

# Community Reference Group

Minutes of Meeting held on Thursday 8 June 2023 at 5.30pm

Venue: Motuihe and Rakino Room – Ports of Auckland and via MS Teams

**Present:**

| <b>Name</b>          | <b>Organisation</b>                           |
|----------------------|---|
| Julie Wagener        | POAL – Head of Communications                 |
| Harriet Somasundaram | POAL – Communications Specialist              |
| Nigel Ironside       | POAL – Head of Sustainability and Environment |
| Matthew Holbrook     | POAL – Senior Pilot                           |
| Allan D’Souza        | POAL – GM Marine and Multi-Cargo              |
| Suhail               | POAL – Sales and Business Development Manager |
| Sarah Powrie         | Deputy Chair Orakei local board               |
| Sarah Trotman        | Waitemata local board member                  |
| Michael McKeown      | City Centre Residents Group                   |
| Gayle Bennett        |   |
| Jarod Hepi           |   |
| Mike Blackburn       |   |
| Paul McLuckie        |   |
| Tim Coffey           |   |

**Apologies:** Roger Gray (POAL), Alistair Kirk (POAL), Dennis Knill, Rick Ellis, Bob Tait, Ardeth Lobet, Bruce Barton

## Agenda

| TIMING | AGENDA ITEM   | OWNER            | SLIDE |
|--------|---|------------------|-------|
| 5:30pm | Welcome and confirmation of last meeting's minutes  | Julie Wagener    | 2     |
| 5:35pm | General Business Update   | Julie Wagener    | 3     |
| 6:00pm | Pilotage and Berthing process   | Matthew Holbrook | 4-12  |
| 6:20pm | Infrastructure Update   | Julie Wagener    | 14    |
| 6:30pm | Environmental Update <ul style="list-style-type: none"><li>Noise, Air, Light</li><li>Neptune update</li><li>Harbour Health initiative</li></ul> | Nigel Ironside   | 15-16 |
| 6:45pm | Any other business  |                  |       |
| 7:10pm | Close   | Julie Wagener    |       |

Open:

### General Business Update – Julie Wagener – Head of Communications

Roger Gray sends his apologies, he is in Australia visiting customers, Alistair Kirk is also away. Congratulations to Allan D'Souza (GM Marine and Multi-Cargo) who accepted the Infrastructure NZ, Building Nations Decarbonisation Award for *Sparky* our electric tugboat.

**Four high straddle carriers** – Following the end of the automation project we have been in negotiations with Kone Cranes to convert the blue automated straddles to manual straddles with cabs. A trial conversion is currently happening in Germany. Future conversions will take place at POAL over the next couple of years. Moving to four high straddles will increase terminal capacity.

**Council engagement** – Mayor Brown has launched four work streams reviewing the port. These are:

1. How can the port be most effective by continuing to operate the current model?
2. How can the port reduce its footprint while maintaining operations?
3. Review the operating/ownership model – should the port be sold?
4. Eke Panuku have been looking at future land use and what this area would look like if there was more waterfront access for the public.

POAL have been actively engaging throughout this process.

**Mike Blackburn** asked – Is there any community involvement?

**Julie Wagener (POAL)** – This process is being led by the mayor’s office. Ports of Auckland have been involved at this stage. We’re not leading the reviews so can’t comment on public consultation.

**Safety Awards** – We have been on a journey over the last two years with our safety transformation. We are delighted to let you know we have been nominated for three NZ safety awards. Safety is never finished but this recognition is an important opportunity to celebrate how far we have come.

## **Pilotage and Berthing process – Senior Marine Pilot, Matthew Holbrook**

A presentation on piloting was requested at the last CRG meeting in March. This is focussed mainly on the Container Terminal.

