

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT

Civil Engineering – Land development

711CL – Kai Tak development – infrastructure works for developments at the southern part of the former runway

Members are invited to recommend to the Finance Committee the upgrading of **711CL** to Category A at an estimated cost of \$5,757.1 million in money-of-the-day prices for the construction of infrastructure essential for the developments at the southern part of the former runway at Kai Tak development.

PROBLEM

We need to provide essential infrastructure to support the planned developments for residential, commercial and other specified uses at the southern part of the former runway at the Kai Tak development (KTD).

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Development, proposes to upgrade **711CL** to Category A at an estimated cost of \$5,757.1 million in money-of-the-day (MOD) prices for the construction of essential infrastructure to serve the planned developments at the southern part of the former runway.

/PROJECT

PROJECT SCOPE AND NATURE

3. The scope of **711CL** comprises –
- (a) construction of the following items of works located at the former runway –
 - (i) realignment and widening of the existing single 2-lane Shing Fung Road to form a dual 2-lane distributor road of about 1.4 kilometres (km) long;
 - (ii) associated single 2-lane roads (including a vehicular underpass¹) with a total length of about 0.6 km branching off from the realigned Shing Fung Road to the sites along the road;
 - (iii) an elevated landscaped deck with lifts and staircases of about 1.4 km long with minimum 11 metres (m) in width above the realigned Shing Fung Road serving as part of a semi-enclosure noise barrier and also as a public open space; and
 - (iv) roadside noise barriers with a total length of about 1.1 km long alongside the realigned Shing Fung Road and integrated with the elevated landscaped deck;
 - (b) upgrading of the existing single 2-lane carriageway of about 0.3 km long on Kai Tak Bridge to a dual 2-lane carriageway;

/(c)

¹ The completion of the proposed vehicular underpass will tie in with the development schedule of the Tourism Node, which is a site with an area of about 5.9 hectares located at the tip of former runway and designated "Other Specified Uses" annotated "Tourism Related Uses to Include Commercial, Hotel and Entertainment" in the approved Kai Tak Outline Zoning Plan (OZP) No. S/K22/4. According to the OZP, it is planned for tourism-related use in the form of commercial, retail and dining facilities, etc. with a view to introducing sufficient attractive elements to both visitors and local Hong Kong people. A number of land use mixes including office, hotel, creative gallery, leisure use, entertainment, retail and dining facilities may be included as appropriate in the Node to add vibrancy to the Kai Tak waterfront.

- (c) construction of the following items of works located at the former south apron area –
 - (i) reconstruction and widening of Shing Cheong Road and part of Cheung Yip Street from the existing single 2-lane roads to form dual 2-lane roads with a total length of about 0.7 km; and
 - (ii) construction of a supporting underground structure (SUS) of about 0.4 km long along Shing Cheong Road and across Cheung Yip Street as enabling works to facilitate future construction of Trunk Road T2;
- (d) improvement to three existing road junctions along Wang Chiu Road at its junctions with Kai Cheung Road, Lam Hing Street and Sheung Yee Road in Kowloon Bay;
- (e) construction of associated footpaths, pedestrian streets, street lighting, traffic aids, drainage, sewerage, water mains, landscaping and ancillary works; and
- (f) implementation of environmental mitigation measures and an environmental monitoring and audit (EM&A) programme for the works mentioned in paragraphs (a) to (e) above.

_____ The plans and the artist's impressions showing the proposed works are at Enclosures 1 and 2.

4. To facilitate early disposal of the development sites concerned, we invited tenders for the proposed works in May 2015. Subject to funding approval of the Finance Committee (FC), we plan to commence the proposed works in the fourth quarter of 2015 for substantial completion by 2019.

/JUSTIFICATION

JUSTIFICATION

5. At present, the Kai Tak Cruise Terminal (KTCT) and Runway Park Phase 1 are connected with Kowloon Bay via single 2-lane roads consisting of Cheung Yip Street and Shing Cheong Road at the former south apron area, and Kai Tak Bridge, as well as Shing Fung Road at the former runway². We need to expand the capacity of infrastructure and public utilities to serve the planned developments at the southern part of the former runway including six commercial sites for land disposal progressively starting from end 2015 as announced in the 2014-15 Budget Speech, six residential sites and the Tourism Node, through realignment and widening of the existing single 2-lane roads to become dual 2-lane roads, implementation of necessary noise mitigation measures and improving the capacity of three existing road junctions along Wang Chiu Road in Kowloon Bay.

6. In the previous version of the approved Kai Tak Outline Zoning Plan (OZP), i.e. No. S/K22/2, the proposed dual 2-lane road and the elevated landscaped deck above, which was zoned as “Open Space (2)” in the OZP, were both located along the waterfront of the former runway. When considering the funding application³ on 6 May 2009 for the construction of advance infrastructure including the existing temporary single 2-lane roads at the former runway, Members of the Public Works Subcommittee (PWSC) requested that the future permanent roads at the southern part of the former runway be located away from the promenades to enhance public enjoyment of the waterfront. After public consultation, the proposed dual 2-lane road and the elevated landscaped deck, which was also zoned as “Open Space(2)”, were both relocated to the centerline of the former runway as reflected in the current version of the approved Kai Tak OZP, i.e. No. S/K22/4. The dual 2-lane road cannot be depressed to underground level because of the presence of underground plant rooms of the District Cooling System.

7. As stipulated in the approved Environmental Impact Assessment (EIA) report and the Environmental Permit (EP) in relation to the realignment of Shing Fung Road, we need to carry out noise mitigation measures to mitigate road traffic noise impact on the adjoining noise sensitive receivers, i.e. the residential developments. In this connection, we will provide a semi-enclosure noise barrier comprising the roadside noise barriers as well as the elevated landscaped deck. The landscaped deck is also intended to serve as a public open space in accordance with the approved Kai Tak OZP.

/8.

² Some advance public utilities including drainage, sewerage, water mains and sewage pumping station are also provided to serve KTCT and Runway Park Phase 1.

³ It refers to PWSC(2009-10)20 on the project “Kai Tak development – stage 1 advance infrastructure works for developments at the southern part of the former runway”.

8. Apart from its function as part of the semi-enclosure noise barrier, the landscaped deck will also be a landmark structure at the former runway, providing public open space and a leisure walkway connecting the Metro Park under planning with the KTCT, Tourism Node and Runway Park. Lifts and staircases together with at-grade pedestrian crossings will be provided to enhance the connectivity of the landscaped deck with adjacent footpaths, pedestrian streets and waterfront promenades. The design of the elevated landscaped deck will make provision for future possible extensions and connections to be built under adjoining development projects. Upon completion of the proposed works, the existing single 2-lane Shing Fung Road will be closed for development into a promenade by a separate project under planning.

9. The Kai Tak OZP has indicated that an Environmentally Friendly Linkage System (EFLS) for Kowloon East would run along the re-aligned Shing Fung Road in front of the commercial development sites. Whilst the mode and the way forward of the proposed EFLS will be subject to the outcome of a detailed feasibility study, provisions have been made in the design of the elevated landscaped deck to allow adequate space for construction of the EFLS, be it running at-grade or elevated, if required.

10. As mentioned in paragraph 5 above, we need to, among others, reconstruct and widen Shing Cheong Road and Cheung Yip Street in the former south apron area. Under the authorised road scheme, a section of the planned Trunk Road T2⁴ will route through the former south apron area in the form of a cut-and-cover tunnel running underneath Shing Cheong Road and part of Cheung Yip Street, with the hospital developments on both sides of the tunnel, viz. the Hong Kong Children's Hospital (HKCH) under construction and the New Acute Hospital under planning. Construction of the above cut-and-cover tunnel section of the Trunk Road T2 under detailed design may only start after widening of Shing Cheong Road and part of Cheung Yip Street under **711CL** and commissioning of the HKCH targeted for 2018.

