

**Report on a Publicly Notified
Resource Consent Application**
(Section 42A)

- Application Reference:** RMA/2019/1361
- Applicant:** Lyttelton Port Company
- Site address:** 2 Cashin Quay and 45 Godley Quay, Lyttelton
- Legal Description:** While the above addresses contain legally defined parcels the proposed works will be taking place on reclaimed land that has no legal description at this point in time.
- Proposal:** To undertake port activities on 34 hectares of reclaimed land at Te Awaparahi Bay in two stages, being Reclamation A (Phases 1 and 2) and Reclamation B. Separate land use consents are being sought for each reclamation.
- Zoning:** Not applicable for the reclamation site as it is within the Coastal Marine Area, therefore outside of the District Plan jurisdiction.
- Overlays and map notations:** For the most part there are no applicable overlays or notations on the reclamation site, as it is within the Coastal Marine area and is thus outside of the District Plan jurisdiction, however Nga Wai Coast (I.D. 96) – Statutory Acknowledgement Area applies.
- Overlays and notations on adjoining land include the following:
- Special Purpose (Lyttelton Port) Zone for the adjoining port and coal handling facilities.
 - Rail corridor designation.
 - Open Space Natural Zone (Urumanu Reserve)
 - Rural Banks Peninsula Zone

- **Rural Amenity Landscape for a portion of legal road**
- **Liquefaction Management Area (LMA)**
- **Nga Turanga Tupuna overlays - Numbers 65 and 71**
- **Natural Character in the Coastal Environment (NCCE 1.0)**
- **Outstanding Natural Landscape / Feature (ONL 1.0)**
- **Coastal Environment**
- **Heritage Item 1229 – Battery Point battery – Headland and Sentry Post (Highly Significant Heritage Item)**
- **Sumner Road – Minor Arterial road**

Activity status:

Discretionary activity

Submissions:

24 in support

9 in opposition

4 are neutral

(Eight submitters seek to be heard, being five submitters in opposition, two who are neutral, and one in support).

A full list of submitters is attached to this report at **Appendix 1**.

Date of Hearing:

28th and 29th of November, 2019

Recommendation:

Grant subject to conditions

Table of Contents

Preamble	3
Proposed Activity	4
Background	7
Description of the site and existing environment	8

TRIM Number 19/1213353

District Plan and National Environmental Standards – Relevant rules and activity status	13
Submissions	15
Resource Management Act 1991	17
Actual and Potential Effects on the Environment (S.104(1)(a))	17
Relevant Objectives, Policies and other Provisions of a Plan or Proposed Plan (S.104(1)(b))	30
Other relevant Statutory Documents (S.104(1)(b))	31
Relevant Other Matters (S.104(1)(c))	32
Part 2 of the Act	34
Conclusion	35
Recommendation	37
Appendices	41

Preamble

1. My name is Kent Wilson. I am employed as a Senior Planner based in the Civic Offices of the Christchurch City Council. I have been employed by the Christchurch City Council since 2006. I hold a Bachelor’s degree in Zoology and a Post Graduate Diploma in Natural Resources. I am an Intermediate member of the New Zealand Planning Institute and have 29 years of experience working in the planning and resource management field.
2. I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014. I have complied with it in preparing this report and I agree to comply with it in presenting at this hearing. The views expressed within this report are within my area of expertise except where I state that they are given in reliance on another person’s advice. I have considered all material facts that are known to me that might alter or detract from the opinions that I express in this report.
3. This report has been prepared with advice from the Council staff detailed below. A copy of their reports has been attached in the appendices.

Officer	Position	Appendix
Ms Isobel Stout	Senior Environmental Health Officer	3

Ms Jennifer Dray	Senior Landscape Architect	4
Mr Andy Milne	Senior Transport Planner	7

3. This report reviews the application for resource consent and addresses the relevant information and issues raised. It should be emphasised that any conclusions reached or recommendations made in this report are not binding on the Commissioner. It should not be assumed that the Commissioner will reach the same conclusion or decision having considered all the evidence to be brought before him by the applicant and submitters.
4. Mr Ken Lawn has been appointed as a commissioner to hear and decide upon this application. An independent decision maker is required in this instance as Christchurch City Council has a 100 per cent shareholding in the Lyttelton Port Company (the Port Company), thus a conflict of interest would arise should a hearings panel including City councillors be appointed to decide on this matter.

Proposed activity

5. Ms Jo Appleyard of Chapman Tripp has applied for land use consent on behalf of Lyttelton Port Company Limited to undertake port activities on reclaimed land at Te Awaparahi Bay in Lyttelton Harbour.
6. The proposal is outlined in detail at Chapter 2 (Project Description) of the application at pages 7 to 15, but in brief, the main features include:
 - A staged development of a container terminal and port activities on 34 hectares of reclaimed land at Te Awaparahi Bay, in Lyttelton Harbour.
 - The reclamation has been approved by Environment Canterbury and will occur in two main stages, being Reclamation A and Reclamation B. The former comprises phase 1 of 10 hectares of already completed reclamation and phase 2, being a further 6 hectares of reclamation, including the construction of a wharf and installation of up to four ship to shore cranes. The completion of the wharf and Reclamation A container terminal is expected to be between 2024 and 2026.
 - Reclamation B comprising an area of 18 hectares will commence after a bund has been constructed around the “reclamation paddock”. That bund will be constructed in the years between 2024 and 2026. Once the reclamation has been completed it is expected that the reclaimed land will take around 15 years to settle sufficiently for construction of the remaining portion of the container terminal to commence, hence completion of the full terminal could be around 2041.
 - The container terminal on Reclamation B will comprise an extension to the wharf on Reclamation A and the installation of a further four or more ship to shore cranes.
 - The completed container terminal will be used for the storage of full and empty shipping containers which will be stacked up to seven high for full containers,

i.e. a height of 20 metres, and up to nine high for empty containers, this being a height of 25 metres. In order to achieve these stack heights stacking cranes will be used, as opposed to the straddle carriers that the Port Company currently uses, which are limited to a stack height of three containers.

- The reclaimed land will be used for the storage of other cargo such as cars and logs until such time as the land is sufficiently stable for the construction of the container terminal facilities.
- Road realignments within the reclamation area will occur during the project to facilitate the construction works, including the construction of a haul road at the eastern margin of Reclamation A to bring rock from the Gollans Bay quarry for seawall protection and to effect the phase 2, six hectare reclamation.
- The image at **Figure 1** below indicatively illustrates the completed container terminal.

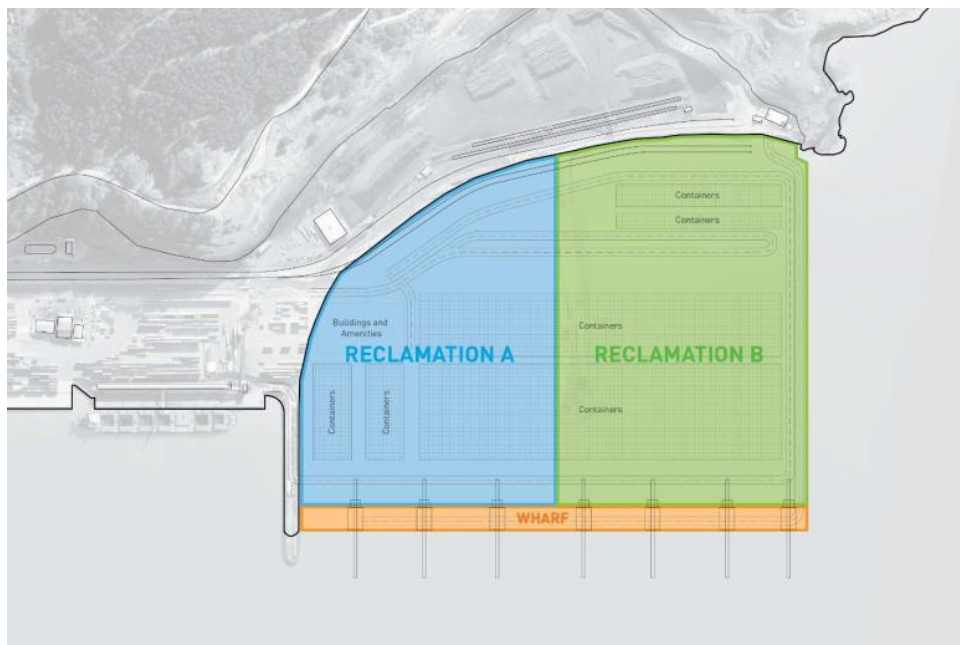


Figure 1: Indicative completed container terminal (Source: Figure 2.7 from the application)

7. Two consents are being sought in this instance; the first being for Reclamation A and the second for Reclamation B. The applicant sets out the reasons for this at paragraphs 7.6 to 7.11 of the application, but in essence the issue is that under Section 116(2) of the Resource Management Act 1991 (the Act) a land use consent to which Section 89(2) applies cannot commence until such time as a certificate pursuant to Section 245(5) has been issued by the regional council. Thus, if only one land use consent was granted, it could not commence until the entire reclamation was completed and a survey plan prepared for the purposes of the Section 245(5) certificate. As a result port activities could not commence until the late 2030's or later.

8. In addition to the above, the applicant states that the existing consent for the 10 hectare phase 1 part of Reclamation A (RMA92018173) will be surrendered once consent has been obtained in relation to the current application.
9. While the application documents illustrate, reference and assess the proposed ship to shore cranes I note that they are proposed to be located on the wharves for the proposed terminal. As such they are within the Coastal Marine Area (CMA) and, as a result, are outside of the jurisdiction of this council. Furthermore, I understand from advice from Mr Andrew Purvis (Planner acting for the applicant) that they are a permitted activity under Regional Coastal Environment Plan by virtue of Section 12(3) of the Act, as that plan has no rules addressing such structures. That being the case there would appear to be a gap in the planning framework, as it would seem anomalous that approximately 95 metre high moving cranes could not be assessed for effects on the environment in some form. Having said that, Mr Jared Pettersson (Project Manager for the applicant) advised me that they were assessed in the preparation of the Recovery Plan. Notwithstanding that, these cranes have been assessed for the purposes of this report, and the commissioner will not that a recommended condition has been put forward addressing the colour of the structures. In recommending that condition I acknowledge that it may be beyond the jurisdiction of this Council, however, if the commissioner is so minded it may be a matter to be explored with the applicant with a view to a volunteered condition from the same.
10. In this case the applicant requested that the application be publicly notified pursuant to Section 95A(3)(a) of the Act.

Consultation

11. The applicant sets out consultation undertaken on the proposed reclamation and the container terminal at Chapter 6 of the application wherein, in summary it is stated that extensive consultation occurred in the preparation of the Lyttelton Port Recovery Plan, that mana whenua were appraised of the applicant's intentions from 2017 to 2019 by way of meetings of the Mana whenua Advisory Group (MAG).
12. The outcomes of the consultation were:
 - Battery Point exclusion zone which allows the point to remain as a landscape feature and a bookend to the development.
 - The southern extent of the reclamation was reduced by 50 metres so that it did not protrude further into the harbour than the existing Cashin Quay breakwater.
 - LED lighting was introduced to reduce potential effects of light spill, glare and sky glow.

Background

13. This application for resource consent was received on 24th of June, 2019 and was publicly notified on the 24th of August, 2019. A delay to notification arose due to the need to undertake a site visit on a date suitable to all parties. In this regard the applicant was comfortable with the delay. The submission period closed on Monday the 23rd of September, 2019. A total of 37 submissions were received during this period, 24 in support, 9 in opposition, and 4 which did not state a position.

14. Unfortunately it came to my attention that a small group of landowners in Lyttelton were not notified as affected parties when they should have been, given that they were identified in the noise assessment prepared by Hegley Acoustic Consultants for the applicant as being subject to more noise than at present. The applicant was advised of this error and agreed that they should be notified. Consequently, notice was served on four property owners on Friday the 18th of October, 2019. The closing date for submissions for those parties is Monday the 18th of November, 2019. The applicant potentially could be prejudiced by this late notification, and the potential for late submissions, however, as stated they have agreed that this was the appropriate course of action. I am also satisfied that should any of these parties submit, their rights will not be compromised as they will still have time to submit expert evidence five working days prior to the hearing and the Council will have time to provide the applicant's evidence to them prior to the hearing. The properties in question are:
 - 14 and 16 Reserve Terrace,
 - 9 Randolph Terrace, and
 - 31 Sumner Road.

15. There is an extensive background to this proposal which is set out at paragraphs 1.13 to 1.23 of the application, much of which has been occasioned by the Canterbury earthquake sequence which caused significant damage to the port infrastructure. As a result there was deemed to be an urgent need to rebuild that infrastructure in a timely and efficient manner such that economic impacts could be minimised. In summary key points to note are as follows:
 - In 2011 an order in Council was obtained from the Minister for Canterbury Earthquake Recovery that provided for resource consents to be obtained as controlled activities for reclamation to occur within Te Awaparahi Bay and for the reclaimed land to be used for port activities.
 - In June 2011 consents were obtained from the regional council and Christchurch City Council for a 10 hectare reclamation and the use of the land for port activities.
 - The Lyttelton Port Recovery Plan (the Recovery Plan) was gazetted in November, 2015 to enable the repair, rebuild and reconfiguration of the port in a timely and efficient manner.
 - The Recovery Plan explicitly provides for the 34 hectare reclamation as Te Awaparahi Bay and the use of that land as a container terminal and for port activities. It directed that changes be made to the Canterbury Regional Policy Statement, the Regional Coastal Environment Plan, the Proposed Christchurch

Replacement District Plan, the Proposed Canterbury Land and Water Regional Plan and the Proposed Canterbury Air Regional Plan to explicitly recognise and provide for the port rebuild.

- The applicant has also obtained consent for an additional 24 hectares of reclamation and wharf.
- Consents obtained by the applicant are listed and attached at Appendix 1 of the application.
- As set out in the application at paragraph 1.20 the:

“Recovery Plan has special significance in relation to these land use applications, because section 60(2) of the Greater Christchurch Regeneration Act 2016 (Regeneration Act) provides that any person deciding a resource consent application “*must not make a decision or recommendation ... that is inconsistent with the Plan...*”.

16. In addition to the above, I would note that the Recovery Plan was prepared under the Canterbury Earthquake Recovery Act 2011 (CERA) and that by way of direction from the Minister for Canterbury Earthquake Recovery (Gazetted 19/6/2014) in the preparation of the Plan the proposal was to be assessed against (amongst other things) CERA, the RMA, the New Zealand Coastal Policy Statement 2010, the Mahaanui Iwi Management Plan and other relevant statutory and non-statutory plans.
17. Finally, no time extensions have been granted under section 37 of the Act.

Description of the site and existing environment

18. The application site is located at Te Awaparahi Bay, Lyttelton Harbour, as shown in the image at **Figure 2** below. This image also shows the relevant zones and other features in the area. Further maps are provided at **Appendix 1** that illustrate the natural hazard and natural and cultural heritage District Plan overlays.



Figure 2: Site, land use zones and relevant features

19. The applicant has described the existing environment of the site and surrounding area at Chapter 3 (Existing Environment) of the application at paragraphs 3.1 to 3.24 including: the topography, geology, marine receiving environment, road access to Lyttelton Port and coal stockyard, Battery Point historical values, and cultural values.
20. The application site encompasses the existing 10 hectare phase 1 area of Reclamation A and the remaining 24 hectares of what is currently open water within Te Awaparahi Bay.
21. The topography of the area is dominated by the harbour and the Port Hills. The terrain rises steeply from the harbour to a height of approximately 500 metres. The Lyttelton area, including the proposed reclamation site occupies the steep, south facing, inner flanks of the extinct Lyttelton volcano crater that is part of the Port Hills. The crater rim and its upper slopes are lined with steep bluffs and large rock outcrops, that together create a distinctive landform and skyline. The slopes east of Lyttelton remain largely undeveloped and primarily in semi-improved grasslands with areas of regenerating native shrub and scrublands. There is a pine forest on the Urumau Reserve which separates Te Awaparahi Bay from Lyttelton.
22. Te Awaparahi Bay is located on the northern side of the Lyttelton Harbour, to the east of Lyttelton Township. Gollans Bay Quarry occupies the slopes below the summit of Sumner Road (Evans Pass). The land subject to this application is owned by LPC with the exception of the Old Sumner Road that runs through it.
23. Te Awaparahi Bay and the coal stockyard are highly modified, mostly occupying earlier reclaimed land, and the entire area is now used for coal stockpiling and coal

handling infrastructure. The toe of the slopes behind the coal storage area has also been modified with terracing from previous excavations for reclamation work. The existing coal stockyard occupies an area of approximately 10.2 ha of which approximately 4.4 ha is for coal stockpiling itself with the balance for conveyors, roading, rail tracks, parking for mobile plant and other equipment.

24. Much of the land to the north, northwest and northeast of the coal stockyard is owned by LPC and is zoned rural. To the south and south east of the coal stockyard is Lyttelton Harbour. The nearest houses are located on a spur which rises to a height of approximately 240 metres above sea level and which separates the township from Te Awaparahi Bay and the coal stockyard. The nearest house in Lyttelton Township is approximately 450 metres to the west of the coal stockyard. The settlements of Purau, Diamond Harbour and Charteris Bay lie across the harbour around 3 to 4.5 kilometres distant. As set out in the application some parts of these communities have line of sight views to the site.
25. The coastline in the Port of Lyttelton and east to Battery Point has been heavily modified by port industry, creating flat land, linear shorelines, and breakwaters that enclose the harbour. Te Awaparahi Bay coal stockyard and shoreline typify the reclamation and modification that has occurred throughout the Port.
26. The Gollans Bay quarry area is visible from many locations within this part of the harbour and from parts of Sumner Road. Excavation of the roads and the quarry has left visible scars in the landscape, and human modification along the upper slopes has reduced the natural character and landscape values of the Evans Pass summit area. Overall the natural character and landscape value of the mid-slopes of the bay, including the previous quarried faces, quarry floor, landfill, and access roads, is modified in comparison to the natural rocky bluffs above the quarry.
27. I note also that since the Canterbury Earthquakes of September 4th 2010 and February 22nd 2011, the landscape of Evans Pass above Sumner Road has been modified due to land slips caused by the quake which have blocked the Sumner Road. Christchurch City Council has subsequently undertaken remedial works to reopen that road and to minimise the risk of further rock-fall onto the road from the slopes and bluffs above it. The most visible result on those works has been the construction of a large catch-bench on the slopes above the road which forms a diagonal scar on the slopes above the road. This can be seen in the image below at **Figure 3**.



