

For discussion on
28 November 2022

Legislative Council Panel on Economic Development

Updates on Marine Legislation

Legislative amendments to enhance the efficiency of marine services and better regulate marine traffic

PURPOSE

This Paper consults Members on two legislative proposals which aim to respectively –

- (a) facilitate the use of electronic certificates (“e-certs”) and electronic log-books (“e-logbooks”) for Hong Kong-registered ships which are ocean-going vessels under the Hong Kong Shipping Register (“Hong Kong-registered ships”) and seafarers, so as to enhance the efficiency of marine services; and
- (b) set up eleven Vessel Height Restriction Areas (“VHRAs”) along the viaducts of the Tseung Kwan O Cross Bay Bridge (“TKOCBB”), Tseung Kwan O Interchange (“TKOI”) and Southern Bridge (“SB”) in Tseung Kwan O (“TKO”) to better regulate marine traffic.

LEGISLATIVE PROPOSALS

I. Facilitating the use of e-certs and e-logbooks for Hong Kong-registered ships and seafarers

Background

2. As one of the policy measures announced in the Chief Executive's 2022 Policy Address, the Government will implement by phases the use of electronic certificates/licences/permits (collectively referred to as "e-certs") by Hong Kong-registered ships and local vessels with a view to enhancing marine services.

3. With the advent of digital encryption and other cybersecurity technology, e-certs in place of certificates/licences/permits in paper format are increasingly popular worldwide. In addition to significantly reducing the time required for processing applications and delivering the certificates/licences/permits to the applicants, the electronic authentication system of e-certs also offers a higher level of security against forgery. Similarly, e-logbooks¹ are becoming more prevalent than traditional paper log-books. E-logbooks reduce the workload of shipboard staff in reproducing the data on paper and help ensure the accuracy of entries by automatic feeding of

¹ Log-books are a record of important events in the management, operation, and navigation of a ship, such as incidents during passage, navigational activities, ship machinery parameters, performance, maintenance and malfunctions, radio-communications, etc.

data from a ship's equipment to the e-logbooks directly. In this connection, the International Maritime Organization ("IMO") first published in 2013 guidelines for the use of e-certs² that seek to set a global standard on the functions and security requirements of e-certs. Together with other relevant international organisation, IMO has also adopted guidelines for use of electronic records³ to which reference could be made in regulating the use of e-logbooks.

4. Based on the advice of the Department of Justice ("DoJ"), the existing shipping legislation of Hong Kong were enacted back in time without fully envisaging the possibility of transacting shipping businesses by electronic means. In particular, certain legal requirements under the existing legislation either require or imply that an action can only be done using paper certificates/licences/permits. Hence it is necessary to amend the existing shipping legislation to enable the operation of electronic certification system in reconciliation with existing statutory requirements, and for the sake of legal certainty, specifying the acceptance of e-certs and e-logbooks.

² Relevant guidelines have now been updated as the Guidelines for the Use of Electronic Certificates (FAL.5/Circ.39/Rev.2).

³ Such guidelines include the Guidelines for the Use of Electronic Record Books under the International Convention for the Prevention of Pollution from Ships ("MARPOL") adopted by the IMO (the IMO Resolution MEPC 312(74) in 2019, as implemented on Hong Kong-registered ships through amendments to local merchant shipping legislation with effect from 1 October 2020), as well as similar guidelines for shipboard electronic record books issued by the International Organization for Standardization ("ISO") (ISO 21745 – "Electronic record books for ships-Technical specification and operational requirements").

5. Accordingly, we propose proceeding with the legislative proposals as elucidated in paragraphs 6 to 8 below. In line with the trend of digitalisation in the maritime and shipping sector and in pursuit of Government's policy objective to facilitate technology adoption in the public sector and the implementation of digital government transformation, the legislative proposal will enhance the convenience and efficiency of our shipping registry services, thereby enhancing the status of Hong Kong as an international maritime centre.

Legislative proposal

6. We propose to specify in the seven pieces of relevant shipping legislation⁴ that e-certs and e-logbooks shall have the same legal effect as paper certificates/licences/permits and log-books. To enable continued use of paper certificates/licences/permits and log-books before complete transition to e-certs and e-logbooks in future, we propose to keep the existing regime regarding paper certificates/licences/permits and log-books intact, while allowing the use of e-certs and e-logbooks by providing for the use of e-certs and e-logbooks to satisfy the same statutory

⁴ The seven pieces of relevant shipping legislation are the Merchant Shipping (Safety) Ordinance (Cap. 369), Merchant Shipping (Prevention and Control of Pollution) Ordinance (Cap. 413), Merchant Shipping (Liability and Compensation for Oil Pollution) Ordinance (Cap. 414), Merchant Shipping (Registration) Ordinance (Cap. 415), Merchant Shipping (Seafarers) Ordinance (Cap. 478), Merchant Shipping (Security of Ships and Port Facilities) Ordinance (Cap. 582), and Bunker Oil Pollution (Liability and Compensation) Ordinance (Cap. 605).

requirements.

7. In particular, we propose to specify the manner on how actions in relation to certificates/licences/permits and log-books required for relevant parties could be done in the case of e-certs and e-logbooks⁵ in a new part of the seven pieces of relevant shipping legislation. Since such manner is dictated by the features of e-certs and electronic record set out in the international guidelines referred to under paragraph 3 above, which are updated from time to time by the IMO, we propose to adopt the direct reference approach, which is widely adopted in local shipping legislation by making direct reference to the provisions of international conventions. This would keep the local legislation in tandem with the requirements based on the international guidelines. Similarly, for e-logbooks, we propose that entries or records required under the seven pieces of relevant shipping legislation may be made or kept in e-logbooks in an electronic device on board the ship to which the log-book relates in accordance with the requirements set out in the guidelines for use of electronic records. Such international guidelines, and certificates/licences/permits and log-books covered by the legislative proposal, will be tabulated in a new Schedule to the seven pieces of relevant shipping legislation. As with a number of

⁵ For example, for issuance of certificates/licences/permits, since e-certs cannot be manually signed as certificates/licences/permits in paper form, without affecting the integrity of the regime for paper certificates/licences/permits, we propose to enable issuance of e-certs by electronic means according to the features set out in the IMO Guidelines for the Use of Electronic Certificates. In practice, an e-cert will contain features for verification and confirmation of validity and authenticity such as unique tracking number (“UTN”) to serve as identifier to distinguish an e-cert and protection from editing, etc.

existing local maritime legislation, it is proposed that the said Schedule would be amended by the Secretary for Transport and Logistics by notice published in the Gazette, so as to enable a more timely implementation of the latest international requirements.

