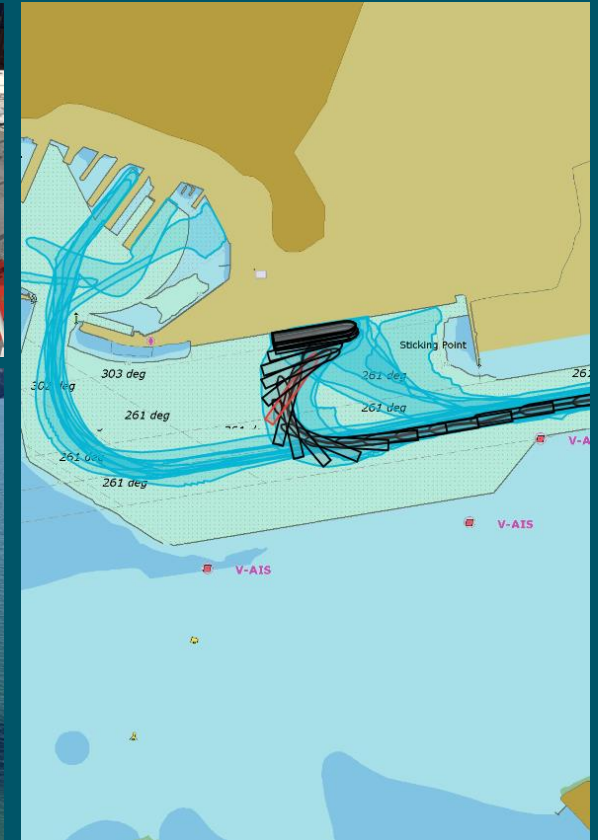


# Lyttelton Port - Standard Passage Plan Pack



Issued: 27/09/2024

Welcome to Lyttelton Port. The dual Purpose of this document is to:

1. Provide advance information to Masters of vessels visiting to Lyttelton Port in relation to;
  - a. key port information
  - b. the Master Pilot Exchange (MPX) Document
  - c. the standard passage plans that LPC Pilots work to
  
2. Provide LPC Pilots with a standardised and agreed planning framework upon which the Master Pilot Exchange (MPX) can be based.

In all instances the MPX will be conducted prior to entry to or departure from the Port, and will take into consideration the conditions on the day. The purpose of the MPX is to create a 'shared mental model' and subsequent agreement between the Pilot and the Master in advance of the vessel transit.

If agreement is not able to be reached, then the Pilotage will not proceed.

# Section 1: Port Information

# Key Port Information

## Anchorage

The main anchorage for vessels waiting for a berth is a combined general anchorage and quarantine anchorage situated in position: Latitude 43° 33.0' South, Longitude 172° 50.0' East (approximately 2.5 nautical miles bearing 026 degrees (True) from Godley Head).

## Communication

A 24/7 visual and listening watch is maintained by Lyttelton Harbour Radio. Communication is available on VHF channels 16, 12 and 63.

## Port Navigation:

The pilot station BRAVO is situated two miles ENE from Godley Head (Latitude: 43° 34.91' South, Longitude: 172° 51.22' East).

The pilot station ALPHA is typically used in heavy weather/sea conditions (Latitude: 43° 34.22' South, Longitude: 172° 52.93' East).

## Pilotage

Pilotage is compulsory for all vessels over 500GT or over 40m LOA, unless exemption is obtained from Maritime New Zealand.

LPC pilots use a Navicom Dynamic Harbour Pilot Position (PPU) monitoring system to enable highly accurate monitoring when manoeuvring large vessels in and out of the harbour.

The Master Pilot Exchange (MPX) process will result in an agreed plan for the safe transit of the vessel into or out of Lyttelton Port.

## Wind

In addition to specific vessel type and berth location wind limits, Lyttelton Port has an overall wind limit of 35 knots (sustained) beyond which arrivals into the Port will be suspended. Strong North Westerly and South Westerly winds are identified as a specific hazards for visiting vessels, and these hazards are identified within the generic plans contained in this document. The Duty Pilot will advise on specific wind limits.

## Towage

Berthing is aided by two Azimuth Stern Drive tugs: *Blackadder*, with a bollard pull of 62.5 tonnes, and *Piaka*, with a bollard pull of 70 tonnes.

## DUKC®

LPC operates a Dynamic Under Keel Clearance (DUKC®) system, aiding in the safe transit of vessels in and out of port.

The DUKC system is used to accurately predict a particular vessel's under keel clearance (DUKC®) based on the vessel's dimensions and stability, the prevailing environmental conditions, predicted vessel speeds and a detailed profile of the Lyttelton Harbour approach channel.

*Notice: These plans presented in this document are indicative only. LPC accepts no liability from the reliance of these plans. The MPX process will result in an agreed plan for the safe transit of the vessel into or out of Lyttelton Port.*

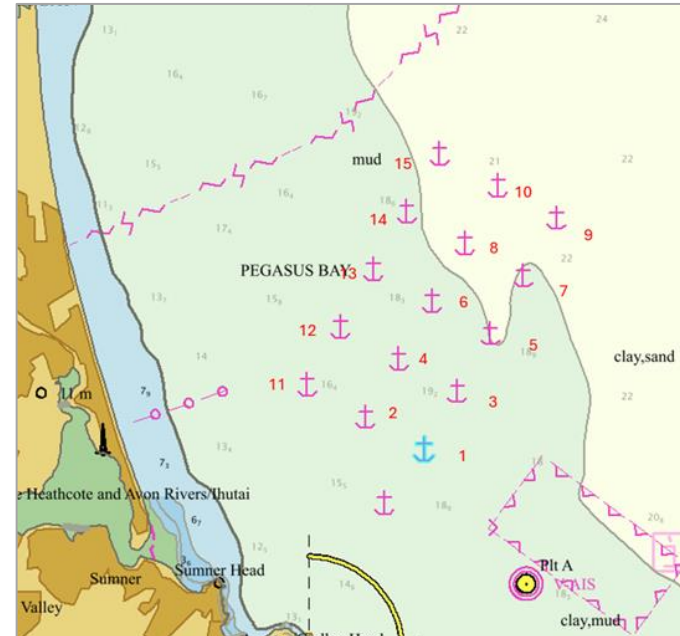
# Anchorage information from the Harbourmaster

## Anchorage

15 designated anchorages are available for general use outside Lyttelton. When anchoring, the anchorage used must be the lowest numbered anchorage available at the time of arrival at the anchorage area.

The quarantine anchorage (Latitude 43° 33.0' South, Longitude 172° 50.0' East, SW of #1 anchorage) may only be used with the permission of the Harbourmaster or when required to quarantine while awaiting free pratique. Further details may be found in the Harbourmaster's Direction 16-1 on Environment Canterbury's website."

Anchorage	Latitude	Longitude
1	43° 32.19' S	172° 50.82' E
2	43° 31.71' S	172° 49.61' E
3	43° 31.33' S	172° 51.50' E
4	43° 30.84' S	172° 50.30' E
5	43° 30.46' S	172° 52.18' E
6	43° 29.98' S	172° 50.98' E
7	43° 29.59' S	172° 52.87' E
8	43° 29.11' S	172° 51.66' E
9	43° 28.72' S	172° 53.55' E
10	43° 28.24' S	172° 52.34' E
11	43° 31.23' S	172° 48.41' E
12	43° 30.36' S	172° 49.09' E
13	43° 29.49' S	172° 49.77' E
14	43° 28.63' S	172° 50.46' E
15	43° 27.76' S	172° 51.14' E



# Key Port Information

Recommended routes between the designated Pilot Boarding station and the selected berth or anchorage are shown below. These plans are indicative and can be deviated from only at the discretion of the Master and/or Pilot. LPC accepts no liability from the reliance of these plans.

Pilot Boarding Station to Cashin Quay						
Name	Latitude	Longitude	Turning Radius (M)	Legline Bearing	Legline Speed (kts)	Legline X Track (M)
PS Alpha	43°34.22'S	172°52.93'E	500	241	12	50
PS Bravo	43° 34.91'S	172° 51.22'E	500	241	12	50
Camp Bay	43° 36.255'S	172° 47.8187'E	500	261	8	50
Cashin Quay	43° 36.75'S	172° 43.7'E				
Pilot Boarding Station to Inner Harbour						
PS Alpha	43°34.22'S	172°52.93'E	500	241	12	50
PS Bravo	43° 34.91'S	172° 51.22'E	500	241	12	50
Camp Bay	43° 36.255'S	172° 47.8187'E	500	261	8	50
Shag Reef	43°36.834'S	172°43.0286'E	300	005	4	30
Inner Harbour	43°36.4772'S	172°43.0286'E				

# Key Port Information

BERTH	DESIGN DEPTH	BERTH POCKET	METRE MARKING	WHARF LENGTH	HEADING	BOLLARD CAPACITY	FENDER TYPE	DESIGN DISPLACEMENT	LANDING VELOCITY	FENDER SPACE
CQ 1	13.1	40	20 – 250	230	260°/080°	50/24 t	Spring fender	35000t	0.2 Knots	4m
CQ E	13.6	45	264 - 574	310	260°/080°	50/150 t	Cone	71200t	0.2 Knots	22m
CQ W	13.1	40	574 - 857	283	260°/080°	50 t	Cone	71200t	0.2 Knots	9 – 12m
CB	10.8	55	0 - 148	148	274°/074°	150 t	Cone	106042t	0.2 Knots	18m
NO. 1 BREASTWORK	9.0	20	15 - 155	140	154°/334°	50/11/9/50 t	Teflon rubbing strips		0.2 Knots	
2 EAST	11.8	35	20 - 200	220	036°/216°	25 t	Teflon Rubbing strips			
2 WEST	10.0	30	0 - 170	170	036°/216°	25/13 t	Teflon Rubbing strips			
3 EAST	9.5	30	0 - 180	180	036°/216°	33 t	Rubber ½ round			
3 WEST	11.0	30	0 - 200	200	036°/216°	33 t	Rubber ½ round			
7 EAST	10.5	30	0 - 205	205	024°/204°	30 t	Long arch fenders			
OIL BERTH	12.6	35	-15 - 215	230	117°/217°	50/75/25t	Cone	71000t	0.2 Knots	23/32/8m

# Section 2: MPX and Berth Guide



# MPX – LPC Master Pilot Exchange Form

LPC uses an electronic MPX system (eMPX) as the primary document for conducting the MPX.

On occasion LPC Pilots will use the hard copy MPS (as shown below). A PDF download of the hard copy LPC MPX is available from the following web link.

<http://www.lpc.co.nz/wp-content/uploads/2015/06/LPC-Pilotage-Passage-Plan.pdf>

HW	TIME	HEIGHT	<input type="checkbox"/> UKC	UKC		DRY DOCK	FLOOR 137.214M TOP 14.7M ENTRANCE 18.8M W MAX DRAFT 5.1M HDG 260T	
LW	TIME	HEIGHT	<input type="checkbox"/> DU/KC	HARBOUR	INNER HARBOUR			
FLOW			TIDE HEIGHT					
WEATHER: PRESENT			DEPTH AT CD					
WIND			TOTAL DEPTH					
WEATHER: PREDICTED			DRAFT					
WIND			UKC STATIC					
			SQUAT					
REMARKS			UKC DYNAMIC (1)					
			SWELL (if any)					
			UKC DYNAMIC (2)					

FOR MASTER / PILOT EXCHANGE DURING PASSAGE PLANNING. REFER TO CHART NZ 6321 FOR NAVIGATION.

IDENTITY	CLASS	STATUS	TYPE	LENGTH (M)	WIDTH (M)	DEPTH (M)	MAX DRAFT (M)	NET TONNAGE	GROSS TONNAGE	REGISTRATION	OWNER	OPERATOR	PILOT	DATE	TIME
02-1	111	111	111	20	2.0	2.0	2.0	200	200	111	111	111			
02-2	111	111	111	20	2.0	2.0	2.0	200	200	111	111	111			
02-3	111	111	111	20	2.0	2.0	2.0	200	200	111	111	111			
02-4	111	111	111	20	2.0	2.0	2.0	200	200	111	111	111			
02-5	111	111	111	20	2.0	2.0	2.0	200	200	111	111	111			
02-6	111	111	111	20	2.0	2.0	2.0	200	200	111	111	111			
02-7	111	111	111	20	2.0	2.0	2.0	200	200	111	111	111			
02-8	111	111	111	20	2.0	2.0	2.0	200	200	111	111	111			
02-9	111	111	111	20	2.0	2.0	2.0	200	200	111	111	111			
02-10	111	111	111	20	2.0	2.0	2.0	200	200	111	111	111			

Main Engine(s) tested by 13.30h  
 New Hull/structure tested by 15.00h

### LYTTELTON PORT PILOTAGE PASSAGE PLAN

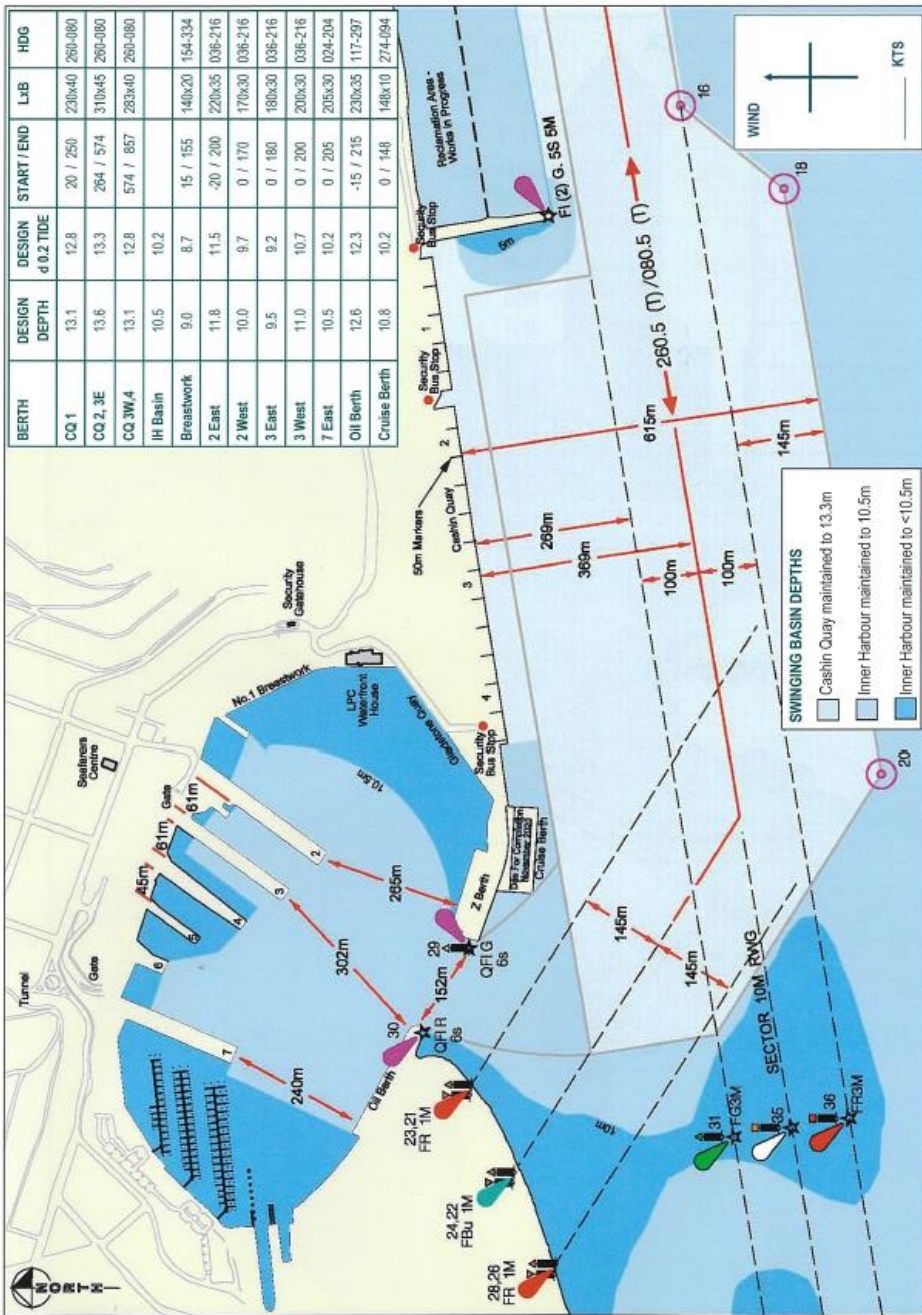
Lyttelton Port listens continuously on VHF 12 / 16. VHF 02 is a working channel for Pilots and Tugs. The bridge team is reminded of its duty to maintain an accurate check on the vessel's position as laid down in the ISM Code, STCW Convention, IMO Regulations & ICS Bridge Procedures Guide. The bridge team is requested to monitor the pilots actions at all times, and to challenge the pilot if in doubt of the planned passage or ship's progress. Smoke free bridge.

VESSEL:	
Date:	Movement: <input type="checkbox"/> In <input type="checkbox"/> Out <input type="checkbox"/> Shift
Channels: VHF 02—12—16	Pilot:
Berth:	Actual Depth: <input type="checkbox"/> P52 <input type="checkbox"/> S52
Ladder: <input type="checkbox"/> P <input type="checkbox"/> S	Ladder Height:
Pilot Card: <input type="checkbox"/> Yes <input type="checkbox"/> No	Main Engine(s) Tested
Thrusters: <input type="checkbox"/> Bow KW / HP =	<input type="checkbox"/> Stern KW / HP = Tested
Anchors Clear: <input type="checkbox"/> P <input type="checkbox"/> S	Use <input type="checkbox"/> Gyro Error <input type="checkbox"/> Bridge Equipment OK
TUGS:	On departure, engine not to be tested until Pilot on Bridge.
Backsaber: 62t <input type="checkbox"/> F <input type="checkbox"/> A	1st/Last Line F A
Picks: 70t <input type="checkbox"/> F <input type="checkbox"/> A	Lines F A
TUGS:	Tugs use tugs line. When letting go tug lower line slowly using a turn on mooring bit (illustrated below)
<input type="checkbox"/> SWL of ships bits <input type="checkbox"/> F <input type="checkbox"/> A	

The Pilot and Master certify that the pilotage plan has been discussed with the Bridge Team

Pilot \_\_\_\_\_ Date / Time \_\_\_\_\_  
 Master \_\_\_\_\_ Date / Time \_\_\_\_\_

Version 2 1/12/2019 REFER TO CHART NZ6321



# LYTTELTON PORT PILOTAGE PASSAGE PLAN



Lyttelton Port listens continuously on VHF 12 / 16. VHF 02 is a working channel for Pilots and Tugs. The bridge team is reminded of its duty to maintain an accurate check on the vessel's position as laid down in the ISM Code, STCW Convention, IMO Regulations & ICS Bridge Procedures Guide. The bridge team is requested to monitor the pilots actions at all times, and to challenge the pilot if in doubt of the planned passage or ship's progress. Smoke free bridge.

<b>VESSEL:</b>			
<b>Date:</b>		<b>Movement:</b>	<input type="checkbox"/> In <input type="checkbox"/> Out <input type="checkbox"/> Shift
<b>Channels:</b>	VHF 02—12—16	<b>Pilot:</b>	
<b>Berth:</b>		<b>Actual Depth:</b>	<input type="checkbox"/> PS2 <input type="checkbox"/> SS2
<b>Ladder:</b>	<input type="checkbox"/> P <input type="checkbox"/> S	<b>Ladder Height:</b>	
<b>Pilot Card:</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Main Engine(s)</b>	Tested
<b>Thrusters:</b>	<input type="checkbox"/> Bow KW / HP =	<input type="checkbox"/> Stern KW / HP =	Tested
<b>Anchors Clear:</b>	<input type="checkbox"/> P <input type="checkbox"/> S	Use	<input type="checkbox"/> Gyro Error <input type="checkbox"/> Bridge Equipment OK
<b>TUGS:</b>	On departure, engine not to be tested until Pilot on Bridge.		
Blackadder	62t bp <input type="checkbox"/> F <input type="checkbox"/> A	1st/Last Line	F A
Piaka	70t bp <input type="checkbox"/> F <input type="checkbox"/> A	Lines	F A

**TUGS** SWL of ship's bits  F  A

Tugs use tugs line. When letting go tug lower line slowly using a turn on mooring bitt (illustrated below)

The Pilot and Master certify that the pilotage plan has been discussed with the Bridge Team

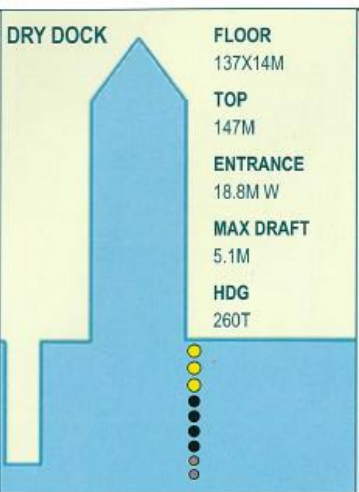
Pilot \_\_\_\_\_ Date / Time \_\_\_\_\_

Master \_\_\_\_\_ Date / Time \_\_\_\_\_

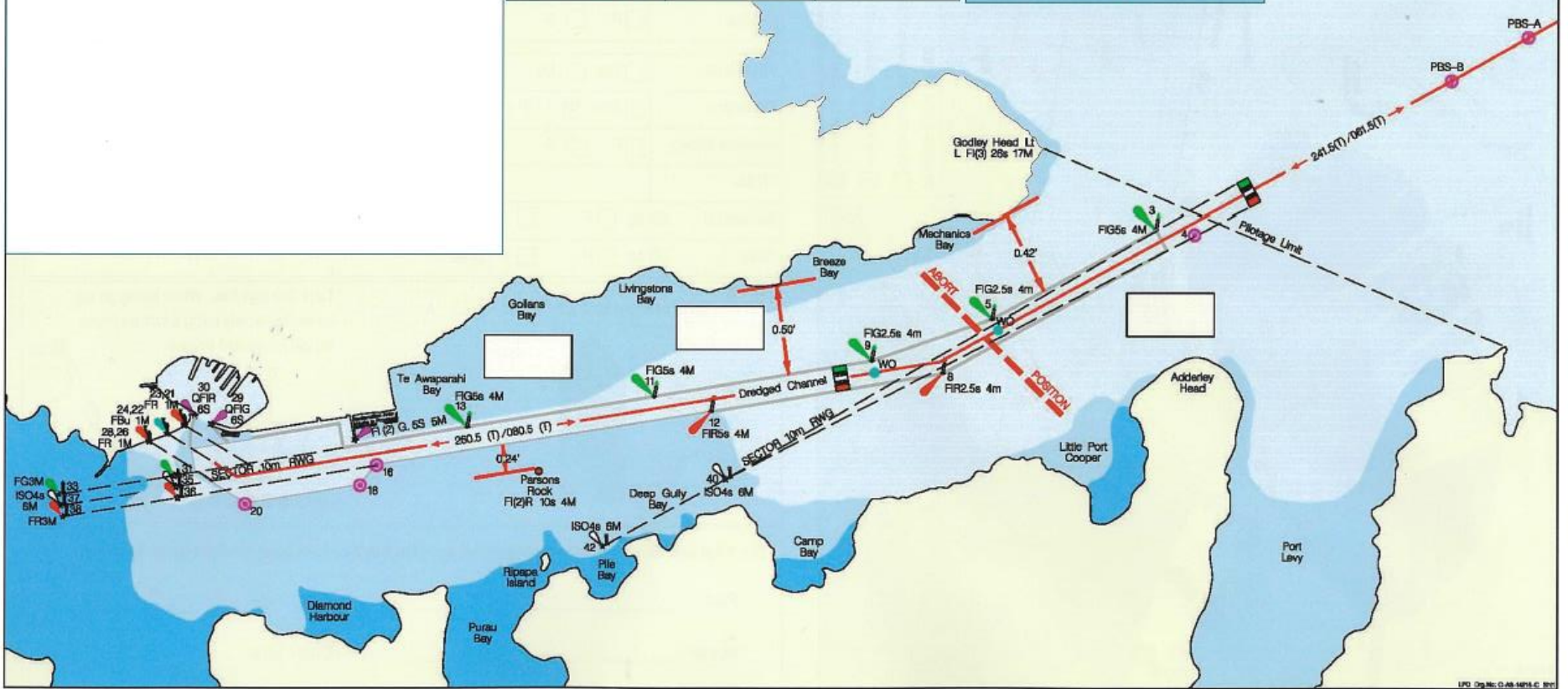
HW	TIME	HEIGHT
LW	TIME	HEIGHT
FLOW	EBB / FLOOD / SLACK	
WEATHER : PRESENT		
WIND		
WEATHER : PREDICTED		
WIND		

REMARKS

<input type="checkbox"/> UKC	UKC	
<input type="checkbox"/> DUKC	HARBOUR	INNER HARBOUR
	TIDE HEIGHT	
	DEPTH AT CD	
	TOTAL DEPTH	
	DRAFT	
	UKC STATIC	
	SQUAT	
	UKC DYNAMIC (1)	
	SWELL (if any)	
	UKC DYNAMIC (2)	



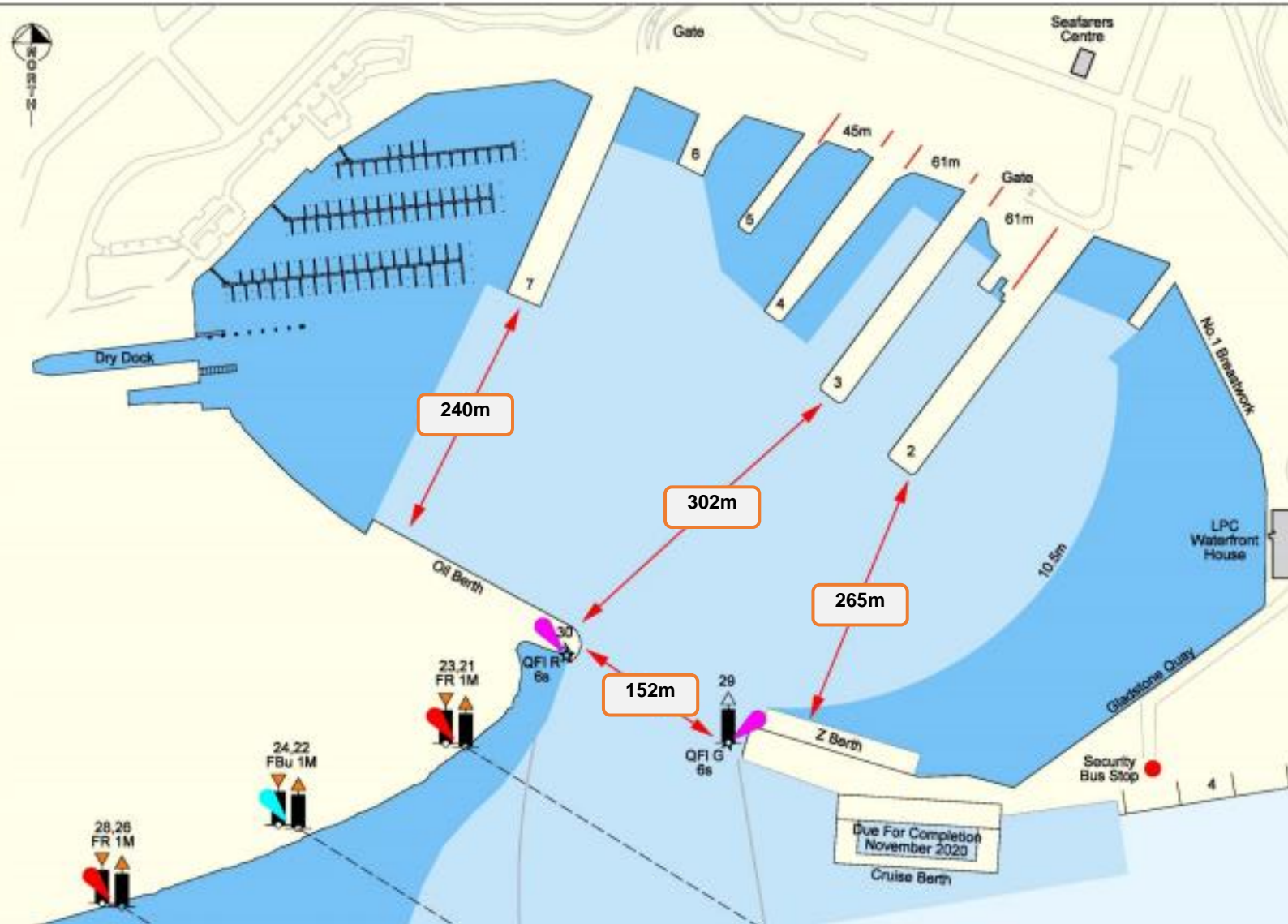
<b>FLOOR</b>	137X14M
<b>TOP</b>	147M
<b>ENTRANCE</b>	18.8M W
<b>MAX DRAFT</b>	5.1M
<b>HDG</b>	260T



FOR MASTER / PILOT EXCHANGE DURING PASSAGE PLANNING.

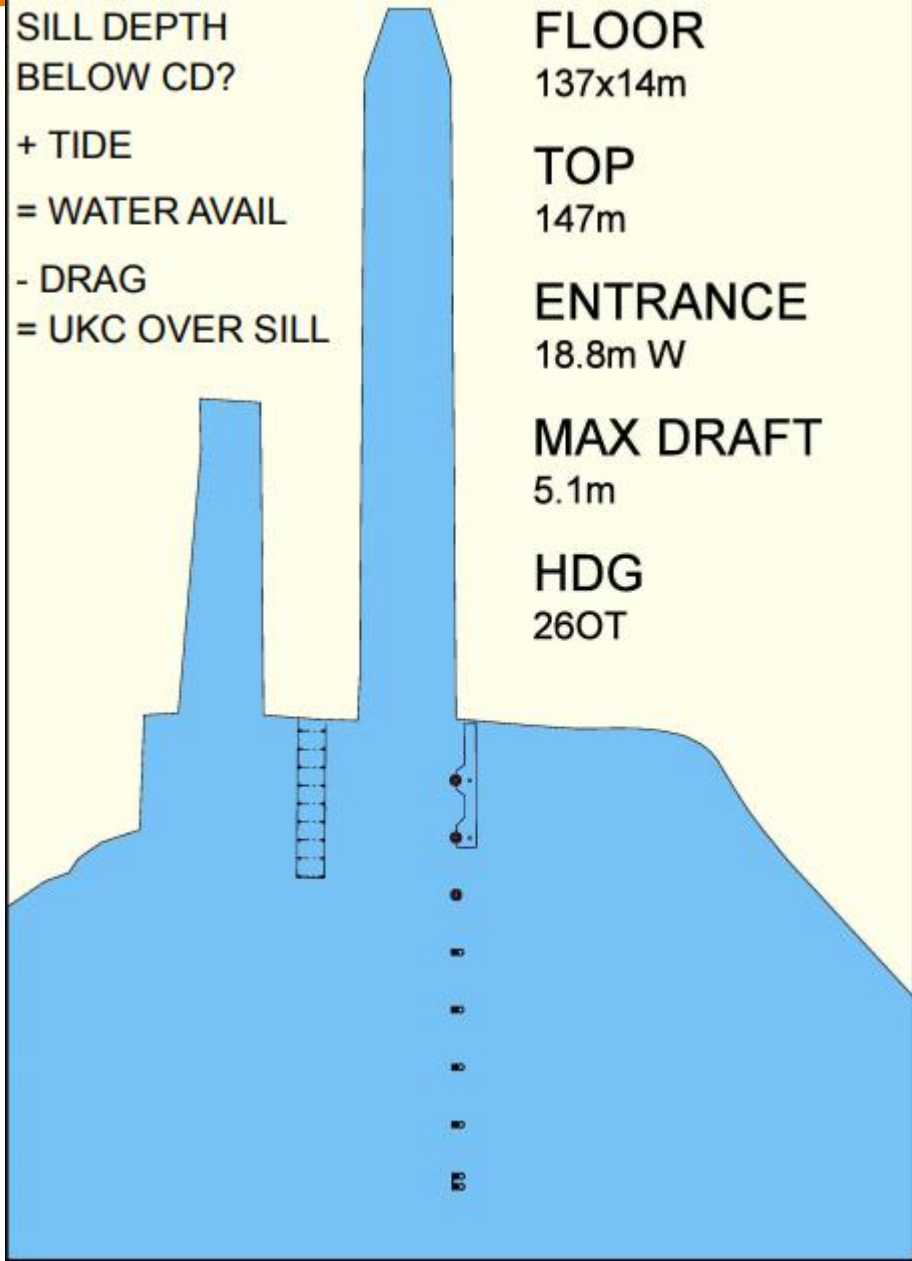
REFER TO CHART NZ 6321 FOR NAVIGATION

# LYTTELTON PORT DRY DOCK PASSAGE PLAN



<b>VESSEL:</b>	
Date:	<input type="checkbox"/> Docking <input type="checkbox"/> Undocking
Contact:	
Stability Data:	
Engine:	<input type="checkbox"/> Available <input type="checkbox"/> Not available
Bow thruster:	<input type="checkbox"/> Available <input type="checkbox"/> Not available
Tugs Required?	<input type="checkbox"/> Piaka <input type="checkbox"/> Blackadder
LPC Rescue?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Double Docking?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, use 2 tugs to speed up
Hull Protrusions?	_____
Vessel PS2 at berth?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes; tug to change sides
Winches Operable?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Use dock capstan?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Owners rep on board?	<input type="checkbox"/> Yes <input type="checkbox"/> No Sign: _____
Communication with crew	<input type="checkbox"/> Yes <input type="checkbox"/> No
Starks staff?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Discuss with Dock master	<input type="checkbox"/> Yes <input type="checkbox"/> No
All in agreement with plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No

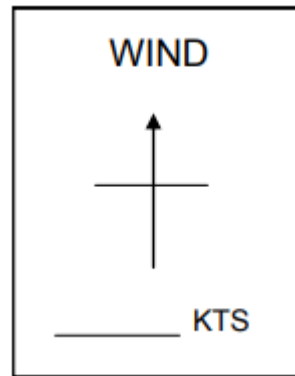
# LYTTELTON PORT DRY DOCK PASSAGE PLAN



Tug Arrangement



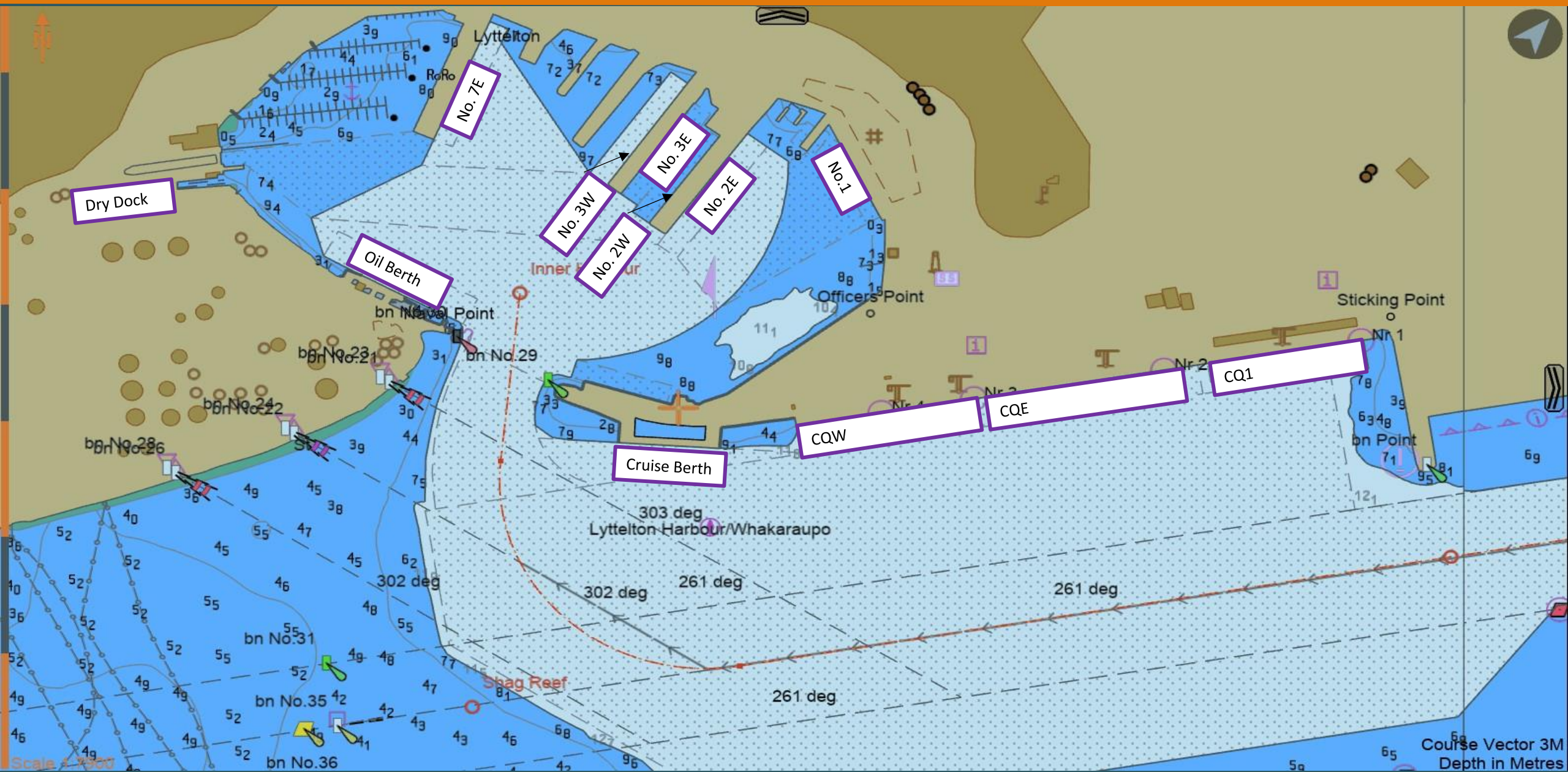
Mooring Arrangement



COMMENTS

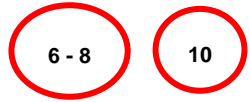
Maximum permissible wind for docking / Undocking is 25 Knots from any direction.