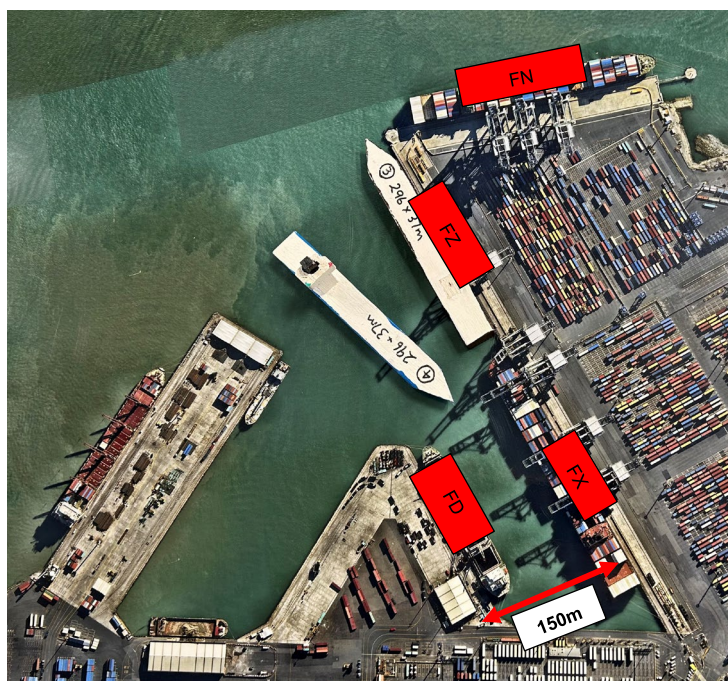
Matthew Holbrook is a Senior Marine Pilot who has been with the port for 21 years.

Pilotage is compulsory all around the world. In NZ any vessel that exceeds 50m in length or 500 gross tonnes, must be piloted. Governed under the Maritime Transport Act Part 90 – this forms the basis of all NZ pilotage procedures.

The main purpose of a Pilot is to provide the safe and efficient passage of a vessel within the Auckland Pilotage District.

### **Berth Arrangement**

- Main wharf (FX & FZ) lies in an approximate North/South direction with an approximate usable length of 600m.



- North wharf (FN) lies in an approximate East/West direction with an approximate usable length of 300m.

- Southern berth (FX) has a limiting width of 150m of navigable water (perpendicular to its direction). This space can be further limited by vessels occupying the berth opposite (FD – Freyberg East/triangle wharf).

## **Vessel type**

The Fergusson Container Terminal mainly services container vessels of approximately 300m in length and 32-40m beam. Occasionally there will be other vessels in for various reasons, but most vessels are for containers. Container vessels in general have been getting bigger over the years.

Vast majority of container vessels are equipped with:

- One direct drive/reversing main engine.
- Single shaft with a 'fixed right-handed' propeller.
- Single rudder.
- One bow thruster (can be non-operational/unavailable).

There is no gear box in the engine. To reverse, you must physically stop the engine and then restart in the opposite direction.

## **Maneuvering Characteristics**

- Transverse Thrust
  - Effect due to rotation of propeller
  - Most pronounced when vessel/propeller is going astern
  - 'Drags' the vessels stern to port or to the left.
- Astern (reverse) Power only 35% of Ahead Power.
- Rudder not effective/usable when going astern (reverse).
- Tugs (x2) utilised forward and aft to assist berthing process.
- Propellers can be prone to cavitation when operating astern

## **Limiting Factors**

- Weather (Wind)
- Depth Under Keel (minimum 40cm) limits propeller effectiveness further i.e does not stop.
- Berth Design:
  - FX, adjacent 'breastworks' is not perpendicular and berthing parallel is not achievable.
  - Navigable water of a width of 150m has not increased in decades yet vessel size, length, width, and mass has increased steadily.
  - Adjacent vessels further reduce width to 100m (SOP minimum); vessel 32m, tug 22m therefore occupies 56m of this space allowing remaining 28m either side. This does not allow for tugs line for towing/pulling.
- Crane Positioning