8. In preparation for the development and implementation of the e-certs system, MD has reviewed the workflow of the existing arrangements for processing applications for certificates/licences/permits which are paper based and require the personal signature of the Director of Marine (“DM”). To further enhance the efficiency of marine services by streamlining the approval mechanism of certificates/licences/permits, it is proposed that delegation provisions be included such that the DM may delegate her power under the relevant shipping legislation⁶ to officers of MD as appropriate.

II. Setting up eleven VHRAs along the viaducts of the TKOCBB, TKOI and SB in TKO

Background

9. Establishment of VHRAs is one of the various measures by the MD in regulating marine traffic and ensuring navigational safety. The restrictions of VHRAs are set out in Shipping and Port Control Regulations

⁶ The delegation provisions will be included in Cap. 369, Cap. 413, Cap. 414, Cap. 582 and Cap. 605.

(Cap. 313A) and Merchant Shipping (Local Vessels) (General) Regulation (Cap. 548F)⁷, and are reviewed from time to time having regard to the latest pattern and volume of marine traffic.

10. Following the construction of the TKOCBB, TKOI and SB, MD has already put in place an array of administrative measures to enhance navigational safety along the viaducts of the TKOCBB, TKOI and SB, including promulgating a Marine Department Notice stating the vessel height restrictions for wide distribution to the maritime trade, as well as stepping up patrol in the area concerned. Currently, the marine traffic in TKO are mainly launches and small crafts plying to/from the sheltered anchorage-to-be in the Eastern Channel, and that ocean-going vessels and large local vessels which normally operate on the east coast of the bay have no operational need to pass underneath TKOCBB except for marine works on the north of TKOCBB.

Legislative proposal

11. In line with the existing arrangements, it is proposed that VHRAs be established to impose height restrictions for vessels passing through the waters underneath the TKOCBB, TKOI and SB to better ensure the safe passage of vessels and mitigate the risk of vessel collision with the bridge structures following the commissioning of TKOCBB and TKOI on 11 December 2022. Having regard to marine traffic and the height of the

⁷ Cap. 313A applies to all vessels (except local vessels) in Hong Kong waters, while Cap. 548F applies to all local vessels.

viaducts, we propose to set up eleven VHRAs along TKOCBB, TKOI and SB with height restrictions being 17.0, 12.0, 6.0 and 3.0 metres along the TKOCBB; 6.0, 3.0 and 2.0 metres along the TKOI; and 5.6 and 4.0 metres along SB. The layouts of the proposed VHRAs are set out at **Annexes A to E**.

CONSULTATION

12. The Hong Kong Fleet Operation Advisory Committee and the Seafarers' Advisory Board of MD were consulted in July 2018 and October 2022, and June and October 2022 respectively, on the proposal to facilitate the use of e-certs and e-logbooks for Hong Kong-registered ships and seafarers. Members supported the proposal.

13. As for the proposed establishment of VHRAs along the viaducts of the TKOCBB, TKOI and SB in Tseung Kwan O, shipping liners, vessel trades and other relevant shipping-related local stakeholders were consulted through Local Vessels Advisory Committee, Pilotage Advisory Committee and Port Operations Committee of MD in September 2022. No adverse comment was received from the members.

LEGISLATIVE TIMETABLE

14. Subject to drafting progress, we plan to introduce the legislative

proposal to facilitate the use of e-certs and e-logbooks for Hong Kong-registered ships and seafarers into the Legislative Council (“LegCo”) in the first half of 2023.

15. As for the legislative proposal to establish the eleven VHRAs for vessels passing through the spans of TKOCBB, TKOI and SB, we propose that the amendment regulation takes effect upon their publication in the Gazette, which would be in December at the earliest, so as to provide the legal backing for the measures to regulate marine traffic in the area as early as possible. The amendment regulation will then be tabled at the LegCo for negative vetting. Prior to the commencement of the proposed subsidiary legislation, MD will continue the administrative measures mentioned in paragraph 10 above to regulate marine traffic in the area.

