For discussion **PWSC(2018-19)18**
on 23 May 2018

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 706 – HIGHWAYS
Transport – Traffic Control
29TC – Installation of Additional Traffic Detectors, Speed Map Panel and Journey Time Indication Systems

Members are invited to recommend to the Finance Committee the upgrading of **29TC** to Category A at an estimated cost of $262.7 million in money-of-the-day prices for the installation of additional traffic detectors and Journey Time Indication Systems as well as enhancement of an existing Speed Map Panel.

PROBLEM

We need to install some 600 sets of traffic detectors on strategic routes [1] and major roads to enhance the efficiency of traffic and incident management, and provide 16 new sets of Journey Time Indication Systems (JTISs) and enhance an existing Speed Map Panel (SMP) ahead of critical divergent points of strategic routes and major roads, to facilitate members of the public to plan their journeys and select suitable routes or transport modes.

/PROPOSAL …..

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[1] Strategic routes include most trunk roads and expressways and are assigned route numbers: Route 1 (Aberdeen to Sha Tin), Route 2 (Quarry Bay to Ma Liu Shui), Route 3 (Sai Ying Pun to Yuen Long), Route 4 (Chai Wan to Kennedy Town), Route 5 (Ngau Tau Kok to Tsuen Wan), Route 6 (Tseung Kwan O to West Kowloon), Route 7 (Tseung Kwan O to Kwai Chung),Route 8 (Sha Tin to Chek Lap Kok), Route 9 (New Territories Circular Route) and Route 10 (Shenzhen Port Area to Lam Tei).

PROPOSAL

2. The Commissioner for Transport, with the support of the Secretary for Transport and Housing, proposes to upgrade **29TC** to Category A at an estimated cost of $262.7 million in money-of-the-day (MOD) prices for the installation of additional traffic detectors and JTISs, as well as enhancement of an existing SMP.

PROJECT SCOPE AND NATURE

3. The proposed scope of works under the project comprises –

(a) installation of some 600 sets of traffic detectors on strategic routes and major roads for collection of real-time traffic data for automatic detection of traffic incidents, traffic management and dissemination of real-time traffic information to the public;

(b) provision of 16 new sets of JTISs and enhancement of an existing SMP for displaying traffic conditions for reference by motorists;

(c) provision of data processing and data communication equipment for the processing and transmission of data collected by traffic detectors and for dissemination of information to the JTISs and SMP; and

(d) associated civil, electrical and mechanical works, including installation of overhead gantries, mounting poles, roadside cabinets and cable ducts.

4. To enable the Transport Department (TD) to have a complete picture of the traffic conditions of all strategic routes and major roads of Hong Kong, enhance the efficiency of handling traffic incidents and traffic management, and provide traffic data for the proposed JTISs and SMP mentioned in paragraph 6 below, we propose to install some 600 sets of traffic detectors, comprising –

(a) 410 sets of video detectors – these detectors collect data on traffic speed and volume and automatically detect traffic incidents on roads through video analytics. The videos taken by the detectors will not be recorded and only snapshots in low resolution (not sufficient for recognition of faces and vehicle licence plate numbers) will be disseminated through TD's website, mobile applications and the Government's public information portal "data.gov.hk";

/(b) …..

(b) 20 sets of automatic licence plate recognition detectors – these detectors collect traffic volume of different vehicle classes on roads through matching of licence plate numbers captured by the detectors and TD's vehicle licensing system. The images captured by the detectors will not be transmitted to TD's central computer system, and the vehicle licence plate numbers analysed from the images will be cryptographically hashed before transmission. The hashed vehicle licence plate numbers and the images will be deleted immediately after use. The traffic volume of different vehicle classes will be disseminated through TD's website and the Government's public information portal "data.gov.hk"; and

(c) 170 sets of bluetooth detectors – these detectors generate data on average vehicular speed and journey time by detecting Media Access Control (MAC) addresses of bluetooth devices in vehicles. The MAC addresses will be deleted immediately after use. The average vehicular speed and journey time calculated will be disseminated through TD's website, mobile applications and the Government's public information portal "data.gov.hk".

The proposed locations for the additional traffic detectors are shown at Enclosure 1.

5. TD will delete the images, vehicle licence plate numbers and MAC addresses of bluetooth devices captured or collected by the traffic detectors upon usage and no personal data will be stored. TD will handle all personal data collected strictly in accordance with the Personal Data (Privacy) Ordinance. In 2017, TD consulted the Privacy Commissioner for Personal Data (PCPD) in respect of the use of the traffic detectors proposed in this project. PCPD noted the types of traffic detectors, usage of the collected data and data protection measures.

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6. In addition, to facilitate the public to better plan their journeys ahead and select suitable routes or transport modes, we propose to provide 16 new sets of JTISs (proposed locations are detailed at Enclosure 2). We also propose to enhance an existing SMP at San Tin Highway near Fairview Park so that traffic conditions of roads leading to the Airport can be shown (as illustrated at Enclosure 3). Information shown on JTISs and SMPs will similarly be disseminated through TD's website, mobile applications and the Government's public information portal "data.gov.hk".

7. Subject to the approval of the Finance Committee, we plan to commence the proposed works in the first quarter of 2019 for completion in end 2020.

JUSTIFICATIONS

8. Traffic detectors detect passing vehicles through different technologies to generate traffic data such as vehicle speed and count. After consolidation and computation of traffic data, real-time traffic information of the relevant road sections (such as average vehicular speed and traffic volume) will be available. At present, some traffic detectors are installed in Traffic Control and Surveillance Systems (TCSS)[2]. TCSS helps monitor and manage traffic in order to improve road safety and efficiency. Currently, not all strategic routes in Hong Kong are equipped with TCSS. TCSS are usually installed at the same time as part of the road projects when new strategic routes are built or existing routes are reconstructed[3].

9. In addition to TCSS, some traffic detectors are installed along parts of strategic routes equipped with JTISs and SMPs. At present, all the installed traffic detectors cover about 45% of the strategic routes in Hong Kong.

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[2] TCSS comprises CCTV cameras, traffic detectors, variable speed limit signs, lane control signals and variable message signs installed on highways with central computer facilities to help monitor and control traffic flows.

[3] TCSS have been installed in the following locations: Aberdeen Tunnel, Cross Harbour Tunnel, Eastern Harbour Crossing, Kai Tak Tunnel, Lion Rock Tunnel, Shing Mun Tunnels, Tai Lam Tunnel, Tate's Cairn Tunnel, Tseung Kwan O Tunnel, Western Harbour Crossing, Shenzhen Western Corridor, Tolo Highway between Sha Tin and Tai Po near Hong Lok Yuen, Tsing Ma Control Area and Tsing Sha Control Area. TCSS will also be installed at Central–Wanchai Bypass, Hong Kong Boundary Crossing Facilities of Hong Kong–Zhuhai–Macao Bridge, Hong Kong Link Road and Tuen Mun-Chek Lap Kok Link, connecting road linking up the Liantang/Heung Yuen Wai Boundary Control Point and the existing Fanling Highway, Tolo Highway between Tai Po near Hong Lok Yuen and Fanling, Tseung Kwan O–Lam Tin Tunnel, Tseung Kwan O Cross Bay Link, Tai Po Road (Sha Tin Section) between Fo Tan Road and Sha Tin Rural Committee Road, Central Kowloon Route and Trunk Road T2.

