

For discussion on
24 April 2017

Legislative Council Panel on Economic Development

Legislative Amendments to Regulate Marine Traffic

Shipping and Port Control Regulations (Cap. 313A)

and

Merchant Shipping (Local Vessels) (General) Regulation (Cap. 548F)

Purpose

This paper seeks Members' endorsement on various measures to regulate marine traffic by amending the Shipping and Port Control Regulations (Cap. 313A) ("SAPCR") and the Merchant Shipping (Local Vessels) (General) Regulation (Cap. 548F) ¹.

Background

2. For navigational safety, Marine Department ("MD") has introduced various measures to regulate marine traffic, including the establishment of principal fairways to regulate traffic movements, as well as designated areas restricting the height, length and navigational direction of vessels. These restrictions are set out in the SAPCR and the Merchant Shipping (Local Vessels) (General) Regulation, and are amended from time to time having regard to the latest pattern and volume of marine traffic.

3. With the help of the vessel traffic services system, the Vessel Traffic Centre ("VTC") of MD coordinates vessel movements and provides navigational assistance as necessary. Vessels are required to report to VTC

¹ SAPCR applies to all vessels (except local vessels) in Hong Kong waters. The Merchant Shipping (Local Vessels) (General) Regulation applies to local vessels.

their movements through designated Very High Frequency (“VHF”) channels in accordance with the SAPCR and the Merchant Shipping (Local Vessels) (General) Regulation.

Proposed Amendments

(i) *Improving Vessel Traffic Services*

4. In view of increasing marine traffic in Hong Kong, MD commissioned a study on Hong Kong Vessel Traffic Services (“VTS”) (“the Study”) in 2013 with a view to improving the VTS. The major amendments based on the findings of the Study are as follows —

- (a) ***Increase the number of VHF sectors*** — Hong Kong waters are divided into three VHF sectors based on three VHF channels. With increasing marine traffic, the three VHF sectors are becoming saturated, especially during peak hours and typhoon periods when communications between VTC and vessels are most frequent. We will increase the VHF sectors from three to five to enable vessels to communicate with VTC more promptly and effectively. We will also take this opportunity to adjust the boundaries of existing VHF sectors to better align them with major traffic routes, so as to do away with repeated reporting.
- (b) ***Streamlining VTS Reporting Procedures*** — Vessels are required to submit reports to VTC at different stages of movements, including pre-movement/departure, ready-to-move or ready-to-depart, as well as move-underway or departure-underway. They are also required to make radio reports when they sail through a calling-in point. With the advancement of navigational technology², such reporting is no longer necessary. Hence, we propose combining the reports into

² Specified vessels are required to install an Automatic Identification System, which allows navigational information of a vessel (e.g. the vessel’s position, name, course, speed) to be automatically sent to VTC.

one movement/departure report. We also propose to remove seven calling-in points to enhance the efficiency of VTS.

(ii) Establishing Principal Fairways

5. There are 10 principal fairways in Hong Kong. Vessels navigating within the principal fairways are required to comply with a set of rules³ mandated by the International Maritime Organization (“IMO”), including navigating as close to the right side of the fairway as possible and following specified procedures when overtaking other vessels. With increasing marine traffic around North Lantau due to the development of neighbouring ports in Pearl River Delta, we propose to establish a new principal fairway in three sections with different names for the purpose of clear communication — Urmston Road Fairway, Castle Peak Fairway and Ha Pang Fairway. Their layout is shown at **Annex A**. The eastern end of the proposed Ha Pang Fairway will intersect with the existing Ma Wan Fairway and Kap Shui Mun Fairway at a junction. Taking into account the geographical constraints and marine traffic, it is proposed to prohibit fishing activities in the junction to ensure navigational safety.