Figure 3: View to the site and surrounds from Koromiko Crescent, Diamond Harbour

28. The viewing point for the above image was Koromiko Crescent in Diamond Harbour. I would note that while the catch-bench diminishes the natural character of the slope above Sumner Road to some degree, the fact that it runs parallel to the strata of the bluffs above it make its less intrusive than it might have been. I would also anticipate that in time, as it weathers, that its visual impact on natural character will diminish. In contrast, Sumner Road is far more intrusive, striking as it does, across the slope, at an opposing angle to the rock strata. What can also be seen in this image is the historical terracing above the coal handling facility and the existing port facilities. Battery Point can also be seen as demarcation point between the modified landscape of the Port environs and more natural and largely unmodified Gollans Bay to the right. The slopes above Sumner Road also exhibit a higher degree of natural character than those below, being less modified by buildings and alterations to the landform.
29. Te Awaparahi Bay is visually secluded from many local land based locations, including Lyttelton, and much of Sumner Road itself. The Windy Rock Point lookout above the coal stockyard provides views into the Bay, not otherwise possible from Sumner Road. Having said that views into the Bay are available from walking tracks in the area
30. Tunnel Road, Norwich Quay, and Gladstone Quay form part of State Highway 74 (SH74) and provide access to the Port area at the eastern end of Lyttelton. Cashin Quay continues from the end of Godley to provide access within the Port area. Old Sumner Road is located within the Rural Zone and vehicular access is restricted with a Council locked gate adjacent to Sumner Road at the western end. The road has a gravel carriageway with a width of approximately 7m and is well maintained.

31. Norwich and Gladstone Quays are both classified as major arterial roads in the District Plan. Norwich Quay carries around 8,200 vehicles per day, as set out in the transport assessment provided in the application, based on 2018 data provided by the New Zealand Transport Agency (NZTA). The data collection point was around 30 metres to the west of Canterbury Street. I have no information on traffic volumes on Gladstone or Cashin Quays, but as these roads serve to principally provide access to the port, traffic volumes will be considerably less than on Norwich Quay, as private vehicles will have turned off Norwich Quay at Canterbury and Oxford Streets. Furthermore, Gladstone Quay would appear to be legal road for only around 215 metres running east from the end of Norwich Quay to a point just east of the Holcim cement silos. From that point on it comprises private access to the port. Cashin Quay is entirely private access.
32. Battery Point has a number of archaeological values which exist in close proximity to the coal stockyard. Battery Point supported a number of military installations dating from the 1880's, WWI and WWII. The Battery Point historic grounds and the boundaries of the Battery Point Battery Historic Area are recorded as an archaeological site; most of the structures date from WWII.
33. There is also a long history of Maori settlement in Banks Peninsula. This has been set out at paragraphs 3.15 to 3.18 of the application. In summary the tangata whenua have had a long history of occupation within Whakaraupo (Lyttelton Harbour) and that it has been an important source of mahinga kai. Te Hapu o Ngati Wheke, based at Rapaki are the papaitipu runanga in the area.
34. The coastal marine area has been recognised to be of importance to Ngai Tahu by way of a Statutory Acknowledgement Area (Te Tai o Mahaanui Selwyn – Banks Peninsula Coastal Marine Area) under the Ngai Tahu Claims Settlement Act 1998. In addition the upper half of the harbour has been gazetted as a Mataitai.
35. At paragraphs 3.12 to 3.14 the applicant sets out that existing consents obtained from Environment Canterbury to reclaim land and build wharves on an area of land of 34 hectares at Te Awaparahi Bay and the consent obtained from this Council to undertake port activities on the existing ten hectare area of reclaimed land are to be considered to form part of the existing environment. The assessment of effects contained in the application has been predicated on that the environment.
36. The Court of Appeal in *Queenstown Lakes DC v Hawthorn Estate Ltd* (2006) considered that the “environment” embraces the future state of the environment as it might be modified by the implementation of resource consents which have been granted at the time a particular application is considered, where it appears that those resource consents will be implemented. That being the case I accept the applicant’s position that the existing consents should be considered as part of the existing environment. Clearly the ten hectare reclamation consent has been given effect to, as has the consent to utilise that area for port activities. Furthermore, work has commenced, and is on-going in relation to phase 2 of Reclamation A, hence there is little doubt that this consent will be implemented. Finally, there is no reason to doubt that Reclamation B will not also be implemented, based on the applicant’s intentions.

37. On a final matter I have not provided a map showing the locations of submitters' properties as it was not feasible to do, given that their properties are scattered around the harbour basin. What can be said though, is that the majority of submissions came from submitters owning property in Diamond Harbour (25), five from Lyttelton property owners and three from submitters with property in the Purau area. The remaining submitters gave Christchurch City addresses.

District Plan and National Environmental Standards – Relevant rules and activity status
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Christchurch District Plan

38. The starting point for establishing the relevant planning framework is a consideration of Section 89(2) of the Act which covers instances such as this where an application is lodged for an activity which will take place on reclaimed land that is currently within the Coastal Marine Area, and thus outside of the District Plan jurisdictional boundaries. Pertinently a key passage in that section states that:

“... the authority may hear and decide the application as if the application related to an activity within its district, and the provisions of this Act shall apply accordingly.”

39. My view of the meaning of this passage is that the likely zoning of the reclaimed land should be applied in relation to determining applicable standards that will provide guidance for assessing the proposal. In this case there can be no doubt that the proposed terminal will be zoned Special Purpose Lyttelton Port Zone (Port Zone) at some point in the near future. I believe this is a preferable approach to dealing with the site without the assistance of the Port Zone, as this could potentially lead to a consideration of District Plan provisions that were not intended to be applied to the zone, (for example, district wide provisions), and conceivably result in conclusions that were inconsistent with the Recovery Plan. In this regard I have discussed this matter with Mr Brent Pizzey (Associate General Counsel for the Council) who agrees with my approach.
40. I note that the applicant has taken the former approach, and has in some instances referred to District Plan provisions (rules) as benchmarks against which to assess the proposal. Rightly, in my view, those rules have not been considered as binding on the application.
41. Further to above, this matter has been addressed in *Tairua Marine Limited v Waikato Regional Council (A108/05)* where as part of the decision the court had to decide the status of a parking and recreation activity on reclaimed land. At paragraph 179 of that decision the court stated:

“[179] However we are not persuaded that the application can be decided on the hypothesis that the land to be reclaimed is within the adjacent zone. It is not. Rather because, absent zoning of the site, the district plan does not

classify the proposed activities, they have to be treated as a discretionary activity.”

42. Given the above my assessment will use the Port Zone provisions for guidance to ensure that all relevant matters are considered, but recognising that the site is not currently zoned.
43. In the above decision I note that the Court relied on Section 77C of the Act, which has been repealed, in reaching a view that the application must be treated as a discretionary activity. Notwithstanding that, I am satisfied that the decision is still applicable as Section 87B(1)(a) is now the comparable and replacement section of the Act to Section 77C. That section states that where there is no plan or proposed plan, and no relevant rule then the application must be treated as a discretionary activity. That is the case in this instance.
44. Further to the above, it also seems that the court in its decision concluded that there was no applicable plan in place even though there may have been district wide provisions that applied that were not reliant upon zoning provisions. In my view that is appropriate, as should district wide provisions be applied to the activity, a more narrow consideration of effects would likely result, potentially overlooking key issues and fettering the ability to look at the activity as a whole, with the risk of a skewed decision occurring.
45. It is also appropriate that a wider consideration of the application be undertaken than one strictly guided by the Port Zone provisions, as this proposal is an intensification of port activities in a new location, albeit adjacent to the existing port, thus matters such as landscape and traffic effects, for example, are relevant matters.
46. Finally, as a discretionary activity my assessment will be guided by the objectives and policies of the relevant planning documents, and as stated earlier, the District Plan rules will be used for guidance purposes only.
47. The objectives and policies for Special Purpose Lyttelton Port Zone (Port zone) specifically seek to facilitate the recovery and growth of Lyttelton Port and to restore its role as strategic infrastructure in the recovery of Greater Christchurch.
48. As part of the redevelopment of the port an objective and supporting policies explicitly anticipate the redevelopment of Dampier Bay into a marina, and public waterfront with associated facilities. A cruise ship berth is anticipated at Naval Point. However, more pertinent to this application, it is expected that there will a phased movement east of port operations which will result in operational port activities being established on reclaimed land at Te Awaparahi Bay. Also of relevance, Norwich Quay is recognised and identified as the access to the port to meet its needs as a strategic transport and freight hub. A second objective and supporting policies concern themselves with the effects of Port recovery and operation and seek to reduce adverse effects on Lyttelton township and wider area.

49. Other key objectives and policies are discussed in a later section of this report.
50. As set out above I accept that the application should be considered as a **Discretionary Activity** and that pursuant to Section 87A(4) the consent authority may refuse or grant a consent, with or without conditions.

National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES)

51. These standards seek to ensure that land affected by contaminants in soil is appropriately identified and assessed before it is developed and if necessary the land is remediated or contaminants contained to make the land safe for human use.
52. The NES controls soil disturbance on land where an activity on the Hazardous Activities and Industries List (HAIL) is being carried out, has been carried out, or is more likely than not to have been carried out. The application site is not identified as HAIL land and as recently, and yet to be reclaimed land, is unlikely to be contaminated, therefore the provisions of the NES do not apply. In this regard Ms Isobel Stout has confirmed that there are very tight controls in place as to what can be placed in the harbour for the purposes of the reclamation, thus contaminated material is excluded.

Submissions

53. Thirty seven submissions were received on this application (24 in support, 9 in opposition and 4 which did not state a position). No late submissions were received. A list of submissions received are attached at **Appendix 2**. Council can provide copies of actual submissions upon request.
54. Copies of all submissions have been provided to the Commissioner.
55. The reasons for the submissions in support are summarised as follows:
 - The Port expansion will support economic growth in Canterbury.
 - The expansion of the Port will create a modern facility that will meet the future needs of Canterbury.
 - Canterbury needs a deep water port and the site selected is appropriate as it is not suitable for the gathering of kai moana.
 - Supports progress.
 - The movement of the Port eastward will allow a greater recreational focus for the inner harbour part of the Port.
56. The reasons for the submissions in opposition are summarised as follows:
 - The proposal will result in more dust and debris in the harbour.
 - Water quality will be further degraded and wildlife will be disrupted. Hector's Dolphins are now a rare sight in the harbour.

- Opposed to the ongoing expansion and occupation of the harbour by the port, when the Port Company does not own the air, sea and land in the harbour.
- Economic justifications should not override environmental values.
- Amenity and landscape values in the harbour will be further undermined. These impacts could be offset by enhanced plantings in Diamond Harbour cliff reserves.
- Hours of operation.
- The applicant should be required to upgrade all port lighting to the new lighting standards.
- Lighting structures should be no higher than 30 metres.
- Overall there will be greater glare and glow from lighting. Appropriate mitigation measures should be adopted to reduce glare, including reflection off water.
- A better noise contour map should be provided to allow an accurate assessment of effects.
- There are no noise contours provided for Diamond Harbour.
- Noise from ships loading and unloading does not appear to have been addressed. These activities result in low frequency, loud percussive noises. This should be addressed in the Port Noise Management Plan.
- Conditions should be imposed limiting the duration, frequency and intensity of percussive sounds, particularly during night-time.
- Norwich Quay is a dangerous access route. Heavy traffic should be redirected off it onto roads constructed within the port area.
- Electrify container handling equipment and moored ships to reduce air pollution.
- It is not clear whether this proposal is a worst case scenario.

57. Reasons given by submitters who were neutral are as follows:

- Divert heavy traffic off Norwich Quay onto roads within the port area.
- Noise and pollution will increase.
- There will adverse effects on wildlife.

58. A submission lodged in support of the proposal by the Lyttelton Seafarers Centre raised matters which, in my view are not planning issues. Specifically, and firstly, they sought that the Port Company adhere to the Maritime Labour Convention (MLC) Standards (Reg. 4.4). The MLC is an international treaty adopted by the International Labour Organisation, and ratified by New Zealand. It sets out minimum standards to address the health, safety and welfare of seafarers. Clearly this is matter between the Port Company as an employer and its employees, and any representative unions, and is not a planning matter.

59. Secondly, they sought that consent only be granted if the Port Company are meeting Christchurch City Council resolutions CNCL/2018/00011 and CNCL/2019/00059. The first of these resolutions relates to the Allandale Transport Yard and appears to have no relevance, while the second records that the Council request that the Port Company fund the Lyttelton Seafarers's Centre. Again this is not a relevant planning matter as it has no relevance to the management of effects arising from the proposed development. The applicant has subsequently advised that the Lyttelton Seafarers Centre likely meant to refer to Council resolution CNCL/2018/00009, rather than CNCL/2018/00011,

TRIM Number 19/1213353

which again is not relevant for the purposes of this report as it relates to funding matters for a seafarers' welfare centre.

60. As an observation, given that Council notified over 1600 property owners, the resulting number of submissions is very low. This could indicate that property owners are unconcerned about the proposal, particularly since the overwhelming majority of submitters are in support of the application, or that they are not interested, since the reclamation consents have already been approved. Perhaps they may see this application as a foregone conclusion, given that Council cannot make a decision that is inconsistent with the Recovery Plan, although I think it is slightly hopeful to expect the general population to understand the implications of that plan on decision making. That being the case I tentatively take the view that there would seem to be support in the broader community for the proposal.

Resource Management Act 1991

61. When considering an application for resource consent and any submissions received, the consent authority must have regard to the matters listed in Sections 104 and 104B of the Resource Management Act 1991. Subject to Part II of the Act, which contains the Act's purpose and principles, including matters of national importance, the consent authority shall have regard to:
- a) Any actual and potential effects on the environment of allowing the activity.*
 - b) Any relevant provisions of a plan or proposed plan, and national environment standard / national / coastal / regional policy statement.*
 - c) Any other matter the consent authority considers relevant and reasonably necessary to determine the application.*
62. It should be noted that other than giving pre-eminence to Part II, Section 104 gives no priority to other matters. They are all matters to have regard to and the consent authority must exercise its discretion as to the weight that it gives certain matters, depending on the circumstances of the case.
63. Under Section 104B, when considering an application for resource consent for a discretionary activity, a consent authority may grant or refuse the resource consent, and (if granted) may impose conditions under section 108.
64. Section 104(3)(a)(ii) states that a consent authority must not have regard to any effect on a person who has given written approval to the application (unless that approval is withdrawn in a written notice before the date of the hearing). No written approvals have been provided with the application.

Actual and Potential Effects on the Environment (S.104 (1)(a))

65. As a discretionary activity the Council's assessment of this proposal is unrestricted and all actual and potential effects must be considered. Guidance as to the effects that

TRIM Number 19/1213353

require consideration is contained in the relevant objectives and policies, and any associated matters of discretion or control.

I have considered the relevant issues and it is my view that they fall broadly into the following categories:

- Positive effects
- Visual impact- Lighting
- Landscape effects (including cumulative effects)
- Noise effects
- Traffic effects
- Construction effects
- Cultural effects
- Other effects

Section 104(2) – Permitted baseline

66. Prior to undertaking an assessment of the effects of this proposal it is useful to consider discretion available under Section 104(2) of the Act (referred to as the “permitted baseline”) whereby a consent authority may disregard an adverse effect of an activity on the environment if the Plan or national environmental standard permits an activity with that effect. In this instance it is very clear that there is no permitted baseline as Section 89(2) makes it clear that any activity on reclaimed land requires consent. Furthermore, case law has established that such activities require consent as a discretionary activity.
67. Having said that is reasonable to acknowledge that should the site be zoned Specific Purpose (Lyttelton Port) Zone, port activities would be a permitted activity. Having reviewed the applicable built form standards for the zone, it would also appear that no grounds for consent would arise in relation to those standards. Consequently the proposal is in accord with activities expected for the zone, and while not a true permitted baseline does form a valid point of comparison in assessing this proposal.

Positive effects

68. Positive effects of the proposal are addressed at Part A (Benefits of the proposed container terminal) of the Assessment of Effects (AEE). This comprises a summary of the report provided by Brown, Copeland Co. Ltd., being an “Assessment of Economic Effects”, attached as Appendix 2 to the application.
69. Key points to note are that New Zealand is heavily reliant on shipping for the import and export of goods and that Lyttelton Port plays an important role in this trade, as it is the third most significant port in the country and the most significant port for the South Island.
70. The benefits of the proposal are set out succinctly at paragraph 84 of the Brown, Copeland report, as follows:

- Efficiency benefits from having a larger area of land adjacent to container ship berths for container storage and logistics;
- The retention of, and increase in employment, incomes and expenditure for Christchurch City, the Canterbury Region and South Island economies;
- Enabling Lyttelton Port to more efficiently cater for the larger container ships expected to become increasingly prevalent on New Zealand's international trade routes;
- Facilitating the implementation of the LPRP and thereby helping to restore the port's capabilities to meet the current and future requirements of the Greater Christchurch and the Canterbury economies;
- Enabling greater use of rail transportation of containers to and from the Port;
- Enabling Lyttelton Port to be more efficient and price competitive; and
- Improving the amenity values of Lyttelton, making it a more attractive place to live and visit.

71. In addition to the above, I would note that one of the benefits set out in the application arising from a greater use of rail transportation will reduce road congestion and the risk of road accidents, while benefits to the amenity values of the township are contended to arise from some port activities moving east away from the port areas directly in front of the town, presumably resulting in noise reductions.

72. While some of these benefits are not quantifiable or certain, there can be no doubt that the development of the expanded container terminal will allow the port to meet current and future cargo handling demands and that this will be beneficial to the local and South Island economies.

Visual Impact - Lighting

73. Lighting matters are detailed at paragraphs 4.8 to 4.58 of the application, wherein the following are addressed:

- The nature of the existing lighting within the container terminal.
- The proposed lighting, including the type of luminaires to be used and the resulting light temperature and colour.
- The types of effects that could result, which include light spill, glare, sky glow and impacts on amenity values.
- The comments made are based on reports provided by WSP/Opus and Mr Andrew Craig (Landscape Architect), both acting for the applicant.

74. Key points to note are as follows:

- Existing lighting within the Cashin Quay container terminal comprises high pressure sodium vapour (HPS) lamps mounted on 30 metre poles. Light produced is of a golden colour with a temperature of 2100 degrees kelvin (°K).
- The angle of the luminaires ranges from 20 to 50 degrees from horizontal.
- Lighting proposed for the new container terminal will comprise either Light Emitting Diode (LED) or Light Emitting Plasma (LEP) lamps mounted on

poles of up to 40 metres in height. The luminaires to be used will comprise flat glass units with a high degree of upward cut off which will be kept to low angles of tilt above horizontal.

