



APPENDIX N

**PROPOSED WHARF
AND DREDGING
PROJECT, LANDSCAPE
AND VISUAL
ASSESSMENT**

NAPIER
PORT

Port of Napier

Proposed Berth Extension
Prepared for The Port of Napier

26 July 2016



Boffa Miskell

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1.0 Introduction

This assessment of landscape, visual and natural character effects has been prepared for the Port of Napier by Boffa Miskell Ltd, Auckland.

This report describes the existing environment into which the proposed expansion works will be introduced; describes the extent of visual catchment for the proposal and its viewing audiences; assesses the impact of visual change from different locations and for different viewing audiences by reference to a series of visual simulations; and finally, sets out an assessment of the potential landscape, natural character and visual amenity effects of the proposed development.

The writer has previously provided the Port of Napier with independent landscape and visual effects advice in relation to various development proposals and is therefore familiar with the site and its landscape context. In addition Boffa Miskell, and the writer specifically, have assisted other Port operators with proposals for development and associated resource consents and in doing so are familiar with the nature of ports and their associated coastal environment characteristics and qualities.

A site visit was undertaken on Monday 27 June 2016 for the purpose of briefing and site familiarisation photographs for the preparation of visual simulations were taken on 5 July (refer Appendix 1).

2.0 The Site

The Port of Napier occupies reclaimed land at the base of Bluff Hill, which projects out along the Hawke Bay coastline, separating the town of Napier to the south from Ahuriri and Westshore to the north, refer map below.

Bluff Hill and its contiguous Napier Hill is itself a significant landmark and feature of the urban area of Napier and of the wider landscape, creating an elevated promontory in a generally flat surrounding landscape. The Hill is relatively densely urbanised, and has become one of Napier's "prime" residential locations and addresses. The Port has also existed for many years in its present location with the adjacent parts of the Bluff Hill having a long standing relationship with the adjacent Port.

Breakwater Road accesses around the seaward side of Bluff Hill sitting directly adjacent to the Port along its southern landward frontage. Hornsey Road extends up Bluff Hill from Breakwater Road adjacent to the Port turning into Karaka and Seapoint Roads as it climbs, at times steeply, up to the top of Bluff Hill. Further west Breakwater Road splits to form Hardinge Road which extends along the coastal edge and the SH50 Ahuriri Bypass parallel with the rail corridor on a more inland route.

The main entry to the Port is in the west with the public visitor access and the relatively new, Port Operations office building entry splitting to the immediate left, and the main truck entry to the right across the rail line.



Site Location, Port of Napier relative to Bluff Hill and Ahuriri

The majority of the operational Port lands (existing area 52 ha) are reclaimed and have a flat topography dominated by expanses of open asphalt for container, raw log, and other cargo storage as well as large vehicle manoeuvring.

The rail corridor accesses the Port from Ahuriri, with the security fence set back behind the rail corridor giving some set back between the Port and public road along Breakwater Road, which follows around the northern base of Bluff Hill. The sheer exposed sandstone geology of the Bluff Hill cliff, which has in the past been subject to earthworks and quarrying, creates a dramatic elevated backdrop to the Port.

On the Ahuriri side, Hardinge Road provides vehicular access parallel to the shore with houses set back behind the road and shorefront reserve, which is grassed and supports a line of well-established Norfolk Island Pine trees. There is a pedestrian pathway along this reserve frontage which becomes more formalised as a path and boardwalk adjacent to the small cluster of café / restaurant / takeaway outlets. The path extends out to Perfume Point, which defines the east bank of the West Quay Harbour.

The Port itself occupies some 52 hectares, with the majority of its buildings located toward the Breakwater Road frontage and open hardstand and a range of wharves and vessel berths on the seaward side. A significant breakwater extends out along the eastern edge of the Port into Hawke Bay wrapping around to the north. The eastern sector of the Port is used primarily for logging functions with raw logs and processed timber products loaded along Higgins Wharf and Cassidy Quay. Raw logs are also stored along the western edge of the reclaimed area. The processing of logs through the Port is an increasing activity due to the current scale of local harvest. An area of reclamation (0.8 ha) consented in 2003 / 2004 in the eastern part of the Port, has provided expanded space for the export of timber and timber products. To the west

the inner sheltered waters of the Port are serviced by a single small finger wharf – Geddis Wharf. Herrick Wharf was rebuilt in 2009 and a triangular area (1.4ha) reclaimed to the east of the wharf. Kirkpatrick Wharf forms the eastern edge of the main container hardstand / marshalling area and is the core of the Port container operations area.

