

**For discussion  
on 9 January 2018**

**Legislative Council  
Panel on Security and Panel on Development  
Government Flying Service Kai Tak Division**

**PURPOSE**

This paper briefs Members on the proposal to upgrade Public Works Programme Item No. 7188GK (the Project) to Category A, at an estimated cost of \$469.1 million in money-of-the-day (MOD) prices, to establish a Government Flying Service (GFS) Kai Tak Division (KTD).

**PROJECT SCOPE**

2. The Project site occupies an area of about 7 400 square metres (m<sup>2</sup>) at the tip of the Ex-Kai Tak Runway (EKTR). The scope of the Project comprises –

- (a) construction of an apron to provide a helicopter take-off/landing pad, two helicopter parking pads and the associated safety/protection areas<sup>1</sup>;
- (b) construction of an office building to accommodate an Air Command and Control Centre, a Flight Planning Centre and ancillary facilities including offices for GFS's aircrew, engineering and administration staff, a multi-purpose function room for mission planning, briefing, training and meeting, and an aircraft and mission equipment storage area;
- (c) construction of a hangar to accommodate two helicopters and the associated maintenance equipment;

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<sup>1</sup> The take-off/landing pad is for shared use by GFS and future commercial operator(s) and one of the two parking pads is for the future commercial operator(s).

- (d) provision of supporting facilities for helicopter operation including radio and communication facilities, navigation, security and surveillance systems, helicopter refueling facilities and firefighting facilities; and
  - (e) the associated civil, drainage, sewerage, water supply, building and landscaping works, etc.
3. A layout plan and two architectural renderings showing the proposed works are attached at **Enclosures 1** and **2** respectively.
4. Subject to funding approval of the Finance Committee (FC), we plan to commence the construction works of the Project in the fourth quarter of 2018 for completion by end of 2020-21.

## JUSTIFICATIONS

5. The GFS was established under the Government Flying Service Ordinance (Cap. 322) in 1993 to provide a wide range of flying services, including search and rescue, air ambulance, fire-fighting, aerial survey and support for law enforcement, for various departments of the Government and people in need. Currently, GFS deploys emergency flights from its Headquarters at the Hong Kong International Airport (HKIA) in Chek Lap Kok. The North Lantau Expressway (NLE, see **Enclosure 3**) is one of the four major helicopter flight routes<sup>2</sup> used by GFS's helicopters for transiting to and from its Headquarters. It is also the primary flight route used by GFS's helicopters in response to emergency call-outs under unfavourable weather conditions. With developments under the Tung Chung New Town Extension (TCNTE) coming up along the northern shore of Lantau, the NLE flight route would be hampered by the buildings below the flight path, making it difficult for GFS to continue using that route for supporting its emergency services under unfavourable weather conditions<sup>3</sup>. In the circumstances, in order to maintain the effectiveness and efficiency of GFS's emergency

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<sup>2</sup> The other routes are the Silvermine Pass, Tung Chung Pass and western coastline of Lantau.

<sup>3</sup> Under unfavourable weather conditions, other primary helicopter flight routes to and from the HKIA (i.e. the Silvermine Pass and Tung Chung Pass) are often subject to low cloud level and poor visibility conditions and are unsafe for use. If the NLE is also hampered, GFS has to consider using the western coastline of Lantau as the last resort, but this route is subject to much higher risk factors such as little effective visual references for pilots, presence of high terrain and turbulence, rendering it unsafe for use under poor weather conditions or at night time. In addition, its longer travelling distance to any part of Hong Kong will adversely lengthen the flight time for all emergency response flights, further compromising GFS's effectiveness in responding to emergency call-outs.

services under all weather conditions, there is a need to establish an operational base for GFS outside its Headquarters at the HKIA.