- Light produced of either type of lamp will be white in colour with a temperature in the range of 3000 to 4000°K.
- Blue light content will be minimised as far as practical given its potential to harm plants and animals.
- Both the existing and proposed terminal will operate twenty four hours a day, seven days a week (24/7).

75. The application summarises the effects arising from the proposed lighting with key conclusions being as follows:

- The proposed lighting would result in similar lighting levels as the existing terminal, but would have less light spill and less reflection off the harbour as a result of the more directional luminaires to be used. Glare will also be less for the same reason.
- As existing lighting is replaced with either LED or LEP lamps sky glow will be reduced on the one hand due to more directional luminaires, but on the other hand will increase as a result of more upward reflection and more atmospheric scattering occasioned by the white light.
- With respect to glare the proposed lighting will meet the intent of Rule 6.3.4.1 which stipulates that light sources are directed, aimed or screened away from the windows of habitable spaces. In addition it is stated that the light spill will easily comply with Rule 13.8.4.2.4, which states that light spill shall not exceed 10 LUX at the boundary of any site in the Residential and Commercial Banks Peninsula zones.
- Light would not be unexpected and out of keeping with what can be expected from a port.

76. Ms Isobel Stout has assessed effects arising from the proposed lighting, including cumulative effects. Before discussing her analysis, which is attached at **Appendix 3** to this report, I would like to make two observations. These observations arise from viewing the port at night time. The first is that the existing HPS lamps create significant light spill resulting in a visually dominant sky glow directly around the port itself, but also when seen from further afield, such as Diamond Harbour. The second observation is that while the proposed lighting will be more directed, sky glow will still result from reflection and scattering and thus, cumulatively there will be more light spill and sky glow. This is an important effect that, in my view, needs to be managed. In this regard I believe it is important that the applicant give thought to a timely retirement of the existing HPS lamps and their replacement with LED or LEP lamps, and that this should ideally be timed to coincide with the staged development of the proposed terminal. I note that submitters have also raised this issue. I have raised this with the applicant and they advised that proposed conditions to be proffered will address this matter.

77. Ms Stout accepts that while the proposed LED or LEP lamps will be more tightly directed, thereby reducing light spill, there will still be a contribution to sky glow due

to reflection off the ground, containers and machinery. She also goes on to recognise that there will be a cumulative effect arising from the addition of the proposed further lighting and that this aspect of the proposal could be managed by the phasing out of the HPS lamps sooner than the end of the life to keep cumulative sky glow to a minimum. In relation to the colour of the light and in response to concerns from submitters, Ms Stout is of the view that this is an aesthetic matter rather than a health effect.

78. I accept Ms Stout's view on these matters and rely upon them for the purposes of this report. In particular, I agree, as set out earlier, that the HSP lamps should be phased out in a timely fashion to minimise the cumulative adverse effects of sky glow. Specifically, I am of the view that the cumulative light effects will only be acceptable in the context of the phasing out the HSP lamps and accordingly have recommended a condition to this effect.
79. In my view one final matter arises that warrants consideration, and this relates to the colour of the light being proposed. The applicant is seeking light up to 4000°K, which is very white and will result in a higher degree of light scatter, based on comments provided in the WSP / Opus report. That report suggests that light colour might be in the range of 3000 to 4000°K, as does the assessment of effects in the application. That being the case it would seem desirable that light colour be reduced to closer to the 3000°K end of that range to reduce light scatter. This would have the added benefit of warming the light, thereby producing a more natural light colour from an amenity perspective. Having said that I have no evidence quantifying the additional scattering of light that will result from a whiter light closer to the 4000°K end of the range compared to a warmer light nearer the 3000°K point, hence while I have recommended a condition requiring this, I do so tentatively.

Landscape Effects

80. Mr Andrew Craig has assessed the landscape effects of the proposal on behalf of the applicant. His findings are summarised at paragraphs 4.31 to 4.58 of the application. In undertaking his assessment he considered three viewing angles, these being from vessels using the harbour, from publicly accessible viewing points and from residential areas. He relied on visual simulations, and in relation to night time effects, the Lighting Report prepared by WSP/Opus.
81. He provides a description of the receiving environment, of which key points of note are that the proposal will comprise an extension to what already exists. He then goes on to say that the height of cranes, lighting towers and container stacks will mean that the lower 30 metres of hillside backdrop will be obscured or partially obscured from various vantage points, including from Diamond Harbour.
82. Key conclusions reached by Mr Craig in relation to the three viewing angles were as follows:

- Effects from water will be low to moderately high depending on proximity, weather conditions and direction of travel. Effects will however be transient and therefore temporary.
- Effects on Lyttelton will be low to non-existent for most of the town due to intervening topography, but there will a moderate effect on property owners on Simeon Quay where views to harbour entrance and Adderley will be more cluttered and partially blocked.
- Effects on Diamond Harbour will likely be moderate, but not more than that as he points out that the lower slopes of the hillside backdrop have been modified by the coal handling facility, haul road and historic benching. He also states that effects will be mitigated to some degree as views to the upper slopes of the Port Hills, which have high natural character, will be unaffected.
- Effects on the western bays (i.e. Governors Bay environs) will be experienced at the northern end of Governors Bay where views of the harbour entrance will be interrupted and compromised to a reasonably significant degree by the proposed cranes, light poles, container stacks and ships. He does say, however, that this effect will be mitigated to a degree by the seven kilometre separation distance and that the hills that enclose the port will remain visually dominant.
- Effects on the Port Hills summit ridgeline from public viewing points such as roads, walking tracks and mountain bike tracks will be variable depending on intervening features such as landforms and vegetation. There are numerous points where clear views are available, but most, but not all, are distant views. For the distant views Mr Craig concludes that effects will be moderately low.

83. Mr Craig then considers landscape and associative effects. With respect to the former he concludes that while the proposal will introduce a significant change, it will not be entirely foreign, since it will constitute an extension of the existing container terminal. For that reason he also concludes that it will not stand alone and will be visually coherent. He also believes that it is in keeping with the development patterns in the harbour basin that typically occupy the lower slopes. Finally, he states that the project timeframes will allow people to become accustomed to it.

84. In relation to associative effects, which he describes as whether activities are expected to normally occur, he is of the view that the proposal is in keeping with public expectations given the presence of the existing port and also because the District Plan anticipates the development. He concludes that there will be negligible, if any, associative effects.

85. Ms Jennifer Dray has reviewed Mr Craig's assessment, with her assessment being attached to this report at **Appendix 4**. She agrees with Mr Craig's conclusions in most regard. In summary, her conclusions were as follows:

- For most Lyttelton residents the proposal will be screened from view.
- She agrees with Mr Craig that residents in the Simeon Quay area will experience moderate effects, but that the development will not appear foreign.

- Effects on residents in the western bays area will experience some effects but these will be mitigated by distance and the visual dominance of the surrounding Port Hills.
- With respect to effects on persons in the Port Hills summit ridgeline area who will be able to see the proposal, Ms Dray agrees with Mr Craig that distance will largely attenuate adverse effects.
- She agrees with Mr Craig that the greatest effects will be upon residents in the Diamond Harbour area and that colours, noise, movement and lighting will exacerbate such effects, and may lead to a reduction in the level of appreciation and enjoyment of the environment for such residents. Ms Dray goes on to say that this is an associative aspect of landscape character.
- In relation to effects on harbour users (i.e. the surface of the harbour) Ms Dray agrees with Mr Craig that effects will be transient and therefore temporary, but notes that for regular users of the harbour, adverse effects will be exacerbated. She also notes that visual impacts on harbour users, while transient, could be quite prolonged, particularly for occupants of non-motorised craft.
- With respect to landscape impacts Ms Dray notes that the ship to shore cranes and light poles will be visible against the hill backdrop and that the existing relatively bright green colour of the cranes does not visually integrate well with that backdrop.
- Ms Dray notes that a cumulative effect on the natural character of the harbour will arise from the additional light spill from the proposed lighting coupled with the existing HPS lamps.
- Overall, however, Ms Dray agrees with Mr Craig that the location of the development is appropriate given that it is an extension of the existing port, thus is not foreign, and will appear visually cohesive.

86. Ms Dray puts forward a number of recommendations designed to mitigate adverse effects. They are as follows:

- That luminaires on light poles along the water's edge should be fitted with additional shielding to minimise light being directed toward Diamond Harbour.
- That light poles be setback from the water's edge to reduce illumination and reflectance off the water's surface.
- That light poles should be restricted to thirty metres in height to minimise light scattering.
- That the ship to shore cranes should be coloured in recessive colours to reduce their visual prominence.
- That should concrete be used for the surface of the new terminal it should be dark tinted and finished in an exposed aggregate or brushed concrete finish to reduce reflections from the proposed lighting.
- The existing HPS lamps should be phased out in a structured manner to match the staging of the terminal development, and not at the end of their scheduled operating life.

87. I accept Ms Dray's view on this matter for the purposes of this report, particularly since the proposed mitigation measures will address concerns raised by submitters residing in

TRIM Number 19/1213353

Diamond Harbour. Those measures have been put forward has recommended conditions of approval. Having said that, the proposed mitigation measures will only constitute a softening of the proposal, given that, as Mr Craig pointed out, the visual effects associated with the development are difficult to mitigate. Furthermore, it is difficult to see how any further mitigation measures could be proposed without frustrating the operation of the terminal, which would be inconsistent with the Recovery Plan.

88. I accept both Mr Craig's and Ms Dray's view that in an overall sense the location of the proposed development is suitable, and that the landscape effects are acceptable, given that the chosen site has already been modified by the coal handling facility, historical benching of the hillside and that it will form an extension of the existing port, hence will not be stand-alone, and as a result will be visually cohesive. Importantly, the development will not breach the natural demarcation line created by Battery Point, between the more natural coastline to the east and the modified area of the proposed site, thus natural character values to the east will be maintained. Furthermore, while from some vantage points the ship to shore cranes will diminish the appreciation of the natural character of the backdrop hills, from many viewing points that will not be the case and the visual dominance of the harbour itself and the surrounding hills will prevail over visual effects created by the proposed development.
89. One further matter was raised by a submitter (Mr Ross) and that is that native planting restoration should be undertaken within Diamond Harbour cliff reserves as an offset to the adverse effects on the environment. Given that even with the proposed mitigation measures suggested by Ms Dray in place there will still be meaningful adverse effects on Diamond Harbour residents, it is not unreasonable to give thought to possible environmental compensation measures. The nature and location of these plantings will, however, need to be elaborated on by the submitter before any view on the merits of such a measure could be reached.
90. There is one other matter that I would like to raise, as potentially it has a bearing on visual effects associated with the container stacks and possibly lamp standard height, and thus light scattering. Before I raise this matter I wish to state that this matter is outside of my area of expertise, and for that matter, anyone within Council, and I only raise it in the form of an open question that the commissioner may wish to explore with the applicant. The matter is the safety of stacking containers nine high within an earthquake environment. It is clear from a Google search that containers stacks do topple in earthquakes, and can also be blown over, as occurred in Wellington where a container was blown onto the passenger rail line adjacent to the port. If it should transpire that it is not safe to stack that high, then visual effects associated with the container stacks might be reduced and the 40 metre light pole height being sought by the applicant might not be warranted, in which case light scattering might be reduced, although I acknowledge that I am assuming that the 40 metre pole height being sought is predicated on the height of the container stacks. There may be other reasons for that pole height.

Noise Effects

91. Section 4, at paragraphs 4.59 to 4.66 of the application discuss noise effects from the proposal. That discussion is based on the findings of the noise assessment (noise report) of Hegley Acoustic Consultants, whose report forms Appendix 6 of the application. The assessment compares existing port noise with the additional noise that will result from the proposal and takes into account that development will result in changes to other port activities, such as the ceasing of activities at No. 7 wharf and the Low-Level Breastwork berth. It is set out that the assessment was undertaken in the context of the District Plan wherein Port Noise Management and Mitigation Plans are required to be prepared. As part of those plans a Port Noise Contour Map is required to be prepared. Where properties are subjected to noise in excess of 65dB_{A_{Ldn}} then the port is required to offer acoustic treatment to affected residents.
92. The findings of Hegley Acoustic Consultants was that two new properties within Lyttelton township will fall within the previous 60dB_{A_{Ldn}} contour, but that all other properties within the town will experience a small decrease in noise. In relation to Diamond Harbour it was concluded that noise levels would be 53dB_{A_{Ldn}}, which is similar to existing levels, and that this is well within reasonable levels for residents.
93. Ms Stout has reviewed the noise assessment undertaken by Hegley Acoustic Consultants. Her report is attached at **Appendix 3** to this report. She agrees with the findings of the noise report. In response to issues raised by submitters from Diamond Harbour concerning percussive noises, such as from ship hatches dropping and containers banging, which was not addressed in the noise report, she comments that NZS 6809 : 1999 places a limit of 85dB_{L_AF_{max}} for impact sounds. In Ms Stout's view such sounds will be very much less than this in Diamond Harbour, (by her estimation probably not measurable as an L_{max} type noise), and would not impact on overall amenity. The sounds will still be discernible however. It should be noted, however, that noise generated within the Coastal Marine Area (CMA) is a matter for ECAN's jurisdiction, hence the noise arising from the loading and unloading of ships is not a matter that can be addressed for the purposes of this application. That being said, noise generated from the land area of the terminal is a relevant matter for consideration as it is within this Council's jurisdiction.
94. Ms Stout goes on to say that the Port Noise Management Plan (attached at **Appendix 5** to this report), is the appropriate way to manage any adverse effects arising from percussive noises as this plan has a complaints and noise monitoring regime, along with the Port Noise Liaison Committee which was established, in part, to deal with any complaints. That committee also functions to monitor the obligations of the Port Company under the Management Plan. One of those obligations is to investigate and adopt the best practicable option to ensure that Port noise does not exceed reasonable levels.
95. Further to the above, I am satisfied that the applicant takes its duties under the Management Plan seriously. Recent examples of the Port Company responding to noise issues, (albeit noise being generated within the CMA), include issues associated with generator noise on the new larger Rio class container ships that are now visiting

New Zealand ports, and issues associated with the unloading of the Ever Brilliant scrap metal ship. In the case of the former the Port Company engaged Marshall Day Acoustic Consultants to investigate and report on the matter. While there was no easy solution to the problem, the Port Company will require ships to berth at the container terminal bow first so that generator noise will be directed towards the heads of the harbour, rather than towards the settlements at the end of the harbour. However this can only be achieved in suitable wind conditions. I also understand that Maersk, who operate the ships, will over time, install mufflers on the generators. With respect to the latter, the Port Company's response was to stipulate that scrap metal loading will now only occur between 0700 and 2300 hours to reduce night time noise nuisance.

96. I am also of view in relation to the additional properties now located within the 60dB_{A_{Ldn}} that the regimes set out in the Noise Management Plan are the appropriate mechanisms to deal with noise effects, particularly since properties are not deemed to be "noise affected" unless they are located wholly within the 65dB_{A_{Ldn}} contour. In this regard I note that should the site be zoned Specific Purpose Lyttelton Port Zone that it would not be subject to any noise limits under the District Plan, but instead noise would be managed by way of the Lyttelton Port Noise Management Plan. The same applies to construction noise (discussed below).
97. Given the above, and based on Ms Stout's views I am satisfied that adverse effects arising from port operational noise will be less than minor.
98. In considering the noise issue I have had to tread a fine line, as the regulatory framework for port noise management sits largely outside of the District Plan, being managed by the Port Noise Management and Mitigation Plans and the Port Recovery Construction Noise Management Plan, although I acknowledge those plans form appendices to the District Plan, namely Appendices 13.8.6.7, 13.8.6.8 and 13.8.6.9. That being the case it is imperative that the applicant abide by the terms and conditions of those plans and that the noise contour data that forms an integral part of the noise management regime be as up to date as possible. Consequently I have recommended conditions addressing these matters. One of those conditions requires a review of the noise contour map and data to coincide with completion milestones in the project, and while I acknowledge that the Port Noise Management Plan has a review clause (Clause 7.3), which requires a review at least once every two years, that could result in the data being out of date for up to two years should that review occur close to the completion of a stage in the terminal development. Hence I believe any review is more appropriately linked with the development milestones for the project, in addition to Clause 7.3.
99. The noise report has not addressed construction noise. The reason for that is that the Port Company currently have a Port Recovery Construction Noise Management Plan in place, (attached at **Appendix 6** to this report), as required by Rule 13.8.4.2.8 of the District Plan. It is the intention of the applicant to apply this Management Plan to the proposed activity. It has similar complaint, noise monitoring and Port Noise Liaison Committee regimes to the Port Noise Management Plan. Ms Stout has advised that this Construction Noise Management Plan appears to be working well. By way of example, she advised that the Port Company has recently limited the construction hours,

including ceasing work on Sundays, for the driving of piles for the new cruise ship wharf. Consequently, I am satisfied that construction noise will be appropriately managed through the Construction Noise Management Plan and that any adverse effects will be less than minor.

Traffic Effects

100. Section 5 of the application addresses traffic effects and in summary sets out the following:

- An Integrated Transport Assessment (ITA) was undertaken in November 2014 to support the Recovery Plan.
- The applicant engaged Stantec to provide a traffic assessment (Traffic Report), which forms Appendix 7 of the application. That assessment focussed on how the intersections within Lyttelton have been performing since the 2014 ITA and to determine any other traffic constraints or issues.
- Intersections within Lyttelton were found to be providing a good level of service throughout the day and that road safety records did not indicate any specific issues.
- Taking into account projected growth of traffic, including an increase in rail freight and cruise ship berth traffic, the intersections on Norwich Quay will continue to provide acceptable levels of service at 2026, with only slightly higher delays for those turning right out of local roads (i.e. Dublin and Canterbury Streets).
- In the longer term there is the potential for intersections at the western end of Norwich Quay to have reduced performance and high delay times turning right onto Norwich Quay. Traffic signals would be required to address delay issues and is an issue for the road controlling authority rather than requiring any specific changes as a result of the Container Terminal consent process.

101. Mr Andy Milne has reviewed the traffic assessment provided in the application and given consideration to any traffic related effects. In this regard he has considered submissions received and, in particular, those submissions which raised concerns about the ongoing use of Norwich Quay as the access to the port and at the same time sought that an alternative route be provided. His report on these matters is attached to this report at **Appendix 7**.

102. Mr Milne has also considered the comments received from the New Zealand Transport Agency (NZTA). Council sought comment from the NZTA, in an absence of a submission from the agency, given that Norwich Quay is a state highway managed by them and that the proposal will result in an increase in heavy vehicle traffic on that road. The letter received from the agency is attached at **Appendix 8**.