# LPC Berth Guide



# Section 3: Standard Passage Plans

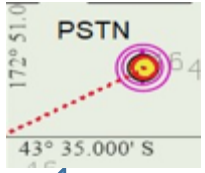
# Symbol Key



Speed - expressed in knots



Wheel over position – target speed and Rate of Turn



Pilot Boarding Station



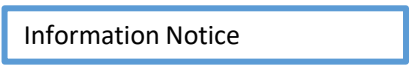
Heading



Potential wind hazard



General Hazard



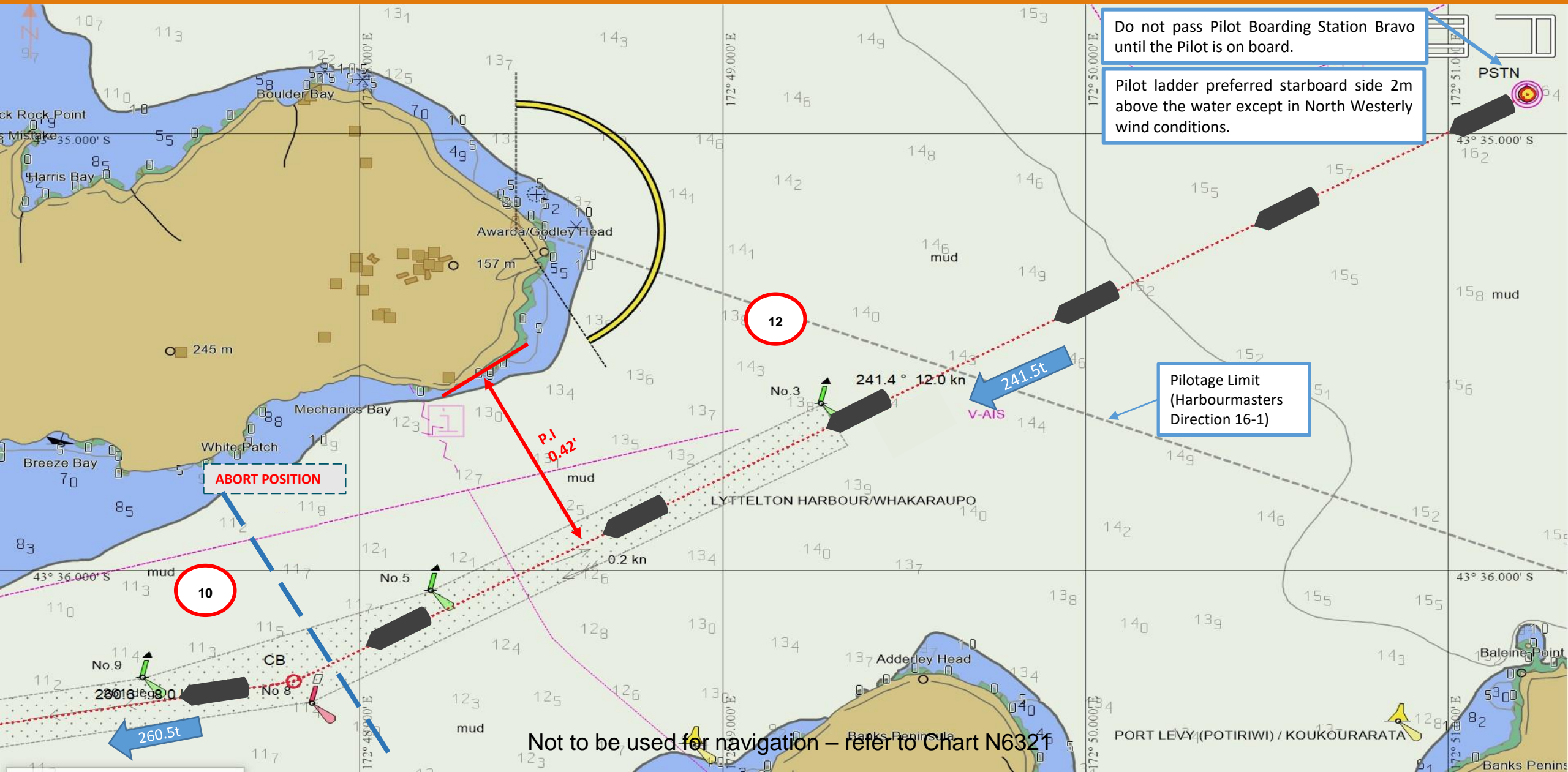
Key information



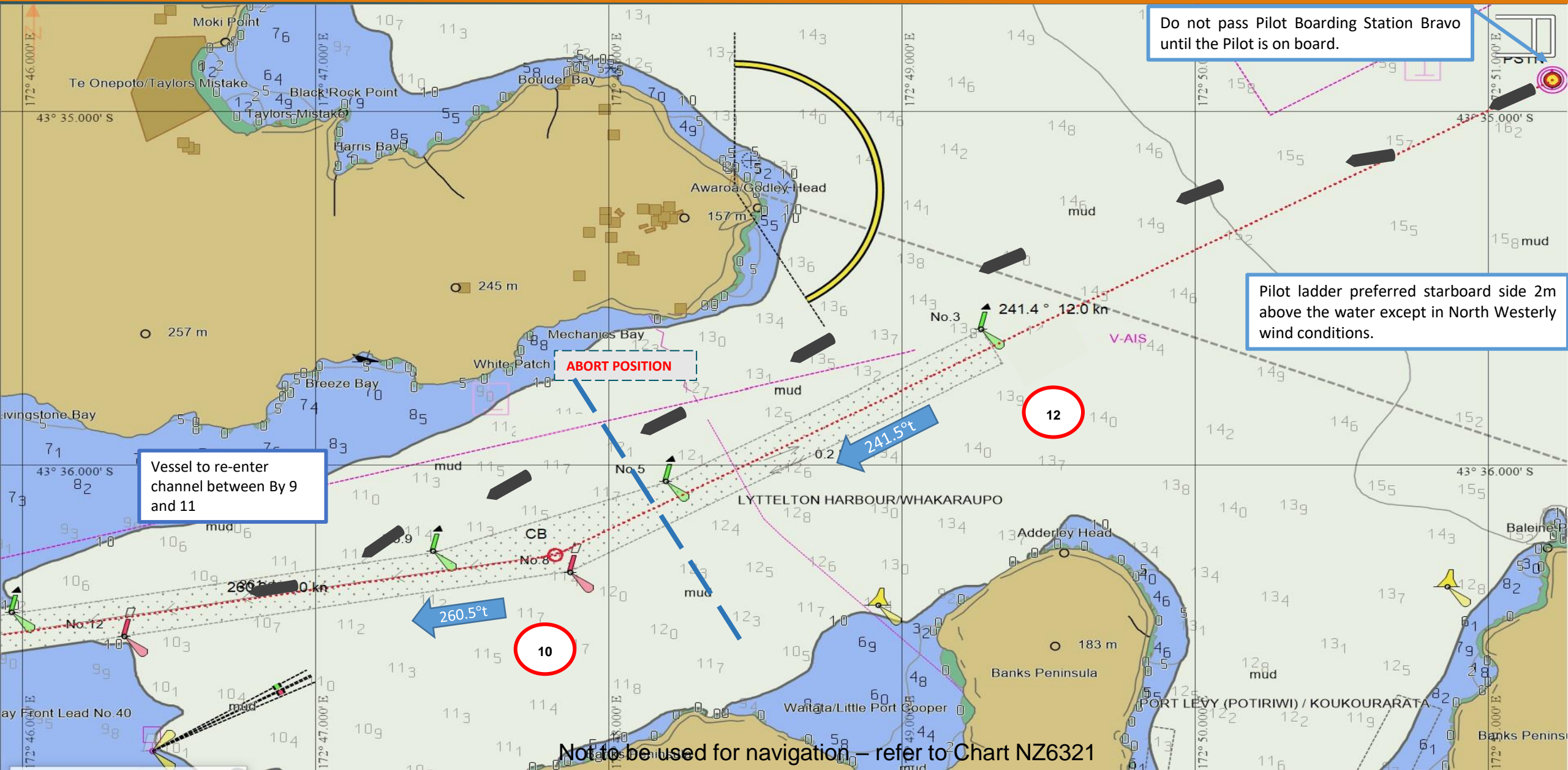
Abort swing area



# Arrival: Pilot Station to Camp Bay



# Arrival: Pilot Station to Camp Bay - Out of Channel - Draft determined by Pilot to maximum of 10.0m



Do not pass Pilot Boarding Station Bravo until the Pilot is on board.

Pilot ladder preferred starboard side 2m above the water except in North Westerly wind conditions.

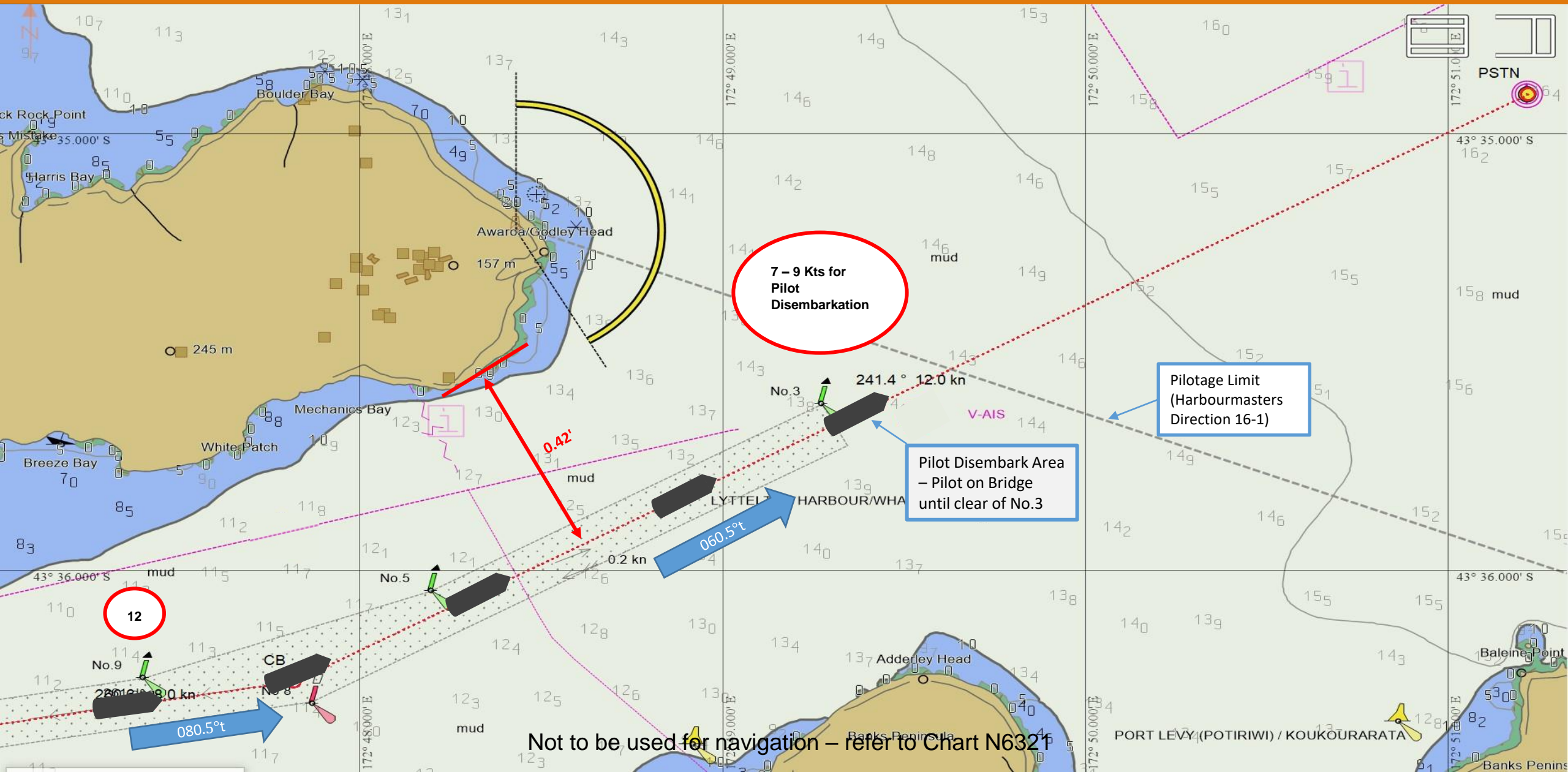
Vessel to re-enter channel between By 9 and 11

ABORT POSITION

10

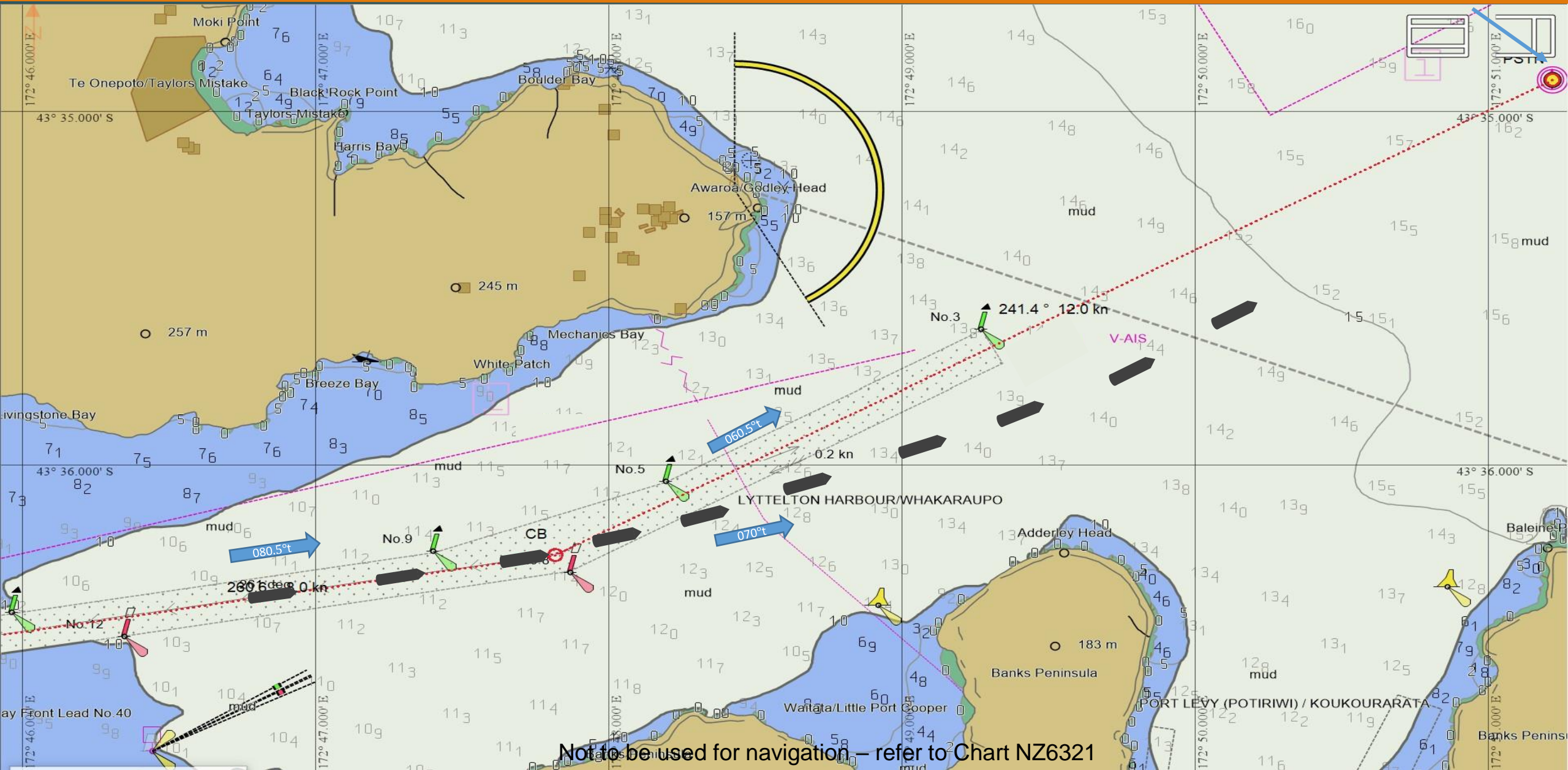
12

# Departure: Camp Bay to Sea

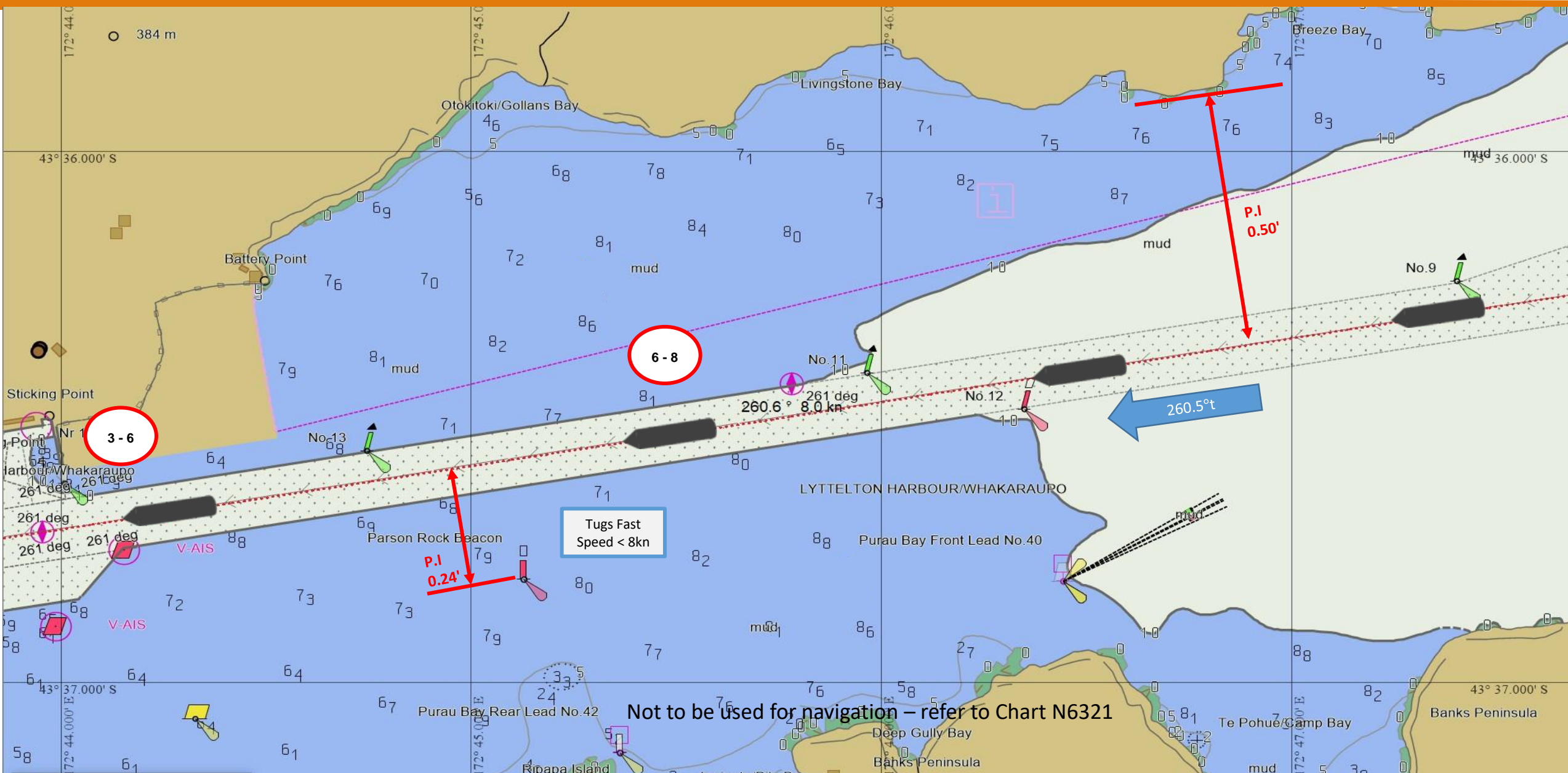


Not to be used for navigation – refer to Chart N6321

# Departure: Camp Bay to Pilot Station - Out of Channel - Draft determined by Pilot to maximum of 10.0m

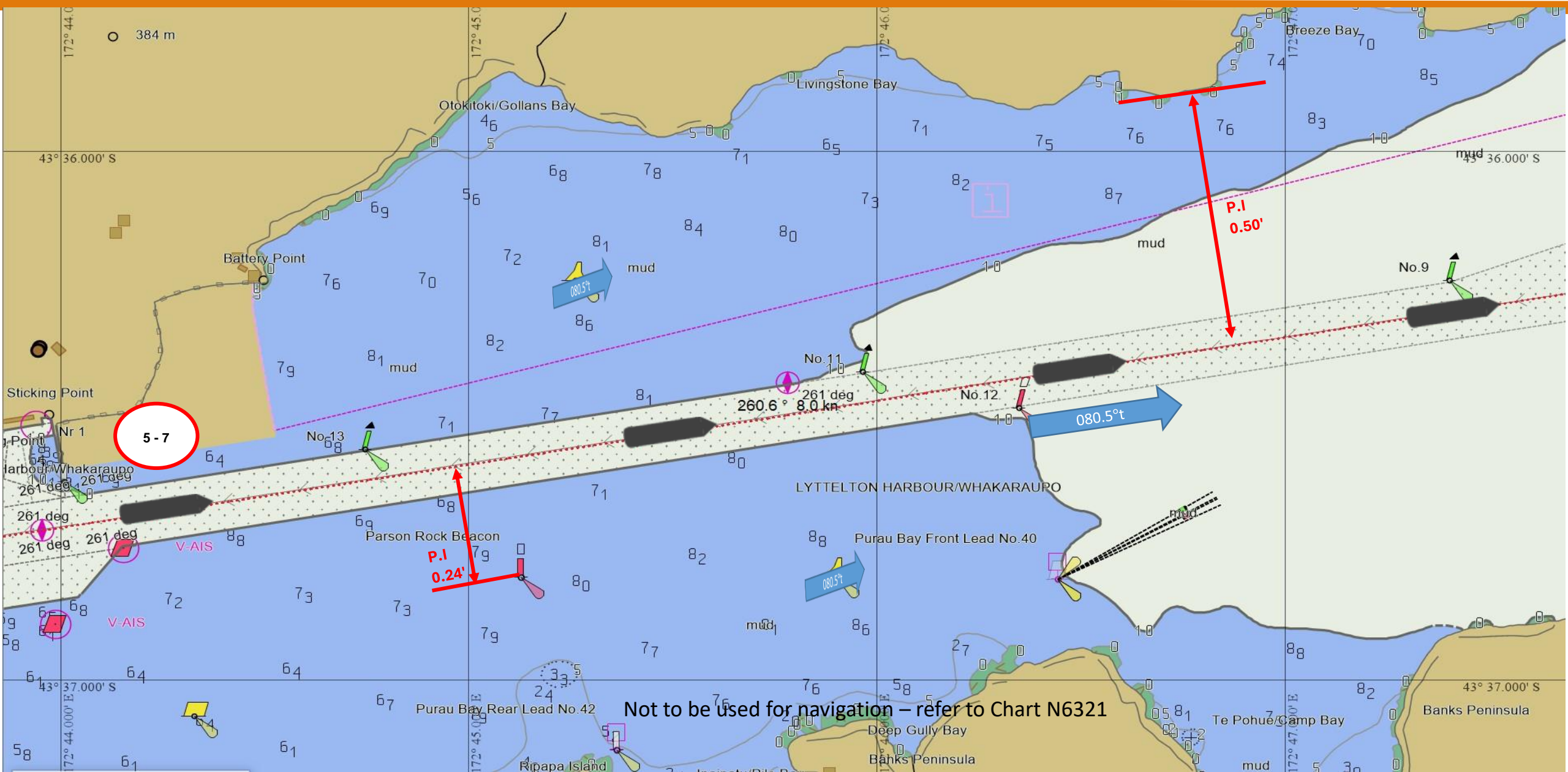


# Arrival: Camp Bay to Breakwater



Not to be used for navigation – refer to Chart N6321

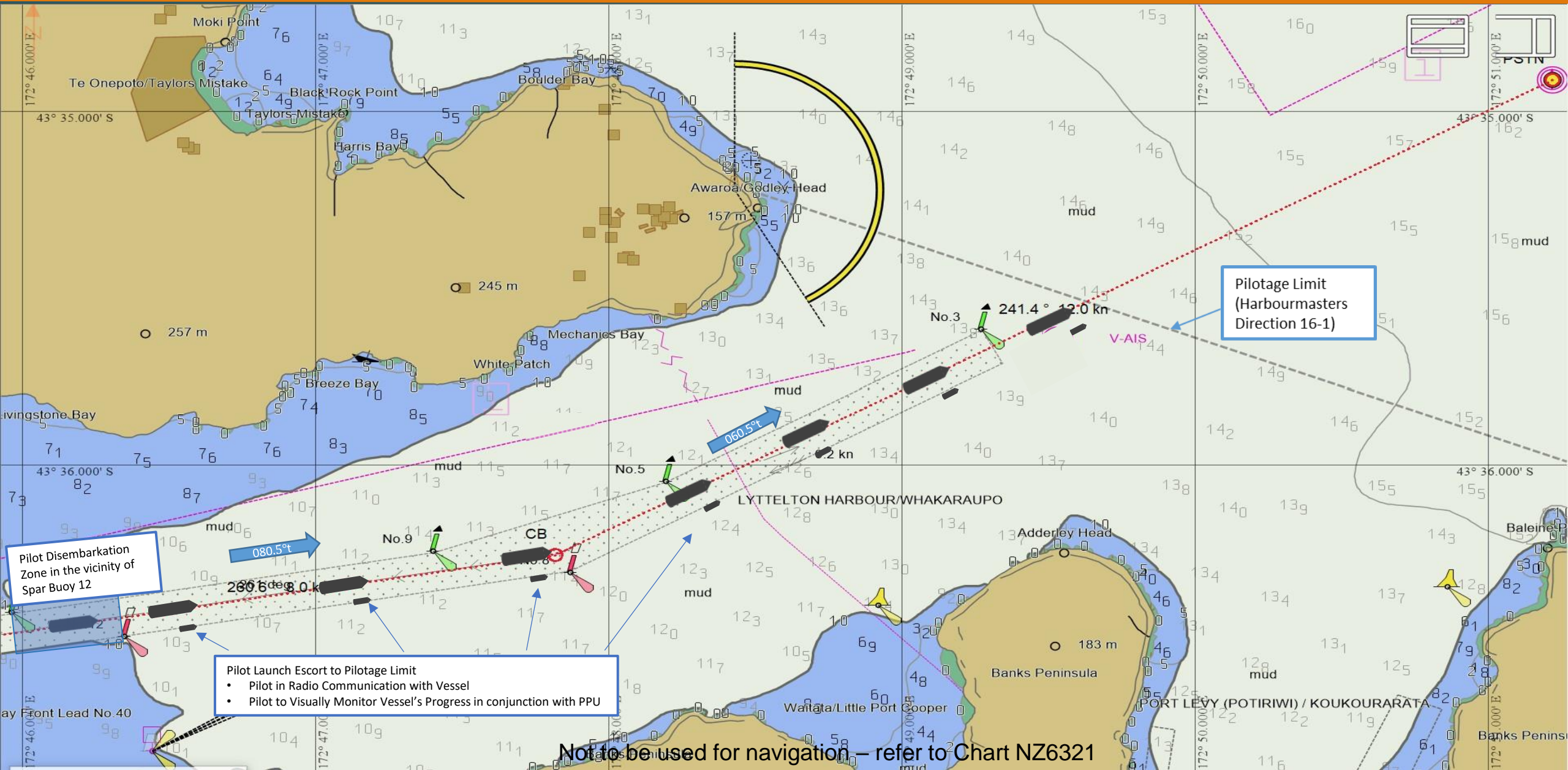
# Departure: Breakwater to Camp Bay



Not to be used for navigation – refer to Chart N6321

# Leading Out of Vessels <105m LOA & <7.5m Draft

May be used when sea conditions pose a risk to Pilot Disembarkation at Spar Buoy No.3



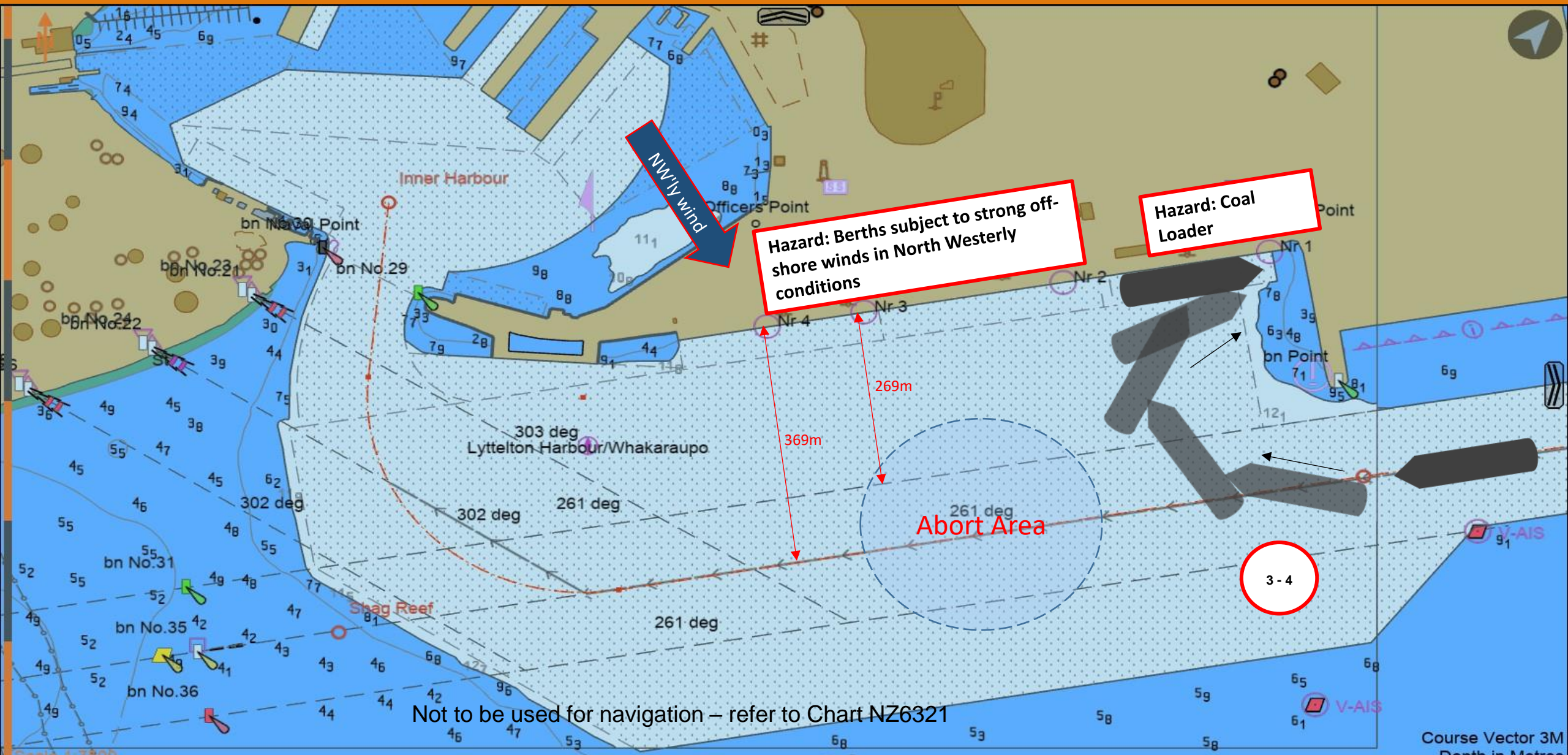
Pilotage Limit  
(Harbourmasters  
Direction 16-1)

Pilot Launch Escort to Pilotage Limit

- Pilot in Radio Communication with Vessel
- Pilot to Visually Monitor Vessel's Progress in conjunction with PPU

Pilot Disembarkation  
Zone in the vicinity of  
Spar Buoy 12

# Arrival: Breakwater to CQ1 PSTQ



Hazard: Berths subject to strong off-shore winds in North Westerly conditions

Hazard: Coal Loader

269m

369m

Abort Area

3-4

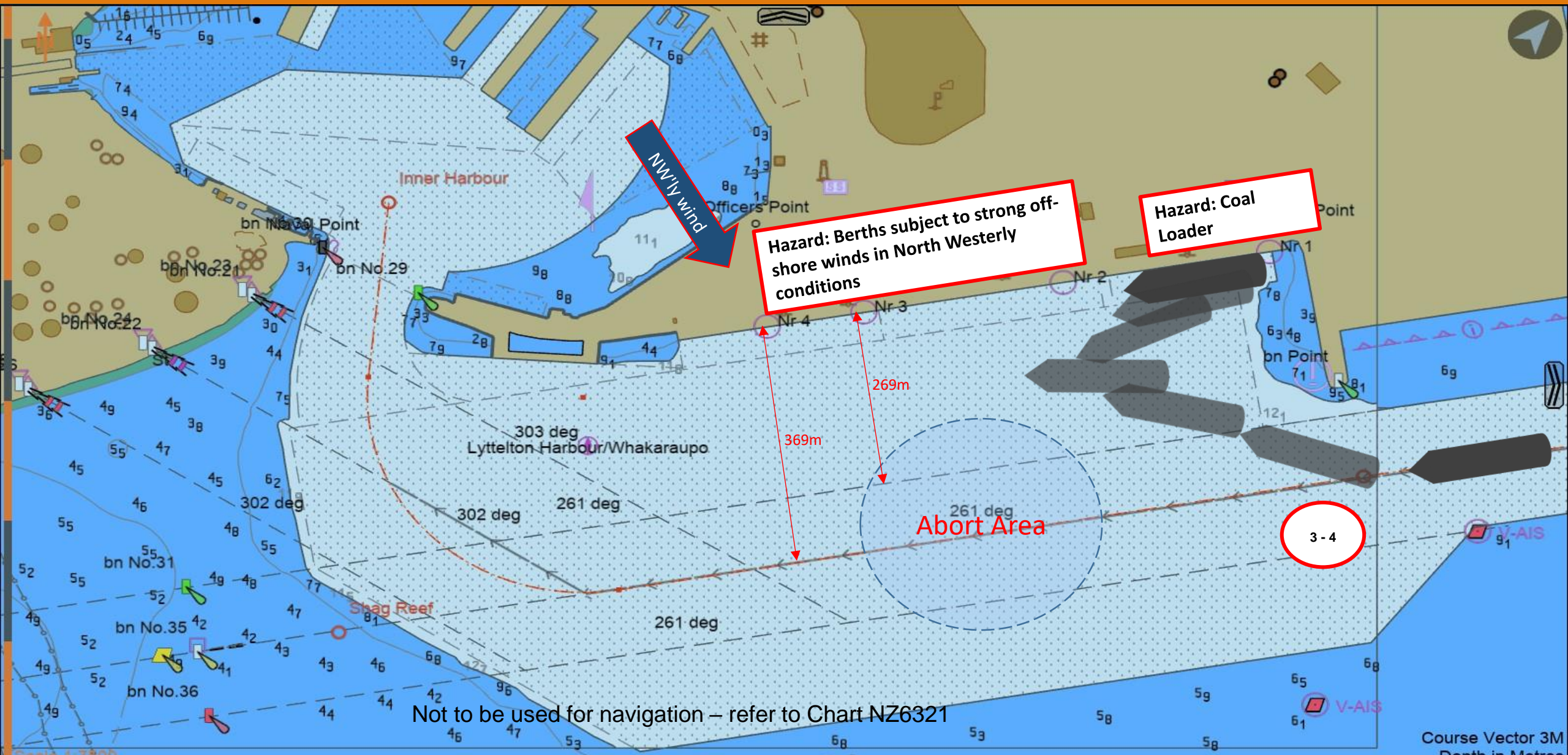
Not to be used for navigation – refer to Chart NZ6321

