

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Fitting-out – Others

403IO – Fitting-out works for Government facilities associated with Intermodal Transfer Terminal Project at Hong Kong International Airport

Members are invited to recommend to the Finance Committee (FC) the upgrading of **403IO** to Category A at an estimated cost of \$341.1 million in money-of-the-day (MOD) prices for the fitting-out works for government facilities associated with Intermodal Transfer Terminal (ITT) project at the Hong Kong International Airport (HKIA).

PROBLEM

To reinforce and enhance Hong Kong's competitiveness as an international and regional aviation hub, the Airport Authority Hong Kong (AAHK) is developing the ITT with a bonded vehicular bridge linking up the Hong Kong Boundary Crossing Facilities (HKBCF) of the Hong Kong-Zhuhai-Macao Bridge (HZMB) with HKIA, with a view to providing new hassle-free travelling experience for bridge-to-air/air-to-bridge transfer passengers. To support the operation of the ITT, it is necessary for the Customs and Excise Department (C&ED), the Immigration Department (ImmD), the Hong Kong Police Force (HKPF), the Department of Health (DH) to be provided with additional facilities for the new services.

/PROPOSAL

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Transport and Housing, proposes to upgrade **403IO** to Category A at an estimated cost of \$341.1 million in MOD prices for carrying out fitting-out works for government facilities associated with the ITT project at HKIA.

PROJECT SCOPE AND NATURE

3. The proposed scope of works comprises –

(a) fitting-out/refurbishment works of the government premises/facilities in SkyPier, ITT building and HKBCF staging area. The proposed works mainly comprise the following facilities -

(i) C&ED :

- baggage examination rooms, personal search rooms, X-ray checker areas, coach kiosks, mobile X-ray vehicle scanning system operation area, dog kennel, and other office and operational areas to be administered by the C&ED;

(ii) ImmD :

- coach kiosks, duty office, computer rooms, other office and operational areas to be administered by the ImmD;

(iii) HKPF :

- police reporting centre, interview rooms, file storage room and police operation rooms to be administered by the HKPF; and

(iv) DH :

- kiosks, client waiting room, health screening room, consultation room, control room and operational areas to be administered by the DH; and

/(b)

- (b) construction of underground cable duct and containment system with communication cabling works linking the new premises/facilities of C&ED, DH, ImmD and HKPF with their existing premises/facilities at HKBCF, Integrated Airport Centre (IAC) and Terminal 1 (T1) of HKIA.

————— A location plan of relevant buildings of the proposed works is at **Enclosure 1**, the
————— underground cable duct and containment layout plan is at **Enclosure 2**, and the floor
————— plans of SkyPier, ITT and HKBCF staging area where the government
premises/facilities are located are at **Enclosures 3 to 8**.

4. We plan to entrust the design and construction works to AAHK as soon as possible upon obtaining funding approval from the Financial Committee for target commissioning in around two years.

JUSTIFICATIONS

5. The ITT is a new strategic project which will enhance HKIA's intermodal connectivity and catchment in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) and further secure its position as the leading international aviation hub in the region. By establishing a direct linkage with the Restricted Area of HKIA, the ITT will not only significantly shorten the connecting time of transfer passengers travelling from the western part of GBA, or vice versa, but also do away with the immigration clearance and transfer process between the HZMB Hong Kong Port and HKIA for passengers who have no intention to enter into Hong Kong. The significant reduction of connecting time coupled with a more hassle-free travel experience, we believe that the ITT would make the choice of using HKIA for international travel yet more attractive for air passengers travelling to/from the western part of GBA. The anticipated growth in passenger traffic will benefit the aviation industry as a whole, including airlines and aviation support services, businesses operating in the terminal such as restaurants and shops, transport operators, and providers of a broad range of other ancillary services at the airport.

6. To support the smooth operation of the ITT and the bonded bus service as well as the enhancement of SkyPier ferry service for transfer passengers, the proposed provision of government premises/facilities for customs, immigration, quarantine and port health control services, and law enforcement at the ITT building and HKBCF staging area, etc. is necessary to support relevant government departments to exercise their duties. Details are set out in paragraphs 7 to 10 below.

Customs services

7. To support the daily operation of customs clearance, C&ED requires additional customs premises/facilities at strategic locations of the ITT project. Setting up of operational systems and specialised equipment, such as X-ray checkers and contraband detectors, is required for maintaining effective customs inspection. These premises/facilities will enhance the overall capability in detecting contrabands carried by passengers using the ITT.

Immigration services

8. To exercise effective immigration control and facilitate transfer passengers travelling between HKIA and Mainland/Macao, ImmD requires additional immigration premises/facilities at ITT project area. Among others, duty office, coach kiosks and associated facilities are required at ITT project area to conduct immigration clearance for bonded bus drivers and ensure smooth running of the daily operation of ImmD.

Quarantine and port health control services

9. To implement health surveillance measures for transfer passengers via HKIA, DH requires additional facilities comprising client waiting rooms, health screening rooms, consultation rooms and associated ancillary facilities in ITT project area. To carry out such measures, additional thermal imaging systems should also be in place for body temperature checks of transfer passengers in order to prevent infectious diseases from being exported to other places via Hong Kong.

/Law

Law enforcement

10. To handle police reports as well as support the daily patrol and operations by various police units, HKPF requires additional police facilities at ITT project area. The radio communication system will connect the ITT to the entire Airport Island and HKBCF, which is essential for maintaining a reliable communication network for the day-to-day policing services. The above facilities and equipment are required to fulfil the increased policing demand on commissioning of the ITT and ensure the security of HKIA and HKBCF as a whole.

11. Apart from the provision of government premises/facilities mentioned in paragraphs 7 to 10 above, in order to enable effective operation and communication between various equipment and facilities in the ITT and HKBCF staging area, it is necessary to integrate all the new and existing systems/facilities of C&ED, ImmD, HKPF and DH located at HKBCF and Airport Island. As such, the project also comprises the construction of underground cable duct and containment systems with communication cabling works linking all the new and existing systems/facilities at IAC, T1 of HKIA, ITT/SkyPier and HKBCF staging area.

FINANCIAL IMPLICATIONS

12. We estimate the cost of the project to be \$341.1 million in MOD prices, broken down as follows –

	\$ million (in MOD prices)
(a) Site works	3.8
(b) Building	56.3
(c) Building services	29.2
(d) Drainage	1.3
(e) External works	4.0
	/(f)

	\$ million (in MOD prices)
(f) Additional energy conservation, green and recycled features	0.9
(g) Underground cable duct and containment system	36.5
(h) Communication cable and associated works	27.9
(i) On-cost payable to AAHK ¹	24.8
(j) Furniture and equipment ²	125.4
(k) Contingencies	31.0
Total :	341.1

13. In view of the exceptionally high degree of integration required amongst the airport facilities under the ITT project and various government facilities located at different parts of the ITT project area, and the critical interfacing issues such as overlapping works sites, construction sequences, and programme dependence among the proposed works, we plan to entrust the design and construction of the project to AAHK. The entrustment approach will enable both the ITT works and the government facilities at the same location to be designed and

/constructed

¹ The estimated cost (15.5% of the construction cost for the proposed works) is to be charged by AAHK for the design, project management, insurance, construction support and airport on-costs of the project.

