

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the Proposed Waikato District Plan

**STATEMENT OF EVIDENCE OF ALISTAIR GRAEME KIRK FOR PORTS
OF AUCKLAND LIMITED IN RELATION TO HEARING 7 – INDUSTRY**

6 DECEMBER 2019

CONTENTS

1. INTRODUCTION.....	1
2. POAL'S OPERATIONS AT THE WAIKATO FREIGHT HUB	2
3. BENEFITS OF THE WAIKATO FREIGHT HUB TO THE WAIKATO REGION .	8
4. OUTCOMES SOUGHT BY POAL	11

1. INTRODUCTION

1.1 My full name is Alistair Graeme Kirk. I am the General Manager of Infrastructure and Property for Ports of Auckland Limited ("**POAL**"). I am authorised to give this evidence on behalf of POAL regarding its submissions and further submissions on the Proposed Waikato District Plan ("**Proposed District Plan**")

1.2 I have a Bachelor of Engineering (Civil) (Hons) from the University of Canterbury, a New Zealand Certificate in Engineering (Civil), New Zealand Qualifications Authority, and I am a Chartered Member of Engineering New Zealand ("**MEngNZ**").

Experience

1.3 In my role, I am responsible for the provision and management of all assets and property of POAL along with Port and freight hub planning. This includes the maintenance, upgrading and expansion of POAL's assets at the Port of Auckland, South Auckland Freight Hub and Waikato Freight Hub.

1.1 I am directly responsible for over \$1 billion of assets, including:

- (a) over 90 hectares of yards and pavements;
- (b) wharf structures, dolphins and seawalls;
- (c) buildings, including warehouses, offices and cargo sheds;
- (d) the provision of services to and within the port, including 11kV electrical reticulation system, water, stormwater and wastewater;
- (e) access channels, turning basins and berths; and
- (f) development of freight hubs comprising 48 hectares of infrastructure.

- 1.2 I am responsible for developing POAL's 30 Year Master Plan ("**Master Plan**"). I regularly review and test the Master Plan, along with setting priorities and implementing the required changes and infrastructure developments.
- 1.3 POAL has a number of concerns in relation to the detail of the provisions of the Proposed District Plan that need to be addressed to ensure that it can develop and operate its inland freight hub activity at Horotiu in a safe and efficient manner.

Scope of Evidence

- 1.4 This statement of evidence will:
- (a) outline POAL's operations at the Waikato Freight Hub;
 - (b) outline the benefits of the Waikato Freight Hub to the Waikato region; and
 - (c) outline the outcomes sought by POAL in relation to the Proposed District Plan.

2. POAL'S OPERATIONS AT THE WAIKATO FREIGHT HUB

- 2.1 POAL is a port company established under the Port Companies Act 1988. POAL has over 550 employees and currently operates the Port of Auckland and three inland freight hubs at Wiri in South Auckland, Mt. Maunganui in the Bay of Plenty, and Longburn, near Palmerston North.
- 2.2 POAL is in the process of establishing an inland freight hub on 33ha of land at the Horotiu Industrial Park, the first stage of which was officially opened in April 2019. The land was chosen because of the predominantly industrial nature of the surrounding land use, as well as the recognition of the Horotiu and Te Rapa areas as strategic industrial nodes and the strategic benefits of the area for industrial use. These include the site's proximity and access to the Expressway and the North Island Main Trunk railway. When fully developed, the Waikato freight

hub will consist of rail sidings, pavement container yards and warehouse and distribution activities.

2.3 POAL's freight hub will also generate significant economic benefits, not only for the Waikato region in terms of their ability to access an “end-to-end” supply chain, but also to importers and exporters nationwide through lower supply chain costs. The freight hub is also anticipated to generate approximately 300 full time equivalent jobs and will have flow-on effects in terms of secondary employment in service industries (such as transport companies) and other industry that rely on freight hub activities.

2.4 When complete, POAL's freight hub activities at Horotiu will comprise:

- (a) an annual throughput capacity of approximately 300,000 teu (equivalent container units);¹
- (b) rail sidings and spur to provide the site with direct north and south bound rail services for trains with up to a 700-metre length;
- (c) approximately 15 hectares of hardstand pavement and associated lighting to store and handle containers, to create an efficient link between the activities occurring on the site and the rail siding;
- (d) multiple 25-metre-high lighting columns to illuminate the hardstand pavement area;
- (e) container stacking to a height of 21; and
- (f) approximately 10 hectares of warehousing and distribution activities to be occupied by third parties to receive containerised products by rail and road networks; unpack the products; and consolidate the products into containers within

¹ This compares to the 939,680 teu that were handled through the Fergusson Container Terminal at the Port of Auckland.

the cross-dock facilities for distribution to the North Island by both the rail and road networks.

