

**For discussion
on 26 February 2019**

Legislative Council Panel on Development

Kai Tak development

- **infrastructure at north apron area of Kai Tak Airport,
provision of an additional District Cooling System
at the Kai Tak Development and
Progress Report on Kai Tak Development**

PURPOSE

This paper briefs Members on the following funding applications in relation to the Kai Tak Development (KTD) and updates Members on the general progress of KTD:

Kai Tak development – infrastructure at north apron area of Kai Tak Airport

- (a) upgrading part of **469CL** to Category A for the construction of stage 5B¹ infrastructure works essential for the continued developments at the former north apron area of KTD (“Stage 5B Works”) (**Enclosure 1**); and

Provision of an additional District Cooling System at the Kai Tak Development

- (b) upgrading **50CG** to Category A for the construction of an additional District Cooling System (DCS) to meet the increase in the projected cooling demand as a result of further increase of the development intensity of the KTD (“Additional DCS”) (**Enclosure 2**).

¹ The stage 5 infrastructure works are implemented in two stages, namely stage 5A and stage 5B. Construction of stage 5A infrastructure works started in September 2016 under **797CL** which was upgraded to Category A on 13 May 2016.

OVERVIEW

2. KTD, covering an area of over 320 hectares, is a mega-sized and highly complex development project in the urban area for transforming the ex-airport site for the future growth of Hong Kong, and at the same time providing an impetus for stimulating regeneration of the adjoining older districts. A master development plan was drawn up in early 2009 for the phased implementation of KTD projects.

Kai Tak development – infrastructure at north apron area of Kai Tak Airport

3. According to the approved Kai Tak Outline Zoning Plan No. S/K22/6, the former north apron area is planned for provision of a well-mixed residential, commercial, office, and government, institution or community developments. To provide essential infrastructure to serve the developments, we propose to construct stage 5B infrastructure works under **469CL** to enhance both vehicular and pedestrian connectivity of KTD with the adjoining areas including Kowloon City and San Po Kong through an integrated network of access roads, flyover, subway and elevated walkway.

Provision of an additional District Cooling System at the Kai Tak Development

4. To enhance energy efficiency and conservation, the Government is constructing the current DCS project² in KTD in phases. As announced in the 2017 Policy Address, the Government completed a review to further increase the development intensity of the KTD. As a result, there will be an additional total commercial floor area of about 400 000 square metres, a change in the design of the Kai Tak Sports Park with cooling for the stadium having a retractable roof, and an increase in the scale of the New Acute Hospital. We propose to construct an additional DCS under **50CG** to meet the increase in the projected cooling demand.

² PWP Item No. 5045CG - District Cooling System at the Kai Tak Development. The scope of works includes the construction of two large-scale centralised air-conditioning plants with underground pipe networks for connection to buildings in KTD. The cooling capacity of the current DCS project is about 284 megawatt of refrigeration as projected in 2008 to provide for a total non-domestic air-conditioned floor area of around 1.73 million square metres in KTD. Funding for the last phase of the project was approved by the Finance Committee on 4 January 2019.

Progress Report on Kai Tak Development

5. KTD is being implemented in phases according to their relative priorities and readiness to proceed. We briefed the Legislative Council Panel on Development on the KTD implementation plan in January 2009 and have since then regularly updated Members on its progress. The latest progress of KTD is given in **Enclosure 3**.

FINANCIAL IMPLICATIONS

6. We estimate the total costs in money-of-the-day prices of the proposed works are as follows:

	\$ million
(a) 469CL – Stage 5B Works	1,720.1
(b) 50CG – Additional DCS	4,269.3
Total	5,989.4

WAY FORWARD

7. Members are invited to consider the funding applications in relation to the KTD as set out in paragraph 1 above. We plan to seek the endorsement of the Public Works Sub-committee for upgrading part of **469CL** and upgrading **50CG** to Category A before seeking funding approval from the Finance Committee.

Development Bureau
Environment Bureau
February 2019

HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT

Civil Engineering – Land development

469CL - Kai Tak development - infrastructure at north apron area of Kai Tak Airport

PROJECT SCOPE AND NATURE

The part of **469CL** that we propose to upgrade to Category A (the proposed works) covers the construction of the following items of works located at the former north apron area -

- (a) a section of dual two-lane Road D1 of about 540 metres (m) long connecting Olympic Avenue;
- (b) single two-lane Road L9 and Road L16 of about 400 m long in total connecting the proposed Road D1;
- (c) a single-lane slip road S14 of about 210 m long linking the eastbound of Prince Edward Road East (PERE) with the proposed Road D1;
- (d) a pedestrian subway SB-01 of about 120 m long across PERE connecting Kowloon City and the future Underground Shopping Street (USS)¹ in KTD;
- (e) an elevated walkway LW-02 of about 150 m long across Kai Tak River, connecting the existing elevated walkway adjoining the Trade and Industry Tower and a Comprehensive Development Area site to the west of Kai Tak River;

¹ According to the Kai Tak Outline Zoning Plan, the USS is proposed to improve the pedestrian linkage to Kowloon City and to Sung Wong Toi Station and Kai Tak Station of the Shatin to Central Link.

- (f) renovation of the existing pedestrian subways KS9, KS10 and KS32, as well as modification of the southern end of the existing pedestrian subway KS10;
- (g) associated footpaths, street lighting, traffic aids, drainage, sewerage, water mains, landscaping, electrical and mechanical works, and ancillary works; and
- (h) implementation of environmental mitigation measures and related environmental monitoring and audit works for the works mentioned in paragraphs (a) to (g) above.

Plans and drawings of artist's impression showing the proposed works are at
— **Annex 1.**

2. Subject to funding approval of the Finance Committee (FC), we plan to commence the proposed works in the third quarter of 2019 for substantial completion in phases from 2023 to 2025.

3. We will retain the remainder of **469CL** in Category B, which mainly covers construction of the remaining infrastructure to serve developments at the former north apron area of KTD. We will apply funding for the remainder of **469CL** to dovetail with the implementation programme of KTD.

JUSTIFICATION

4. According to the approved Kai Tak Outline Zoning Plan (Kai Tak OZP) No. S/K22/6, the former north apron area is planned for provision of a well-mixed residential, commercial, office, and government, institution or community (GIC) developments. The proposed works as mentioned in paragraph 1 above form part of the essential infrastructure to serve the continued developments at the former north apron area of KTD.

5. The proposed works will enhance both vehicular and pedestrian connectivity of KTD with the adjoining areas including Kowloon City and San Po Kong through an integrated network of access roads, flyover, subway and elevated walkway. In particular, the proposed Roads D1, L9, L16 and slip road S14 will

further enhance the road networks serving the developments in the former north apron area of KTD where the future public housing, commercial and GIC developments are located. In addition, the proposed subway SB-01 across PERE will link Kowloon City with the future USS to be formed by private developers in KTD whilst the proposed elevated walkway LW-02 will connect the existing elevated walkway adjoining Trade and Industry Tower with the future developments.

6. To improve the existing pedestrian facilities for the public to connect with KTD, we will carry out renovation works at three existing subways, namely KS9, KS10 and KS32, near PERE and Prince Edward Road West as well as modifying the southern end of the existing subway KS10.

FINANCIAL IMPLICATIONS

7. We estimate the cost of the proposed works to be about \$1,720.1 million in money-of-the-day (MOD) prices.

PUBLIC CONSULTATION

8. We consulted Wong Tai Sin District Council (WTSDC) on 5 November 2013, the Housing and Infrastructure Committee (HIC) of Kowloon City District Council (KCDC) on 7 November 2013 and Kwun Tong District Council (KTDC) (by circulation) on 12 November 2013 on the proposed stage 5 works which included stage 5A and stage 5B. Members of the three District Councils had no objection to the proposed stage 5 works.

9. We gazetted the road scheme and sewerage scheme for the proposed stage 5 works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) and under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) as applied by section 26 of the Water Pollution Control (Sewerage) Regulation (Cap. 358AL) on 17 and 25 April 2014 respectively, and received no objection. The road scheme and sewerage scheme were both authorised on 29 August 2014.

10. Subsequently, we proposed amendments to the stage 5B works to reflect changes in layout of Road L9 and Road L16 shown on the Kai Tak OZP No.

S/K22/6², including the associated sewerage works at these roads. We also proposed two new pedestrian connections, namely subway SB-01 and elevated walkway LW-02, as well as new sewerage works in stage 5B works.

11. For the proposals mentioned in paragraph 10 above, we consulted the HIC of KCDC on 10 May 2018, the Traffic and Transport Committee (T&TC) of WTSDC on 5 June 2018 and T&TC of KTDC on 5 June 2018. Members of the three District Councils had no objection to the proposals.

12. We subsequently gazetted the proposed amendments to the road scheme and the proposed subway SB-01 and elevated walkway LW-02 on 2 and 9 November 2018 under the Roads (Works, Use and Compensation) Ordinance (Cap. 370), and received no objection. We also gazetted the proposed amendments to the sewerage scheme and the proposed new sewerage works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) as applied by section 26 of the Water Pollution Control (Sewerage) Regulation (Cap. 358AL) on 2 and 9 November 2018, and received no objection. The amended and new road schemes, and amended and new sewerage schemes were authorised on 1 February 2019.