10. One of the "smart mobility" initiatives in the "Hong Kong Smart City Blueprint" promulgated in December 2017 is to install traffic detectors on all strategic routes to provide real-time traffic information. This initiative will be implemented in two phases. The design and construction costs of the first phase of installation of about 550 traffic detectors on parts of the strategic routes were approved by the Legislative Council (LegCo) in mid-2016; and the relevant design work was completed in October 2017. It is anticipated that the installation contract for the first phase will be awarded in mid-2018 and the works will be completed by end-2020. This proposed project belongs to the second phase of installation.

11. In addition, JTISs are installed at critical divergent points to provide the estimated journey time from the divergent points to the exit portals of various cross-harbour tunnels, and assist motorists to make an informed route choice. SMPs are schematic electronic maps installed at critical divergent points, using different colours to indicate real-time traffic conditions on the roads ahead and the estimated journey times. Pictures of an existing JTIS and an existing SMP are shown at Enclosure 4. There are currently 10 sets of JTISs and 5 SMPs in Hong Kong. After completion of the additional installation works, information shown on the total of 26 JTISs and 5 SMPs will be simultaneously disseminated through TD's website, mobile applications and the Government's public information portal "data.gov.hk" to facilitate the public to better plan their journeys and select routes or transport modes.

12. After completion of the proposed project, all strategic routes and major roads will be equipped with traffic detectors, so that TD can comprehensively monitor the traffic conditions of these roads, strengthening TD's capability in handling traffic incidents as well as traffic management. In addition, relevant traffic incident information will be disseminated to other stakeholders (including public transport operators, Hong Kong Police Force and Fire Services Department) for coordination in handling traffic incidents, thereby enhancing traffic incident management.

13. TD has been disseminating real-time traffic information through various electronic platforms, such as websites and mobile applications; and uploading the datasets of real-time traffic information to the Government's public information portal "data.gov.hk". The expanded coverage of traffic detectors, JTISs and SMP under this project will enable more real-time traffic data and information to be provided for public use, assisting the public to better plan their journeys and selecting suitable routes or transport modes.

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FINANCIAL IMPLICATIONS

14. We estimate the capital cost of the proposed project to be $262.7 million in MOD prices, broken down as follows –

		$ million (in MOD prices)
(a)	Installation works of traffic detectors	60.5
(b)	Installation/modification works of JTISs and SMP	13.1
(c)	Power supply equipment, data processing and communication equipment	31.8
(d)	Associated civil and electrical and mechanical works	113.2
(e)	Electrical and Mechanical Services Trading Fund (EMSTF) charges[4]	22.2
(f)	Contingencies	21.9
	Total	262.7

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[4] Since the establishment on 1 August 1996 under the Trading Fund Ordinance, the EMSTF charges government departments for design and technical consultancy services provided by the Electrical and Mechanical Services Department. The services under EMSTF rendered for this Project during the construction stage include contract administration and site supervision. In carrying out these services, EMSTF will employ a civil consultant to vet and approve the contractor's civil and temporary traffic arrangement proposals at a fee estimated to be 2% of the contract sum. EMSD's supervision charge is 8% of the total of the contract sum and the civil consultant's fee.

15. Subject to approval, we plan to phase the expenditure as follows –

Year	$ million (MOD)
2018 – 2019	5.3
2019 – 2020	127.1
2020 – 2021	101.4
2021 – 2022	14.1
2022 – 2023	14.8
Total	262.7

16. We have derived the MOD estimates on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output for the period 2018 to 2023. We will deliver the construction works through a lump-sum contract because we can clearly define the scope of works in advance.

17. We estimate the annual recurrent expenditure arising from the proposed project to be $19.9 million.

PUBLIC CONSULTATION

18. TD submitted an information paper on this project to the 18 District Councils (DCs) in early April 2018. The DCs had no objection to this project. The THB and the TD consulted the LegCo Panel on Transport (Panel) on this project on 27 April 2018. The Panel also supported the project. During the consultations, some suggestions were received, including those contained in a motion passed by the Panel. The TD has thoroughly considered those suggestions from the DCs and the Panel on traffic grounds and incorporated some of them in this proposal, including additional JTIS at Pok Fu Lam Road near Chi Fu Road and at Wong Chuk Hang Road near Aberdeen Sports Ground.

ENVIRONMENTAL IMPLICATIONS

19. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). As the site works mainly involve mounting traffic detectors and associated equipment on existing street lighting poles and sign gantries, modifying the existing directional signs and laying of cables, the noise, dust and site run-off nuisances arising from the project will be minimal. TD has included in the project estimate the cost to implement suitable mitigation measures to control short term environmental impacts.

20. At the planning and design stages, TD has considered measures to reduce the generation of construction waste where possible (e.g. using metal signboards so that these materials can be recycled or reused in other projects). In addition, TD will require the contractor to reuse inert construction waste (e.g. excavated materials for backfilling) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities[5]. TD will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further minimise the generation of construction waste.

21. At the construction stage, TD will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. TD will ensure that the day-to-day operations on site comply with the approved plan. TD will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. TD will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

22. TD estimates that the proposed project will generate in total about 100 tonnes of construction waste. Of these, we will reuse about 30 tonnes (30%) of inert construction waste on site and deliver 50 tonnes (50%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 20 tonnes (20%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites is estimated to be about $8,000 for the project (based on

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[5] Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

a unit charge rate of $71 per tonne for disposal at public fill reception facilities and $200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

23. The proposed project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

24. The proposed project does not require any land resumption.

BACKGROUND INFORMATION

25. We upgraded the proposed project to Category B in October 2017. TD engaged an engineering consultant to undertake the investigation and design work in December 2017. The total cost of the above consultancy service is about $2.2 million which is funded by block allocation **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme". The investigation and design work have been completed and the tender documents are being prepared.

26. The project will not involve any tree removal or planting proposals.

27. We estimate that the proposed works will create about 100 jobs (80 for labourers and another 20 for professional/technical staff) providing a total employment of about 2 100 man-months.