(iii) Imposing Conditions for Vessels Passing Through the Two Link Roads of HZMB

6. In anticipation of the commissioning of the Hong Kong-Zhuhai-Macao Bridge (“HZMB”), we need to impose conditions for vessels passing through the navigational channels underneath the Southern Connection of the Tuen Mun-Chek Lap Kok Link (“TM-CLKL”) and the Hong Kong Link Road (“HKLR”) to ensure the safe passage of vessels. Having regard to marine traffic and the height of the viaduct, we propose to set up three restricted areas along TM-CLKL with height restrictions of 21, 12 and 6 metres and four restricted areas along HKLR with height restrictions of 41, 12, 10 and 5 metres. In addition, we will also set up three special areas to segregate vessels based on their length and navigational direction

³ The set of navigation rules specific to principal fairways, adopted from the International Regulations for Preventing Collisions at Sea 1972 (COLREGS), are set out in the Merchant Shipping (Safety) (Signals of Distress and Prevention of Collisions) Regulations (Cap 369N).

within the restricted area with height restriction of 41 metres. This arrangement, modelled on the one-way traffic regime adopted for the Kap Shui Mun Bridge, regulates the traffic flows along the navigational channel of HKLR. The layouts of the proposed restricted areas and special areas are set out at **Annexes B to D**.

7. Eight Hong Kong International Airport Approach Areas (“HKIAAAs”) have been set up to regulate the height of vessels navigating in the vicinity of the Hong Kong International Airport (“HKIA”)⁴. Due to the construction of the HZMB, part of the waters in the vicinity of HKIA has been reclaimed for constructing the HKLR and the Hong Kong Boundary Crossing Facilities (“HKBCF”). We will take the opportunity to amend the boundaries of the HKIAAAs that have become obsolete due to reclamation.

Consultation

8. The Pilotage Advisory Committee (“PAC”) and the Port Operations Committee (“POC”) of MD supported the proposal to improve vessel traffic services. The Local Vessels Advisory Committee (“LVAC”), POC, PAC and the High Speed Craft Consultative Committee (“HSCCC”) of MD, as well as the Traffic and Transport Committee of the Islands District Council supported the proposal to impose conditions for vessels passing through the spans of the two link roads of HZMB.

9. POC, LVAC, PAC and HSCCC were consulted on the establishment of principal fairways. Most members supported the proposal on the ground of enhanced marine safety and were keen to see early establishment of the principal fairways. We have explained that there would be loss of fishing grounds due to the proposal, but prohibiting fishing activities in the area is essential in the interest of safety for both the fishing community and marine traffic.

⁴ The height restrictions of vessels passing through the HKIAAAs range from 15 metres to 30 metres above sea level.