6. An extensive site search process, having regard to key factors such as GFS's operational needs, compatibility with aviation safety requirements, land use planning, technical feasibility, optimal site utilisation and compliance with statutory requirements, etc., was conducted between 2015 and 2016. Following the site search and technical feasibility assessments, a site at the tip of the EKTR (the Site) has been identified as the most suitable location for establishing the GFS Division. The Site has been zoned as "Other Specified Uses" annotated "Heliport" under the Kai Tak Outline Zoning Plan (OZP) S/K22/2 since 2007, primarily intended for the provision of an at-grade cross-boundary heliport. Co-location of the proposed GFS KTD with the planned cross-boundary heliport on this site will maintain GFS's performance commitments and emergency response effectiveness, as well as maximize the use of limited waterfront land resources while ensuring compatibility with the intended land use of the site.

7. Upon the establishment of the proposed KTD, the existing GFS Headquarters at Chek Lap Kok will continue to provide support for other scheduled flying services and routine training, as well as emergency responses depending on the call-out location, resources (including helicopters, aircrew and equipment) available for deployment during the specific situation, weather conditions, etc.

8. In undertaking the design of the proposed GFS KTD, every care has been taken to ensure that provisions are made to support the co-location with the future cross-boundary heliport. The proposed works at the apron area (item (a) under paragraph 2 above) will be able to meet the operational needs of both the GFS and the future cross-boundary heliport. Under the co-location arrangement, the proposed GFS KTD would not be in conflict with the possible development of a cross-boundary heliport thereat. Such arrangement will preserve the original cross-boundary heliport use and its commercial viability, achieve synergy between the Kai Tak Cruise Terminal and the future commercial helicopter services, whilst accommodating the proposed GFS KTD.

9. At present, GFS is procuring seven new helicopters and these will be delivered in phases in 2018/19 to replace the existing fleet. Following an internal review on the deployment of its helicopters, GFS has decided to keep two of the seven helicopters in the existing fleet for contingency use and supporting role. The proposed GFS KTD will see

the stationing of two helicopters when it commences operation. In addition, in support of the aviation theme of Kai Tak Runway Park adjacent to KTD, GFS is considering to transfer the airframe of one of its retired fixed-wing aircraft (Jetstream 41) to the Park for display. KTD, together with the display of the disused Jetstream 41 at the tip of EKTR, will be in full compatibility with the overall planning and design framework of the Kai Tak Development, vibrancy and accessibility of the Harbour, as well as complement the aviation theme in this part of EKTR.

10. The TCNTE is one of the major initiatives to increase land supply to meet the housing and other development needs of Hong Kong. The timely commissioning of the proposed GFS KTD is thus crucial to ensure that the supply of over 40 000 new housing units (with over 60% for public housing) in Tung Chung East under the TCNTE project would be made available starting from 2023 to meet the strong demand for housing in the short to medium term. To enable construction of the housing units in a timely manner and to maintain GFS's emergency services at its current level, we need to commence the construction works of the Project in the fourth quarter of 2018 for commissioning of the KTD in 2021, in order to allow subsequent construction of the superstructure of the housing blocks in Tung Chung East which is underneath the GFS helicopter flight path. The GFS will endeavor to gear up the required manpower, including aircrew and engineering professionals, to cope with the proposed commencement of the KTD.

## **FINANCIAL IMPLICATION**

11. We estimate the capital cost of the Project to be \$469.1 million in MOD prices. Upon completion of the detailed design now being finalised, a detailed breakdown of the project cost estimate will be provided in the funding application to the FC.

## **PUBLIC CONSULTATION**

12. We consulted the Housing and Infrastructure Committee of the Kowloon City District Council (DC), the Food and Environmental Hygiene Committee of the Wong Tai Sin DC and the Environment and Hygiene Committee of the Kwun Tong DC on 15 June, 27 June and 20 July 2017 respectively. Members of the three DCs generally supported the Project.

13. We also consulted the Task Force on Kai Tak Harbourfront Development (KTTF) of the Harbourfront Commission on 8 September and 1 November 2017. Members of the KTTF generally supported the Project having regard that the Site was identified to be most suitable after an extensive and elaborate territory-wide site search exercise.

## **ENVIRONMENTAL IMPLICATIONS**

14. The Project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We have carried out a Preliminary Environmental Review (PER) under the technical feasibility study and revealed that the Project, together with the planned cross-boundary heliport to be co-located at the Site, will not cause long-term adverse environmental impacts. The Project will be designed and implemented in accordance with the requirements of the Hong Kong Planning Standards and Guidelines. GFS will also adopt specific flight paths and procedures to minimize potential helicopter noise impact.