² The estimated cost is based on an indicative list of furniture and equipment (F&E) required, including general office furniture and equipment items, as well as specialised operational equipment. We plan to entrust the design, procurement and installation of some of the F&E items to AAHK and the estimated on-cost payable to AAHK (15.5% of the design, procurement and installation cost) has been included.

constructed in a holistic and seamless manner. Such arrangement will not only ensure design integration, enable efficient coordination and facilitate control of construction progress under a single managing party, but also ensure timely commissioning of facilities for commencing operation of the ITT.

14. The total construction floor area (CFA) of the project is about 2 930 square metres (m²). The estimated construction unit cost, represented by the building and building services costs, is \$29,181 per m² of CFA in MOD prices. Taking into consideration the work nature and complexity, we consider the unit cost reasonable as compared with that of other projects built by the Government.

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

Year	\$ million (in MOD prices)
2021 – 2022	50.2
2022 – 2023	199.7
2023 – 2024	48.4
2024 – 2025	33.9
2025 – 2026	8.9
	<hr/> 341.1 <hr/>

16. 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 2021 to 2026. The contract will provide for price adjustments.

17. We estimate the annual recurrent expenditure arising from this project to be \$151.1 million.

PUBLIC CONSULTATION

18. AAHK briefed the community leaders from the neighbouring districts in two rounds of its Community Liaison Group meetings on the ITT project and its associated works, among other topics, in July 2018 and December 2018. The Islands District Council (IDC) was also briefed on 17 December 2018. There were also meetings with individual IDC members and Area Committee members of the neighbouring districts from time to time to update them on the key developments at HKIA, including the ITT project. Members noted that the ITT project and its associated works would be conducive to enhancing the service for transfer passengers and shortening their travelling time.

19. We consulted the Legislative Council Panel on Economic Development on 17 November 2020 on the proposed works. Members indicated support for the proposal to be submitted to Public Works Subcommittee for consideration.

ENVIRONMENTAL IMPLICATIONS

20. The project will not cause long term environmental impact. We have included in the project estimates the cost to implement suitable mitigation measures to control short term environmental impacts.

21. At the planning and design stages, we will provide measures to reduce the generation of construction waste where possible.

22. At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures and ensure that the day-to-day operations on site comply with the approved plan.

/23.

23. We estimate that the project will generate about 260 tonnes of non-inert construction waste which will be disposed at landfills. There will be no inert construction waste to be generated by this project. The total cost for disposal of construction waste at landfill sites is estimated to be about \$52,000 for this project (based on a unit charge rate of \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

HERITAGE IMPLICATIONS

24. This project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interests and government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

25. This project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

26. This project will adopt various forms of energy efficient features, including –

- (a) demand control of supply air; and
- (b) brushless direct current motor for fan coil units.

27. The total estimated additional cost for adoption of the energy conservation and green features is around \$0.9 million (including \$0.5 million for the above energy efficient features), which has been included in the cost estimate of this project. The energy efficient features will achieve 11.5% energy savings in the annual energy consumption with a payback period of about eight years.

/BACKGROUND

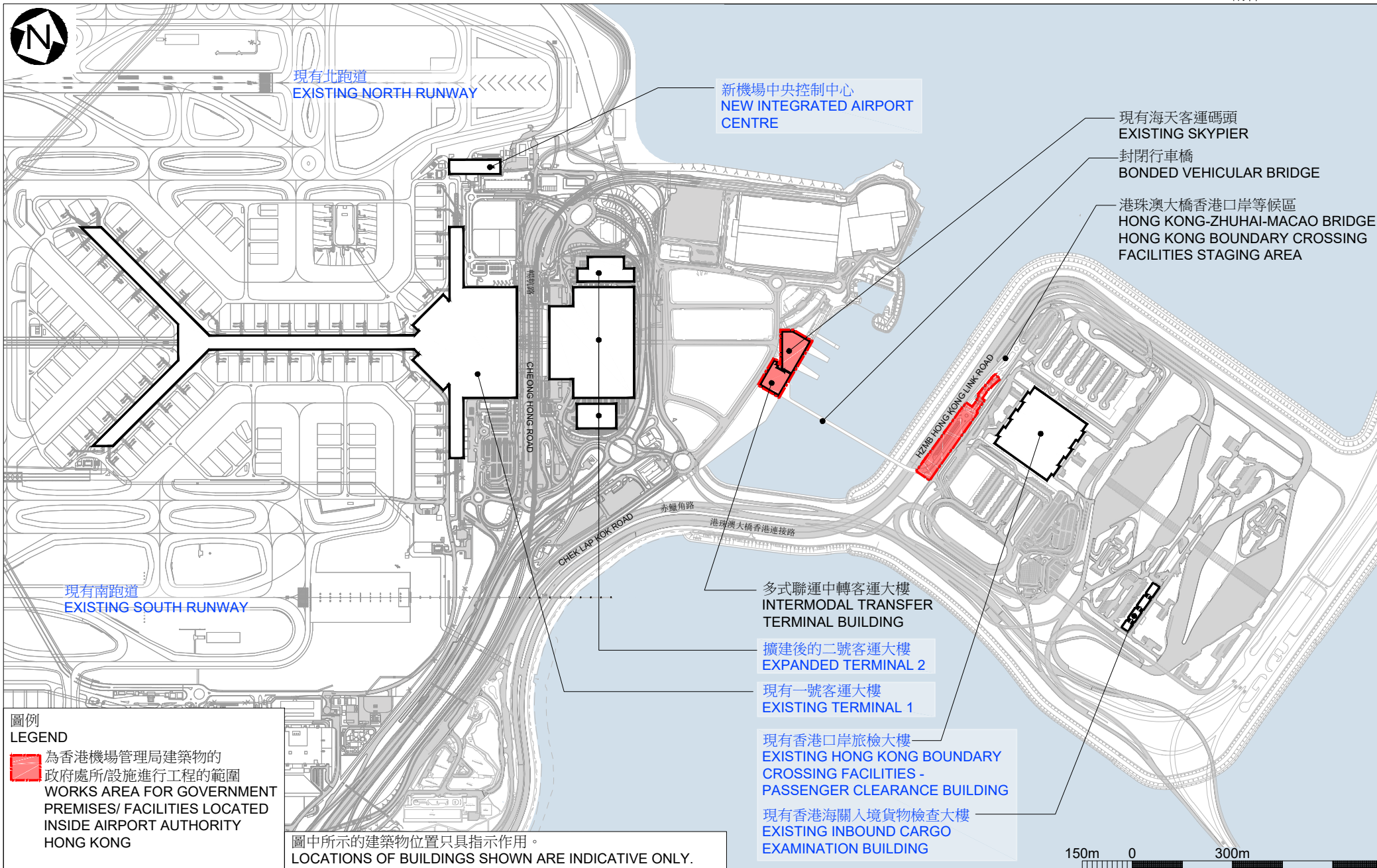
BACKGROUND INFORMATION

28. We upgraded **403IO** to Category B in March 2020. The planning and preliminary design of the project have been completed.