ADVICE SOUGHT

16. Members are invited to comment on the legislative proposals set out in this Paper.

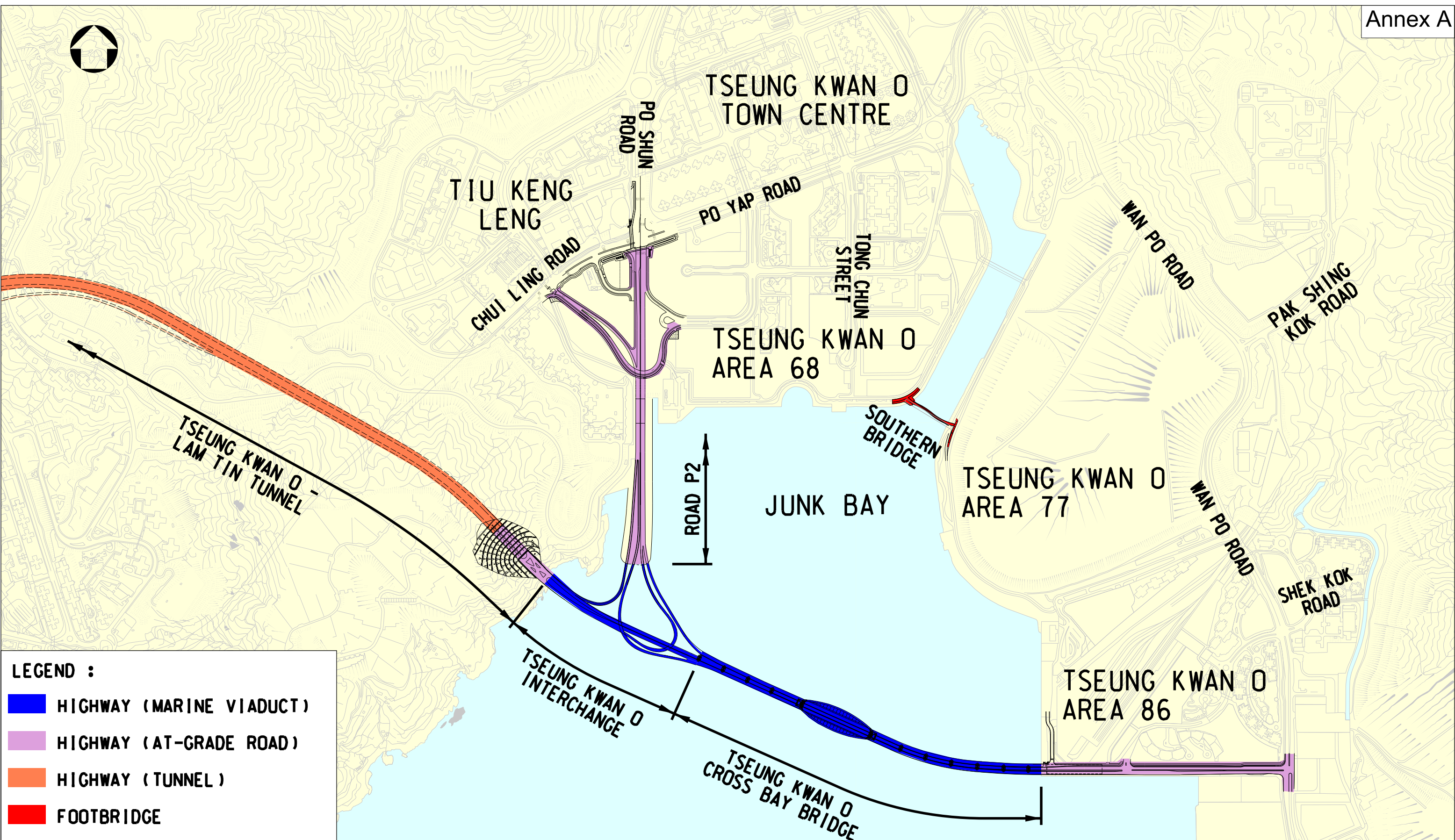
Transport and Logistics Bureau

Marine Department

November 2022

ANNEX COVER

Annex A	Layout Plan
Annex B	Layout of Navigation Channel at TKOCBB Area No. 1
Annex C	Location Plan and Elevation of TKOCBB Areas No. 1 - 4
Annex D	Location Plan and Elevation of TKOI Areas No. 1 – 3
Annex E	Location Plan and Elevation of Southern Bridge Areas No. 1 - 2



LEGEND :