103. Mr Milne's conclusions can be summarised as follows:

- Given the levels of service at intersections on Norwich Quay and based on monitored traffic use, and from the traffic analysis undertaken, Mr Milne concludes that Norwich Quay offers suitable access to the port for some years

TRIM Number 19/1213353

to come and that a condition of approval requiring an alternative port road is not appropriate at this stage.

- The introduction of controlled intersections along Norwich Quay (western end) can ensure safe turning and pedestrian crossing opportunities in the future.
- In response to comments provided by the NZTA Mr Milne recommends that the consent include a condition requiring the daily monitoring of Norwich Quay and the sweeping of the same should it be found to be contaminated with debris. He is also of the view, given the expected increase in rail freight, that the proposal will provide both road and rail modes of transport. Finally, he notes that the matter of the management of cruise ship passengers is more properly resolved outside of this consent process as it does not relate to the current application.

104. I rely on Mr Milne's view in relation to traffic effects and consequently am of the view that any traffic effects will be less than minor.

Construction Effects

105. Construction effects in this case will be those effects occasioned strictly by the building of the terminal facilities, which could include laying the surface of the terminal, installing underground infrastructure, constructing workshop buildings and any other necessary buildings and installing cranes and other equipment. Other aspects of the construction such as quarrying activities within Gollans Bay quarry and the upgrading of the associated haul road have been addressed through existing consents, namely RMA/2017/869 and RMA92018173.

106. That being the case I am satisfied that any effects will be relatively benign. The construction of the surface of the terminal will result in additional heavy vehicle movements, particularly concrete trucks, or seal laying trucks and machines, but as such activities are undertaken in a staged fashion, I do not anticipate additional vehicle movements to be beyond the capacity of the roading network, particularly since the volumes are likely to far less than the volumes of trucks movements when the terminal is operating. Advice received indicates that the roading network is able to accommodate those volumes safely, hence the lower vehicle volumes associated with construction activities are not likely to give rise to adverse effects.

107. In other regards the construction activities are unlikely to generate any more than minor adverse effects with appropriate conditions of approval in place. Specifically, construction noise should be in accordance with NZS 6803 : 1999 Acoustics – Construction Noise, and as set out earlier in this report, subject to the Construction Noise Management Plan put forward by the applicant.

108. Other effects of the proposed construction involving discharges have been addressed through existing consents obtained from the regional council.

Cultural Effects

109. I am satisfied that the proposal will not result in adverse effects on Ngai Tahu cultural values for a number of reasons. Firstly, no submissions have been received from either Ngai Tahu or the papatipu runanga (Te Hapu o Ngati Wheke) which, in my view, indicate a level of comfort with the proposal. Secondly that same runanga advised the applicant that a cultural impact assessment did not need to accompany this application. Thirdly, the applicant has recognised mana whenua values in the provision of the Battery Point exclusion zone and the incorporation of LED or LEP lighting, and finally, extensive consultation was undertaken in the preparation of the Lyttelton Port Recovery Plan, which presumably resulted in the MAG. I would assume that any substantive concerns that mana whenua had were addressed through that consultation.

Other Effects

110. Submitters have raised a number of concerns about other effects that might arise from this proposal. These include an increase in debris and dust in the harbour, effects on wildlife (including Hector's Dolphins), impacts on water quality and air pollution.
111. In my view these effects are more relevant to the reclamation activity and ships using the harbour, in which case they fall within the regional council's jurisdiction, and not this Council's. Impacts on water quality, air pollution and effects on wildlife would fall into this category. I understand that these matters were extensively canvassed during the consent process for the reclamation.
112. Notwithstanding the above, I note that at Section 7 (Stormwater) of the application, the applicant details that they will be using a flow based "vortex" stormwater treatment device which will filter out suspended solids, trap floating hydrocarbons and remove gross pollutants. In higher risk areas it is stated that oil water separators can be used. Furthermore, the discharge of stormwater into the harbour from the proposed container terminal has been addressed and approved by way of regional consent CRC175508. Accordingly I am satisfied that any adverse effects on water quality from discharges have been addressed.

Conclusion with respect to effects on the environment

113. In summary, it is my opinion that in many regards adverse effects arising from this proposal will be less than minor. Into this category I place effects associated with noise, traffic, construction of the terminal and effects on cultural values.
114. Visual effects, will however, be moderate in nature, largely because the visual change occasioned by the terminal will be largely impossible to mitigate, but these effects will be confined to regular harbour users, particularly those in non-motorised craft, and to residents of Diamond Harbour and probably Purau. In this regard there will be additional cumulative light effects, visual impacts associated with the presence of large ships closer to residential areas, and visual effects associated with a greater number of ship to shore cranes than at present and considerably higher container stacks than at present. These will contribute to a diminution of natural character values of the harbour itself

but in relation to the ship to shore cranes there will also be impacts, to some degree, on the natural character values of the background hills, although I note, as set out earlier in this report, that these cranes are outside the jurisdiction of this council. Hence, while they will generate adverse visual effects, those effects have been disregarded in reaching conclusions on this proposal. Similarly, I have disregarded effects associated with ships moored alongside the terminal, for the same reason.

115. The recommended mitigation measures will only soften, but not eliminate the adverse visual effects of the proposal.

Relevant Objectives, Policies, and other Provisions of a Plan or a Proposed Plan (S.104 (1)(b))
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116. Regard must be had to the relevant objectives and policies in the Christchurch District Plan. These are set out and discussed at paragraphs 7.38 to 7.61 of the application. For the most part I adopt the applicant's assessment of these provisions. As set out earlier in this report Policy 13.8.2.1.1 explicitly recognises that operational port activities will be established on reclaimed land at Te Awaparahi Bay, while Policy 13.8.2.1.4 identifies Norwich Quay as the access to the port. Clearly the application is in accord with these provisions.

117. There is, however, one further objective that would on first blush appear to have some relevance to this proposal, namely Objective 9.2.2.1.2, which reads as set out below.

9.2.2.1.2 *Objective – Outstanding natural landscapes*

1. *The outstanding natural landscapes of the Christchurch District that are listed in Appendix 9.2.9.1.2 are protected.*

118. This objective might be relevant given the ship to shore cranes are likely to diminish appreciation of the character values of the backdrop ONL from some viewing points. The supporting policy, however, sheds light on how this is to be understood, in so far as it becomes clear that the management of adverse effects is for activities that are occurring within the ONL, and not from activities outside of it. Should the latter apply I imagine the objective would become unworkable given the multiplicity of viewing points likely for any given ONL.

119. I have not considered the objective and policies relating to natural character in the coastal environment since I am mindful that Chapter 9.6 (Coastal Environment) expressly states that the provisions of this chapter do not apply to the Specific Purpose (Lyttelton Port) Zone. Consequently, I do not believe it is appropriate to then consider the provisions of Chapter 9.2 that relate to the same environment.

120. Notwithstanding the tension with objective discussed above, it is my conclusion that in an overall sense, the application is in accord with the relevant District Plan objectives and policies, subject to the recommended conditions of approval.

Other relevant Statutory Documents (S.104 (1)(b))

121. Statutory documents of relevance to this application include the Regional Coastal Environment Plan (Coastal Plan), Regional Policy Statement and the New Zealand Coastal Policy Statement 2010. The applicant has assessed the proposal against these documents at 7.62 to 7.93 of the application. I accept and agree with assessment undertaken and conclusions reached, and hence adopt it for the purposes of this report.
122. By way of brief commentary on that policy framework, it is clear that both the Coastal Plan and Regional Policy statement explicitly anticipate and provide for the proposed development and were subject to changes directed by the Recovery Plan to this effect. In the case of the Coastal Plan, and as the applicant has pointed out, the provisions of Chapter 10 (which deal with the recovery of Lyttelton Port) prevail over other provisions on the same matter.
123. While the Coastal Policy Statement has not been subjected to changes occasioned by the Recovery Plan I note under Objective 6 that the protection of coastal values is not absolute and that development is not precluded in appropriate places, and that some activities are important to the social, economic and cultural wellbeing of people and communities, and that in addition, some uses can only be functionally located on the coast or in the coastal marine area. Policy 6 goes on to discuss activities in the coastal environment. This policy requires a consideration of locations where development could occur without undermining natural character values and also recognises the contribution of certain uses to the economic, social and cultural wellbeing of people and communities. Finally, Policy 9 recognises the importance of ports towards a sustainable national transport system. This includes expansion of ports in developing their capacity for shipping.
124. With respect to the above I am of the view that the location chosen for the expanded container terminal is appropriate in so far as it is not located in a natural character area, the surrounding area is heavily modified, the development comprises an extension to the existing terminal and thus will not be a stand-alone facility, and importantly provides an exclusion (setback) from Battery Point. This feature also acts as a demarcation point between the heavily modified area of the site and more natural areas to the west. Consequently I believe the proposal is in accordance with Objective 6 and Policy 6, with respect to its location. There can also be no doubt about the importance of the Port to Canterbury and South Island economies and the proposal is clearly in accord with the Policy 9 which supports the establishment and development of ports.
125. While there will be some adverse effects on natural character values it is my view that the policy framework of the Statement does not preclude this. Consequently I agree with the applicant that the proposal is in accordance with the policy framework of the Coastal Policy Statement. In this regard, and further to my comments on District Plan Objective 9.2.2.1.2 at paragraphs 117 and 118 of this report, I am also of the view that Policy 15 of the Policy Statement is not relevant for activities occurring outside of the outstanding natural feature or landscape, although I note that Mr Craig has assessed this provision of the statement.

126. Notwithstanding the above, I also note that, amongst other things, the Recovery Plan was developed to give effect to the Policy Statement, which in effect means that the Regional Plans and District Plans become the more relevant planning framework for assessing this proposal.
127. Given the above I am satisfied that the proposed is consistent with the objectives and policies of these statutory documents.

Relevant Other Matters (S.104 (1)(c))

Recovery Plans and Regeneration Plans

128. Section 60(2) of the Greater Christchurch Regeneration Act 2016 requires that decisions and recommendation on resource consent applications are not inconsistent with Recovery Plans and Regeneration Plans.
129. The Lyttelton Port Recovery Plan is relevant to this proposal as set out in the application. Without labouring the point the Recovery Plan explicitly anticipates the expansion of the container terminal into Te Awaparahi Bay over the 34 hectares comprising the site. In addition, through the directed changes to the District Plan, Norwich Quay is to be the access corridor for the Port. Clearly granting consent will be consistent with the Recovery Plan. Further, in my view none of the recommended conditions will frustrate, or be inconsistent with the intent of the Plan.

Lapsing of the consent

130. Section 125 of the Resource Management Act 1991 provides that resource consents shall lapse on the date specified in the consent, or if no date is specified, 5 years after the date of commencement of consent (unless the consent is given effect to). While the applicant has not explicitly asked for longer lapsing periods it is inherent in the application, as Reclamation A is expected to be completed between 2024 and 2026, while the completion date for Reclamation B is anticipated to be 15 years after the completion of Reclamation A. Furthermore, the former cannot commence until such time as Reclamation A is complete and a survey plan produced and approved for it under Section 245 of the Act.
131. Given the above, it would seem necessary that a lapse date of seven years apply to Reclamation A and 15 years apply to Reclamation B. I am mindful that the courts have raised issues with consents subsisting for lengthy periods without being given effect to, particularly nuisance and amenity effects arising from protracted construction activities and uncertainty for adjoining landowners. I do not foresee these issues arising in this case for two reasons, as follows:
- Construction effects of the terminal will not be protracted, as once the land has settled and stabilised I would anticipate that construction would be undertaken in a timely and expeditious manner.

- There can be no argument arising that uncertainty would be created for property owners in the area, as while the terminal construction will be delayed, construction of the reclamation will not, thus it will be abundantly clear that the terminal development will be proceeding.

Statutory Acknowledgement Area - Te Tai o Mahaanui (Selwyn – Banks Peninsula Coastal Marine Area)

132. The Ngai Tahu Claims Settlement Act 1998 stipulates that local authorities must send a summary of the application to Ngai Tahu for an activity that adjacent or within a Statutory Acknowledgment Area and decide whether they are an affected party for the purposes of notification. The areas themselves are an acknowledgment by the Crown of a statement of Ngai Tahu's particular cultural, spiritual, historical, and traditional association with the areas.
133. Ngai Tahu was sent a summary of the application and was notified as an affected party as part of the public notification of the application. No submission was received from them. In addition, the papatipu runanga (Te Hapu o Ngati Wheke) were also directly notified. Again no submission was received.
134. As set out in the application the applicant consults regularly with mana whenua on a range of matters, including on these applications for the container terminal. It is also stated that a cultural impact assessment (CIA) was not sought from Te Hapu o Ngati Wheke in this case as they were advised by the same that such an assessment was not required to accompany these applications.

Relevant Non-statutory Documents

135. The Lyttelton Master Plan (June 2012) is a Council facilitated community generated vision for the development of Lyttelton township. The township was selected by Council for a master plan as part of its Suburban Centres Programme due to extensive damage sustained by it from the recent Canterbury earthworks.
136. The Plan has a number of goals and action points. Of relevance to this proposal are those relating to access issues to the port and township. Goal 2 and the supporting action points (M1 and M2) read as follows:
- **Goal 2:** Alternative Port access investigations and public access to the inner harbour waterfront.
 - **(M1) Norwich Quay amenity improvements**
Undertake small-scale amenity improvements within the kerb and build-outs on Norwich Quay in the short term to improve the environment for pedestrians and redevelopment while maintaining freight and other vehicle movements.
 - **(M2) Heads of Agreement to facilitate resolution of Port and inner harbour waterfront access-related issues**

Draft and finalise for approval by Council, a Heads of Agreement between the Lyttelton Port of Christchurch, the New Zealand Transport Agency, Kiwirail, Environment Canterbury and the Council to agree key responsibilities and clearly set down intentions with regard to the provision of alternate heavy access to the Port, Norwich Quay and public access to the inner harbour waterfront.

137. As a non-statutory document limited weight can be given to it. Furthermore the above intention has effectively been rendered redundant by the Lyttelton Port Recovery Plan, which through the directed changes to the District Plan explicitly sets out that Norwich Quay is to be the access to the Port. That being the case I would question whether any small-scale amenity improvements would be worthwhile.

Part 2 of the Act

138. The matters outlined previously are subject to Part 2 of the Act which outlines its purpose and principles.
139. The use, development and protection of resources is to be sustainably managed in a way that enables people and communities to provide for their social, economic and cultural wellbeing and their health and safety, while avoiding, remedying or mitigating any adverse effects of activities on the environment.
140. The Christchurch District Plan has recently been reviewed. Its provisions were prepared under the higher order planning documents and, through its preparation and the process of becoming operative, have been assessed against the matters contained within Part 2.
141. Taking guidance from recent case law¹, the District Plan is considered to be the mechanism by which the purpose and principles of the Act are given effect to in the Christchurch District. It was competently prepared via an independent hearing and decision-making process in a manner that appropriately reflects the provisions of Part 2. Under normal circumstances no further assessment against Part 2 would be necessary. However, in this case as there is no applicable District Plan zoning, and for the sake of completeness I will consider Part 2 of the Act. Having said that, I am satisfied that the other planning documents have given effect to Part 2, and provide necessary guidance, without recourse back to this part of the Act.
142. As set out earlier there can be no doubt that the proposal will enable people and communities to provide for their wellbeing. With respect to Section 6 (Matter of National Importance) I believe that there is some tension with Section 6(b) given that the natural character values of the backdrop hills, which are an Outstanding Natural Landscape, will be diminished to some degree. That being said, on the face of it there would also appear to be some tension with Sections 7(c) and (f), as the proposal will inevitably impact on the natural character values of the harbour basin. However, I

¹ R J Davidson Family Trust v Marlborough District Council [2018] NZCA 316

think this would be an erroneous conclusion given the policy framework established by the lower order planning documents, which explicitly contemplate the port expansion. That planning framework should, in my view, supercede Part 2 in this instance.

143. I agree with the applicant that the proposal satisfies Sections 6(e) and 7(a) given the lengthy and ongoing consultation the applicant has undertaken with the papatipu runanga.
144. In conclusion I am satisfied that the proposal is in accordance with Part 2 of the Act.

Conclusion

145. After considering the actual and potential effects on the environment of allowing the application, it is my conclusion that in many regards adverse effects arising from this proposal will be less than minor. Into this category I place effects associated with noise, traffic, construction of the terminal and effects on cultural values. Noise effects will, however, only be minor subject to the constraints imposed by the recommended conditions.
146. Visual effects, will however, be moderate in nature, largely because the visual change occasioned by the terminal will be largely impossible to mitigate, but these effects will be confined to regular harbour users, particularly those in non-motorised craft, and to residents of Diamond Harbour and probably Purau. In this regard there will additional cumulative light effects and visual impacts associated with the container stacks. While the presence of large ships closer to residential areas, and visual effects associated with a greater number of ship to shore cranes than at present will also contribute to adverse visual effects I am mindful that those activities will be located within the CMA and thus any effects cannot be considered for the purposes of this report. Setting those matters aside I am of the view that the remaining aspects of the proposal discussed above will contribute to a diminution of natural character values of the harbour and to some degree, the natural character values of the background hills.
147. Notwithstanding the above, it is my view that in an overall sense the location of the proposed development is suitable, given that the chosen site has already been modified by the coal handling facility, historical benching of the hillside and that it will form an extension of the existing port, hence will not be stand-alone, and as a result will be visually cohesive. Importantly, the development will not breach the natural demarcation line created by Battery Point, between the more natural coastline to the east and the modified area of the proposed site.
148. In my opinion this proposal is consistent with the objectives and policies of the District Plan and those of the higher order planning documents as the relevant objectives and policies clearly anticipate a container terminal being developed on reclaimed land at Te Awaparahi Bay and for Norwich Quay to be the access for the port. In addition the movement of some port activities eastwards will potentially reduce adverse effects, particularly noise, on Lyttelton township, which is consistent with relevant policies

seeking to ensure that adverse effects on Lyttelton and its wider environment are mitigated. The recommended conditions of consent will also contribute in this regard.

149. I consider that the proposal is in accord with Part 2 of the Resource Management Act 1991, and that it is consistent with the Lyttelton Port Recovery Plan.
150. Having considered all of the relevant matters under Sections 104 and 104B, it is my opinion that consent should be granted subject to conditions.