29. The proposed fitting-out works will not involve any tree removal or planting proposal.

30. The project estimate was \$380.9 million when we briefed the Legislative Council Panel of Economic Development for the ITT project and the associated fitting-out works for government facilities in November 2020. The reduction in cost estimate is due to design development and refinement of the user requirements of the proposed project. We consider that the latest estimate, which is 10% lower than our earlier estimate as stated in the Panel Paper (LC Paper No. CB(4)131/20-21(03)) reflects the prevailing market situation and is sufficient for delivery of the proposed project.

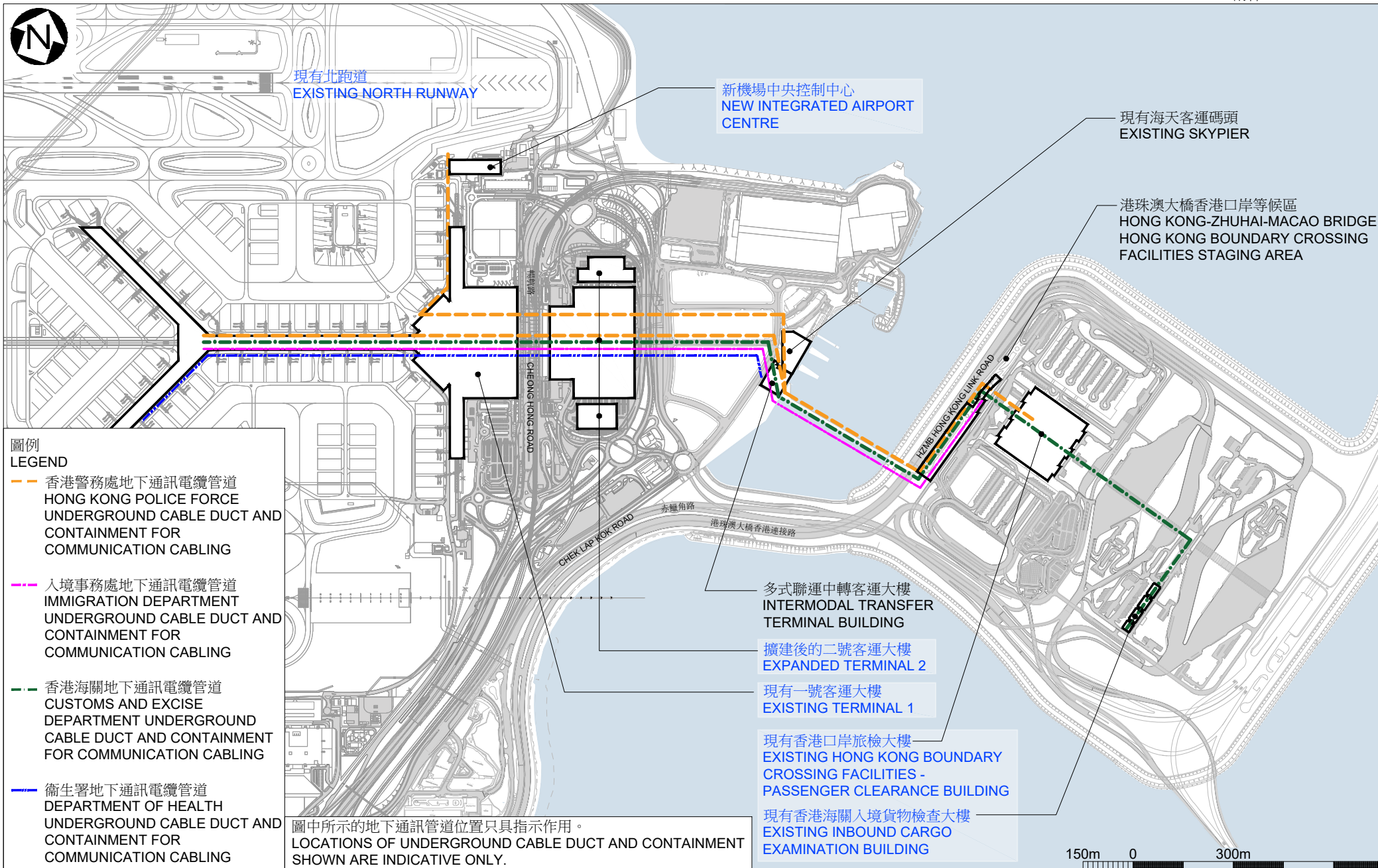
31. We estimate that the project will create about 90 jobs (80 for labourers and 10 for professional/technical staff), providing a total employment of 1 500 man-months.



位置圖
LOCATION PLAN

40310

香港國際機場多式聯運中轉客運大樓發展計劃相關的政府設施裝置工程
FITTING-OUT WORKS FOR GOVERNMENT FACILITIES ASSOCIATED WITH INTERMODAL TRANSFER
TERMINAL PROJECT AT HONG KONG INTERNATIONAL AIRPORT