Transport and Housing Bureau
May 2018

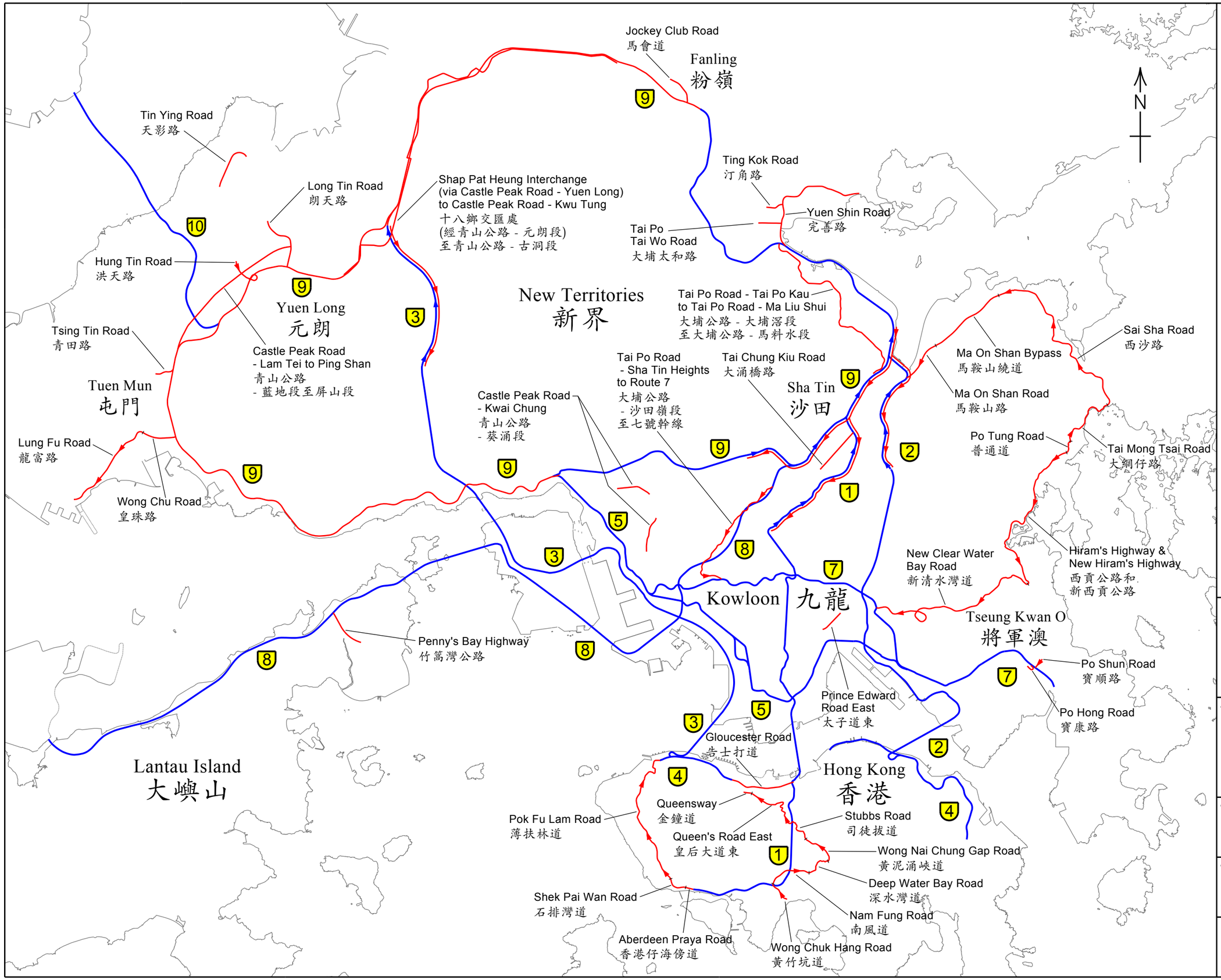
Locations of the Proposed Traffic Detectors (see the attached Drawing No. 6029TC/SK/002)

擬議安裝交通探測器的地點（見附圖編號 6029TC/SK/002）

Hong Kong Island 香港島	Gloucester Road 告士打道 Shek Pai Wan Road 石排灣道 Deep Water Bay Road 深水灣道 Nam Fung Road 南風道 Stubbs Road 司徒拔道 Queensway 金鐘道	Aberdeen Praya Road 香港仔海傍道 Pok Fu Lam Road 薄扶林道 Wong Chuk Hang Road 黃竹坑道 Wong Nai Chung Gap Road 黃泥涌峽道 Queen's Road East 皇后大道東
Kowloon 九龍	Prince Edward Road East 太子道東	

New Territories East 新界東	Route 1 一號幹線 Route 2 二號幹線 Route 9 九號幹線 Ma On Shan Bypass 馬鞍山繞道 New Clear Water Bay Road 新清水灣道 Clear Water Bay Road 清水灣道 Pu Tung Road 普通道 Sai Sha Road 西沙路 New Hiram's Highway 新西貢公路 Po Hong Road 寶康路 Jockey Club Road 馬會道	Tai Po Road – Tai Po Kau to Tai Po Road – Ma Liu Shui 大埔公路–大埔滘段至大埔公路–馬料水段 Tai Chung Kiu Road 大涌橋路 Ma On Shan Road 馬鞍山道 Tai Po Road–Sha Tin Heights Section to Route 7 大埔公路–沙田嶺段至七號幹線 Po Shun Road 寶順路 Tai Mong Tsai Road 大網仔路 Hiram's Highway 西貢公路 Tai Po Tai Wo Road 大埔太和路 Ting Kok Road 汀角路 Yuen Shin Road 完善路

New Territories West 新界西	Route 3 三號幹線 Route 9 九號幹線 Wong Chu Road 皇珠路 Lung Fu Road 龍富路 Tsing Tin Road 青田路 Hung Tin Road 洪天路	Castle Peak Road – Ping Shan Section to Lam Tei Section 青山公路－屏山段至藍地段 Long Tin Road 朗天路 Tin Ying Road 天影路 Castle Peak Road – Kwai Chung 青山公路–葵涌段 Shap Pat Heung Interchange (via Castle Peak Road – Yuen Long) to Castle Peak Road – Kwu Tung 十八鄉交匯處(經青山公路–元朗段)至青山公路–古洞段
Islands 離島	Penny's Bay Highway 竹篙灣公路	



LEGEND :
圖例 :

9 Strategic Route Number
主要幹線編號

Roads with existing traffic detectors or traffic detectors to be installed in Phase 1. Those with arrow (➔➔) indicate carriageways installed or to be installed with traffic detectors in that direction only.
已裝置有交通探測器或將會在第一期工程安裝交通探測器的道路。有箭咀者 (➔➔)表示祇有在該行車道方向裝有或將裝有交通探測器。

Roads with traffic detectors to be installed in this Project. Those with arrow (➔➔) indicate carriageways to be installed with traffic detectors in that direction only.
將在本工程項目安裝交通探測器的道路。有箭咀者 (➔➔)表示祇有在該行車道方向將裝有交通探測器。

INSTALLATION OF ADDITIONAL TRAFFIC DETECTORS, SPEED MAP PANEL AND JOURNEY TIME INDICATION SYSTEMS
安裝新增的交通探測器、行車速度屏和行車時間顯示系統

drawing title
LOCATION PLAN FOR TRAFFIC DETECTORS
交通探測器位置圖

drawing no.	scale
6029TC/SK/002	1 : 120 000

office
TRAFFIC AND TRANSPORT SURVEY DIVISION

運輸署 Transport Department

A3 420 x 297

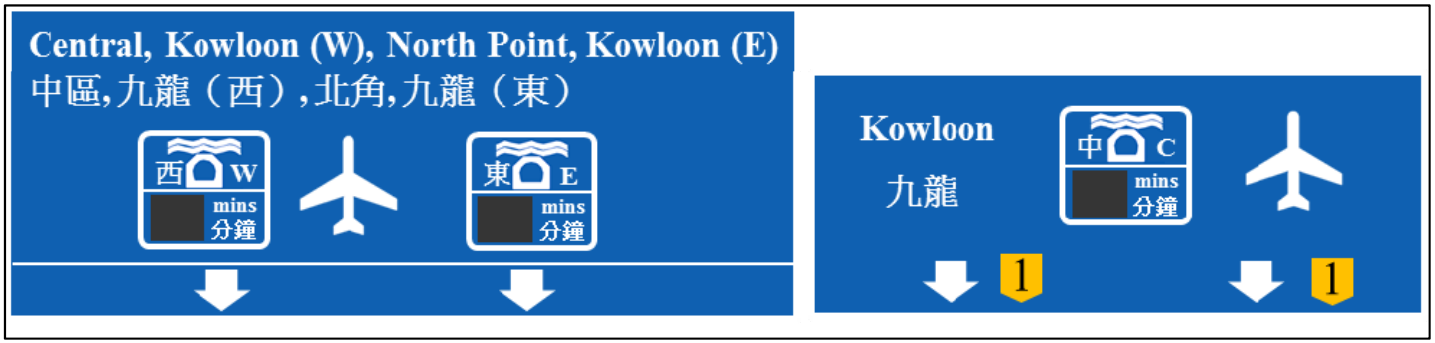
Proposed Locations of Journey Time Indication System
擬議的行車時間顯示系統的地點