/11.

⁴ Trunk Road T2 is the middle section of the strategic Route 6 connecting Central Kowloon Route and Tseung Kwan O – Lam Tin Tunnel under detailed design, and was authorized under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 21 November 2014.

11. To allow future works for the planned Trunk Road T2 to proceed without causing serious disruptions to the operation, environment and accessibility of the KTCT, the adjacent hospitals, as well as the future development sites at the southern part of the former runway, we need to provide the SUS as part of the project. The SUS will also avoid the need to demolish the newly widened roads during the future construction of Trunk Road T2 at this location. The SUS will form part of the future permanent tunnel structure of Trunk Road T2 under detailed design.

FINANCIAL IMPLICATIONS

12. We estimate the cost of the proposed works to be \$5,757.1 million in MOD prices (please see paragraph 14 below), broken down as follows –

		\$ million
(a)	Road construction	678.5
	(i) roads, associated footpaths and pedestrian streets	316.4
	(ii) vehicular underpass	121.8
	(iii) improvement to road junctions	6.4
	(iv) drainage, sewerage, water mains and ancillary works	233.9
(b)	Elevated landscaped deck	982.3
	(i) foundations	503.9
	(ii) superstructures	410.8
	(iii) lifts and staircases	67.6
(c)	Roadside noise barriers	230.4
	(i) foundations	88.0
	(ii) superstructures	142.4
(d)	SUS	1,753.6
	(i) foundations	774.3
	(ii) earthworks	259.4
	(iii) tunnel structures	719.9
(e)	Landscaping works	102.6
	(i) on elevated landscaped deck	41.3
	(ii) roadside and at-grade	61.3

/(f)

		\$ million	
(f)	Environmental mitigation measures and EM&A programme	57.5	
(g)	Consultants' fees for	35.9	
	(i) contract administration	16.6	
	(ii) management of resident site staff	15.4	
	(iii) independent environmental checker service ⁵	3.9	
(h)	Remuneration of resident site staff	368.6	
(i)	Contingencies	420.9	
	Sub-total	4,630.3	(in September 2014 prices)
(j)	Provision for price adjustment	1,126.8	
	Total	5,757.1	(in MOD prices)

13. Due to insufficient in-house resources, we propose to engage consultants to undertake the contract administration and site supervision of the proposed works. A breakdown of the estimate for consultants' fees and resident site staff costs by man-months is at Enclosure 3.

14. Subject to funding approval, we will phase the expenditure as follows –

Year	\$ million (Sept 2014)	Price adjustment factor	\$ million (MOD)
2015 – 2016	78.5	1.05725	83.0
2016 – 2017	657.8	1.12069	737.2
			/2017 – 2018

⁵ As part of the EM&A programme for the proposed works, we will commission consultants to provide independent environmental checker services to review and audit the environmental monitoring works and results for the proposed works.

Year	\$ million (Sept 2014)	Price adjustment factor	\$ million (MOD)
2017 – 2018	1,319.0	1.18793	1,566.9
2018 – 2019	1,350.3	1.25920	1,700.3
2019 – 2020	827.7	1.33475	1,104.8
2020 – 2021	294.0	1.40483	413.0
2021 – 2022	103.0	1.47507	151.9
	<hr/> 4,630.3 <hr/>		<hr/> 5,757.1 <hr/>

15. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period from 2015 to 2022. We will deliver the proposed works under two separate contracts. For the proposed works at the former south apron area, we will adopt a re-measurement contract because the quantities of works involved will vary depending on actual ground conditions. For the proposed works at the former runway and other locations, we will adopt a design-and-build contract approach so as to allow flexibility for contractors to team up with experts and compete for aesthetic and cost-effective design and construction of the elevated landscaped deck integrated with the roadside noise barriers⁶. Both contracts will provide for price adjustment.

16. We estimate the annual recurrent expenditure arising from the proposed works to be about \$30.4 million. The cost arising therefrom will be taken into consideration when determining the affected fees and charges as appropriate in future.

/PUBLIC

⁶ The detailed design of elevated landscaped deck and roadside noise barriers will be submitted to the Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS) for vetting and acceptance in due course. ACABAS, which comprises representatives of the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Planners, an academic institution, Architectural Services Department, Highways Department, Housing Department and Civil Engineering and Development Department, is responsible for vetting the design of bridges and other structures associated with the public highway system, including noise barriers and enclosures, from the aesthetic, visual and greening points of view.

PUBLIC CONSULTATION

17. For the proposed works, we consulted the Task Force on Kai Tak Harbourfront Development of Harbourfront Commission (HC), and the relevant committees of Kowloon City District Council (KCDC), Wong Tai Sin District Council (WTSDC) and Kwun Tong District Council (KTDC), with the details as listed below –

(a) proposed works located at the former runway and Kai Tak Bridge

	Date of Consultation	Outcome
Housing and Infrastructure Committee (HIC) of KCDC	9 January 2014	Generally supportive
Leisure and District Facilities Management Committee of KCDC	6 November 2014	
Traffic and Transport Committee (T&TC) of WTSDC	28 January 2014	
T&TC of KTDC	6 February 2014	
Task Force on Kai Tak Harbourfront Development of HC	14 January and 20 February 2014	

(b) proposed works located at the former south apron area

	Date of Consultation	Outcome
HIC of KCDC	7 November 2013	Generally supportive
T&TC of WTSDC	26 November 2013	
T&TC of KTDC	28 November 2013	

(c) proposed improvement to three existing road junctions in Kowloon Bay (by circulation of consultation papers)

	Date of Consultation	Outcome
T&TC of KTDC	15 July 2014	No objection received
District Facilities Management Committee of KTDC	23 February 2015	

18. We gazetted the proposed road schemes and sewerage works at the former runway and south apron area under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) and the Water Pollution Control (Sewerage) Regulation (Cap. 358) on 16 May 2014. One objection was received, but was subsequently withdrawn without conditions. The proposed road schemes and sewerage works were subsequently authorised on 29 August 2014.

19. We separately gazetted the proposed improvement works to the three existing road junctions at Kowloon Bay under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 22 August 2014 and received no objection. The proposed improvement works were subsequently authorised on 28 November 2014.

20. We consulted the Legislative Council Panel on Development on 28 April 2015 and Members generally supported the proposed works. We provided supplementary information as requested by the Panel on 2 June 2015.

ENVIRONMENTAL IMPLICATIONS

21. The proposed realigned Shing Fung Road is a designated project under Schedule 2 of the EIA Ordinance (Cap. 499) requiring an EP for construction and operation. The Director of Environmental Protection (DEP) approved the EIA report and issued an EP for the construction and operation of, inter alia, the realignment of Shing Fung Road in May 2013 and August 2014 respectively. With implementation of the recommended mitigation measures, the approved EIA report concludes that the realignment would not cause any adverse environmental impact. We will implement the mitigation measures recommended in the approved EIA report and comply with the conditions of the EP. The key noise mitigation measures comprising the elevated landscaped deck integrated with the roadside noise barriers to form a semi-enclosure noise barrier providing the necessary noise mitigation measure are to be constructed above the realigned Shing Fung Road, i.e. paragraph 3(a)(iii) and (iv). We have included the cost of providing these noise screening structures in the overall project estimate.

/22.