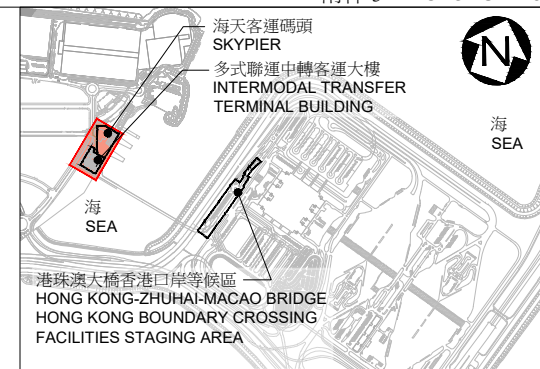
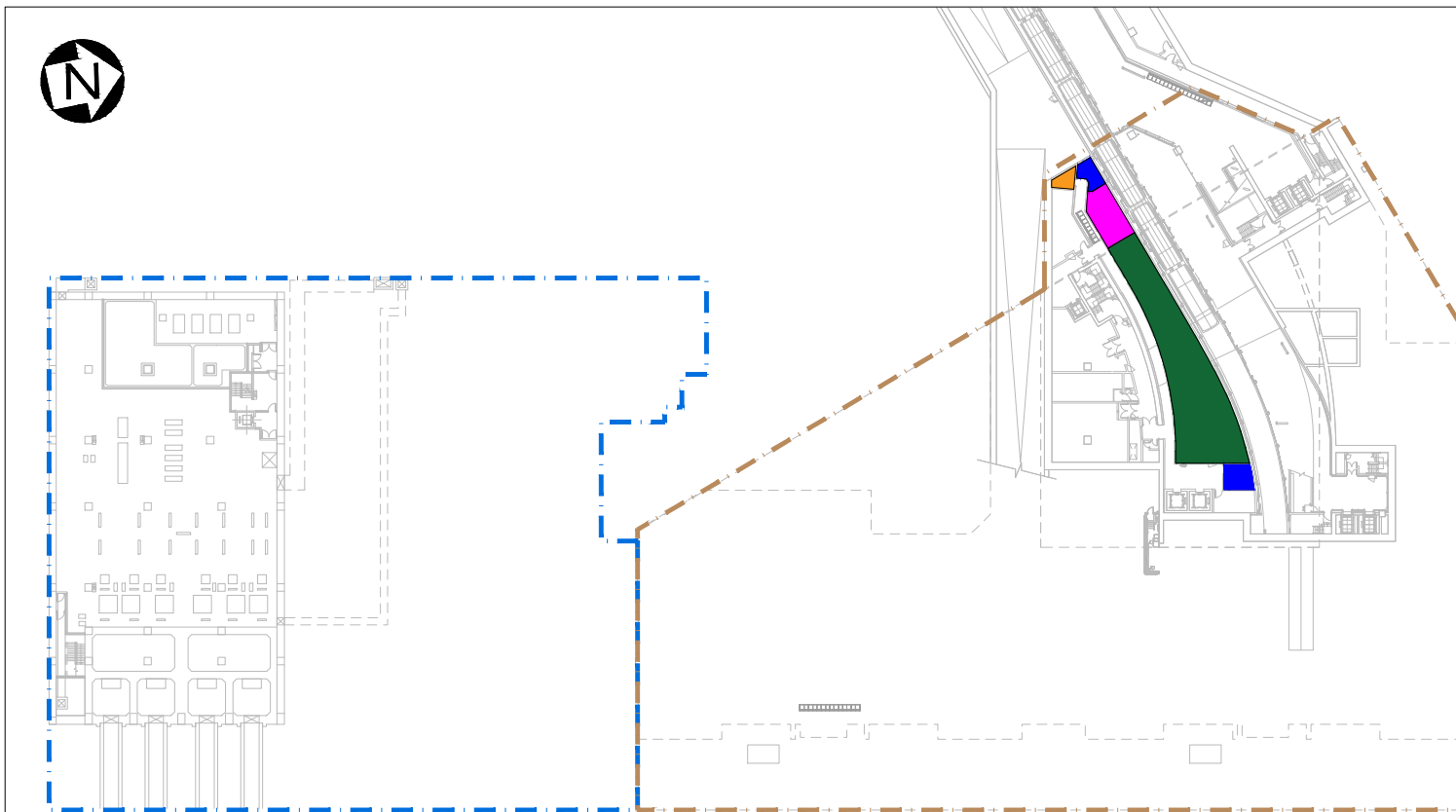
地下通訊電纜管道平面圖
UNDERGROUND CABLE DUCT AND CONTAINMENT LAYOUT PLAN FOR COMMUNICATION CABLING

40310

香港國際機場多式聯運中轉客運大樓發展計劃相關的政府設施裝置工程
FITTING-OUT WORKS FOR GOVERNMENT FACILITIES ASSOCIATED WITH INTERMODAL TRANSFER TERMINAL PROJECT AT HONG KONG INTERNATIONAL AIRPORT



ARCHITECTURAL SERVICES DEPARTMENT 建築署



KEY PLAN 索引圖

第一層主要用途：旅客捷運系統
 MAIN USE OF LEVEL 1: AUTOMATED PEOPLE MOVER



施工範圍圖例
 LEGEND OF WORKS AREA

- | | |
|---|---|
|  香港警務處的設施、辦公和運作地方
HONG KONG POLICE FORCE'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA |  香港海關的設施、辦公和運作地方
CUSTOMS AND EXCISE DEPARTMENT'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA |
|  入境事務處的設施、辦公和運作地方
IMMIGRATION DEPARTMENT'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA |  衛生署的設施、辦公和運作地方
DEPARTMENT OF HEALTH'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA |

建築物圖例
 LEGEND OF BUILDINGS

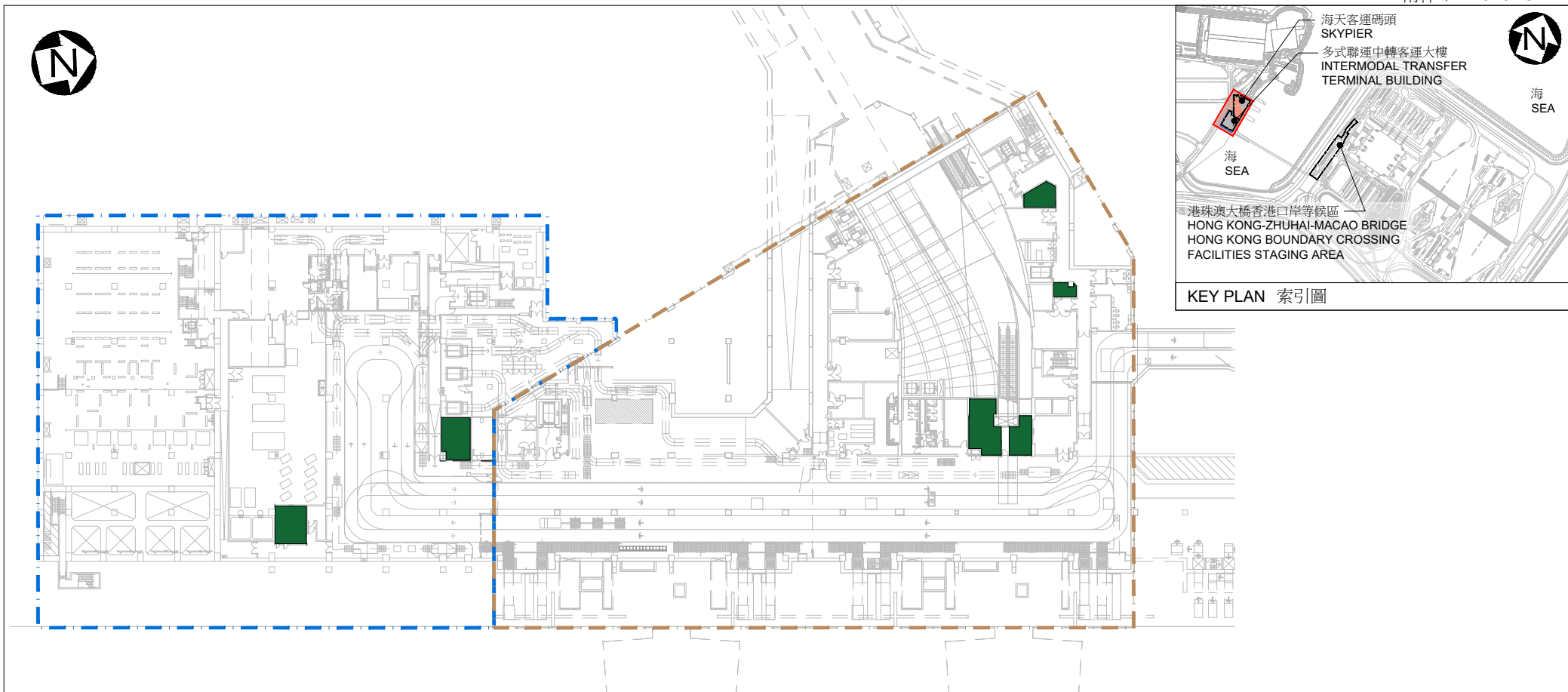
-  海天客運碼頭 SKYPIER
-  多式聯運中轉客運大樓 INTERMODAL TRANSFER TERMINAL BUILDING