At the western edge of the existing Port reclamation there is a public vehicular and pedestrian access to a small boat ramp used by the community.

To the immediate west of the Port between the western inner edge of the reclamation and a rock groyne that projects out from the reclaimed coastline, a small sandy beach has formed. This is a popular local swimming place and beach. The face of the Port's reclamation was upgraded with limestone rock and the area immediately behind the seawall grassed and specimen trees planted in 2008. At the back of the beach, the land is retained with large unit concrete retaining wall, with angled carparks, installed by Napier City Council about 2–3 years ago, on the Breakwater Road edge above. The Port of Napier sporadically enriches the beach with sand collected in the breakwater drain which forms part of the seaward eastern breakwater of the Port.

The reserve area stretching west around the foreshore to Perfume Point is a popular destination, with focal attraction points including a children's playground, café / restaurant / takeaway and carpark / fishing area at Perfume Point itself some 2 kms to the west. The beach here is a mix of stony shoreline transitioning to finer sand adjacent to the café / restaurant / takeaway area. Also along this coastline there are remnant features of former wharf construction in the intertidal zone, creating a relic landscape with memories of a past waterfront development and activity.

In terms of the Port's relationship to existing residential development, there are two main residential catchments, being those adjacent along the flat of the foreshore and those elevated above the Port on Bluff Hill accessed by the often steep streets that traverse the hill.

Development on the flat that enjoys an aspect north out to the water comprises primarily houses on the south side of Hardinge Road, and closer to the existing Port, houses east of the Ahuriri Bypass / Chatham Street intersection on Breakwater Road. There are some eight residential properties (numbers 2 to 7 – odd and even street numbers included) along this stretch of Breakwater Road, as well as the three storey Breakwater Apartments (4 unit motel) at number 1 Breakwater Road that currently view north over the road and rail corridor to the open water of the man-made bay / swimming beach.

Development on the Bluff Hill comprises areas that look directly over the existing Port, primarily properties accessed from Hornsey and Karaka Roads, and areas to the west of this including some properties accessed from Seapoint, Kowhai and the end of Bayview Road, that currently have partial views to the western edge of the Port.

The current Port activity is overlooked from the open space of Bluff Hill Domain and the Bluff Hill Lookout, which from its northern edge look over and down onto the operational workings of the Port as well as out to an expansive coastal view to the north across Hawke Bay towards the Mahia Peninsula. The Bluff Hill carpark and lookout are a popular local and visitor destination, with the land-based Port activities and associated large vessels, occasional cruise liners, historical and military vessels creating a further foreground point of interest and attraction for many viewers at this scenic lookout.

3.0 Description of the Proposal

The proposal is to establish a new, additional, wharf berth aligned parallel with the existing main reclamation with a broadly east / west orientation. The wharf will have a width of approx. 35m and a length of 350m. The Location Map attached illustrates the positioning of the wharf extension relative to the existing reclamation. It sits to the eastside of the main reclamation area adjacent to the container port area. The wharf will be supported by piles with a concrete surface generally similar to the wharf along the eastern edge of the reclamation area.

The 350m length of the wharf will enable larger ships to be accommodated at the Port consistent with the evolving scale and nature of international shipping. Ships of a size up to 300m with a width (beam) of 42.8m are expected to berth at the new wharf. In general ships spend around 12 hours (+/- a couple of hours) in the Port off and on loading cargo with longer times generally in the peak season. During peak times (associated with Hawkes Bay harvest times) occupancy of the wharf could be expected to be at around 60% to 70%. Larger ships, such as can be accommodated at the proposed new wharf, also mean that there could be fewer numbers of ships but slightly longer berthing times.

Associated with the new orientation of the berthage, light towers, consistent with those already located in the Port area, as well as additional reefer towers for access to containers (up to four high) will be required as well as some reorganisation to the access and layout of containers, which currently stack up to 6 high, will be required although the overall combination and nature of Port activities on the yard of the reclamation will remain unaltered with containers being assembled in this central Port area and log storage to the west and east.