22. The proposed reconstruction and widening of Shing Cheong Road and Cheung Yip Street at the former south apron area as well as Trunk Road T2 under detailed design including the proposed SUS, are classified as designated projects under Schedule 2 of the EIA Ordinance (Cap. 499), requiring EPs for construction and operation. DEP approved the EIA report for the KTD in March 2009 and issued an EP in April 2009 covering the construction and operation phases of the proposed reconstruction and widening works, whereas the EIA report and an EP for Trunk Road T2 under detailed design including the proposed SUS were approved and issued by DEP both in September 2013. The approved EIA reports conclude that with implementation of the recommended mitigation measures, the proposed works concerned will not cause any adverse environmental impact.

23. The proposed improvement works to the three existing road junctions in Kowloon Bay, which mainly involve local widening of traffic lanes to upgrade their capacities, are minor in nature and would not cause any adverse environmental impact.

24. For short-term impacts caused by the proposed works during construction, we will implement the mitigation measures and the EM&A programme. These measures mainly include the use of quieter equipment and movable noise barriers or enclosures to minimise construction noise impact, regular watering of the works sites and provision of wheel-washing facilities to minimise dust generation, and the use of temporary drains to discharge the surface run-off of sites. We have included in paragraph 12(f) above a sum of \$57.5 million (in September 2014 prices) in the project estimate for the implementation of environmental mitigation measures and the EM&A programme.

25. At the planning and design stages, we have considered the alignment, design level and construction method of the proposed works to reduce the generation of construction waste where possible. In addition, we will require the contractors to reuse inert construction waste (e.g. excavated soil and rock fill) 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 facilities⁷. We will encourage the contractors to maximise the use of recycled or recyclable inert construction waste and the use of non-timber formwork to further reduce the generation of construction waste.

/26.

⁷ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

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

27. We estimate that the proposed works will generate about one million tonnes of construction waste in total. Of these, we will reuse about 120 000 tonnes (12%) of inert construction waste on site and deliver 870 000 tonnes (87%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 10 000 tonnes (1%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$25 million for the proposed works (based on a unit charge rate of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation).

HERITAGE IMPLICATIONS

28. The proposed works will not affect any heritage sites, 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.

TRAFFIC IMPLICATIONS

29. We have completed traffic impact assessments (TIAs) for the proposed works. The TIAs conclude that the proposed works will not cause any significant traffic impact. To minimise disturbance to the traffic during the construction of the proposed works, we will maintain the existing number of traffic lanes along the affected roads as far as practicable.

30. During construction, we will establish Traffic Management Liaison Groups and closely liaise with the Transport Department, the Hong Kong Police Force and other stakeholders, to discuss, scrutinise and review the proposed temporary traffic arrangements with a view to minimising the traffic impacts arising from the proposed works.

/LAND

LAND ACQUISITION

31. The proposed works do not require any resumption of private land.

BACKGROUND INFORMATION

32. We upgraded **711CL** to Category B on 3 December 2004.

33. In December 2006, the FC approved upgrading of part of **711CL** as **724CL** “Kai Tak development – investigation and detailed design for advance infrastructure works for developments at the southern part of the former runway”, at an estimated cost of \$38.0 million in MOD prices, for engaging consultants to undertake the investigation and detailed design for advance infrastructure works to serve the planned developments at the southern part of the former runway. The investigation and detailed design have been substantially completed.

34. In February 2008, the FC approved further upgrading of another part of **711CL** as **734CL** “Kai Tak development – decommissioning and decontamination works at the south apron of the former Kai Tak Airport and installation of supplementary radar at North Point Government Offices (NPGO)”, at an estimated cost of \$120.1 million in MOD prices, for carrying out decommissioning and decontamination works to remove and treat underground contaminants at the former south apron area and installing a supplementary radar at the rooftop of NPGO. All the works have been substantially completed.

35. In May 2009, the FC approved further upgrading of another part of **711CL** as **741CL** “Kai Tak development – stage 1 advance infrastructure works for developments at the southern part of the former runway”, at an estimated cost of \$539.6 million in MOD prices, for construction of the stage 1 advance infrastructure works to serve the early developments at the southern part of the former runway. The works have been substantially completed.

36. In June 2011, the FC approved further upgrading of part of **711CL** as **749CL** “Kai Tak development – reprovisioning of radar on top of the cruise terminal building”, at an estimated cost of \$88.4 million in MOD prices, to provide a new radar with radome on top of the KTCT building to replace the previous one in Kowloon Bay. The works have been substantially completed.

/37.

37. At the PWSC meeting on 31 October 2001, some Members suggested and the Government agreed to include information on the scope, approved project estimates and progress of all the KTD (formerly known as South East Kowloon development) Public Works Programme items in future PWSC submissions relating to KTD. The information is at Enclosure 4.

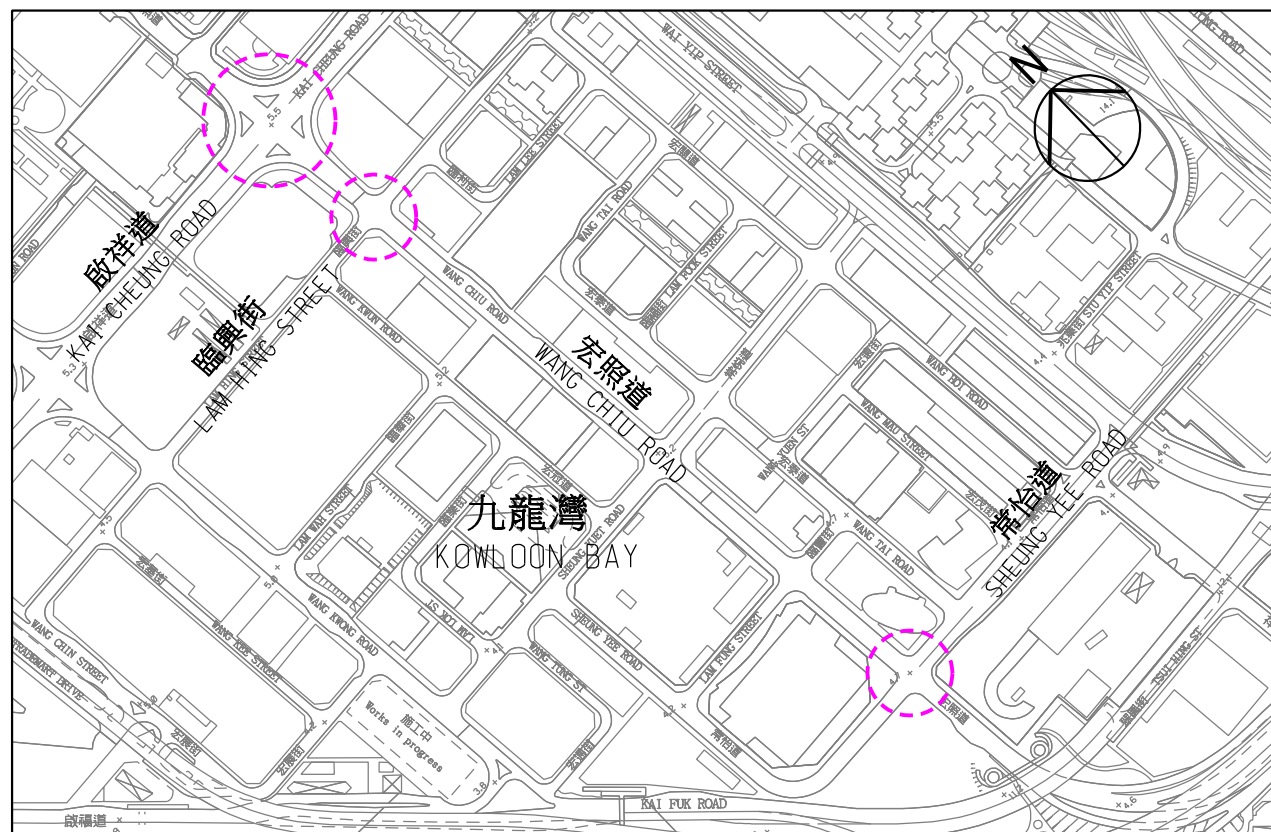
38. Of the 194 trees within the boundary of the proposed works, 73 trees will be preserved. The proposed works will involve the removal of 121 common trees including 117 trees to be felled and four trees to be transplanted. All trees to be removed are not important trees⁸. We will incorporate planting proposals as part of the proposed works, including estimated quantities of 1 143 trees and 163 950 shrubs and herbaceous plants.