圖中所示的相關政府部門設施、辦公和運作地方之位置只具指示作用，其他地方供非政府部門使用。
 LOCATIONS OF FACILITIES, OFFICE AND OPERATIONAL AREAS FOR VARIOUS GOVERNMENT DEPARTMENTS SHOWN ARE INDICATIVE ONLY. REMAINING AREAS ARE NON-GOVERNMENT USE.

多式聯運中轉大樓
 第一層樓面平面圖
 INTERMODAL TRANSFER TERMINAL BUILDING LEVEL 1 FLOOR PLAN

40310
 香港國際機場多式聯運中轉客運大樓發展計劃相關的政府設施裝置工程
 FITTING-OUT WORKS FOR GOVERNMENT FACILITIES ASSOCIATED WITH INTERMODAL TRANSFER TERMINAL PROJECT AT HONG KONG INTERNATIONAL AIRPORT





第二層主要用途：行李處理
MAIN USE OF LEVEL 2: BAGGAGE HANDLING

施工範圍圖例
LEGEND OF WORKS AREA

- 香港海關的設施、辦公和運作地方
CUSTOMS AND EXCISE DEPARTMENT'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA

建築物圖例
LEGEND OF BUILDINGS

- 海天客運碼頭
SKYPIER
- 多式聯運中轉客運大樓
INTERMODAL TRANSFER TERMINAL BUILDING

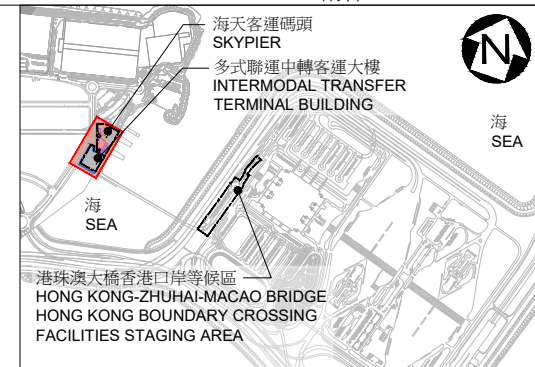
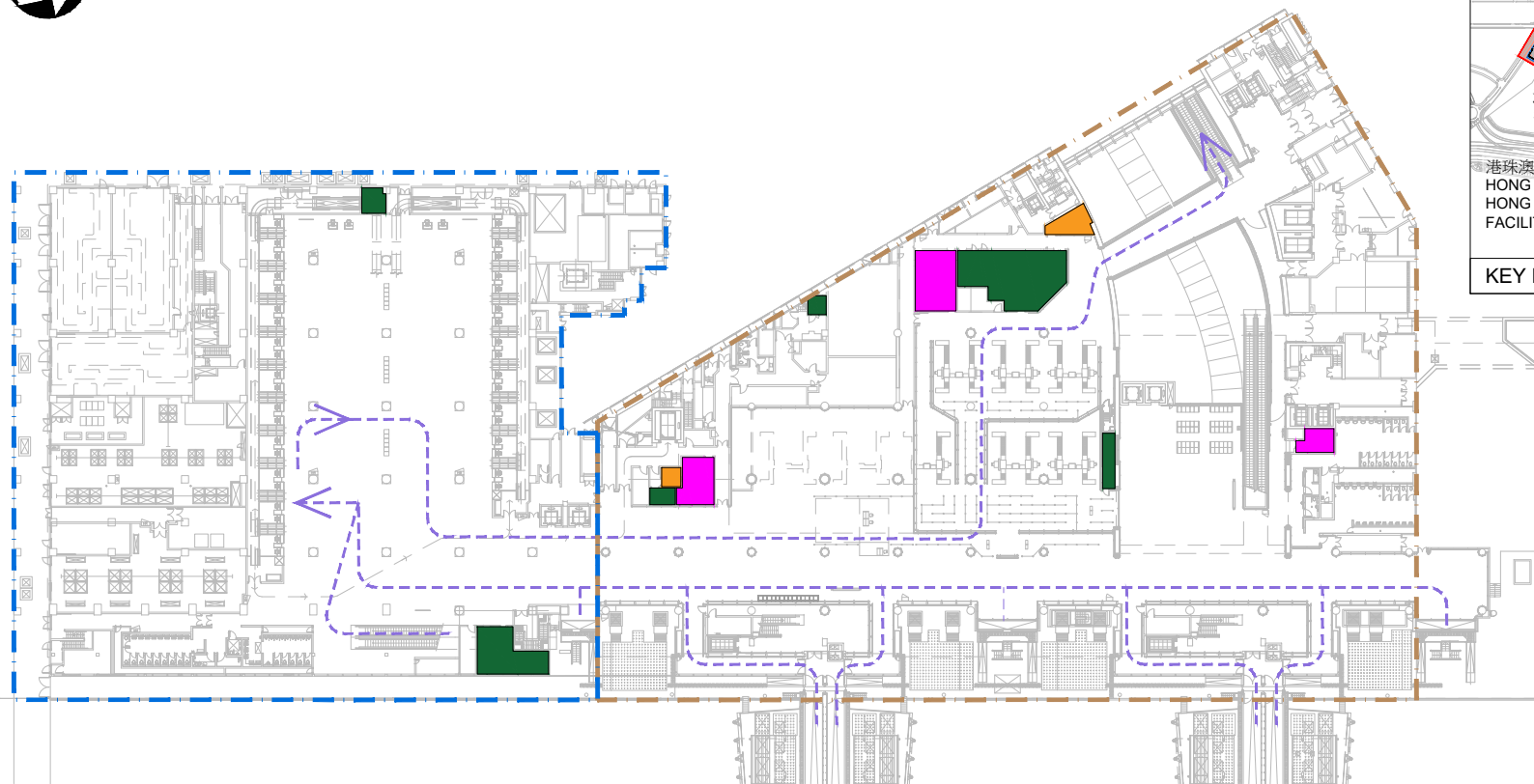


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LOCATIONS OF FACILITIES, OFFICE AND OPERATIONAL AREAS FOR VARIOUS GOVERNMENT DEPARTMENTS SHOWN ARE INDICATIVE ONLY. REMAINING AREAS ARE NON-GOVERNMENT USE.