ENVIRONMENTAL IMPLICATIONS

13. The proposed district distributor Road D1 is a designated project under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 499), whilst the other proposed works are non-designated projects. The KTD EIA report approved under the EIA Ordinance on 4 March 2009 concluded that the proposed works would not cause adverse environmental impact with implementation of the recommended mitigation measures. The Civil Engineering and Development Department (CEDD) obtained the environmental permit (EP) for the construction and operation of the proposed Road D1 on 23 April 2009. We will implement the environmental mitigation measures recommended in the approved EIA report and comply with the conditions of the EP.

² The original Road L9 was connected to the western end of Road L16. As part of the former north apron area which covered the original Road L9 had been designated “Open Space” for the provision of Heritage Park for preservation and public appreciation of heritage and archaeological relics, Road L9 was shortened and shifted eastward to the location shown on **Annex 1**. The western end of Road L16 was also amended to a cul-de-sac.

14. The other proposed works including Road L9 and Road L16 are not designated projects under the EIA Ordinance. The CEDD has completed an Environmental Review (ER) which concluded that the changes in layout will not cause adverse environmental impact with implementation of the recommended mitigation measures. We will implement the environmental mitigation measures recommended in the ER to control the environmental impacts arising from the proposed works to within the established standards and guidelines.

15. For short-term environmental impacts caused by the proposed works during construction, we will incorporate requirements into the works contract to require the contractor to implement environmental mitigation measures. These mitigation measures mainly include use of quieter equipment and moveable noise barriers or enclosures to minimise the construction noise impact, regular watering of works sites and provision of wheel-washing facilities to minimise dust generation, and use of temporary drains to discharge surface run-off of sites. We have included the cost of these measures in the project estimate.

16. At the planning and design stages, we have considered the alignment, design level and construction method of the proposed works to reduce generation of construction waste where possible. In addition, we will require the contractor 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 disposal of inert construction waste at public fill reception facilities³. We will encourage the contractor to maximise the use of recycled/recyclable inert construction waste and the use of non-timber formwork to further reduce generation of construction waste.

17. At the construction stage, we will require the contractor to submit for approval their plan 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 plan. We will require the contractor 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 a trip-ticket system.

³ 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.

18. We estimate that the proposed works will generate in total about 96 000 tonnes of construction waste. Of this, we will reuse about 18 000 tonnes (19%) of inert construction waste on site and deliver about 71 000 tonnes (74%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 7 000 tonnes (7%) 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 \$6.4 million for the proposed works (based on 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

19. There are no declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interest and historic sites identified by the Antiquities and Monuments Office (AMO) within the works area. As part of the works area is located in the vicinity of the archaeological discoveries yielded in the area of the Sung Wong Toi Station (formerly known as To Kwa Wan Station) of Shatin to Central Link, the CEDD conducted further archaeological field investigation in 2015. Based on the findings of the investigation, areas to be impacted by the proposed works are assessed to be of no or relatively low archaeological potential. For the area of relatively low archaeological potential, the proposed works, with the implementation of mitigation measures recommended in the archaeological field investigation report, will be confined to a shallow depth to minimise intrusion into any archaeological potential layer. We will also consult with AMO to formulate and implement necessary precaution measures to minimise any adverse impact to the area.

TRAFFIC IMPLICATIONS

20. We have completed a traffic impact assessment (TIA) for the proposed works. The TIA concluded that the proposed works will not cause significant traffic impact to surrounding areas. To minimise disturbance to the traffic flow during the construction of the proposed works, we will maintain the existing number of traffic lanes along the affected roads as far as practicable.

21. 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 ACQUISITION

22. The proposed works do not require any land acquisition.

BACKGROUND INFORMATION

23. We included **469CL** in Category B in October 1996.

24. In February 1998, the FC approved upgrading of part of **469CL** as **494CL** “South East Kowloon development at Kai Tak Airport – decontamination and site preparation”, at an estimated cost of \$316.9 million in MOD prices, for ground decontamination, demolition of existing buildings and structures and site preparation at the former north apron area. The works were completed in April 2002.

25. In November 2001, the FC approved upgrading of part of **469CL** as **694CL** “South East Kowloon development at Kai Tak Airport – consultants’ fees and site investigation”, at an estimated cost of \$115.9 million in MOD prices, for site investigation works and detailed design of infrastructure for the planned developments at the former north apron area. Detailed design of stages 1, 2, 3A, 3B, 4 and 5A infrastructure works and the reconstruction and upgrading of Kai Tak Nullah at the former north apron area has been completed. The detailed design of stage 5B infrastructure works is being finalised, and the detailed design of other remaining infrastructure works at the former north apron area is in progress.

26. In February 2004, the FC approved upgrading of part of **469CL** as **708CL** “South East Kowloon development – site preparation and drainage works at north apron area of Kai Tak Airport”, at an estimated cost of \$131.6 million in

MOD prices, for implementation of drainage works and demolition of the passenger terminal building and car-parking building at the former north apron area. The works were completed in September 2006.

27. In May 2009, the FC approved upgrading of part of **469CL** as **739CL** “Kai Tak development – stage 1 infrastructure at north apron area of Kai Tak Airport”, at an estimated cost of \$566.5 million in MOD prices, for construction of the stage 1 infrastructure works at the former north apron area to serve mainly the public housing developments. The works were completed in December 2013.

28. In June 2011, the FC approved upgrading of part of **469CL** as **746CL** “Kai Tak development – stage 2 infrastructure at north apron area of Kai Tak Airport”, at an estimated cost of \$355.8 million in MOD prices, for construction of the stage 2 infrastructure works at the former north apron area to serve mainly the residential developments at the Grid Neighbourhood to the east of Kai Tak River. The works were completed in June 2015.

29. In January 2013, the FC approved upgrading of part of **469CL** as **167CD** “Kai Tak development – reconstruction and upgrading of Kai Tak Nullah”, at an estimated cost of \$2,488.2 million in MOD prices, for reconstruction and upgrading of Kai Tak Nullah from PERE to Kai Tak Approach Channel, construction of two enclosed desilting compounds and ancillary works. The works were substantially completed in April 2018.

30. In June 2013, the FC approved upgrading of part of **469CL** as **761CL** “Kai Tak development – stages 3A and 4 infrastructure at north apron area of Kai Tak Airport”, at an estimated cost of \$2,255.3 million in MOD prices, for construction of stages 3A and 4 infrastructure works at north apron area to serve the development sites near San Po Kong and also the residential developments at the Grid Neighbourhood to the west of Kai Tak River. The works commenced in July 2013. The stage 3A infrastructure works were substantially completed in June 2017 whilst the stage 4 infrastructure works are currently under construction for completion by the first quarter of 2019.