39. We estimate that the proposed works will create about 1 700 jobs (1 360 for labourers and another 340 for professional or technical staff), providing a total employment of 67 300 man-months.

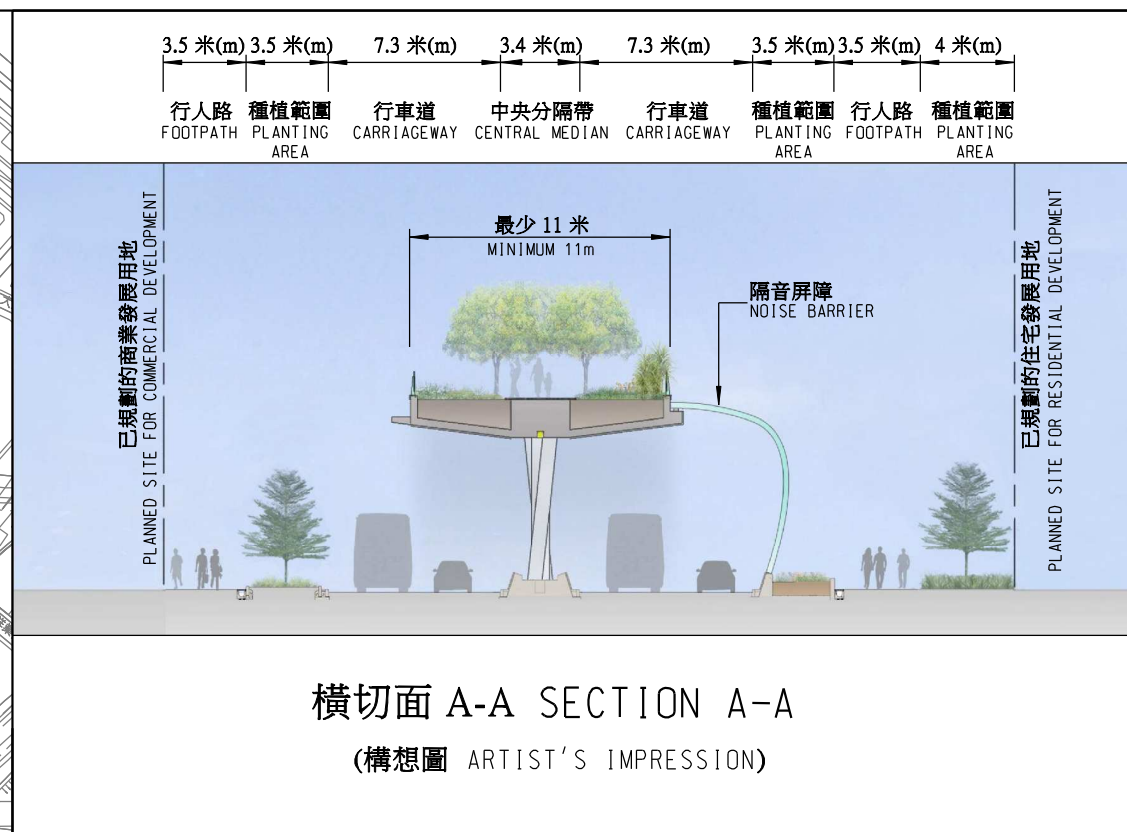
Development Bureau
June 2015

⁸ “Important trees” refers to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of the overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with a trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with a height/canopy spread equal to or exceeding 25 m.

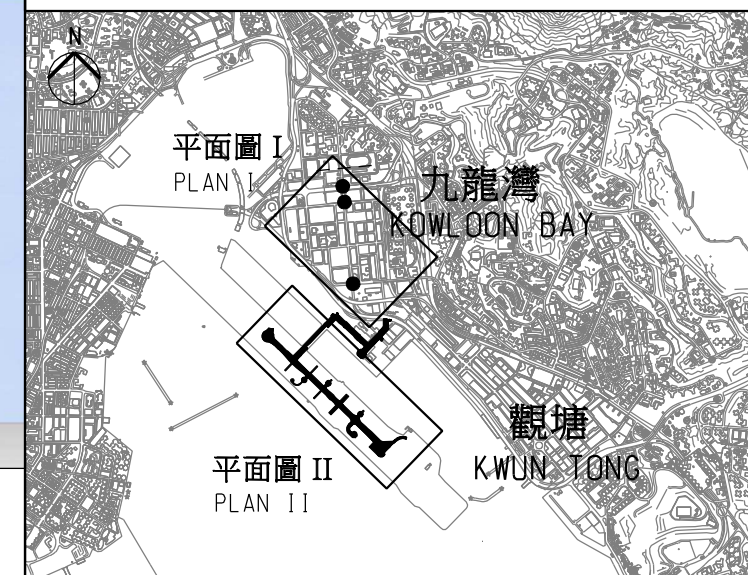


平面圖 I
PLAN I



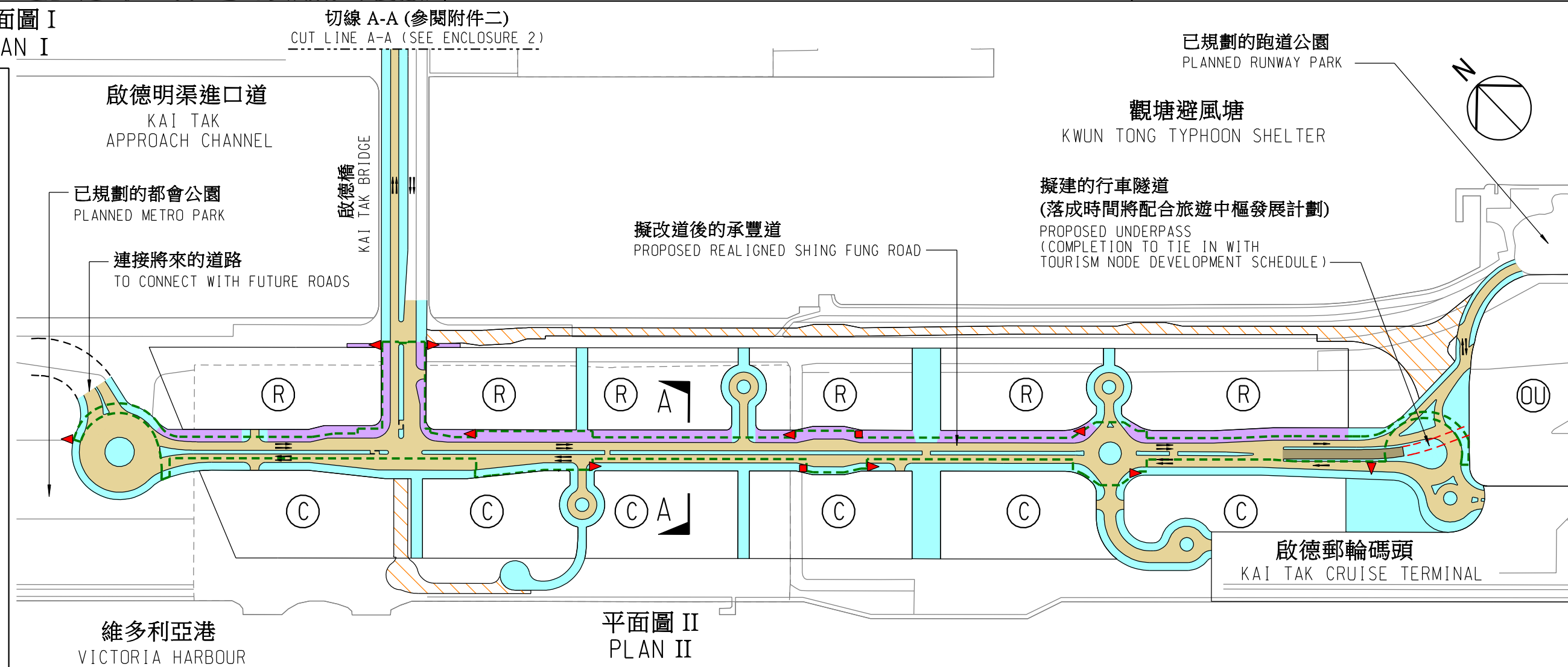
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(構想圖 ARTIST'S IMPRESSION)