Legislative Timetable

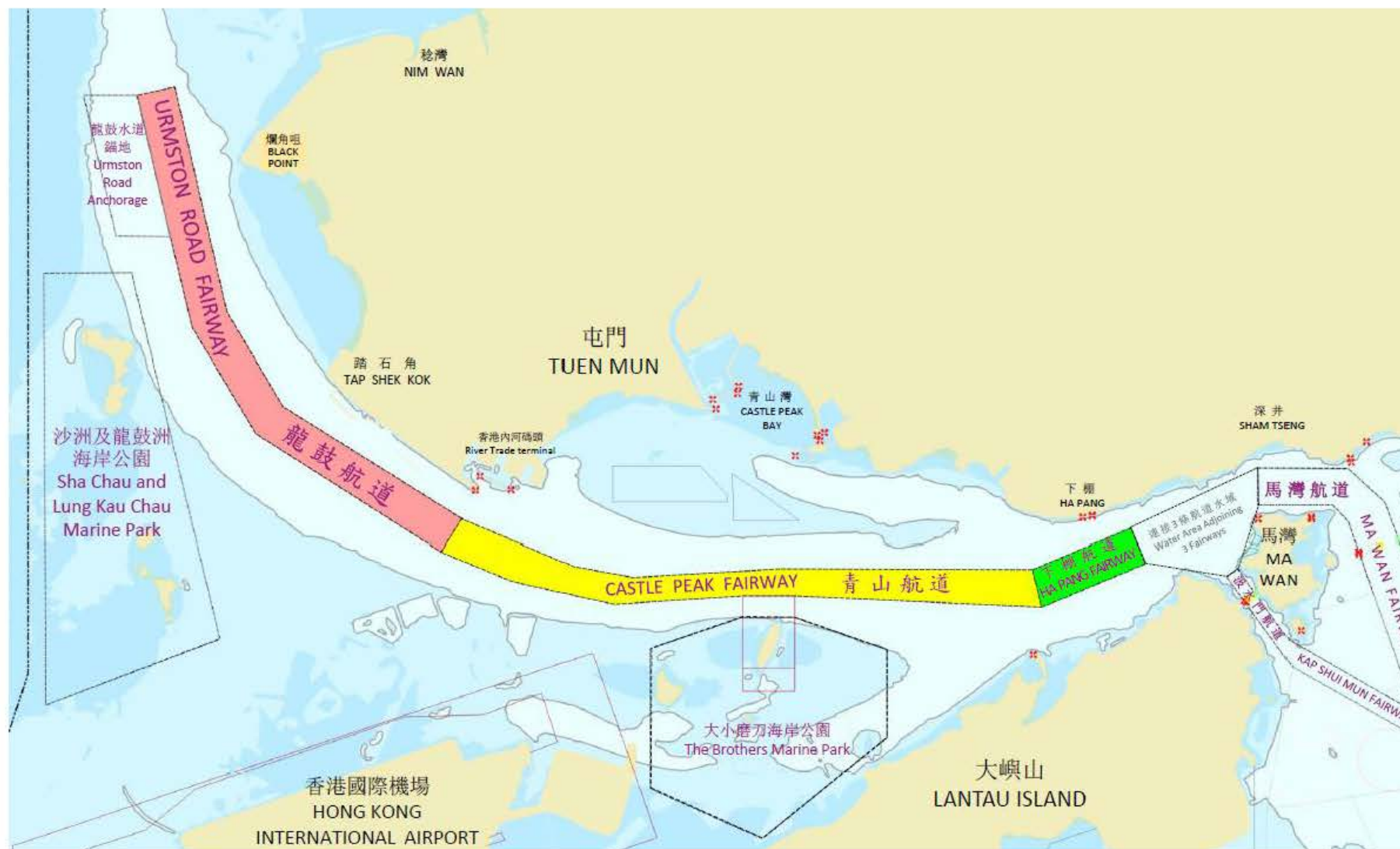
10. We aim at introducing the proposals to impose conditions for vessels passing through the spans of the two link roads of HZMB into the Legislative Council in May 2017. As for the proposals to establish principal fairways and to improve vessel traffic services, we aim at tabling the amendments in October 2017. All three proposals involve amendments to both SAPCR and the Merchant Shipping (Local Vessels) (General) Regulation.