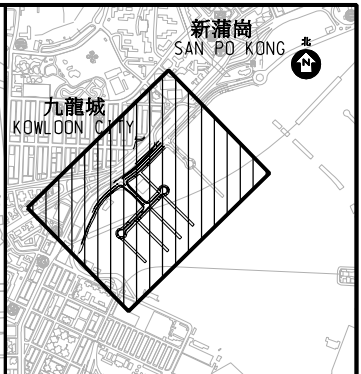
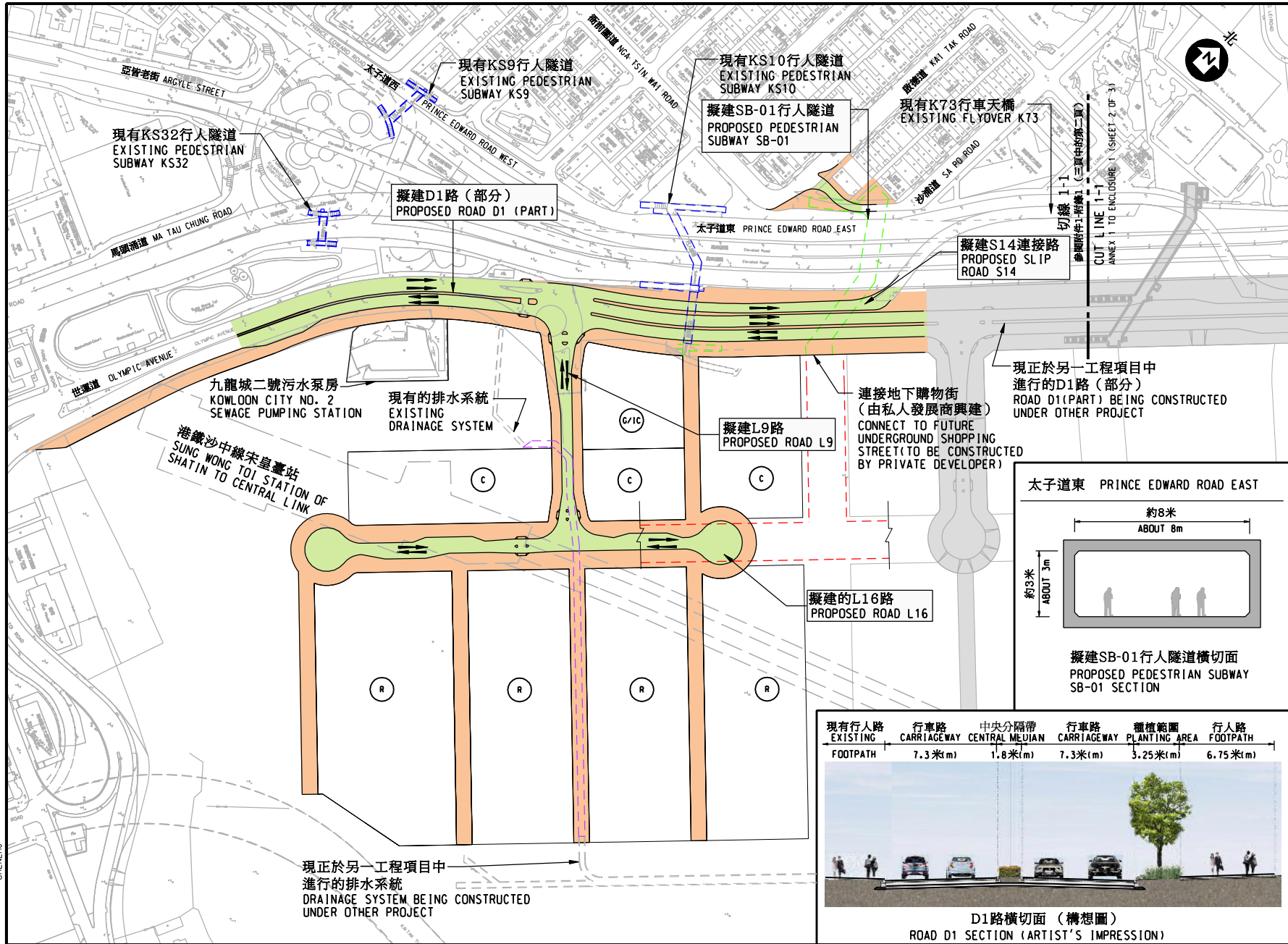
31. In May 2016, the FC approved upgrading of part of **469CL** as **797CL** “Kai Tak development – stages 3B and 5A infrastructure works at former north apron area”, at an estimated cost of \$2,152.8 million in MOD prices, for

construction of stages 3B and 5A infrastructure works at the former north apron area to serve the development sites at the former north apron area. The works commenced in September 2016 and are currently under construction for completion in phases by 2020.

WAY FORWARD

32. We plan to seek the endorsement of the Public Works Sub-committee for upgrading part of **469CL** to Category A for construction of stage 5B infrastructure works at the former north apron area before seeking funding approval from the FC. We plan to invite tenders in parallel to enable early commencement of the proposed works in the third quarter of 2019. We will only award the contract after having secured the FC's funding approval.

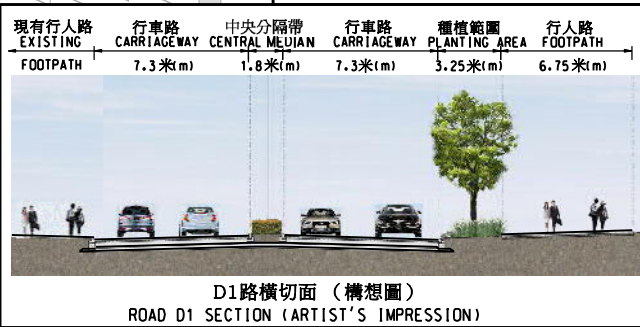
**Development Bureau
February 2019**

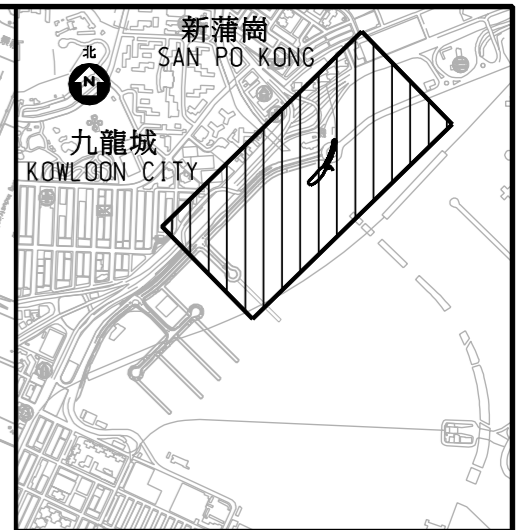
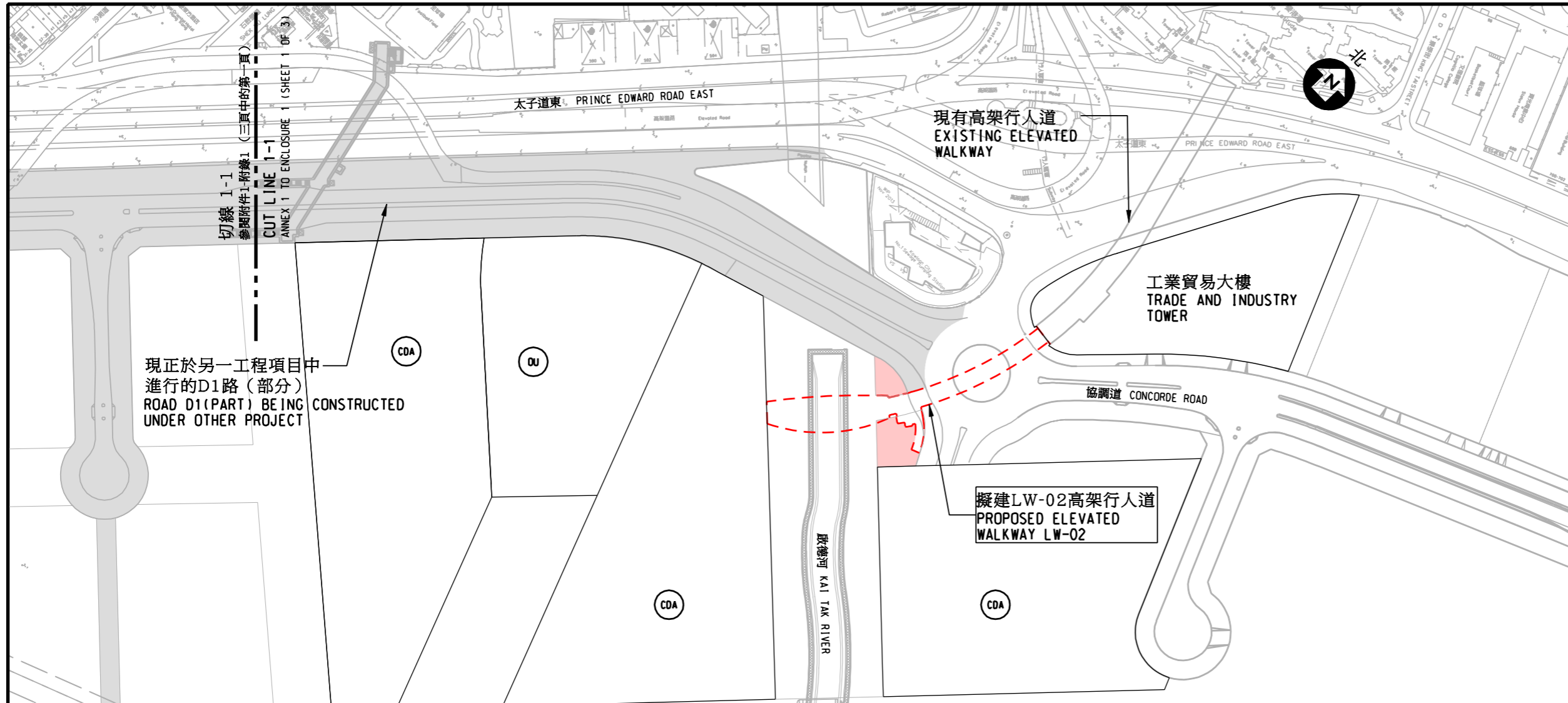


位置圖 LOCATION PLAN

圖例 LEGEND:

- 擬建行車道 PROPOSED CARRIAGEWAY
- 擬建行人路、中央分隔帶和安全島 PROPOSED FOOTPATH, CENTRAL MEDIAN AND TRAFFIC ISLAND
- 擬建行人隧道 PROPOSED PEDESTRIAN SUBWAY
- 改建/翻新現有行人隧道 MODIFICATION/RENOVATION OF EXISTING PEDESTRIAN SUBWAY
- 於另一工程項目中進行的道路工程 ROADWORKS BEING CONSTRUCTED UNDER OTHER PROJECT
- 擬建箱型暗渠 PROPOSED BOX CULVERT
- 由私人發展商興建的地下購物街 UNDERGROUND SHOPPING STREET TO BE CONSTRUCTED BY PRIVATE DEVELOPER
- 擬建住宅發展用地 PROPOSED SITE FOR RESIDENTIAL DEVELOPMENT
- 擬建商業發展用地 PROPOSED SITE FOR COMMERCIAL DEVELOPMENT
- 擬建政府、機構或社區 PROPOSED SITE FOR GOVERNMENT, INSTITUTION OR COMMUNITY
- 行車線 (每一箭嘴表示一條行車線) TRAFFIC LANE FOR CARRIAGEWAY (ONE ARROW REPRESENTS ONE LANE)