Scale 1:7500

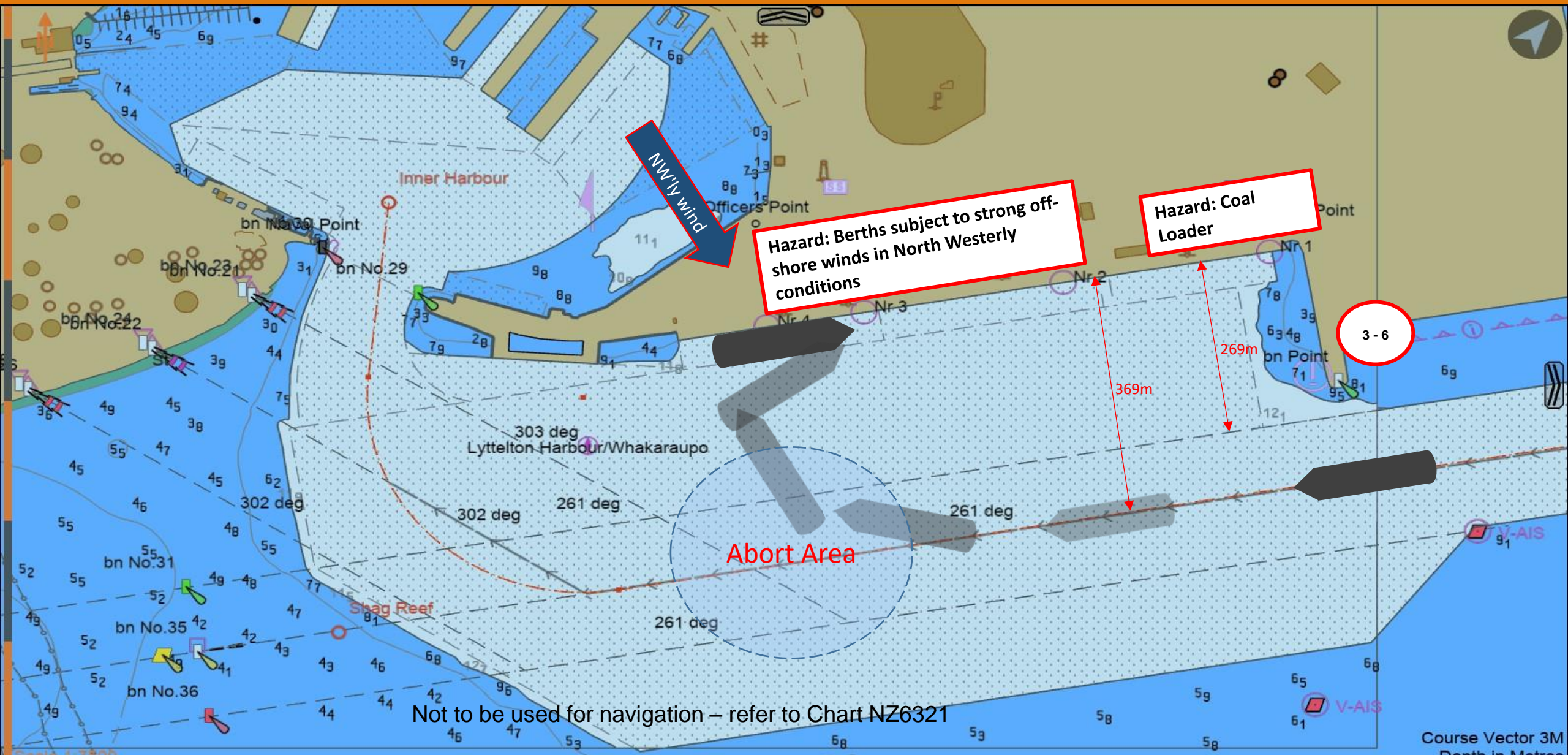
Course Vector 3M  
Depth in Metres



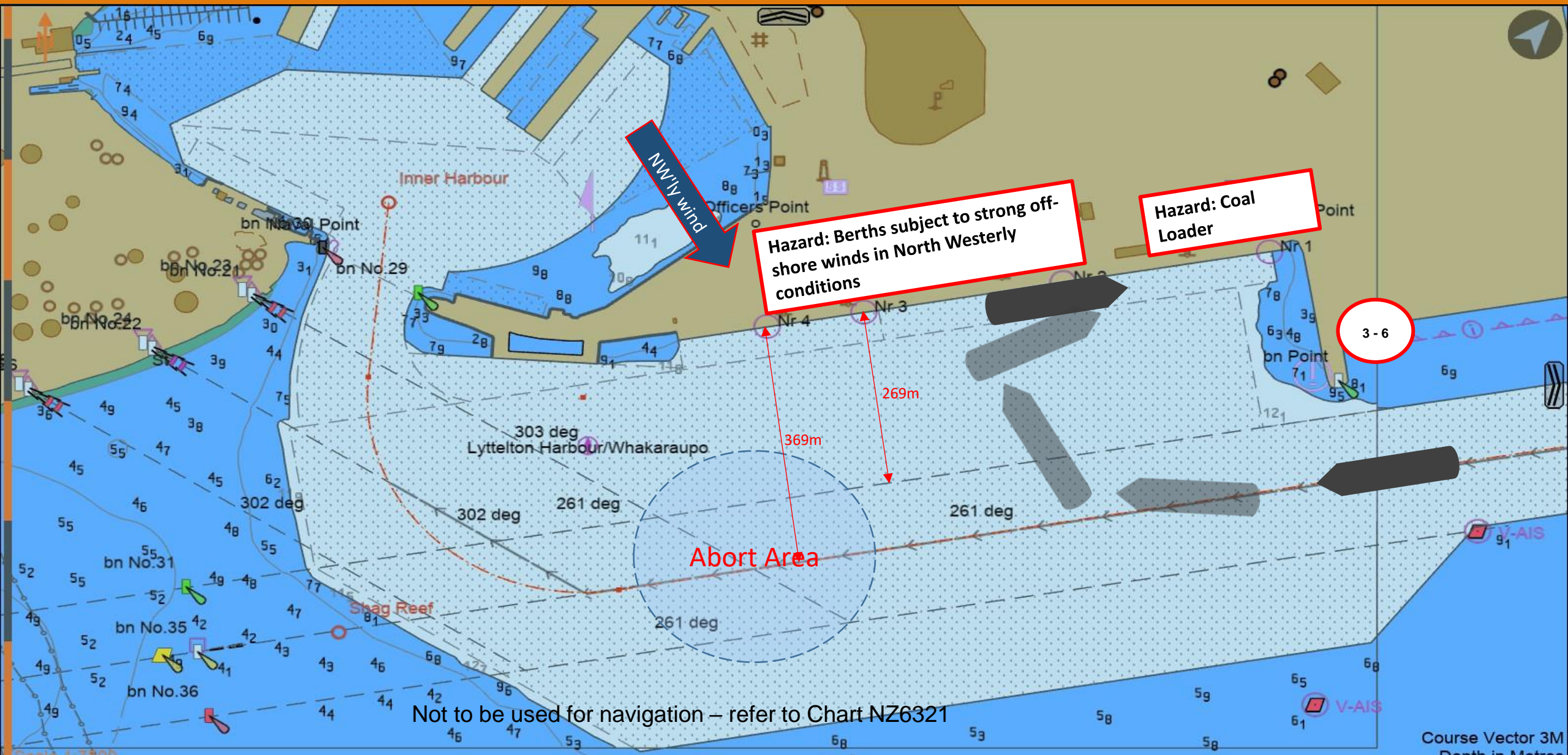
# Arrival: Breakwater to CQ1 SSTQ



# Arrival: Breakwater to CQ-West PSTQ



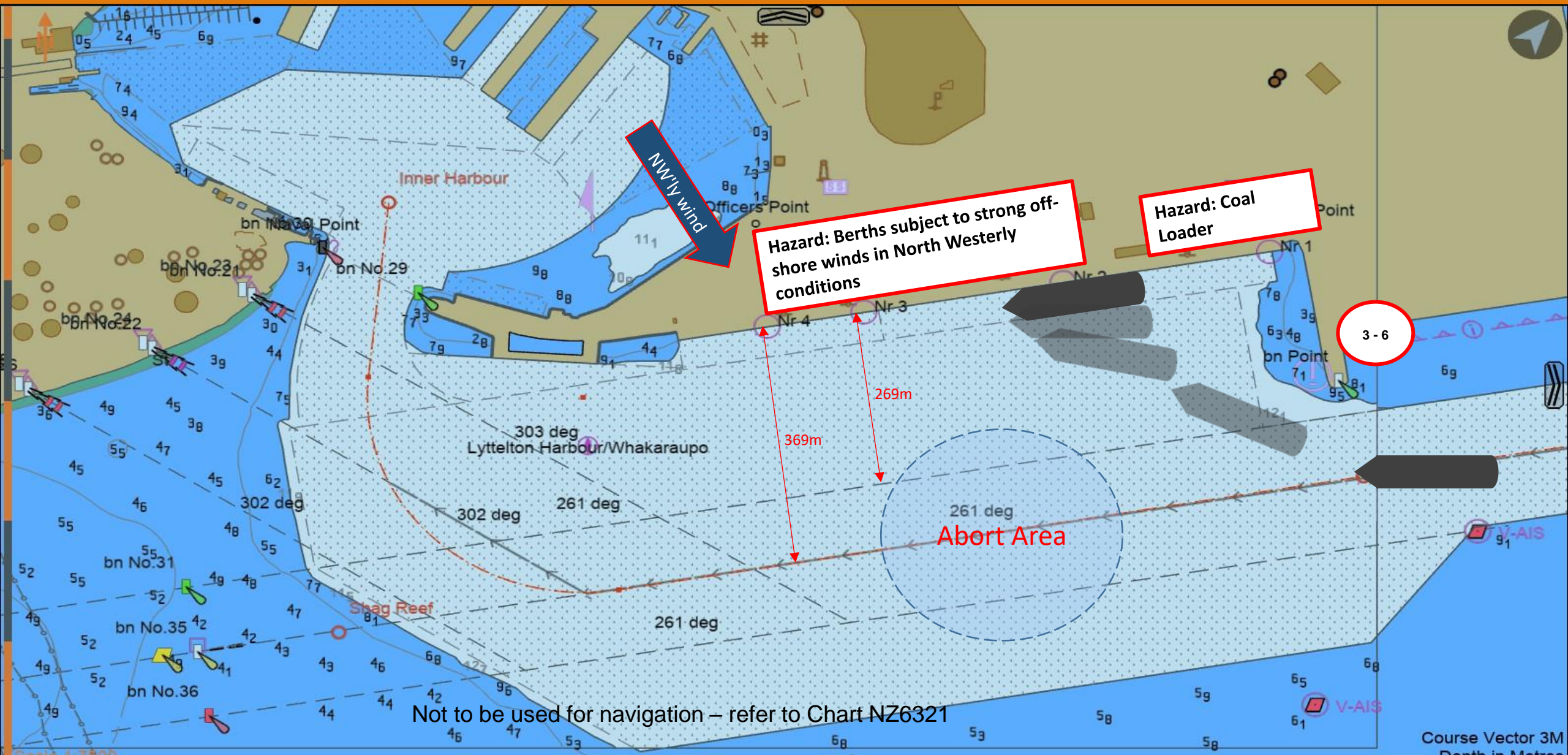
# Arrival: Breakwater to CQ-East PSTQ



Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

# Arrival: Breakwater to CQ-East SSTQ

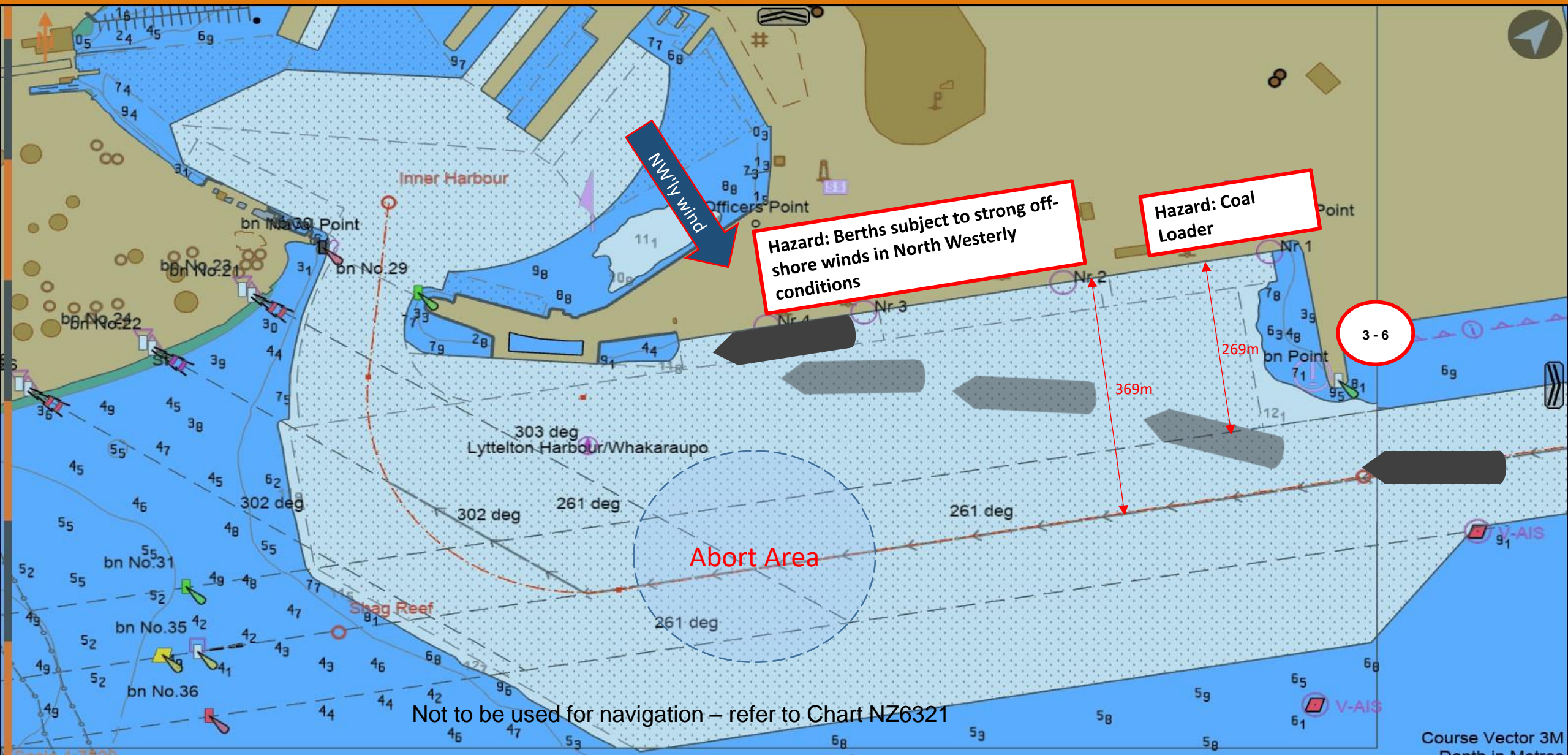


Not to be used for navigation – refer to Chart NZ6321

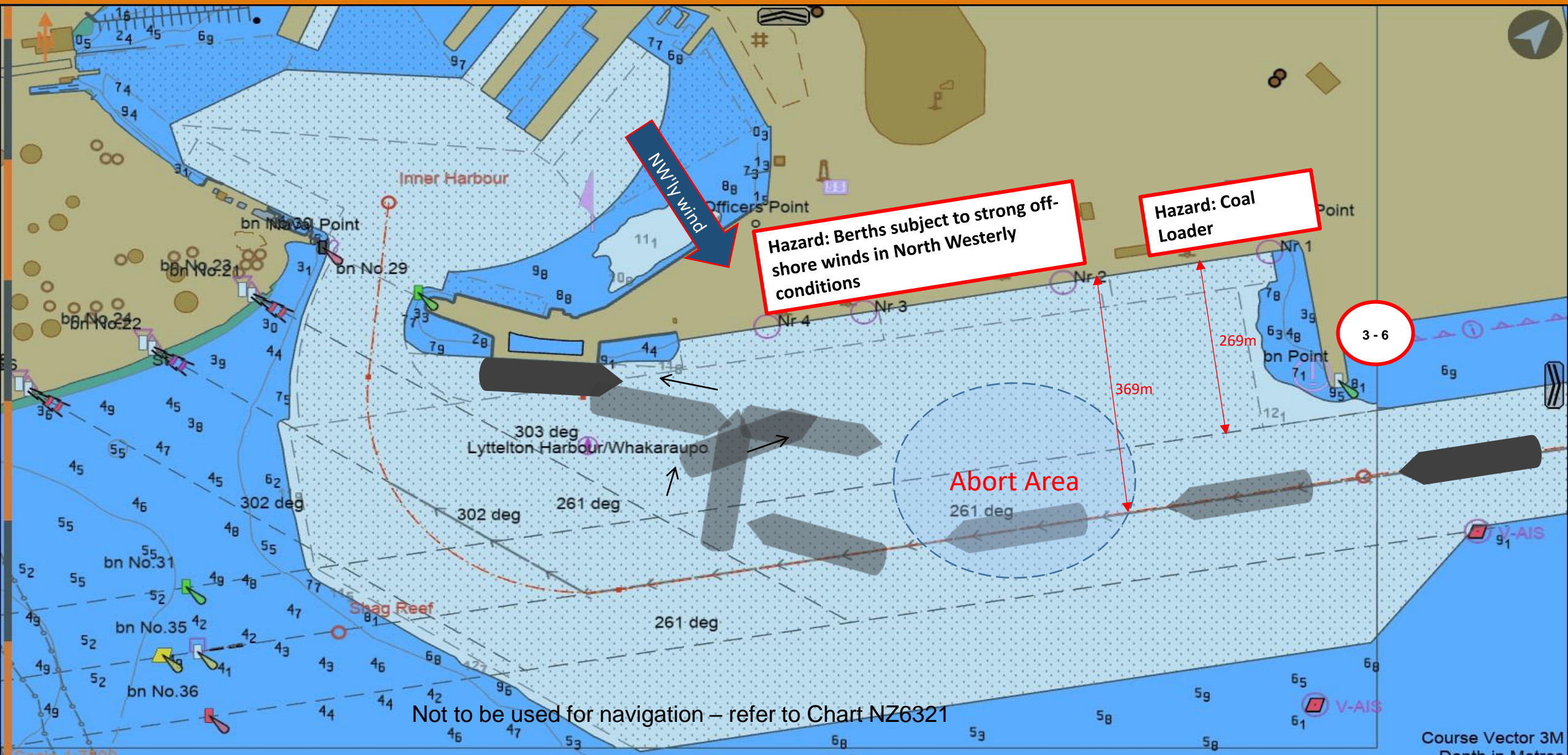
Scale 1:7500

Course Vector 3M  
Depth in Metres

# Arrival: Breakwater to CQ-West SSTQ



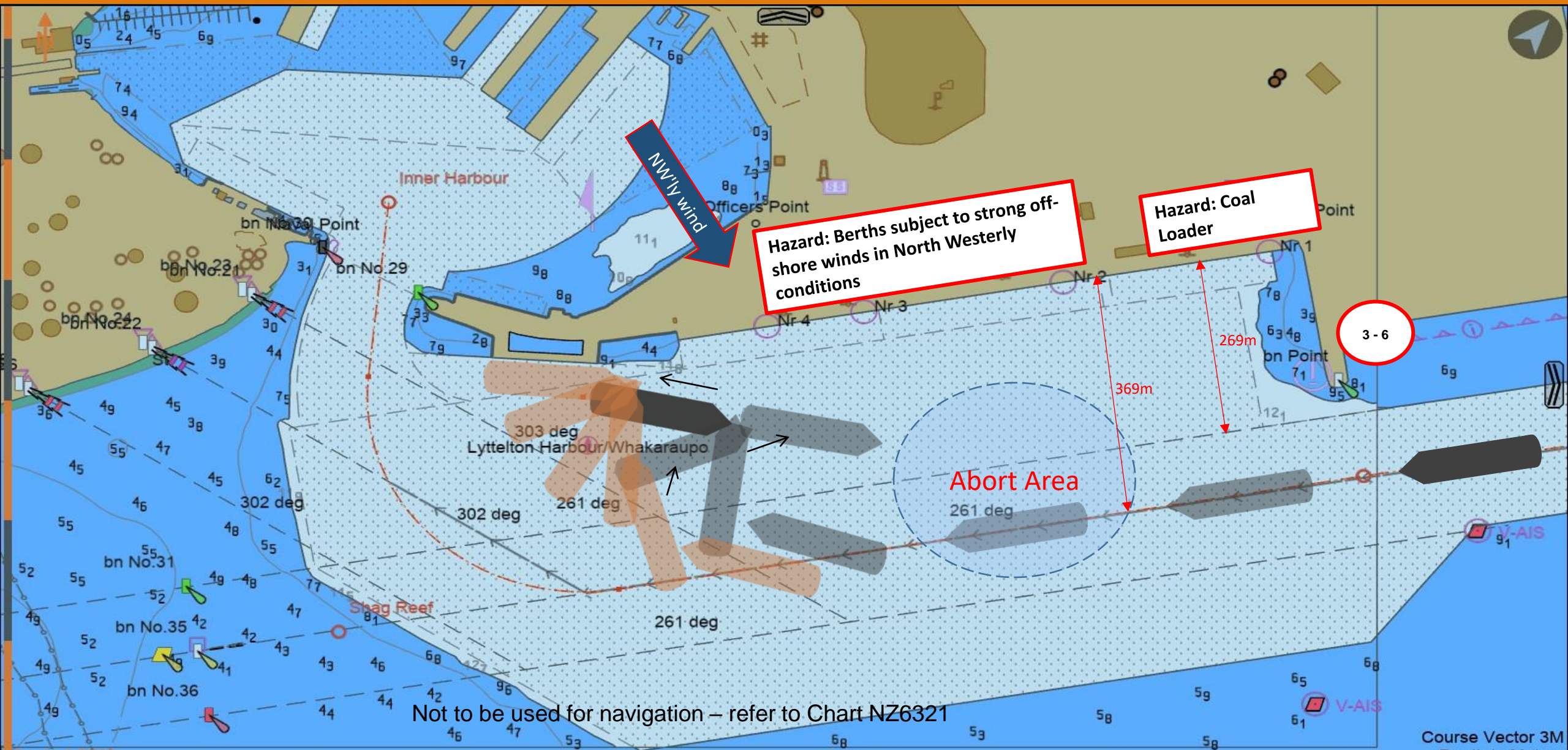
# Arrival: Breakwater to Cruise Berth PSTQ – Bow to Stbd



Not to be used for navigation – refer to Chart NZ6321

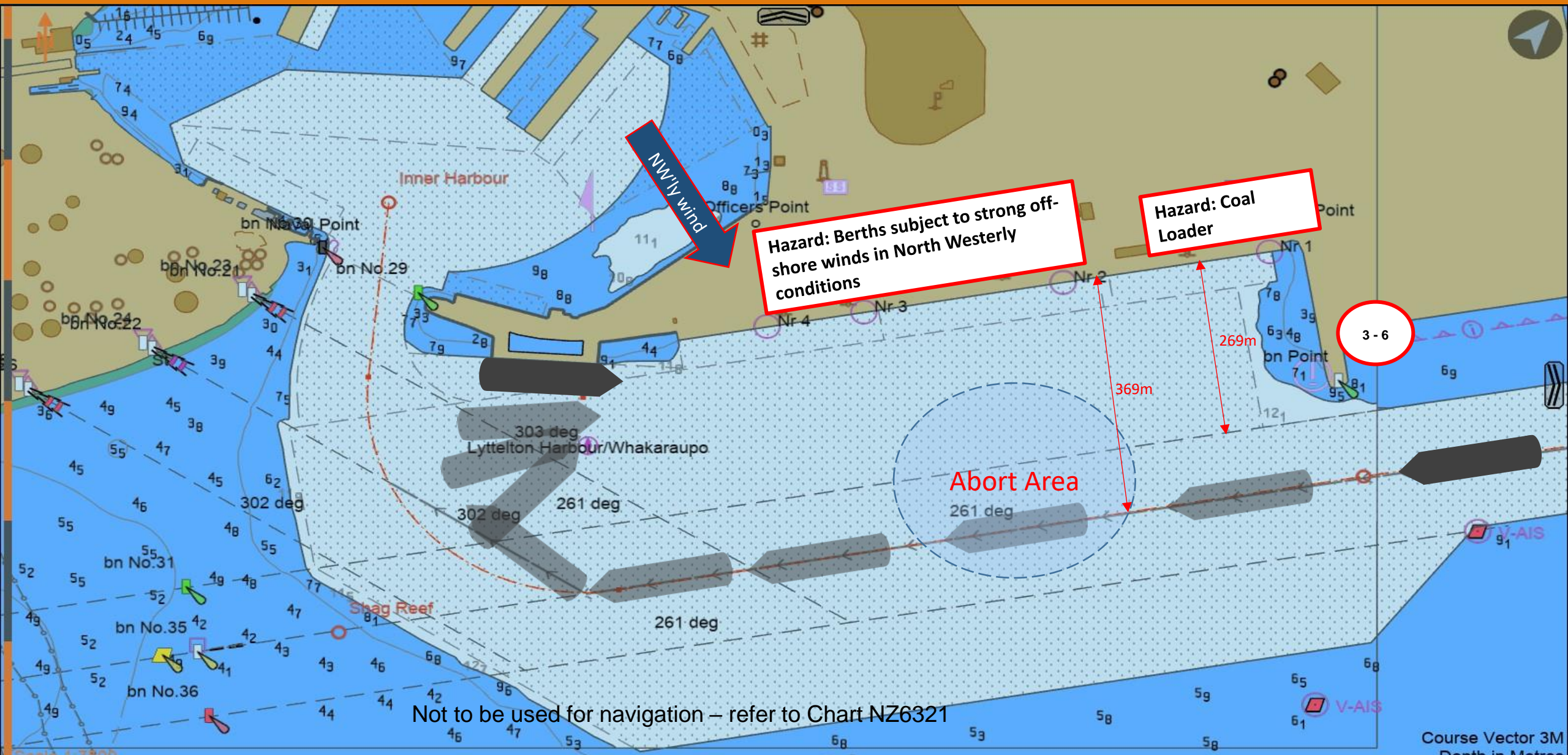
3 - 6

# Arrival: Breakwater to Cruise Berth AZI PSTQ – Bow to Stbd



Not to be used for navigation – refer to Chart NZ6321

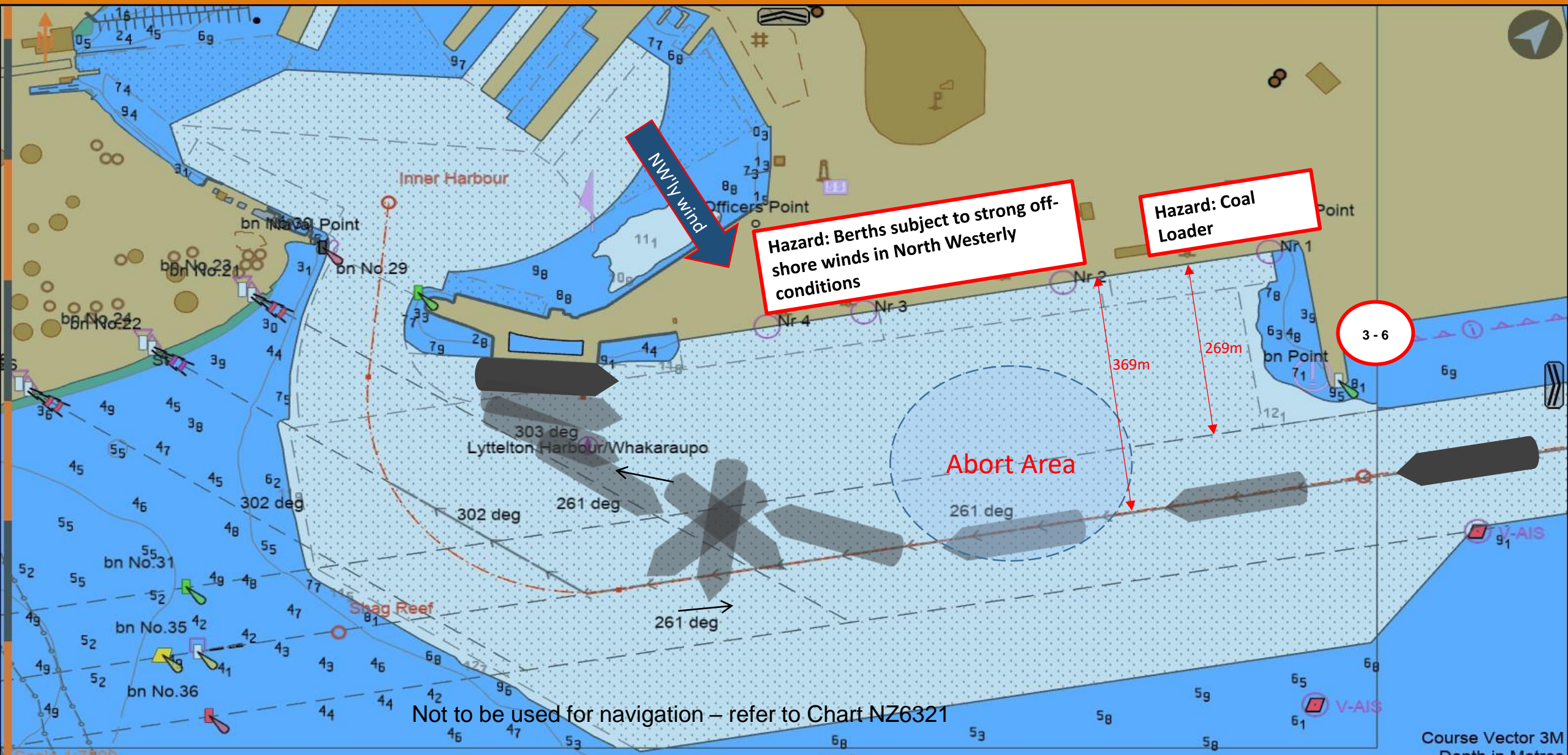
# Arrival: Breakwater to Cruise Berth (Non-Cruise) PSTQ – Bow to Stbd



Not to be used for navigation – refer to Chart NZ6321

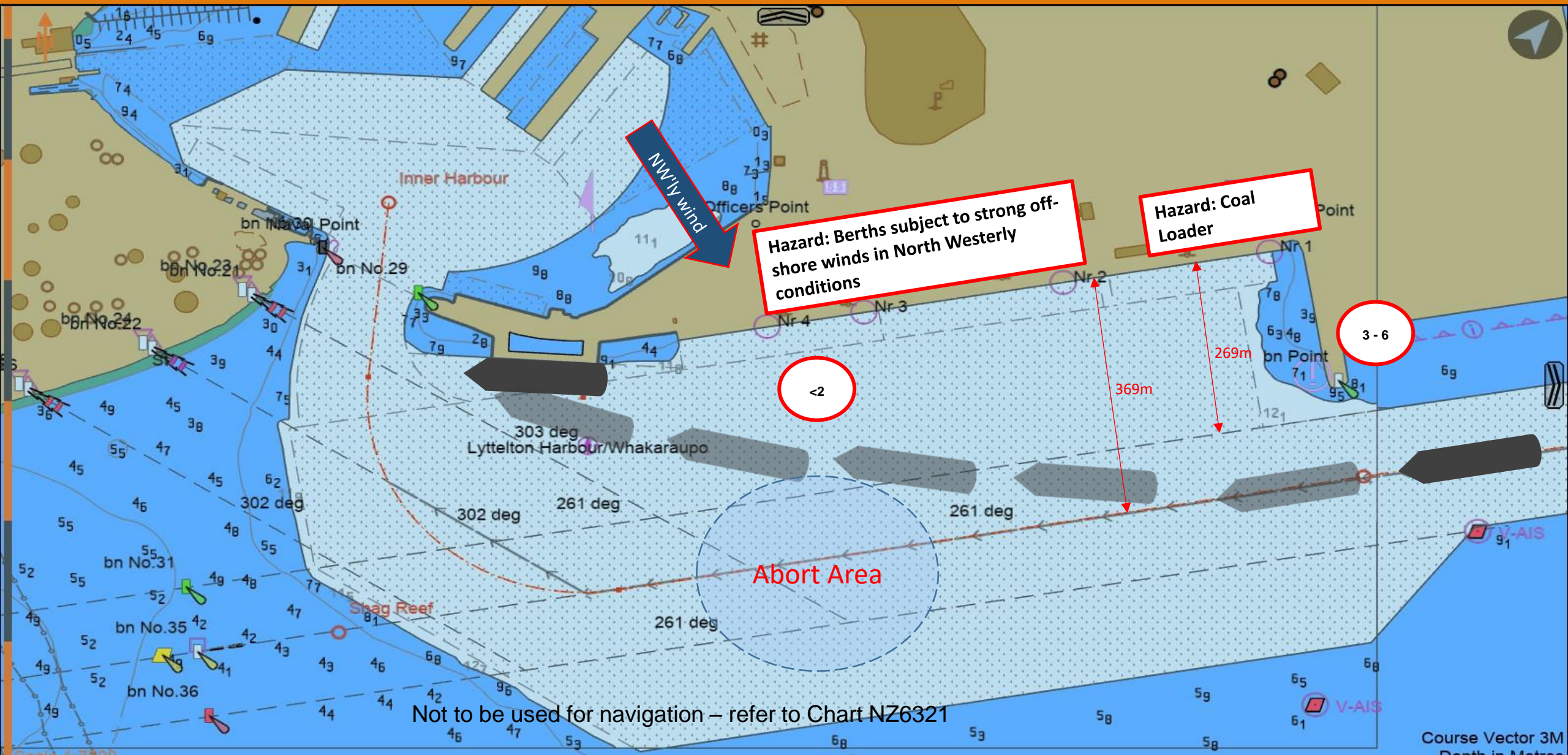


# Arrival: Breakwater to Cruise Berth PSTQ – Bow to Port



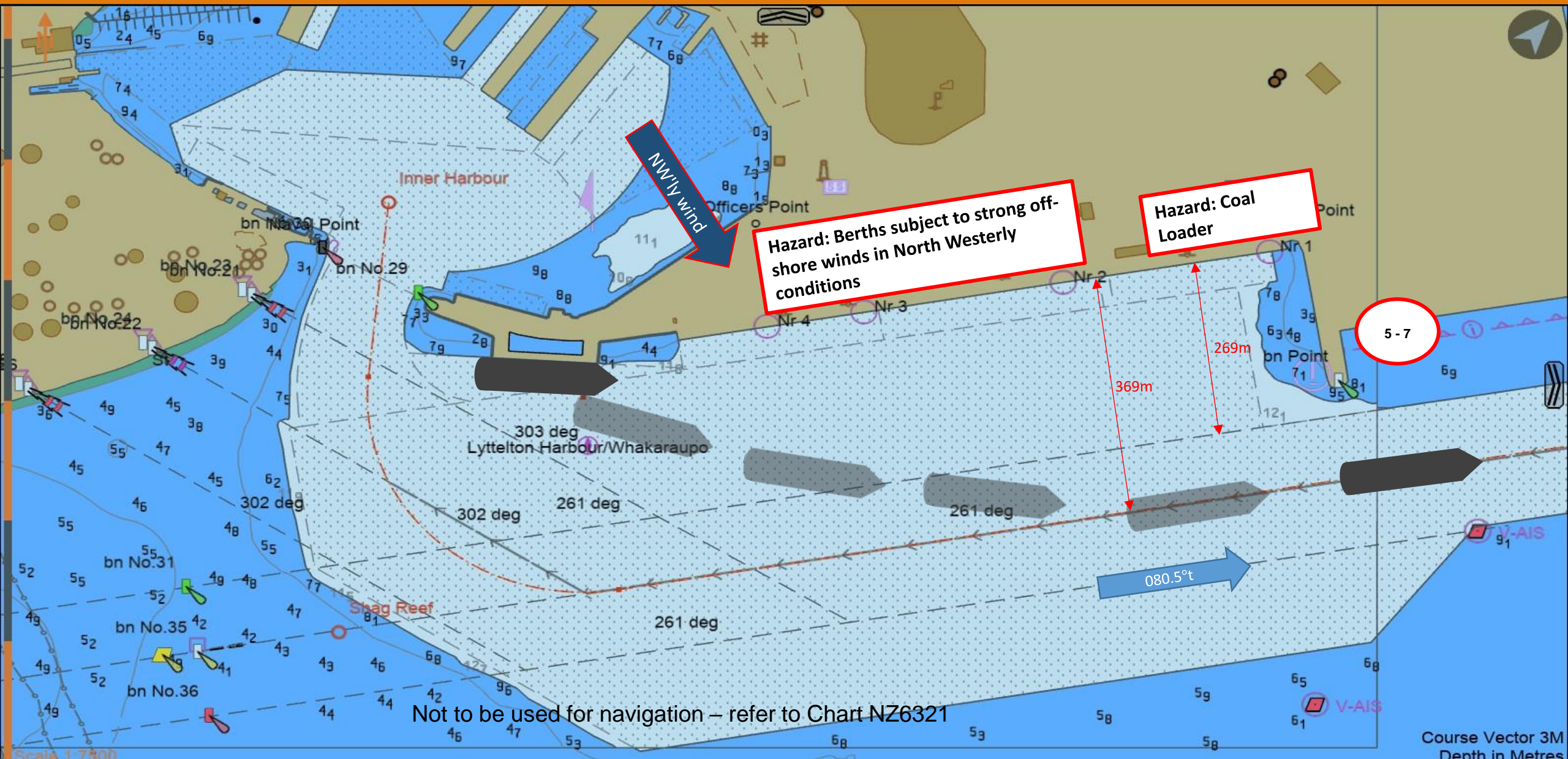
Not to be used for navigation – refer to Chart NZ6321