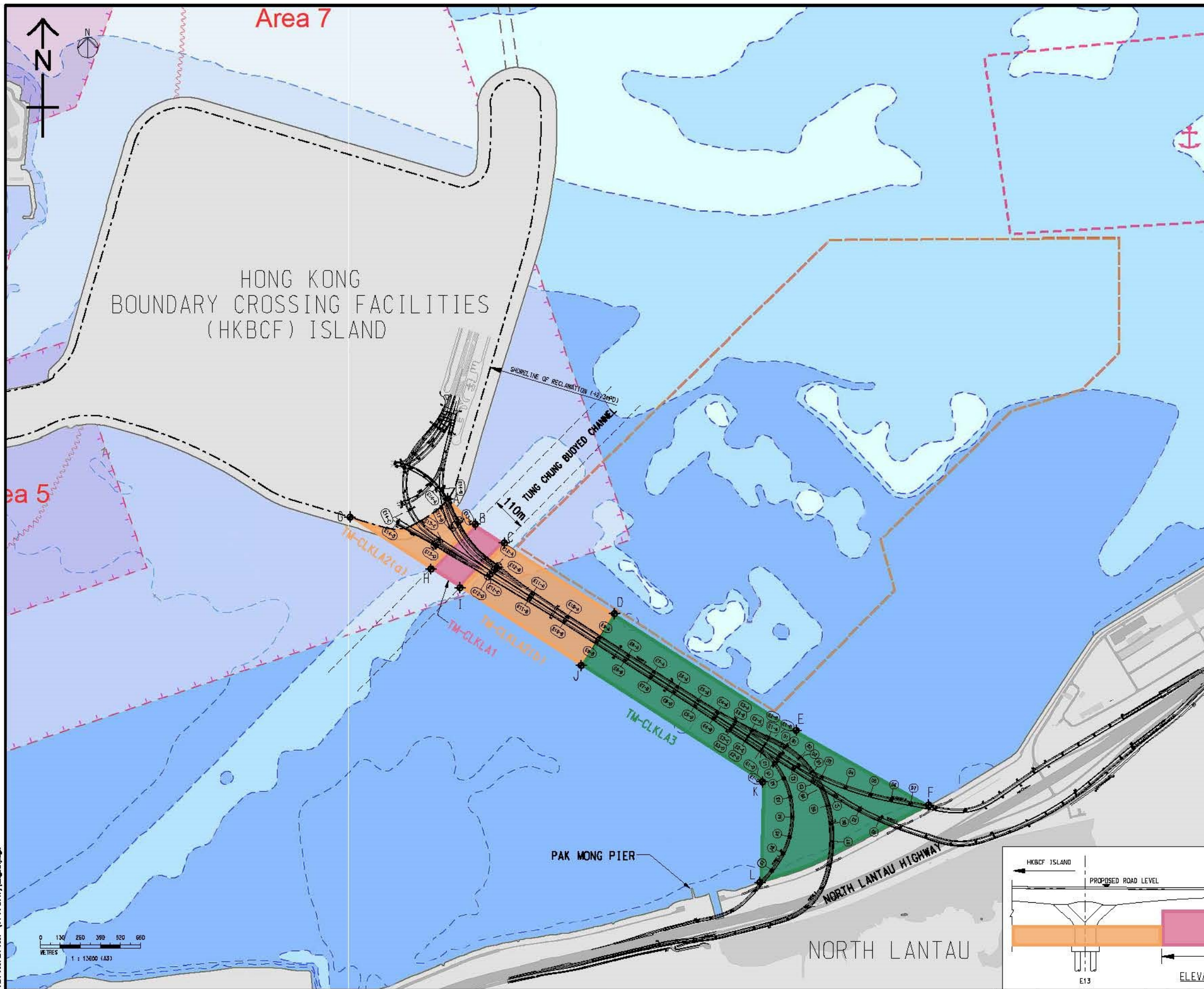
Advice Sought

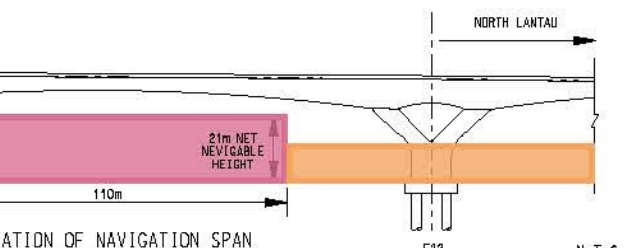
11. Members are invited to endorse the above proposals for introduction into the Legislative Council in 2017.