1. Wong Nai Chung Road (near junction with Queen's Road East)
黃泥涌道（近皇后大道東交界）
2. Ap Lei Chau Bridge
鴨脷洲大橋
3. West Kowloon Highway (near MTR Nam Cheong Station)
西九龍公路（近港鐵南昌站）
4. Long Tin Road (near Parkside Villa)
朗天路(近柏麗豪園）
5. Hong Tin Road (near junction with Hung Chi Road)
洪天路（近洪志路交界）
6. Yuen Long Highway (near Shap Pat Heung Interchange)
元朗公路（近十八鄉交匯處）
7. Fanling Highway (near Kwu Tung)
粉嶺公路（近古洞）
8. Tai Po Road (near Kwong Fuk Estate)
大埔公路（近廣福邨）
9. Po Shun Road (near Chun Ming Court)
寶順路（近頌明苑）
10. Wan Po Road (near Hong Kong Velodrome)
環保大道（近香港單車館）
11. Po Hong Road (near KMB Tseung Kwan O Depot)
寶康路（近九巴將軍澳車廠）
12. Wong Chuk Hang Road (near Country Club)
黃竹坑道(近鄉村俱樂部）
13. Wong Chuk Hang Road (near Aberdeen Sports Ground)
黃竹坑道(近香港仔運動場）
14. Pok Fu Lam Road
薄扶林道
15. Fuk Man Road
福民路
16. Tsing Sha Highway
青沙公路

1 **Wong Nai Chung Road** (near junction with Queen's Road East)
黃泥涌道 (近皇后大道東交界)

Existing Directional Signs 現時的路線指示標誌:

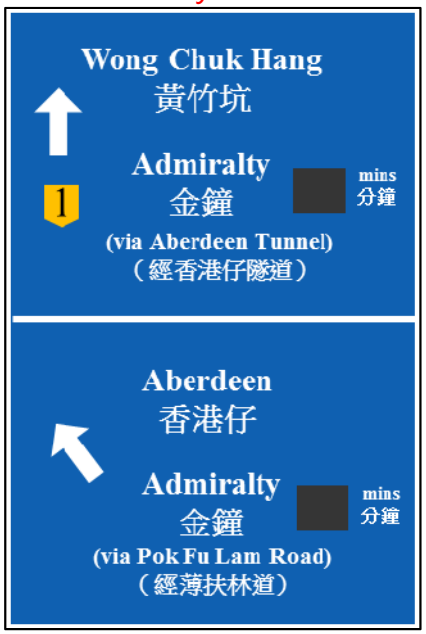
Directional Signs after Addition of Proposed Journey Time Indication System 加設擬議行車時間顯示系統後的交通標誌:



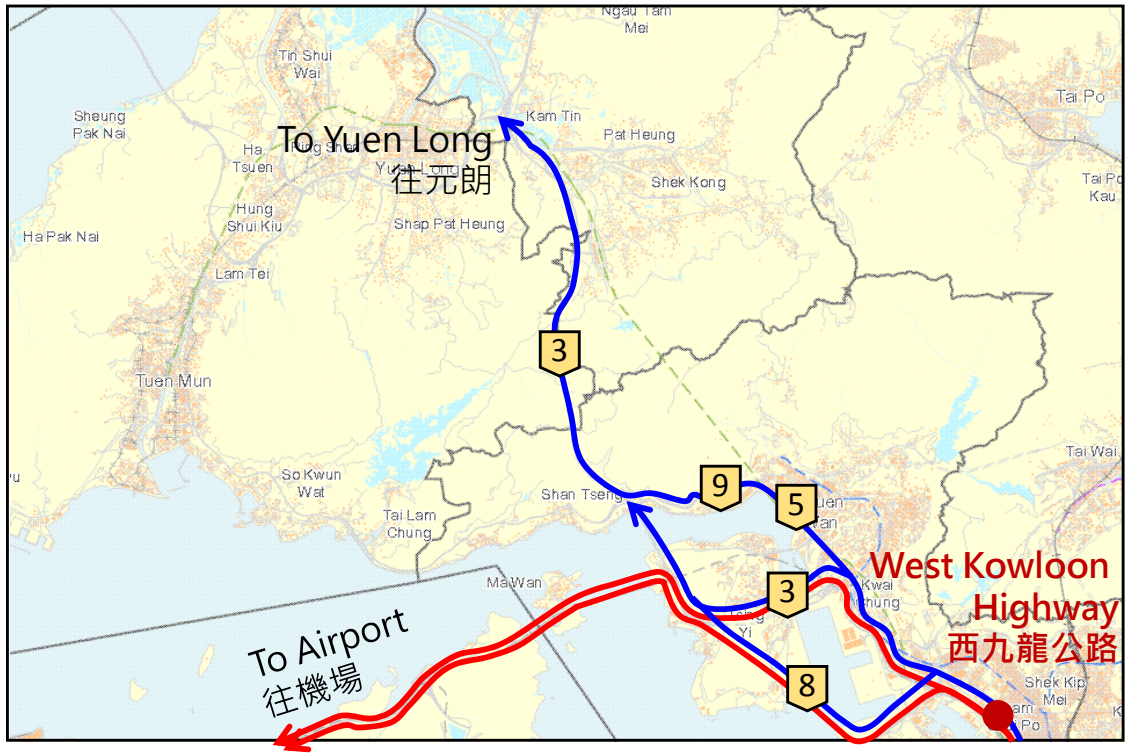
2 Ap Lei Chau Bridge
鴨脷洲大橋

Existing Directional Sign 現時的路線指示標誌:

Directional Signs after Addition of Proposed Journey Time Indication System 加設擬議行車時間顯示系統後的交通標誌:



3 West Kowloon Highway (near MTR Nam Cheong Station)
西九龍公路 (近港鐵南昌站)



Existing Directional Sign 現時的路線指示標誌:

Directional Signs after Addition of Proposed Journey Time Indication System 加設擬議行車時間顯示系統後的交通標誌:

4 Long Tin Road (near Parkside Villa)
朗天路(近柏麗豪園)

Existing Directional Sign 現時的路線指示標誌:

Directional Signs after Addition of Proposed Journey Time Indication System 加設擬議行車時間顯示系統後的交通標誌:

5 **Hong Tin Road** (near junction with Hung Chi Road)
洪天路 (近洪志路交界)