# Arrival: Breakwater to Cruise Berth SSTQ (non Cruise)

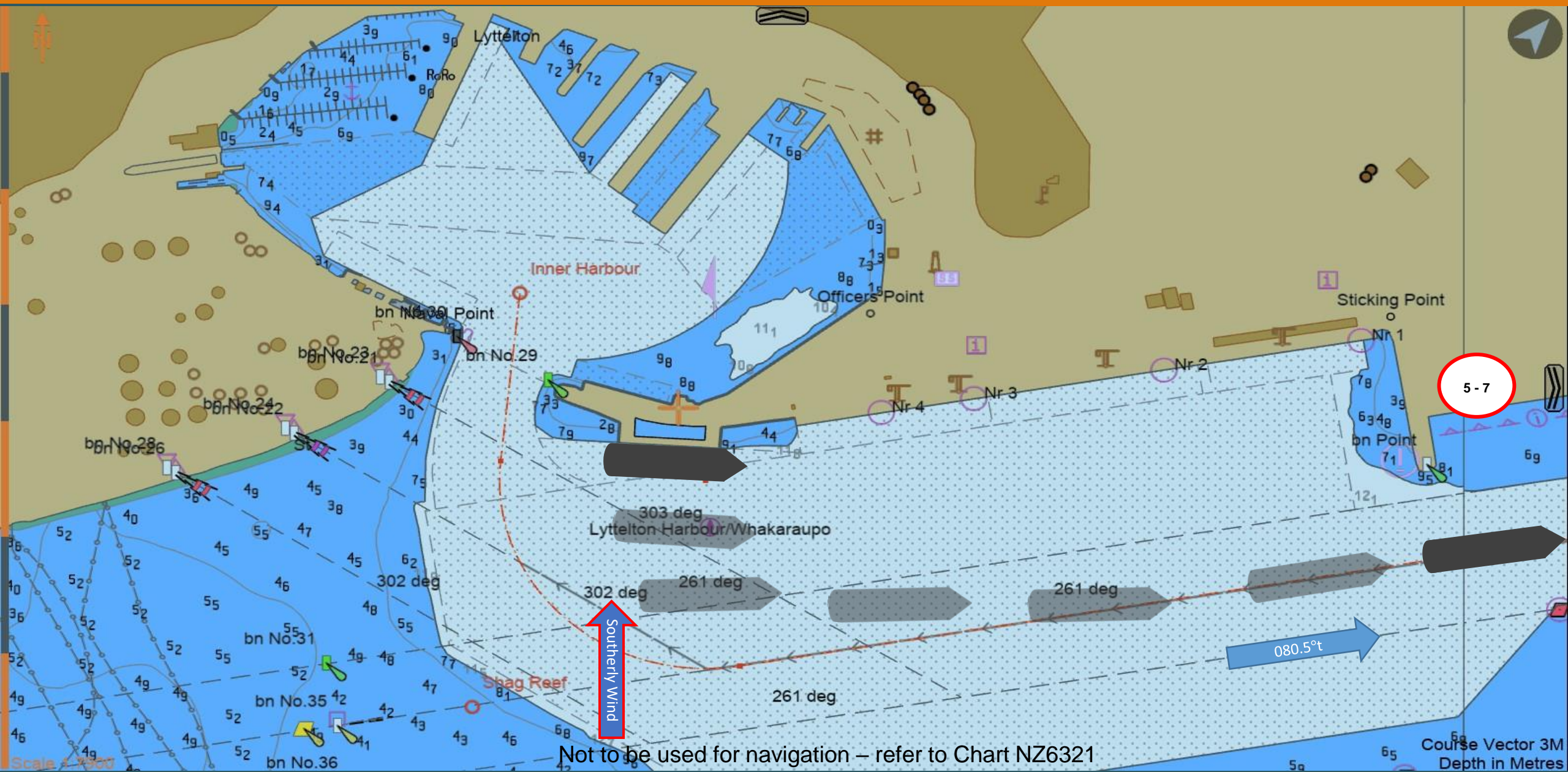


Not to be used for navigation – refer to Chart NZ6321

# Departure: Cruise Berth PSTQ to Breakwater



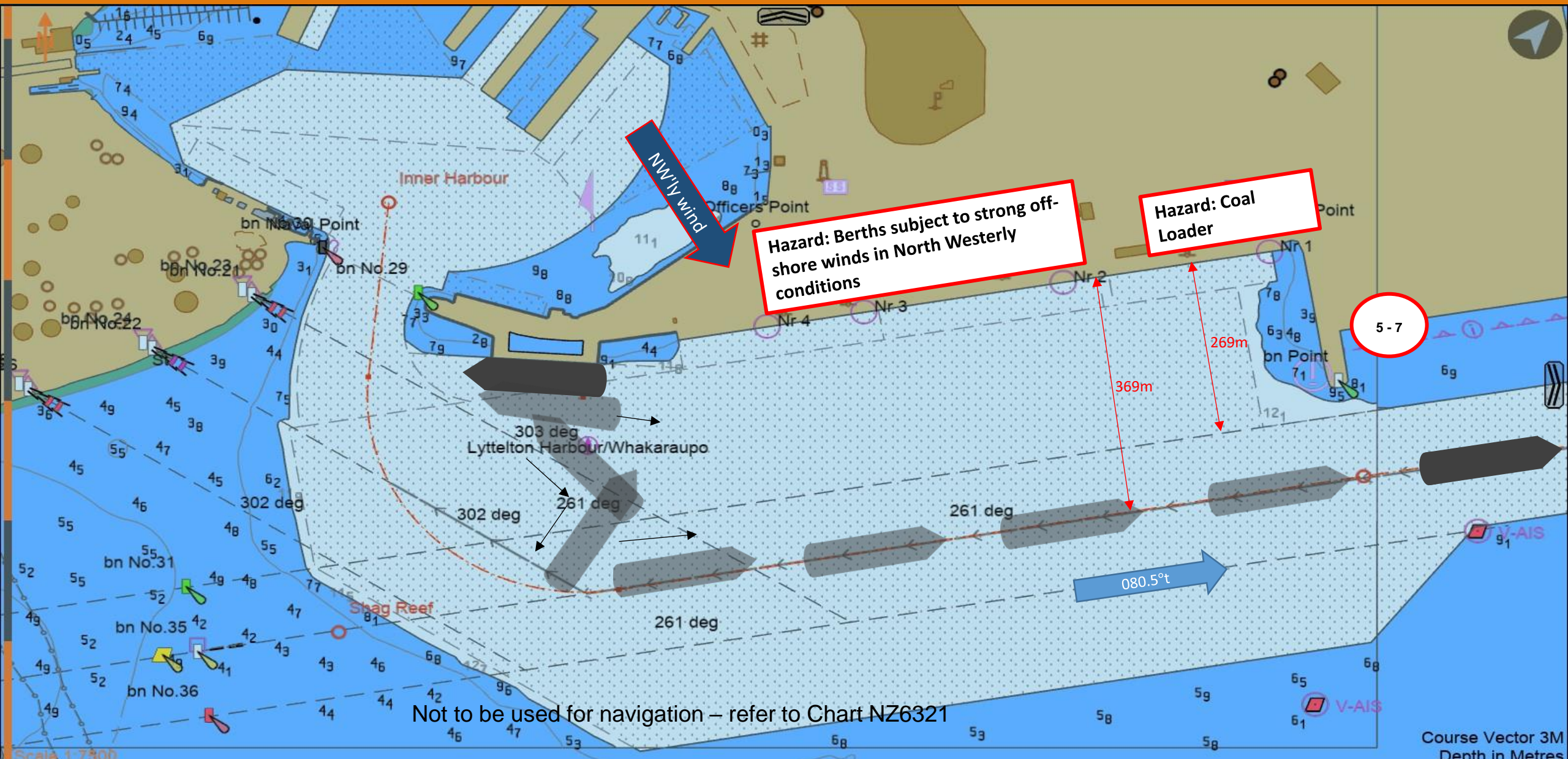
# Departure: Cruise Berth PSTQ to Breakwater – – Strong S'y Wind



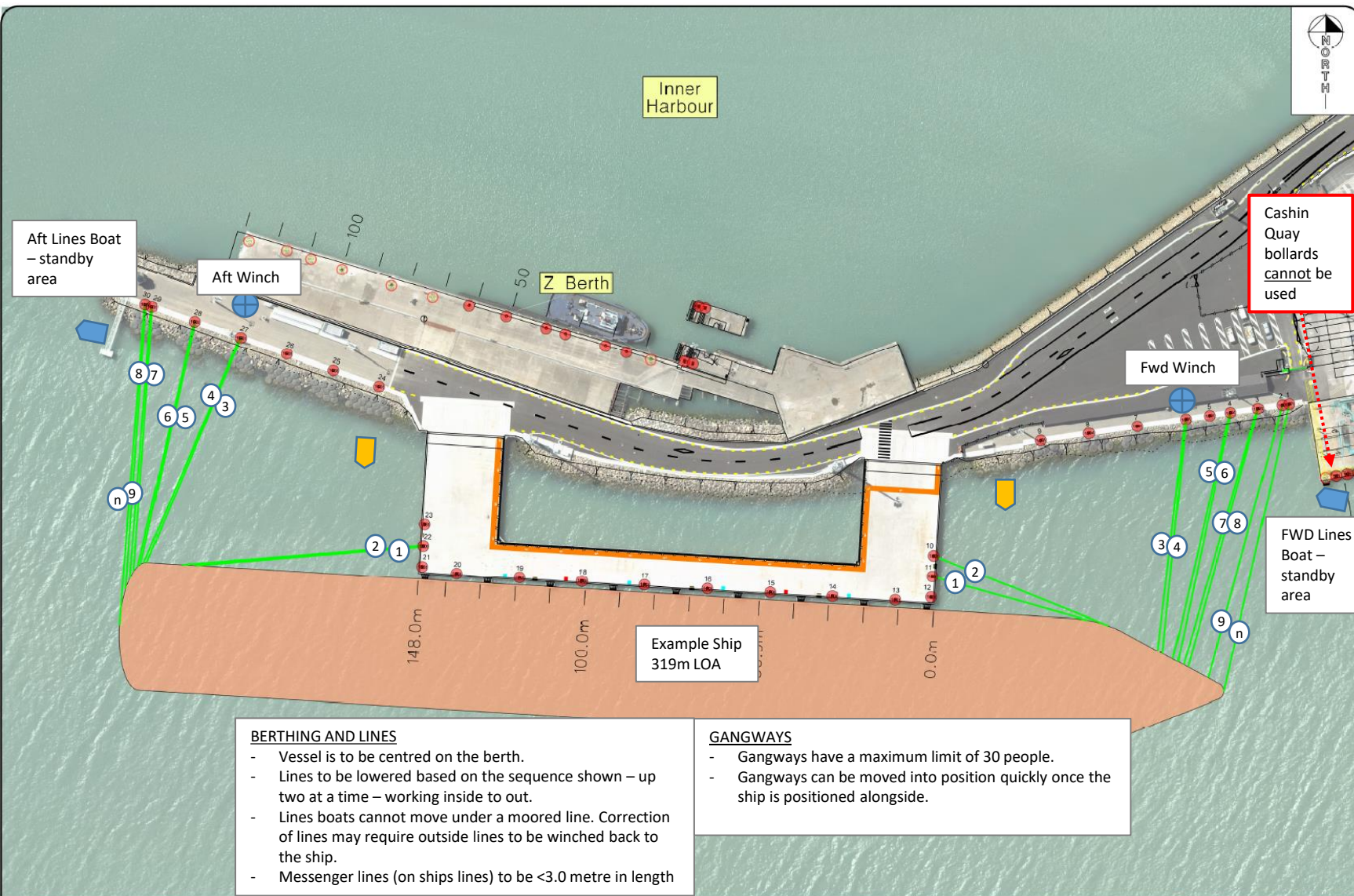
Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

# Departure: Cruise Berth SSTQ to Breakwater (Non Cruise)



# Cruise Berth Arrival – Mooring Operation with Lines Boats



**Key**

- Lines Boat – Standby Area
- Shore Lines Winch
- Lines Boat – In Operation

① - ⑨ Order of Lines

**Lines Operation**

- Lines Boats will run a messenger from ashore and secure it to the ships lines – up to two ships lines at a time
- Lines will then be winched ashore in the sequence shown
- Spring lines – ships crew to throw a heaving line to the lines team on the berth as the vessel comes alongside. Alternatively a messenger line will be taken by the Lines Boat to the ship and secured to the ships line once the vessel is alongside.
- Tugs will be available on standby and may be used by the Pilot to manage/hold the position of the ship alongside
- Vessel to be aware of thruster and propulsion use when lines boats in operation - there should be no wash in the lines boat operational area.

**LPC Pilot will**

- Confirm Lines Boats are in standby position prior to berthing
- Request that Lines Boats come into position to commence tie-up once vessel is alongside and conditions are safe
- Hand over lines boat operation to LPC Lines Supervisors
- Release Lines Boats once tie-up complete
- Pilot will take control of lines operation as required
- VHF CH11 to be used for communication between Lines Supervisors and Lines Boats. Lines Boats to listen on VHF CH02

**Cruise Berth Arrival/Departure Wind Limits**

Vessel LOA / tug assistance	Max 3 second wind speed (southerly quarter)
>=250m LOA with Tugs	25kn
< 250m LOA with Tugs	30kn

**Clear Berth Wind Limits (3 second gusts)**

- Cruise Berth: 40kn gusts NW (>220m LOA), else 50kn gusts NW/NE/SW direction
- Inner Harbour (No2, No7): 30kn gusts NW, 50kn gusts SW

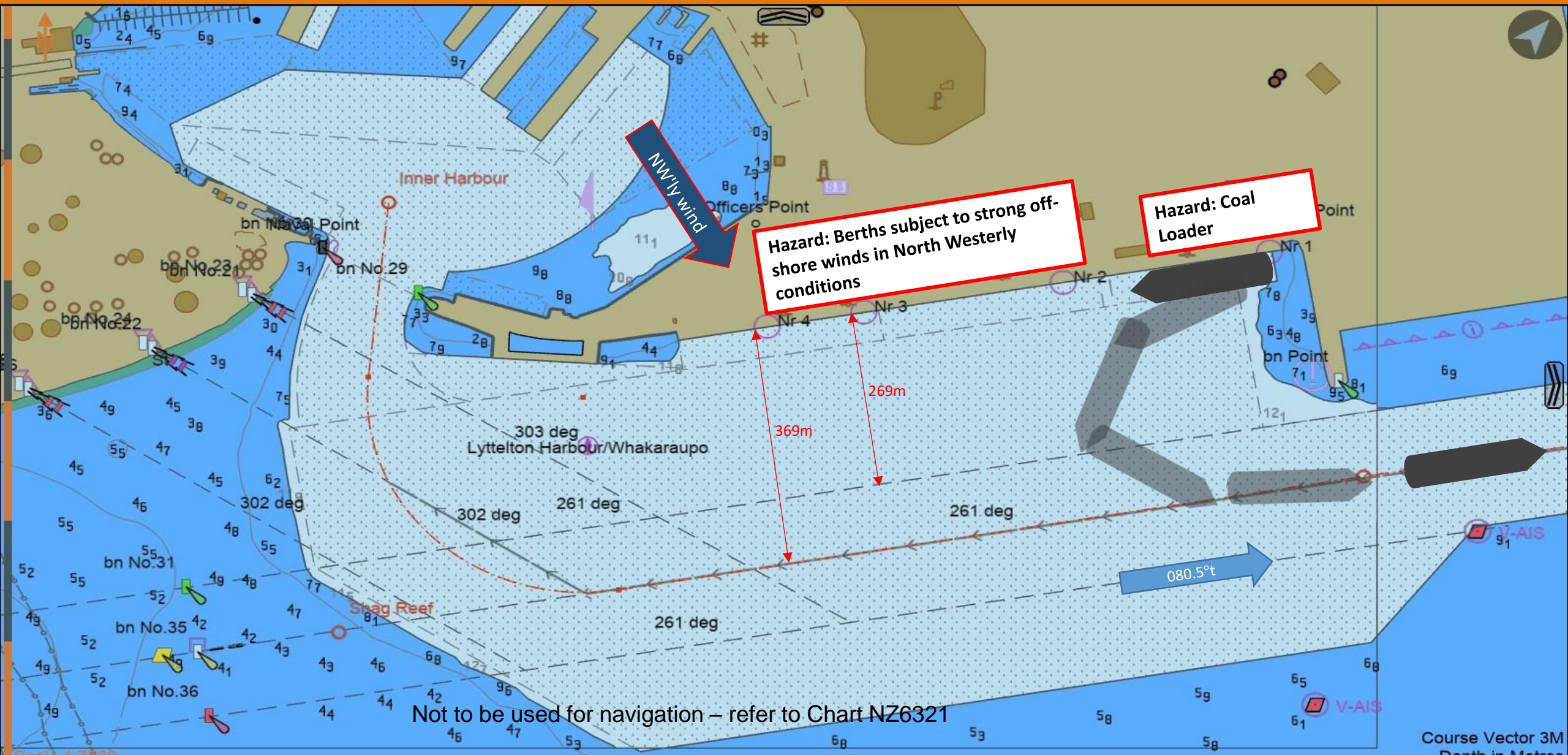
**BERTHING AND LINES**

- Vessel is to be centred on the berth.
- Lines to be lowered based on the sequence shown – up two at a time – working inside to out.
- Lines boats cannot move under a moored line. Correction of lines may require outside lines to be winched back to the ship.
- Messenger lines (on ships lines) to be <3.0 metre in length

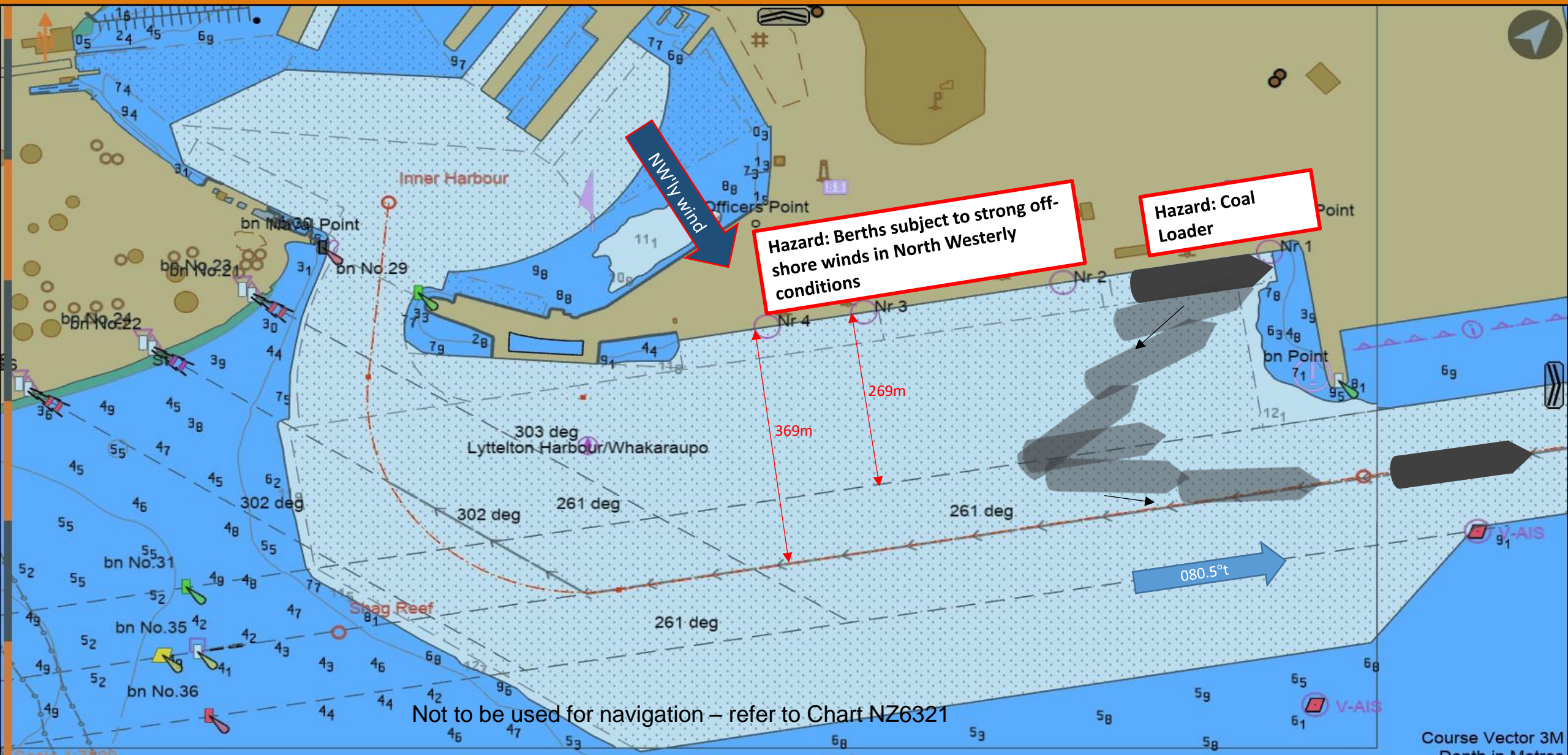
**GANGWAYS**

- Gangways have a maximum limit of 30 people.
- Gangways can be moved into position quickly once the ship is positioned alongside.

# Departure: CQ1 SSTQ to Breakwater

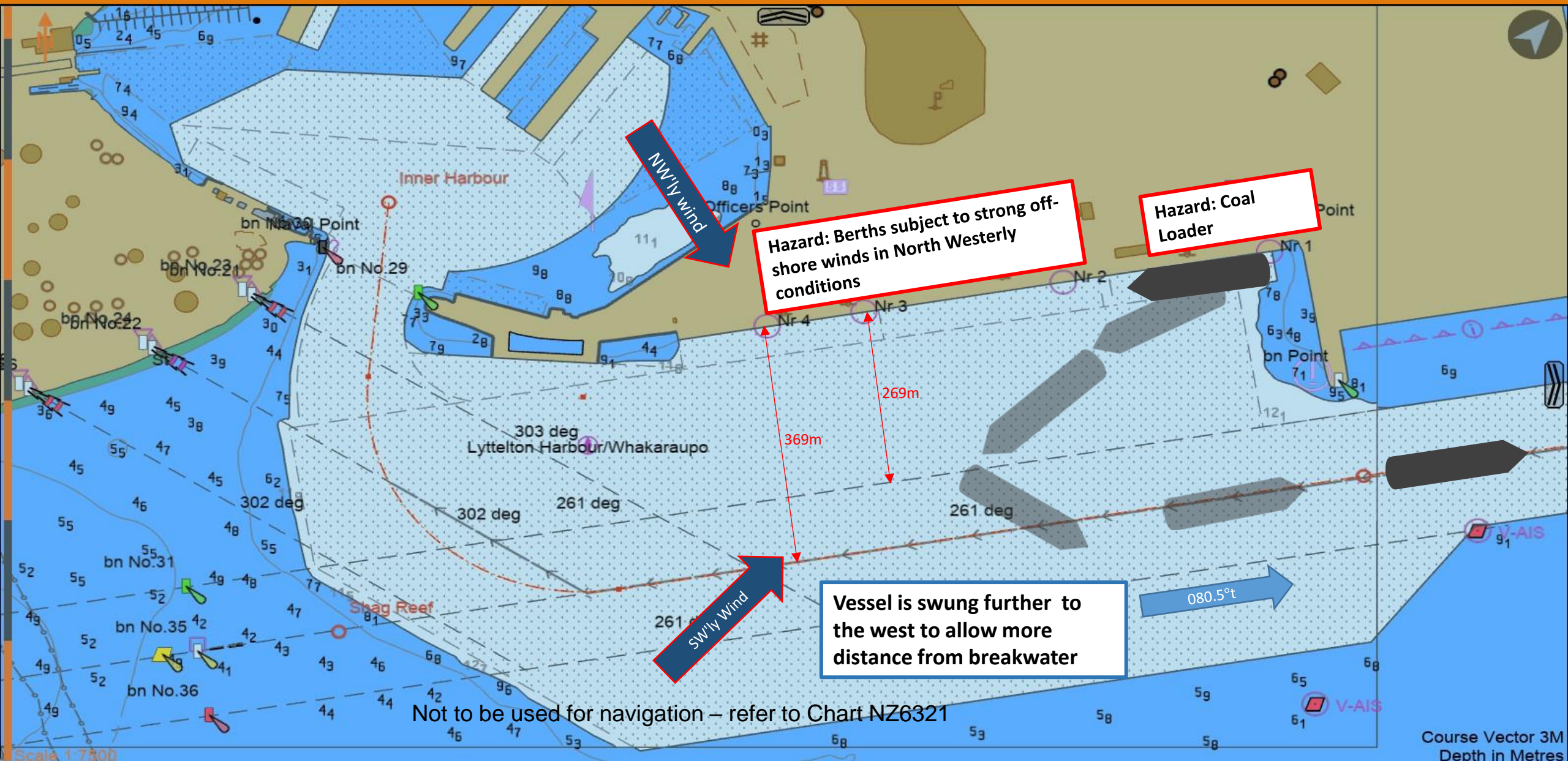


# Departure: CQ1 PSTQ to Breakwater

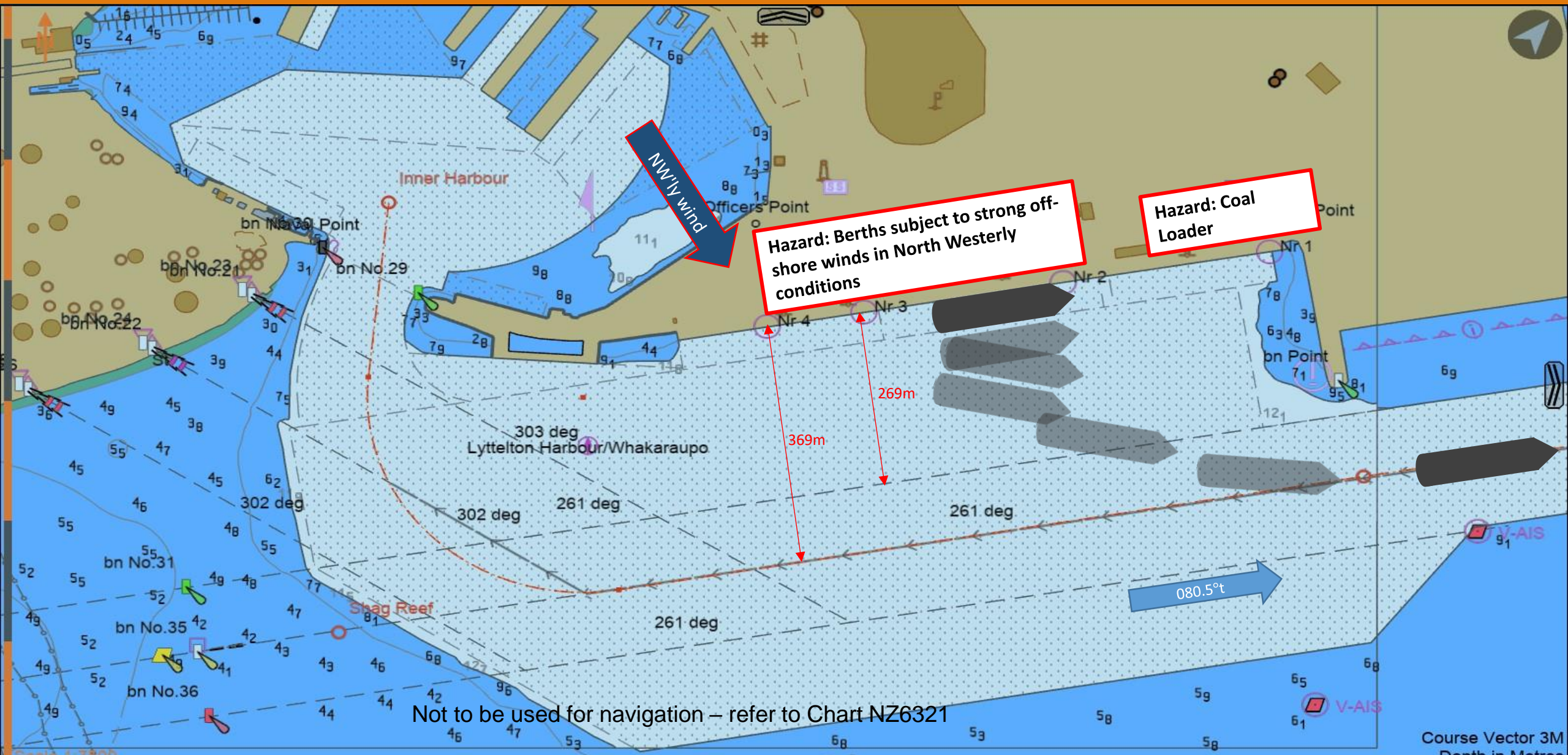




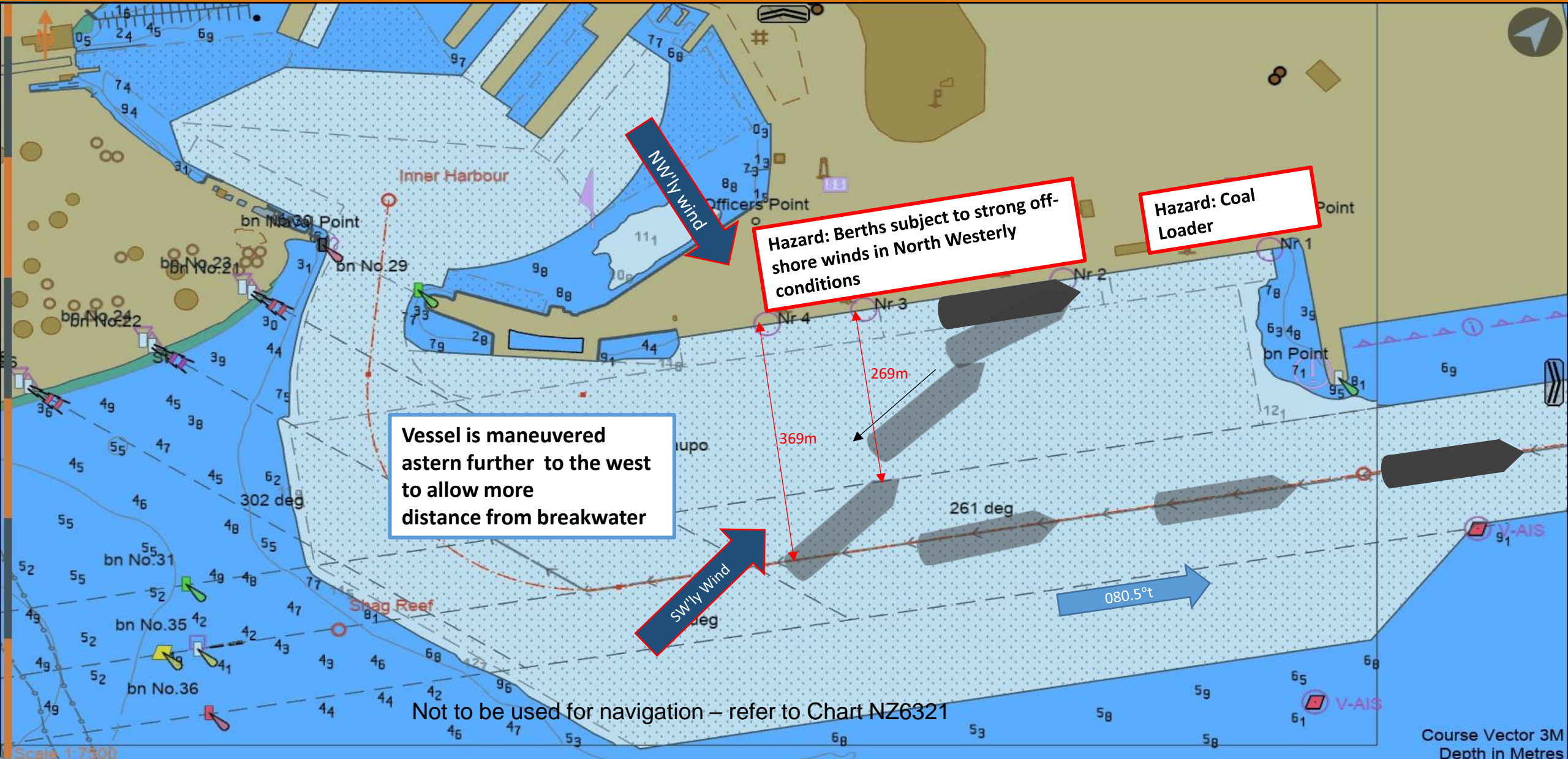
# Departure: CQ1 SSTQ to Breakwater – Strong S'yly Wind



# Departure: CQ-East PSTQ to Breakwater



# Departure: CQ-East PSTQ to Breakwater – Strong SW'y Wind



Vessel is maneuvered astern further to the west to allow more distance from breakwater

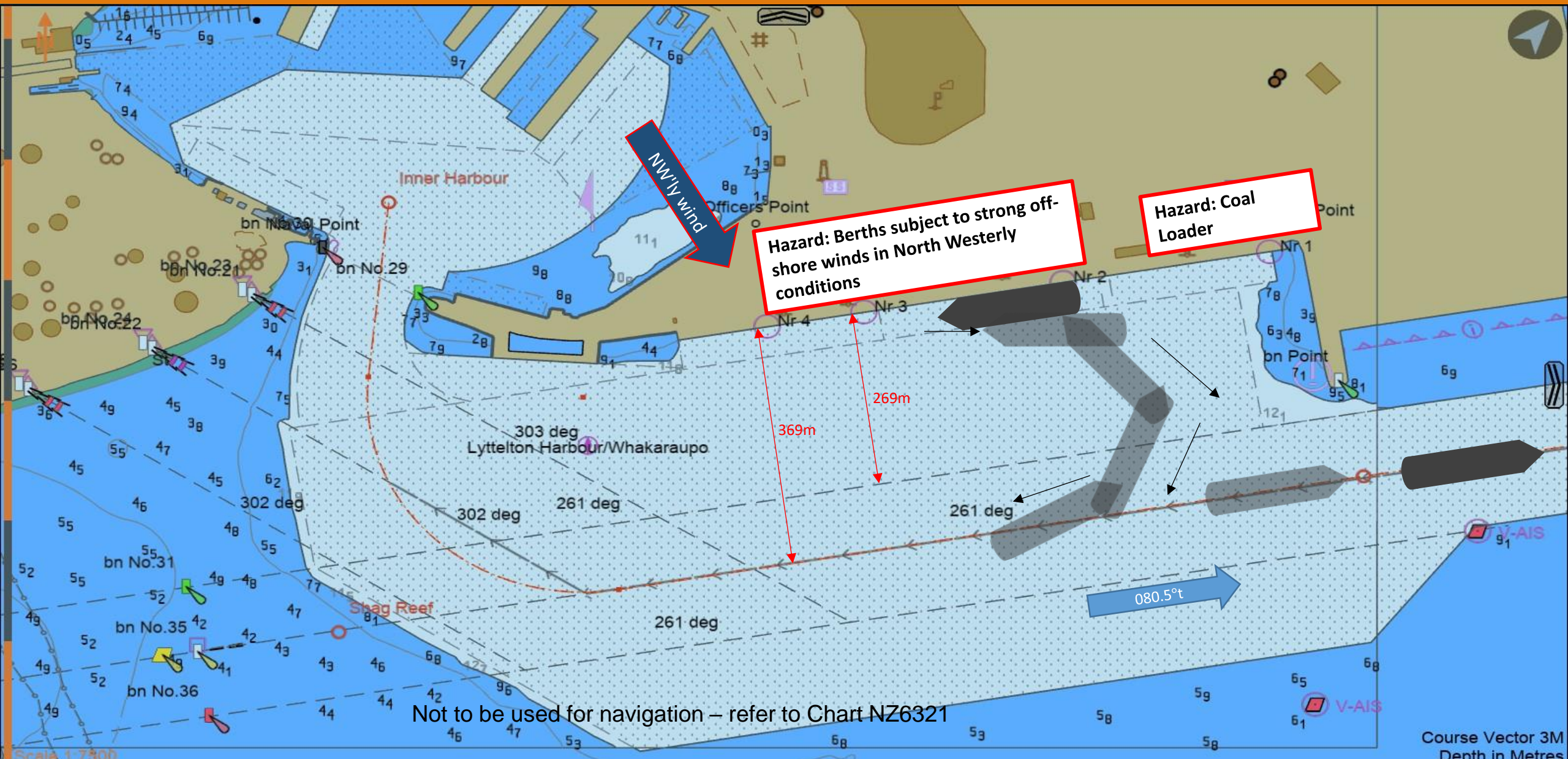
Hazard: Berths subject to strong off-shore winds in North Westerly conditions

Hazard: Coal Loader

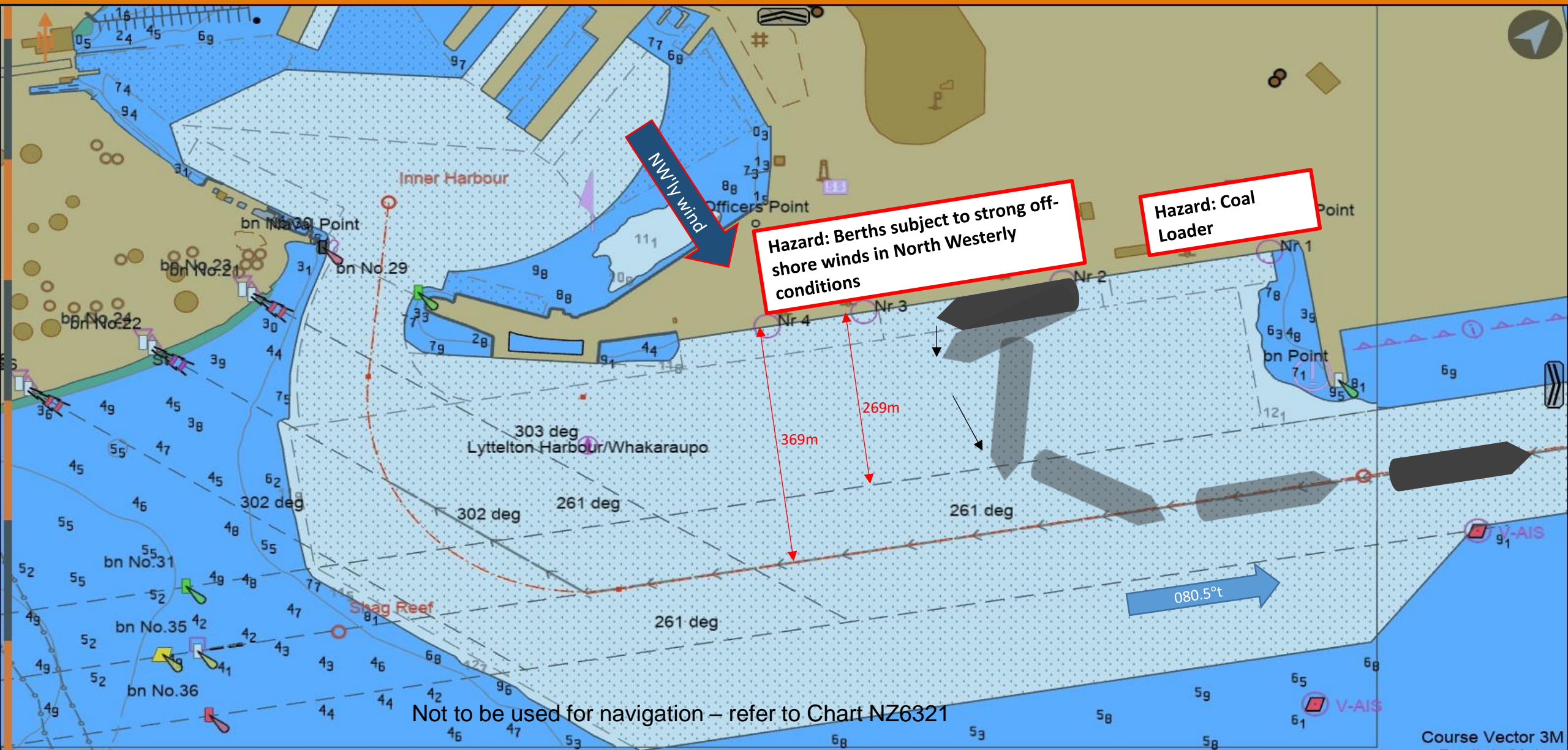
Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