Transport and Housing Bureau
Marine Department
April 2017

Proposed Establishment of New Principal Fairways

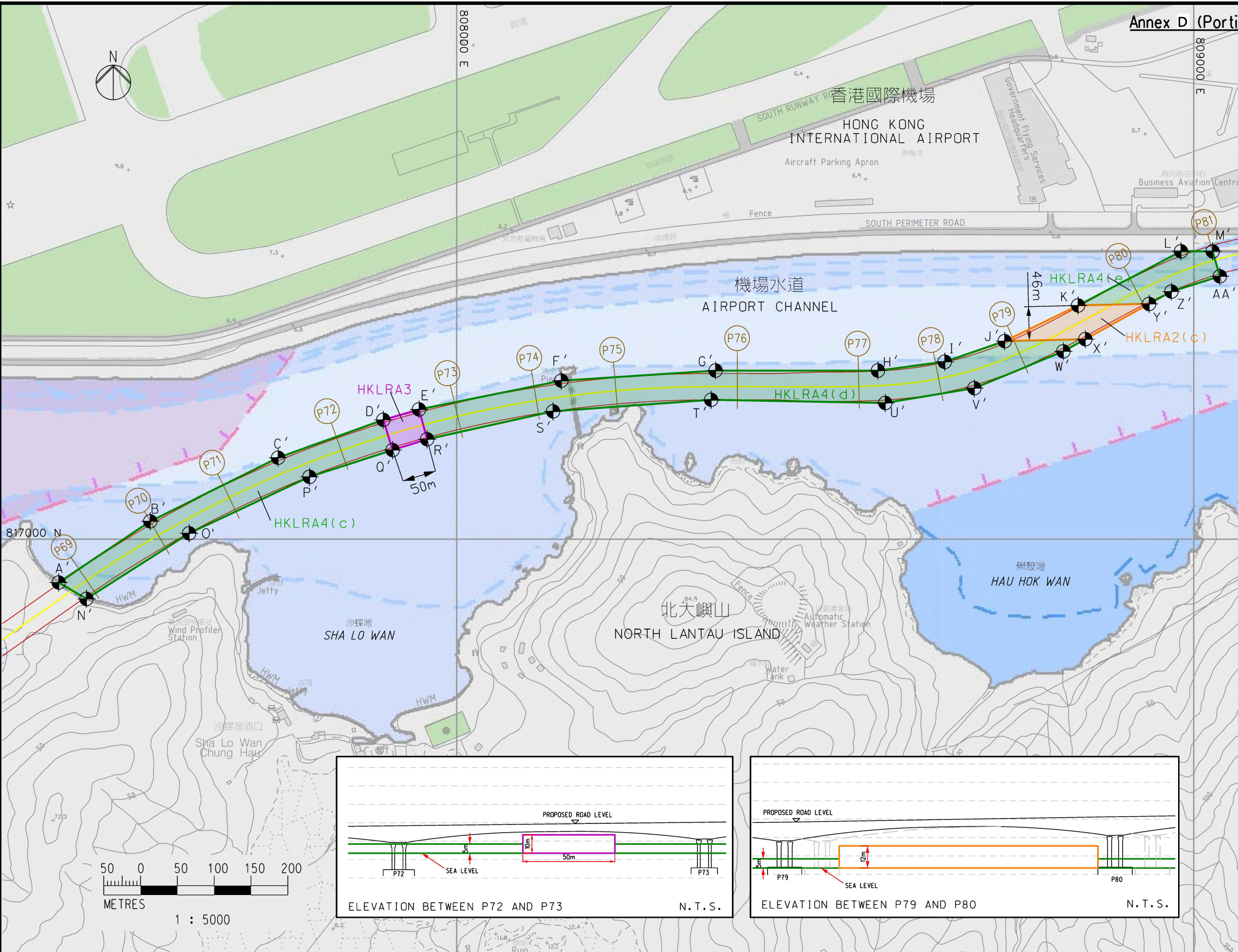




Annex B						
RESTRICTED AREAS IN THE FIFTH SCHEDULE OF THE SHIPPING AND PORT CONTROL REGULATIONS (CAP 313A)						
TM-CLKL AREA NO.	COORDINATES OF THE BOUNDARIES (REPRESENTED BY THE WGS 84)		RESTRICTIONS			
1  TM-CLKL1	THE AREA OF THE WATERS OF HONG KONG BOUNDED BY STRAIGHT LINES JOINING THE FOLLOWING POSITIONS-		NO VESSEL WHICH HAS A HEIGHT EXCEEDING 21m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.			
	B	22°18.625'N 113°57.607'E				
	C	22°18.592'N 113°57.660'E				
		22°18.513'N 113°57.578'E				
	J	22°18.546'N 113°57.523'E				
2  TM-CLKL2	THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE SHORE AND STRAIGHT LINES JOINING THE FOLLOWING POSITIONS A, B, H, G (i.e. 2(a))-		NO VESSEL WHICH HAS A HEIGHT EXCEEDING 12m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.			
	A	22°18.670'N 113°57.555'E				
		22°18.625'N 113°57.607'E				
	B	22°18.546'N 113°57.523'E				
		22°18.638'N 113°57.370'E				
	H	THE AREA OF THE WATERS OF HONG KONG BOUNDED BY STRAIGHT LINES JOINING THE FOLLOWING POSITIONS C, D, J, I (i.e. 2(b))-				
		C			22°18.592'N 113°57.660'E	
	D	22°18.468'N 113°57.871'E				
		J			22°18.377'N 113°57.808'E	
	I				22°18.513'N 113°57.578'E	
		THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE SHORE AND STRAIGHT LINES JOINING THE FOLLOWING POSITIONS-			NO VESSEL WHICH HAS A HEIGHT EXCEEDING 6m ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH.	
	L	22°17.995'N 113°58.147'E				
22°18.172'N 113°58.151'E						
K	22°18.377'N 113°57.808'E					
	22°18.468'N 113°57.871'E					
J	22°18.263'N 113°58.215'E					
	22°18.132'N 113°58.466'E					
D						
	E					
F						
						