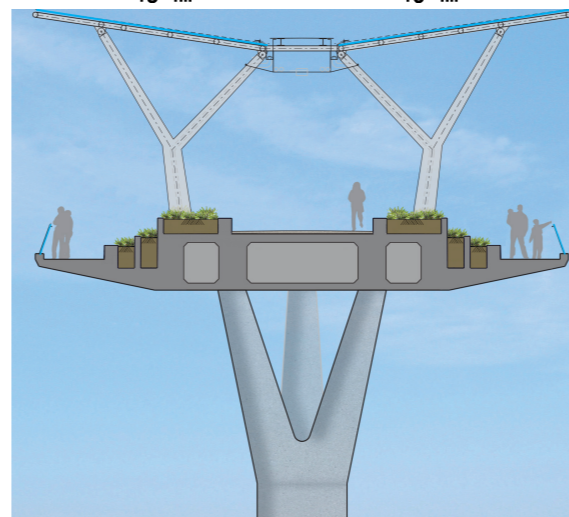
位置圖 LOCATION PLAN

圖例 LEGEND:

- 擬建高架行人道 PROPOSED ELEVATED WALKWAY
- 擬建美化市容地帶 PROPOSED AMENITY AREA
- 於另一工程項目中進行的道路工程 PROPOSED ROADWORKS BEING CONSTRUCTED UNDER OTHER PROJECT
- 擬建其他指定用途 PROPOSED OTHER SPECIFIED USES
- 擬建的綜合發展區用地 PROPOSED SITE FOR COMPREHENSIVE DEVELOPMENT AREA

行人道 WALKWAY 花槽 PLANTER 行人道 WALKWAY 花槽 PLANTER 行人道 WALKWAY

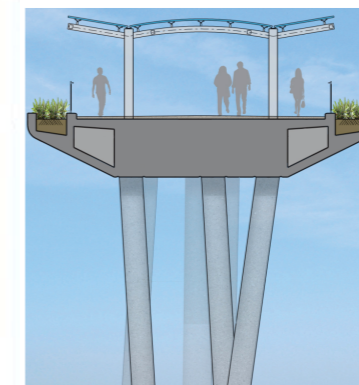
約2米 ABOUT 2m 約1.5至4米 ABOUT 1.5 TO 4m 約5米 ABOUT 5m 約1.5至4米 ABOUT 1.5 TO 4m 約2米 ABOUT 2m



擬建LW-02高架行人道橫切面(啟德河上方)
PROPOSED ELEVATED WALKWAY LW-02 SECTION (ABOVE KAI TAK RIVER)

花槽 PLANTER 行人道 WALKWAY 花槽 PLANTER

約1.5米 ABOUT 1.5m 約9米 ABOUT 9m 約1.5米 ABOUT 1.5m

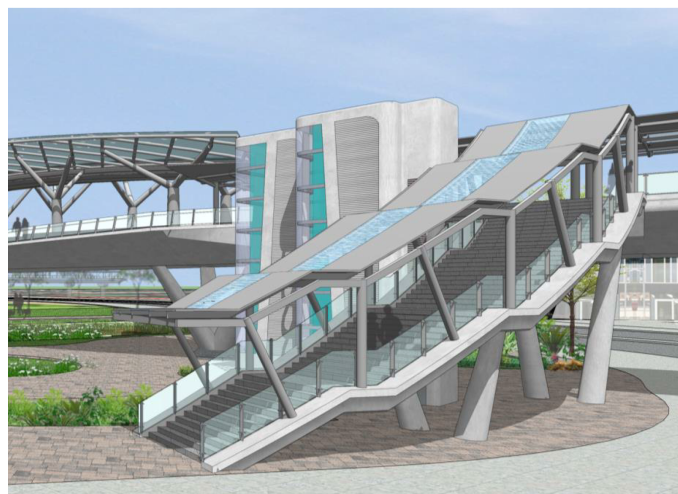


擬建LW-02高架行人道典型橫切面
PROPOSED ELEVATED WALKWAY LW-02 TYPICAL SECTION

圖則名稱 drawing title
工務計劃第469CL號 - 啟德發展計劃 - 前北面停機坪第5B期的基礎設施工程
PWP ITEM NO. 469CL - KAI TAK DEVELOPMENT - STAGE 5B INFRASTRUCTURE WORKS AT THE FORMER NORTH APRON AREA



擬建LW-02高架行人道 (構想圖)
PROPOSED ELEVATED WALKWAY LW-02 (ARTIST'S IMPRESSION)



擬建LW-02高架行人道 - 位於協調道的樓梯及升降機(構想圖)
STAIRCASE AND LIFTS OF PROPOSED ELEVATED WALKWAY LW-02 AT CONCORDE ROAD
(ARTIST'S IMPRESSION)



擬建SB-01行人隧道 - 位於沙浦道的入口 (構想圖)
ENTRANCE OF PROPOSED PEDESTRIAN SUBWAY SB-01 AT SA PO ROAD (ARTIST'S IMPRESSION)

CHEN LU
Plotting By: 14/02/2019

■則名稱 drawing title

工務計劃第469CL號 - 啟德發展計劃 - 前北面停機坪第5B期的基礎設施工程
PWP ITEM NO. 469CL - KAI TAK DEVELOPMENT - STAGE 5B INFRASTRUCTURE WORKS AT THE FORMER NORTH APRON AREA

HEAD 705 – CIVIL ENGINEERING

Civil Engineering – Multi-purpose

50CG - Provision of an Additional District Cooling System at the Kai Tak Development

PROJECT SCOPE AND NATURE

The scope of the project proposed to be upgraded to Category A (the proposed works) is as follows -

- (a) a chiller plant cum seawater pump room;
- (b) seawater pipework;
- (c) chilled water pipework; and
- (d) connection facilities at user buildings including the New Acute Hospital (NAH), the Kai Tak Sports Park (KTSP), Animal Management and Animal Welfare Building Complex and adjacent commercial areas at Area 3 at the Kai Tak Development (KTD).

2. The estimated cooling capacity of the proposed additional DCS is about 178MW which could serve an estimated total additional public and private non-domestic air-conditioned floor areas of about 811 000 square metres. A layout plan showing the main construction works and pipework of the proposed works is at **Annex 1**.

3. Subject to funding approval of the Finance Committee (FC), we plan to commence construction of the proposed works in the fourth quarter of 2019 in phases. Operation of the additional DCS is planned to commence in 2022-23 to tie in with the commissioning of KTSP, and the entire project is planned for completion by end 2028. A preliminary schedule for the provision of district cooling services is at **Annex 2**.

4. Having regard to the experience of Phase II of the existing DCS

Project, we will tender the works for the additional DCS (including construction of the DCS plant building and installation of electrical and mechanical (E&M) equipment, associated underground seawater pipe networks and chilled water pipe networks, and connection facilities at non-commercial sites) under a “Design, Build and Operate” (DBO) contract. Tasking the selected contractor with the detailed design and construction works will help expedite the project to tie in with the commissioning of KTSP. Incorporating the operating requirements into the design of the DCS will also facilitate the management and maintenance of the facilities.

5. Regarding the connection facilities at the commercial sites, as we can only locate the chilling substations after the building owners have finalized their building designs, works for those connection facilities will be procured through separate contracts later.

6. To enhance the coordination and interface of related projects, especially to avoid having to re-open newly completed roads for pipe laying works of the additional DCS, the Electrical and Mechanical Services Department (EMSD) will entrust the works for pipe laying at Trunk Road T2, Road L9 and Road D1 to the Civil Engineering and Development Department (CEDD) which is responsible for building those roads.

JUSTIFICATIONS

7. A DCS is an energy-efficient air-conditioning system, consuming 35% and 20% less electricity as compared with traditional air-cooled air-conditioning systems and individual water-cooled air-conditioning systems using cooling towers (WACS) respectively. Hence, installing the additional DCS at KTD will bring about significant environmental benefits. Upon full utilisation, the additional DCS is estimated to save about 53 million kilowatt-hour of electricity per annum, corresponding to a reduction of about 37 000 tonnes of carbon dioxide emission per annum.

8. Apart from energy saving, the additional DCS will also bring about the following benefits –

- (a) reduction in users’ upfront capital cost, as chiller plants are not required at user buildings. The reduction is about 5% to 10% of the total building cost;

- (b) more flexible building designs for user buildings;
- (c) reduced heat island effects at KTD, and no noise and vibration arising from the operation of heat rejection equipment and chillers of air-conditioning plants, as such equipment will not be required in user buildings; and
- (d) a more adaptable air-conditioning system as compared to individual air-conditioning systems. Individual buildings can adjust their cooling capacity to meet air-conditioning demands without having to carry out extensive modification or retrofitting works.