# Departure: CQ-East SSTQ to Breakwater (Bow to Stbd)



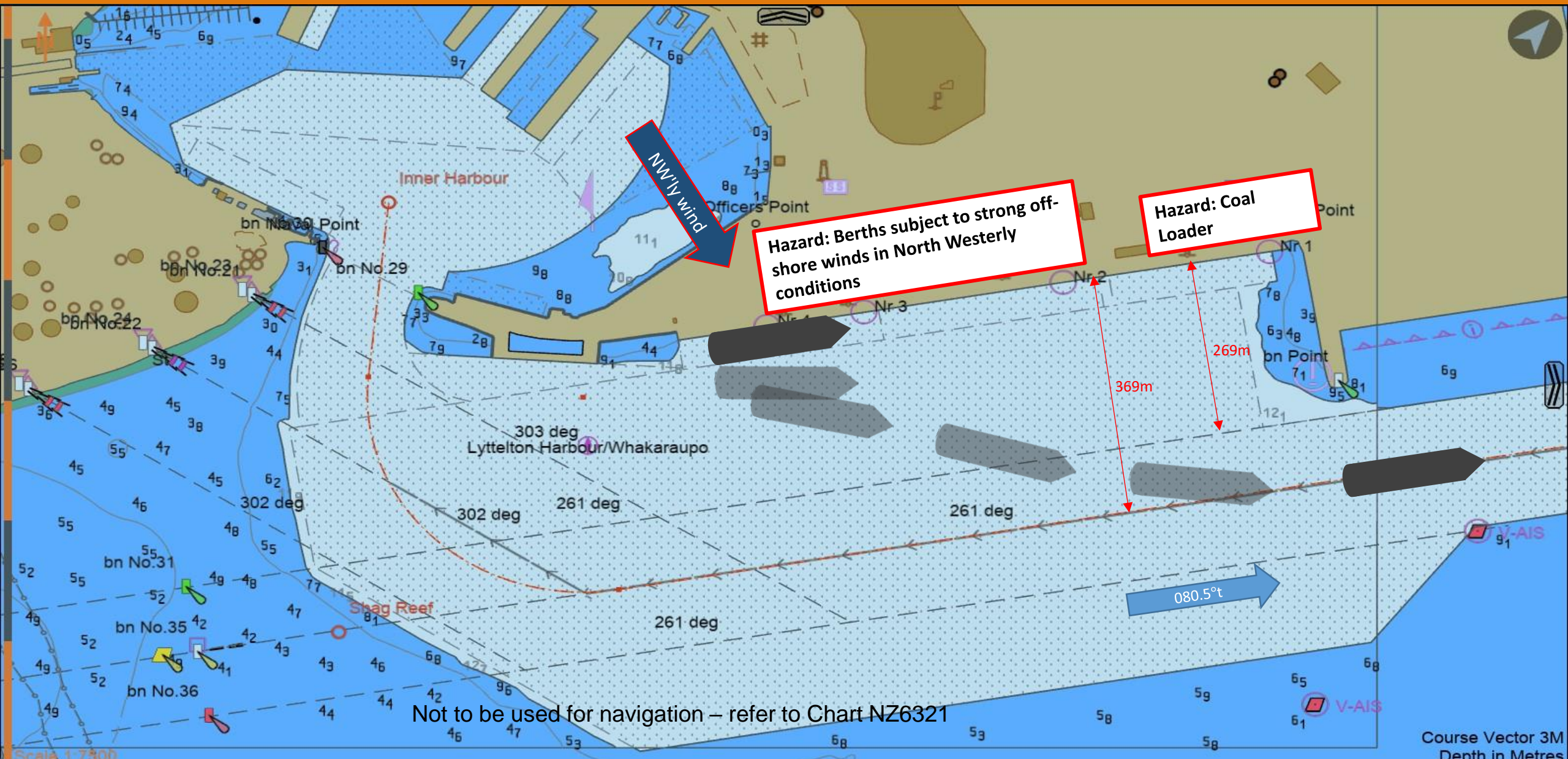
# Departure: CQ-East SSTQ to Breakwater (Bow to Port)



Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

# Departure: CQ-West PSTQ to Breakwater

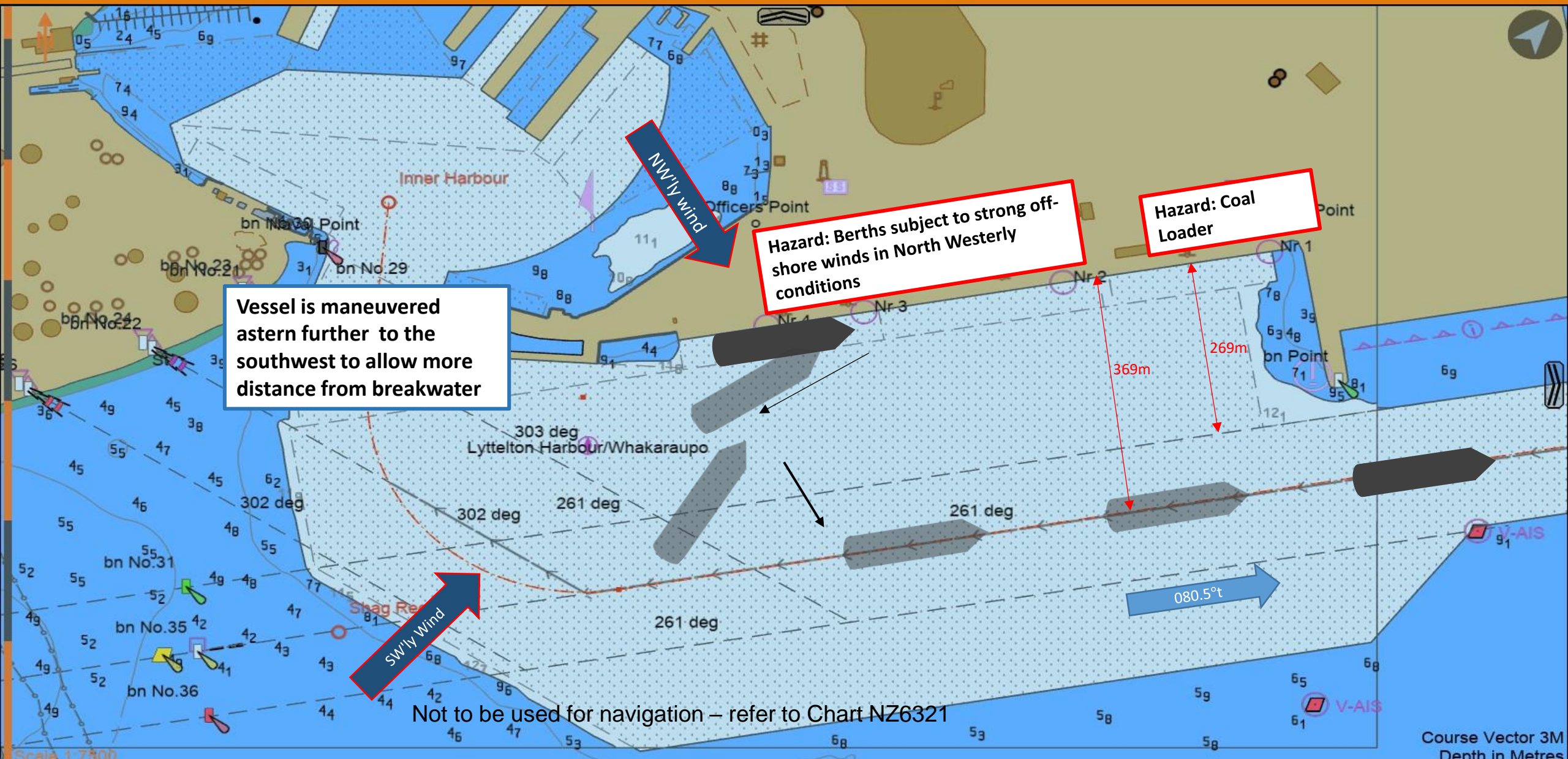


Not to be used for navigation – refer to Chart NZ6321

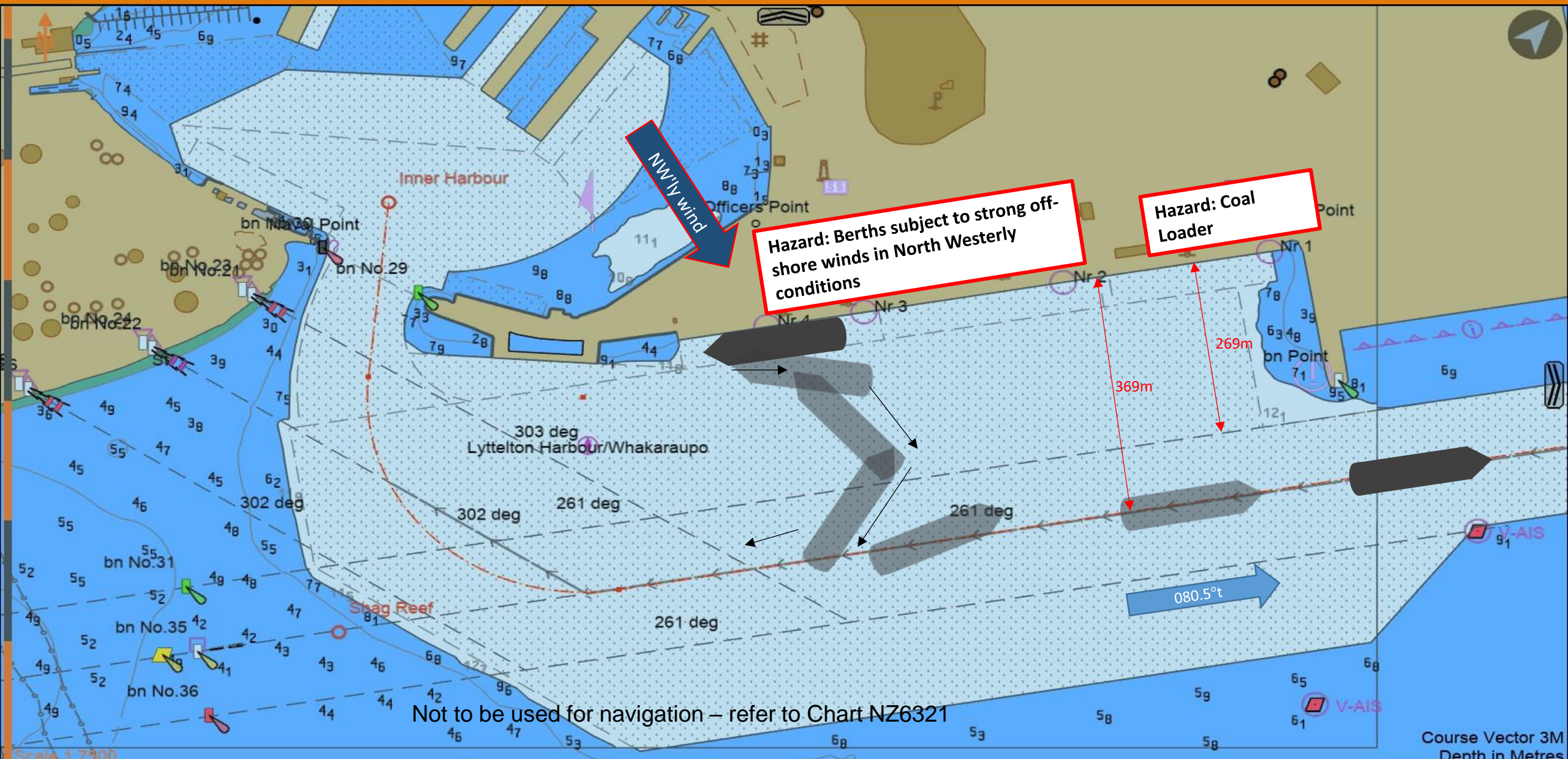
Scale 1:7500

Course Vector 3M  
Depth in Metres

# Departure: CQ-West PSTQ to Breakwater – Strong SW'y Wind

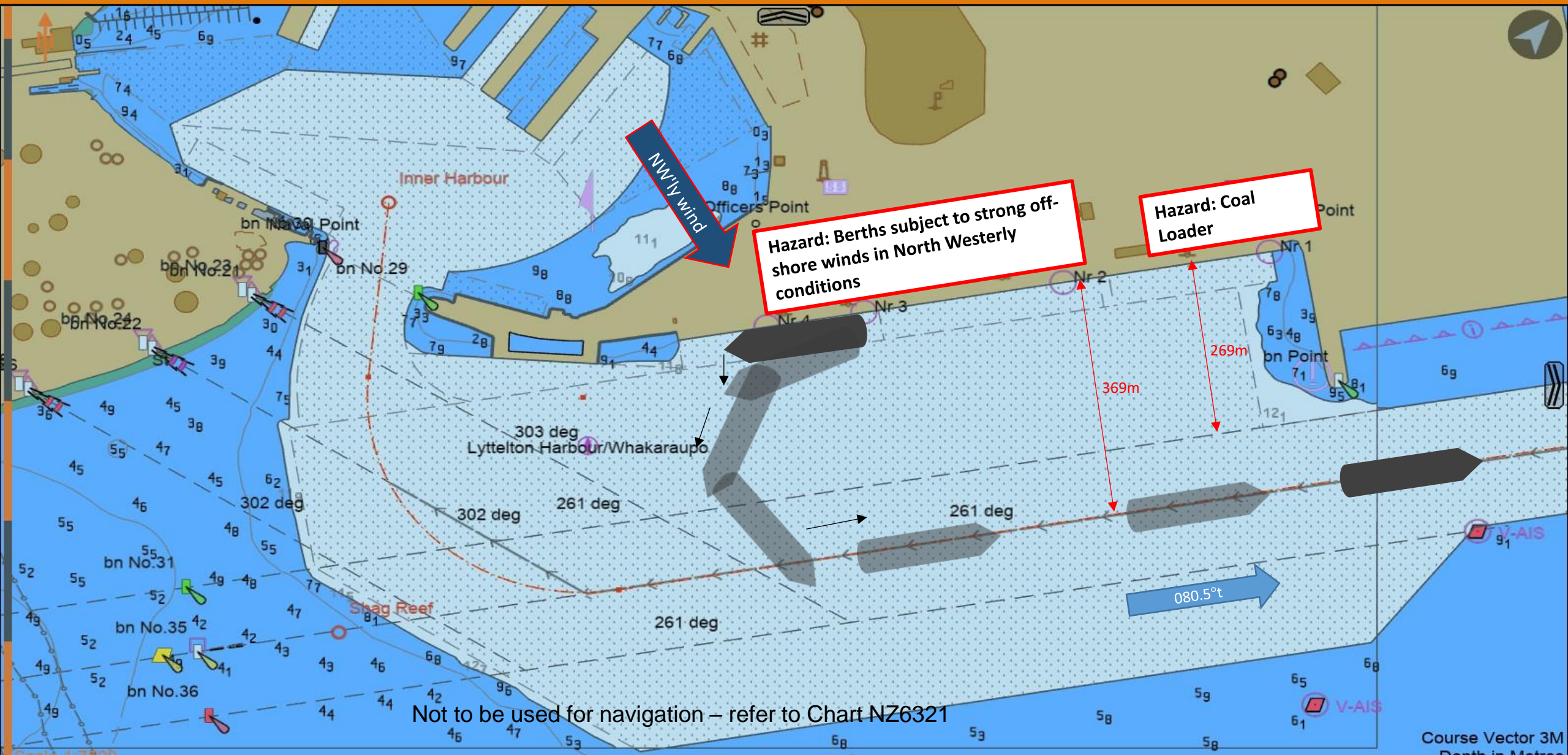


# Departure: CQ-West SSTQ to Breakwater (Bow to Stbd)

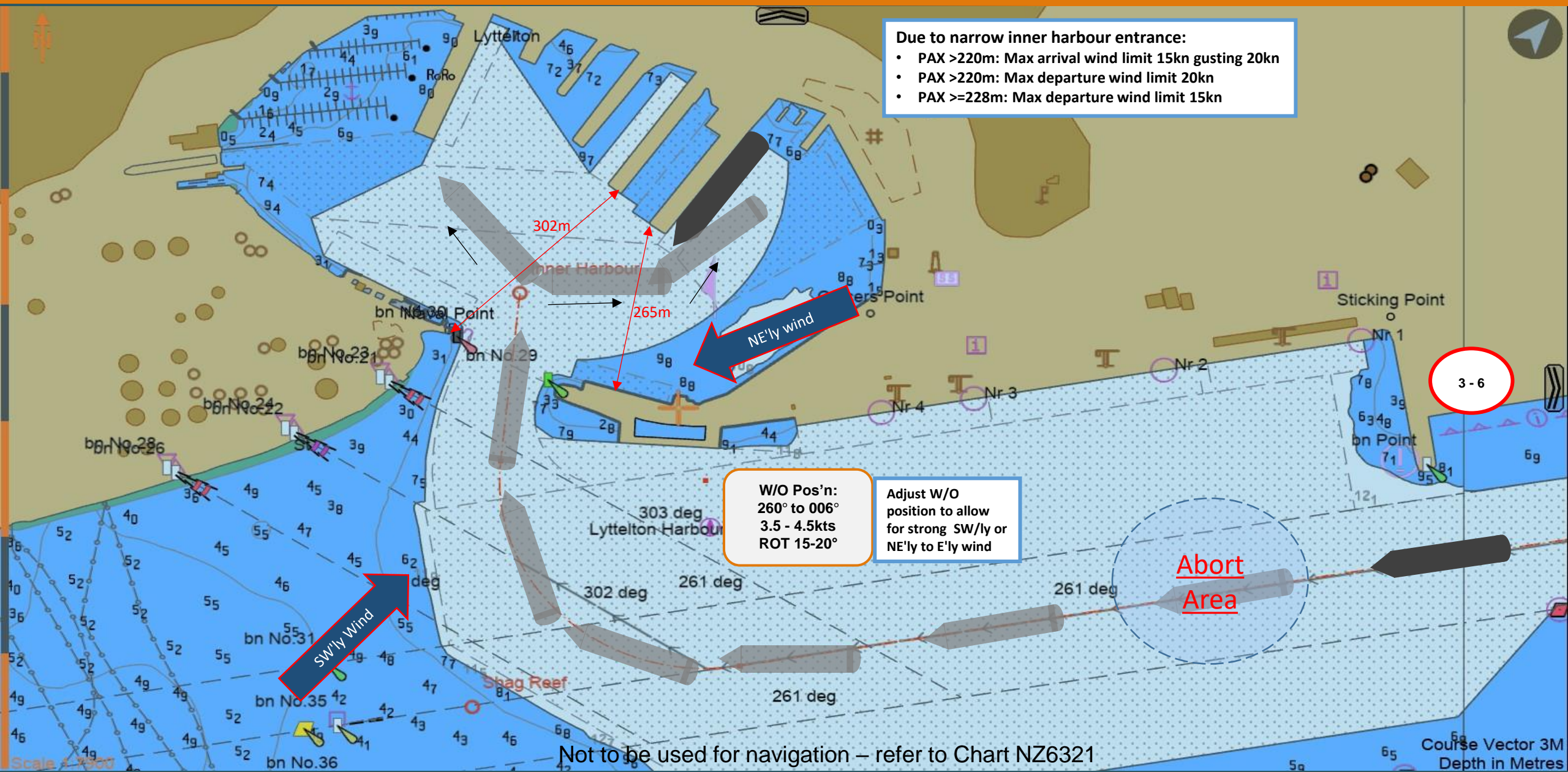




# Departure: CQ-West SSTQ to Breakwater (Bow to Port)



# Arrival: Breakwater to 2East SSTQ



Due to narrow inner harbour entrance:

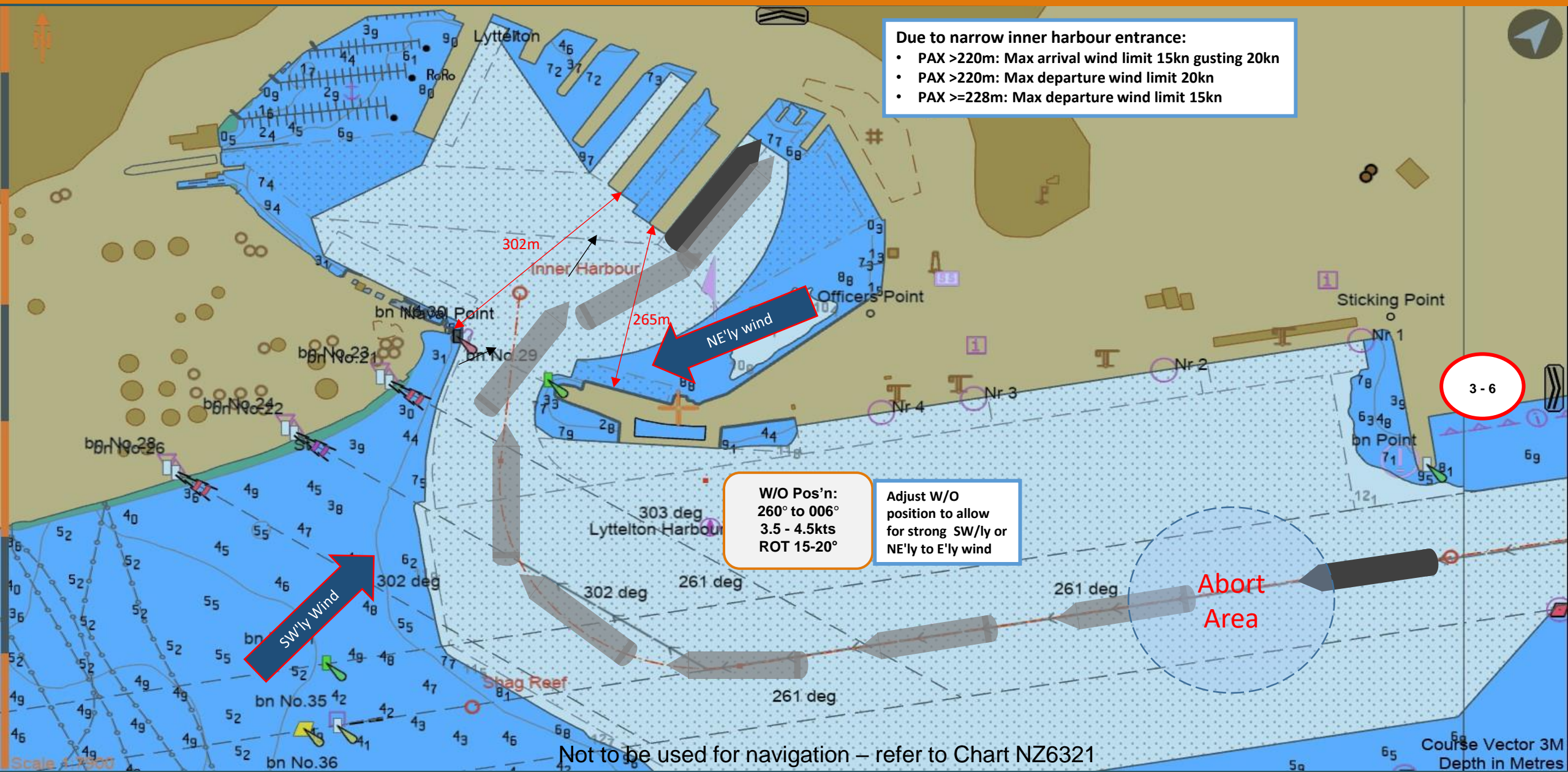
- PAX >220m: Max arrival wind limit 15kn gusting 20kn
- PAX >220m: Max departure wind limit 20kn
- PAX >=228m: Max departure wind limit 15kn

W/O Pos'n:  
260° to 006°  
3.5 - 4.5kts  
ROT 15-20°

Adjust W/O  
position to allow  
for strong SW'ly or  
NE'ly to E'ly wind

3 - 6

# Arrival: Breakwater to 2East PSTQ



Due to narrow inner harbour entrance:

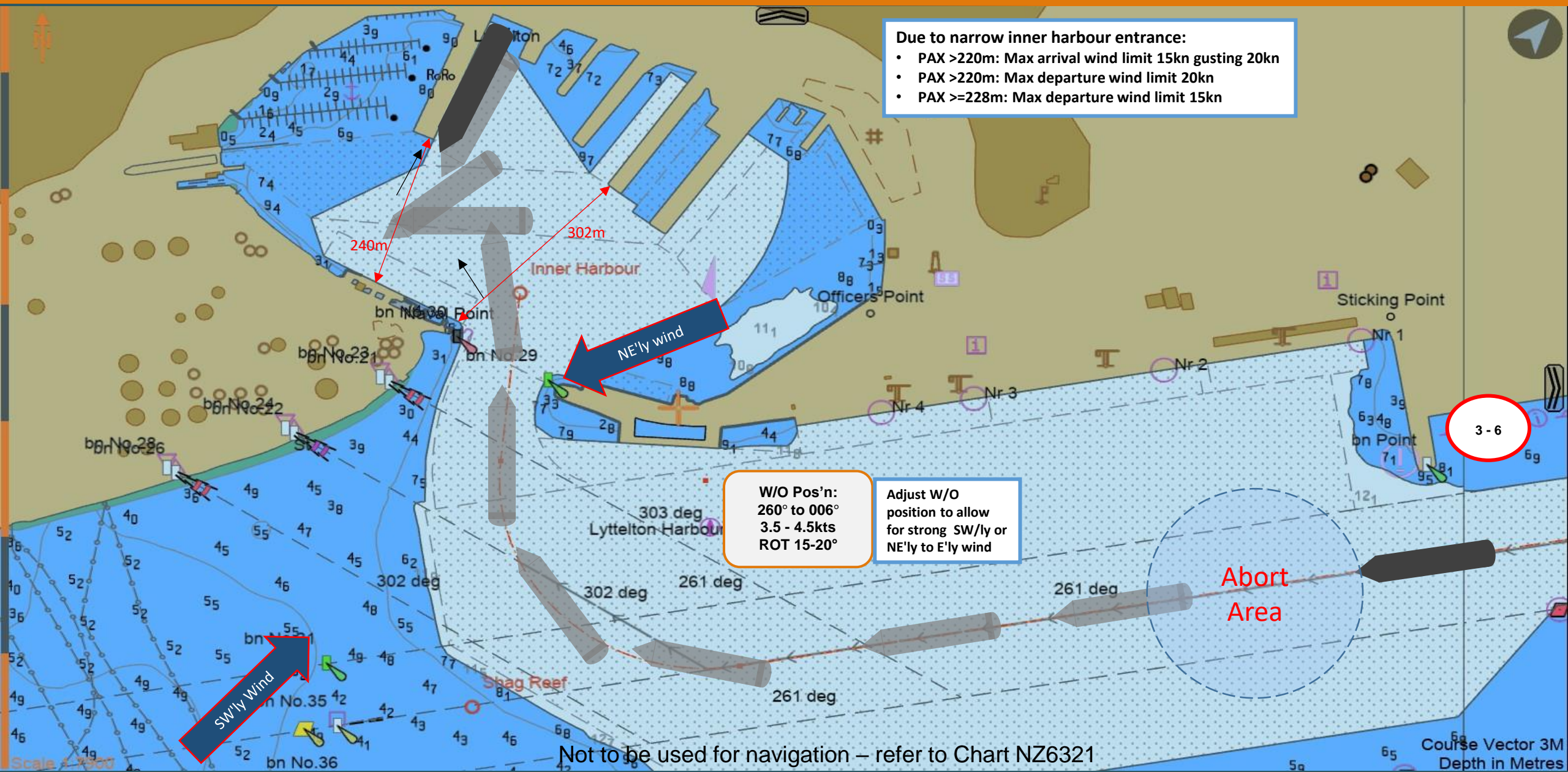
- PAX >220m: Max arrival wind limit 15kn gusting 20kn
- PAX >220m: Max departure wind limit 20kn
- PAX >=228m: Max departure wind limit 15kn

W/O Pos'n:  
260° to 006°  
3.5 - 4.5kts  
ROT 15-20°

Adjust W/O  
position to allow  
for strong SW'ly or  
NE'ly to E'ly wind

Not to be used for navigation – refer to Chart NZ6321

# Arrival: Breakwater to 7East SSTQ



3 - 6

W/O Pos'n:  
260° to 006°  
3.5 - 4.5kts  
ROT 15-20°

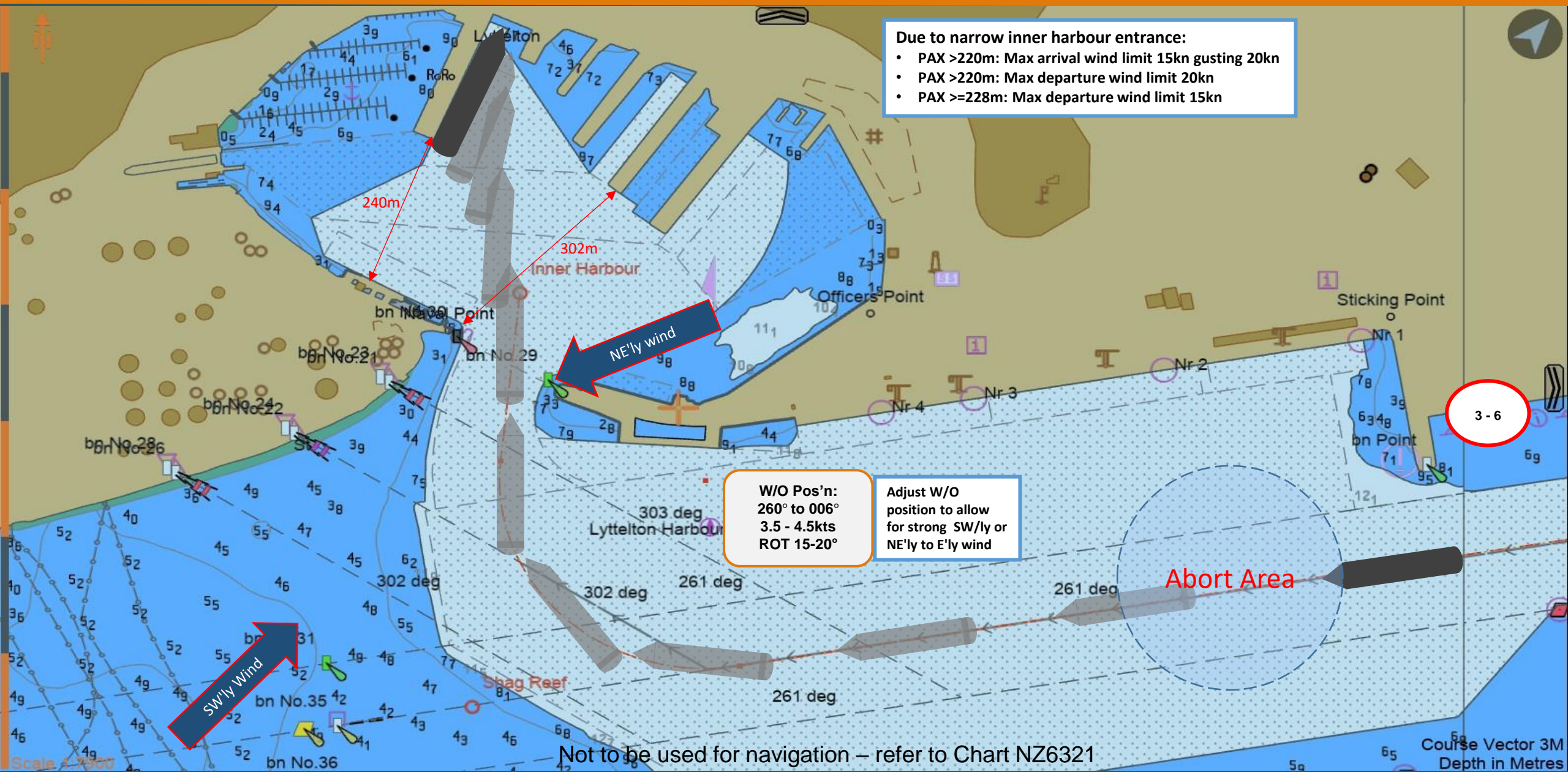
Adjust W/O  
position to allow  
for strong SW'ly or  
NE'ly to E'ly wind

Due to narrow inner harbour entrance:  
• PAX >220m: Max arrival wind limit 15kn gusting 20kn  
• PAX >220m: Max departure wind limit 20kn  
• PAX >=228m: Max departure wind limit 15kn

Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

# Arrival: Breakwater to 7East PSTQ



Due to narrow inner harbour entrance:

- PAX >220m: Max arrival wind limit 15kn gusting 20kn
- PAX >220m: Max departure wind limit 20kn
- PAX >=228m: Max departure wind limit 15kn

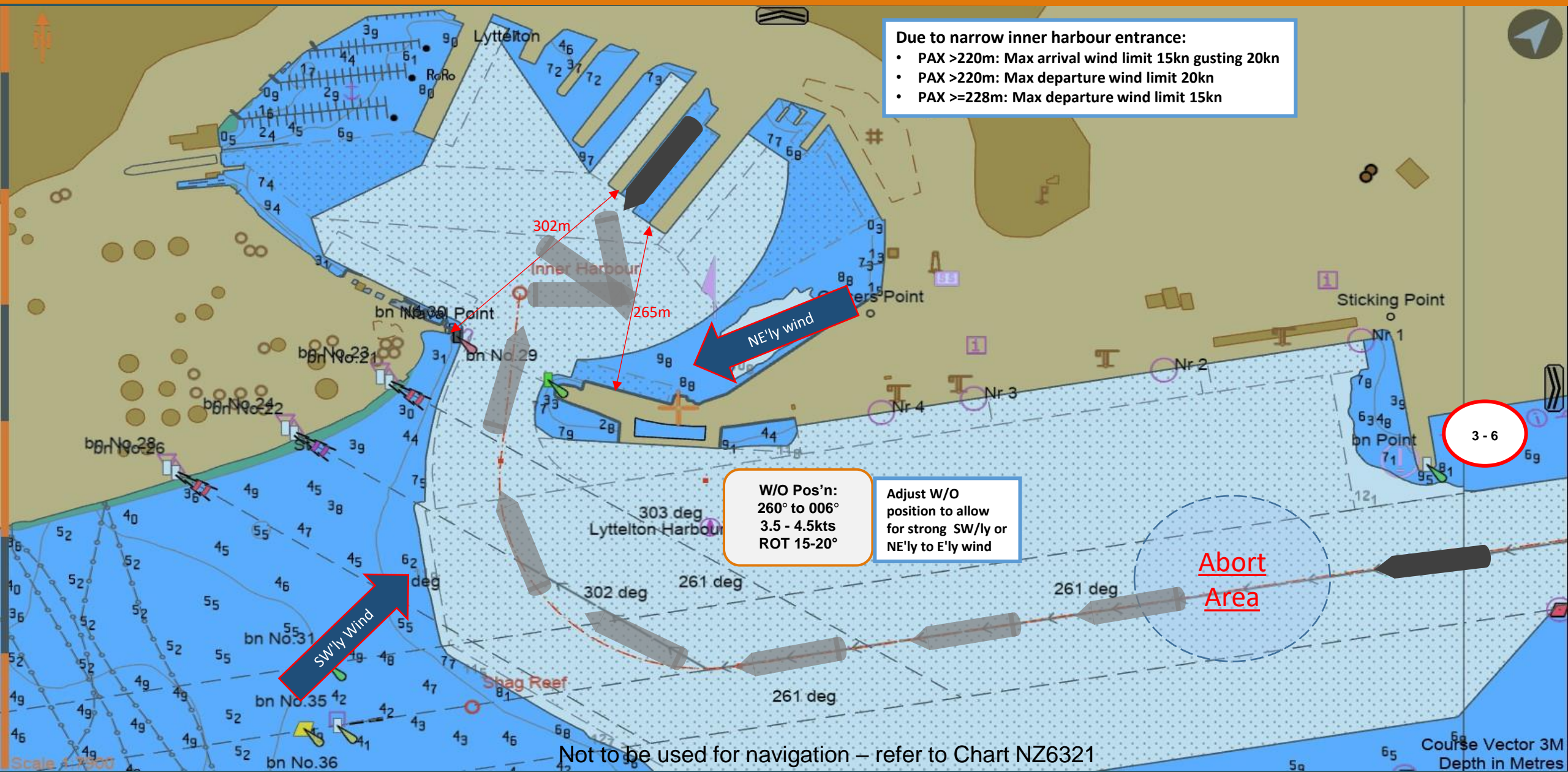
W/O Pos'n:  
260° to 006°  
3.5 - 4.5kts  
ROT 15-20°

Adjust W/O  
position to allow  
for strong SW/ly or  
NE'ly to E'ly wind

3 - 6

Not to be used for navigation – refer to Chart NZ6321

# Arrival: Breakwater to 3East SSTQ



Due to narrow inner harbour entrance:

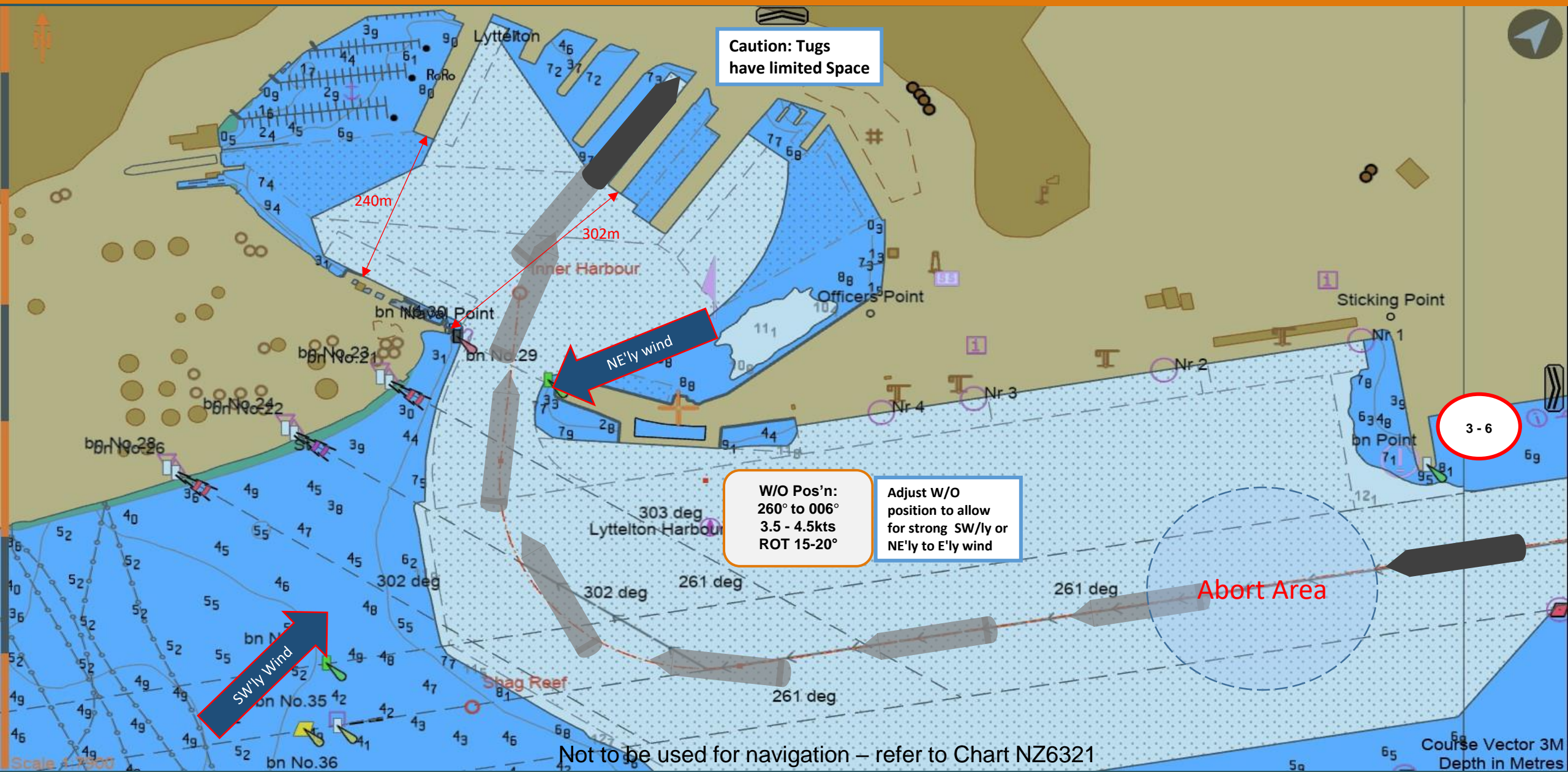
- PAX >220m: Max arrival wind limit 15kn gusting 20kn
- PAX >220m: Max departure wind limit 20kn
- PAX >=228m: Max departure wind limit 15kn