In terms of construction some works will be undertaken from barge on water with most works from the landward side. In order to enable large ship access to the new wharf alignment dredging of the channel and swinging basin will be required. This work will involve a combination of a Backhoe Dredge with barges and a Trailing Suction Hopper Dredge, both disposing of dredge spoil to the west of the port away from Pania Reef. Some discolouration will occur in association with the dredging process and release, however this will be temporary in nature and not unlike storm related discolouration of the Esk or Tukituki river mouth when discharging naturally to Hawke Bay.

In summary therefore the existing port area, along its northern seaward frontage will be extended to a small overall extent to accommodate a new pile structure concrete wharf some 350m long and 35m wide accommodating ship berthage on this new east / west orientation. Some landward reconfiguration within the workings of the Port, including reefer towers for access to containers and light towers for operational purposes, will be required for the new alignment.

4.0 Visual Catchment and Viewing Audiences

The visual catchment for this proposed, relatively limited, Port expansion is contained to locations on the north side of Bluff Hill extending around the flat of the Ahuriri and more distant Westshore waterfront. It is a relatively small visual catchment but given the urban location, has a relatively large, in numerical terms, viewing audience. The elevated and proximate nature of some parts of the residential viewing audience means that the proposed development, like the

existing Port, will be in part be able to be seen from some residential and recreational open space locations. It should also be recognised that for the vast majority of these views and viewers the existing long established Port area already forms part of the view and is a familiar object and source of activity and interest within the view.

Viewing audiences can be split into the following main groupings:

- i. Residents located on Breakwater Road east of the Chatham Road intersection through to and including the Breakwater Motel Apartments (number 1 Breakwater Road).
- ii. Residents located along the south side of Hardinge Road.
- iii. Residents in north-facing elevated properties on Bluff Hill with views out over the Port, primarily those on parts of Seapoint, Kowhai, and Bayview Road as well as users of this public street network.
- iv. People recreating and using the lookout in the Bluff Hill Domain.
- v. People using the street network adjacent to the site on the flat, primarily Breakwater Road, Hardinge Road and the northern portion of the Ahuriri Bypass / Chatham Road.
- vi. People recreating along the foreshore reserve and beach west of the existing sea wall breakwater through to Perfume Point.
- vii. People in boats on the inner waters adjacent to the Port and heading to / from the inner harbour mouth by Perfume Point.
- viii. People in planes flying over the area of the Port, landing or taking off from Napier Airport.

The visual absorption capacity (VAC) of the subject proposal in the subject location, that is the locality's ability to absorb the nature of the visual change proposed, is relatively high (i.e. the change can be relatively easily absorbed).

This is due to the extent to which the proposal comprises a relatively small additional wharf structure area comprising the same visual elements to those that are already well established in the view in a location that is very much internal to the workings of the Port and away from its landward public edges.

The proposal does not extend the western or eastern extent of the Port or change its established nature. Given the location of the proposed wharf the most visually evident component of its presence is likely to be ships berthed at this new port location which will have a different orientation or alignment to that of existing ships in the port, and including the storage and handling of containers when loading and unloading from ships.

5.0 Visual Simulations

In order to assist in the visualisation of the scale and potential impact of the proposed wharf extension from a range of representative public viewpoints (VP), Boffa Miskell has prepared a series of three visual simulations from representative public viewpoints. Figure 1, Appendix 1, illustrates the location of each of the viewpoints used in the simulations.

The existing view is represented in the top photograph with the simulated view incorporating the proposed wharf extension with a 300m ship berthed at the new wharf shown below. For VP 2 a second simulation is also shown without the ship in place.

The main public location from which the proposal will have an ability to be seen is from the elevated location of Bluff Hill Domain. Viewpoints 1 and 2 are from different locations on Bluff Hill, VP1 close to the car park and VP2 on the walkway adjacent to the fence line. These two visual simulations, VP1 and VP2 demonstrate the small relative scale and limited visibility of the wharf extension. The main element of the view is the ship aligned along the east/west axis. VP2B shows the view without a ship at berth which confirms the limited visibility of the additional structure in the view.