附件一
ENCLOSURE 1



位置圖 LOCATION PLAN

- 圖例:
LEGEND:
- 擬建的/重建的行車道
PROPOSED/RECONSTRUCTED CARRIAGEWAY
 - 擬建的/重建的行人路,中央分隔帶,安全島或種植範圍
PROPOSED/RECONSTRUCTED FOOTPATH, CENTRAL MEDIAN, TRAFFIC ISLAND OR PLANTING AREA
 - 擬建的/重建的行人路或種植範圍附設隔音屏障
PROPOSED/RECONSTRUCTED FOOTPATH OR PLANTING AREA WITH NOISE BARRIER
 - 擬建的園景平台界限與隔音屏障結合
PROPOSED LIMIT OF LANDSCAPED DECK INTEGRATED WITH NOISE BARRIER
 - 現有的道路將被替代
EXISTING ROAD TO BE REPLACED
 - 擬建的宏照道路口改善工程
PROPOSED JUNCTION IMPROVEMENT AT WANG CHIU ROAD
 - 擬建的行車隧道
PROPOSED UNDERPASS
 - 擬建行車道
(落成時間將配合旅遊中樞發展計劃)
PROPOSED CARRIAGEWAY (COMPLETION TO TIE IN WITH TOURISM NODE DEVELOPMENT SCHEDULE)
 - 行車道的行車線
(每一箭嘴表示一條行車線)
TRAFFIC LANE FOR CARRIAGEWAY (ONE ARROW REPRESENTS ONE LANE)
 - 已規劃的住宅發展用地
PLANNED SITE FOR RESIDENTIAL DEVELOPMENT
 - 已規劃的商業發展用地
PLANNED SITE FOR COMMERCIAL DEVELOPMENT
 - 已規劃的旅遊中樞
PLANNED TOURISM NODE
 - 擬建的升降機
PROPOSED LIFT
 - 擬建的樓梯
PROPOSED STAIRCASE

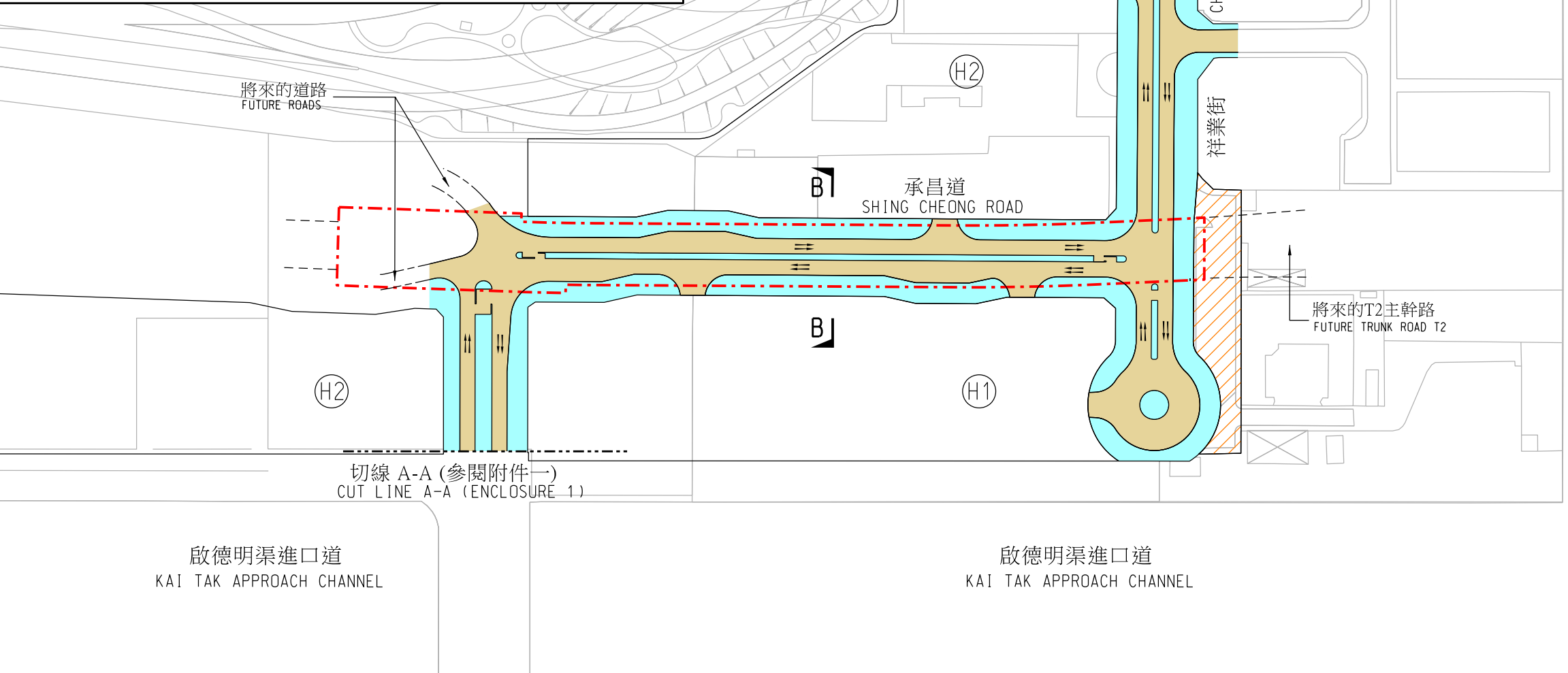
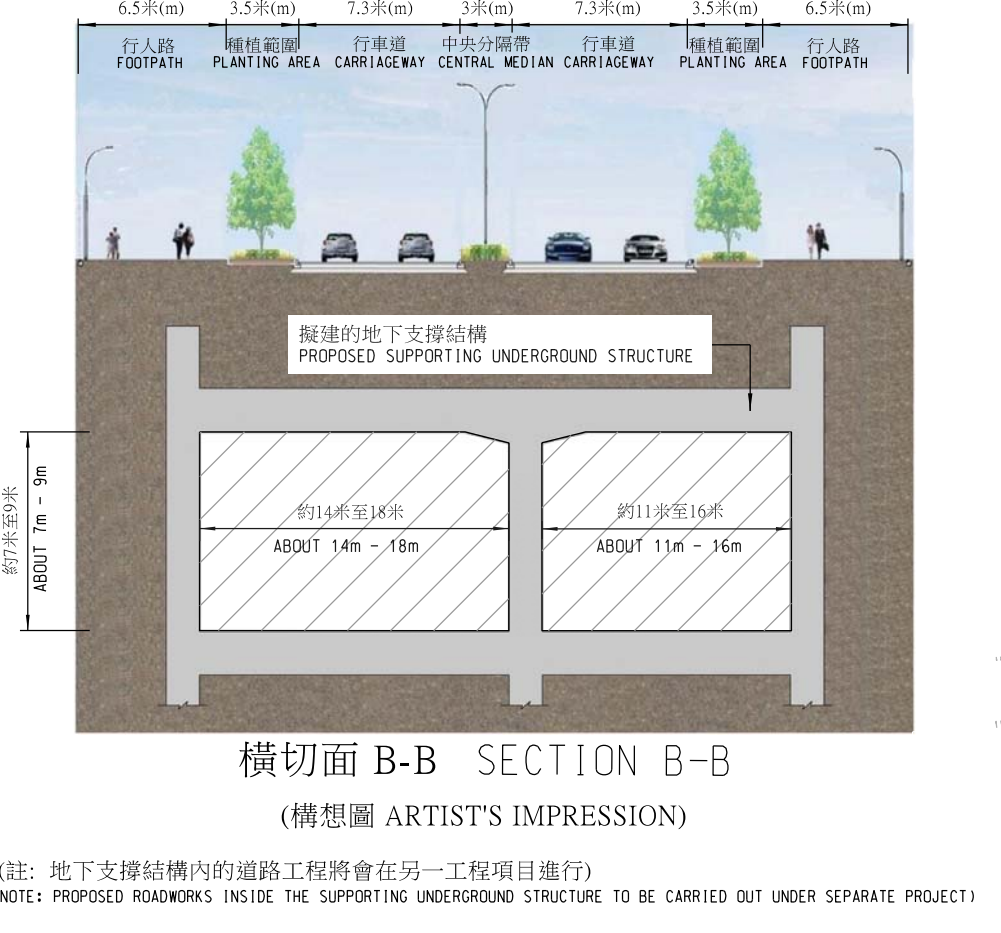