W/O Pos'n:  
260° to 006°  
3.5 - 4.5kts  
ROT 15-20°

Adjust W/O  
position to allow  
for strong SW/ly or  
NE'ly to E'ly wind

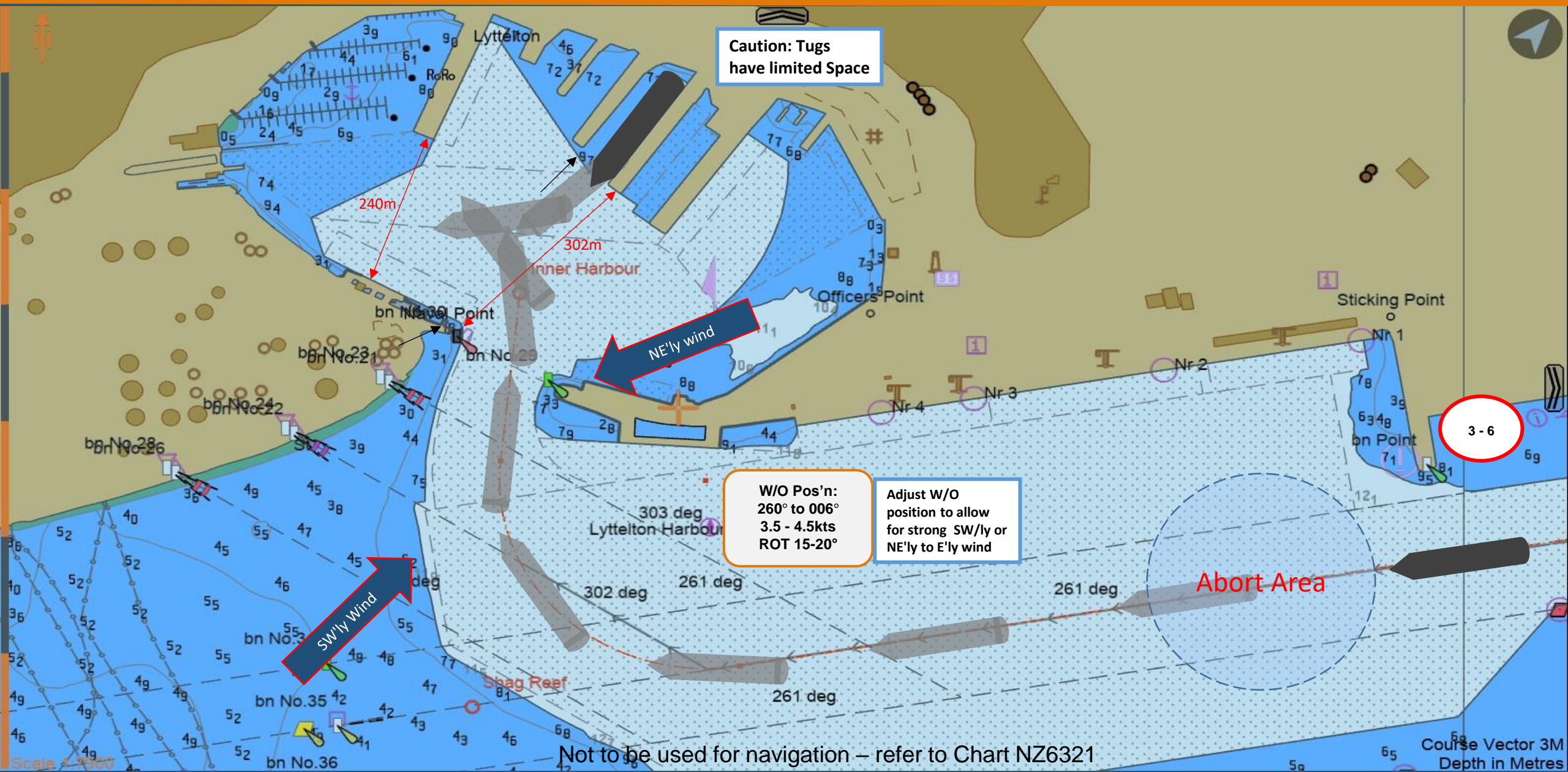
3-6

# Arrival: Breakwater to 3West SSTQ



Not to be used for navigation – refer to Chart NZ6321

# Arrival: Breakwater to 3West PSTQ



Caution: Tugs have limited Space

W/O Pos'n:  
260° to 006°  
3.5 - 4.5kts  
ROT 15-20°

Adjust W/O position to allow for strong SW'ly or NE'ly to E'ly wind

3-6

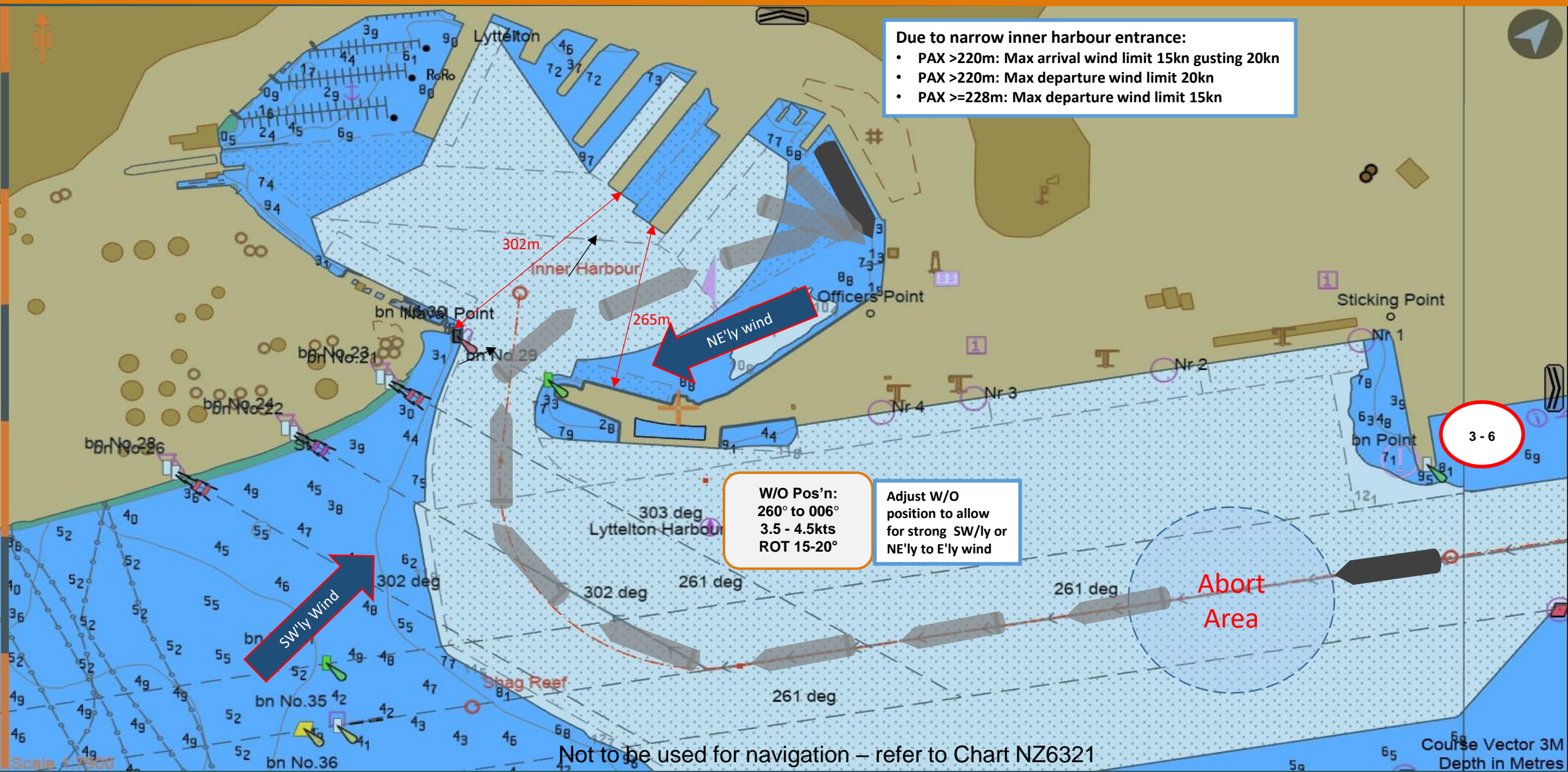
Abort Area

Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres



# Arrival: Breakwater to 1BW PSTQ



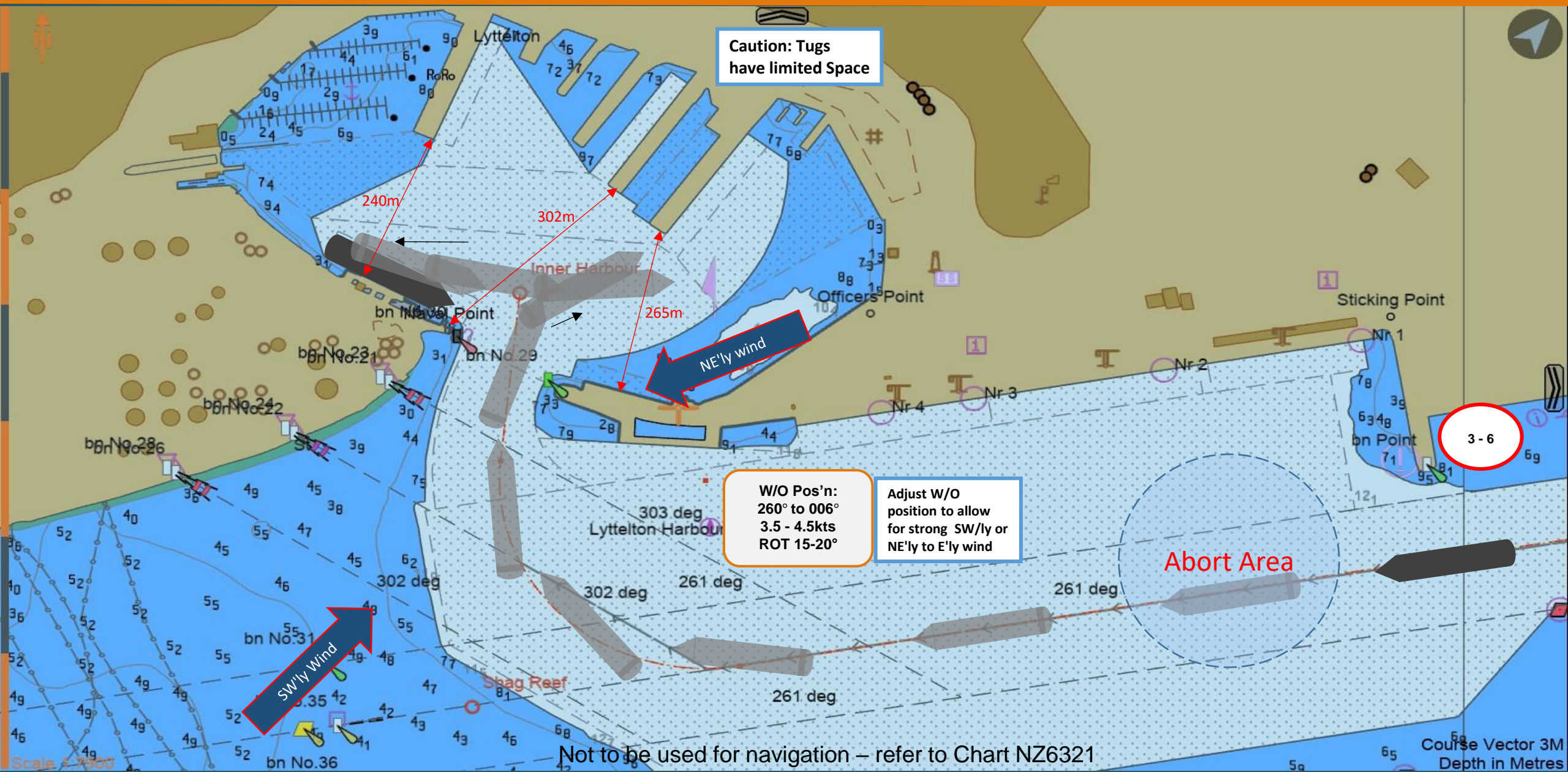
Due to narrow inner harbour entrance:

- PAX >220m: Max arrival wind limit 15kn gusting 20kn
- PAX >220m: Max departure wind limit 20kn
- PAX >=228m: Max departure wind limit 15kn

W/O Pos'n:  
260° to 006°  
3.5 - 4.5kts  
ROT 15-20°

Adjust W/O  
position to allow  
for strong SW'ly or  
NE'ly to E'ly wind

# Arrival: Breakwater to Oil Berth SSTQ



Caution: Tugs have limited Space

W/O Pos'n:  
260° to 006°  
3.5 - 4.5kts  
ROT 15-20°

Adjust W/O position to allow for strong SW/ly or NE'ly to E'ly wind

3 - 6

Abort Area

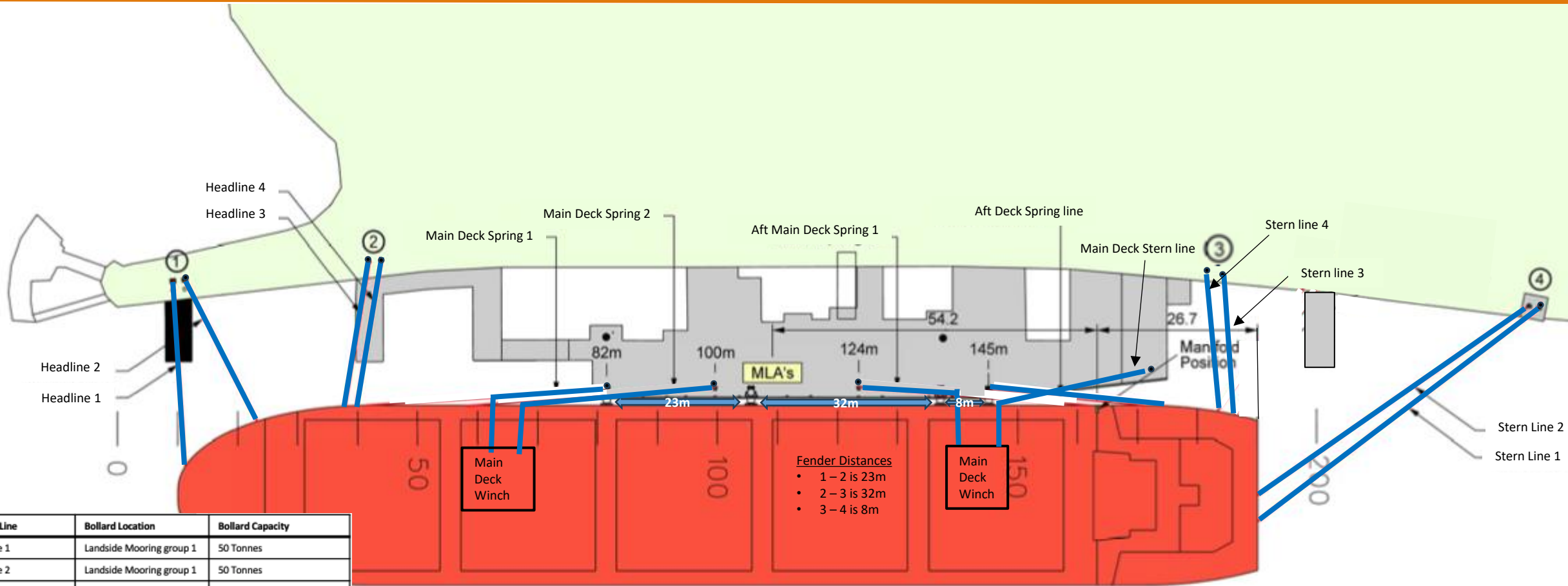
SW'ly Wind

NE'ly wind

Not to be used for navigation - refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

# Oil Berth Arrival Tanker 183m LOA – Mooring Operation



Mooring Line	Bollard Location	Bollard Capacity
Head Line 1	Landside Mooring group 1	50 Tonnes
Head Line 2	Landside Mooring group 1	50 Tonnes
Head Line 3	Landside Mooring group 2	50 Tonnes
Headline 4	Landside Mooring group 2	50 Tonnes
Main deck Bow Spring 1	82m	75 Tonnes
Main Deck Bow Spring 2	100m	50 Tonnes
Main Deck Spring 1	124m	50 Tonnes
Aft Deck Spring	145m	75 Tonnes
Stern line 1	Landside Mooring group 4	50 Tonnes
Stern line 2	Landside Mooring group 4	50 Tonnes
Stern line 3	Landside Mooring group 3	50 Tonnes
Stern line 4	Landside Mooring group 3	50 Tonnes

### Moorings

- Moorings to be discussed during Master Pilot exchange. When strong winds are forecast head and stern lines should be increased accordingly - factors to consider will be the type and strength of moorings, freeboard, wind direction and duration of stay
- Only Two lines permitted at Each landside group 1 – 4.
- Crew at the stern of the vessel can pass heaving lines for first spring as stern is passing fender #4.

### Wind

- Clear Berth limit 60 knots (3 Second Gusts)
- When the wind speed forecast is SW 45 Knots, the Oil Company, Liquidgas, the Ship and the Duty Pilot are to review the forecast and if wind is forecast to strengthen:
  - Discharge operations to stop.
  - The MLA / LPG arm to be disconnected.
  - A Tug will be placed on standby.

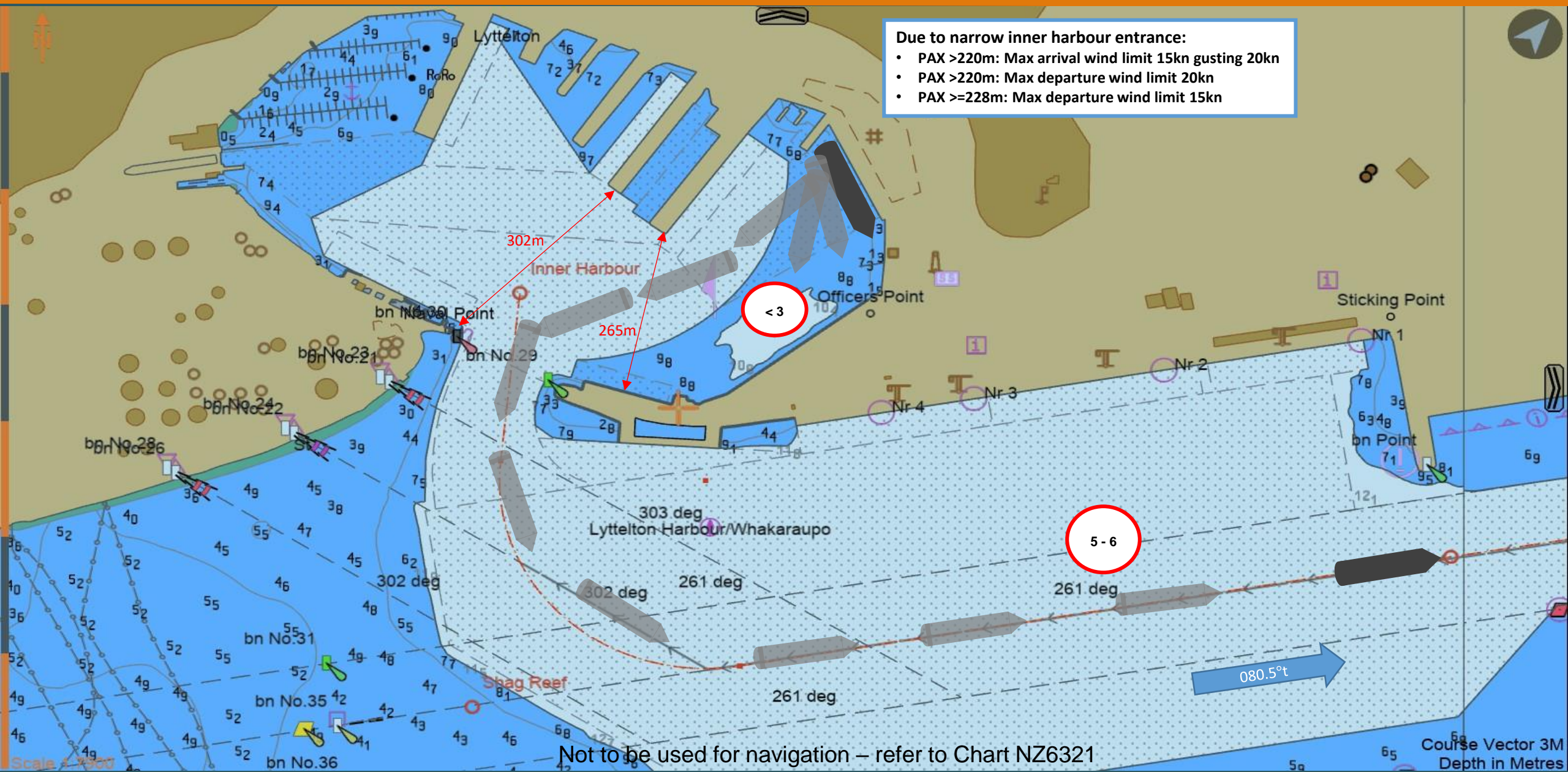
### Berth Information

- The main wharf structure is 115m long and approx. 25m wide
- Maximum vessel length is 200m with a maximum draught of 11.2m
- The wharf has a modern fender and mooring system, with Trelleborg fenders. The wharf deck is lightweight concrete providing access for operations and vessel personnel.
- Facilities include:
  - 3 Marine unloading arms for discharge of petroleum products
  - 1 Marine unloading arm for LPG
  - Facilities for discharge of bitumen and methanol
  - Bunkering facilities
  - Potable water supply

# Departure: 1BW PSTQ to Breakwater

Due to narrow inner harbour entrance:

- PAX >220m: Max arrival wind limit 15kn gusting 20kn
- PAX >220m: Max departure wind limit 20kn
- PAX >=228m: Max departure wind limit 15kn



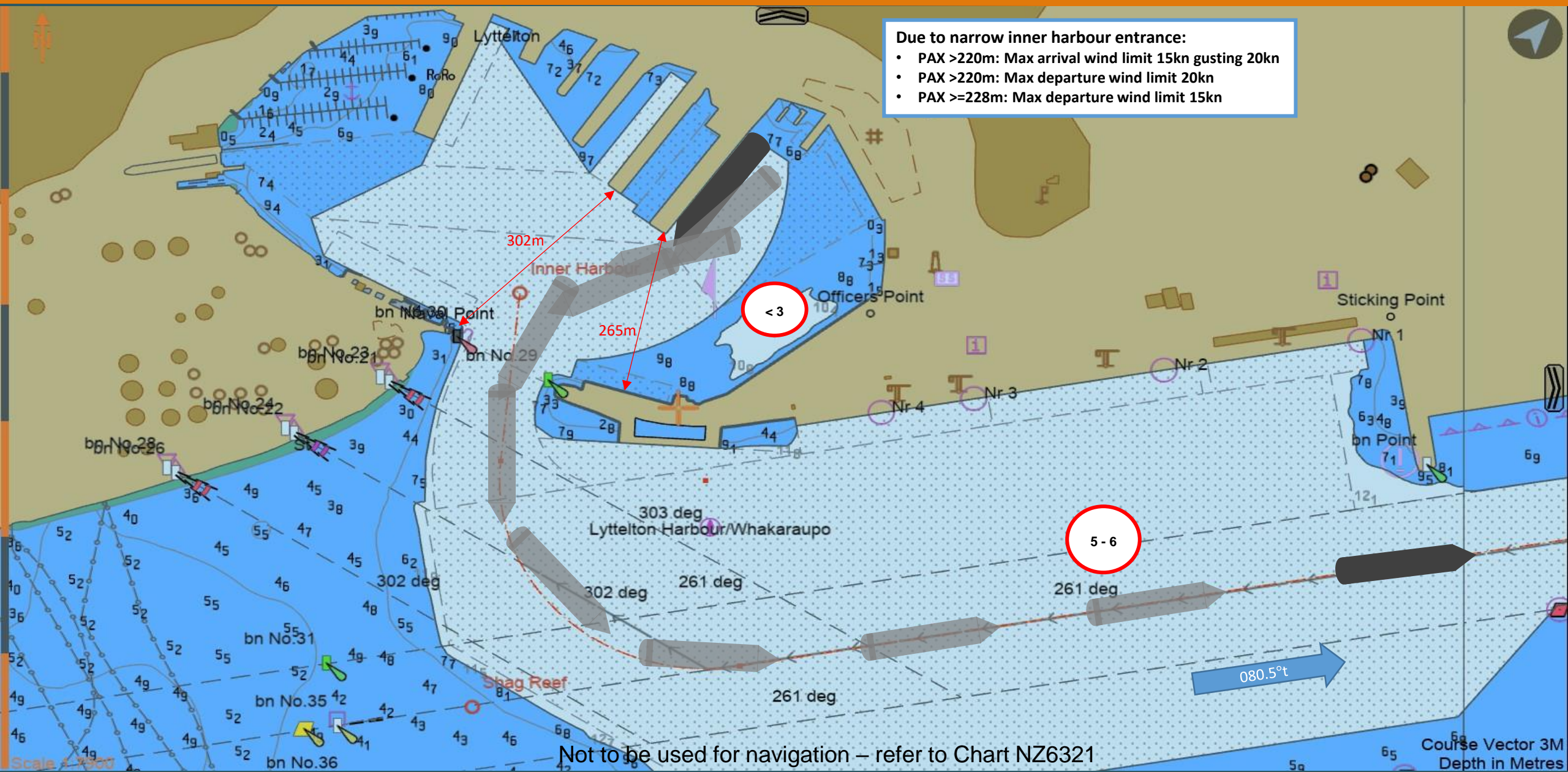
Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

# Departure: 2East SSTQ to Breakwater

Due to narrow inner harbour entrance:

- PAX >220m: Max arrival wind limit 15kn gusting 20kn
- PAX >220m: Max departure wind limit 20kn
- PAX >=228m: Max departure wind limit 15kn



Not to be used for navigation – refer to Chart NZ6321

# Departure: 2East SSTQ to Breakwater

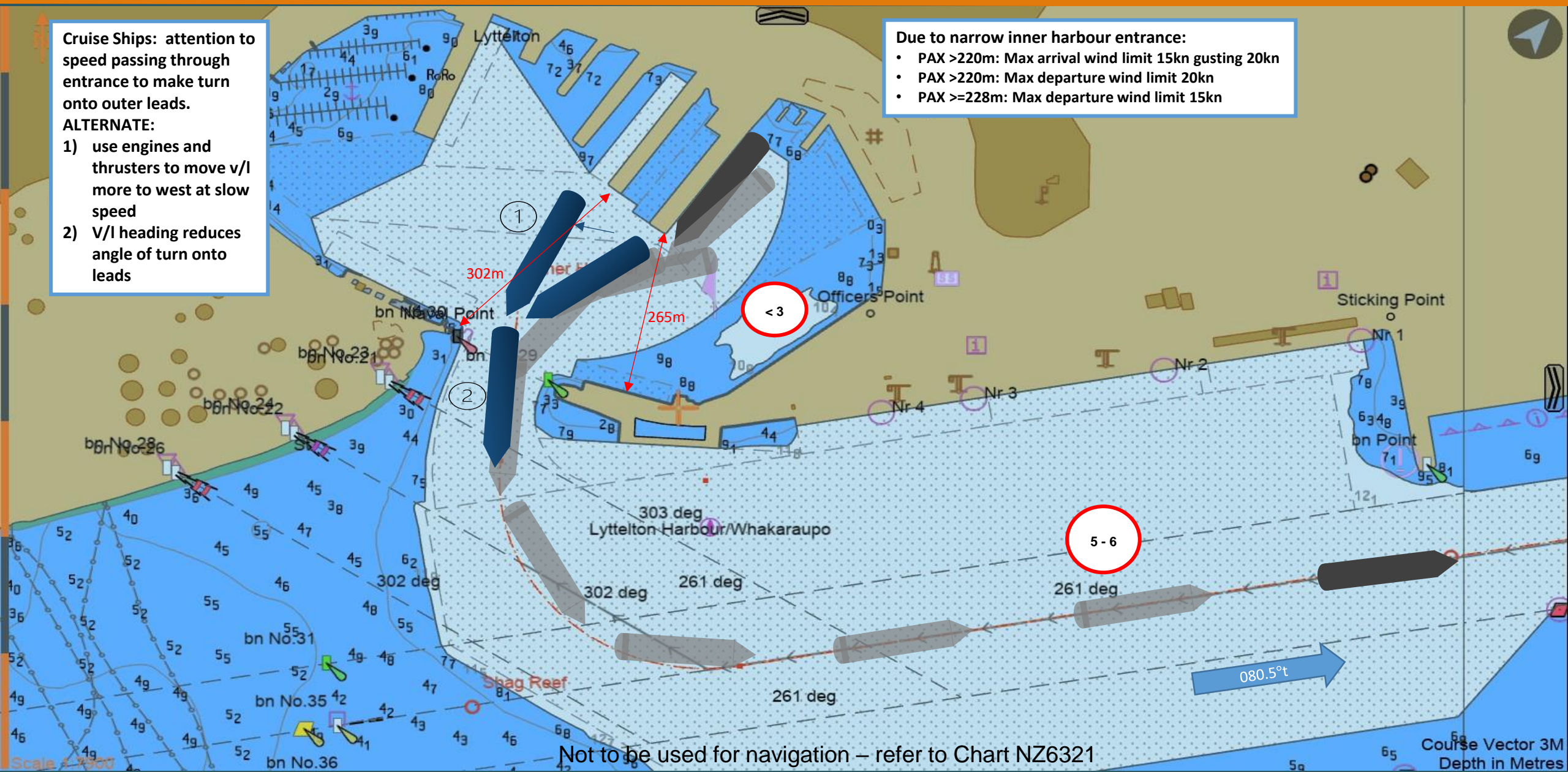
Cruise Ships: attention to speed passing through entrance to make turn onto outer leads.

**ALTERNATE:**

- 1) use engines and thrusters to move v/l more to west at slow speed
- 2) V/l heading reduces angle of turn onto leads

Due to narrow inner harbour entrance:

- PAX >220m: Max arrival wind limit 15kn gusting 20kn
- PAX >220m: Max departure wind limit 20kn
- PAX >=228m: Max departure wind limit 15kn



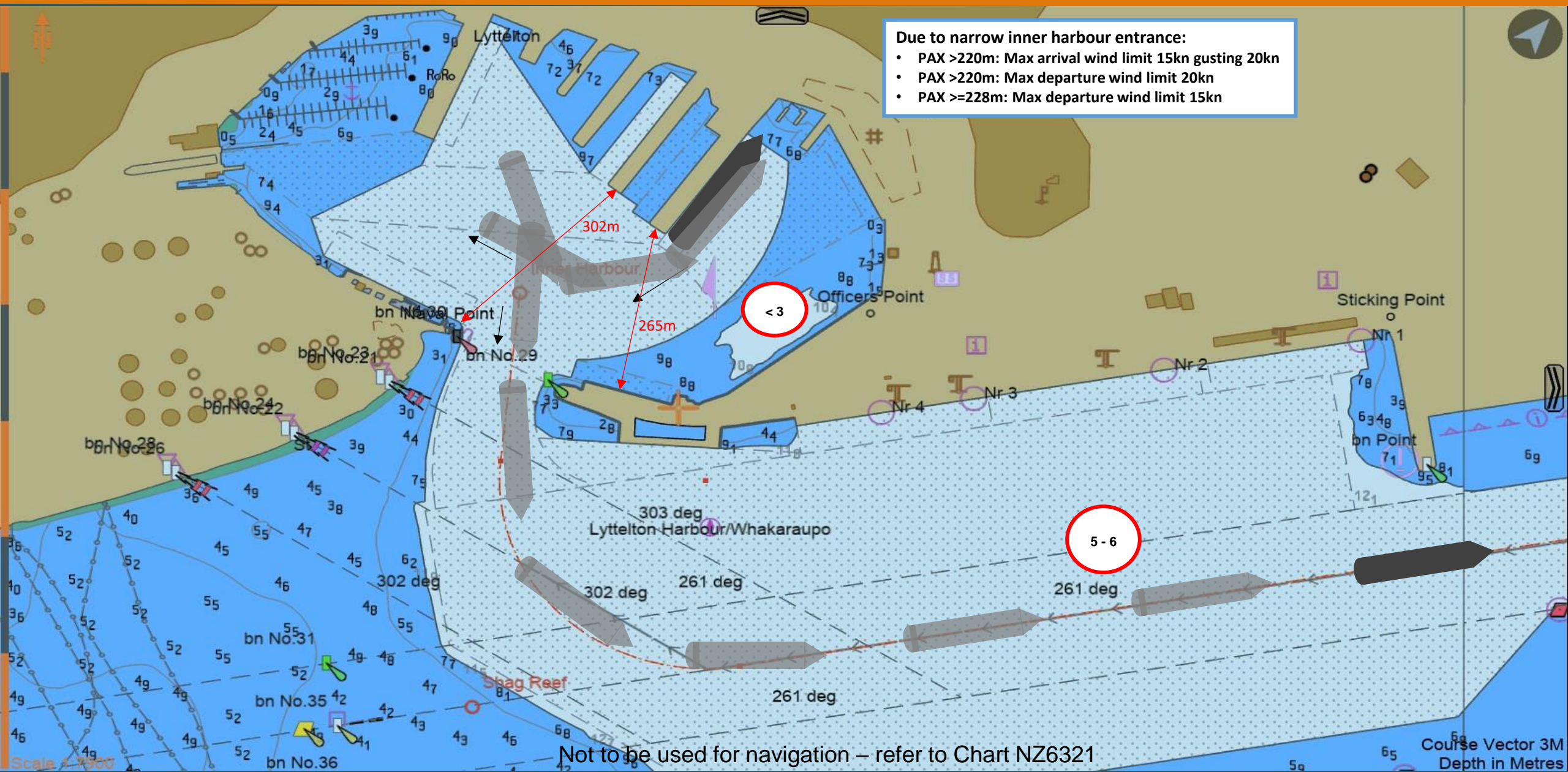
Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

# Departure: 2East PSTQ to Breakwater

Due to narrow inner harbour entrance:

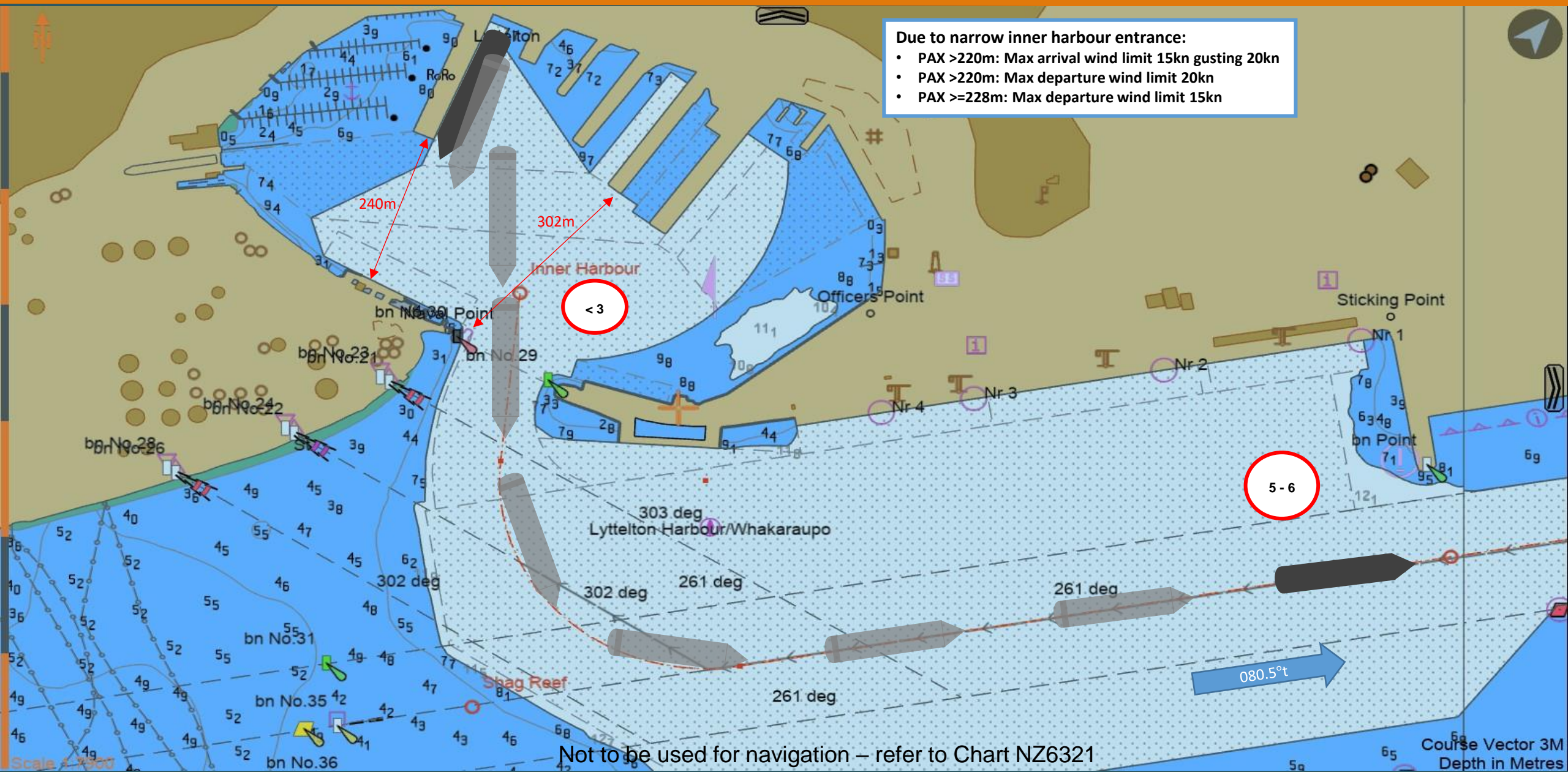
- PAX >220m: Max arrival wind limit 15kn gusting 20kn
- PAX >220m: Max departure wind limit 20kn
- PAX >=228m: Max departure wind limit 15kn



Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

# Departure: 7East SSTQ to Breakwater



Due to narrow inner harbour entrance:

- PAX >220m: Max arrival wind limit 15kn gusting 20kn
- PAX >220m: Max departure wind limit 20kn
- PAX >=228m: Max departure wind limit 15kn

Not to be used for navigation – refer to Chart NZ6321

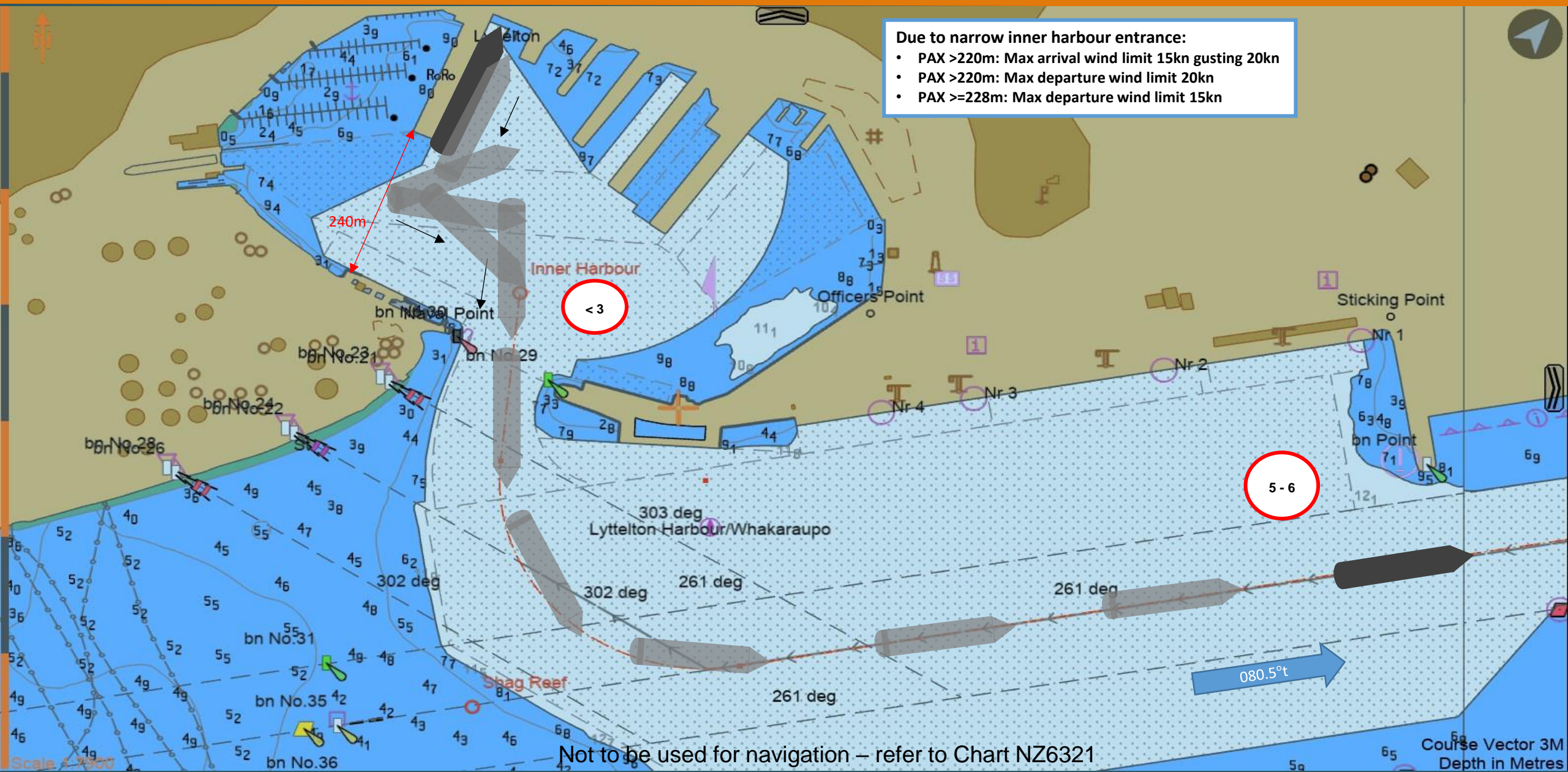
Course Vector 3M  
Depth in Metres



# Departure: 7East PSTQ to Breakwater

Due to narrow inner harbour entrance:

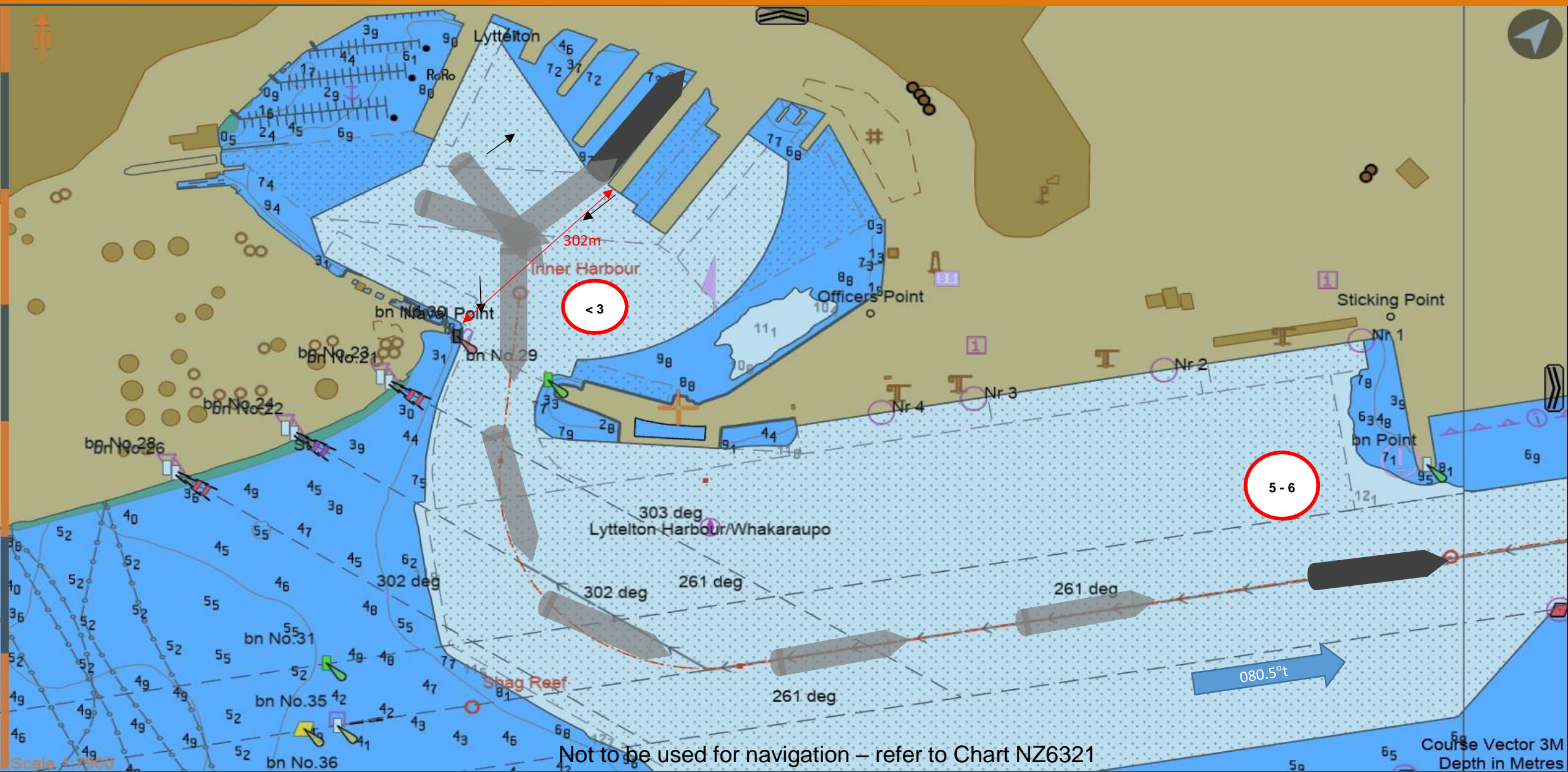
- PAX >220m: Max arrival wind limit 15kn gusting 20kn
- PAX >220m: Max departure wind limit 20kn
- PAX >=228m: Max departure wind limit 15kn



Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

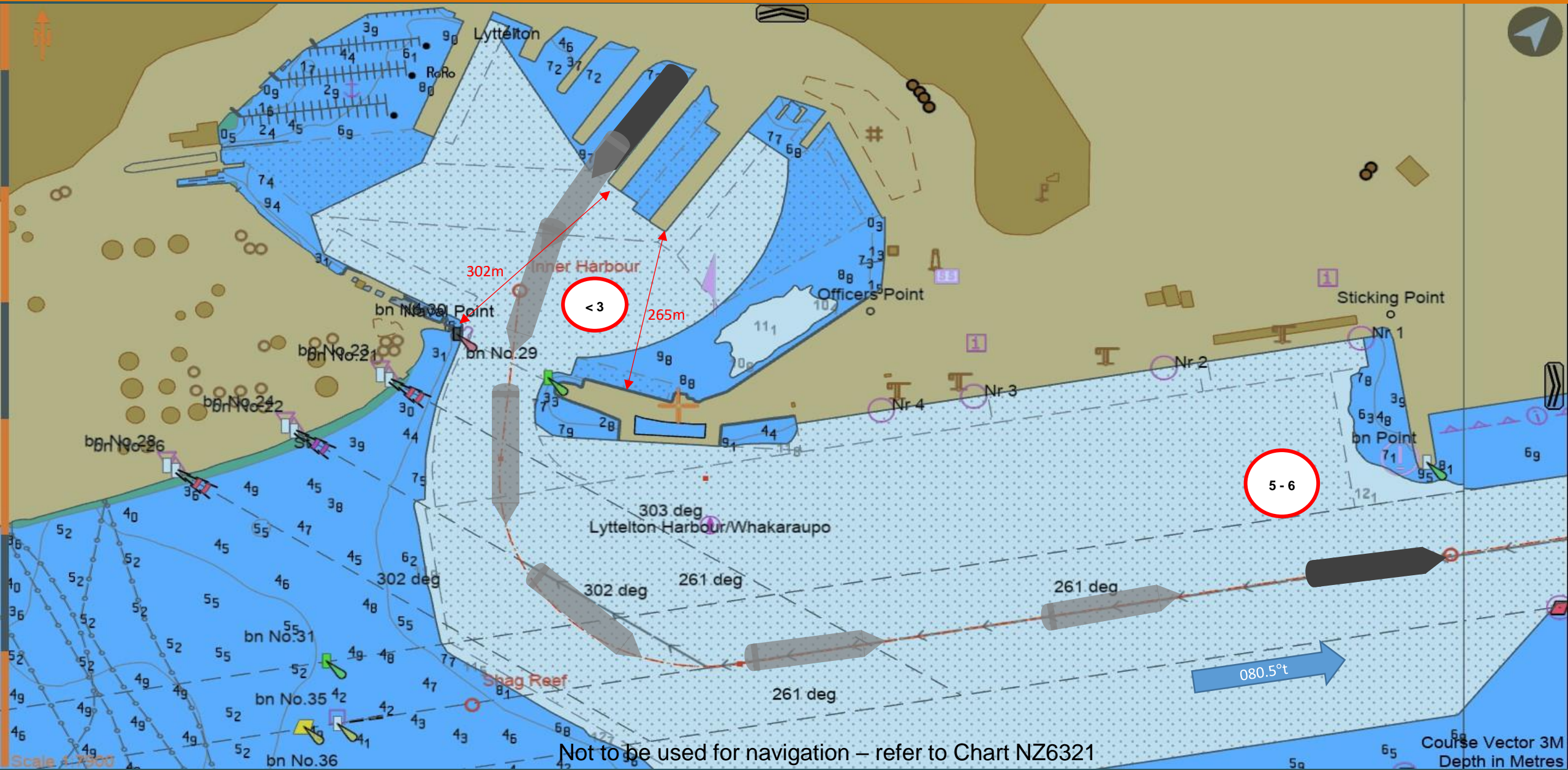
# Departure: 3West SSTQ to Breakwater



Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

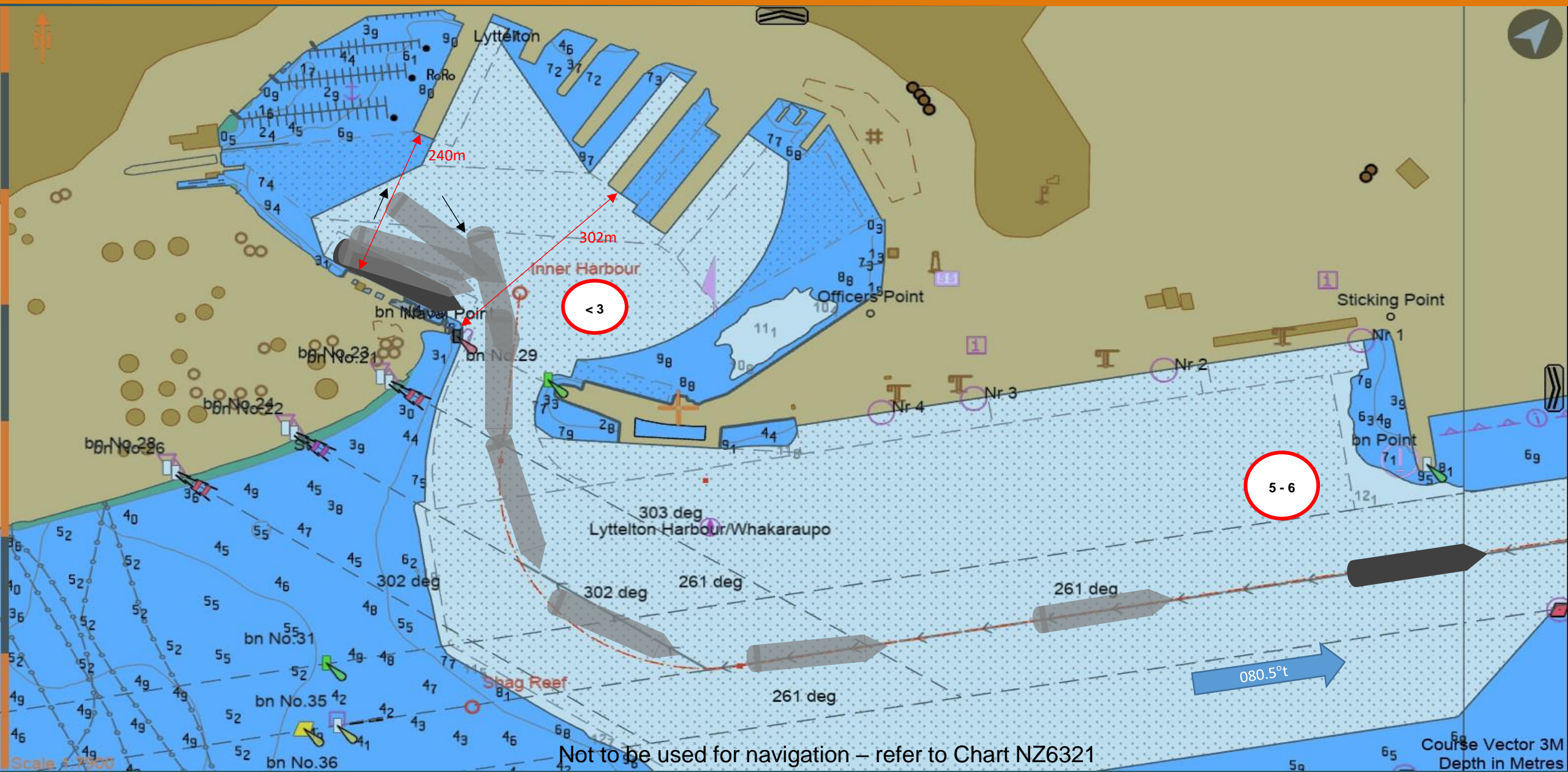
# Departure: 3West PSTQ to Breakwater



Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

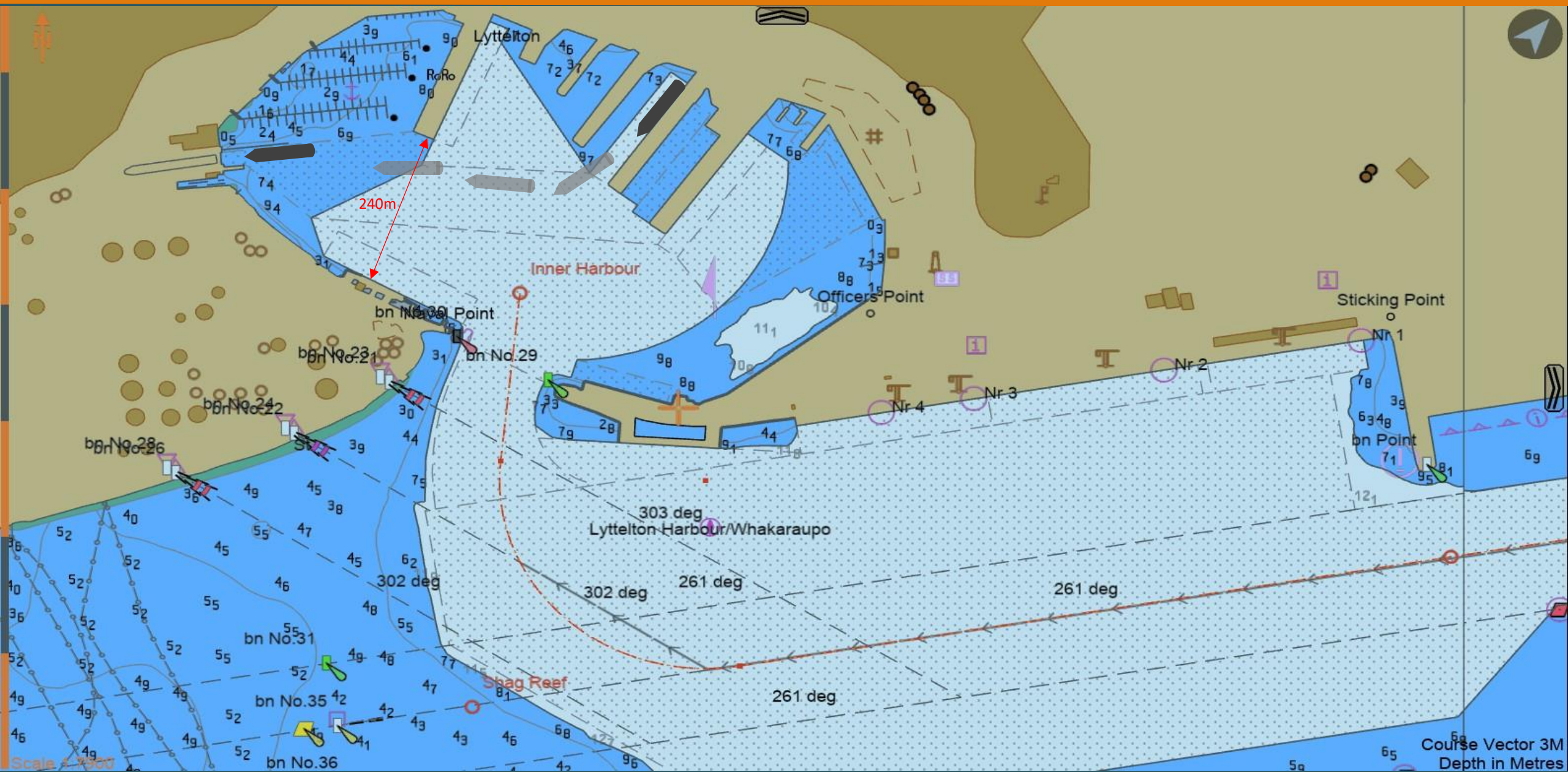
# Departure: Oil Berth SSTQ to Breakwater



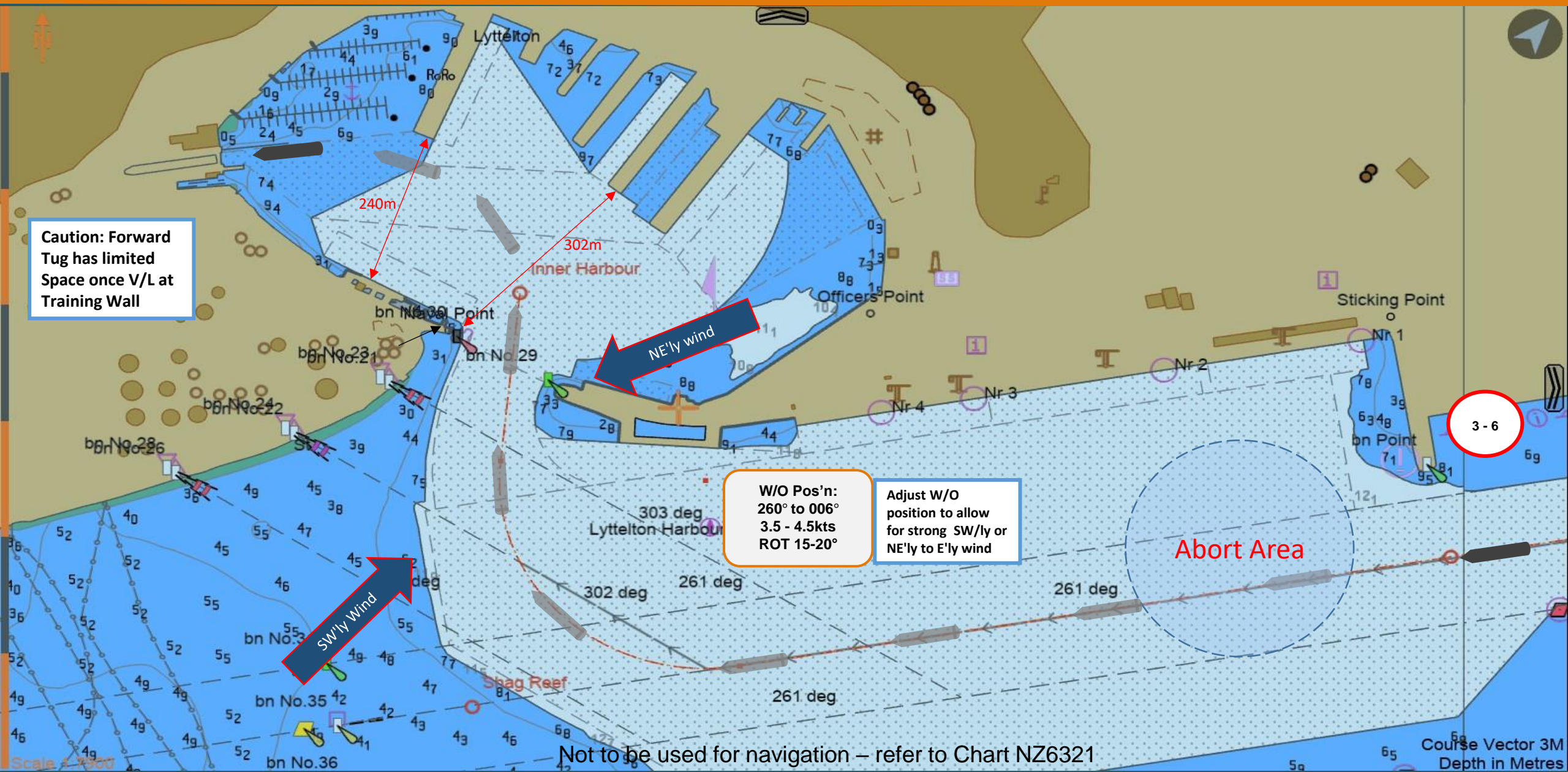
Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