For the purposes of illustrating the limited nature of the impact a further visual simulation VP3 has been prepared from a public viewpoint on the foreshore about half way to Perfume Point. This demonstrates that the siting of the proposed new wharf is essentially visually contained within the area of the Port and screened from view. Again a ship berthed at this wharf will have some visibility but this is consistent with the character of the port and its habitual activity. Similar views will be available along this stretch of foreshore and parallel roadway through to Perfume Point although at that distance the visual impact of an additional boat at berth will be limited.

6.0 Assessment of Landscape and Visual Effects

Landscape and visual impacts result from natural or induced change in the components, character or quality of landscape. Usually these are the result of landform or vegetation modification or the introduction of new structures, activities or facilities into the landscape. The process of change itself, that is the construction process and/or activities associated with the development, also carry with them their own visual impacts as distinct from those generated by a completed development.

The landscape and visual effects generated by any particular proposal can, therefore, be perceived as:

- Positive (beneficial), contributing to the visual character and quality of the environment.
- Negative (adverse), detracting from existing character and quality of environment; or
- Neutral (benign), with essentially no effect on existing character or quality of environment.

The degree to which landscape and visual effects are generated by a development depends on a number of factors, these include:

- The degree to which the proposal contrasts, or is consistent, with the nature and qualities of the surrounding landscape.
- The proportion of the proposal that is visible, determined by the observer's position relative to the objects viewed.
- The distance and foreground context within which the proposal is viewed.

- The area or extent of visual catchment from which the proposal is visible.
- The number of viewers, their location and situation (static or moving) in relation to the view.
- The backdrop and context within which the proposal is viewed.
- The predictable and likely known future character of the locality.
- The quality of the resultant landscape, its aesthetic values and contribution to the wider landscape character to the area.

Change in a landscape does not in and of itself, constitute an adverse landscape or visual effect.

The proposal involves a modest extension to the established Port in Napier comprising a new wharf aligned with the existing northern face of the existing reclamation. In relation to the existing 52 ha Port area the extension comprises a small change, including the storage and handling of containers when loading and unloading from ships.

Landscape and Natural Character Effects:

Landscape effects relate to changes in the physical nature of a site or locality, these effects occur whether or not they are seen. Natural character effects (RMA Section 6(a)) are a subset of landscape effects. They relate to the elements, patterns and processes within that part of the landscape – being the coastal environment.

The landscape and natural character of this part of the coastal environment is already highly modified with both the landward shoreline and Port area comprising reclaimed land.

The proposal does not involve additional reclamation - involving instead a pile based wharf structure aligned with the central portion of the established reclamation. The location is contained within the existing extent of the Port area. Ships will berth at the new wharf as a temporary activity and cranes, which already operate within the Port area, with associated lighting, will service ships on this new alignment.

The proposal is not incongruous with the established patterns, elements or processes already well established in this coastal locality. It is consistent with that established environment and once constructed will tie in with the now long established nature of the modified natural environment of the Port.

Proposed dredging will alter the seabed but is proposed to avoid Pania Reef. Any associated water discolouration will be temporary and not inconsistent with natural discolouration experienced at times at local river mouths as they naturally discharge into Hawke Bay particularly during a high rainfall event in the headwaters.

Visual Effects:

In terms of visual effects the proposed introduction of the new 350m wharf structure, and associated vessels, aligned with the existing reclamation, is not considered to generate more than minor long or short term adverse visual effects for users of the adjacent road network, walkways, coastal edge or other public places, as seen from the water, land or air. The location and relatively small scale of the proposal mean that the new wharf will have minimal additional impact and limited visibility.

As illustrated by the three visual simulations even in elevated views from Bluff Hill Domain - refer visual simulations VP1 and VP2 - the proposal will have a minimal visual impact with the main visibly element being the temporal presence of ships on a new east / west alignment.

When no ship is at berth (refer visual simulation VP2B) the proposed wharf itself has a negligible visual presence.

Therefore even in more elevated views from the street network and on Bluff Hill Domain, where the potential to see the proposal is greatest, the wharf is of a small scale and consistent with the established presence of the Port. It is also undoubtedly the case that for some people who visit Bluff Hill the Port forms an attraction and point of active visual interest not only due to its ships but to the activity within the Port and its industrial scale and character.