- HIGHWAY (MARINE VIADUCT)
- HIGHWAY (AT-GRADE ROAD)
- HIGHWAY (TUNNEL)
- FOOTBRIDGE

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LAYOUT PLAN

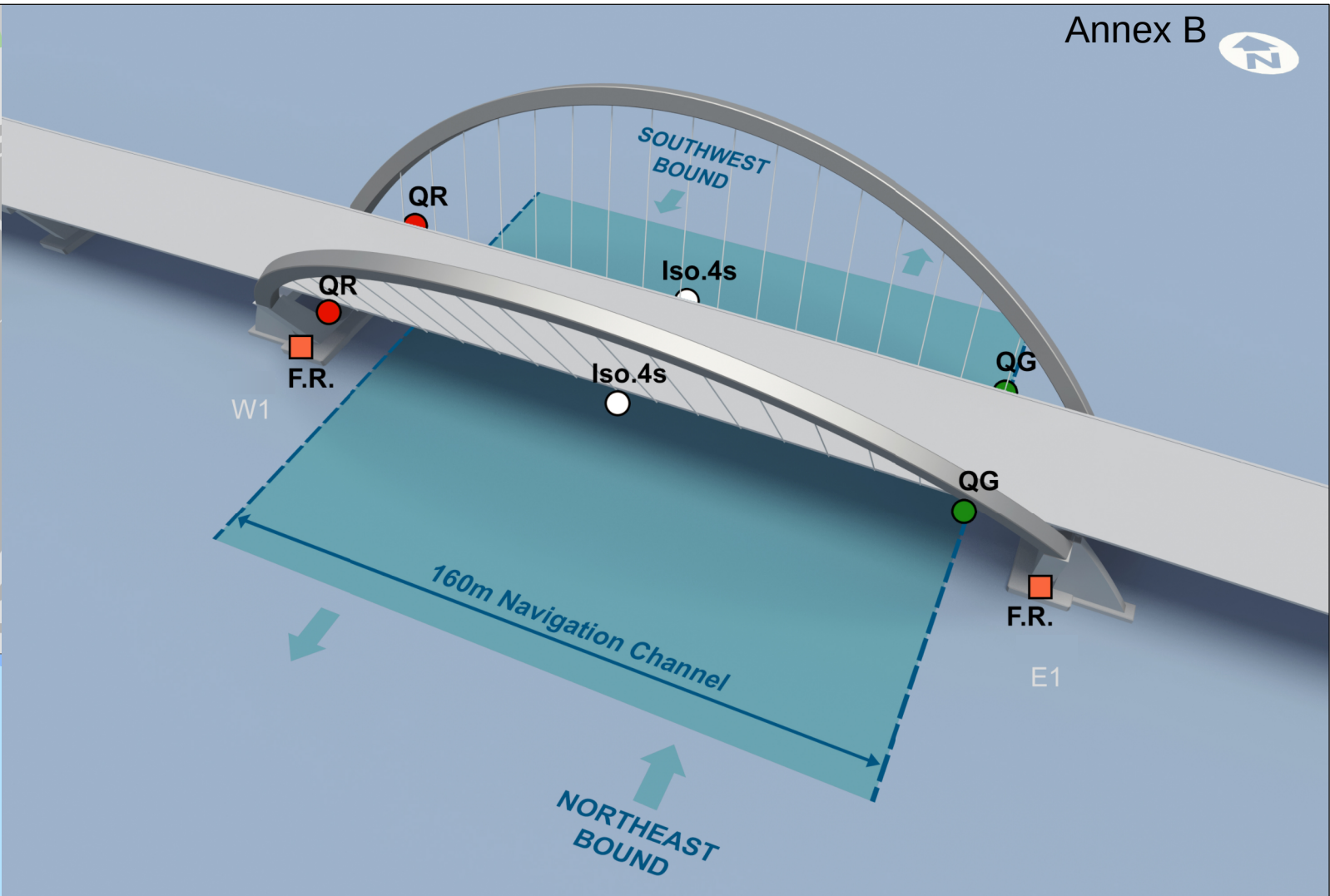
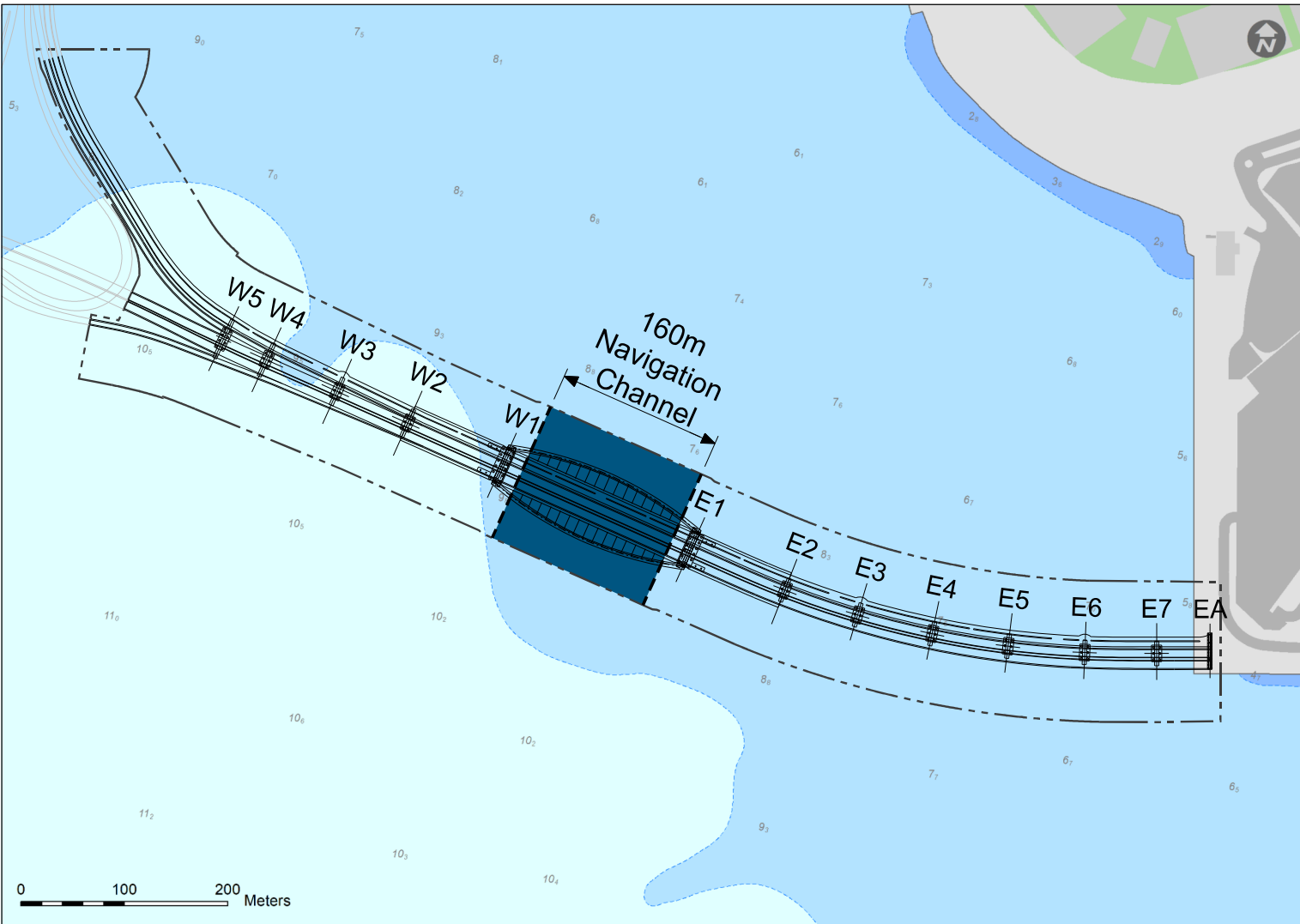
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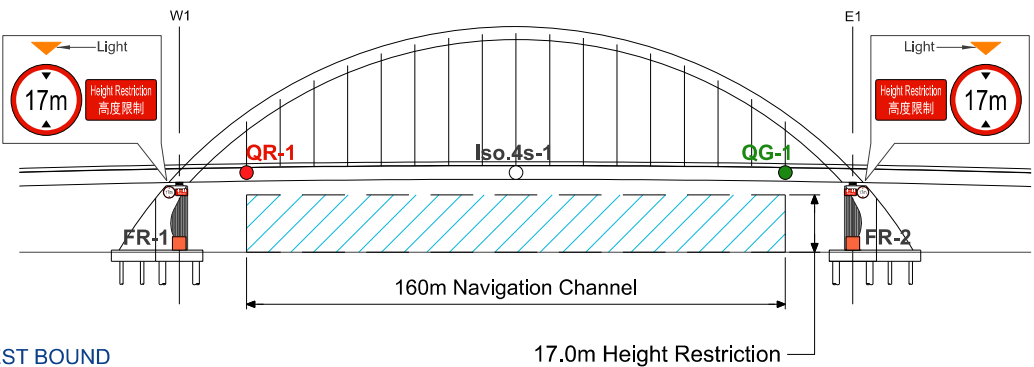
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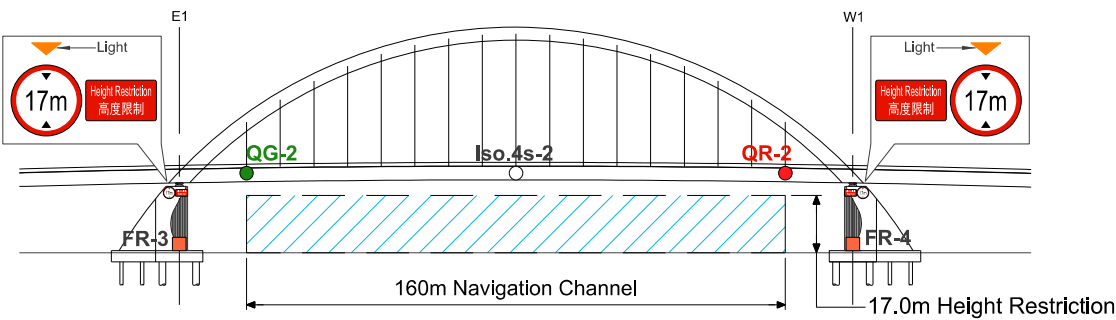
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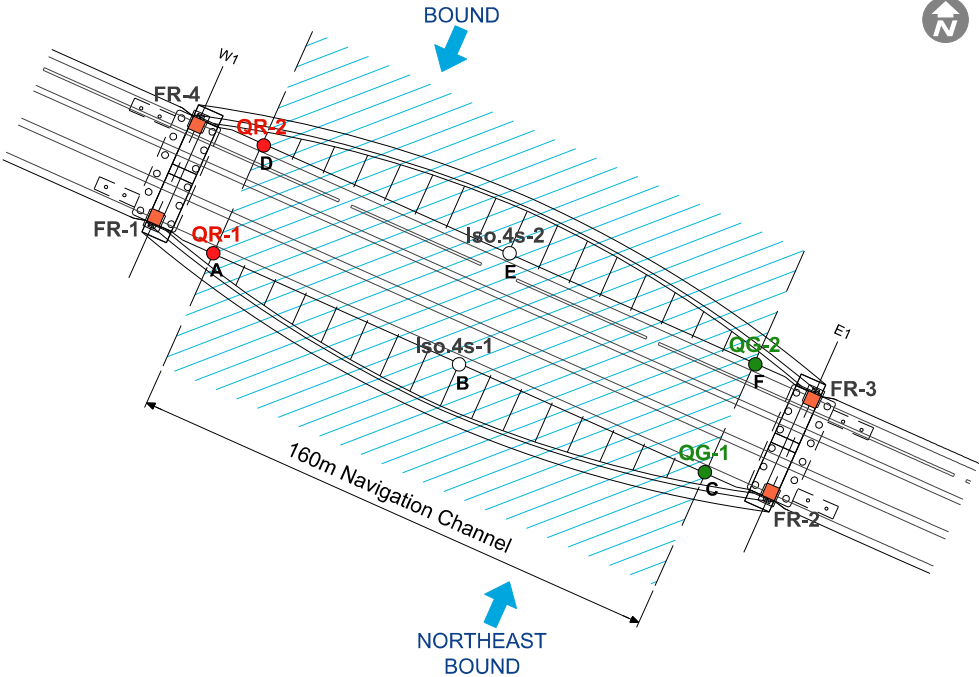
NORTHEAST BOUND