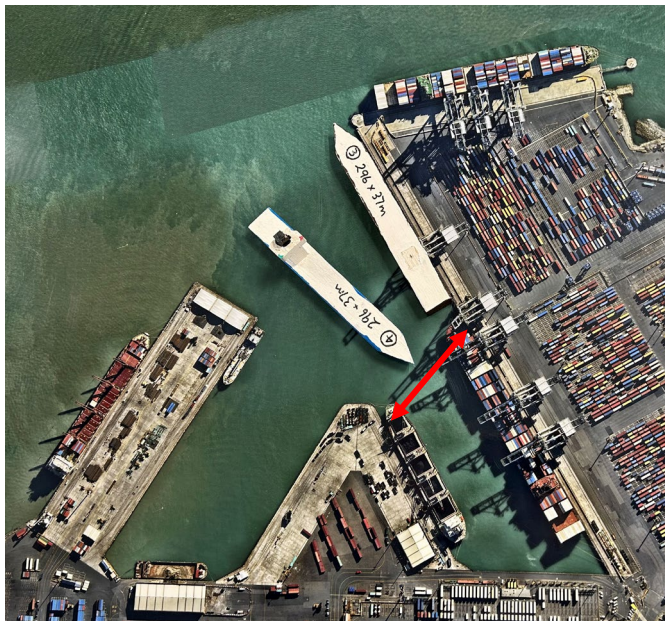
- Cranes must be clear of vessel
- Vessel bow 'flare' exposes southern cranes when bow south.

### **Berthing - Bow South (front first). Not preferred.**

To berth a vessel bow south at FX, it requires the Pilot to maneuver in reverse and this is not ideal.

- Controlling speed can be problem – some vessels 9kts at DSAH.
- Slowing/stopping can affect control of vessels movement through critical points.
- Bow thruster less effective when moving ahead – pivot point/lever.
- Less ability to:
  - Stop – 35% power, cavitation.
  - Control vessel with rudder.
  - Control bow with thruster – pivot point/lever.
  - Abort – low chance of success.
  - Visibility, ascertain dangers due to distance from bow.
  - Avoid bow flare over wharf.
  - Ebb tide exacerbates transverse thrust on departure against required direction.

Maneuvering in reverse gives only 35% of engine power. Pilots do not like to move bow south into FX and FZ because you cannot move quickly in emergency situations. The pull of the tide across FN can make it difficult to reverse out on exit as the tide pulls the ship to the port and there is no steering power.



The width of the water between Freyberg and FX/FZ hasn't changed in over 50 years, but the ships have gotten bigger. This narrow stretch of water needs to fit two vessels and two tugs.



## **Berthing - Bow North (backing in). Preferred option.**

- Easier to drive out forwards with full power and steering capability
- Cut/transverse thrust assists turn first part of maneuver
- Stop engine track astern
- Better ability to:
  - Stop
  - Control direction with rudder
  - Control bow with thruster – pivot point/lever
  - Abort maneuver high chance of success
  - Visibility – pilot in aft part of vessel with better visibility to danger points/obstructions

Questions for Matthew:

**Paul McLuckie** asked – What about further down Quay Street? And what about smaller vessels that are not bow south? Small coastal vessels.

**Allan D'Souza** (GM Marine and Multi-Cargo) – Sometimes shipping lines request the berthing position of a vessel depending on the cargo.

**Bill Endean** asked – Who has the say on which way ships are positioned? The ship master or POAL?

**Matthew Holbrook** answered – It is very rare there is a request for the position of the ship to be a certain way. Sometimes there is a broken gangway, or lifeboat that needs to be replaced. The safest way is to berth bow north, and safety is always the highest priority.

**Bill Endean** – It's the noisy ships that are the problem for a residential community. Ships on FN are spun 180 degrees to get onto the berth. Can POAL use the same dexterity to put the ships in FX and FZ bow south?

**Matthew Holbrook** – Berthing at the northern berth is a completely different maneuver. It's comparing apples and oranges. Bow south on FX is a lot more dangerous and riskier.

**Mike Blackburn** asked – Who decides, and when do they decide, which ship is going to be berthed in which direction (north or south)? Does there have to be a trigger point for the decision to be made to berth a ship bow south?

**Matthew Holbrook** – Pilots do not make the decision of berth direction in the spur of the moment. It is planned in advance. If there is a request to put a ship bow south, we will try and make it work, however there may be some restrictions placed around that – timing, vessel delay, extra resource (sometimes at a cost to the shipping line).