ELEVATION OF NAVIGATION SPAN						
SCALE 1:13000 (A3)		ISSUED DATE 01-03-2017				
DRAWN GC		PREPARED TC		APPROVED SYN		
DRAWING REFERENCE NIL						
SKETCH NO. DF0637				REV. -		

THE LOCATIONS OF TUEN MUN - CHEK LAP KOK LINK(TM-CLKL) AREAS NO. 1-3

SCALE 1:13000 (A3)		ISSUED DATE 01-03-2017	
DRAWN GC		APPROVED SYN	
DRAWING REFERENCE NIL		REV. -	
SKETCH NO. DF0637			
REV.	DATE	DESCRIPTION	APP.
-	21/02/17	THE LOCATIONS OF TUEN MUN - CHEK LAP KOK LINK(TM-CLKL) AREAS NO. 1-3	GC TC SYN



Annex D (Portion adjacent to the Airport)

RESTRICTED AREAS IN THE FIFTH SCHEDULE OF THE SHIPPING AND PORT CONTROL REGULATIONS (CAP 313A)		
HKLR AREA NO.	COORDINATES OF THE BOUNDARIES (REPRESENTED BY THE WGS 84)	RESTRICTIONS
2 HKLR2	BETWEEN P79 AND P80 (i.e. 2(c)) 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 METRES ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH
	Y' 22°17.675' N 113°54.701' E	
	X' 22°17.649' N 113°54.650' E	
	J' 22°17.648' N 113°54.587' E	
	K' 22°17.674' N 113°54.645' E	
3 HKLR3	BETWEEN P72 AND P73 THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE STRAIGHT LINES JOINING THE FOLLOWING POSITIONS:-	NO VESSEL WHICH HAS A HEIGHT EXCEEDING 10 METRES ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH
	E' 22°17.597' N 113°54.124' E	
	R' 22°17.575' N 113°54.130' E	
	Q' 22°17.567' N 113°54.103' E	
	D' 22°17.589' N 113°54.096' E	
4 HKLR4	BETWEEN P69 AND P72 (i.e. 4(c)) THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE SHORE AND STRAIGHT LINES JOINING THE FOLLOWING POSITIONS:-	NO VESSEL WHICH HAS A HEIGHT EXCEEDING 5 METRES ABOVE SEA LEVEL SHALL ENTER OR PASS THROUGH
	A' 22°17.469' N 113°53.839' E	
	B' 22°17.514' N 113°53.911' E	
	C' 22°17.561' N 113°54.012' E	
	D' 22°17.589' N 113°54.096' E	
	Q' 22°17.567' N 113°54.103' E	
	P' 22°17.547' N 113°54.037' E	
	O' 22°17.505' N 113°53.942' E	
	N' 22°17.457' N 113°53.861' E	
	BETWEEN P73 AND P79 (i.e. 4(d)) THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE STRAIGHT LINES JOINING THE FOLLOWING POSITIONS:-	
	X' 22°17.649' N 113°54.650' E	
	W' 22°17.640' N 113°54.633' E	
	V' 22°17.613' N 113°54.563' E	
	U' 22°17.602' N 113°54.492' E	
	T' 22°17.604' N 113°54.355' E	
	S' 22°17.595' N 113°54.230' N	
	R' 22°17.575' N 113°54.130' E	
	E' 22°17.597' N 113°54.124' E	
	F' 22°17.618' N 113°54.236' E	
	G' 22°17.626' N 113°54.358' E	
	H' 22°17.626' N 113°54.487' E	
	I' 22°17.632' N 113°54.539' E	
	J' 22°17.648' N 113°54.587' E	
	BETWEEN P80 AND P81 (i.e. 4(e)) THE AREA OF THE WATERS OF HONG KONG BOUNDED BY THE STRAIGHT LINES JOINING THE FOLLOWING POSITIONS:-	
	M' 22°17.714' N 113°54.751' E	
	AA' 22°17.696' N 113°54.757' E	
	Z' 22°17.684' N 113°54.718' E	
	Y' 22°17.675' N 113°54.701' E	
	K' 22°17.674' N 113°54.645' E	
	L' 22°17.714' N 113°54.725' E	