SOUTHWEST BOUND



SOUTHWEST BOUND



Legend

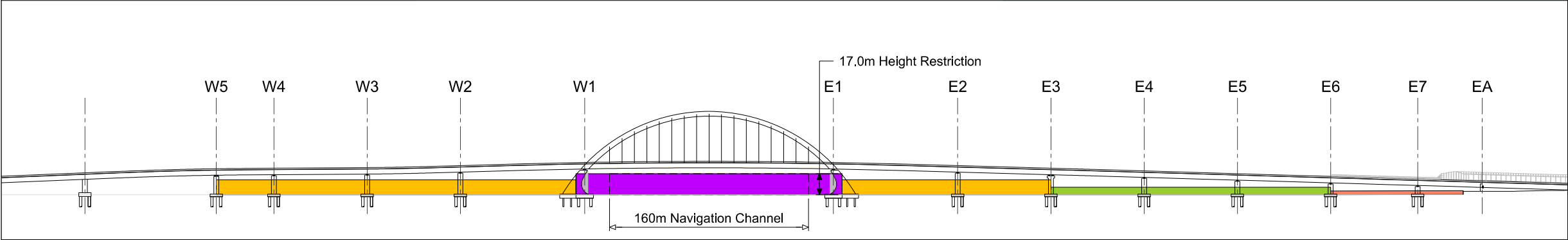
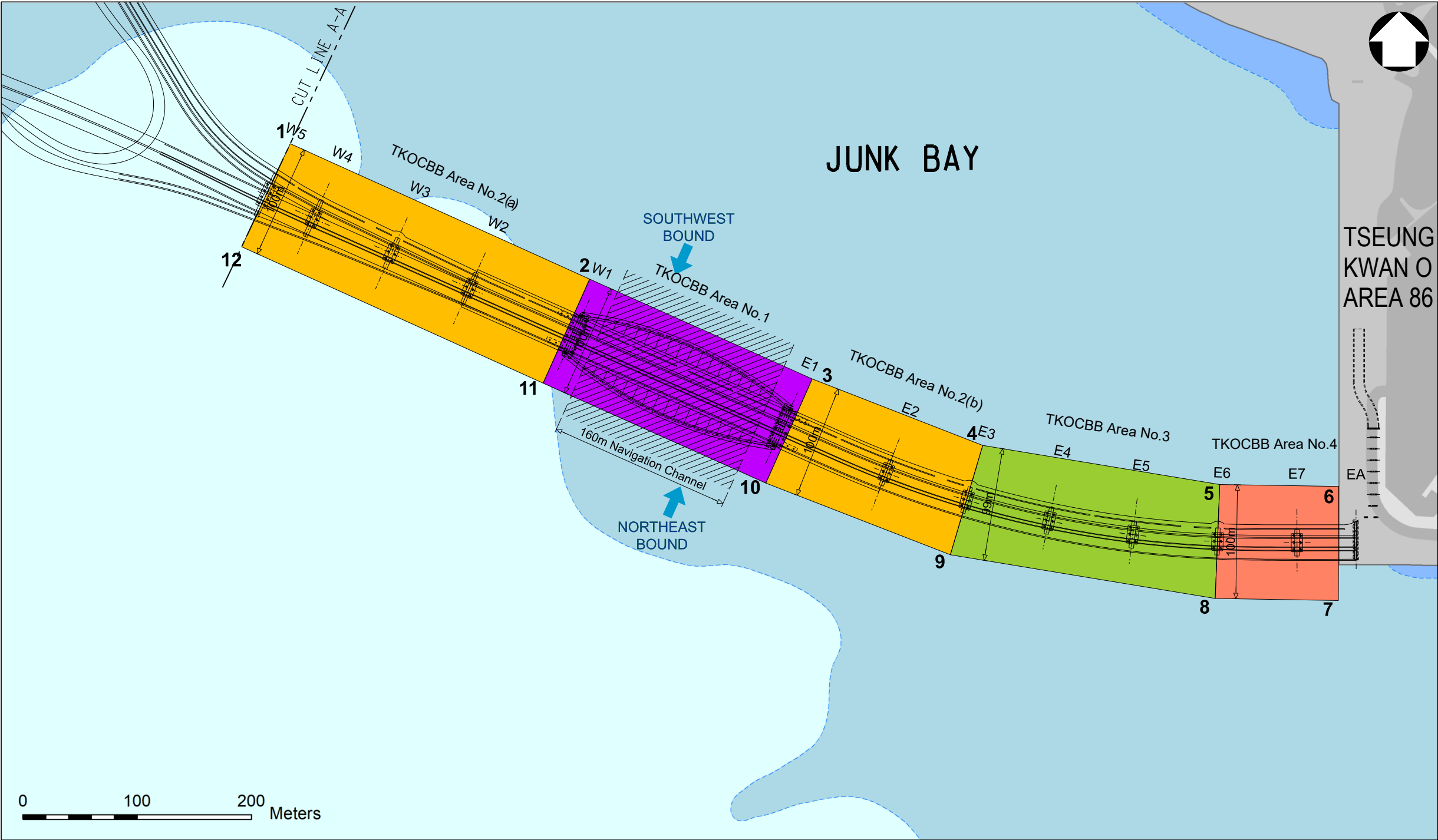
- Isophase Light 4s
- Continuous Quick Flashing Red Light (QR) and Continuous Quick Flashing Green Light (QG)
- QG Continuous Quick Flashing Green Light
- QR Continuous Quick Flashing Red Light
- Iso.4s Isophase (duration of light and darkness equal) at 4s repeat
- FR Fixed Red Light
- A-F Alphabetic order of lights