Recommendation

Reclamation A (Phases 1 and 2) and Reclamation B

1. I have assessed these applications to undertake port activities at Te Awaparahi Bay, Lyttelton Harbour. Having considered all the matters relevant to this application, I recommend that the applications for port activities be **granted** for the Reclamation A site and Reclamation B site respectively pursuant to Sections 104, 104B and 108 of the Resource Management Act 1991 subject to the following conditions:

Lapsing of Consent

2.
 - (i) Reclamation A site: Pursuant to Section 125(1) of the Resource Management Act 1991 this resource consent shall lapse 7 years after the commencement of the consent.
 - (ii) Reclamation B site: Pursuant to Section 125(1) of the Resource Management Act 1991 this resource consent shall lapse 15 years after the commencement of the consent.

Commencement of Consent

3. Consent for the Reclamation B site shall not commence until such time as a certificate has been issued for the Reclamation A site pursuant to Section 245(5) of the Act.

Location

4. The Port Activities may occur on reclaimed land located in the area shown on Drawing entitled “Te Awaparahi Bay Reclamation Project Overall Site Map” being Figure 1.1 of the application.

Height of Structures

5. The following heights shall not be exceeded:
 - a) Lighting structures: 30 metres.
 - b) Buildings 15 metres.
6. There shall be no height limit for ship to shore and container cranes.

Construction Noise

7. The applicant shall abide by the terms and conditions of the Port Recovery Construction Noise Management Plan for the Lyttelton Port of Christchurch attached at **Appendix 7** to this decision

Noise from Port Activities

8. Noise from Port Activities undertaken on the reclaimed land shall be incorporated into the Port Noise Contour Map included as part of the “Port Noise Management Plan – Lyttelton Port of Christchurch”, in accordance with the relevant provisions of Rule 13.8.4.2.7 (Lyttelton Port Noise Management and Noise Mitigation), clause a. of the District Plan.
9. That the Port Noise Contour Map be reviewed, by measuring the noise afresh, at the completion of the Reclamation A site container terminal and again at the completion of the overall terminal development to confirm and validate the modelling undertaken for the purposes of this application.
10. The applicant shall abide by the terms and conditions of the Port Noise Management and Mitigation Plans for the Lyttelton Port of Christchurch.

Lighting

11. All flood lighting luminaires shall be fitted with shields and, as far as is practicable, orientated so that the principal output is directed away from the opposite side of the harbour.
12. That light poles along the water’s edge be set back from that edge to minimise light reflections off the water’s surface.
13. Temporary flood lighting luminaires required for the construction of the reclamation area at Te Awaparahi Bay shall be located and controlled to ensure that direct illumination does not exceed 10 lux (lumens per square metre) within the boundary of any site within the Residential Zone, Residential Conservation Zone or Town Centre Zone and shall incorporate luminaire shielding to ensure the principal output is directed away from the opposite side of the harbour. In addition, any temporary light poles along the water’s edge shall be set back from that edge to minimise light reflections off the water’s surface.
14. Permanent lighting required for Port Activities shall be designed by a suitably qualified and experienced lighting engineer and installed to ensure that direct illumination does not exceed 10 lux (lumens per square metre) within the boundary of any site within the Banks Peninsula Residential Zone or Banks Peninsula Commercial Zone.
15. For the purpose of this condition, light shall be measured by a person experienced in the measurement and assessment of outdoor lighting.
16. That the existing HPS lamps be phased out in a progressive fashion linked to the staged development of the proposed container terminal with the end result that by the time the terminal on Reclamation B is completed the whole container terminal (existing and proposed) is operating with either LED or LEP lamps. The applicant is to provide to Council for acceptance a schedule which details the progressive phasing out the of the HSP lamps. As a minimum one third of the existing HPS lamps are to be replaced

when the first LED or LEP lamps are installed on the Reclamation A area, given that the latter is approximately one third of the overall new container terminal, thus this is a commensurate response.

17. That the colour temperature of the LED or LEP lamps be kept as close as practicable to 3000°K, and no greater than 3500°K.

Terminal Surface

18. That terminal surface be finished in dark colours and rough or textured surface, should concrete be used, to reduce light reflectance.

Colour of Ship to Shore Cranes

19. That the ship to shore cranes be finished in a recessive colour that best integrates with the surrounding context, and in particular the backdrop hills. The applicant shall submit the proposed colour to Council for acceptance. The chosen colour shall be supported by analysis of the dominant colours of the backdrop hills, including seasonal variations.

Maintenance of Norwich Quay

20. That Norwich Quay be inspected on a daily basis and swept / cleaned, if necessary, to remove any debris or contamination.

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:

i) 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.

ii) *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.



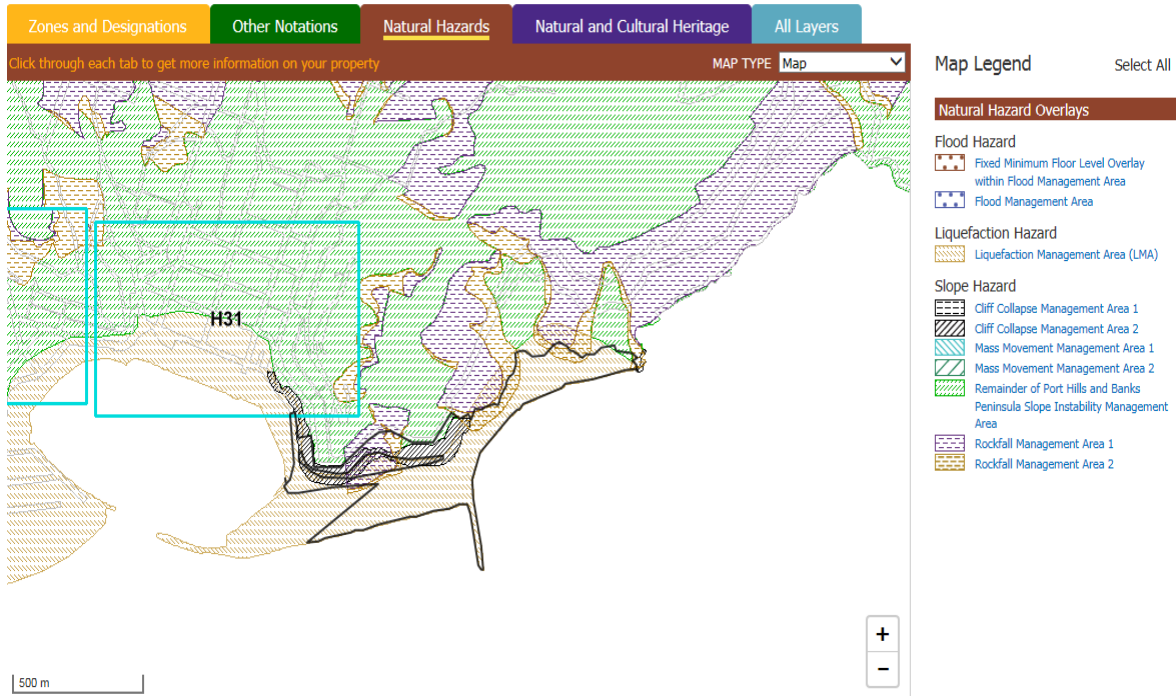
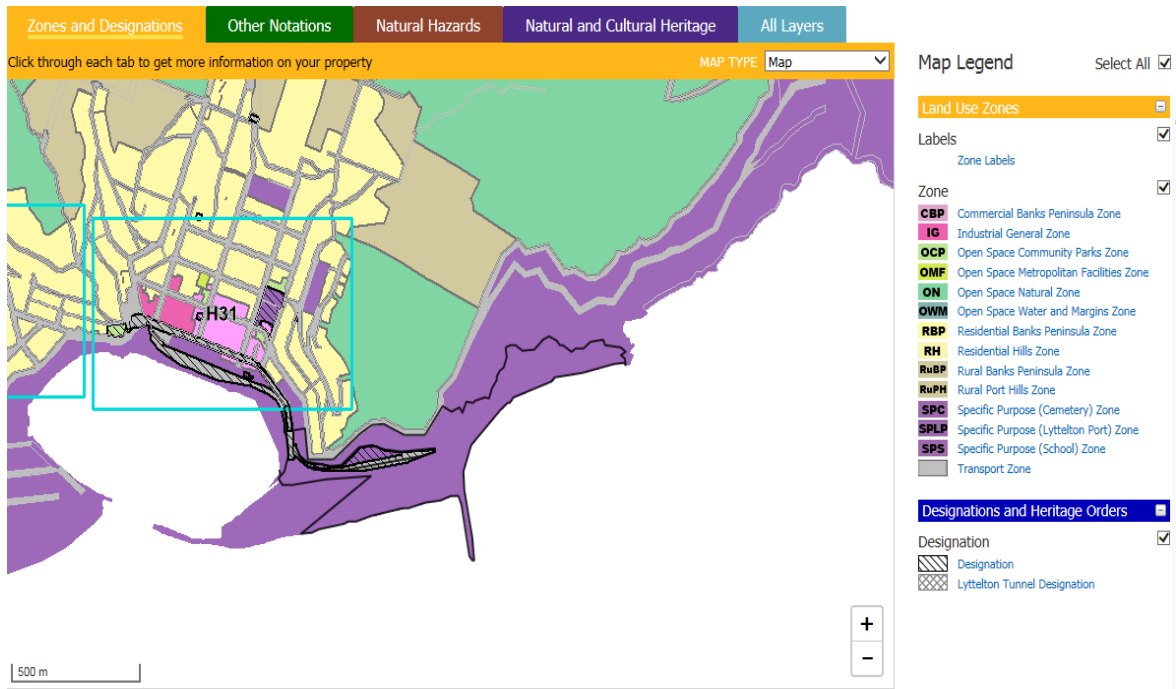
Kent Wilson
Senior Planner
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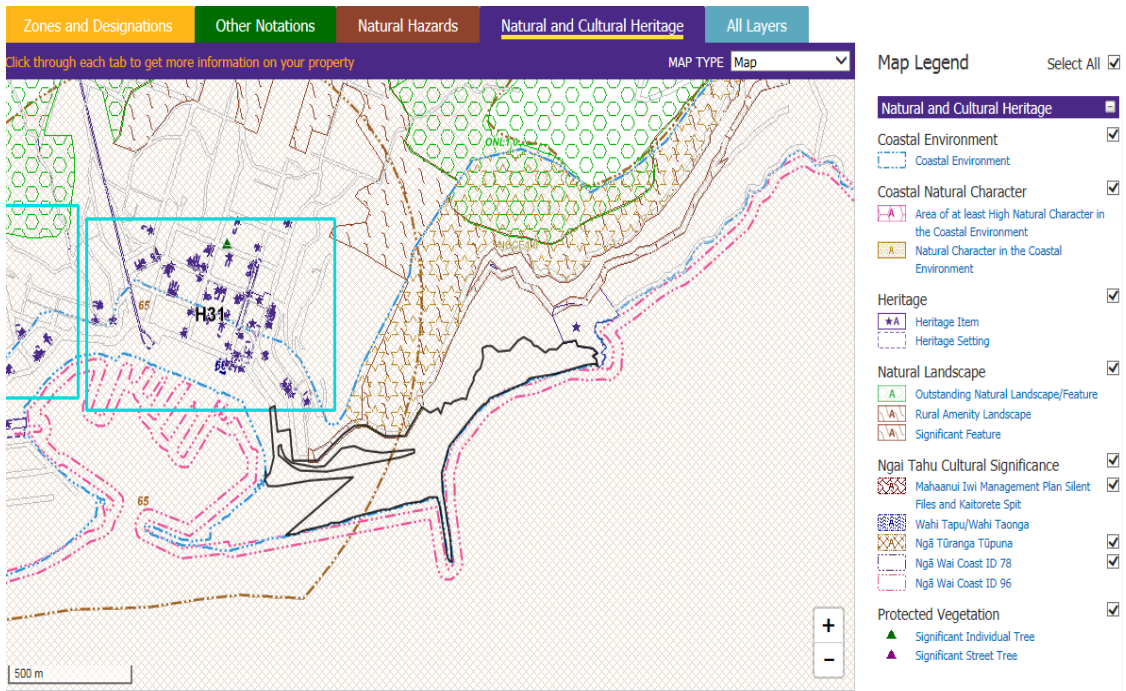
Reviewed by:

Jeremy Rusbatch
Team Leader

31/10/2019

APPENDIX 1
DISTRICT PLAN MAPS





APPENDIX 2
LIST OF SUBMISSIONS RECEIVED

1	Paul Chapman	10 Purau Avenue	RD 2	Diamond Harbour 897	Paul	Y	paulchapman@mailworks.org	Oppose	No	No	27/08/2019
2	Clare Hall	10 Purau Avenue	RD 2	Diamond Harbour 897	Clare	Y	clarehall@speedymail.org	Oppose	No	No	28/08/2019
3	Jocelyn Maud & William Errol	112 Marine Drive	RD 1	Lyttelton 8971	Jocelyn & William	Y	jbhaley@	Support	No	No	29/08/2019
4	Michael John Bushnell	15 Rossall Street	Merivale	Christchurch 8014	Michael	Y	mbushnell@pifnz.co.nz	Support	No	No	28/08/2019
	Patricia van den Busken &										
5	Gilbert Lucas Wally de Jongh	6 Muriwai Drive	RD 1	Lyttelton 8971	Patricia and Gilbert	Y	patriclashannon@outlook.com	Oppose	No	No	28/08/2019
6	Simon Carl Nikoloff	20 James Drive			Simon	Y	simon@strategicadventure.co.nz	Support	No	No	30/08/2019
7	Carol Blake	51 James Drive	RD 1	Lyttelton 8971	Carol	Y	carolblake@xtra.co.nz	Support	No	No	30/08/2019
8	Murray James Blake	51 James Drive	RD 1	Lyttelton 8971	Murray	N		Support	No	No	30/08/2019
9	Angela Eileen McCol	58 Koromiko Crescen	RD 1	Lyttelton 8971	Angela	Y	jilsoano@snap.net.nz	Support	No	No	30/08/2019
10	Graeme John McCol	58 Koromiko Crescen	RD 1	Lyttelton 8971	Graeme	Y	jilsoano@snap.net.nz	Support	No	No	30/08/2019
	Robert William Rodgers; Pamela										
11	Mary Rodgers	62 James Drive	RD 1	Lyttelton 8971	Robert and Pamela	Y	rrodders2@gmail.com	Support	No	No	01/09/2019
12	Robert John Edwards	59 Bayview Road	RD 1	Lyttelton 8971	Robert	Y	robedwards2016@gmail.com	Neutral	No	No	03/09/2019
13	Elaine Mavis Poulson	110 Marine Drive	RD 1	Lyttelton 8971	Elaine	Y	clairepoulson@gmail.com	Support	No	No	03/09/2019
14	Kenneth Poulson	110 Marine Drive	RD 1	Lyttelton 8971	Kenneth	Y	kennpoulson@gmail.com	Support	No	No	03/09/2019
15	Shane Kevin Clinch	24 James Drive	RD 1	Lyttelton 8971	Shane	N	clinchautomobile@xtra.co.nz	Support	No	No	04/09/2019
16	Kim Marie Glennie-Clinch	24 James Drive	RD 1	Lyttelton 8971	Kim	Y	kimglennie@xtra.co.nz	Support	No	No	04/09/2019
17	Lesley May Barnett	18 Ngatea Road	RD 1	Lyttelton 8971	Lesley	N		Support	No	No	09/09/2019
18	Richard James Fulton Barnett	18 Ngatea Road	RD 1	Lyttelton 8971	Richard	N		Support	No	No	09/09/2019
19	Mandy Jane Coughlin	C/ Mrs LM Barnett	18 Ngatea Road	RD 1, Lyttelton 8971	Mandy	N		Support	No	No	09/09/2019
20	Stephen Palfrey	64 Bletsoe Avenue	Spreydon	Christchurch 8024	Stephen	Y	stephenpalfrey@gmail.com	Support	No	No	10/09/2019
21	Tania Helen Bennet	59 Koromiko Crescen	RD 1	Lyttelton 8971	Tania	Y	Tanzee@xtra.co.nz	Support	No	No	10/09/2019
22	Stefan Tony Bennett	59 Koromiko Crescen	RD 1	Lyttelton 8971	Stefan	Y	S.Bennett@xtra.co.nz	Support	No	No	10/09/2019
23	Ian Alexander Boyd	105 Marine Drive	RD 1	Lyttelton 8971	Ian	N	ataboyd@yahoo.co.nz	Support	No	No	11/09/2019
24	JC & KC McClelland	21 James Drive	RD 1	Lyttelton 8971	Kenneth & Jillian	N	jillmcclelland156@gmail.com	Support	No	No	17/09/2019
	Ben Warner	TEST									
25	Antje Duda	2 Waipapa Avenue	RD 2	Diamond Harbour 897	Antje	Y	antjeduda@web.de	Oppose	No	Yes	16/09/2019
26	Thomas Kulpe	73 Purau Port Levy Road	RD 2	Diamond Harbour 897	Thomas	Y	tkulpe@gmail.com	Oppose	Yes	-	17/09/2019
27	Kevin John Holland	11 Emerson Crescent	RD 1	Lyttelton 8971	Kevin	Y	kevin.dhb@gmail.com	Support	-	-	19/09/2019
28	Alan & Fiona Margaret Penney	37 Manor Place	Bryndwr	Christchurch 8053	Alan and Fiona	N	alanpenney@yahoo.com	Oppose	Yes	Yes	19/09/2019
29	Martin Kinross Watson	1 Panorama Road	Clifton	Christchurch 8081	Martin	Y	martyandleasa@gmail.com	Support	No	-	19/09/2019
30	Ken Maynard	83 Canterbury Street		Lyttelton 8082	Ken	Y	lyttca@gmail.com	Neutral	Yes	Yes	19/09/2019
31	Melanie Betts	29 Brittan Terrace		Lyttelton 8082	Melanie	Y	mei@actrix.co.nz	Support	No	-	20/09/2019
32	Gaynor Rose Pavelka	6 Marama Terrace	RD 1	Lyttelton 8971	Gaynor	Y	gaypavelka@conflictresolution.net	Neutral	No	-	20/09/2019
33	Matthew Ross	175 Marine Drive				Y	thurba@btinternet.com	Oppose	Yes	Yes	20/09/2019
	James David Bundy & Heather										
34	Joan Bundy	PO Box 39		Lyttelton 8841	James and Heather	Y	jdb Bundy@cyberexpress.co.nz	-	Yes	-	19/09/2019
35	Stephanie Brown	38 Reserve Terrace			Stephanie	Y	stephalastair@gmail.com	Oppose	Yes	Yes	19/09/2019
36	Richard Suggate	16 Whero Avenue	RD 1	Lyttelton 8971	Richard	Y	richard.suggate@gmail.com	Neutral	Yes	Yes	20/09/2019
37	Lyttelton Seafarers Centre	John Clister	PO Box 197	Lyttelton 8082	John	Y	imclister@icloud.com	Support	Yes	-	23/09/2019

APPENDIX 3
REPORT OF MS ISOBEL STOUT

RMA 2019 1361
Lyttelton Port Company Limited
45 Godley Quay, Lyttelton
Land use consent application to establish a container terminal.