9. DCS systems require water for heat rejection and should better be located near a water source. The proposed additional DCS plant will therefore be located adjacent to the Desilting Compound at Site 1P1 as shown at **Annex 1**. The DCS will draw desilted water directly from the Desilting Compound for heat rejection, which will help reduce construction cost.

FINANCIAL IMPLICATIONS

10. The estimated capital cost of works for the additional DCS at KTD is about \$4,269.3 million in MOD prices.

11. The tariff for using DCS at KTD has been set at a competitive level, comparable to the cost of using WACS, and WACS is already the most cost-effective air-conditioning system available in the market. The District Cooling Services Ordinance (Cap. 624), which sets out the tariff level, was passed by the Legislative Council in March 2015. Our preliminary assessment shows that the additional DCS is financially viable, as the capital and operating costs for the additional DCS can be recovered through charges collected from DCS consumers over the project life of 30 years. The estimated unit cost of air-conditioning provided by DCS under the **50CG** project for all types of buildings is lower than that of WACS.

PUBLIC CONSULTATION

12. We have consulted the following parties. They all support the

additional DCS at KTD –

- (a) Wong Tai Sin District Council (6 November 2018);
- (b) Housing and Infrastructure Committee of the Kowloon City District Council (8 November 2018);
- (c) Environment and Hygiene Committee of the Kwun Tong District Council (27 November 2018); and
- (d) Subcommittee on Energy Efficiency and Conservation and Renewable Energy under the Energy Advisory Committee (1 February 2019).

13. EMSD briefed the Task Force on Kai Tak Harbourfront Development (the Task Force) on the additional DCS project on 15 January 2019. The Task Force acknowledged the operational need and environmental merits of the additional DCS. It also proposed improving the façade design of the proposed plant building, minimising the building footprint and housing multiple uses on the same site. EMSD will take into account these views in preparing the tender document, and will consult the Task Force again when a more detailed design is available.

ENVIRONMENTAL IMPLICATIONS

14. The project is not a designated project under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 499). We have completed the Preliminary Environment Review (PER) for the project. The PER has concluded, and the Director of Environmental Protection has agreed, that the project would not cause adverse environmental impacts with the implementation of the recommended environmental mitigation measures which include acoustic louvres and silencers to mitigate operational fixed plant noise.

15. For mitigating short-term construction impacts, we will implement measures recommended in the PER to control noise, dust and site run-off nuisances, in order to comply with established standards and guidelines. These measures include the use of quality powered mechanical equipment, movable noise barriers, noise enclosure and acoustic mats for noisy construction activities, frequent cleansing and watering of the site, and provision of wheel-washing

facilities. We will also carry out site inspections to ensure that these mitigation measures and good site practices are properly followed and implemented. We have included in the project estimates the cost for the implementation of these mitigation measures.

16. At the planning and design stages, we will consider the piping alignment, design level and construction method of the proposed works to avoid generating construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated soil) 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 facilities¹. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to avoid generating construction waste.

17. At the construction stage, we 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. We will ensure that the operations on site comply with the approved plan. We will require the contractor to separate inert and non-inert construction wastes on site for disposal at appropriate facilities. We 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.

18. We estimate that the proposed works will generate about 306 000 tonnes of construction waste. Of this, we will reuse about 216 810 tonnes (70.8%) of inert construction waste on site and deliver about 88 380 tonnes (28.9%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 810 tonnes (0.3%) 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 \$6.4 million for the proposed works (based on 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)).

¹ 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.

19. The Government will continue to take the lead in promoting green building. We expect to achieve the second highest rating under BEAM Plus for the DCS plant building which will also incorporate green features and renewable energy systems such as photovoltaic panel systems. In addition, we have considered the adoption of greenery. The proposed plant building roof greening ratio will be over 20% of the roof area and the overall greening ratio will be over 30% of the overall site area.

HERITAGE IMPLICATIONS

20. The 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 (AMO). As part of the alignment of DCS pipes is located within the area of relatively low archaeological potential that was identified in the Archaeological Field Investigation conducted by CEDD in 2015, we will consult AMO to formulate and implement necessary mitigation measures to minimise any adverse archaeological impact.

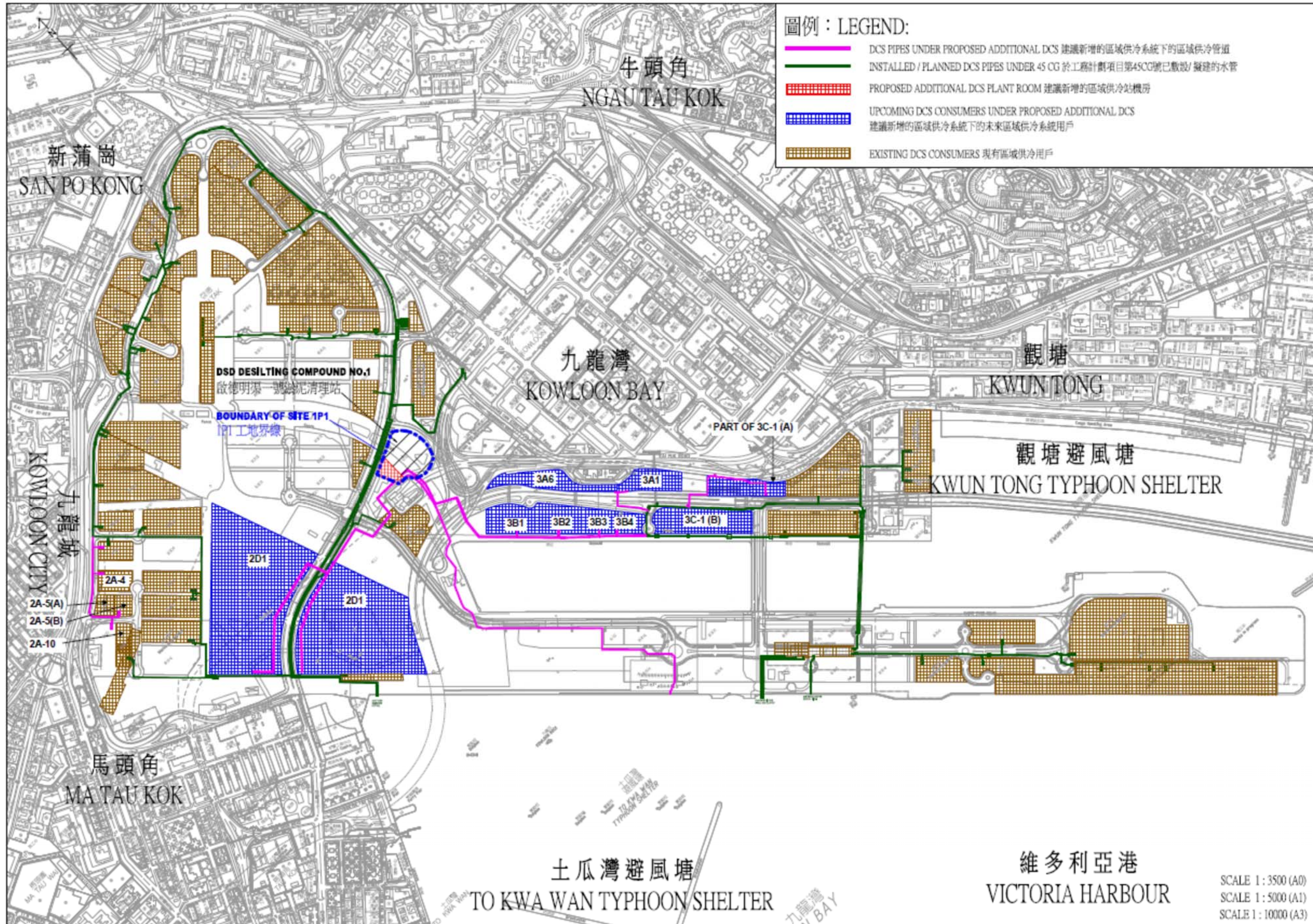
LAND ACQUISITION

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

WAY FORWARD

22. We plan to seek the approval of the Public Works Subcommittee to upgrade the **50CG** project to Category A, and then seek funding approval of FC in the second quarter of 2019. We will invite tenders for the DBO contract in parallel to enable early commencement of the proposed works in the fourth quarter of 2019. We will only award the contract after securing FC's funding approval.