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LAYOUT OF NAVIGATION CHANNEL AT TKOCBB AREA NO.1

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LOCATION PLAN AND ELEVATION OF TKOCBB AREAS NO. 1 - 4

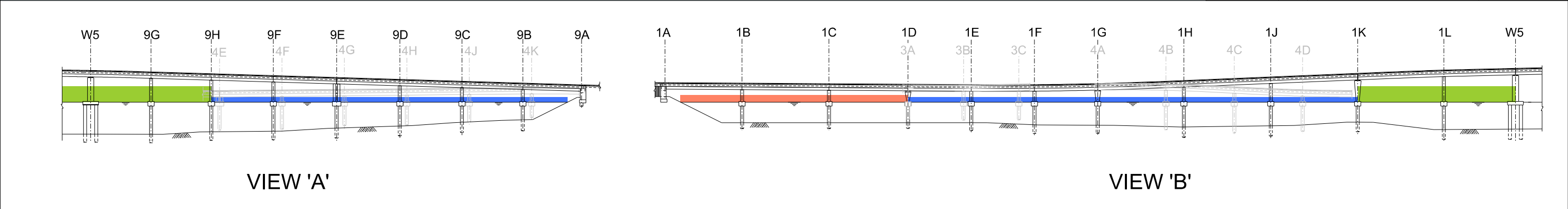
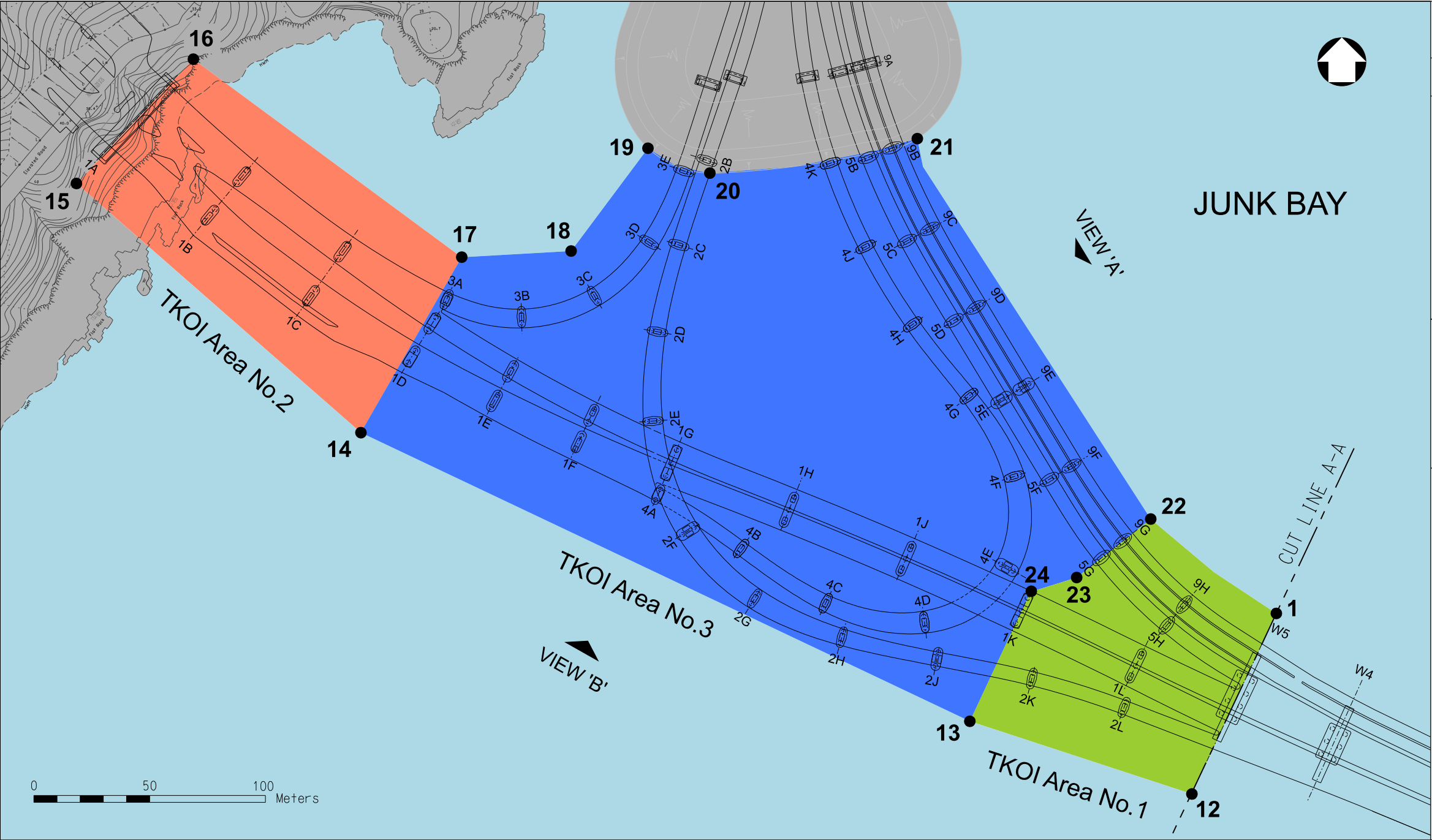
Annex C		
RESTRICTED AREAS IN THE FIFTH SCHEDULE OF THE SHIPPING AND PORT CONTROL REGULATIONS (CAP 313A)		
TKOCBB AREA NO.	COORDINATES OF THE BOUNDARIES (REPRESENTED BY THE WGS 84)	RESTRICTIONS
1	BETWEEN W1 AND E1 THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE STRAIGHT LINES JOINING THE FOLLOWING POSITIONS.	NO VESSEL WHICH HAS A HEIGHT EXCEEDING 17.0m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.
	2	
	3	
	10	
	11	
	12	
2(a)	BETWEEN W5 AND W1 THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE STRAIGHT LINES JOINING THE FOLLOWING POSITIONS.	NO VESSEL WHICH HAS A HEIGHT EXCEEDING 12.0m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.
	1	
	2	
	11	
	12	
	13	
2(b)	BETWEEN E1 AND E3 THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE STRAIGHT LINES JOINING THE FOLLOWING POSITIONS.	NO VESSEL WHICH HAS A HEIGHT EXCEEDING 6.0m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.
	3	
	4	
	9	
	10	
	11	
3	BETWEEN E3 AND E6 THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE STRAIGHT LINES JOINING THE FOLLOWING POSITIONS.	NO VESSEL WHICH HAS A HEIGHT EXCEEDING 3.0m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.
	4	
	5	
	8	
	9	
	10	
4	BETWEEN E6 AND EA THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE STRAIGHT LINES JOINING THE FOLLOWING POSITIONS.	NO VESSEL WHICH HAS A HEIGHT EXCEEDING 3.0m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.
	5	
	6	
	7	
	8	
	9	