# Shift: Dry Dock to 3West PSTQ



# Arrival: Breakwater to Dry Dock



Caution: Forward Tug has limited Space once V/L at Training Wall

W/O Pos'n:  
260° to 006°  
3.5 - 4.5kts  
ROT 15-20°

Adjust W/O position to allow for strong SW'ly or NE'ly to E'ly wind

3-6

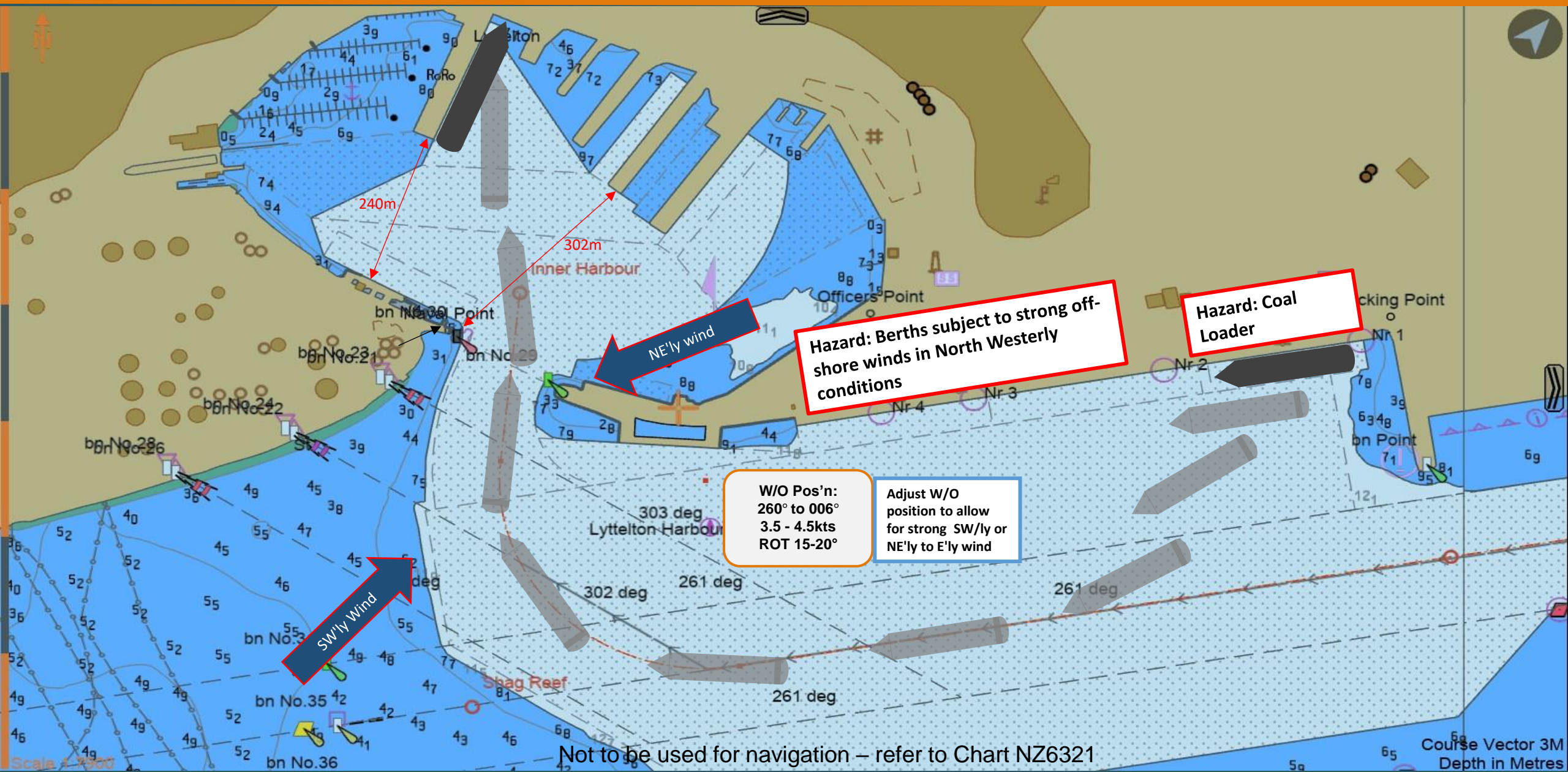
Abort Area

Not to be used for navigation - refer to Chart NZ6321

Scale 1:7500

Course Vector 3M  
Depth in Metres

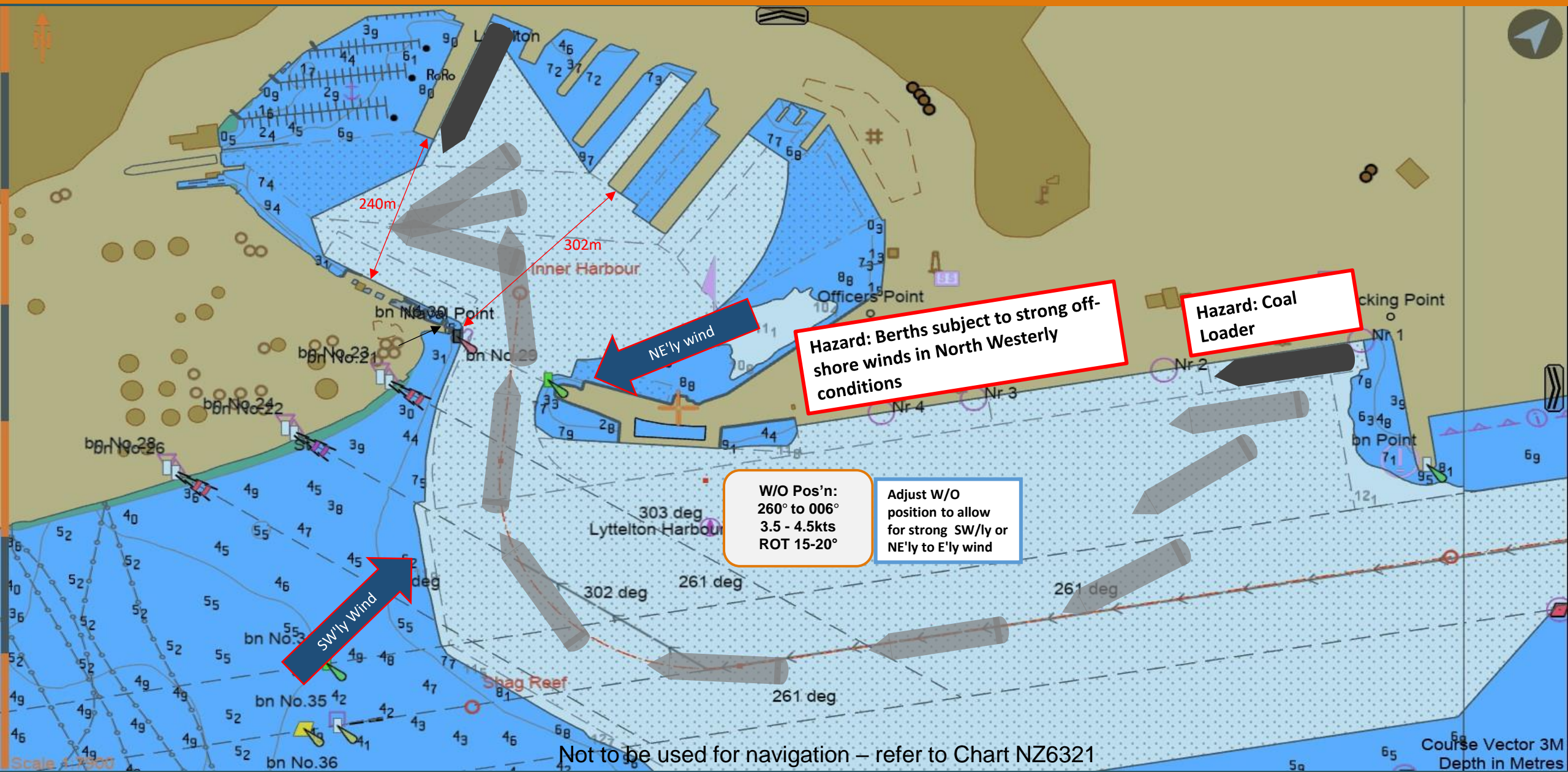
# Shift: CQ1 SSTQ to 7E PSTQ



Not to be used for navigation – refer to Chart NZ6321

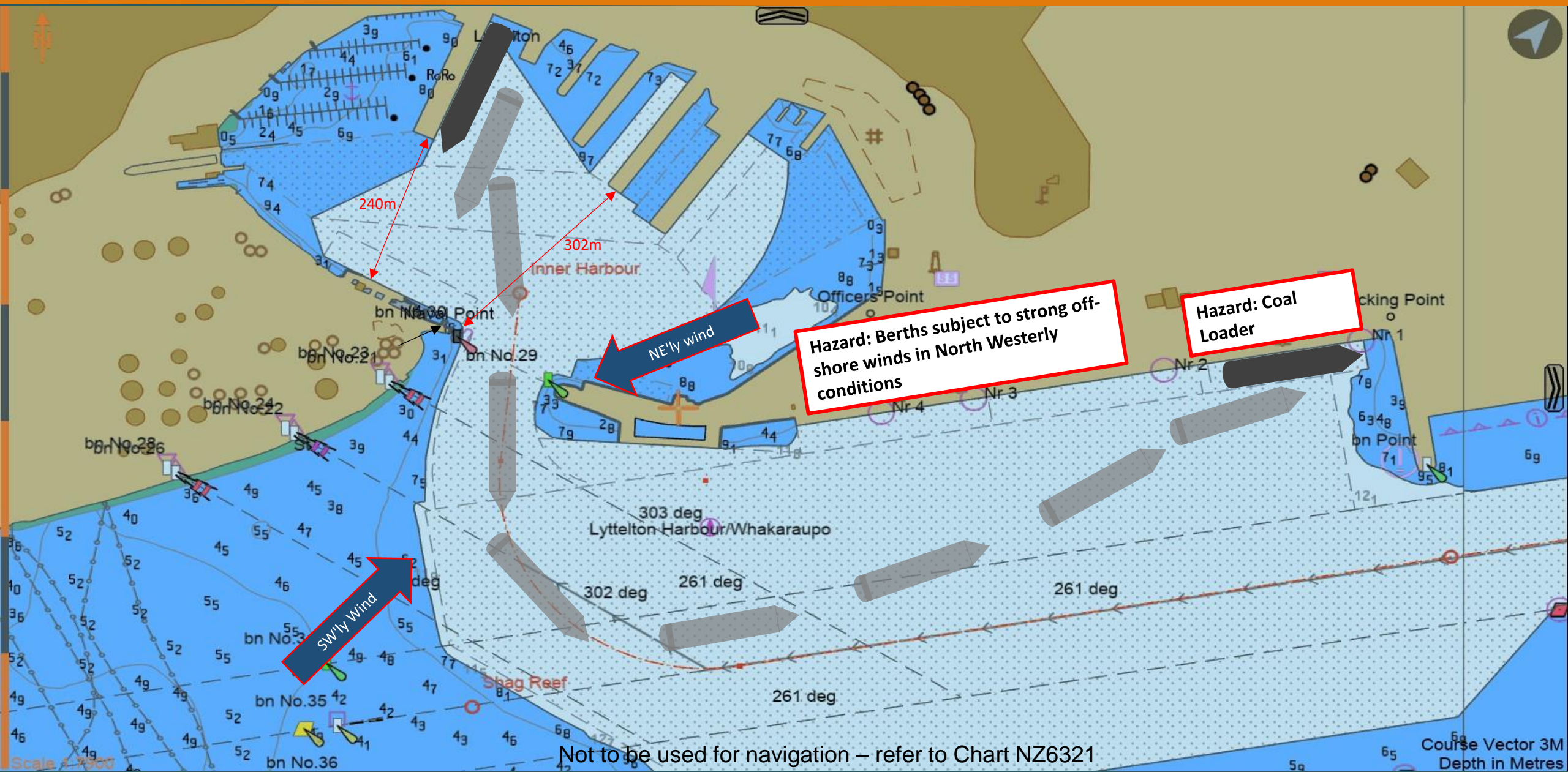
Course Vector 3M  
Depth in Metres

# Shift: CQ1 SSTQ to 7E SSTQ

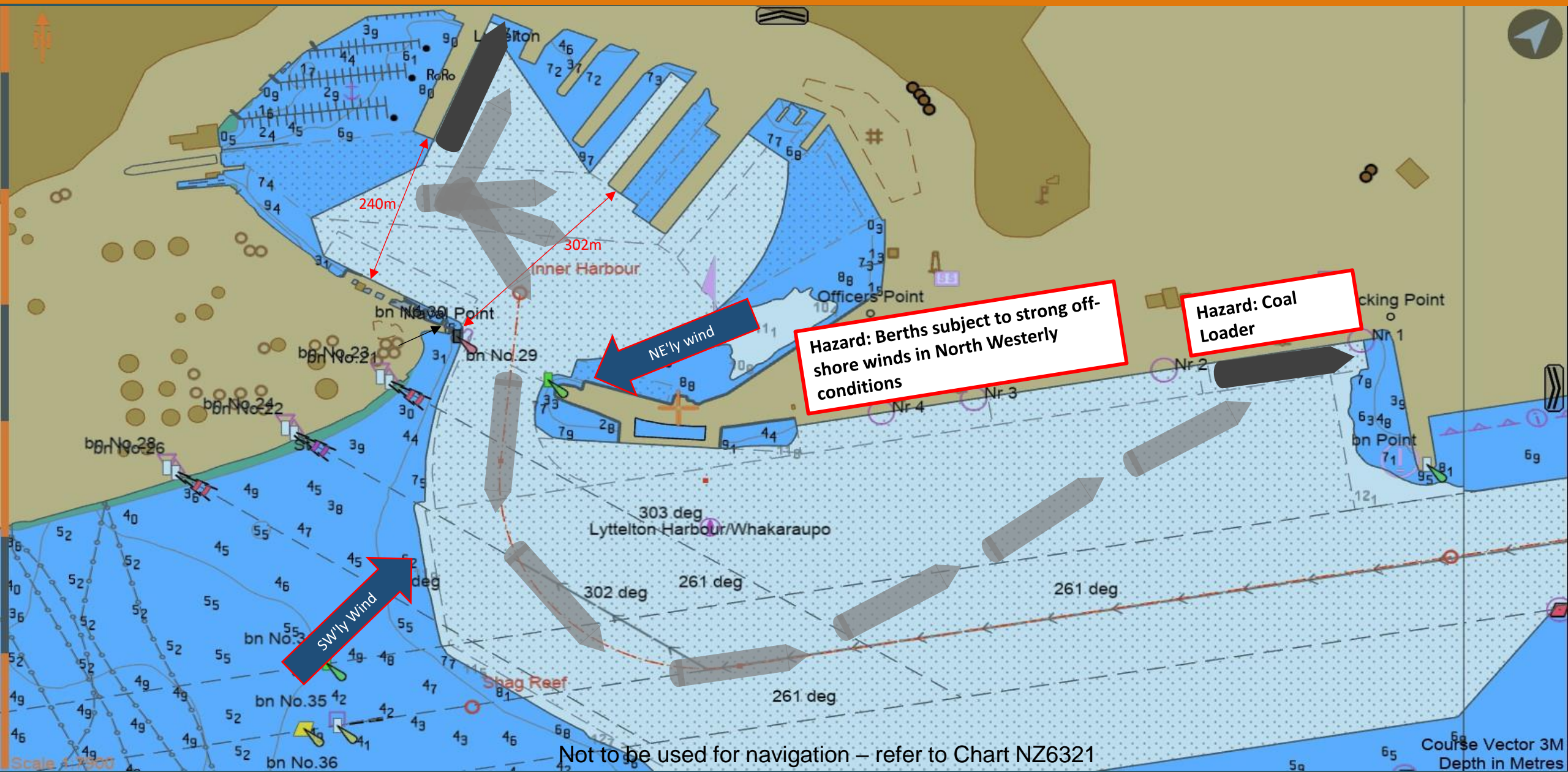




# Shift: 7E SSTQ to CQ1 PSTQ



# Shift: 7E PSTQ to CQ1 PSTQ



Hazard: Berths subject to strong off-shore winds in North Westerly conditions

Hazard: Coal Loader

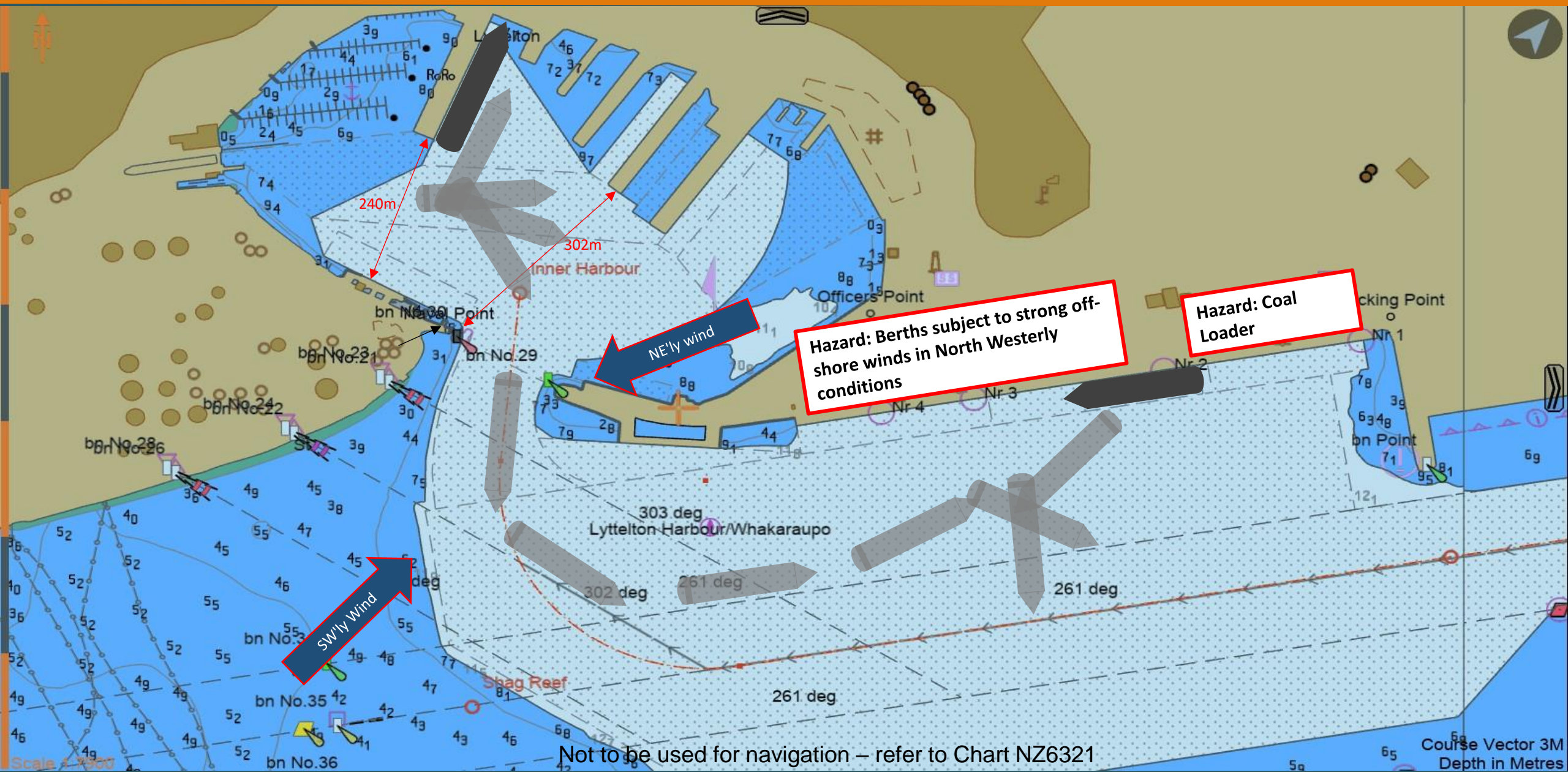
NE'ly wind

SW'ly Wind

Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

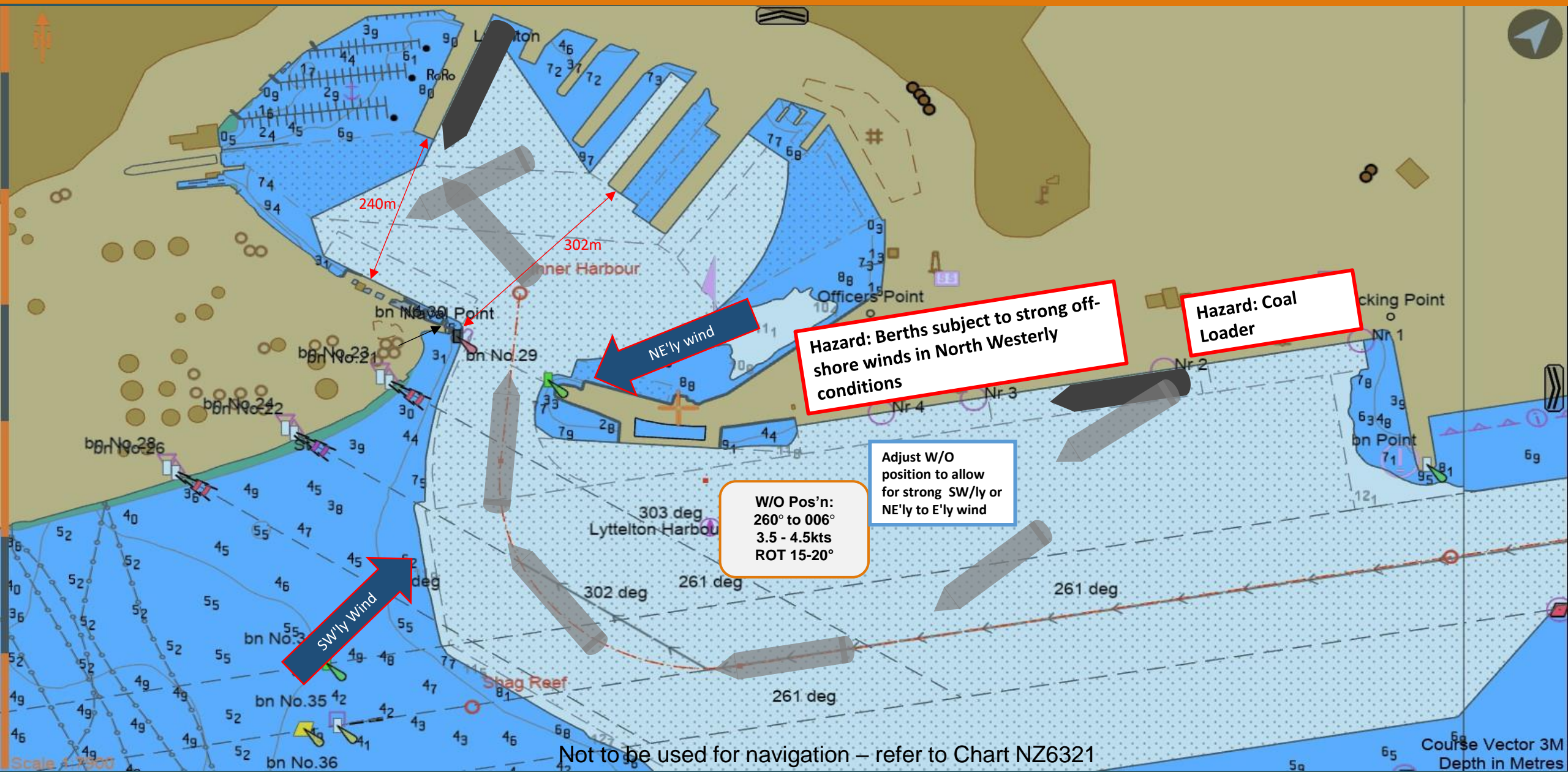
# Shift: 7E PSTQ to CQE SSTQ



Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

# Shift: CQE SSTQ to 7E SSTQ



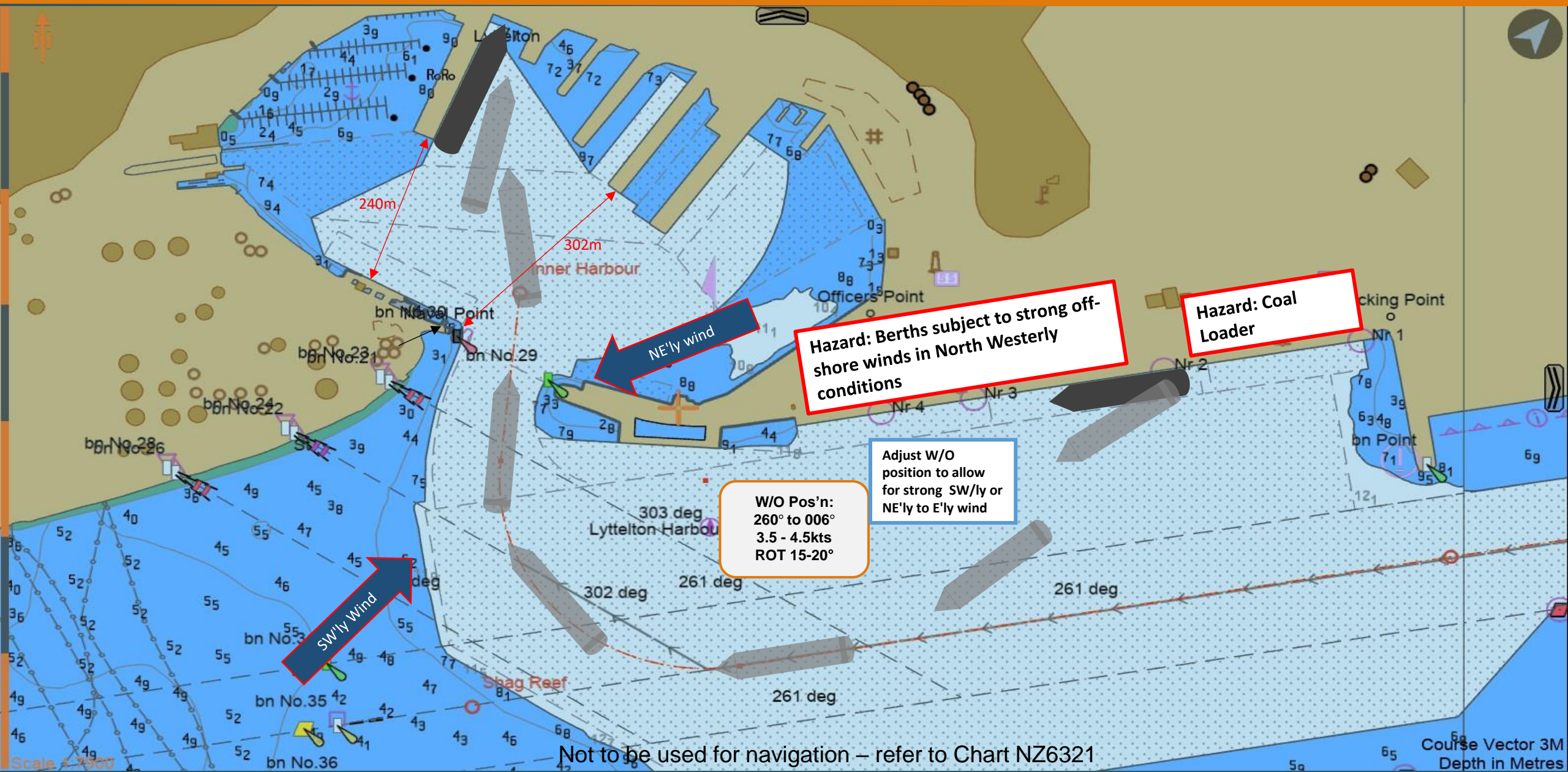
W/O Pos'n:  
260° to 006°  
3.5 - 4.5kts  
ROT 15-20°

Adjust W/O  
position to allow  
for strong SW'ly or  
NE'ly to E'ly wind

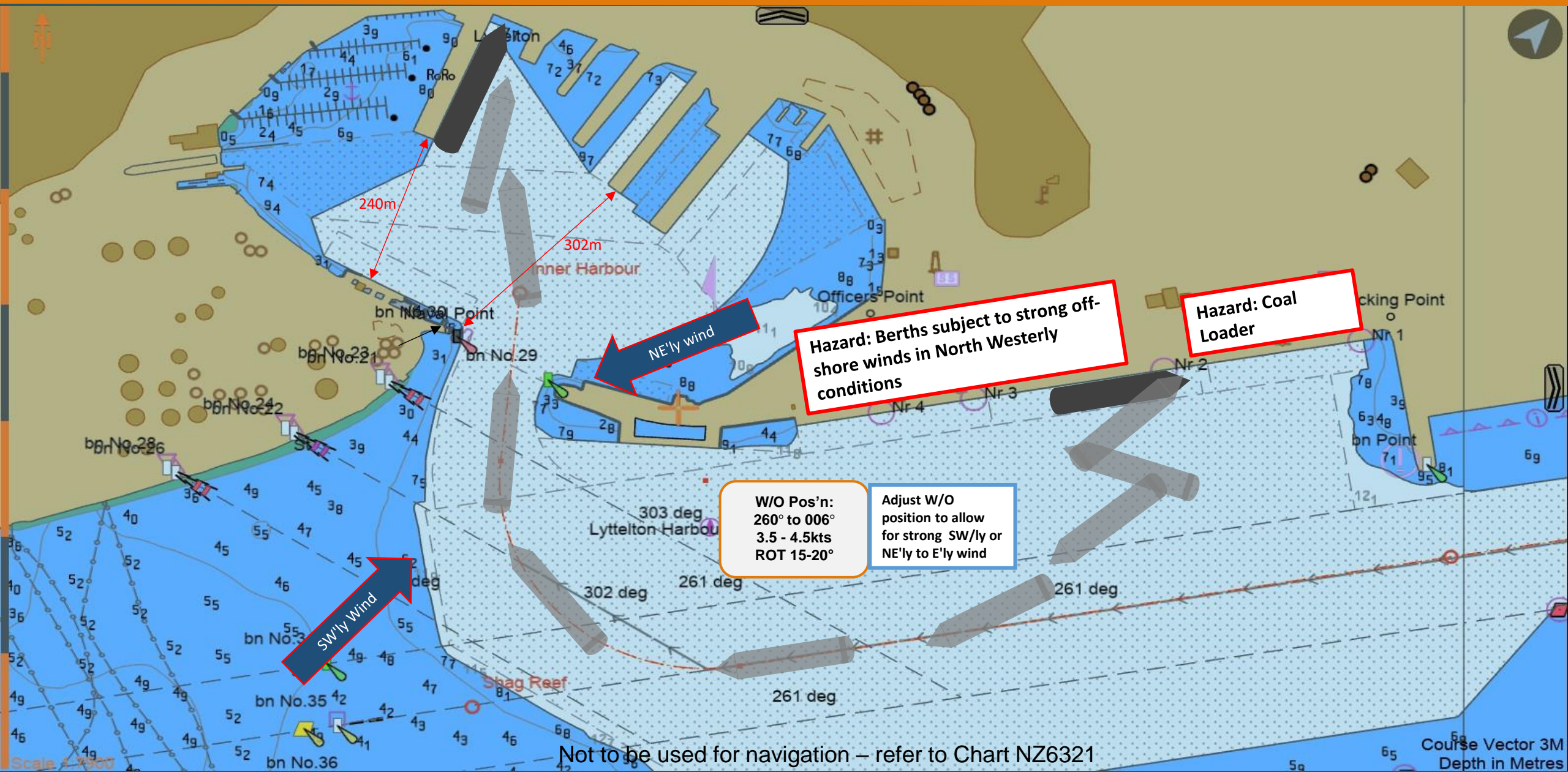
Not to be used for navigation – refer to Chart NZ6321

Course Vector 3M  
Depth in Metres

# Shift: CQE SSTQ to 7E PSTQ



# Shift: CQE PSTQ to 7E PSTQ



Hazard: Berths subject to strong off-shore winds in North Westerly conditions

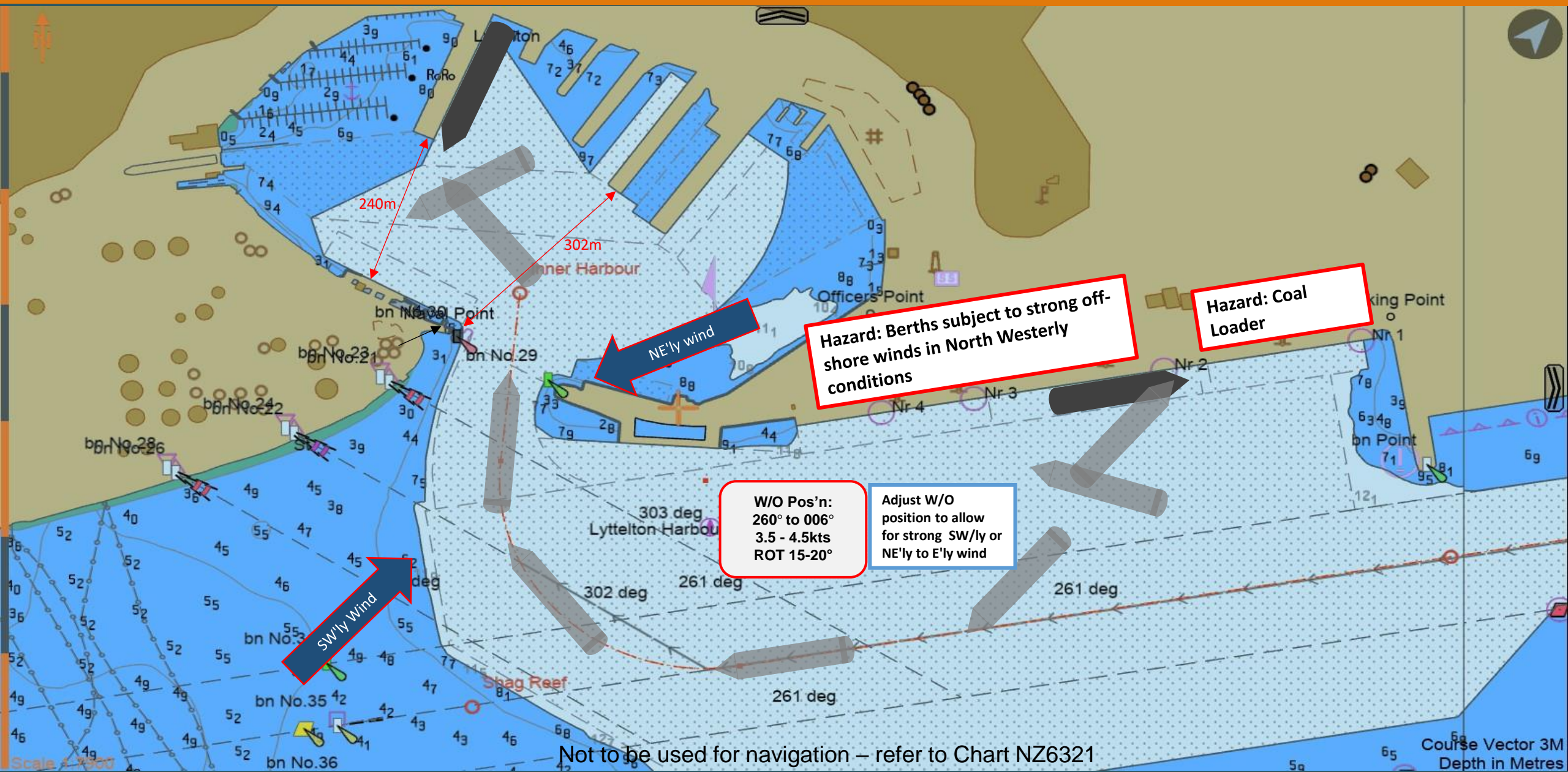
Hazard: Coal Loader

W/O Pos'n:  
260° to 006°  
3.5 - 4.5kts  
ROT 15-20°

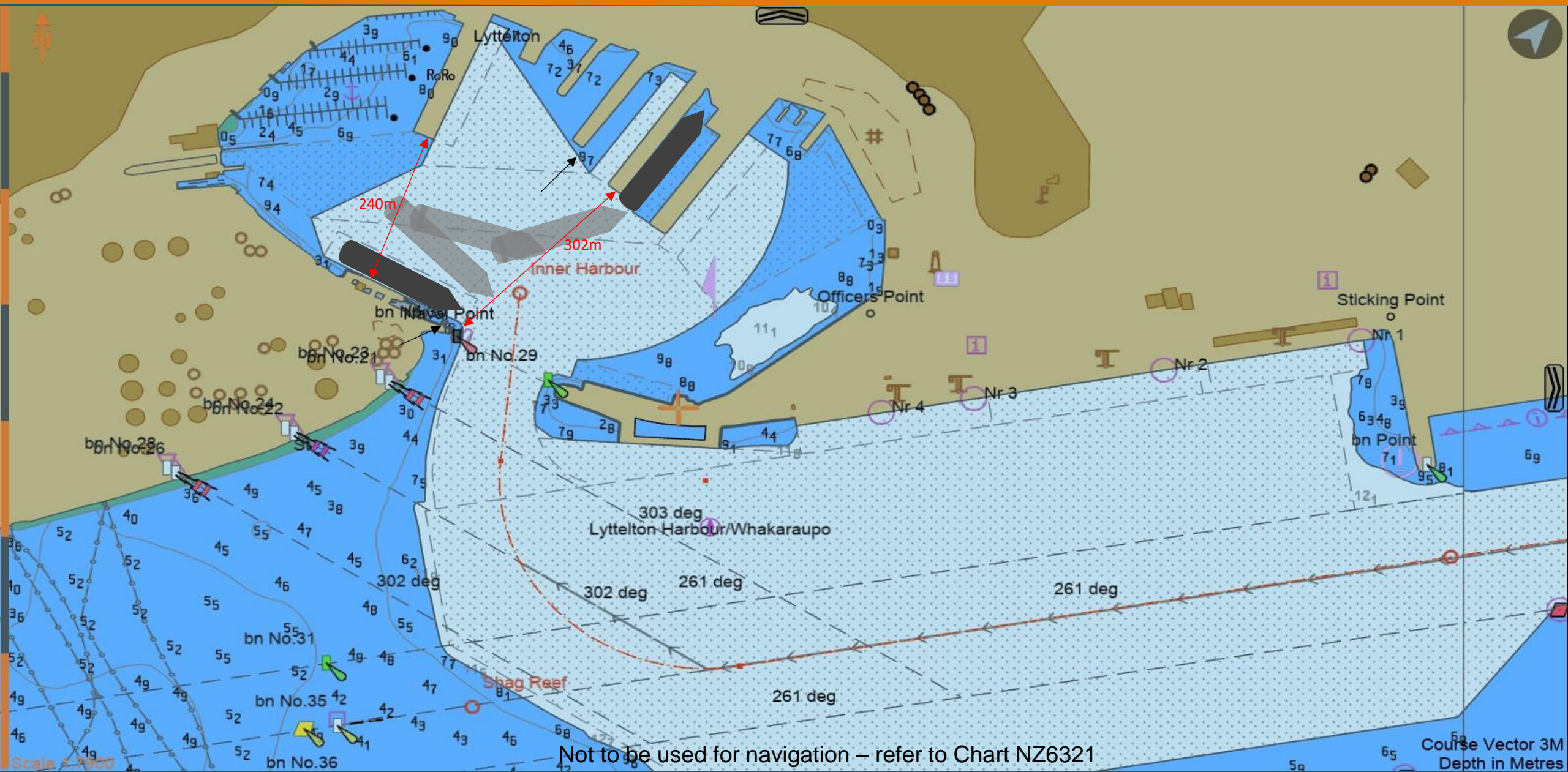
Adjust W/O  
position to allow  
for strong SW'ly or  
NE'ly to E'ly wind

Not to be used for navigation – refer to Chart NZ6321

# Shift: CQE PSTQ to 7E SSTQ

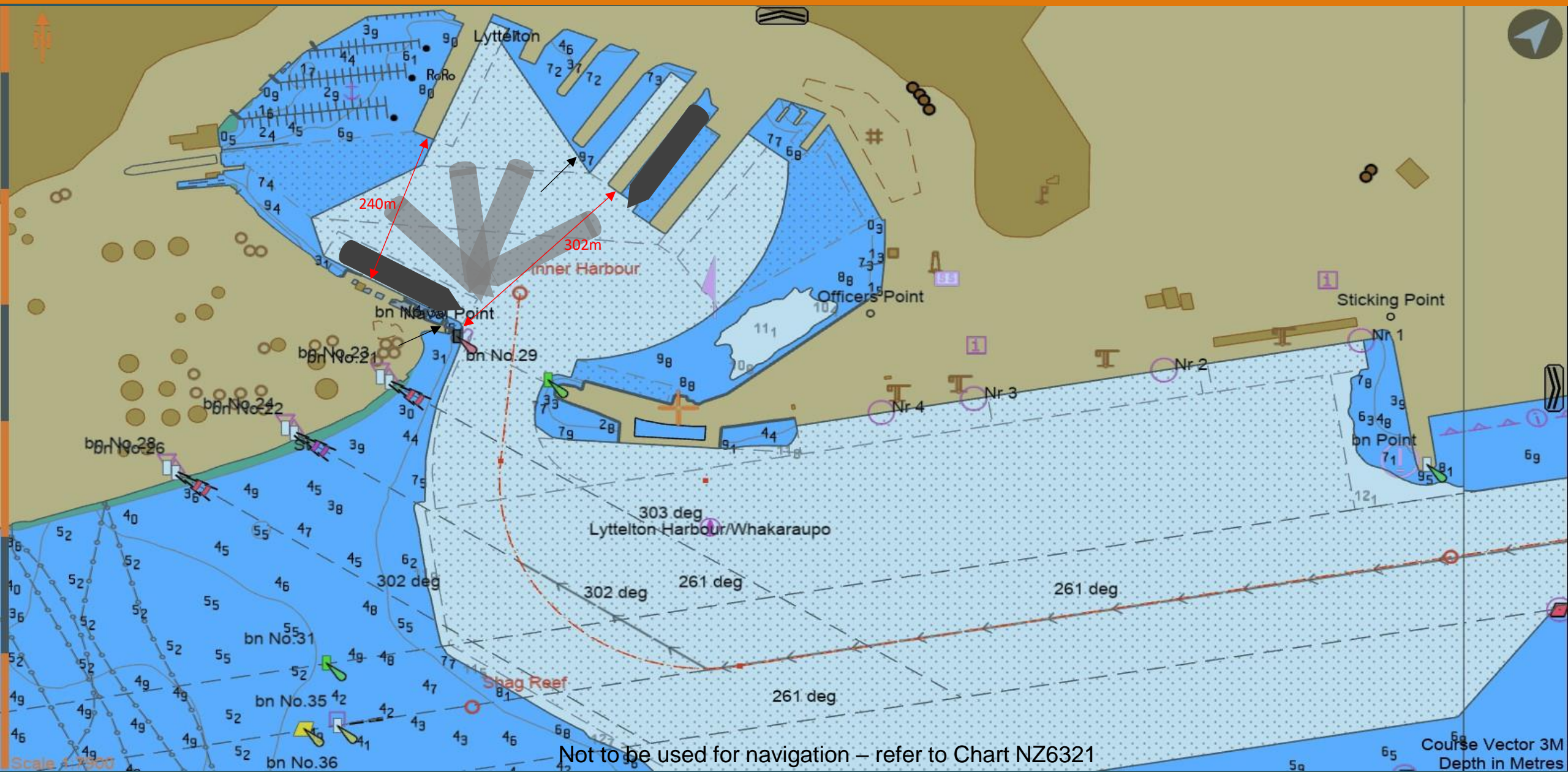


# Shift OB SSTQ to 3E PSTQ

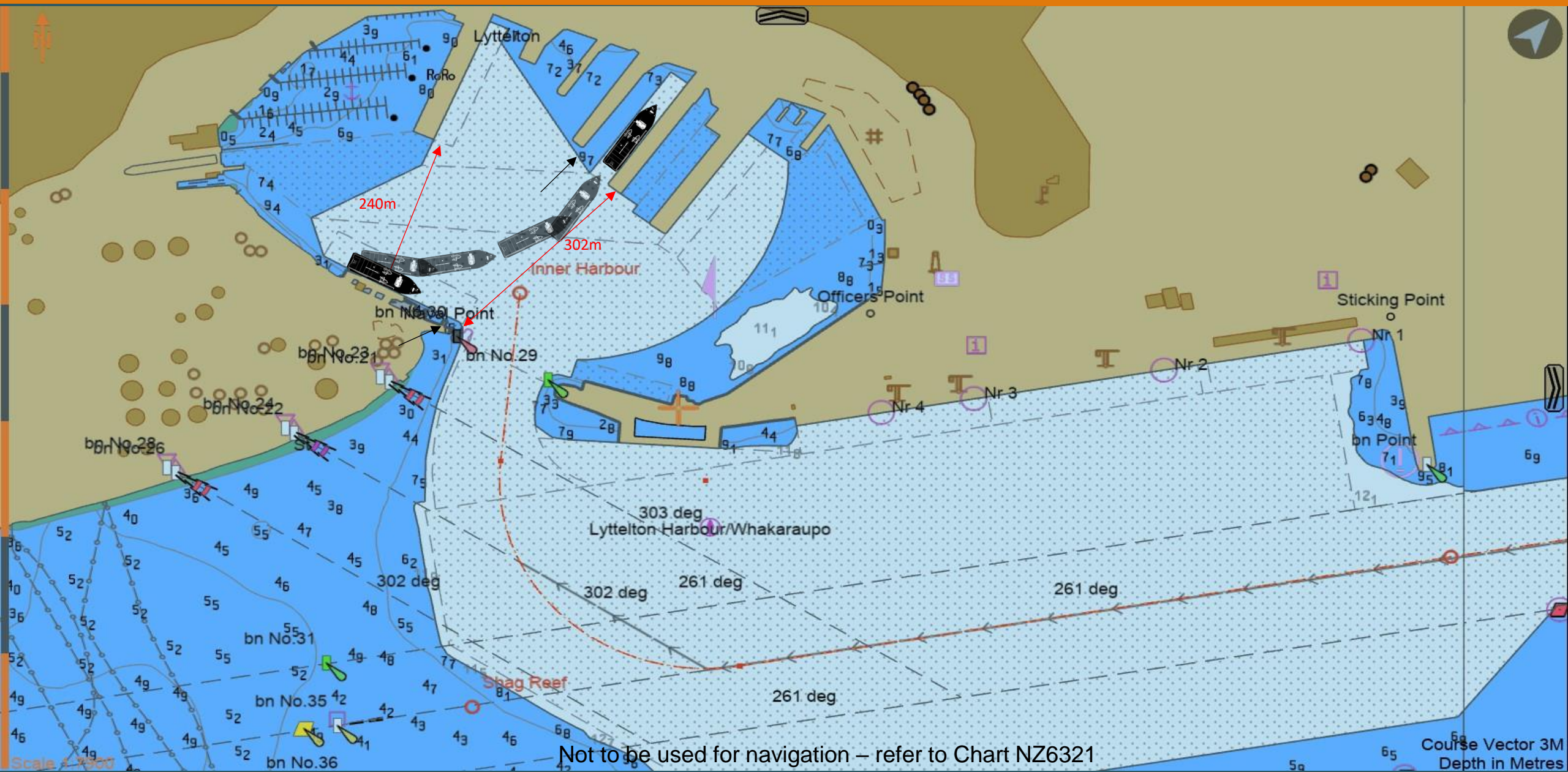




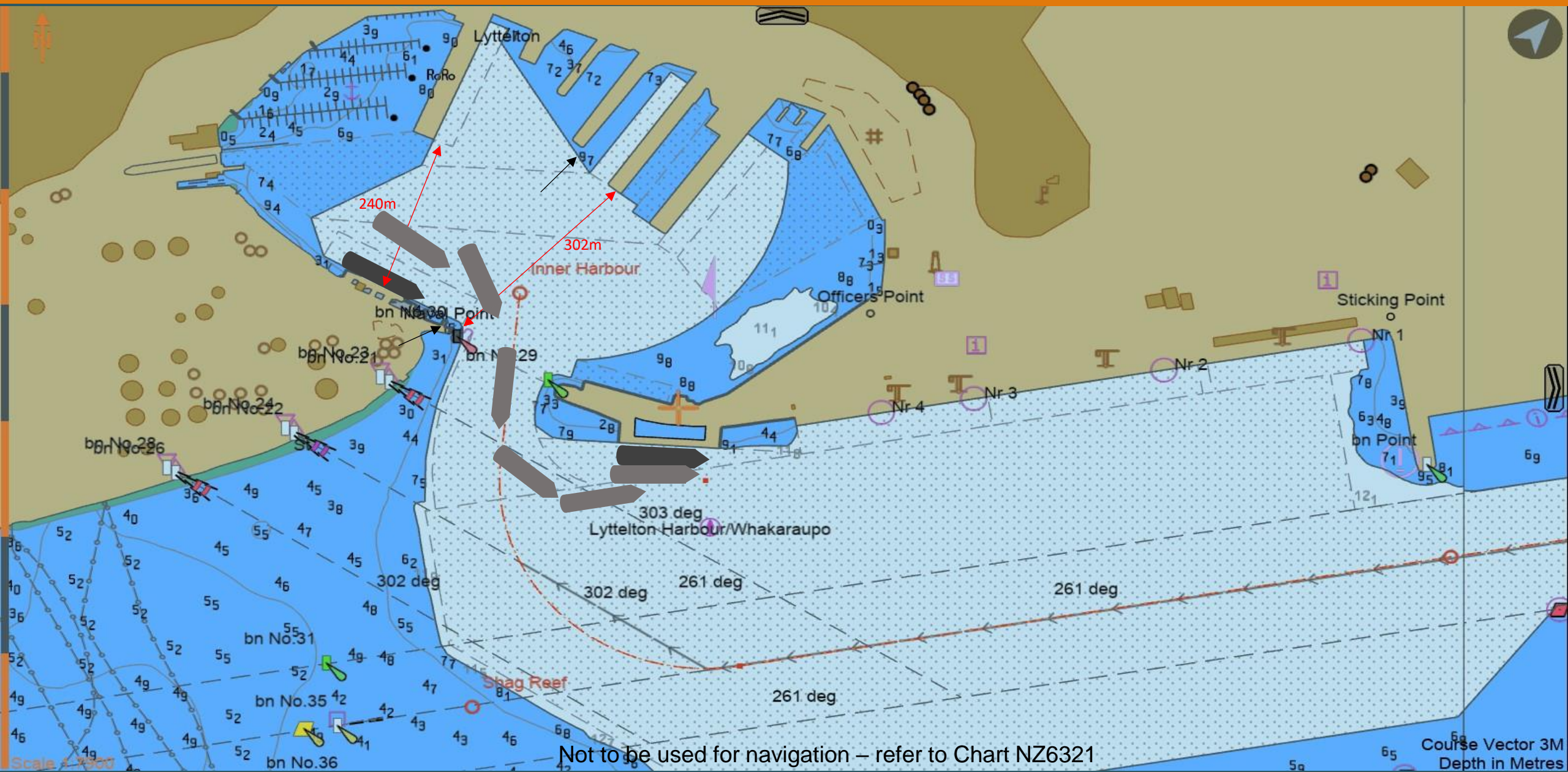
# Shift OB SSTQ to 3E SSTQ



# Shift 3W SSTQ to OB SSTQ



# Shift OB SSTQ to CB PSTQ



Not to be used for navigation – refer to Chart NZ6321