Electrical and Mechanical Services Department
Environment Bureau
February 2019



**Provision of an Additional District Cooling System
at the Kai Tak Development**

Preliminary Schedule of Provision of District Cooling Service to User Buildings

Site	Usage	Year of Provision of District Cooling Service
2A-4, 2A-5(A), 2A-5(B), 2A-10	Commercial	2023
2D1	Kai Tak Sports Park	2022/2023
3A1	Animal Management and Animal Welfare Building Complex of the Agriculture, Fisheries and Conservation Department	2022
3A6, 3B1, 3B2, 3B3, 3B4	Commercial	2025-2028
Part of 3C-1 (A)	New Acute Hospital	2024
3C-1 (B)	New Acute Hospital	2024

[Note:

Year of provision of district cooling service to commercial sites is subject to the development schedule of the sites.]

Progress Report on Kai Tak Development

PURPOSE

This report updates Members on the general progress of Kai Tak Development (KTD).

OVERVIEW

2. Since 2009, we have obtained funding approvals from the Legislative Council (LegCo) for a series of public works projects for KTD with an aggregate approved project estimate of about \$101 billion in money-of-the-day prices as detailed at **Annex 1**.

CURRENT SITUATION

Major Projects Already Completed

3. Major KTD projects already completed are shown at **Annex 2**. At the former south apron and runway areas, Stage 1 advance infrastructure works including Shing Cheong Road and Shing Fung Road leading to the Kai Tak Cruise Terminal (KTCT) were completed for public use in May 2013. The KTCT building and its first berth, as well as the Kai Tak Fire Station cum ambulance depot at the junction of Cheung Yip Street and Hoi Bun Road, were completed in June 2013. The landscaped deck on top of KTCT building and Runway Park Phase 1 were opened to public in October 2013 and June 2014 respectively. Inaugural berthing for medium-sized cruise vessels took place at the second berth of KTCT in September 2014. Upon completion of remaining dredging works in December 2015, the second berth of KTCT is able to accommodate berthing of mega-sized cruise vessels from 2016 onwards. The Kwun Tong Promenade was opened to public in two stages in January 2010 and May 2015 respectively. The Hong Kong Children's Hospital (HKCH) has commenced service in phases since 18 December 2018.

4. At the former north apron area, Stage 1 infrastructure works were completed in December 2013 to support the public rental housing (PRH) development

including Kai Ching Estate and Tak Long Estate. Stage 2 infrastructure works serving the residential sites in the Grid Neighbourhood on the eastern side of Kai Tak River were completed in June 2015, while the Trade and Industry Tower (TI Tower) was completed in April 2015. Two primary schools adjacent to the PRH development, namely S.K.H. Holy Cross Primary School and Po Leung Kuk Stanley Ho Sau Nan Primary School, were completed in December 2015. Stage 3A infrastructure works (serving the development sites near San Po Kong and enhancing the connectivity of KTD with San Po Kong) were completed in June 2017. The upgrading and reconstruction works for the section of Kai Tak Nullah within KTD were substantially completed in April 2018. Other projects including five sewage pumping stations and Phases I & II of District Cooling System (DCS) covering the northern plant room, southern plant room and sea water pump room, were also completed. In end 2017, DCS Phase III (Package A) was completed to serve the TI Tower, two primary schools, as well as the HKCH.

5. Phase 1 improvement works at Kai Tak Approach Channel (KTAC) and Kwun Tong Typhoon Shelter (KTTS), including embankment improvements, dredging and bioremediation works, to address the odour issue were completed in July 2014. Drainage and sewerage improvement works in the hinterland of KTD are also progressively completed.

6. Housing supply is one of the key policy priorities of the Government. Up to now, we have delivered in batches a total of 20 residential sites (16 of them are located at or near the Grid Neighbourhood on both sides of Kai Tak River at the former north apron area and four of them are located at the former runway) and one mixed use site (**Annex 3**). These 21 sites have been handed over in batches to the Urban Renewal Authority and the Hong Kong Housing Authority for development, and the Lands Department (LandsD) for land sale purpose. The total residential gross floor area (GFA) inclusive of those for public housing made available to date in KTD is about 1 480 000 square metres (m²), providing about 28 300 flats.

7. Apart from increasing housing land supply, the continued supply of land for commercial uses is essential to sustain Hong Kong's economic growth. On top of the commercial GFA of about 59 000 m² in the residential sites and the mixed use site as mentioned above, two commercial sites at the former north apron with a total commercial GFA of about 276 000 m² have been handed over to LandsD since December 2016 for land sale, capable of providing a total of about 335 000 m² commercial GFA (**Annex 3**).

8. In 2015, in view of the continual pressing demand for housing and commercial land, we conducted a technical feasibility study to explore optimizing the development potential of sites and enhancing the land use proposals in KTD. The land use proposals and development intensity of sites within KTD was reviewed. Based on the findings and recommendations of the study, we proposed changes to the land use zoning and development intensity for a number of sites in KTD. The planned population, residential GFA, flat production and commercial GFA have been increased by 28% (from 105 000 to 134 000), 31% (from 2 220 000 m² to 2 900 000 m²), 28% (from 39 000 units to 49 900 units) and 17% (from 1 950 000 m² to 2 280 000 m²) respectively as compared with those in the Kai Tak Outline Zoning Plan (OZP) No. S/K22/4 together with the section 16 planning applications approved up to April 2015. Relevant amendments were incorporated in the Kai Tak OZP No. S/K22/5 which was exhibited for public inspection in February 2017. The Chief Executive in Council approved the amended OZP in May 2018. Up to now, additional seven development sites were designated for public housing development. The latest planned flat production and population are 50 800 units (public housing account for 25 400 units) and 137 000 respectively.

Major Projects under Construction

9. Major projects in KTD currently under construction are summarised in the ensuing paragraphs. A location plan of these projects is at **Annex 4**.

10. At the former north apron area, Stage 4 infrastructure works (serving six housing sites of the Grid Neighbourhood west of Kai Tak River and enhancing the connectivity between To Kwa Wan and Kowloon Bay) are in progress for substantial completion by the first quarter of 2019 while Road D2 was open to the public in July 2018. Stages 5A and 3B infrastructure works to serve more development sites at the former north apron area near Kowloon City and San Po Kong commenced construction in September and December 2016 respectively for completion both in 2020. Construction of the Tai Wai to Hung Hom Section of the Shatin to Central Link (SCL) in KTD is ongoing.

11. Kowloon East Regional Headquarters and Operational Base cum Ngau Tau Kok Divisional Police Station are under construction for completion in 2019. The main contract for a 30-classroom secondary school commenced in March 2017 for completion in 2019. For the Inland Revenue Tower project, the main contract commenced in August 2018 for completion in 2022. The works of the Avenue Park

project commenced in June 2018 for completion by the first quarter of 2021. The contract of Station Square (Phase 1) commenced in February 2019 for completion in 2020 (while preparation of Phase 2 tendering is in progress with planned completion of the works in 2022). The design, construction and operation contract of the Kai Tak Sports Park commenced in February 2019 and construction is scheduled for completion in 2023.

12. For the New Acute Hospital (NAH), the foundation works contract commenced in September 2018. Subject to the timely funding approval from LegCo for the NAH main building works, the whole NAH project is scheduled for completion in 2024. The waterfront promenade adjacent to NAH has been incorporated into the NAH project for timely delivery while the contract of the one adjacent to HKCH commenced construction in November 2018 for completion in 2020. Construction of the Government Flying Service Kai Tak Division at the former runway tip commenced in November 2018 for completion by the first quarter of 2021.

13. DCS Phase III (Package B) which will supply chilled water to the headquarters of the Electrical and Mechanical Services Department (EMSD), the Sung Wong Toi Station and Kai Tak Station of SCL, the Cognitio College and the Kowloon East Regional Headquarters and Operational Base cum Ngau Tau Kok Divisional Police Station is under construction for completion by the third quarter of 2019. DCS Phase III (Package C) also commenced in September 2016 for completion by the first quarter of 2020. Following the approval of LegCo's Finance Committee, construction of the Remaining Works under DCS Phase III commenced on 31 January 2019 for completion by end 2025.

14. To facilitate an early disposal of commercial and residential development sites at the former runway, infrastructure works commenced in November 2015 for staged completion by 2019. Stage 2 infrastructure works at the former runway cover re-aligning and widening of Shing Fung Road, as well as building new roads with associated infrastructures including an elevated landscaped deck and noise barriers, whereas Stage 3 infrastructure works at the former south apron area include widening of Cheung Yip Street and Shing Cheong Road together with construction of the supporting underground structure as enabling works for the future Trunk Road T2.

Major Projects under Active Planning/Design

15. Major projects under active planning and design are summarised in the ensuing paragraphs. A location plan of these projects is at **Annex 5**.

16. The consultancy for design and construction of Hoi Sham Park Extension in To Kwa Wan was awarded in July 2018 and the detailed design is in progress.

17. For the Lung Tsun Stone Bridge Preservation Corridor, tender preparation is in progress.

18. Stage 5B infrastructure works to serve developments at the former north apron area and enhance connectivity of KTD with the adjoining Kowloon City and San Po Kong districts are planned to start construction in 2019 subject to funding approval from LegCo.

19. Tender documentation for the Agriculture, Fisheries and Conservation Department's Animal Management and Animal Welfare Building Complex is in progress. It is targeted to seek funding approval from LegCo in early 2020.