多式聯運中轉大樓
第二層樓面平面圖
INTERMODAL TRANSFER
TERMINAL BUILDING
LEVEL 2 FLOOR PLAN

40310
香港國際機場多式聯運中轉客運大樓發展計劃相關的政府設施裝置工程
FITTING-OUT WORKS FOR GOVERNMENT FACILITIES ASSOCIATED WITH INTERMODAL TRANSFER
TERMINAL PROJECT AT HONG KONG INTERNATIONAL AIRPORT





KEY PLAN 索引圖

第三層主要用途：登記大堂及保安檢查

MAIN USE OF LEVEL 3: CHECK-IN HALL AND SECURITY SCREENING



施工範圍圖例

LEGEND OF WORKS AREA

- 香港警務處的設施、辦公和運作地方
HONG KONG POLICE FORCE'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA
- 香港海關的設施、辦公和運作地方
CUSTOMS AND EXCISE DEPARTMENT'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA
- 入境事務處的設施、辦公和運作地方
IMMIGRATION DEPARTMENT'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA

建築物圖例

LEGEND OF BUILDINGS

- 海天客運碼頭
SKYPIER
- 多式聯運中轉客運大樓
INTERMODAL TRANSFER TERMINAL BUILDING
- ➔ 由港珠澳大橋／碼頭往機場
FROM HZMB/FERRY TO AIR

圖中所示的相關政府部門設施、辦公和運作地方之位置只具指示作用，其他地方供非政府部門使用。
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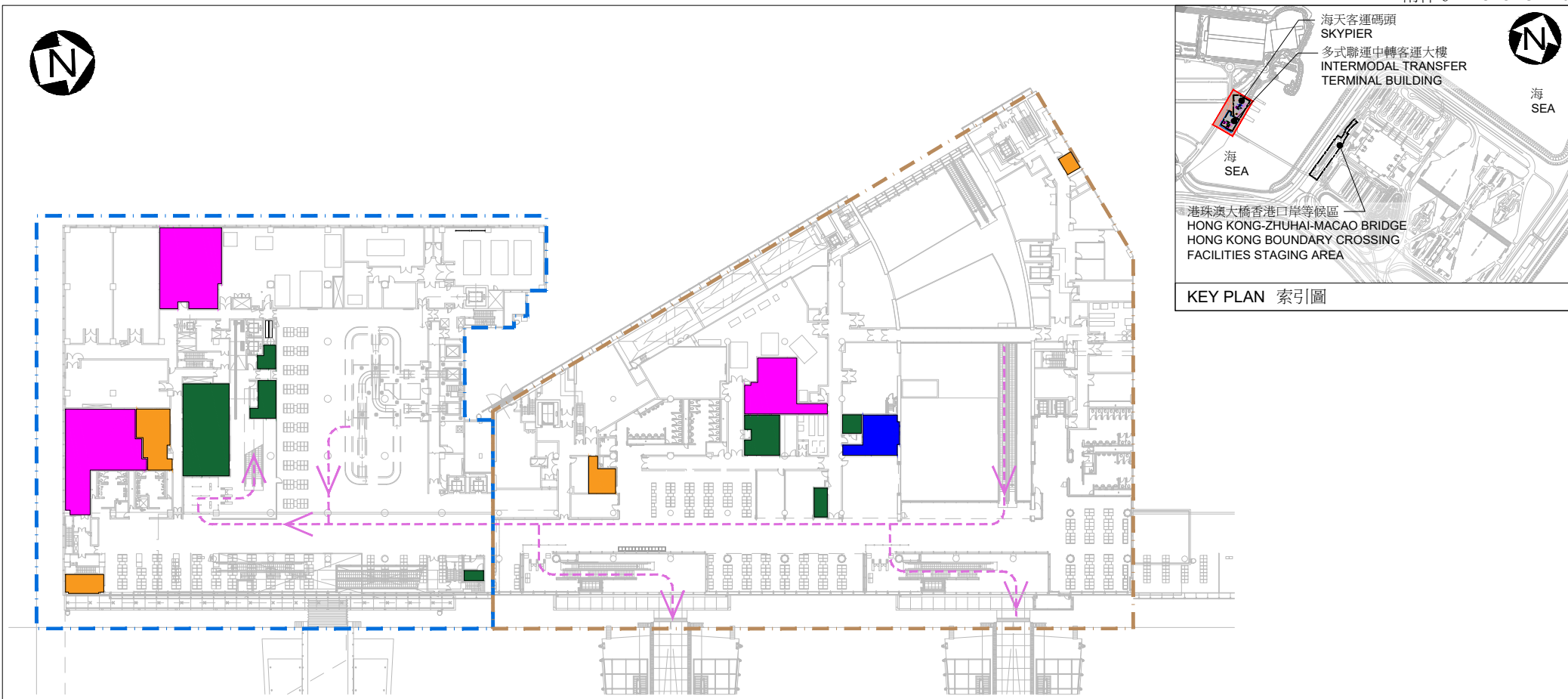
多式聯運中轉大樓
第三層樓面平面圖
INTERMODAL TRANSFER
TERMINAL BUILDING
LEVEL 3 FLOOR PLAN

40310

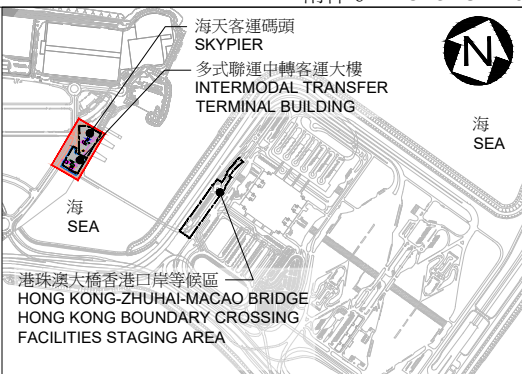
香港國際機場多式聯運中轉客運大樓發展計劃相關的政府設施裝置工程
FITTING-OUT WORKS FOR GOVERNMENT FACILITIES ASSOCIATED WITH INTERMODAL TRANSFER
TERMINAL PROJECT AT HONG KONG INTERNATIONAL AIRPORT



ARCHITECTURAL
SERVICES
DEPARTMENT 建築署





第四層主要用途：空陸轉乘/空海轉乘等候室
 MAIN USE OF LEVEL 4: AIR-TO-BRIDGE/AIR TO SEA WAITING LOUNGE



KEY PLAN 索引圖



施工範圍圖例
 LEGEND OF WORKS AREA

- | | |
|---|---|
|  香港警務處的設施、辦公和運作地方
HONG KONG POLICE FORCE'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA |  香港海關的設施、辦公和運作地方
CUSTOMS AND EXCISE DEPARTMENT'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA |
|  入境事務處的設施、辦公和運作地方
IMMIGRATION DEPARTMENT'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA |  衛生署的設施、辦公和運作地方
DEPARTMENT OF HEALTH'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA |

建築物圖例
 LEGEND OF BUILDINGS

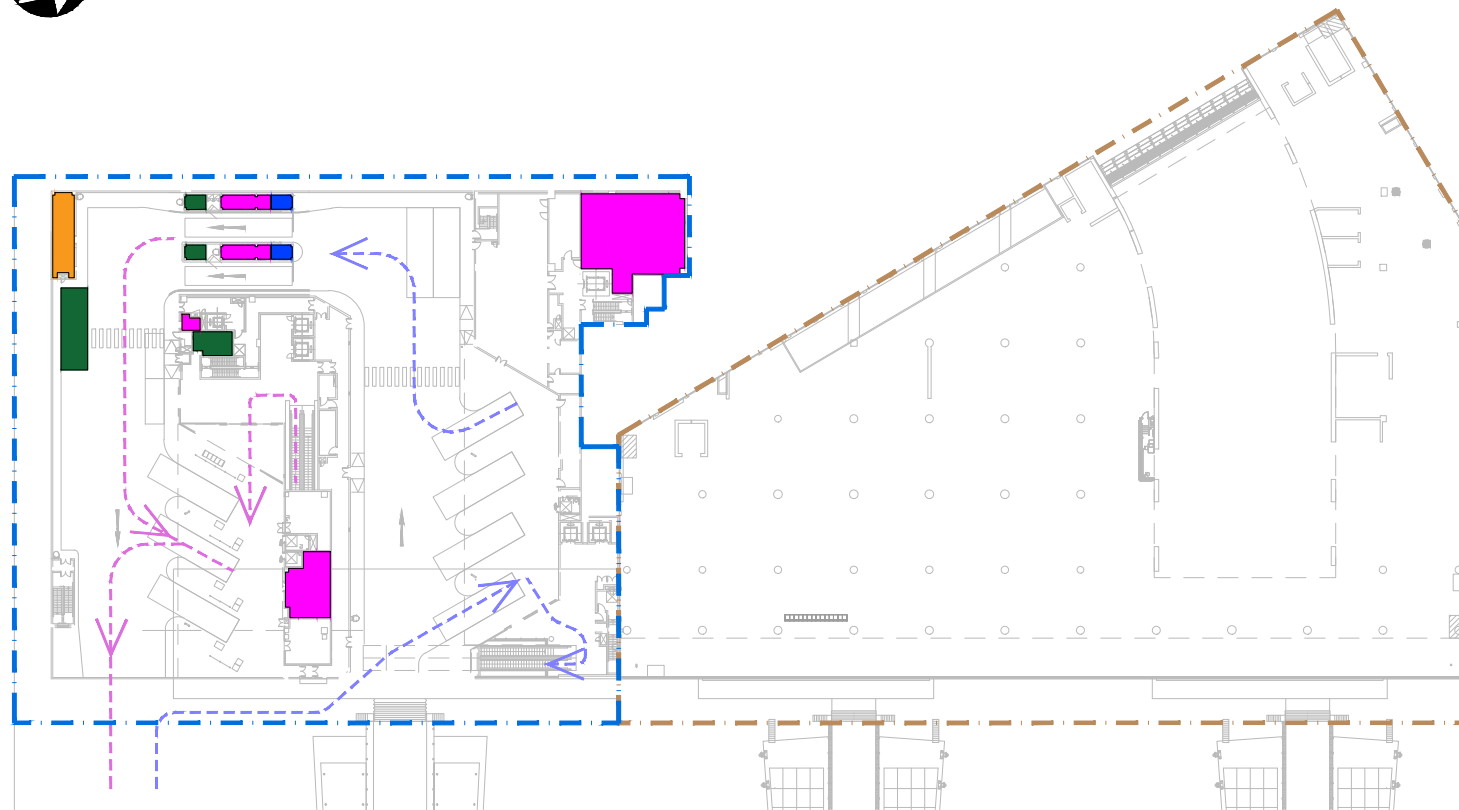
-  海天客運碼頭
SKYPIER
-  多式聯運中轉客運大樓
INTERMODAL TRANSFER TERMINAL BUILDING
-  由機場往碼頭/港珠澳大橋
FROM AIR TO FERRY/HZMB

圖中所示的相關政府部門設施、辦公和運作地方之位置只具指示作用，其他地方供非政府部門使用。
 LOCATIONS OF FACILITIES, OFFICE AND OPERATIONAL AREAS FOR VARIOUS GOVERNMENT DEPARTMENTS SHOWN ARE INDICATIVE ONLY. REMAINING AREAS ARE NON-GOVERNMENT USE.

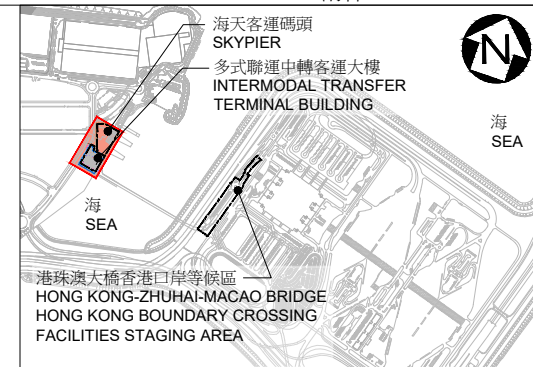
多式聯運中轉大樓
 第四層樓面平面圖
 INTERMODAL TRANSFER
 TERMINAL BUILDING
 LEVEL 4 FLOOR PLAN

40310
 香港國際機場多式聯運中轉客運大樓發展計劃相關的政府設施裝置工程
 FITTING-OUT WORKS FOR GOVERNMENT FACILITIES ASSOCIATED WITH INTERMODAL TRANSFER
 TERMINAL PROJECT AT HONG KONG INTERNATIONAL AIRPORT









第五層主要用途：接駁巴士上落客
MAIN USE OF LEVEL 5: BONDED BUS PICK-UP & DROP-OFF



KEY PLAN 索引圖



施工範圍圖例
LEGEND OF WORKS AREA

- | | |
|---|---|
|  香港警務處的設施、辦公和運作地方
HONG KONG POLICE FORCE'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA |  香港海關的設施、辦公和運作地方
CUSTOMS AND EXCISE DEPARTMENT'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA |
|  入境事務處的設施、辦公和運作地方
IMMIGRATION DEPARTMENT'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA |  衛生署的設施、辦公和運作地方
DEPARTMENT OF HEALTH'S PREMISES FACILITIES, OFFICE AND OPERATIONAL AREA |