2.5 The planned Waikato Freight Hub is shown in *Figure 1* below:



Figure 1: Artist's impression of the Waikato Freight Hub

2.6 The Waikato Freight Hub has been master-planned to ensure the efficient and safe movement of freight within the site:

- (a) rail sidings located adjacent to the North Island Main Trunk Line;
- (b) a container yard area adjacent to the rail sidings, operated by heavy equipment;
- (c) warehouse/cross dock buildings;
- (d) staff parking and road access.

2.7 POAL purchased the site, a former sand quarry, and has undertaken significant work to get the first phase of operations underway, including:

- (a) earthworks to re-compact and level the site;
- (b) the construction of an overbridge to the site;

- (c) the construction of approximately 50% of the internal roading to the site;
- (d) services to site;
- (e) the construction of the first warehouse; and
- (f) the partial construction of stormwater ponds.

2.8 *Figure 2 below shows the development as at November 2019.*



Figure 2: Waikato Freight Hub development as at November 2019

2.9 It is expected to take around 10 years to fully develop the site to match cargo demand and the next phase of works will comprise:

- (a) the construction of a 2ha hardstand pavement for container storage;
- (b) the lowering First Gas main located in the eastern portion of the site;
- (c) the completion of the internal roading on the site;
- (d) further warehousing development;
- (e) the completion of first stormwater pond; and

(f) the installation of the rail sidings.

2.10 The Waikato Freight Hub will operate 24 hours per day, 7 days per week. When complete, it will have an annual throughput of approximately 300,000 containers that are to be transported by both road and rail. This represents a significant amount of freight. To put the scale of POAL's operations at Horotiu into context:

(a) the Lyttleton Port of Christchurch handles approximately 440,000 containers per annum;

(b) the Port of Napier handles approximately 266,000 containers per annum;

(c) the Port of Otago handles approximately 200,000 containers per annum; and

(d) CentrePort (Wellington) handles approximately 85,000 containers per annum (and handled approximately 132,000 containers prior to the Kaikoura earthquake in 2016).

2.11 The Waikato Freight Hub is required to operate 24/7 as many freight movements by road and rail occur at night-time (i.e. off-peak).

2.12 While POAL will operate the Waikato Freight Hub in accordance with the resource consent that is held, the nature of their operations is such that it cannot internalise all of its effects within its site boundaries. For example:

(a) Noise levels from the Horotiu Inland Freight Hub activity have the potential to exceed the night-time noise limits of the Operative Waikato District Plan as it relates to the Living Zone.

(b) The height of the container stacking (21 metres) and multiple lighting columns (25 metres) means that such structures will be visible from beyond the boundaries of the freight hub.

- (c) The 24 hour/7 days per week operation requires the site to be illuminated at night to a level that ensures the safety of workers and will result in increased truck² and rail movements.

2.13 Containers will be moved initially by reach stacker (shown below) to and from trains and trucks to a yard area. The operation is normally fairly quiet, but there can be noise from the steel-on-steel or steel-on-pavement contacts; particularly if the operator is less experienced or if a container is slightly twisted. *Figure 3* and *Figure 4* illustrate how containers will be moved.



Figure 3: Photograph of reach stacker loading a train



Figure 4: Photograph of reach stacker loading a truck

²

900 truck movements per day are anticipated.

- 2.14 Containers are stacked in the yard which is subject to a 21m height limit (8 containers high). Containers are likely to remain in the yard area for 5-30 days (dwell time) which is greater than the 2-3 days at the Waitematā Seaport. This is because container consignments are consolidated at the Freight Hub, or empty containers are returned for storage until being redeployed for freight.



Figure 5: Photograph of stacked containers

- 2.15 Modern container handling equipment can stack empty containers up to 9 high and full containers up to 6 high (refer to *Figure 5* above) to optimise the efficiency of expensive land at ports and freight hubs/terminals around the world.

3. BENEFITS OF THE WAIKATO FREIGHT HUB TO THE WAIKATO REGION

- 3.1 Freight demand is increasing in the Waikato Region. A number of large manufactures such as Yashili, Open Country Dairy and Synlait, have commissioned new plants in the region or increased production at existing facilities.
- 3.2 We are also aware of manufacturing companies who have outgrown their current facilities and are considering relocating operations to the

region; the most innovative of them being the Comfort Group who are planning the development of the Sleepyhead Estate.