15. We will also incorporate into the relevant works contract the mitigation measures recommended in the PER to control the environmental impacts arising from the construction works within established standards and in accordance with relevant guidelines. These include use of silencers, mufflers, acoustic linings or shields and building of temporary barriers for noisy construction activities, frequent cleaning and watering of the site, and provision of wheel-washing facilities. We have included in the project estimates the cost to implement these mitigation measures.

16. We have considered the site formation arrangement in the planning and design stages to reduce generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated materials) on site or in other suitable construction sites as far as possible, in order to minimize the disposal of inert construction waste to public fill reception facilities<sup>4</sup>. We will encourage the contractor to maximize the use of recycled or recyclable inert construction waste, as well as the use of non-timber formworks to further minimize the generation of construction waste.

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<sup>4</sup> 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.

17. At the construction stage, we will also 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 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. Besides, we will control the disposal of inert construction waste and non-inert construction waste to public fill reception facilities and landfills respectively through a trip-ticket system.

18. We estimate that the Project will generate in total about 17 000 tonnes of construction waste. Of these, we will reuse about 1 500 tonnes (9%) of inert construction waste on site and deliver about 14 900 tonnes (88%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of 600 tonnes (3%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites for the Project is estimated to be \$1.2 million (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 IMPLICATION**

19. This Project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded heritage site or buildings, sites of archeological interest and Government historic sites identified by the Antiquities and Monuments Office.

## **LAND ACQUISITION**

20. The Project does not require any land acquisition.

## **BACKGROUND**

21. We engaged consultants in May 2015 to undertake a technical feasibility study (at a cost of about \$10.8 million in MOD prices) to identify a suitable site and to ascertain the technical feasibility of

establishing on that site a GFS Division outside the HKIA. Upon confirming the technical feasibility of the Site at the tip of the EKTR, we engaged consultants in June 2017 to carry out the detailed design and site investigation works for the Project (at a cost of about \$9.4 million in MOD prices). These pre-construction tasks were funded under block allocation Subhead 7100CX “New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme”.

22. We upgraded **7188GK** to Category B in September 2016.

23. No old and valuable trees have been identified in the Site. The proposed works will not involve any tree removal. While no tree planting is proposed due to operational constraints, a green roof of approximately 1 500 m<sup>2</sup> is proposed at the office building and hangar for environmental and amenity benefits.