For residential viewers within the elevated catchment of Bluff Hill, who have a more frequent and static locational viewpoint, the change in the Port area resulting from the new wharf and potential ships at berth on a new alignment, it is considered that there will be a minor to negligible visual effect, consistent with the existing presence of the Port which is both long established and has comprised a container terminal since 1978.

For viewers both in the public realm or in residential properties on the flat such as on Breakwater Road at the toe of Bluff Hill or further around to Perfume Point the proposed new wharf, as illustrated in VP3, will be out of view. The only change in the view will result from a new location and orientation for ships berthed in the Port. This change is not considered to generate an adverse visual effect with ships already comprising a habitual component of the Port and forming part of its visual interest.

Similarly for users of the popular small swimming beach adjacent to the Port reclamation it is considered that no change will be perceived and no visual effect generated.

In relation to water based public viewpoints, the Port already comprises a significant element at the landward edge of the Bay, with Bluff Hill providing a strong physical containment and backdrop to the flatter profile of the Port. Views toward the coastline encounter a modified urban environment dominated by residential housing and larger scale development including the Port seen within this existing urban context and modified coastline. The proposed new wharf will be consistent with this existing character of the environment. Even in more proximate water based views the proposal will sit into the existing character of the landscape and land / water interface and will not create a significant change and it is considered that no adverse visual effects will be generated.

In terms of views from the air the proposed new wharf will be of negligible impact and will not noticeably increase the scale of the Port and its activities will remain consistent. The Port already comprises a point of interest and industrial activity on the waterfront below Bluff Hill this established characteristic will remain relatively unchanged.

7.0 Summary and Conclusion

In conclusion therefore it is considered that the proposed new wharf, associated lighting and crane structures and including any associated ship at berth alongside, will not generate more than a minor adverse visual effect. For the most part the proposal is considered to be negligible in its visual effects.

The proposal expands an existing landuse / activity to a very small extent which does not change the overall impact or scale of the Port in the landscape. Visually the proposal is consistent with the established visual character and amenity of the visual environment.

In terms of the natural character of the coastal environment and its landscape character and values the proposed new wharf represents a proportionally very small additional area within an environment that is already highly modified and industrial in character.

Boffa Miskell Ltd
Rachel de Lambert

26 July 2016

Appendix 1: Location Map & Visual Simulations



Proposed Wharf Extension

VP 3

VP 2

VP 1



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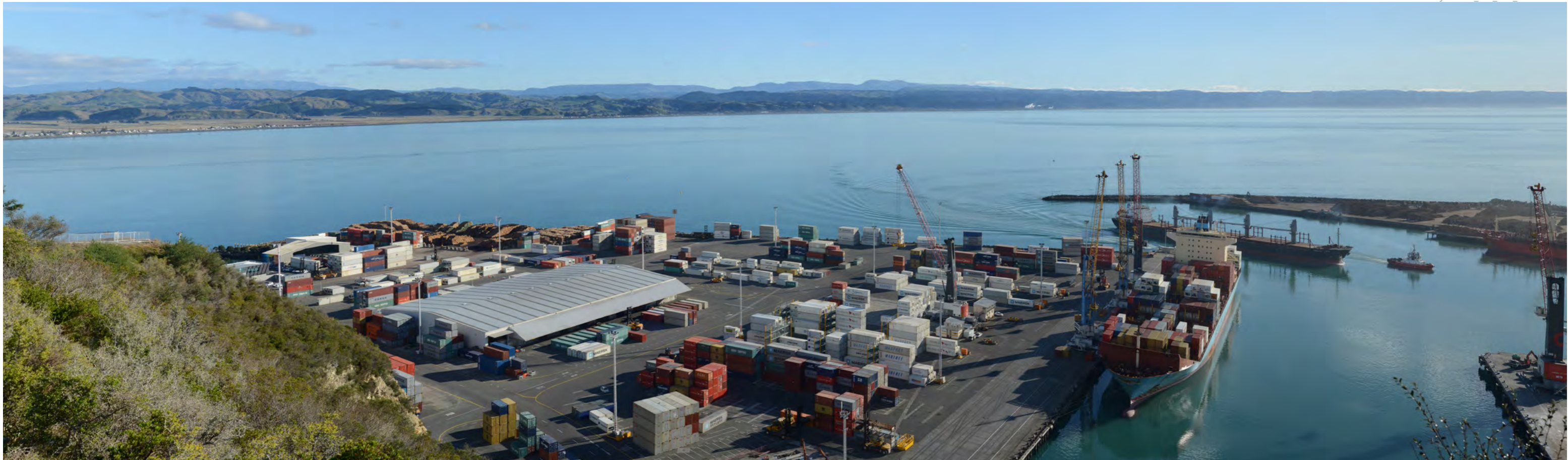
PROPOSED NAPIER PORT EXPANSION