- 3.3 Growth in the population of the 'Golden Triangle' is also driving an increase in freight volumes. This is putting pressure on existing distribution centre (DC) and logistics networks for retailers. Consequently, there are retailers who are looking to either relocate their National DC or establish a regional DC from which they can service growth in the Waikato region as well as other regions including Bay of Plenty, Hawkes Bay, Manawatu and Taranaki.
- 3.4 The increased volume of retail, grocery and fast-moving consumer goods together with the growth in manufacturing output (predominantly dairy) is placing pressure on the capacity of existing logistics services. The problem is compounded by the fact that both have peaks at the same time.
- 3.5 The current road transport-centric logistics model has the potential to constrain growth (especially during the peak periods), impact competitiveness due impaired service levels, and increase total supply chain costs due to increasing service and resource costs and decreasing vehicle productivity due to traffic congestion and inefficient freight networks.
- 3.6 It is therefore logical that the model needs to change from being road transport-centric to one that is intermodal; where rail is used to move freight in bulk into and out of the region and then road transport used for the first and last mile - that is between the origin/destination of the cargo.
- 3.7 Vehicle productivity increases significantly where there is a high density of freight and a greater opportunity to minimise the need for trucks to run empty (or at least keep it to very short distances). The Waikato Freight Hub is therefore being developed as an intermodal facility that aims to provide a solution that is more attractive than road by:

- (a) Reducing logistics costs through optimisation, economies of scale and increased utilisation of resources.
 - (b) Providing 'value-add' services to offset costs that cannot be eliminated or mitigated.
 - (c) Using economies of scale and innovative technologies to reduce intermodal operation costs.
 - (d) Creating an opportunity to develop a precinct around the Waikato Freight Hub that optimises the distribution of freight and containers by maximising the utilisation of transport resources and minimising the cost and complexity of transporting goods over a short distance.
- 3.8 Rail services will connect with the Port of Auckland, the South Auckland Freight Hub and the Waikato Freight Hub. The Port provides a gateway for international cargo, while the South Auckland Freight Hub is located with the highest freight density region in the country and in very close proximity to many national distribution centres.
- 3.9 Dedicated train services between purpose built intermodal facilities provides the opportunity to seamlessly integrate first and last mile deliveries making intermodal services more competitive with traditional road services.
- 3.10 Direct access to the Port means that import and export containers do not need to be transferred between metro and line haul services. Therefore, the Waikato Freight Hub effectively moves the port-gate to the Waikato region.
- 3.11 Cross-dock facilities on the Waikato Freight Hub will provide the opportunity to remove significant costs from 'end-to-end' freight transport, including the reduction/elimination of the cost of returning empty containers (which can be reused on-site).
- 3.12 Total supply chain costs can also be reduced when unpacked goods are delivered directly to customers from the cross-dock. The

consolidation of freight with other users of the cross-dock provides further potential to reduce costs.

- 3.13 The large warehouse facilities that are part of the Waikato Freight Hub provide the opportunity for cargo owners to either be innovative and participate in the 'shared economy' or manage their own facility by collaborating with other companies to realise synergy opportunities from sharing and optimising the use technology, space and resources.
- 3.14 The Waikato Freight Hub will encourage industry to relocate to the region; these businesses need to be able to access their markets and suppliers, both local and international, in a reliable and sustainable manner. Business are not only looking to ensure that total logistics costs are minimised but are seeking to extract value from any costs that are incurred.
- 3.15 The location of the Waikato Freight Hub, the co-location of a wide range of logistics services on the same site, and the surrounding industrial land resource presents a very rare opportunity to develop an eco-industrial precinct which is closely aligned with the Government's Living Standard Framework.
- 3.16 POAL envisages that the Waikato Freight Hub will develop into a community of businesses that cooperate with each other, the logistics service providers to efficiently share resources (information, materials, energy, water, infrastructure and equipment) leading to economic gains.
- 3.17 Economic success and collaboration between business and the community provides the opportunity to create jobs and improve social wellbeing in the region.

4. OUTCOMES SOUGHT BY POAL

- 4.1 It is important to note that plans for efficiencies and capacity enhancements at the Waikato Freight Hub are not rigid. There are huge number of variables, including varying growth rates, changes in

technology, or regulatory requirements. POAL regularly reviews and remodels capacity plans as these variables change and needs to remain responsive to changes in freight demand over time. Flexibility is the key, including flexible planning provisions which enable POAL to respond to market needs.

- 4.2 POAL therefore seeks the retention of a 'bespoke' set of provisions for the Horotiu Industrial Park that recognise the importance of its Waikato Freight Hub and the Horotiu Industrial Node to the economic and social wellbeing of the Waikato Region, and to facilitate the efficient development of the Waikato Freight Hub, without restricting the day-to-day practicalities of the working industrial environment.

Alistair Graeme Kirk

9 December 2019