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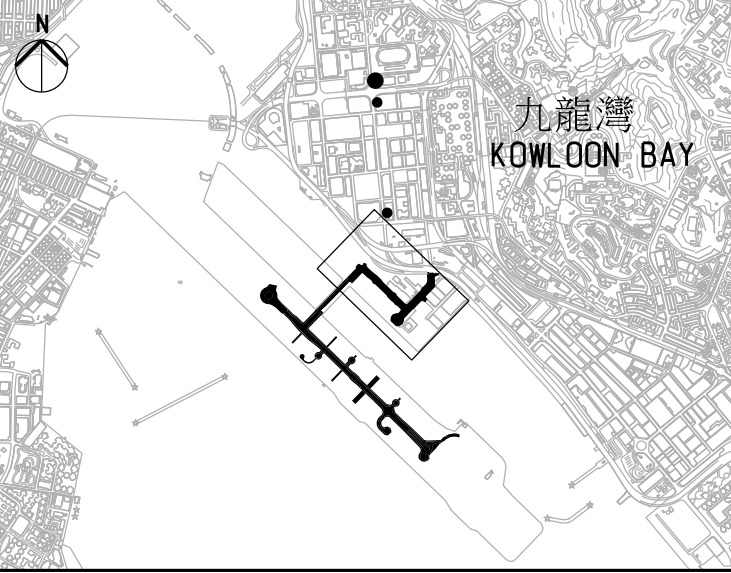
工務計劃項目第 7711CL 號
啟德發展計劃 - 前跑道南面發展項目的基礎設施工程

PWP ITEM NO. 7711CL

KAI TAK DEVELOPMENT - INFRASTRUCTURE WORKS FOR DEVELOPMENTS AT THE SOUTHERN PART OF THE FORMER RUNWAY



附件二
ENCLOSURE 2



位置圖 LOCATION PLAN

- 圖例:
LEGEND:
- 擬建的/重建的行人路,中央分隔帶, 安全島或種植範圍
PROPOSED/RECONSTRUCTED FOOTPATH, CENTRAL MEDIAN, TRAFFIC ISLAND OR PLANTING AREA
 - 擬建的/重建的行人路,中央分隔帶, 安全島或種植範圍
PROPOSED/RECONSTRUCTED FOOTPATH, CENTRAL MEDIAN, TRAFFIC ISLAND OR PLANTING AREA
 - 現有的道路將永久封閉
EXISTING ROAD TO BE PERMANENTLY CLOSED
 - 擬建的地下支撐結構
PROPOSED SUPPORTING UNDERGROUND STRUCTURE
 - 行車道的行車線(每一箭嘴表示一條行車線)
TRAFFIC LANE FOR CARRIAGEWAY (ONE ARROW REPRESENTS ONE LANE)
 - 施工中的香港兒童醫院
HONG KONG CHILDREN'S HOSPITAL UNDER CONSTRUCTION
 - 規劃中的新急症全科醫院
NEW ACUTE HOSPITAL UNDER PLANNING

711CL – Kai Tak development – infrastructure works for developments at the southern part of the former runway

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2014 prices)

			Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$million)
(a)	Consultants' fees for contract administration (Note 2)	Professional	-	-	-	12.4
		Technical	-	-	-	4.2
					Sub-total	16.6
(b)	Resident site staff (RSS) costs (Note 3)	Professional	1 105	38	1.6	126.2
		Technical	6 608	14	1.6	257.8
					Sub-total	384.0
	Comprising –					
	(i) Consultants' fees for management of RSS					15.4
	(ii) Remuneration of RSS					368.6
(c)	Independent environmental checker service (Note 4)	Professional	9	38	2.0	1.3
		Technical	54	14	2.0	2.6
					Sub-total	3.9
					Total	404.5

* MPS = Master Pay Scale

Notes

1. A multiplier of 2.0 is applied to the average MPS point to arrive at the full staff costs including the consultant's overheads and profit as the staff will be employed in the consultants' offices. A multiplier of 1.6 is applied to the average MPS point to arrive at the cost of RSS supplied by the consultants (as at now, MPS point 38 = \$71,385 per month and MPS point 14 = \$24,380 per month).
2. The consultants' fees for contract administration are estimated in accordance with two existing consultancy agreements relating to the project. The construction phase of the assignments will only be executed subject to Finance Committee's approval to upgrade **711CL** to Category A.

3. The actual man-months and actual costs will only be known after completion of the construction works.
4. The actual man-months and actual costs will only be known after the consultants for independent environmental checker services have been selected through the usual competitive lump-sum bid system.

Kai Tak Development
List of Public Works Programme (PWP) Items in Category A

(Note: For details on the project scope of the PWP items listed below, please refer to the corresponding PWSC papers.)

PWP item no.:	440CL
Project title:	South East Kowloon development – comprehensive feasibility study
Date of upgrading to Category A:	April 1995
Approved project estimate:	\$220 million
Project scope:	The project comprises a comprehensive feasibility study for the whole South East Kowloon area, as well as associated laboratory testing and site investigation works.
Brief account of progress:	(a) The feasibility study was completed in December 2003. (b) The project account has been finalised at the sum of \$185.2 million.

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PWP item no.:	494CL (part upgrade from 469CL)
Project title:	South East Kowloon development at Kai Tak Airport – decontamination and site preparation
Date of upgrading to Category A:	February 1998
Approved project estimate:	\$316.9 million
Project scope:	Ground decontamination, demolition of existing buildings and structures and site preparation at the north apron of Kai Tak Airport.

- Brief account of progress:
- (a) The civil engineering works and the post-decontamination monitoring works were completed in April 2002 and December 2003 respectively.
 - (b) The project account has been finalised at the sum of \$281.8 million.