REPORT OF ISOBEL STOUT
ON NOISE and LIGHTING
Dated 15 October 2019

TABLE OF CONTENTS

INTRODUCTION 1

SUMMARY OF REPORT..... 1

NOISE **ERROR! BOOKMARK NOT DEFINED.**

LIGHTING.....

CONCLUSION..... 3

REFERENCES 3

INTRODUCTION

1. My full name is Isobel Louise Stout. I am a member of the Consenting and Compliance Unit at the Christchurch City Council (**Council**). I am here providing an assessment of acoustic and lighting matters as an input to the officers' report in relation to the application to establish a container terminal.
2. I hold a *Bachelor of Science degree and Post Graduate Diploma (majoring in Anatomy) from the University of Otago and a Post Graduate Diploma in Environmental Health from Wellington Polytechnic, now Massey University and a Diploma in Public Health from the University of Otago, Christchurch Medical School.*
3. I am employed as a Senior Environmental Health Officer with Council. I have worked in the role for the past 29 years. My work is centred on environmental health and in particular acoustics as well as lighting and radio frequency electromagnetic radiation.
4. I have over 30 years' experience working as an Environmental Health Officer.
5. Whilst it is not directly relevant for the preparation of this report, I am aware that the Council has approved direct referral of this application to the Environment Court. I confirm that I have read and agreed to comply with the Code of Conduct for expert witnesses contained in the Environment Court Practice Note (dated December 2014). I confirm that the issues addressed in this report are within my area of expertise. I have not knowingly omitted to consider facts or information that might alter or detract from the opinions expressed.

SUMMARY OF REPORT

6. The purpose of this report is to provide information and advice for the consent application, in relation to potential adverse environmental health effects of noise and lighting. I understand that the proposal is a discretionary activity.
7. I have read the following documents when preparing this report:
 - 7.1 The original consent application, together with the specialist acoustic and lighting reports appended.
 - 7.2 The response to further information sought on acoustics and lighting after the receipt of submissions.
 - 7.3 The submissions to the application where they mention environmental health effects.
8. The application is accompanied by an acoustic modelling assessment built upon the scenario of both Reclamation Areas A and B in full operation and the removal of some operations from inner harbour areas.
9. The model produces sound contours in accordance with the best practice advice in NZS 6809:1999 Acoustics – Port Noise management and land use planning, and the District Plan rule 13.8.6.7.
10. Moving some port activities out of the inner harbour and centering the container terminal operations on the reclamation will see levels of noise from port activities

received in Lyttelton township reduce overall but with potentially two residences now meeting the requirements for assessment of acoustic insulation that do not today.

11. The lighting planned for the container terminal will create a noticeable change to the night time visual environment as modern luminaires are whiter in colour rather than orange and dramatically reduce the amount of light spill including sky glow.
12. This application may perhaps offer the opportunity to improve the environmental performance of the existing lighting at the port in anticipation of the reclamation land development.

NOISE

13. The management, measurement and assessment of noise from port activities is a specialised area of acoustics recognised by the fact that there is a specific New Zealand Standard (NZS6809:1999 Acoustics – Port Noise Management and Land Use Planning). It is this standard that forms the basis of the rules for the Lyttelton Port Zone in the Christchurch District Plan.
14. As there are multiple sources of noise in the Port and these can come from multiple locations, the rules require that a sound model is built that shows how the total sound lies across the land in contours of equal levels. The resulting Port Noise Contour Map is the principal instrument for the assessment of the likely adverse effects of port noise.
15. A new contour map has been developed by adding the noise from the new container terminal and removing some noise sources from the inner harbour as these activities are removed. Overall the relocation of the contaminate terminal onto the reclaimed land to the east reduces the noise that reaches Lyttelton residences as the bulk of the landform shelters the town. The removal of some current activities from the inner harbour also makes a reduction in the noise likely to be received on the western side of town.
16. However, the new contour map does show two residences that may now receive a bit more noise than before and may trigger the Rule requirement for an acoustic insulation assessment using the Plan for Acoustic Treatment and Purchase of Dwellings.
17. The contour map is built from overall sound levels on a continuous basis taking into account increased residential sensitivity to noise at night. It does not and cannot make allowances for impact type sounds such as ship hatches dropping and containers banging.
18. NZS 6809:1999 places a limit of 85dB_{LAFmax} for impact sounds. Whilst such sounds may be audible at distances such as Diamond Harbour the absolute sound level will be very much less than this, probably not even measurable as an L_{max} type noise, and would not impact overall amenity.

19. It is the complaints and operational review systems that are run along with the contour plan as part of the Port Noise Management Plan that are the best tool for minimising impact noises. Examples of this tool in action include not loading scrap metal during the District Plan night time hours.

LIGHTING

20. As the container terminal is a 24hour operation lighting at night is critical. The Port currently has sodium vapour luminaires that give off an orange glow that extends beyond the working area and does contribute to sky glow.
21. The reclamation area will be lit with more modern and energy efficient LED or LEP luminaires. These are much whiter in colour and can be quite tightly directed so that light is not spilt beyond where it is needed but it can still contribute to sky glow as the light is reflected from surfaces such as the ground, metal containers and machinery.
22. Submissions have also raised the issue of the change in nature of the light, the visibility of the lights at a distance and the height of the lights. These are more of an aesthetic matter than an environmental health one but the new lighting will add to the cumulative light level over what is currently present.
23. Therefore I do support the submissions that the older sodium lights be phased out sooner than at their end of life in order that the cumulative sky glow is kept to a minimum.

CONCLUSIONS

24. The adverse effects of noise and lighting can be mitigated with conditions so that any residual adverse effects are at acceptable levels.

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REFERENCES

RECOMMENDATION FOR CONDITIONS

25. A timetable be prepared and submitted for the phasing out of sodium vapour lighting in favour of LED or LEP at a rate that minimizes any increase in the cumulative light levels as the new areas of the container terminal become operational.

APPENDIX 4
REPORT OF MS JENNIFER DRAY

RMA 2019 1361
Lyttelton Port Company Limited

**APPLICATION FOR LAND USE CONSENTS IN RELATION TO A
CONTAINER TERMINAL AT TE AWAPARAHI BAY**

**REPORT OF JENNIFER GERALDINE DRAY
ON LANDSCAPE AND VISUAL ASSESSMENT**
Dated 21 OCTOBER 2019

TABLE OF CONTENTS

INTRODUCTION	1
SUMMARY OF REPORT	1
DESCRIPTION OF THE PROPOSAL.....	2
CHRISTCHURCH DISTRICT PLAN (CDP)	5
THE NEW ZEALAND COASTAL POLICY STATEMENT (NZCPS).....	7
DESCRIPTION OF RECEIVING ENVIRONMENT	9
LANDSCAPE AND VISUAL EFFECTS.....	11
SUBMISSIONS.....	18
ASSESSMENT OF PROPOSED MITIGATION MEASURES	20
RECOMMENDATIONS	20
CONCLUSION.....	22
REFERENCES	23

INTRODUCTION

1. My full name is Jennifer Geraldine Dray. I am a member of the Technical Services and Design Unit at the Christchurch City Council (**Council**). I am here providing an assessment of the landscape and visual amenity as an input to the officers' report in relation to the application for land use consents at the LPC Container Terminal at Te Awaparahi Bay, Lyttelton.
2. I hold a Bachelor of Science in Physical Geography from Canterbury University and a Bachelor of Landscape Architecture from Lincoln University.
3. I am employed as a Senior Landscape Architect with Council. I have worked in the role for the past 15 years. My work is centred on both landscape design and landscape assessment. I have been involved in reviewing many landscape and visual assessments for Council for applications relating to both residential and commercial zoned land, as well as rural developments and developments within areas of outstanding natural landscape (ONL) around the Port Hills and Banks Peninsula. In 2015 I appeared before the Independent Hearings Panel (IHP) while contributing to the Rural Chapter 17 of the District Plan Review.
4. I have over 20 years' experience working as landscape architect.
5. I confirm that I have read and agreed to comply with the Code of Conduct for expert witnesses contained in the Environment Court Practice Note (dated December 2014). I confirm that the issues addressed in this report are within my area of expertise. I have not knowingly omitted to consider facts or information that might alter or detract from the opinions expressed.
6. I visited the site on 23 July 2019, and have also viewed the site from different viewpoints within the Lyttelton Harbour Basin, including Governors Bay and Diamond Harbour. I visit the Lyttelton and its environs often, and am generally familiar with the area.

SUMMARY OF REPORT

7. The purpose of this report is to provide information and advice for the consent application, particularly to provide advice on the merits of this proposal in relation to landscape and visual amenity effects upon the wider harbour basin, as well as

the Natural Character status of the immediate backdrop to the development. In addition, I have been asked to make comment in regards to the policies in the Coastal Policy Statement that provide for Ports and the Port Recovery Plan, particularly those policies that relate to natural character.

8. I have read the following documents when preparing this report:
 - 8.1 The consent application including further information and amendments;
 - 8.2 **The Assessment of Environmental Effects.**
 - 8.3 Landscape Assessment prepared by Andrew Craig and dated June 2019.
 - 8.4 Graphic Attachments Landscape prepared by Andrew Craig and dated June 2019
 - 8.5 Photo Simulations prepared by Virtual View dated 17 April 2019.
9. Following damage to the Port after the 2011 Canterbury earthquakes, the Minister for Canterbury Earthquake Recovery directed Environment Canterbury to develop a Lyttelton Port Recovery Plan ('Recovery Plan'), the purpose of which was to expedite the complex repair, rebuild and reconfiguration of the Port. A key element of the Recovery Plan is the 34ha reclamation at Te Awaparahi Bay. The Recovery Plan directed that the Regional Coastal Environment Plan contain provisions to make a future reclamation in Te Awaparahi Bay a controlled activity. LPC has previously gained approvals from Environment Canterbury to reclaim land and build wharves that cover a total 34ha within Te Awaparahi Bay.
10. LPC is seeking two land use consents from the Christchurch City Council. The first land use consent will enable the establishment and operation of the Container Terminal on Reclamation A and associated wharf. The second land use consent will enable the establishment and operation of the Container Terminal on Reclamation B.

DESCRIPTION OF THE PROPOSAL

Development Phases

11. The proposed sequence of development is outlined within the application, however the layouts and timelines are indicative and could change as LPC

refines its design to reflect changes in cargo volumes, demand forecasts and land availability.

12. LPC also holds an existing land-use consent granted in 2011 to use 10ha of the total 34 ha for port activities, and the reclaiming of the land is being carried out in two distinct parts being Reclamation A (comprising Phases 1 and 2) and Reclamation B. This 34ha of reclaimed land forms a part of the existing environment, and this is acknowledged within my comments.
13. LPC is seeking two land use consents from the Christchurch City Council. The first land use consent will enable the establishment and operation of the Container Terminal on Reclamation A and associated wharf. The second land use consent will enable the establishment and operation of the Container Terminal on Reclamation B.
14. The construction of Reclamation A (Phase 1) has recently been completed (10ha), and is providing access to the Phase 2 reclamation area. The construction of Reclamation A (Phase 2) has commenced (6ha) and is anticipated to be completed, along with a wharf, between 2024 and 2026. The construction of Reclamation B (18ha), including the associated wharf, is not anticipated to be completed until some 15 years after completion of Reclamation A. The full extent of the Container Terminal is unlikely to be realised until the late 2030's.

Container Stacking

15. During the Reclamation A (Phase 1) development, the road will be re-aligned, and refrigerated ('reefer') containers will be stored in the area. The reefer containers are to be stacked four-high and connect to three-storey steel lattice frames (reefer towers), to a height of approximately 12m. Cars and logs are likely to be stored on the reclaimed land while the land consolidates. Empty containers could be stacked up to nine-high (approximately 25m) in this area.
16. The intention is for the Reclamation A container terminal to operate stacking cranes in the long term, although the new terminal will initially run a straddle operation. Stacking cranes enable the establishment of dense container blocks with a minimal gap between containers. The containers would be stacked seven-

high and eight wide and each block about 180m long. Each block, including the stacking cranes, would be a height of approximately 20m.

Ship-to-shore cranes

17. The 'ship-to-shore' cranes are potentially the most visually prominent aspect of the port activities. These cranes are estimated to be 95m in height (with the arms extended to full height). Currently there are four existing 'ship-to-shore' cranes (also described within the application as 'gantry' cranes and 'quayside cranes') located on the existing wharf area, coloured a light green. An additional quantity of up to four ship-to-shore cranes would be put in place to unload and load container vessels upon completion of the new wharf, after the Reclamation A Phase 2 works have settled (estimated to be 2020-2024/26). When the southern edge of Reclamation B becomes sufficiently stable, the second part of the wharf would be constructed and up to four or more ship-to-shore container cranes installed (estimated to be 2024 to 2026 onwards).

Workshop and Administration building

18. A combined workshop and administration building is proposed, likely within Reclamation A. This structure may be up 30m in height to accommodate the servicing of straddle carriers. The proposed building will be located to the rear of Reclamation A.

Lighting

19. The applicants have submitted that *"Given the rapidly evolving technology, it is difficult to predict the lighting design that will be used even for the Container Terminal on Reclamation A, which is due to be completed between 2024 and 2026"*², and a lighting plan has not been provided. However, it is anticipated to include LED or LEP luminaires, which have a cool white output. Mounting heights will be 30 - 40m above ground (the existing resource consent for the 34ha area has given provision for 30m high light standards). Luminaire tilt will be limited to low angles above horizontal, to assist the mitigation of the obtrusive

² AEE para 4.19

effect of the lighting. The spacing between lighting poles is expected to remain similar to that in the existing container terminal.

20. The existing Cashin Quay container terminal is flood-lit, with sodium vapour luminaries, which have the distinctive golden colour and sit on poles that are up to 30m high. It is anticipated that the proposed lighting will provide similar functional lighting levels as exists in the existing container terminal, but with more refined beam control and increased efficiency of distribution, with less light spill and reduced sky glow.

CHRISTCHURCH DISTRICT PLAN (CDP)

21. The reclaimed land is expected to eventually be subject to Specific Purpose (Lyttelton Port) Zoning ('Port Zone'). The Port Zone zoning currently covers all LPC owned land. Guidance can be taken from the provisions for the Lyttelton Port Zone contained within the CDP. Port activities are a permitted activity on the flat land in the Port Zone. Any decision must not frustrate the operation of the Container Terminal, as to do so would be inconsistent with the Recovery Plan.
22. The two relevant built form standards are those regarding building height and noise. There are no height limits on container cranes, lighting towers and container storage, while other buildings are permitted up to a height of 15m.
23. The coastline at Te Awaparahi Bay is not identified as an area of high natural character in the coastal environment ('HNC'), nor is any part of the Port Zone identified as an Outstanding Natural Landscape ('ONL'). However the site is nestled within HNC and ONL areas, as the land further east is identified as HNC and ONL, and the upper slopes around the harbour are generally identified as ONL. That is, the surrounding context, as well as the immediate backdrop to the development, has a Natural Character status under the District Plan.
24. I am guided in my assessment by relevant objectives and policies within Chapter 13.8 of the Christchurch District Plan concerning the Lyttelton Port Zone, in addition to relevant policies within Chapter 9.2 of the CDP concerning Landscape and Natural Character.

CDP 13.8 Specific Purpose (Lyttelton Port) Zone

25. 13.8.2.2 Objective - Effects of Lyttelton Port recovery and operation - aims to manage the recovery of Lyttelton Port, including its operation, to reduce the potential for adverse effects on the amenity of the wider Lyttelton town-ship during recovery and repair, while also mitigating adverse effects on the wider Lyttelton town-ship and environment, generated from on-going port operations. This objective seeks to provide guidance on effects both within the township, while also referring to the wider harbour basin.
26. 13.8.2.2.1 Policy - Recovery opportunities to reduce adverse effects - seeks to ensure development activities undertaken within the Lyttelton Port Zone are designed to reduce existing, and minimise new adverse effects generated within the Port operational areas. This policy provides for assessing the merits of this particular proposal, particularly in regards to the proposed mitigation measures in relation to actual and potential adverse effects.

CDP 9.2 Landscapes and Natural Character

27. 9.2.2.1.4 Objective - Natural character – seeks to preserve the natural character of the Christchurch District’s coastal environment, wetlands, and lakes and rivers and their margins.
28. Associated 9.2.2.2.6 Policy - Recognition of natural character - Recognises that the following natural elements, patterns, processes and experiential qualities contribute to natural character. These include areas or waterbodies in their natural states or close to their natural state, coastal or freshwater landforms and landscapes, coastal or freshwater physical processes, including the movement of water and sediment and the experience of the above elements, patterns and processes.
29. In addition, 9.2.2.2.7 Policy - Recognising and preserving the natural character qualities of the coastal environment – aims to recognise and preserve the natural character qualities of areas within the coastal environment that have outstanding natural character, high (and very high) natural character, and other areas with natural character.

30. This policy also seeks to protect those qualities from inappropriate subdivision, use and development by managing the adverse effects of these activities, avoiding significant adverse effects, and by avoiding subdivision, use and development within areas of outstanding natural character, where it would damage, diminish or compromise natural character.
31. The same policy seeks to concentrate development within existing settlements to avoid development sprawling along the coastline, avoiding development in areas of high natural character, except that where development cannot be practicably located outside of an area of high natural character, remedying or mitigating any adverse effects as far as practicable, and ensuring development is not readily visible from public places and frequently visited viewpoints.
32. 9.2.2.2.9 Policy - Cumulative effects on natural character – addresses effects on the natural character of the coastal environment, wetlands, and lakes and rivers and their margins by requiring an assessment of the cumulative effects of allowing more of the same activity, allowing more of a particular effect, whether from the same activities or from other activities causing the same or similar effect; and all activities in the coastal or freshwater environment at the site.
33. 9.2.2.2.10 Policy - Restoration of natural character – seeks to promote opportunities to restore and rehabilitate natural character, such as through the removal of plant and animal pests, and supporting initiatives for regeneration of indigenous vegetation.