Location Map

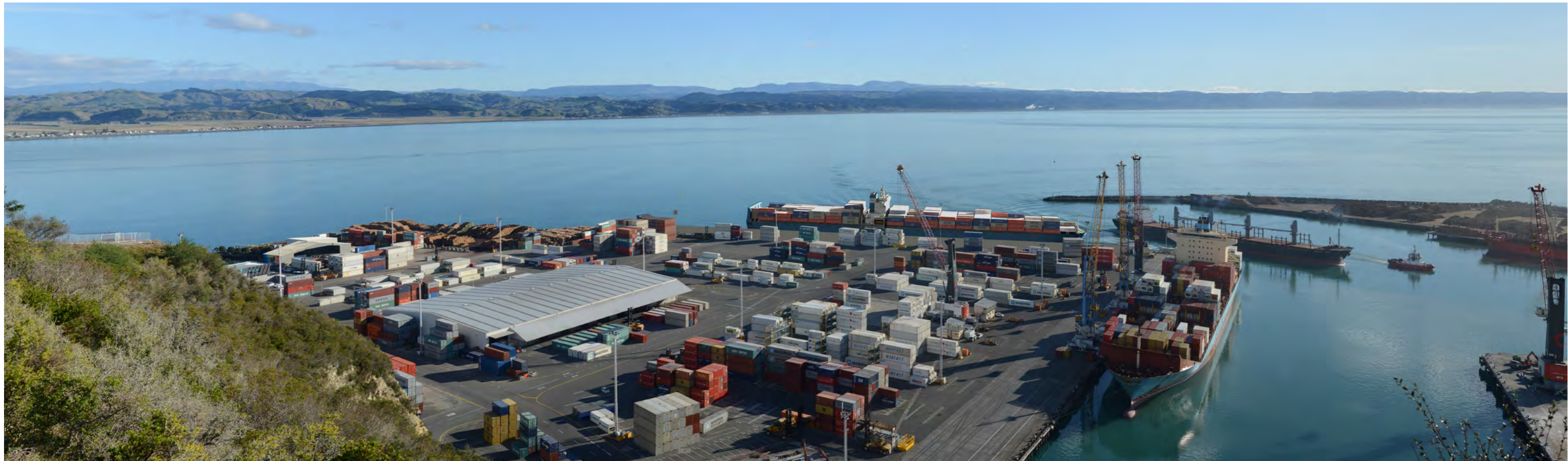
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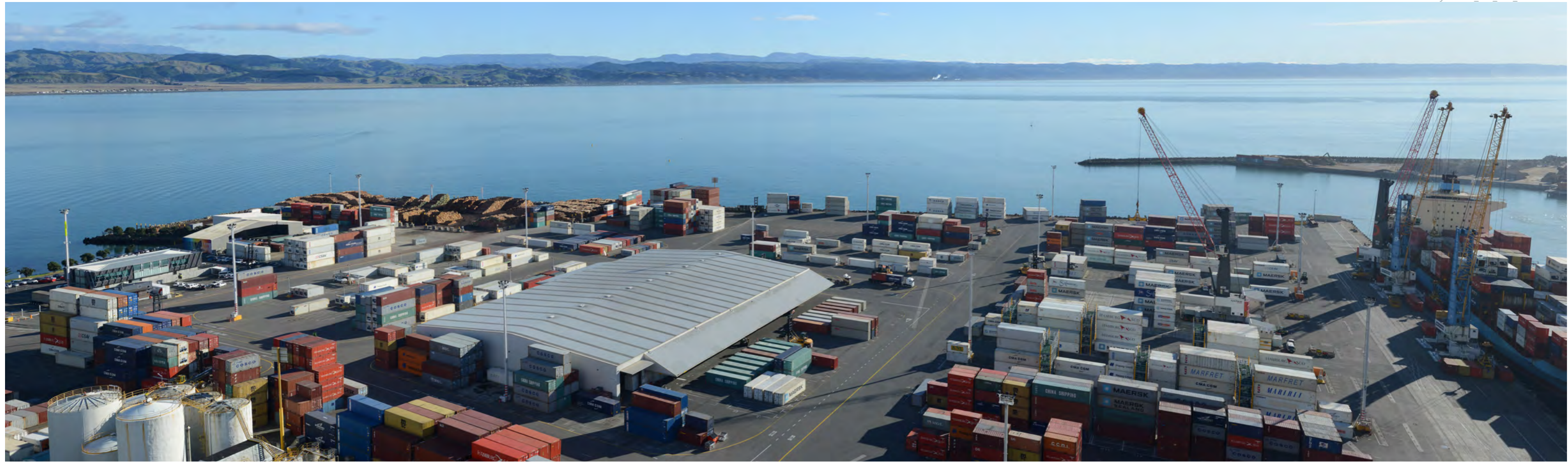
Author: rachel.de.lambert@boffamiskell.co.nz