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- PWP item no.: **694CL** (part upgrade from **469CL**)
- Project title: South East Kowloon development at Kai Tak Airport – consultants' fees and site investigation
- Date of upgrading to Category A: November 2001
- Approved project estimate: \$115.9 million
- Project scope: Site investigation works and detailed design for 6 kilometres (km) drainage box culverts, five sewage pumping stations, flyovers, roads, sewerage, drainage and demolition of the passenger terminal building for the planned developments in the north apron area of Kai Tak Airport.
- Brief account of progress:
- (a) Consultancy started in January 2002.
 - (b) Detailed design for demolition of the passenger terminal building and associated structures has been completed.
 - (c) Detailed design of the stages 1, 2, 3A and 4 infrastructure works and the reconstruction and upgrading of Kai Tak Nullah at the north apron has been completed.
 - (d) Detailed design of the remaining infrastructure works at the north apron is in progress.

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PWP item no.:	693CL (part upgrade from 465CL)
Project title:	South East Kowloon development – consultants’ fees and site investigation for Kai Tak Approach Channel (KTAC) reclamation
Date of upgrading to Category A:	November 2001
Approved project estimate:	\$63.8 million
Project scope:	Site investigation works and detailed design for treatment of contaminated sediments and reclamation of KTAC, drainage and demolition of the existing airport taxiway bridge in KTAC.
Brief account of progress:	<p>(a) Consultancy started in January 2002.</p> <p>(b) In the light of the Court of Final Appeal (CFA)’s ruling on harbour reclamation under the Protection of the Harbour Ordinance (Cap. 531), the consultancy had been suspended since December 2003 and was terminated in July 2006.</p> <p>(c) The project account has been finalised at the sum of \$50.2 million.</p>

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PWP item no.:	699CL (part upgrade from 482CL)
Project title:	South East Kowloon development – consultants’ fees and site investigation for Kowloon Bay reclamation and engineering works
Date of upgrading to Category A:	July 2002
Approved project estimate:	\$105.7 million
Project scope:	Site investigation works and detailed design for treatment of contaminated sediments and reclamation of Kowloon Bay, marine structures and facilities,

roads, drainage and sewerage works.

Brief account of progress:

- (a) Consultancy started in December 2002.
- (b) In the light of CFA's ruling on harbour reclamation under the Protection of the Harbour Ordinance (Cap. 531), the consultancy had been suspended since December 2003 and was terminated in July 2006.
- (c) The project account has been finalised at the sum of \$6.1 million.

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PWP item no.:

708CL (part upgrade from **469CL**)

Project title:

South East Kowloon development – site preparation and drainage works at north apron area of Kai Tak Airport

Date of upgrading to Category A:

February 2004

Approved project estimate:

\$131.6 million

Project scope:

Construction of a twin-cell box culvert of about 600 m long, decommissioning of an existing culvert, demolition of the passenger terminal building and car-parking building at north apron area of Kai Tak Airport.

Brief account of progress:

- (a) Works contract commenced in April 2004 and was completed in September 2006.
- (b) The project account has been finalised at the sum of \$131.3 million.

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PWP item no.:

719CL

Project title:

Kai Tak development – engineering review

Date of upgrading to Category A:

December 2006

Approved project
estimate:

\$87.5 million

Project scope:

A study to confirm the detailed engineering feasibility of the revised Preliminary Outline Development Plan of Kai Tak development, preliminary preparatory work for the early development of the cruise terminal in Kai Tak.

Brief account of
progress:

Consultancy commenced in January 2007 and substantially completed in April 2010.

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PWP item no.:

724CL (part upgraded from **711CL**)

Project title:

Kai Tak development – investigation and detailed design for advance infrastructure works for developments at the southern part of the former runway

Date of upgrading to
Category A:

December 2006

Approved project
estimate:

\$38 million

Project scope:

Investigation and detailed design for roads, drainage, sewerage, watermains, relocation and reprovisioning of existing radar facilities for the proposed developments at the southern part of the former runway.

Brief account of
progress:

- (a) Consultancy commenced in January 2007.
- (b) Detailed design of the decommissioning and decontamination works at the south apron and relocation and reprovision of Marine Vessel Traffic Services radar has been completed.
- (c) Detailed design of the stage 1 advance infrastructure works has been completed.
- (d) Detailed design of the remaining infrastructure works is substantially completed.

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PWP item no.: **734CL** (part upgraded from **711CL**)

Project title: Kai Tak development – decommissioning and decontamination works at the south apron of the former Kai Tak Airport and installation of supplementary radar at North Point Government Office (NPGO)

Date of upgrading to Category A: February 2008

Approved project estimate: \$120.1 million

Project scope: Decommissioning and decontamination of about 12 600 square metres of land at the south apron of the former Kai Tak Airport, installation of a supplementary radar at NPGO and associated works.

Brief account of progress:

- (a) Works contract commenced in May 2008 and was completed in January 2010.
- (b) The project account has been finalised at the sum of \$82.5 million.

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PWP item no.: **738CL** (part upgraded from **465CL**)

Project title: Kai Tak development – detailed design and site investigation for Kai Tak Approach Channel and Kwun Tong typhoon shelter improvement works.

Date of upgrading to Category A: May 2009

Approved project estimate: \$50 million

Project scope: Site investigation works, environmental mitigation trial and monitoring, and detailed design for treatment of the contaminated sediments, forming of a 600 m opening at the former runway with a piled deck on the top and associated works.

Brief account of

- (a) Consultancy commenced in August 2009.

progress:

- (b) Detailed design of Phase 1 works has been completed.
- (c) Design of the Phase 2 works is in progress.

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PWP item no.: **740CL** (part upgraded from **702CL**)

Project title: Kai Tak development – detailed design and site investigation for remaining infrastructure works for developments at the former runway

Date of upgrading to Category A: May 2009

Approved project estimate: \$32 million

Project scope: Site investigation works and detailed design for a road including a piled deck on the former runway; roads, footbridges, drainage, sewerage and water mains in south apron; and associated works.

Brief account of progress: Consultancy commenced in July 2009 and detailed design of the infrastructure works is in progress.

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PWP item no.: **739CL** (part upgraded from **469CL**)

Project title: Kai Tak development – stage 1 infrastructure works at north apron area of Kai Tak Airport

Date of upgrading to Category A: May 2009

Approved project estimate: \$566.5 million

Project scope: Construction of about 2.6 km of new roads and other roadworks within the north apron area; two footbridges, two drainage box culverts, improvement to three existing subways across Prince Edward Road East, drainage, sewerage, water mains and

associated works.

Brief account of progress:

Works contract commenced in July 2009 and was completed in December 2013.

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PWP item no.:

741CL (part upgraded from **711CL**)

Project title:

Kai Tak development – stage 1 advance infrastructure works for developments at the southern part of the former runway

Date of upgrading to Category A:

May 2009

Approved project estimate:

\$539.6 million

Project scope:

Construction of about 1.8 km carriageway, a fireboat berth cum landing steps, drainage, a sewage pumping station, sewerage, water mains and associated works for developments at the southern part of the former runway.

Brief account of progress:

Works contract commenced in September 2009 and was completed in December 2013.

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PWP item no.:

841TH (part upgraded from **785TH**)

Project title:

Trunk Road T2 – investigation and design

Date of upgrading to Category A:

June 2009

Approved project estimate:

\$133.6 million

Project scope:

Impact assessments on environment, traffic, marine, heritage and other related aspects; detailed design of the works and associated site investigations and supervision for Trunk Road T2.

Brief account of

(a) Consultancy commenced in July 2009.

progress:

(b) The environmental impact assessment report was approved in September 2013.

(c) Detailed design is in progress.