建築物圖例
LEGEND OF BUILDINGS

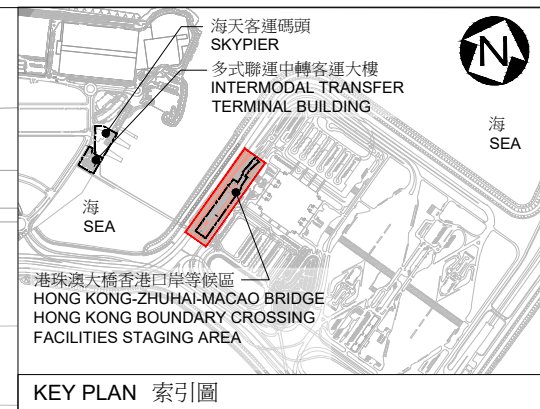
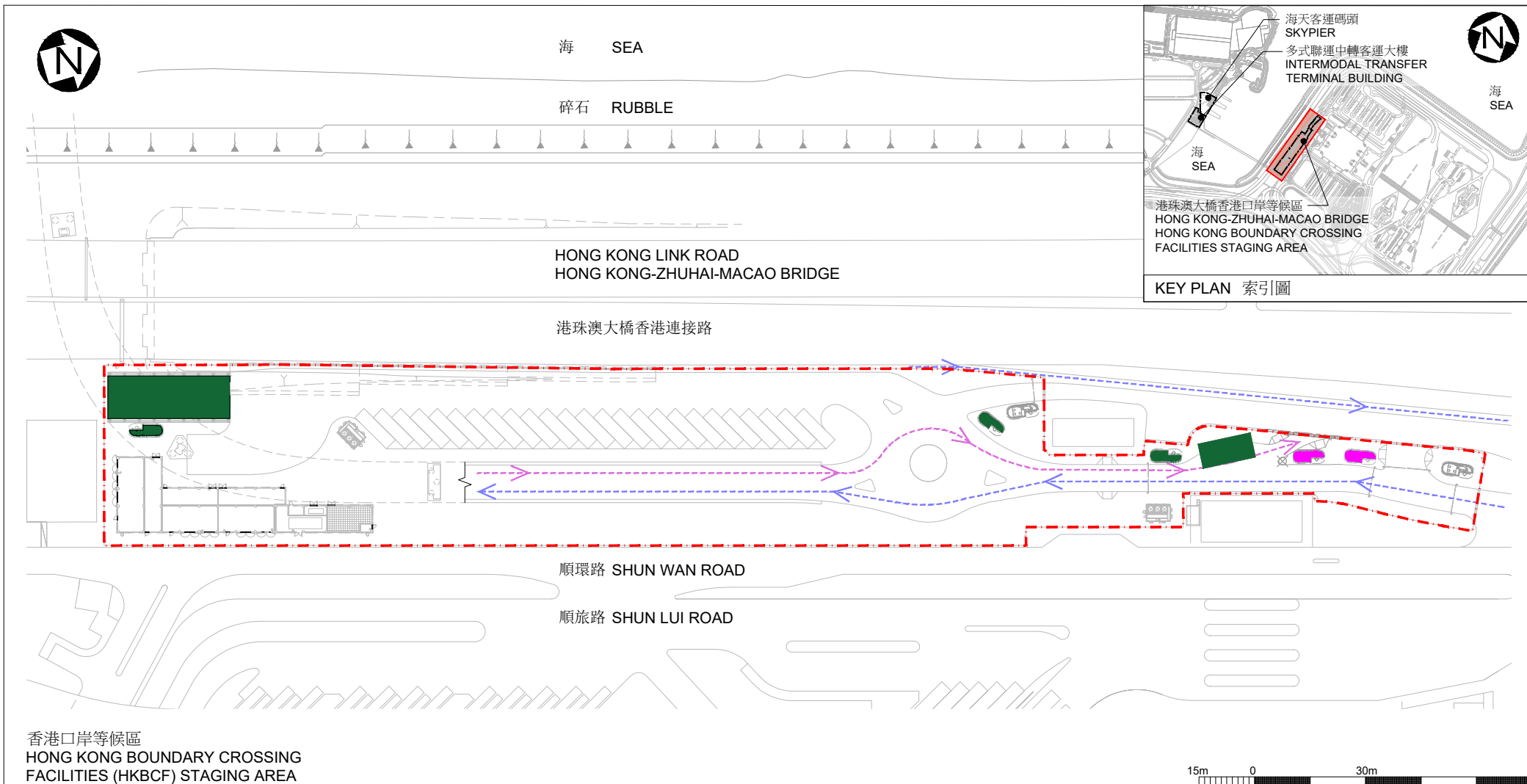
- | | |
|---|---|
|  海天客運碼頭
SKYPIER |  多式聯運中轉客運大樓
INTERMODAL TRANSFER TERMINAL BUILDING |
|  由港珠澳大橋抵港
ARRIVAL FROM HZMB |  經港珠澳大橋離港
DEPARTURE TO HZMB |

圖中所示的相關政府部門設施、辦公和運作地方之位置只具指示作用，其他地方供非政府部門使用。
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多式聯運中轉大樓
第五層樓面平面圖
INTERMODAL TRANSFER
TERMINAL BUILDING
LEVEL 5 FLOOR PLAN

40310
香港國際機場多式聯運中轉客運大樓發展計劃相關的政府設施裝置工程
FITTING-OUT WORKS FOR GOVERNMENT FACILITIES ASSOCIATED WITH INTERMODAL TRANSFER
TERMINAL PROJECT AT HONG KONG INTERNATIONAL AIRPORT





施工範圍圖例
LEGEND OF WORKS AREA

- 香港海關的設施、辦公和運作地方
CUSTOMS AND EXCISE DEPARTMENT'S
PREMISES FACILITIES, OFFICE AND
OPERATIONAL AREA
- 入境事務處的設施、辦公和運作地方
IMMIGRATION DEPARTMENT'S
PREMISES FACILITIES, OFFICE AND
OPERATIONAL AREA

建築物圖例
LEGEND OF BUILDINGS

- 香港口岸等候區
HKBCF STAGING AREA
- 由港珠澳大橋抵港
ARRIVAL FROM HZMB
- 經港珠澳大橋離港
DEPARTURE TO HZMB

圖中所示的相關政府部門設施、辦公和運作地方之位置只具指示作用，其他地方供非政府部門使用。
LOCATIONS OF FACILITIES, OFFICE AND OPERATIONAL AREAS FOR VARIOUS GOVERNMENT DEPARTMENTS SHOWN ARE INDICATIVE ONLY. REMAINING AREAS ARE NON-GOVERNMENT USE.



港珠澳大橋香港口岸等候區
地面平面圖
HKBCF STAGING AREA
GROUND FLOOR PLAN

40310
香港國際機場多式聯運中轉客運大樓發展計劃相關的政府設施裝置工程
FITTING-OUT WORKS FOR GOVERNMENT FACILITIES ASSOCIATED WITH INTERMODAL TRANSFER
TERMINAL PROJECT AT HONG KONG INTERNATIONAL AIRPORT