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RESTRICTED AREAS IN THE FIFTH SCHEDULE OF THE SHIPPING AND PORT CONTROL REGULATIONS (CAP 313A)

TKOI AREA NO.	COORDINATES OF THE BOUNDARIES (REPRESENTED BY THE WGS 84)		RESTRICTIONS
1	22	22°17.731' N 114°15.433' E	NO VESSEL WHICH HAS A HEIGHT EXCEEDING 6.0m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.
	1	22°17.713' N 114°15.467' E	
	12	22°17.664' N 114°15.442' E	
	13	22°17.683' N 114°15.387' E	
	24	22°17.713' N 114°15.403' E	
	23	22°17.717' N 114°15.414' E	
	16	22°17.838' N 114°15.192' E	
2	17	22°17.792' N 114°15.260' E	NO VESSEL WHICH HAS A HEIGHT EXCEEDING 3.0m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.
	14	22°17.751' N 114°15.234' E	
	15	22°17.809' N 114°15.163' E	
	17	22°17.792' N 114°15.260' E	
	18	22°17.793' N 114°15.287' E	
3	19	22°17.817' N 114°15.307' E	NO VESSEL WHICH HAS A HEIGHT EXCEEDING 2.0m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.
	20	22°17.811' N 114°15.322' E	
	21	22°17.820' N 114°15.374' E	
	22	22°17.731' N 114°15.433' E	
	23	22°17.717' N 114°15.414' E	
	24	22°17.713' N 114°15.403' E	
	13	22°17.683' N 114°15.387' E	
	14	22°17.751' N 114°15.234' E	
	17	22°17.792' N 114°15.260' E	
	18	22°17.793' N 114°15.287' E	
	19	22°17.817' N 114°15.307' E	
	20	22°17.811' N 114°15.322' E	