THE NEW ZEALAND COASTAL POLICY STATEMENT (NZCPS)

34. The purpose of the New Zealand Coastal Policy Statement (NZCPS) is to state policies in order to achieve the purpose of the Resource Management Act in relation to the coastal environment of New Zealand. The NZCPS 2010 took effect on 3 December 2010.
35. Objective 2 seeks to preserve the natural character of the coastal environment and protect natural features and landscape values through recognising the characteristics and qualities that contribute to natural character, natural features and landscape values and their location and distribution; identifying those areas where various forms of subdivision, use, and development would be

inappropriate and protecting them from such activities; and encouraging restoration of the coastal environment.

36. Policy 13: Preservation of natural character – seeks firstly to preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development; to avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and to avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment.
37. Secondly, the same policy is consistent with District Plan policy 9.2.2.2.6, in that it seeks to recognise that natural character is not the same as natural features and landscapes or amenity values and may include matters such as natural elements, processes and patterns; biophysical, ecological, geological and geomorphological aspects; natural landforms, the natural movement of water and sediment; the natural darkness of the night sky; places or areas that are wild or scenic; a range of natural character from pristine to modified; and experiential attributes, including the sounds and smell of the sea; and their context or setting.
38. Policy 14: Restoration of natural character – addresses the promotion of the restoration or rehabilitation of the natural character of the coastal environment.
39. Policy 15: Natural features and natural landscapes – seeks to avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment; and avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment. Regard must be had to natural science factors (topographical), the presence of water (including the sea), legibility or expressiveness, and aesthetic values including memorability and naturalness.
40. Policy 6 of the NZCPS recognises that in order to enable people and communities to provide for their wellbeing, health and safety the protection of the natural values of the coastal environment does not preclude some use and development in appropriate places and forms, and that some uses are functionally required to locate on the coast or in the coastal marine area.

41. In this regard, Policy 9 of the NZCPS explicitly recognises that the efficient and safe operation of ports (including their development of their capacity for shipping) should not be compromised. As to whether the location for the proposed new terminal is appropriate, Mr Craig has reached views on this matter and concluded that the new terminal comprises an extension to the existing terminal, and consequently will not be foreign to the site or out of keeping and that it will not stand alone, but will instead, be visually coherent. He concludes, for those reasons, that it is a suitable location for the port extension. I mostly agree with his conclusions, and add that while it is a physical extension to the existing container terminal that appears coherent in terms of visual amenity, the degree of effects upon some other aspects of amenity (particularly lighting) will potentially be intensified to a level that some may find to be unacceptable. I will be providing additional comments and recommendations on these matters.

DESCRIPTION OF RECEIVING ENVIRONMENT

42. A description on the existing environment is contained within the application and within the landscape and visual assessment, which I adopt for the purposes of these comments. This includes a description of the coastline from Magazine Bay east to Battery Point as being *“heavily modified by the Port, with flat land, linear shorelines and breakwaters that enclose the inner Harbour and protect Cashin Quay. The existing coal stockyard, along with the recent completion of the 10 ha reclamation approved in 2011 (Reclamation A, Phase 1) and the commencement of the approximately 6 ha Reclamation A (Phase 2) in Te Awaparahi Bay typify the reclamation and modification that has occurred throughout the Port area. The Port environment is one of continual activity and noise, with ships, trains, cargo, stockpiled material, and other port infrastructure”*³.
43. In addition *“Residential areas of Diamond Harbour and Charteris Bay headland lie across the other side of the harbour from Te Awaparahi Bay, approximately 3 to 4.5 km to the south, and some parts of these communities would have a line of view to the site. Most of the Lyttelton residences are separated from the site by a high ridge”*.⁴

³ AEE para 3.7

⁴ AEE para 3.9

44. The site description within the application also makes some reference to the hills forming the back drop behind the container terminal site, including reference to the old Sumner Road, the Sumner Road and Gollans Bay Quarry. Of particular note is the identified 'historic area', at Battery Point below old Sumner Road behind the coal yard, which encompasses 20 historic sites relating to military defence activity and structures from the 1880's and World War II.
45. The steep slopes to the north (and behind) the application site form a back drop to the container terminal, and this is particularly evident when viewed from the environs in and around Diamond Harbour. The lower slopes have been modified by the presence of Sumner Road and Old Sumner Road, and display only a moderate level⁵ of natural character.
46. The upper slopes display a more rural character, given over to plantation forestry, regenerating native vegetation, and some areas of a pastoral nature. The lack of modification and predominance of open and closed areas of natural vegetation provide a high/very high degree of natural character, and is mostly within an '*Open Space Natural*' (OSN) zone, with an ONL overlay.
47. The wider Harbour environment consists of rural zoned land interspersed with small settlements such as Governors Bay and Diamond Harbour. East of Diamond Harbour the area consists mostly of rural dwellings and small settlements at Purau and Camp Bay. The township of Diamond Harbour sits across from the container terminal with direct views at a distance of at least 2km across the open sea.
48. The expanse of open water which comprises the Lyttelton Harbour Basin assists with providing a high degree of natural character generally across the whole area, moderated only by transitory, but frequent, presence of ships and boats and other water borne activity. The visually dominant vegetated hill-slopes provide a backdrop which surrounds and mostly encloses the harbour basin, providing rural context and assisting greatly with a high degree of natural character.

⁵ Based on NZILA Best Practice Guidelines 10.1 seven point scale Using a 7 point scale Negligible/Very Low/Low/Moderate/High/Very High/Extreme

49. Lyttelton Harbour/Whakaraupō is an important destination for recreationalists. There are two yacht clubs located in the harbour, and in addition, wind surfers, sea kayakers and motorised craft frequent the harbour. Swimmers also visit various bays and Port Levy, and the entire basin is popular with cyclists and walkers.

LANDSCAPE AND VISUAL EFFECTS

50. The applicant engaged Andrew Craig Landscape Architect Ltd to assess the likely effects on landscape character⁶ and visual amenity⁷ in addition to the amenity effects of proposed lighting. Mr Craig also discusses associative⁸ effects. In carrying out his assessment, Mr Craig describes the visibility of the Container Terminal generally, submitting that *“The heights of these structures (cranes and lighting towers) mean that the lower 30m of hillside backdrop will be obscured, or partially so, when viewed across from the harbour and at various vantage points around it. This will particularly be the case for those living directly opposite the Port at Diamond Harbour”*⁹. I am in general agreement, and consider that the ship-to-shore cranes are likely to result in the most noticeable visual effects from the water and from Diamond harbour and environs.

Visual Effects

51. Mr Craig has provided photo-simulations and discusses visual effects from several representative viewpoints as follows;

- 51.1 Visual effects from the water. I note that Mr Craig’s submission is that as water borne activities are transient in nature, the effects will consequently themselves be transitory and that while views from vessels close to the site will be dominated by the port activities, the effects will be temporary. I consider that while this might be the case for less frequent users or those using speedier vessels, for more regular users, or those in slower un-

⁶ Landscape effects being described as being those arising from changes to the landscape irrespective of whether they are visible.

⁷ Visual effects being those that are visible from potentially affected residential areas and publically accessible vantage points such as roads and parks.

⁸ Associative effects are described as spiritual, cultural or social associations with particular landscape elements, features, or areas (NZILA, BPG 10.1)

⁹ AEE para 4.35 (d)

powered craft, the effects would be less “transient” and consequently would be more significant.

Unpowered craft such as yachts that are tacking into the wind, or kayaks, will take a longer amount of time to paddle or sail past the terminal, and the length of time required to navigate past the activities will obviously be increased with an extended container terminal.

Submissions were received in relation to this matter and these are discussed further below. In addition, when passing the container terminal at night, any adverse effects caused by light reflecting off the water surface will also be more noticeable.

51.2 Visual effects from Lyttelton Township. Mr Craig makes a distinction between effects from two distinct areas being the following;

- The Township north and east of Simeon Quay. I accept Mr Craig’s assessment that majority of residents in the township, north and east of Simeon Quay, will not be able to see the proposed activity.
- The area encompassing residential areas south and west of Simeon Quay. The developments will be visible to some of these residents. Views toward the harbour entrance will appear more cluttered, and there will be some loss of views of the eastern harbour and Adderley Head in the background. There will be some adverse effects on the apparent naturalness of the harbour basin backdrop. It is Mr Craig’s assessment that the effects from port activity will intensify, but will not be foreign, and that those residing in this part of Lyttelton will experience moderate effects. I am in agreement with this assessment.

51.3 Visual effects from Diamond Harbour environs. I am in agreement with Mr Craig’s assessment that *“Because of its relative proximity to the application site and perpendicular view of it, visual effects from this vantage point will be greatest. Generally there are no view impediments such as intervening vegetation or landforms. Consequently many residents in Diamond Harbour will have clear views of the proposed port activity, as is the case presently of the existing activity”*.

- 51.4 The proposed activity will intensify the current effects which are resulting from existing port operations. The effects will be most noticeable from water level and low elevation viewing points, as well as from Diamond Harbour where the development will be superimposed upon the natural character area that comprises the Port Hills slopes that form a back drop to the development.
- 51.5 Despite the natural character Port Hills backdrop, and the ameliorating effects of distance, the Diamond Harbour and environs area will potentially be most sensitive to current and proposed port activities. As port activities are characterised by an amount of colour, movement, lighting, and noise, this draws the attention of residents and impacts more significantly on aspects of amenity than a similar sized static development. In addition to likely effects on visual amenity, those experiencing the intensified port activities may perceive a reduction in the level of enjoyment and appreciation of their environment, which comprises the associative aspects of landscape character.
- 51.6 One of the most noticeable visual effects will occur as a result of the large ship-to-shore cranes. The four existing cranes could potentially be increased in number, with at least an additional eight cranes or more as a part of the proposal. These cranes are an estimated 95m in height and are located in a visually prominent position along the wharf structures to the front of the container terminal development. The cranes are moving structures, shifting longitudinally along the length of the wharf, and able to pivot and turn while operating, raising the arm structure. A moving object is more likely to draw the eye than a static object. The existing cranes are coloured a light green providing little integration into the surrounding context of the harbour basin.
- 51.7 Mr Craig considers that the proposed port activity will intensify the visual effects that already arise from the current port activity. He considers that, overall, adverse view effects from Diamond Harbour will be moderate, countered by the landform backdrop, and the 2km distance between the application site and residences at Diamond Harbour.

51.8 I mostly agree that while the development would comprise an intensification of port activities, overall the visual effects during the daylight hours would be moderate. This would be with the exception of the ship-to-shore cranes, and I will be making recommendations regarding this matter.

51.9 In terms of the visual effects of lighting, the level of lighting will obviously be intensified in terms of longitudinal extent, however in addition to this, the Lighting Report assesses that the impact of glare and sky glow are greatest at Diamond Harbour, due to its relative proximity and viewing position. This matter will be discussed further below.

51.10 Visual effects from Western Bays (Governors Bay) environs. Views from the Governors Bay environs are at a distance of 7km or more. Mr Craig makes a distinction between views at lower and higher elevations and that some view of the harbour entrance will be compromised. I am in agreement with Mr Craig, that the Port Hills back drop, the intervening topography and the distance between these residences and the container terminal will mostly alleviate any adverse effects. Residents of these areas will experience a very low degree of adverse effects.

51.11 Visual effects from the Port Hills summit ridgeline. Mr Craig has assessed that from some areas of the Summit Ridge, and the Crater Rim walkway *“views to the application site are more or less unimpeded”*. I am in agreement with Mr Craig’s assessment that for the most part views of the application site are generally moderated by distance. I also agree that from high viewpoints, the port activities are one of a collection of activities taking place within the full field of view. In addition, these effects are transient for motorists, walkers and bikers, who will experience a very low degree of adverse effects.

The visual amenity effects of lighting

52. In his assessment, Mr Craig has relied on the lighting assessment¹⁰ and the night time photo-simulations which accompany the application. The container terminal will operate continuously for 24 hours of the day, over the night time period.

¹⁰ AEE para 4.8

Proposed lighting is described within the application and described in terms of 'light spill', 'glare' and 'sky glow' which collectively influence the visual amenity of the area at night.

53. With the extension of the container terminal, there will be an associated extension of the illuminated area. The lighting proposal is to provide a similar amount of illumination but with more refined beam control and increased efficiency of distribution, while reducing light spill, and hence reflected light spill from the harbour waters. The Lighting Report assesses that the impact of glare and sky glow are greatest at Diamond Harbour, due to its relative proximity and viewing position. However the associated glare is expected to be considerably less, due to predominantly downward orientated luminaires and, as a consequence, reduced direct views of the light source¹¹.
54. The Lighting Report comments that if the existing container terminal lighting is replaced over time, there should be an overall reduction in glare. However, sky glow is expected to increase as a result of stronger illumination causing increased upward reflection from pavement and containers, and presumably from reflected light spill from the water surface. The Lighting Report also makes comment that the white spectrum lighting associated with LED or LEP lights cause more atmospheric scatter than the existing HPS lighting¹². A number of submissions have been made by local residents in regards to lighting and I comment further in these below.
55. The container terminal extension and associated lighting, when combined with sodium lighting associated with the existing container terminal, comprises an adverse cumulative effect where it *"arises over time or in combination with other effects"*¹³. This cumulative effect should be managed and mitigated by requiring the removal and replacement of existing old lighting technology (sodium lamps) in a structured way over a specified timeframe. I make a recommendation on this matter further within these comments.
56. I consider that the lighting proposal could potentially have an impact on the visual amenity and associative landscape character effects (enjoyment and

¹¹ AEE para 4.25

¹² AEE para 4.27

¹³ RMA (1991) s3(d)

appreciation of the environment) to a moderate/high degree and make recommendations as to the mitigation of the potential adverse effects of proposed lighting further in these comments. As a summary, the recommended mitigation measures in relation to lighting include;

56.1 Height of light standards.

56.2 Location of light standards in relation to the water surface.

56.3 Shielding of luminaires.

56.4 Controls on the colour and texture of surface treatment to reduce light reflection and consequent sky glow.

56.5 Staged phasing out of sodium luminaires within existing container terminal area.

Landscape Effects

57. Landscape attributes include biophysical elements, patterns, and processes (topography, vegetation and land use for example) as well as sensory qualities (visibility, legibility, aesthetic qualities and coherence). Associative attributes are a third set of aspects which are discussed further below. Landscape effects are the resulting impact of change on landscape attributes, and can vary in size and magnitude. Effects include potential as well as actual (i.e. once mitigation measures have been applied). Effects can be positive as well as adverse, and includes temporary (or transient) as well as permanent.

58. District Plan 13.8.2.2.1 Policy seeks to ensure development activities undertaken within the Lyttelton Port Zone are designed to reduce existing, and minimise new adverse effects generated within the Port operational areas.

59. Mr Craig has outlined in his assessment a number of changes that have the potential to adversely affect the landscape character of the container terminal site, in addition to the immediate area of Lyttelton Township and the wider context of the harbour basin. These matters include the diversity and prominence of the differing port activities, 24 hours a day operations, and the likely effects of the increased lighting. In addition, these changes to the

landscape character will be incremental over a span of 10-20 years, and are to be concentrated within the container terminal area.

60. District Plan (9.2.2.1) objectives and policies relating to natural character seek to recognise and preserve the natural character qualities of the coastal environment. The existing character is currently highly modified due to the reclamation and port activities that the reclamation supports. The edges of the new reclaimed areas are lined by rock bunding, and proposed wharf extensions will comprise additional modifications. The adverse effects of the proposal on the natural coastal character of the immediate environs is unlikely to be remedied or mitigated.
61. In terms of the natural character qualities of the coastal environment in the wider harbour basin setting, Mr Craig considers that any new adverse effects will be minimised through the location of the port activities in such a way that renders it least visible from sensitive vantage points such as nearby residential areas. New adverse effects will also be minimised by the concentrating or clustering of the port activities near or adjacent to the existing container terminal. The location of the application site also avoids headlands or prominent ridgelines. Mr Craig has also discussed this proposal in terms of the extending of the container terminal in its current location assisting with the visual coherence of the proposal. I am mostly in agreement with these views, however provide some recommendations outlining further mitigation measures to assist in reducing impact on the existing natural character qualities of the site.
62. In addition, the application site is back-dropped by upper slopes which mostly sit within an OSN zone, with an ONL overlay. The proposed development and port activities will be concentrated mainly at a low elevation and will not impact on the upper slopes. The proposed workshop and administration building will be located to the rear of the reclamation and so will appear less prominent, particularly as it will be foregrounded by other port activities which will screen or obscure most of the building when viewed from the harbour and surrounding residential areas.
63. The 95m high ship-to-shore cranes however will be visible against the hill backdrop, as will the 30-45m tall light poles supporting luminaires. These structures will also be visible against the skyline and the water surface backdrop,

dependent on viewing angles. Further mitigation measures will be discussed below.

64. The New Zealand Coastal Policy Statement (NZCPS) objectives and policies seek to preserve the natural character of the coastal environment and protect natural features and landscape values and to avoid adverse effects of activities on natural character and also where possible to restore natural character of the coastal environment. Similar to the above assessment, the existing level of natural character in the immediate proximity is low and it is unlikely that natural character in the coastal environment will be restored or enhanced.
65. NZCPS Policy 15 also seeks to avoid adverse effects of activities on outstanding natural features as well as outstanding natural landscapes in the coastal environment. Again, the proposed development and port activities will be concentrated mainly at a low elevation and will not impact on the upper slopes, with exception of the visual effects of the ship-to-shore cranes. There is no indigenous vegetation to be removed, and the development avoids headlands or prominent ridgelines. I am in agreement with Mr Craig's assessment that by extending the existing container terminals and concentrating port activities, this assists in the visual coherence of the site and satisfies CPS Policies 6 and 9 in this regard.
66. Appreciation of the natural character of the upper slopes and the coastline surrounding the development will be impacted for the residents of Diamond Harbour environs, as the existing activities are extended in area and intensity. Mitigation measures will minimise these effects to some degree, particularly with regards to controls over the colour of the visually prominent ship-to-shore cranes, and controls of certain aspects of the lighting proposal.

SUBMISSIONS

67. I understand that 37 submissions were received, with 25 being in support of the proposal. Five of these submissions directly address landscape and visual amenity, and lighting effects. Submitters are residing within the Lyttelton Township, as well as Diamond Harbour.
68. In terms of landscape and visual amenity, there are concerns related to the erosion of natural values; port structures intruding on the visual landscape; views

from Diamond Harbour cliff reserves; and the impact that the proposal will have on the natural environment, especially the Hector's dolphins. In addition, it was submitted that the visual impacts for "boaties" is not "temporary", as sailing on the harbour is not a transient activity, and it can take some time to sail up or down the harbour.