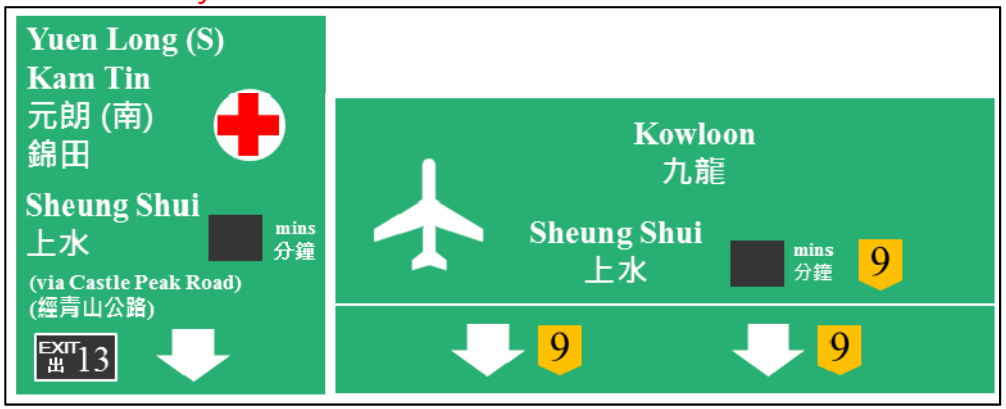
Existing Directional Sign 現時的路線指示標誌:

Directional Sign after Addition of Proposed Journey Time Indication System 加設擬議行車時間顯示系統後的交通標誌:

6 **Yuen Long Highway** (near Shap Pat Heung Interchange)
元朗公路 (近十八鄉交匯處)

Existing Directional Signs 現時的路線指示標誌:

Directional Signs after Addition of Proposed Journey Time Indication System 加設擬議行車時間顯示系統後的交通標誌:

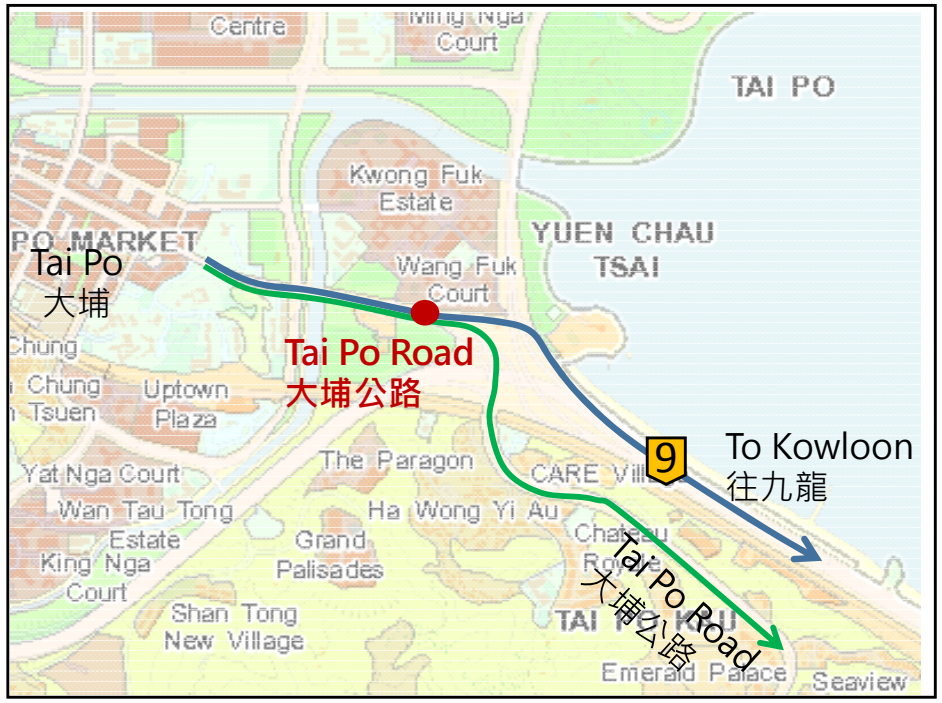


7 Fanling Highway (near Kwu Tung)
粉嶺公路 (近古洞)

Existing Directional Signs 現時的路線指示標誌:

Directional Signs after Addition of Proposed Journey Time Indication System 加設擬議行車時間顯示系統後的交通標誌:

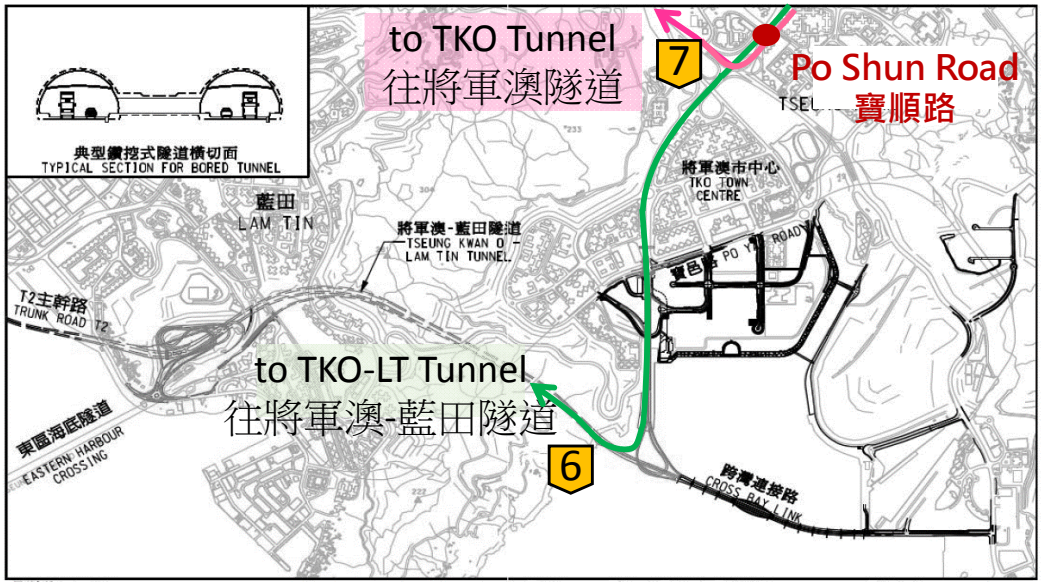
8 Tai Po Road (near Kwong Fuk Estate)
大埔公路 (近廣福邨)



Existing Directional Sign 現時的路線指示標誌:

Directional Sign after Addition of Proposed Journey Time Indication System:
加設擬議行車時間顯示系統後的交通標誌:

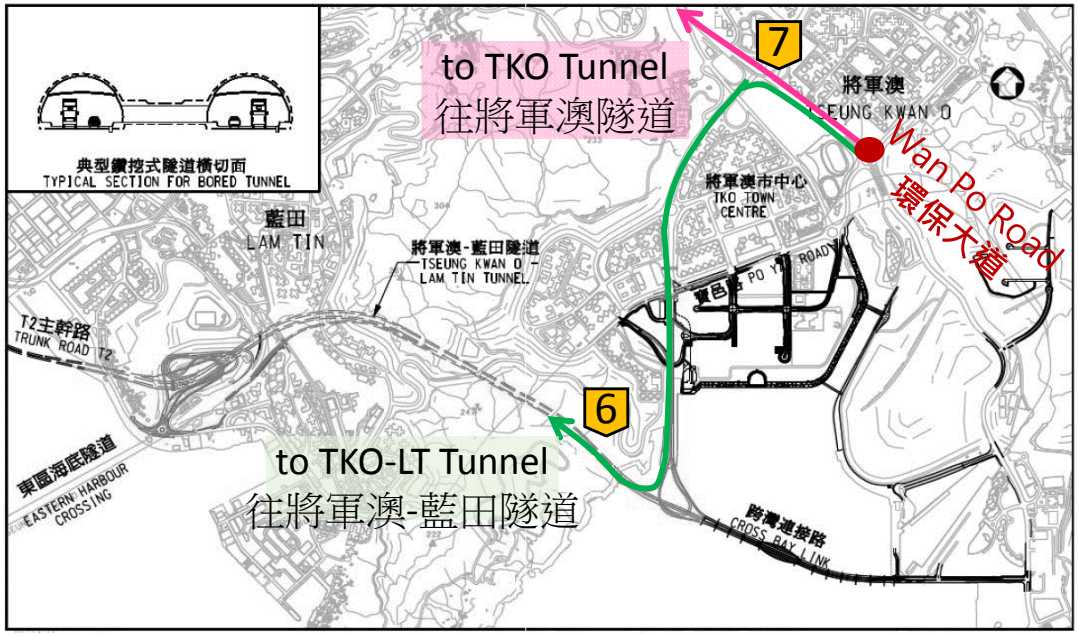
9 Po Shun Road (near Chun Ming Court)
寶順路 (近頌明苑)



Existing Directional Sign 現時的路線指示標誌:

Directional Sign after Addition of Proposed Journey Time Indication System 加設擬議行車時間顯示系統後的交通標誌:

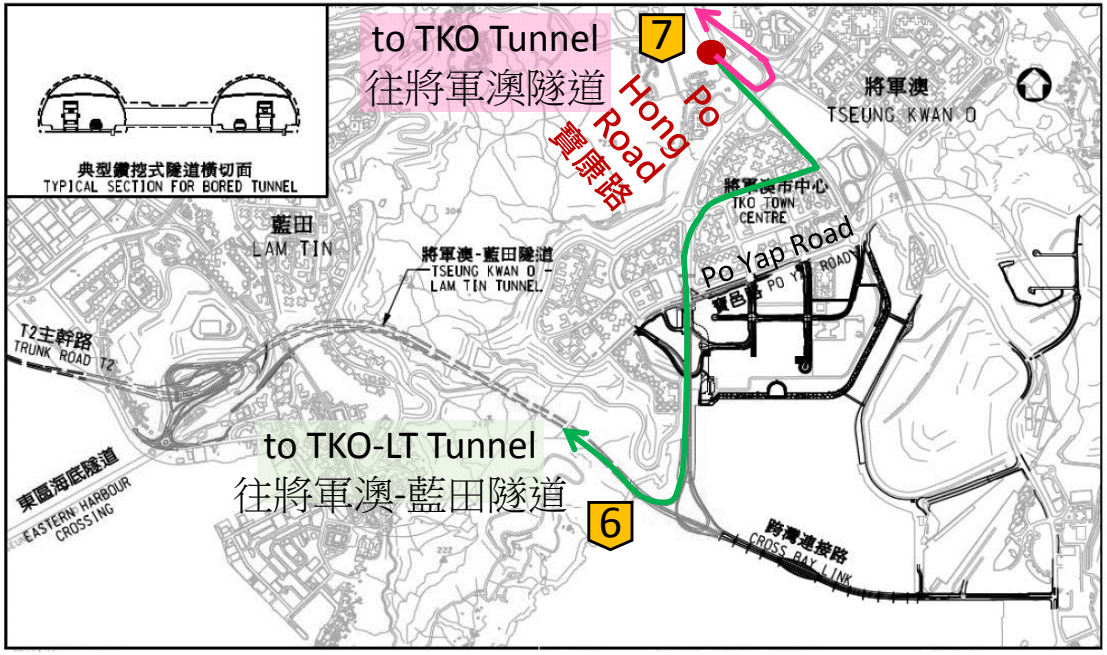
10 **Wan Po Road** (near Hong Kong Velodrome)
環保大道 (近香港單車館)



Existing Directional Signs 現時的路線指示標誌:

Directional Signs after Addition of Proposed Journey Time Indication System 加設擬議行車時間顯示系統後的交通標誌:

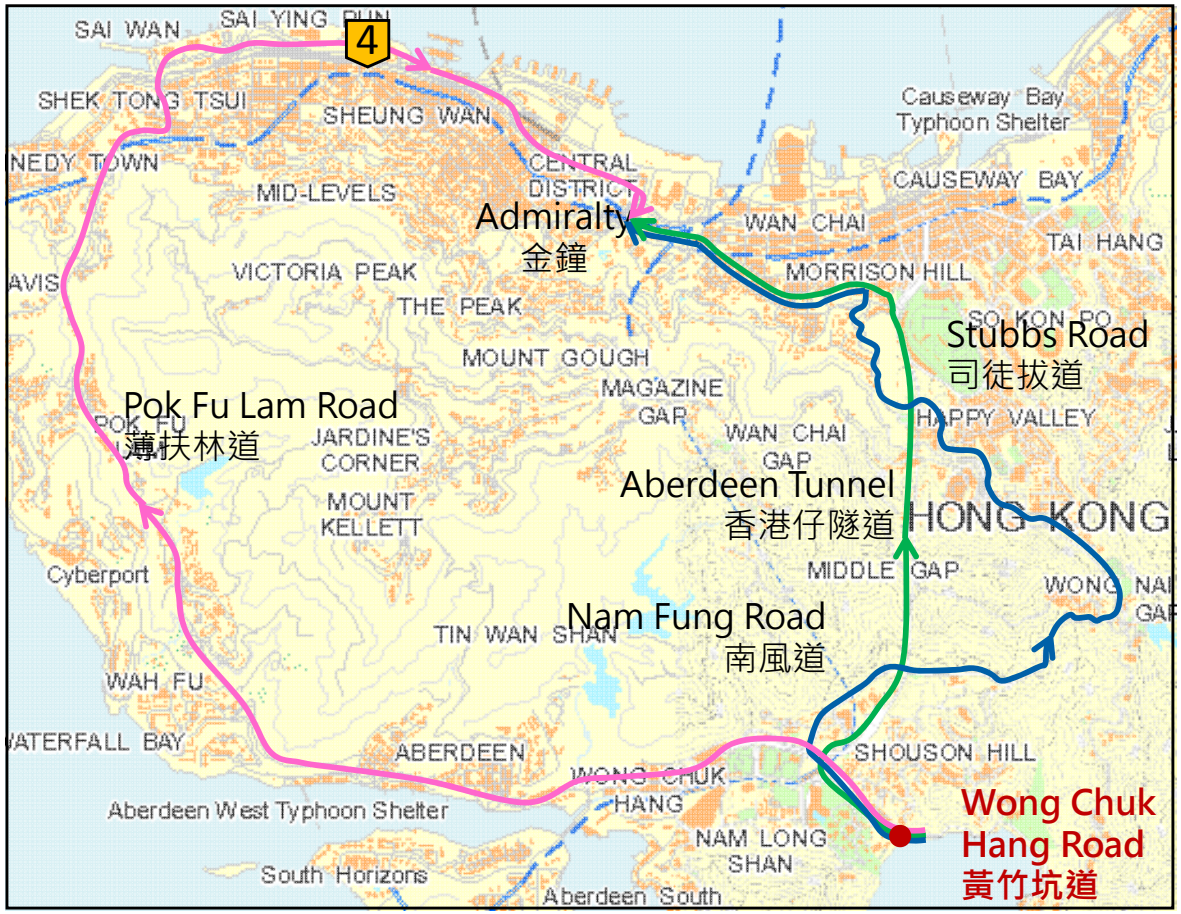
11 Po Hong Road (near KMB Tseung Kwan O Depot)
寶康路 (近九巴將軍澳車廠)