**Mike Blackburn** – Do you ever ask the ship to come in bow south for any reason?

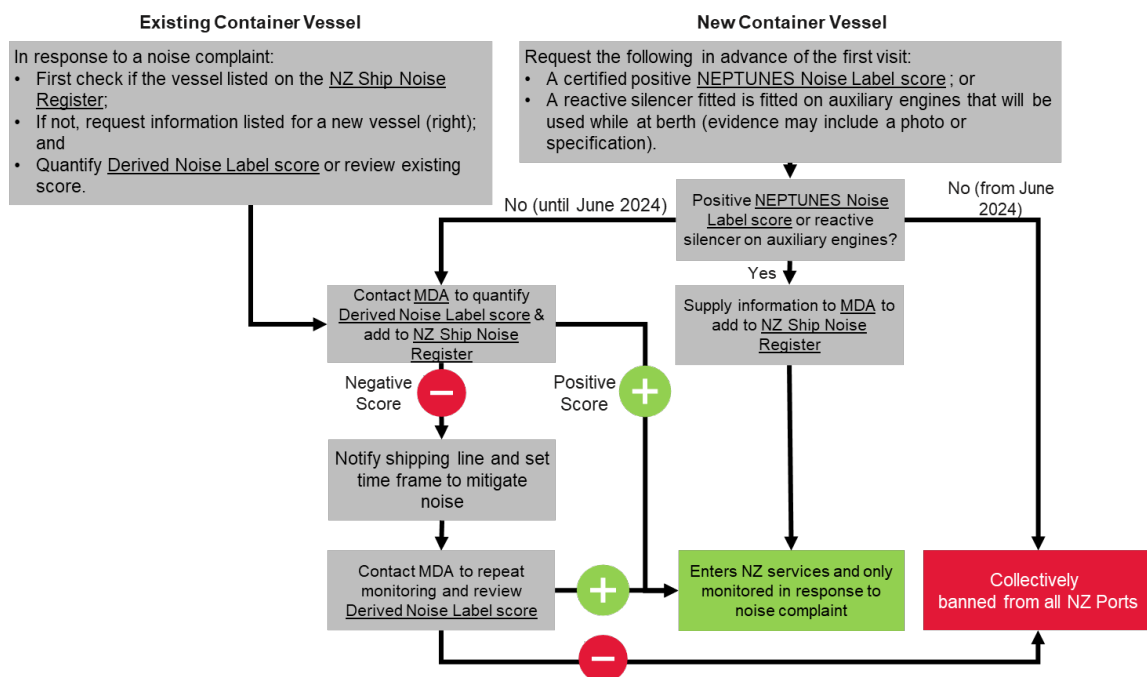
**Allan D'Souza** – We have done this with problem ships. We tell the line that the ship is a problem vessel and will be berthed bow south.

**Sarah Trotman** extended invitation to POAL team to discuss the issue of noise affecting the community with the Waitematā Local board. Sarah is very interested in the port master plan.

## Environmental Update – Nigel Ironside – Head of Sustainability and Environment

### Noise specification process – Fergusson Container Terminal only

- Another way of tackling the noise issue is to put in a system that requires vessels coming into NZ to provide a noise label score.
- We have a watchlist of existing vessels we are monitoring (10 at the moment), and new vessels will be added to this process.
- In the future, only quiet ships will be serviced in NZ.
- All the shipping lines have been formally notified that from June 2024, all vessels coming into NZ have to provide a noise label score, based on Neptune's Noise Labelling.
- Ports in NZ have collectively agreed not to work a noisy ship.



**Allan D'Souza** (POAL) – In the future when the ships are built, they will be built to meet the Neptune standard.

**Nigel Ironside** (POAL) – Neptune is a robust and industry agreed label score, and we will accept this. We are only looking at the low frequency thud in our modified methodology – until June 204.

**Bill Endean** asked – There are audible alarms coming from the port at 3:30am. What are these and what are they for? Dual tone alarm.

**Nigel Ironside** (POAL) – The only audible alarm could be the cranes moving, but this is not often. A risk assessment into reducing these has been initiated.

**Bill Endean** – Who is in danger around the crane in the middle of the night?

**Julie Wagener** (POAL) – We have people working on and around the cranes 24/7 and they need to be notified that the cranes are moving.

For safety we cannot remove the alarms. We will investigate what can be done to tone down the alarm.