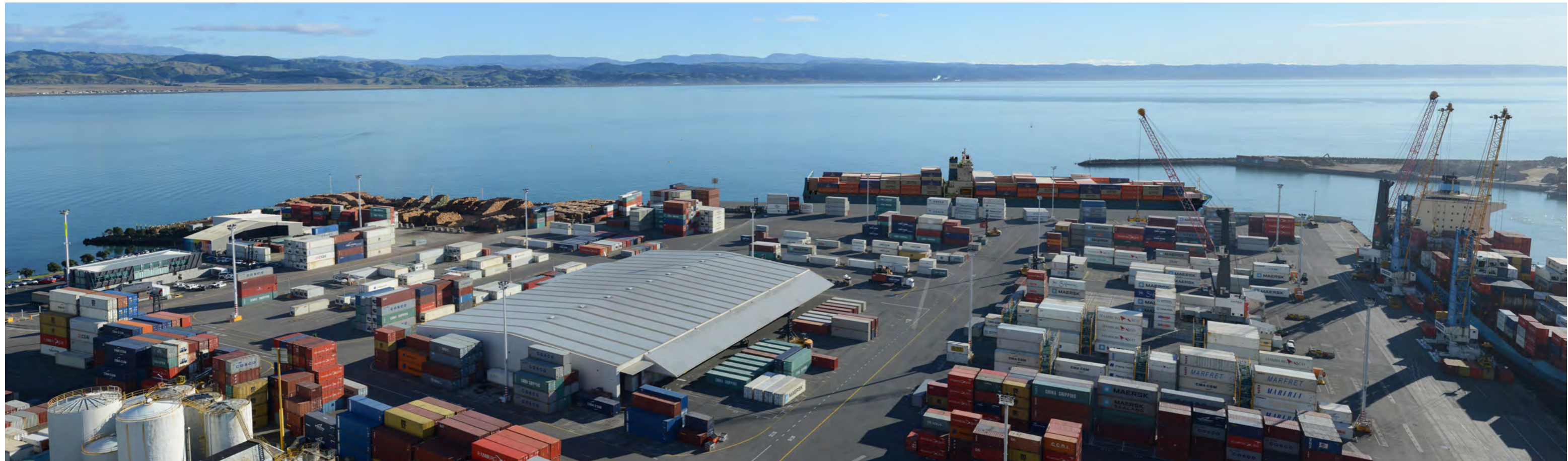
Existing Situation



Proposed Situation



Existing Situation

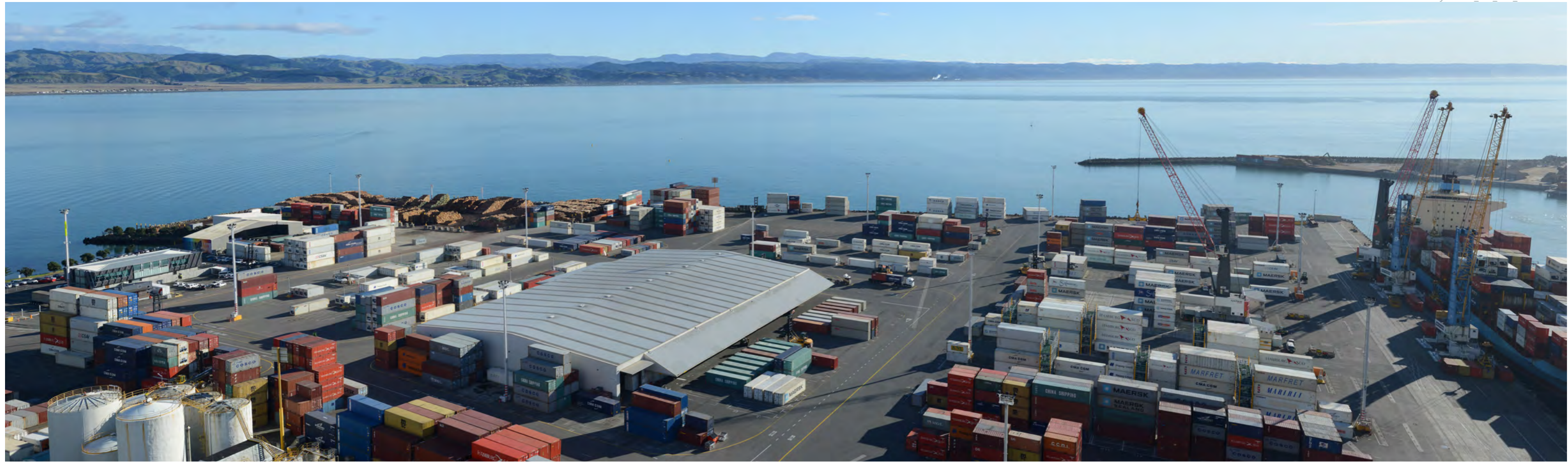


Proposed Situation

VIEWPOINT DETAILS

HawkesBay 2000 Easting : 420 848.8 mE
 HawkesBay 2000 Northing : 819 140.9 mN
 Elevation : 105 m

Date of Photography : 5 July 2016 10:01 am
 Horizontal Field of View : 90°



Existing Situation



Proposed Situation

VIEWPOINT DETAILS

HawkesBay 2000 Easting : 420 848.8 mE
HawkesBay 2000 Northing : 819 140.9 mN
Elevation : 105 m

Date of Photography : 5 July 2016 10:01 am
Horizontal Field of View : 90°



Existing Situation



Proposed Situation

Appendix 2: Definition of Terms: Visual Impact Scale of Effects

No visual effect: No discernible visual effect. The visual effects of the proposal on the character or key attributes of the receiving environment and / or the view and / or the perceived amenity derived from the view are so limited as to be negligible.

Concise Oxford English Dictionary Definition: Negligible; (adjective) that need not be considered.

Low visual effect: The visual effects of the proposal on the character or key attributes of the receiving environment and / or the view and / or the perceived amenity derived from the view is low. In terms of the RMA low visual effect equates to 'less than minor' adverse visual effects.

Concise Oxford English Dictionary Definition: Low; (adjective) not reaching the normal or average level.

Moderate visual effect: Visual effects of some significance. The visual effects of the proposal on the character or key attributes of the receiving environment and / or the view and / or the perceived amenity derived from the view is moderate. In terms of the RMA moderate visual effects equate to 'minor' adverse visual effects.

Concise Oxford English Dictionary Definition: (adjective) avoiding extremes, temperate in conduct or expression.

High visual effect: Visual effects that are prominent, limited opportunity for visual integration. The visual effect of the proposal on the character or key attributes of the receiving environment and / or the view and / or the perceived amenity derived from the view is high. In terms of the RMA high visual effects equate to 'more than minor' adverse visual effects.

Concise Oxford English Dictionary Definition: (adjective) coming above the normal or average level.

Severe visual effect: Visual effects that are dominant and change the character of the locality / view. The visual effect of the proposal on the character or key attributes of the receiving environment and / or the view and / or the perceived amenity derived from the view are severe or extreme. In terms of the RMA severe visual effect relates to significant effects that cannot be mitigated or ameliorated. In terms of the RMA severe visual effects equate to 'significant adverse' visual effects.

Concise Oxford English Dictionary Definition: (adjective) harsh, extreme, serious, not slight.