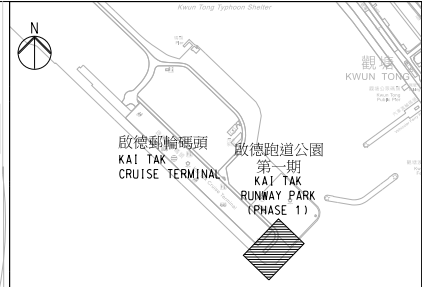
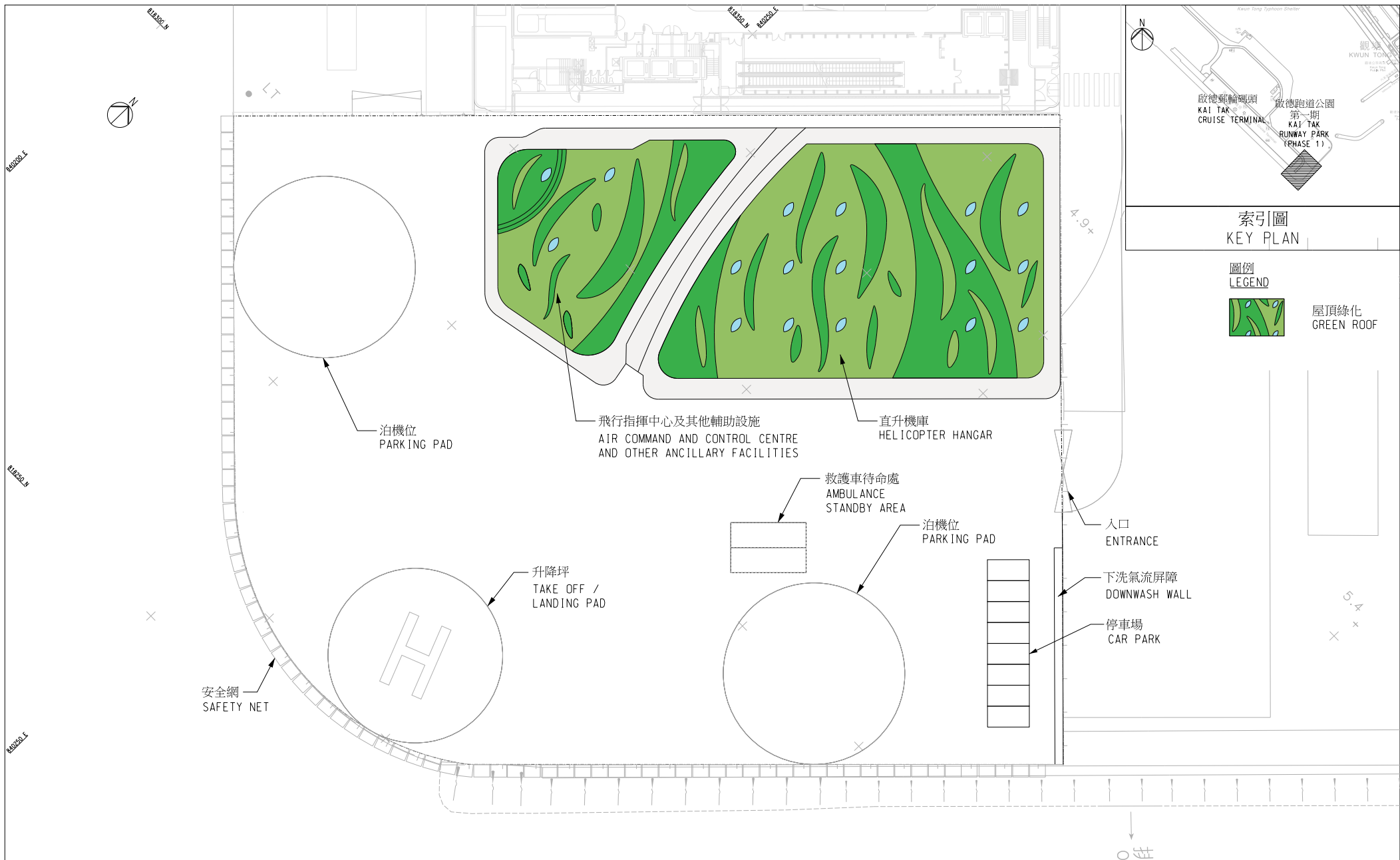
## **WAY FORWARD**

24. We plan to seek support from the Public Works Subcommittee for upgrading the Project to Category A before seeking approval from the FC. Comments from Members of the Panel on Security and Panel on Development are welcome.

Enclosure 1	Layout plan
Enclosure 2	Architectural renderings of proposed KTD
Enclosure 3	NLE – Helicopter flight path during unfavourable weather conditions

**Security Bureau**  
**Development Bureau**  
**Government Flying Service**  
**Civil Engineering and Development Department**

**January 2018**



索引圖  
KEY PLAN

圖例  
LEGEND

 屋頂綠化  
GREEN ROOF

工務計劃項目第7188GK號 — 政府飛行服務隊啟德分部平面圖  
P.W.P. ITEM NO. 7188GK - GOVERNMENT FLYING SERVICE KAI TAK DIVISION - LAYOUT PLAN