Existing Directional Sign 現時的路線指示標誌:

Directional Sign after Addition of Proposed Journey Time Indication System 加設擬議行車時間顯示系統後的交通標誌:

12 Wong Chuk Hang Road (near Country Club)
黃竹坑道(近鄉村俱樂部)



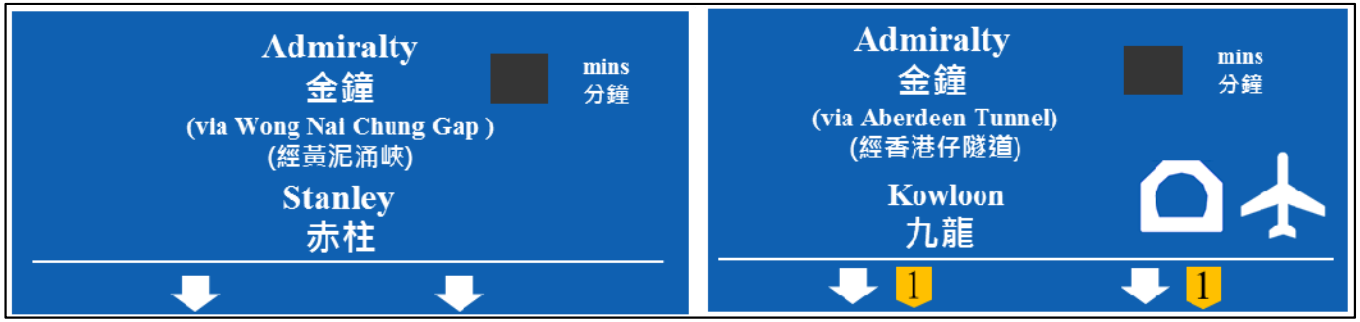
Existing Directional Sign 現時的路線指示標誌:

Directional Sign after Addition of Proposed Journey Time Indication System
加設擬議行車時間顯示系統後的交通標誌:

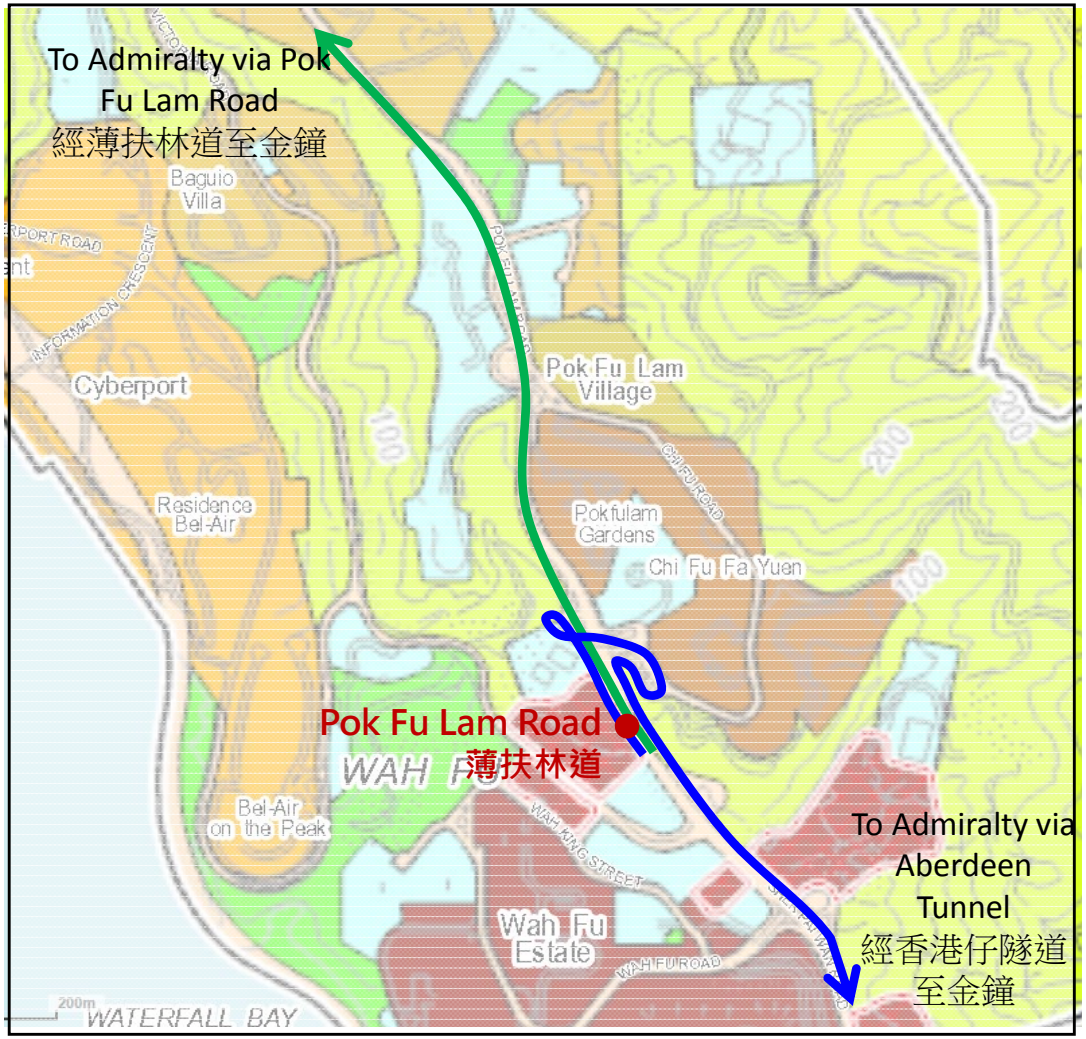
13 Wong Chuk Hang Road (near Aberdeen Sports Ground)
黃竹坑道(近香港仔運動場)

Existing Directional Sign 現時的路線指示標誌:

Directional Sign after Addition of Proposed Journey Time Indication System
加設擬議行車時間顯示系統後的交通標誌:

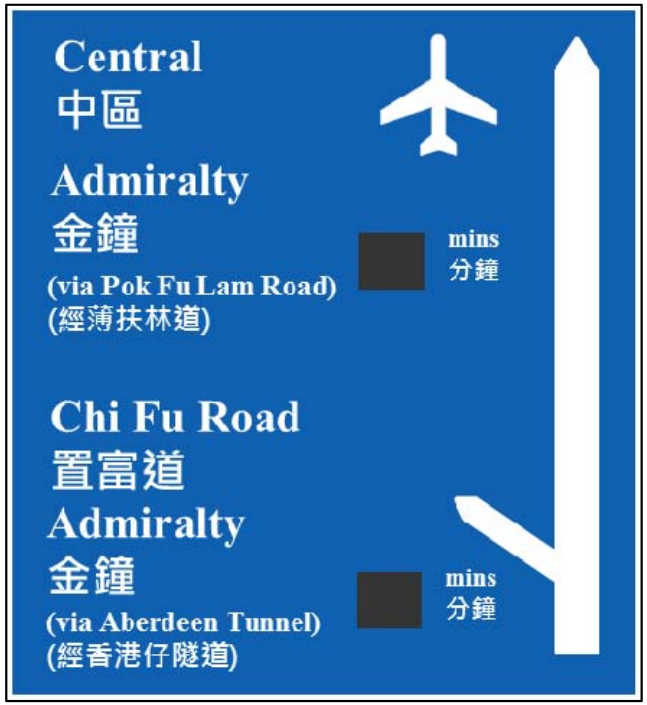


14 Pok Fu Lam Road 薄扶林道



Existing Directional Sign 現時的路線指示標誌:

Directional Sign after Addition of Proposed Journey Time Indication System
加設擬議行車時間顯示系統後的交通標誌:



15 Fuk Man Road 福民路

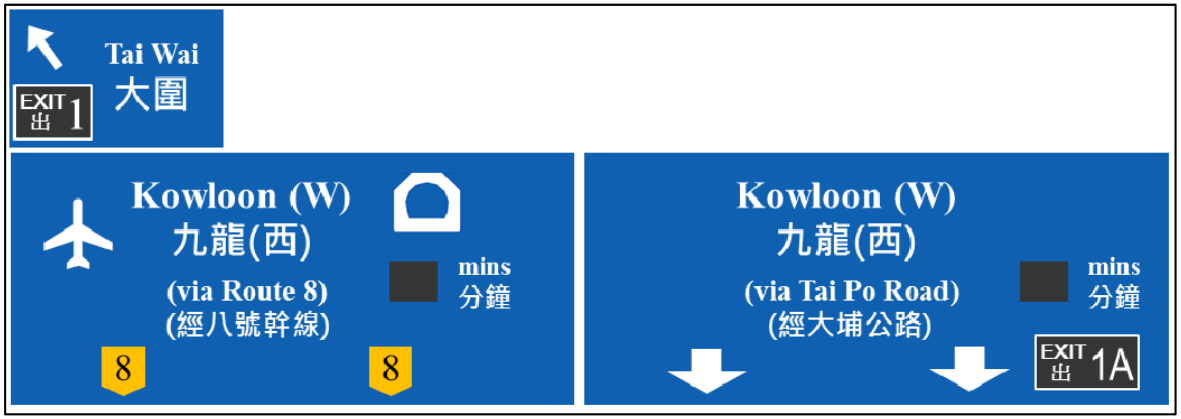
Existing Directional Sign 現時的路線指示標誌:

Directional Sign after Addition of Proposed Journey Time Indication System
加設擬議行車時間顯示系統後的交通標誌:

16 Tsing Sha Highway 青沙公路

Existing Directional Sign 現時的路線指示標誌:

Directional Sign after Addition of Proposed Journey Time Indication System
加設擬議行車時間顯示系統後的交通標誌:



Project: 29TC - Installation of Additional Traffic Detectors, Speed Map Panel and Journey Time Indication Systems
工程項目: 29TC - 安裝新增的交通探測器、行車速度屏和行車時間顯示系統

Transport and Housing Bureau 運輸及房屋局
Transport Department 運輸署

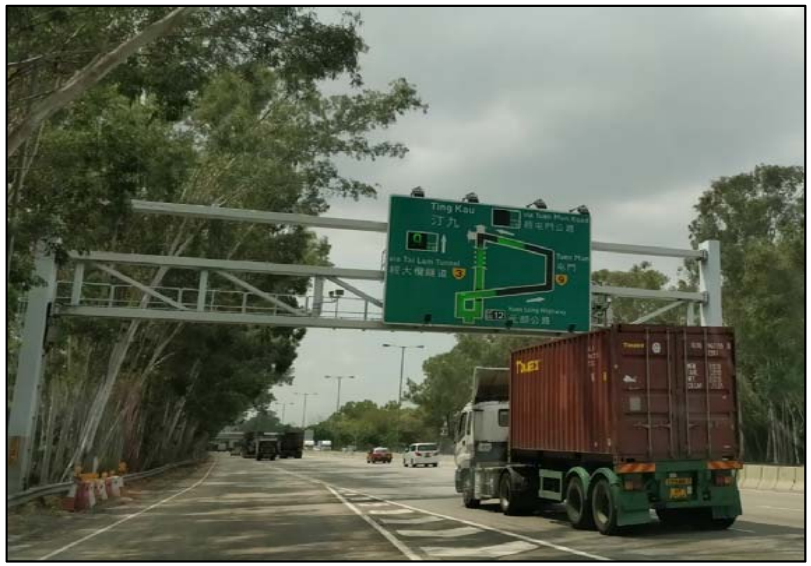
Proposed Enhancement of a Speed Map Panel

擬議改善的行車速度屏

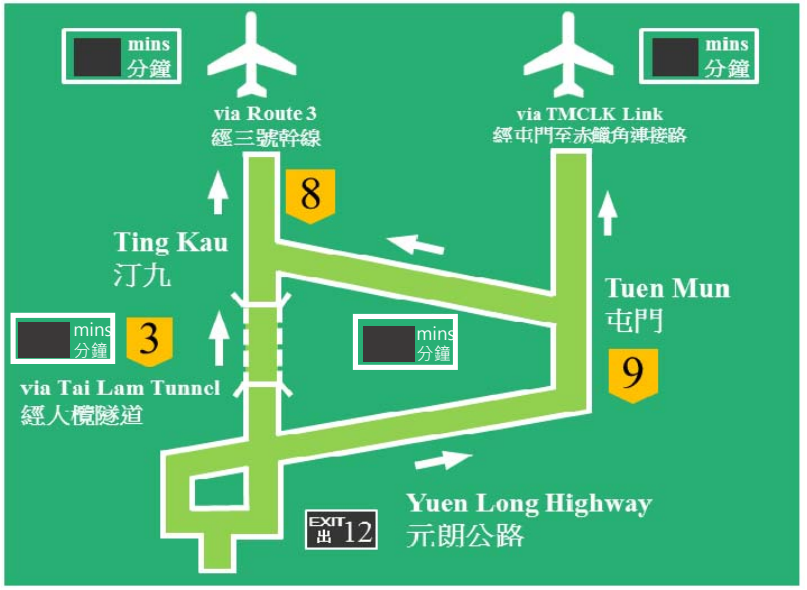
1. San Tin Highway (near Fairview Park)
   新田公路（近錦綉花園）

1 San Tin Highway (near Fairview Park)
新田公路 (近錦綉花園)

Existing Speed Map Panel 現時的行車速度屏:



Proposed Speed Map Panel 擬議的行車速度屏:



Project: 29TC - Installation of Additional Traffic Detectors, Speed Map Panel and Journey Time Indication Systems
工程項目: 29TC - 安裝新增的交通探測器、行車速度屏和行車時間顯示系統

Transport and Housing Bureau 運輸及房屋局
Transport Department 運輸署

Journey Time Indication System and Speed Map Panel

行車時間顯示系統 與 行車速度屏

Journey Time Indication System
行車時間顯示系統

Speed Map Panel
行車速度屏

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Transport and Housing Bureau 運輸及房屋局
Transport Department 運輸署