**Nigel Ironside** (POAL) – These alarms are already toned down for night work.

***ACTION: POAL will do a risk assessment.***

## **Infrastructure Update – Julie Wagener – Head of Communications**

- We are digging up certain sections of the Fergusson Container Terminal to stabilise the ground of the terminal. This work is only happening during the day. Material is getting reused – remixed and relayed.
- Council's storm water project is progressing.

## **Harbour Health Initiative – Nigel Ironside - Head of Sustainability and Environment**

There was a huge stakeholder group who created Sea Change, a spatial plan designed to improve the whole of the Hauraki Gulf. POAL were part of this, and it finished up around 2019. Ever since we have been looking at what we can do to help implement the objectives of this spatial plan.

We kicked off the first step this week.

We are trying to turn the port into a marine nursery for algae, mussels, etc. We'd like to try and grow these nurseries in the port and then transfer them to reef structures out in Mechanics Bay. Reef structures are an important habitat type in the marine environment. We will be monitoring these structures to see what grows.

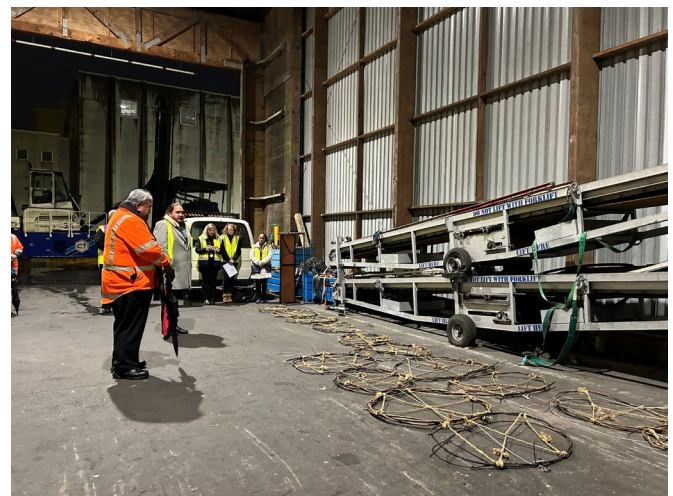
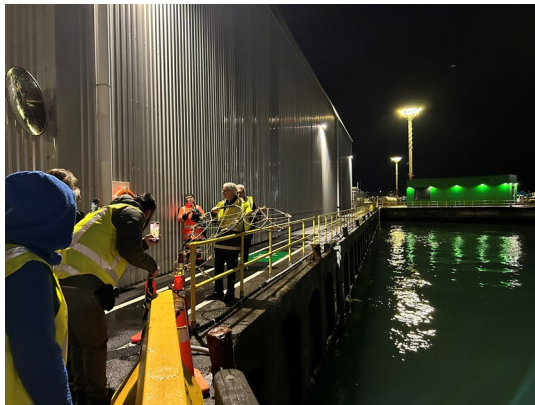


**Mike Blackburn** – Are they doing a water column test to see if the quality of water improves?

**Nigel Ironside** – No we won't at this stage, this is more ecological. We are trying to enhance the biodiversity at the port, and the quantity of that biodiversity. We will do more testing / ecological survey's later in the process.

**Mike Blackburn** asked – Is this a harbour health initiative or a nursery?

**Nigel Ironside** – It's just a nursery at this stage, but once these nurseries have been developed, we will transfer them to the reef structures in the harbour and then look to improve and enhance the habitats of the reef structures later. These reef structures are vital for the health of the harbour. We will provide the first steps, and then nature will repair itself.



## **Replanting South Head**

The port has a land holding at South Head. We began the tree planting project on Mahanihahi (South Head), commonly known as Āwhitu Peninsula.

Over 24 thousand native trees will be planted during the first stage of a 38-hectare restoration project in collaboration with Ngāti Te Ata Waiohū, Āwhitu Landcare and Kauri Park.

The ports' ambition is to restore the headland to native bush helping provide an ecological corridor up and down the West Coast from the Waitakere Ranges, develop an ecological area which celebrates the land and its historical sites, and ultimately provide walking trails for the public to enjoy.

## **Any other business?**

**Mike Blackburn** asked – What is happening with the master plan? The community get left out of this process. The port is such a big part and it affects so many communities.

**The meeting ended at 6:40pm.**