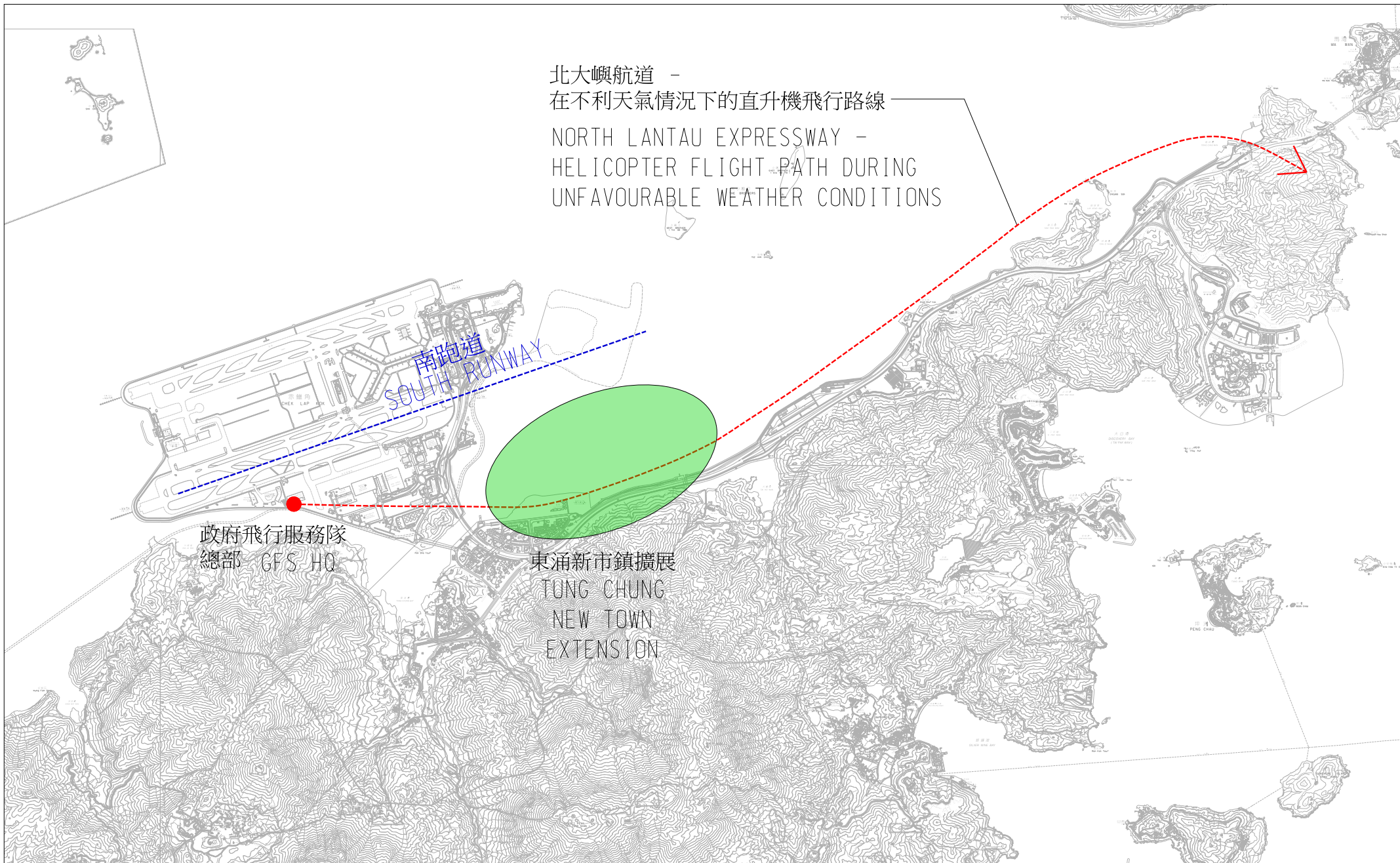
圖則名稱 drawing title

擬建政府飛行服務隊啟德分部建築效果圖 — 從高空俯瞰  
ARCHITECTURAL RENDERING OF PROPOSED GFS KAI TAK DIVISION - AERIAL VIEW



圖則名稱 drawing title

擬建政府飛行服務隊啟德分部建築效果圖 — 正視圖  
ARCHITECTURAL RENDERING OF PROPOSED GFS KAI TAK DIVISION - FRONT VIEW



圖則名稱 drawing title

北大嶼航道 - 在不利天氣情況下的直升機飛行路線  
 NORTH LANTAU EXPRESSWAY -  
 HELICOPTER FLIGHT PATH DURING UNFAVOURABLE WEATHER CONDITIONS