20. Trunk Road T2 and Cha Kwo Ling (CKL) Tunnel together with the Central Kowloon Route (CKR) and Tseung Kwan O – Lam Tin Tunnel form Route 6 in the strategic road network, which will provide relief to the existing heavy traffic in the Central and Eastern Kowloon areas. As both Trunk Road T2 and part of CKR fall within KTD, their progress update are also provided for reference. For the CKR, four contracts (Ho Man Tin Access Shaft, Kai Tak West, Yau Ma Tei East and Yau Ma Tei West) commenced construction from December 2017 to November 2018. Tenders for the Kai Tak East contract were being assessed. Tenders for the Central Tunnel contract were invited on 14 December 2018. The remaining two contracts will be tendered progressively from the fourth quarter of 2019 onwards phasing in with the overall implementation programme of CKR. Trunk Road T2 and CKL Tunnel were repackaged into a single Public Works Programme item. Subject to funding approval from LegCo, the project is targeted to commence in the second half of 2019 for completion in around 2025 in tandem with CKR.

21. Funding approval from LegCo was obtained on 30 November 2018 for the provision of infrastructure at the former runway and south apron, which comprises mainly the construction of a section of Road D3 (Metro Park Section) and its associated works at the former runway as well as the proposed Roads S20, L18 and L10 (southern section), and an elevated walkway FB02 serving developments at the former south apron. The works are targeted to commence in phases starting from March 2019 for completion in phases by 2023.

22. Besides, the construction works for an additional DCS to meet the increase in cooling demand arising from the further increase in development intensity of KTD, latest scope of KTSP and NAH are tentatively scheduled to commence in the last quarter of 2019 subject to funding approval from LegCo. EMSD consulted the Kwun Tong, Kowloon City and Wong Tai Sin District Councils in November 2018. Consultation with the Task Force on Kai Tak Harbourfront Development (KTTF) was conducted on 15 January 2019. The detailed design is underway.

23. The odour problem at KTAC and KTTS is generally under control. In 2015, we studied alternative options in lieu of the proposed 600 m opening under the Phase 2 improvement works at KTAC and KTTS and concluded that an Interception and Pumping (IP) Scheme could effectively reduce the polluted flow from entering KTAC and KTTS and improve the water circulation, whilst achieving similar environmental performance as the originally proposed 600 m opening. We consulted the Kwun Tong, Kowloon City and Wong Tai Sin District Councils and the KTTF in the third quarter of 2015 and obtained general support for the proposed alternative IP scheme. The detailed design of which is underway.

Kai Tak Fantasy (KTF)

24. KTF covers an area of about 90 hectares spanning the former runway tip in KTD, the Kwun Tong Action Area (KTAA) and the enclosed water body between them. KTF will be a recreational landmark and will also become a tourism and entertainment destination for public enjoyment. The Energizing Kowloon East Office (EKEO) of the Development Bureau (DEVB) is taking forward the KTF initiative under two studies, namely the Planning and Urban Design Review for Developments at Kai Tak Runway Tip and the Planning and Engineering Study on KTAA. EKEO consulted the KTTF, the Kwun Tong and Kowloon City District Councils and the Land and Development Advisory Committee between August and November 2017 on the Preliminary Outline Development Plan under the KTAA Study. Various technical assessments are being conducted to formulate the Recommended Outline Development Plan for KTAA. Major findings of the KTAA Study and the Kai Tak Runway Tip Study are expected to be available in mid-2019.

Environmentally Friendly Linkage System (EFLS)

25. Following funding approval from LegCo in July 2015, the detailed

feasibility study (DFS) for the EFLS commenced in October 2015. As diverse views had been received regarding the most suitable mode of green transport (GT) for the EFLS and its alignment, additional time was taken to carry out the DFS in two stages, with the first stage assessing the various GT modes on an equal basis to identify the most suitable one. In the interim public consultation completed in mid-2017, general support for adopting an elevated GT mode was received. We are now proceeding with the second stage study which includes the determination of the EFLS's network coverage, alignment, station locations, etc. and the associated technical and financial assessments to ascertain its feasibility, with views of the stakeholders and members of the public collected during the interim public consultation being taken into account. The way forward for the EFLS project will be formulated upon completion of the DFS.

Cycle Track Network in KTD

26. In response to public aspirations for a wider coverage of the cycle track network in KTD for leisure and recreation purposes, we reviewed the cycle track network and proposed an extension of the network from about 6 kilometres (km) to about 13 km mainly by incorporating cycle track on public open spaces. With general public support received, a feasibility study commenced in November 2015 to examine the proposed cycle track network, its ancillary facilities including rental and parking provision, operation and management framework and implementation strategy.

27. Following the recommendations of the feasibility study, the Government is considering to implement a 13 km long "GreenWay" network, being a shared-use path for cyclists and pedestrians, in KTD. The GreenWay network will be implemented in two phases largely according to the delivery programme of various open space projects in KTD, with the first phase of about 7.5 km long GreenWay to be available by 2023. The KTTF, the respective Committees of the Kowloon City, Kwun Tong and Wong Tai Sin District Councils, and the concerned cycling associations were consulted in September/October 2017 on the study recommendations and a proposed pilot project on the GreenWay at Kwun Tong Promenade, with general support received. Launched in July 2018, the six-month field trial of the GreenWay pilot project at Kwun Tong Promenade was completed on 31 December 2018 as scheduled. The experience gained in the pilot project will help optimising the planning and implementation of the future GreenWay network in KTD.

Public Transport Services in KTD

28. There are currently 11 franchised bus routes and two green minibus (GMB) routes and a scheduled ferry service running between North Point and Kwun Tong via Kai Tak serving the completed developments such as the PRH development, HKCH and KTCT in KTD. The routes mainly provide access to Hong Kong Island, Kowloon East and Yau Tsim Mong. To tie in with the phased commissioning of the HKCH since December 2018, two additional GMB routes between Yau Tong and HKCH and between Sau Mau Ping and HKCH were planned to be introduced in the first quarter of 2019.

29. To tie in with the development progress and population growth of KTD, facilities such as taxi stands, minibus and bus stops and ferry pier have been provided. Public transport services have been adjusted and strengthened at appropriate junctures to meet public demands.

Other Activities in the Pipeline

30. Following the formal launch of the “Kai Tak Brand Identity Manual and Public Creatives Guidelines” in December 2016, the street furniture items with Public Creatives design were progressively implemented under various infrastructure projects in KTD. These items include paving pattern of pedestrian footpaths and graphic painting on street lamp poles and street name plate poles which were being showcased to public in the community greening ceremony of Kai San Road under Stage 3A infrastructure works at former north apron in August 2017. Whereas for other street furniture items like bollard, pedestrian island railing, roadside irrigation point, and manhole cover, agreement on the detailed design was obtained from relevant departments and will be implemented under the on-going and new infrastructure projects in KTD. In order to promote the “Public Creatives” design concept in private developments, the link of website of Public Creatives manual and guidelines will be included in the tender documents for all upcoming private development sites in KTD.

31. In response to key stakeholders’ comments on the enhancement of urban design of development sites at the former runway during the public consultation of Kai Tak OZP amendments, we commenced the study on urban design of development sites in December 2016. The “Urban Design Guidelines and Manual for the Runway Precinct” was completed in September 2018 and was uploaded to the website of Kai Tak Office for public use.

32. Besides, we, in collaboration with the Harbour Office of DEVB, Leisure and Cultural Services Department, Architectural Services Department and Planning Department, engaged a consultant in late February 2017 to carry out the Study on Design Control and Guidelines for Kai Tak Promenades to facilitate the phased delivery of Kai Tak promenades which will be partly under public works projects and partly via the “Public Open Space in Private Development” approach. The “Design Guideline for Kai Tak Promenade” was completed in August 2018 and was uploaded to the website of Kai Tak Office for public use.