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LOCATION PLAN AND ELEVATION OF TKOI AREAS NO. 1 - 3

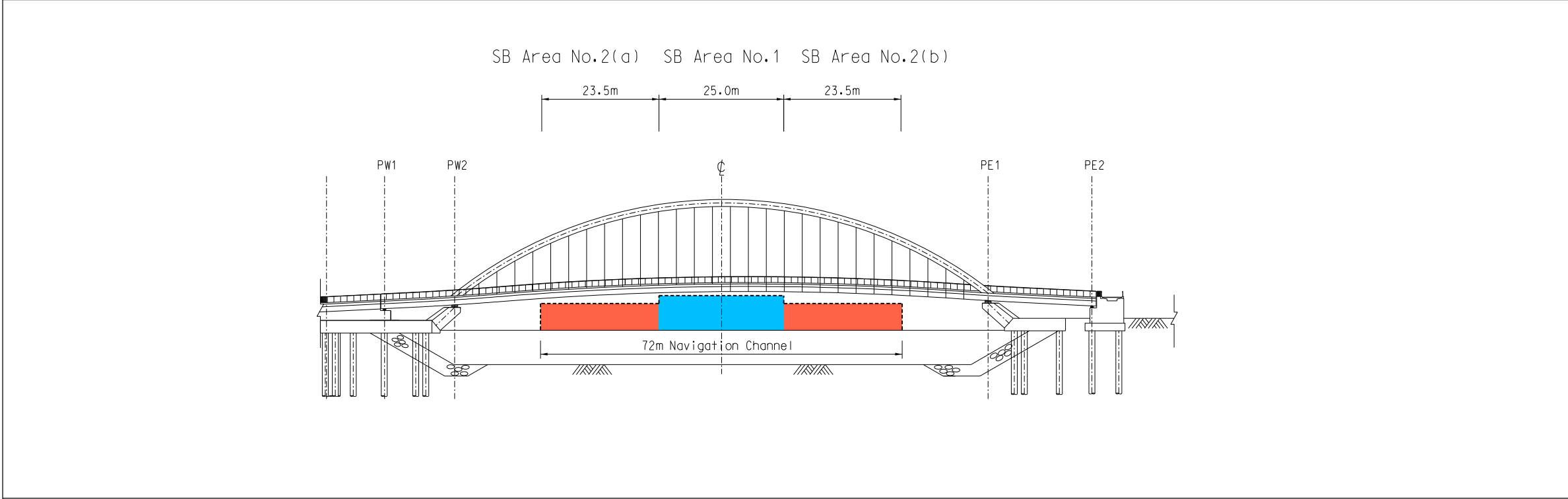
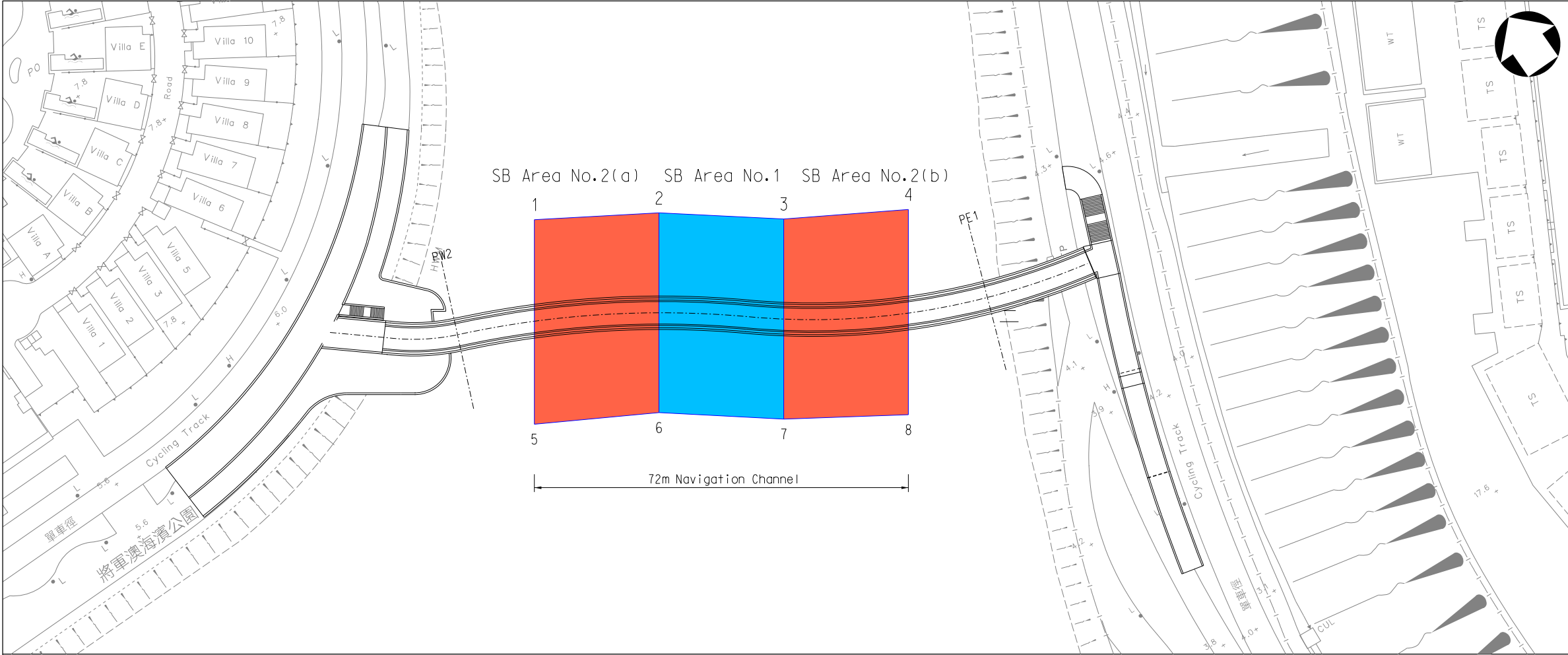
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LOCATION PLAN AND ELEVATION OF SOUTHERN BRIDGE AREAS NO. 1 - 2

Annex E

RESTRICTED AREAS IN THE FIFTH SCHEDULE OF THE SHIPPING AND PORT CONTROL REGULATIONS (CAP 313A)

SB AREA NO.	COORDINATES OF THE BOUNDARIES (REPRESENTED BY THE WGS 84)	RESTRICTIONS								
1	BETWEEN PW2 AND PE1 THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE STRAIGHT LINES JOINING THE FOLLOWING POSITIONS. <table><tbody><tr><td>2</td><td>22°18.083' N 114°15.821' E</td></tr><tr><td>3</td><td>22°18.075' N 114°15.833' E</td></tr><tr><td>6</td><td>22°18.065' N 114°15.808' E</td></tr><tr><td>7</td><td>22°18.057' N 114°15.820' E</td></tr></tbody></table>	2	22°18.083' N 114°15.821' E	3	22°18.075' N 114°15.833' E	6	22°18.065' N 114°15.808' E	7	22°18.057' N 114°15.820' E	NO VESSEL WHICH HAS A HEIGHT EXCEEDING 5.6m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.
2	22°18.083' N 114°15.821' E									
3	22°18.075' N 114°15.833' E									
6	22°18.065' N 114°15.808' E									
7	22°18.057' N 114°15.820' E									
2(a)	BETWEEN PW2 AND PE1 THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE STRAIGHT LINES JOINING THE FOLLOWING POSITIONS. <table><tbody><tr><td>1</td><td>22°18.090' N 114°15.809' E</td></tr><tr><td>2</td><td>22°18.083' N 114°15.821' E</td></tr><tr><td>5</td><td>22°18.072' N 114°15.795' E</td></tr><tr><td>6</td><td>22°18.065' N 114°15.808' E</td></tr></tbody></table>	1	22°18.090' N 114°15.809' E	2	22°18.083' N 114°15.821' E	5	22°18.072' N 114°15.795' E	6	22°18.065' N 114°15.808' E	NO VESSEL WHICH HAS A HEIGHT EXCEEDING 4.0m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.
1	22°18.090' N 114°15.809' E									
2	22°18.083' N 114°15.821' E									
5	22°18.072' N 114°15.795' E									
6	22°18.065' N 114°15.808' E									
2(b)	BETWEEN PW2 AND PE1 THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE STRAIGHT LINES JOINING THE FOLLOWING POSITIONS. <table><tbody><tr><td>3</td><td>22°18.075' N 114°15.833' E</td></tr><tr><td>4</td><td>22°18.068' N 114°15.845' E</td></tr><tr><td>7</td><td>22°18.057' N 114°15.820' E</td></tr><tr><td>8</td><td>22°18.050' N 114°15.832' E</td></tr></tbody></table>	3	22°18.075' N 114°15.833' E	4	22°18.068' N 114°15.845' E	7	22°18.057' N 114°15.820' E	8	22°18.050' N 114°15.832' E	NO VESSEL WHICH HAS A HEIGHT EXCEEDING 4.0m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.
3	22°18.075' N 114°15.833' E									
4	22°18.068' N 114°15.845' E									
7	22°18.057' N 114°15.820' E									
8	22°18.050' N 114°15.832' E									

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