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PWP item no.:

45CG

Project title:

District Cooling System at the Kai Tak Development

Date of upgrading to
Category A:

June 2009

Approved project
estimate:

\$3,145.9 million (approved by the Finance Committee on 21 June 2013) for Phase I, Phase II and Phase III (Package A) of the project

Project scope:

Construction of district cooling system including chiller plants, underground seawater pump house and operational facilities, seawater intake and discharge pipelines, chilled water distribution pipe networks; and connection facilities at the Kai Tak development.

Brief account of
progress:

(a) Contract for Phase I commenced in February 2011 and was completed in January 2013.

(b) Contract for Phase II commenced in March 2011 and was completed in September 2014.

(c) Contract for Phase III (Package A) commenced in July 2013 for completion by December 2017.

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PWP item no.:

736CL

Project title:

Site formation for Kai Tak cruise terminal development

Date of upgrading to
Category A:

November 2009

Approved project estimate:	\$2,303.9 million
Project scope:	Construction of about 1.1 km long seawall, piled structures, marine facilities and structures, and dredging works for Kai Tak Cruise Terminal .
Brief account of progress:	Save some remaining seabed dredging works to be carried out after the diversion of existing submarine gas mains, the site formation for Kai Tak cruise terminal development has been completed, with the first berth and the second berth commenced operations in June 2013 and September 2014 respectively.

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PWP item no.: **7GA**

Project title: Cruise terminal building and ancillary facilities for the Kai Tak cruise terminal development

Date of upgrading to Category A: April 2010

Approved project estimate: \$5,852.1 million

Project scope: Development of new cruise terminal facilities at the southern end of the former runway at the Kai Tak development; and provisions of building services to the apron area.

Brief account of progress: Works contract commenced in May 2010 and was completed in May 2013.

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PWP item no.: **745CL** (part upgraded from **465CL**)

Project title: Kai Tak development – Kai Tak approach channel and Kwun Tong typhoon shelter improvement works (Phase 1)

Date of upgrading to

Category A:	June 2011
Approved project estimate:	\$717.7 million
Project scope:	Bioremediation treatment of the contaminated sediments over an area of about 90 hectares of seabed at KTAC and Kwun Tong typhoon shelter, dredging of seabed at KTAC, and demolition of a disused dolphin and associated improvement works in the vicinity of To Kwa Wan typhoon shelter.
Brief account of progress:	Works contract commenced in July 2011 and was substantially completed in July 2014.

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PWP item no.:	746CL (part upgraded from 469CL)
Project title:	Kai Tak development – stage 2 infrastructure at north apron area of Kai Tak Airport
Date of upgrading to Category A:	June 2011
Approved project estimate:	\$355.8 million
Project scope:	Construction of about 590 m roads, about 2 110 m footpaths, drainage box culverts, sewage pumping station and associated works.
Brief account of progress:	Works contract commenced in July 2011 for completion in October 2015.

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PWP item no.:	749CL (part upgraded from 711CL)
Project title:	Kai Tak development – reprovisioning of radar on top of the cruise terminal building
Date of upgrading to Category A:	June 2011
Approved project estimate:	\$88.4 million

Project scope: Reprovisioning of a radar and associated signal processing and relaying equipment and construction of a radome, a radome base support and associated works.

Brief account of progress: (a) The works contract commenced in August 2011 and was completed in June 2013.

(b) The project account has been finalised at the sum of \$87.7 million.

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PWP item no.: **172BF**

Project title: Construction of fire station-cum-ambulance facility at Cheung Yip Street, Kowloon Bay

Date of upgrading to Category A: July 2011

Approved project estimate: \$210 million

Project scope: Construction of a new six-storey fire station with ambulance facility-cum-an urban search and rescue equipment store in Kowloon Bay.

Brief account of progress: Works contract commenced in July 2011 and was completed in June 2013.

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PWP item no.: **109KA**

Project title: Construction of Trade and Industry Tower in Kai Tak Development Area

Date of upgrading to Category A: January 2012

Approved project estimate: \$2,645.1 million

Project scope: Construction of government offices and ancillary property management facilities providing a net

operational floor area (NOFA) of around 32 400 m², and a community hall of about 600 m² in NOFA.

Brief account of progress:

Works contract commenced in January 2012 and was completed in April 2015.

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PWP item no.:

443RO (part upgraded from **425RO**)

Project title:

Runway Park at Kai Tak, Kowloon City District – Phase 1

Date of upgrading to Category A:

July 2012

Approved project estimate:

\$169.7 million

Project scope:

Construction of a 270 m long waterfront promenade at the runway tip facing Lei Yue Mun and along the waterfront facing Kwun Tong, a large lawn with seating and extensive soft landscape planting, and ancillary facilities.

Brief account of progress:

Works contract commenced in August 2012 and was completed in April 2014.

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PWP item no.:

439RO

Project title:

Kwun Tong promenade (stage 2)

Date of upgrading to Category A:

July 2012

Approved project estimate:

\$250.7 million

Project scope:

Construction of a 750 m long waterfront promenade at the former Kwun Tong Public Cargo Working Area with a boardwalk, and upgrading works for the Kwun Tong promenade (stage 1), including installation of more lighting, close-circuit television and a public address system.

Brief account of progress: Works contract commenced in February 2013 and was completed in December 2014.

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PWP item no.: **167CD** (part upgraded from **469CL**)

Project title: Kai Tak development – reconstruction and upgrading of Kai Tak Nullah

Date of upgrading to Category A: January 2013

Approved project estimate: \$2,488.2 million

Project scope: Reconstruction and upgrading of Kai Tak Nullah from Prince Edward Road East to KTAC, construction of two enclosed desilting compounds with vehicular access and ancillary works.

Brief account of progress: Works contract commenced in January 2013 for completion in April 2018.

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PWP item no.: **76MM**

Project title: Establishment of the Centre of Excellence in Paediatrics (Hong Kong Children's Hospital)

Date of upgrading to Category A: June 2013

Approved project estimate: \$12,985.5 million

Project scope: Establishment of the Centre of Excellence in Paediatrics with 468 beds in the south apron of the Kai Tak development.

Brief account of progress: Works contract commenced in August 2013 for completion in June 2017.

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PWP item no.:	761CL (part upgraded from 469CL)
Project title:	Kai Tak development – stages 3A and 4 infrastructure at north apron area of Kai Tak Airport
Date of upgrading to Category A:	June 2013
Approved project estimate:	\$2,255.3 million
Project scope:	<p>Stage 3A – Construction of roads, a vehicular underpass, a pedestrian subway, extension of an existing subway, reconstruction of existing roads, associated drainage, sewerage, water mains, roadworks and other ancillary works.</p> <p>Stage 4 – Construction of roads, reconstruction and widening of existing footpaths, two sewage pumping stations, twin rising mains, associated drainage and sewerage works and other ancillary works.</p>
Brief account of progress:	Works contracts commenced in stages starting from July 2013 for phased completion by June 2017.
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PWP item no.:	349EP
Project title:	A 30-classroom primary school at site 1A-3, Kai Tak development, Kowloon
Date of upgrading to Category A:	July 2013
Approved project estimate:	\$312.4 million
Project scope:	Construction of a 30-classroom primary school at site 1A-3, Kai Tak development
Brief account of progress:	Works contract commenced in November 2013 for completion in September 2015.
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PWP item no.:	350EP
Project title:	A 30-classroom primary school at site 1A-4, Kai Tak development, Kowloon
Date of upgrading to Category A:	July 2013
Approved project estimate:	\$317.5 million
Project scope:	Construction of a 30-classroom primary school at site 1A-4, Kai Tak development
Brief account of progress:	Works contract commenced in November 2013 for completion in September 2015.

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