**Development Bureau
Civil Engineering and Development Department
February 2019**

Kai Tak Development
List of Public Works Programme (PWP) Items
Upgraded to Category A since 2009

PWP Item No.	Project Title	Date of Upgrading to Category A	Approved Project Estimate (\$million)
738CL	Kai Tak development – detailed design and site investigation for Kai Tak Approach Channel and Kwun Tong Typhoon Shelter improvement works	May 2009	50.0
739CL	Kai Tak development – stage 1 infrastructure works at north apron area of Kai Tak Airport	May 2009	566.5
740CL	Kai Tak development – detailed design and site investigation for remaining infrastructure works for developments at the former runway	May 2009	32.0
741CL	Kai Tak development – stage 1 advance infrastructure works for developments at the southern part of the former runway	May 2009	539.6
357DS	Sewage interception scheme in Kowloon City	Jun 2009	700.3
736CL	Site formation for Kai Tak cruise terminal development	Nov 2009	2,303.9
7GA	Cruise terminal building and ancillary facilities for the Kai Tak cruise terminal development	Apr 2010	5,852.1
162CD	Reconstruction and rehabilitation of Kai Tak Nullah from Po Kong Village Road to Tung Kwong Road – stage 1	Jul 2010	159.4
363DS	Provision of interception facilities at Jordan Valley box culvert	Dec 2010	588.0
377DS	Upgrading of Central and East Kowloon sewerage - phase 2	Jun 2011	503.0
745CL	Kai Tak development - Kai Tak approach channel and Kwun Tong typhoon shelter improvement works (Phase 1)	Jun 2011	717.7

PWP Item No.	Project Title	Date of Upgrading to Category A	Approved Project Estimate (\$million)
746CL	Kai Tak development - stage 2 infrastructure at north apron area of Kai Tak Airport	Jun 2011	355.8
749CL	Kai Tak development - reprovisioning of radar on top of the cruise terminal building	Jun 2011	88.4
140CD	Reconstruction and rehabilitation of Kai Tak Nullah from Po Kong Village Road to Tung Kwong Road - remaining works	Jul 2011	1,602.0
172BF	Construction of fire station-cum-ambulance facility at Cheung Yip Street, Kowloon Bay	Jul 2011	210.0
109KA	Construction of Trade and Industry Tower in Kai Tak Development Area	Jan 2012	2,645.1
443RO	Runway Park at Kai Tak, Kowloon City District – Phase 1	Jul 2012	169.7
439RO	Kwun Tong promenade (stage 2)	Jul 2012	250.7
167CD	Kai Tak development – reconstruction and upgrading of Kai Tak Nullah	Jan 2013	2,488.2
761CL	Kai Tak Development - stages 3A and 4 infrastructure at north apron area of Kai Tak Airport	Jun 2013	2,255.3
45CG	District Cooling System at the Kai Tak Development	Jun 2009 Feb 2011 Jun 2013 Jul 2015 Apr 2016 Jan 2019	1,671.0 1,861.8 ¹ 3,145.9 ² 3,752.0 ³ 3,905.7 ⁴ 4,945.5 ⁵
76MM	Establishment of the Centre of Excellence in Paediatrics (renamed to Hong Kong Children's Hospital)	Jun 2013	12,985.5
169CD	Reconstruction and rehabilitation of Kai Tak Nullah from Tung Kwong Road to Prince Edward Road East – main works	Jul 2013	1,244.3

¹ Approved project estimate for Item 45CG was increased to \$1,861.8 million in February 2011.

² Approved project estimate for Item 45CG was increased to \$3,145.9 million in June 2013.

³ Approved project estimate for Item 45CG was increased to \$3,752.0 million in July 2015.

⁴ Approved project estimate for Item 45CG was increased to \$3,905.7 million in April 2016.

⁵ Approved project estimate for Item 45CG was increased to \$4,945.5 million in January 2019.

PWP Item No.	Project Title	Date of Upgrading to Category A	Approved Project Estimate (\$million)
349EP	A 30-classroom primary school at Site 1A-3, Kai Tak Development, Kowloon	Jul 2013	312.4
350EP	A 30-classroom primary school at Site 1A-4, Kai Tak Development, Kowloon	Jul 2013	317.5
287RS	Kai Tak Multi-Purpose Sports Complex – pre-construction work	Jul 2015	62.7
711CL	Kai Tak development – infrastructure works for developments at the southern part of the former runway	Jul 2015	5,757.1
65TR	Detailed Feasibility Study for Environmentally Friendly Linkage System for Kowloon East	Jul 2015	92.3
797CL	Kai Tak Development - stages 3B and 5A infrastructure works at former north apron area	May 2016	2,152.8
237LP	Kowloon East Regional Headquarters and Operational Base cum Ngau Tau Kok Divisional Police Station	May 2016	3,186.0
271ES	Construction of A 30-classroom Secondary School at Site 1A-2, Kai Tak Development	Jun 2016	446.7
272RS	Kai Tak Sports Park– construction work	Jun 2017	31,898.0
92MM	New Acute Hospital at Kai Tak Development Area - Preparatory Works	Jul 2017	769.3
122KA	Inland Revenue Tower in Kai Tak Development	Apr 2018	3,600.0
436RO	Avenue Park at Kai Tak	May 2018	321.9
452RO	Waterfront promenade adjacent to the Hong Kong Children’s Hospital	May 2018	82.2
188GK	Government Flying Service Kai Tak Division	May 2018	469.1
94MM	New Acute Hospital at Kai Tak Development Area – foundation, excavation and lateral support, and basement excavation works	May 2018	5,356.8
467RO	Station Square at Kai Tak	Jun 2018	1,651.5

PWP Item No.	Project Title	Date of Upgrading to Category A	Approved Project Estimate (\$million)
822CL	Kai Tak development – infrastructure for developments at the former runway and south apron	Nov 2018	2,874.7
		Total	100,604.0

啟德發展計劃 – 已完成的主要項目

Kai Tak Development – Major Projects Completed



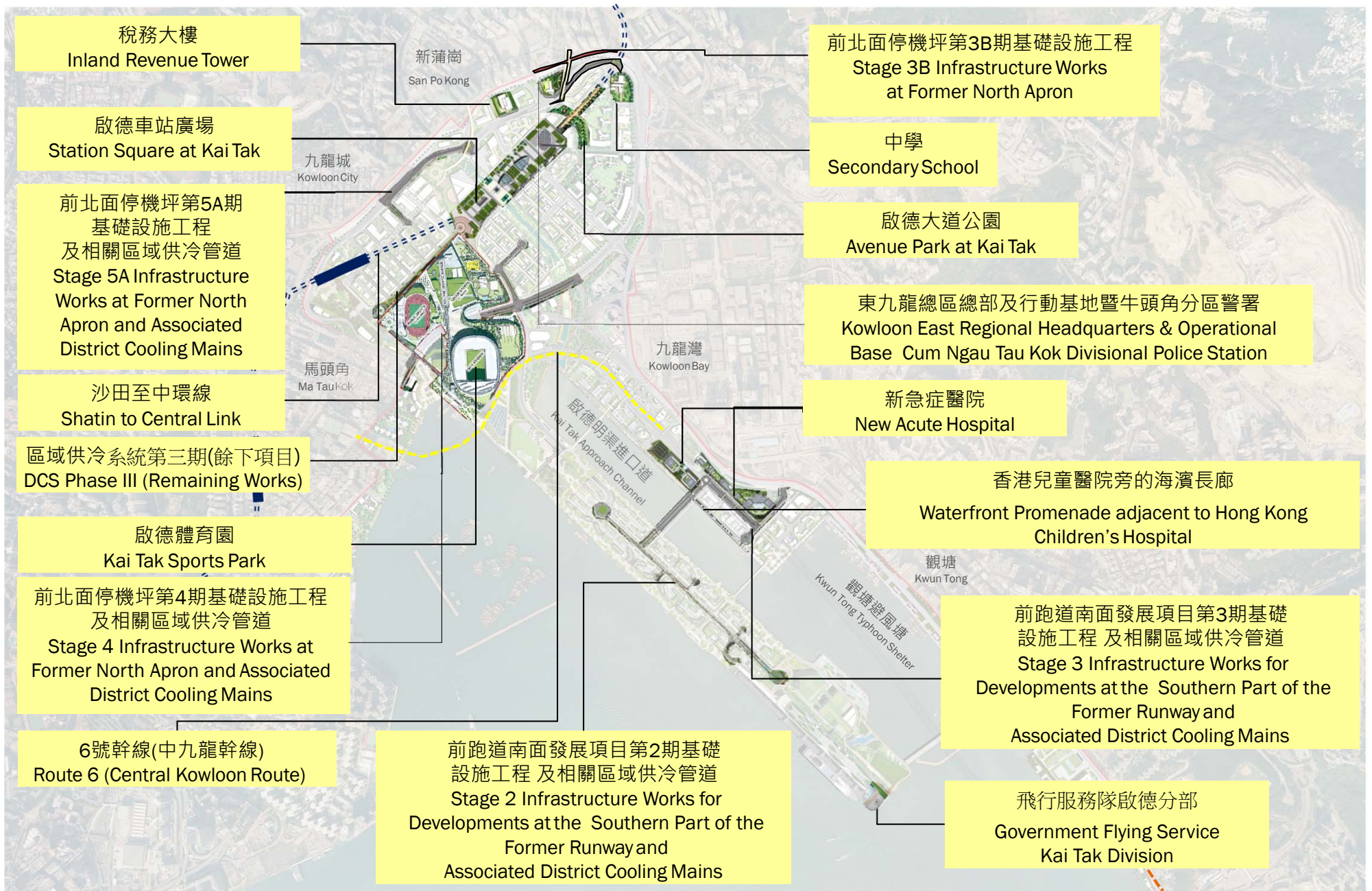
啟德發展計劃 – 住宅及商業用途之土地供應

Kai Tak Development – Land Supply for Housing and Commercial Uses



啟德發展計劃 – 建造中的主要項目

Kai Tak Development – Major Projects under Construction



啟德發展計劃 – 積極規劃 / 設計中的主要項目

Kai Tak Development – Major Projects under Active Planning / Design