69. A further suggestion was received that the visual effects of port structures on Diamond Harbour cliff reserves could be offset by enhancing their amenity value through native planting restoration. While native planting restoration would have added benefits to local bio-diversity and natural character, I understand that this form of offsetting would provide for 'compensation' rather than 'mitigation', and would be dependent on the level of adverse effects on the environment caused by the proposal.
70. I consider that some port structures, in particular the ship-to-shore cranes, will indeed intrude on the visual landscape and adversely affect some views, and will be suggesting some mitigation measures in regard to this matter.
71. In terms of lighting, concerns relate mainly to illumination of the sea surface, and lighting output being shielded or directed away from the opposite side of the harbour. One submitter noted that the recent installation of the main channel markers and their associated navigation lighting has altered the sense of solitude that could be enjoyed at night. It was also submitted that existing port lighting results in significant night glow from glare and light spill, which greatly affects the amenity of the area.
72. Submitters have asked that additional shielding should be required to stop any direct illumination of the sea surface or any neighbouring land outside the designated night-time working area, and that luminaires be fitted with shields and as far as possible orientated so that the principal output is directed away from the opposite side of the harbour.
73. In addition, submitters have asked that light poles be no higher than 30m, and that to mitigate the effect of increasing the overall area affected by lighting, the applicant should be required to upgrade all existing lighting to the new standard.

74. I have considered the submitters views within my preceding comments and my following recommendations are additionally in response to the submitter concerns.

ASSESSMENT OF PROPOSED MITIGATION MEASURES

75. The application summarises the outcome of consultation with stakeholder groups¹⁴. The resulting mitigation measures include the addition of the Battery Point exclusion zone in response to Mana-whenua values, the reduction of the southern extent of the reclamation and subsequent wharf intrusion, and the introduction of LED lighting to reduce potential effects of light spill, glare and sky glow. No further landscape mitigation measure have been provided.

RECOMMENDATIONS

76. Ship-to-shore cranes. The 95m high ship-to-shore cranes will be visible against the hill backdrop, and also visible against the skyline and the water surface when viewed from certain points. The cranes are moving structures, located in a visually prominent position along the front of the wharf structures. The current four cranes are likely to swell in numbers to approximately 12 cranes in future. The existing cranes are coloured a light green which provides little integration into the surrounding context of the harbour basin.

Recommendation: A further analysis is to be carried out which comprises an assessment of the dominant colours of the vegetated hill slopes which form a back drop to the ship-to-shore cranes. From this analysis an alternative colour for the crane structures is to be submitted for approval. This colour must be a recessive colour that best integrates with the surrounding context, reducing the visual prominence of the crane structures.

77. Lighting proposal recommendations as follows;

77.1 Height of light standards. The LPC currently has consent for light standards mounted with luminaires to be provided to a maximum height of 30m within the existing container terminal. Light standards of a greater height will obviously bear luminaires at a greater height, and have consequently greater adverse effects on local character and amenity of the immediate area and the adjoining natural character areas. The submitted rationale for higher light

¹⁴ AEE para 6.8

standards is the consequent reduction in number of lights required for the same level of illumination. I am not aware of analysis that provides evidence that the taller light standards would provide better illumination without impacting on consequent glare and sky glow.

Recommendation: Light standards be provided at a maximum height of 30m.

77.2 Location of light standards in relation to the water surface. I am also not aware of any analysis with regards to setback of light standards and luminaires from the water's edge, and the consequent illumination and reflection of light off the water surface.

Recommendation: Light standards to be provided with an appropriate setback distance from water's edge to reduce illumination and reflectance off water's surface.

77.3 Shielding of luminaires.

Recommendation: Luminaires to be shielded in such a way as to reduce glare for those residents of Diamond harbour and environs with a direct view to the container terminal. This is directly in relation to those luminaires that are situated closest to the water's edge.

77.4 Controls on the colour and texture of surface treatment. In order to reduce light reflection and consequent sky glow, treatment of illuminated sealed surfaces to reduce reflectivity could include adjustments to surface colour and surface texture. Darker colours and rougher surfaces are most likely to reduce reflectivity. This could be achieved through the use of a dark tinted, exposed aggregate or brushed concrete finish.

Recommendation: A further analysis is to be carried out which identifies the most appropriate surface colour and texture to best reduce reflectivity.

77.5 Staged phasing out of sodium luminaires within existing container terminal area.

Recommendation: The existing sodium vapour luminaries within the Cashin Quay container terminal be removed and replacement in a structured way over a specified timeframe.

CONCLUSION

78. While the application site itself is not identified as an area of high natural character in the coastal environment nor as an outstanding natural landscape, the surrounding context, as well as the immediate backdrop to the development, has a Natural Character status under the District Plan. The expanse of open water which comprises the Lyttelton Harbour Basin assists with providing a high degree of natural character generally across the whole area, moderated only by transitory, but frequent, presence of ships and boats and other water borne activity.
79. The proposed activity will intensify the current effects which are resulting from existing port operations. These effects will be most noticeable from water level, as well as from Diamond Harbour where the development will be superimposed upon the natural character area backdrop.
80. The most noticeable visual effects will occur as a result of the large ship-to-shore cranes which will likely increase in number from four to twelve, and the lighting proposal which intensifies the lighting that is currently existing on the Cashin Quay container terminal. However new lighting technology will provide for a refined beam control with less light spill and reduced sky glow.
81. Policies contained within the NZCPS recognise that the protection of the natural values of the coastal environment does not preclude some use and development in appropriate places and forms, and that some uses are functionally required to locate on the coast or in the coastal marine area. The NZCPS also explicitly recognises that the efficient and safe operation of ports (including their development of their capacity for shipping) should not be compromised.
82. The applicant has submitted, and I am in agreement, that the proposed location of further port activities within the 34ha of land that has been reclaimed as the container terminal extension is appropriate, as the development will be concentrated mainly at a low elevation and will not impact on the upper slopes (with exception of the visual effects of the ship-to-shore cranes). The development avoids headlands or prominent ridgelines, and by extending the existing container terminal, and concentrating port activities, the proposal assists in retaining the visual coherence of the application site.

83. While some residents and users of the Lyttelton Harbour Basin will experience some loss in their visual amenity and enjoyment of their environment, the potential adverse effects can be further mitigated by a series of measures. I have included a number of recommendations regarding these matters which I believe will assist in ensuring the proposal results in acceptable adverse effects on the visual amenity, landscape character and natural character of the surrounding landscape.

Jennifer Geraldine Dray

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Technical Services and Design Unit,
Christchurch City Council
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Direct Dial: 941-8734

REFERENCES

- NZILA Education Foundation. (2010). *Best Practice Guide 10.1 - Landscape Assessment and Sustainable Management*. Auckland: NZILA.
- NZTA. (2014). *NZTA Landscape Guidelines*. Auckland: NZTA.

APPENDIX 5
PORT NOISE MANAGEMENT PLAN

Appendix 13.8.6.7 Port Noise Management Plan

1. Port Noise Management Plan

The Port Noise Management Plan required under Rule 13.8.4.2.7(a) 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.

APPENDIX 6
PORT RECOVERY CONSTRUCTION
NOISE MANAGEMENT PLAN

Appendix 13.8.6.9 Construction Noise Management Plan

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 required under Rule 13.8.4.2.8(a) 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.
 3. Keep within the annual budget provided by the owners and operators of the Port of Lyttelton.
 5. 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 required under Rule 13.8.4.2.7(b) 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, Appendix 13.8.6.8(d) Acoustic Treatment;
 - 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 7
REPORT OF MR ANDY MILNE



RMA/2019/1361
Lyttelton Port Company Limited
Te Awaparahi Bay
Land use consent application to establish a container terminal at Te
Awaparahi Bay

REPORT OF ANDREW MILNE
ON TRANSPORT
Dated: 23 October 2019

TABLE OF CONTENTS

INTRODUCTION 33

SUMMARY OF REPORT 33

DISTRICT PLAN TRANSPORT RULES..... 34

SUBMISSIONS..... 34

CONCLUSION..... 36

APPENDIX 1 ERROR! BOOKMARK NOT DEFINED.

INTRODUCTION

1. My full name is Andrew Milne. I hold the position of Senior Transportation Planner at Christchurch City Council (**Council**). I have held this position since April 2012.
2. I am a Chartered Professional Engineer (CPEng) registered under the Chartered Professional Engineers New Zealand Act 2002. This qualification means I am reviewed every six year period by the registration authority and deemed competent to practice in my area of expertise.
3. My qualifications also include a Master of Science Degree in Transportation Planning and Management from Westminster University in London, and a Bachelor of Engineering Degree (Honours) in Civil and Transportation Engineering from Napier University in Edinburgh. I am also a Member of the Institution of Professional Engineers New Zealand. I have practiced in the field of Transportation Engineering and Transport planning for over 24 years.
4. As part of my role at the Council, I have been asked to provide evidence on transportation issues in relation to the consent application by Lyttelton Port Company (**LPC**) to use existing and future reclamation areas at the eastern end of the Lyttelton Port for the establishment of a container terminal and other port operations.
5. I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and that I agree to comply with it. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person. The Council, as my employer, has agreed to me giving expert evidence on its behalf in accordance with my duties under the Code of Conduct.

SUMMARY OF REPORT

6. The purpose of this report is to provide information and advice for the consent application, in relation to effects on the safety and efficiency of the transport network.
7. I have read the following documents when preparing this report:
 - The consent application and subsequent submissions relevant to transport issues;
 - The relevant sections of the Lyttelton Port Recovery Plan, 2015
 - Lyttelton Port Recovery Plan Integrated Transport Assessment, 2014, (Abley report)

- Te Awaparahi Bay Container Terminal Transport Assessment ,13 June 2019 (Stantec Report)
- Lyttelton Master Plan, June 2012

8. I am familiar with Norwich Quay and have visited the area on numerous occasions.
9. I have considered the relevance of the proposal against the District Plan and considered the transport related submissions in the context of relevant documents and transport analysis and find that the proposal can be supported from a transport perspective.

DISTRICT PLAN TRANSPORT RULES

10. Chapter 7 of the Christchurch District Plan relates to transport requirements for all activities that occur throughout the District and to activities within the Transport Zone¹⁵. The exception to this is the land zoned Specific Purpose (Lyttelton Port) Zone, which is exempt from the Transport requirements of the District Plan.
11. I note that Norwich Quay is part of the state highway network (State Highway 74, SH74), for which the road controlling authority is the New Zealand Transport Agency (**NZTA**). Informal discussions with NZTA have indicated that they are of the view that Norwich Quay is operating satisfactorily. Written confirmation of NZTA's position is included as Appendix 8 of the Planners report, and I note that they do not raise any concerns about the operation of Norwich Quay.

SUBMISSIONS

12. A total of 37 submissions have been received regarding the proposal and of these three submitters have expressed specific concerns regarding the effects of the establishment and use of a container terminal and other port activities on the efficiency and safety of the operation of Norwich Quay. A theme common to each submission is a desire to see heavy port related traffic re-routed off Norwich Quay to a purpose-built road constructed within Lyttelton Port Company (**LPC**) land.
13. **Ms Stephanie Brown** is concerned about the reduced level of service in the long term on the side roads, particularly for right turning traffic onto Norwich Quay and for the safety of pedestrians. Ms Brown considers that an alternative route to the port that does not use Norwich Quay should be considered.
14. As a Major Arterial route, Norwich Quay (SH74) offers the highest level of movement function and serves a regionally significant port. Norwich Quay (SH74) forms part of the Strategic

¹⁵ Chapter 7 – Transport, 7.1(b) Introduction

Freight Network. As an arterial route, the District Plan affords such routes as requiring the highest degree of movement function protection.

15. The Stantec Transport report included analysis¹⁶ of traffic network performance showing sufficient capacity at the local road intersections with Norwich Quay. This analysis indicated good levels of service for turning traffic until 2041 where higher delays for some movements at some of the intersections are predicated.
16. The report recognised that in longer term, intersection performance will deteriorate, with the increased contribution of Port related light and heavy traffic but based on the Port expansion traffic forecasts, the need for improvements to enhance access to and from Norwich Quay is not of immediate concern, but is rather a matter for longer term monitoring and forward planning by the road controlling authorities.
17. Given the available levels of service at intersections with Norwich Quay (SH74), and based on monitored traffic use¹⁷, I conclude from the traffic analysis undertaken that in the short term (up to 2026), an alternative road access to the port is not justified from an operational or road network planning perspective.
18. As highlighted in the Stantec report, a key driver for future improvements may relate to perception of safety, and ease of access to the Lyttelton town centre, in which case traffic signals at one of the side road intersections might be a consideration. Increasing intersection capacity while enhancing safe pedestrian crossing opportunities through the introduction of controlled intersections is also identified within the Abley report as suitable mitigations against increased port related traffic on Norwich Quay post 2026.
19. **Mr Ken Maynard, on behalf of the Lyttelton Community Association**, has expressed concern regarding the volumes of heavy traffic using Norwich Quay. The submission requests that any consent should be subject to a condition requiring traffic to divert from Norwich Quay onto LPC land to the south and provide accessible access to Te Ana marina.
20. As set out in the Lyttelton Port Recovery Plan¹⁸ (**LPRP**) the intention over the long term, is to shift port operations towards the east resulting in higher community access to the inner harbour and enhanced pedestrian access to Dampier bay which includes Te Ana marina. The current consent application, in my view is consistent with the LPRP by seeking to increase operations to the east thus moving a step closer to reducing operations in the western area of

¹⁶ Te Awaparahi Bay Container Terminal Transport Assessment June 2019 page 33

¹⁷ SH74 Continuous traffic count data, NZTA, found pages 11-16 of Te Awaparahi Bay Container Terminal Transport Assessment

¹⁸ Lyttelton Port Recovery Plan, 2015, page 14

the port where opportunities to enhance linkages between the town centre and Dampier Bay can be created as envisaged in the Lyttelton Master Plan¹⁹ and sought by the submitter. In my view the consent application enables enhanced pedestrian linkages to be created in the longer term.

21. The Abley transport report²⁰ highlights the development of Dampier Bay will include amongst other things, *retiring the use of Sutton Quay for heavy vehicle port access and shifting the security fence to the eastern side of No. 7 Wharf* thus providing safe access opportunities and enhanced linkages between Lyttelton town centre and Dampier Bay as requested by the submitter.
22. The analysis presented within the Abley and Stantec transport reports suggest that Norwich Quay (SH74) offers suitable access to the Port for some years to come and as such I come to the view that a condition of consent requiring the provision of an alternative port road is not appropriate at this stage.
23. **Mr James and Ms Heather Bundy** are concerned about the extra heavy vehicles that will use Norwich Quay (SH74) and submit that heavy vehicular traffic associated with the Port should be using a new road constructed either side of the railway line.
24. For the reasons set out in response to the other submitters in this report, it is my view that a new road as requested by the submitter is not required at this time. The practicalities of providing for such infrastructure at this time is also challenging in terms of LPC's necessary agreement as land owner and potential impacts on the LPC operations. In an initial response to submissions in this regard LPC referred to The Abley Transport Assessment that stated: *due to the current demands on Port land, it is unlikely that LPC would be in a position to cease use of the land that would be required for an alternative Port access road in the short to medium term (up to 15 years)²¹.*

CONCLUSION

25. In summary:

- NZTA who manage the State highway network confirm that the use of Norwich Quay (SH74), for the purposes of heavy vehicle access to the port is appropriate at this time although they raise three issues; that the State Highway has been prone to material being tracked onto it from the port site and that the applicant should ensure that the proposal includes measures to remedy this, that the

¹⁹ Lyttelton Master Plan, June 2012, page 48

²⁰ Lyttelton Port Recovery Plan Integrated Transport Assessment, 2014, page 38

²¹ Lyttelton Port Recovery Plan Integrated Transport Assessment November 2014, page 70

proposal should enable both road and rail transportation, and that it would be undesirable for cruise ship passengers to be loaded onto buses along the edge of the State Highway; this activity should occur within the port.

- Based on current and forecast traffic projections, network analysis indicates that Norwich Quay (SH74) has the capacity to provide good levels of service to and from the local road network;
- The transport analysis undertaken as part of the LPRP and the consent application indicate that the introduction of controlled intersections can ensure safe turning and pedestrian crossing opportunities along Norwich Quay (SH74) in the future.

26. Based on the above findings I conclude that the proposal is acceptable from a transport perspective and that the use of Norwich Quay (SH74) for use by light and heavy port related traffic is appropriate at this time.
27. With respect to the comments from the NZTA it is appropriate that a condition of approval require that the State Highway be subject to daily inspections and swept, if necessary, to keep it free of debris. While this is more a matter for the applicant to comment on, I note that the proposal does incorporate rail for the movement of freight and that in the transport assessment from Stantec, at Section 16, it is estimated that rail freight will account for approximately 20% of units moved in 2041, which is an increase from the estimated current 12% moved by rail.
28. On the final matter raised by the NZTA in relation to the management of cruise ship passengers, it is my view that this is a matter that does not relate to the current application and is more properly a discussion that should be had between the Port Company and the NZTA.

Andrew Milne

Senior Transport planner, Asset Transport Planning Unit

Andrew.milne@ccc.govt.nz

09 9418929

APPENDIX 8
LETTER FROM THE NEW ZEALAND
TRANSPORT AGENCY

22 October 2019

Andy Milne
Christchurch City Council
PO Box 73014
Christchurch 8154

Dear Andy

REQUEST FOR NZTA COMMENT - LYTTELTON PORT COMPANY

Thank you for your request for comment regarding the resource consent application for the Lyttelton Port Company which we understand was publicly notified.

We have reviewed the information provided and comment as follows:

1. The Port Recovery Plan included encouragement for utilisation of a combination of forms of transport for the transfer of goods. This would include the use of the railway. The Transport Agency encourages the use of multiple modes of transport being available and, for the purposes of this resource consent, it should be ensured that the proposed activity will be enabling for both transport options.
2. It is possible that the proposed area may be used for cruise ships but also the proposal will result in an increase in number of heavy vehicle movements along the State Highway. The Transport Agency has always been conscious that at some point it may be sought for cruise ship passengers to be loaded on to buses along the edge of the State Highway. It is not desirable to have a large number of pedestrians, not familiar with the area, walking to and boarding the buses in this area particularly due to the potential number of heavy vehicles also operating along the Highway. On this basis the Transport Agency encourages that it is ensured that buses will always be able to enter the port and collect cruise ship passengers on site.
3. It has been noticeable that material has been tracked on to the State Highway from the port site. This will be from a variety of activities across the site. The applicant should ensure that the proposal includes measures to avoid potential tracking of material on to the State Highway.

Thank you for the opportunity to provide comment and if you have any queries regarding the above please feel free to get in contact.

Yours sincerely



Richard Shaw
Principal Planner - Consenting and Community
Pursuant to authority delegated by NZ Transport Agency