

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Quarters – Internal security

65JA – Construction of rank and file quarters for Customs and Excise Department at Yau Yue Wan Village Road, Tseung Kwan O

Members are invited to recommend to the Finance Committee the upgrading of **65JA** to Category A at an estimated cost of \$604.8 million in money-of-the-day prices for the construction of rank and file quarters for Customs and Excise Department at Yau Yue Wan Village Road, Tseung Kwan O.

PROBLEM

There is a substantial shortfall of departmental quarters (DQ) for married rank and file (R&F) officers of the Customs and Excise Department (C&ED).

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Security, proposes to upgrade **65JA** to Category A at an estimated cost of \$604.8 million in money-of-the-day (MOD) prices for the construction of R&F quarters for C&ED at Yau Yue Wan Village Road, Tseung Kwan O.

/PROJECT

PROJECT SCOPE AND NATURE

3. The project site occupies an area of around 4 200 square meters (m²) at Yau Yue Wan Village Road, Tseung Kwan O. The scope of the project comprises –

- (a) construction of a 19-storey quarters block with a total construction floor area (CFA) of 12 960 m² for provision of a total of 136 DQ units (28 F-grade and 108 G-grade DQ units¹); and
- (b) the following ancillary facilities –
 - (i) a management office;
 - (ii) amenity/communal areas including a multi-function room² and small-scale outdoor children playing fixtures/facilities; and
 - (iii) 26 car parking spaces and 3 motorcycle parking spaces on ground floor.

_____ A site plan, layout plans, a sectional plan and an artist's impression drawing for the project are at Enclosures 1 to 6. Subject to the funding approval of the Finance Committee, we plan to commence construction in June 2015 for completion in January 2018.

JUSTIFICATION

4. It is an established government policy to provide DQ for married disciplined services staff subject to the availability of resources.

5. Currently, there is a substantial shortfall in DQ for married R&F officers of C&ED. As at 1 March 2014, there were 2 247 R&F officers eligible for DQ, but only 1 359 DQ units were available, representing a shortfall of 39.5%. Eligible R&F staff have to wait for about five years on average to be allocated a DQ unit.

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¹ F-grade and G-grade units are DQ units of 70 m² and 55 m² respectively.

² Covering an area of approximately 18 m², the multi-function room primarily serves as a meeting room for the residents' associations or the Mutual Aid Committee.

6. In the coming years, C&ED will continue to recruit R&F staff to meet the manpower requirement of various new control points. We therefore anticipate that the demand for DQ will continue to rise.

FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the project to be \$604.8 million in MOD prices (please see paragraph 8 below), broken down as follows –

	\$ million
(a) Site works	6.0
(b) Geotechnical works	50.0
(c) Piling	58.3
(d) Building	214.6
(e) Building services	45.6
(f) Drainage	8.0
(g) External works	26.7
(h) Additional energy conservation, green and recycled features	7.7
(i) Furniture and equipment ³	18.9
(j) Consultants' fees for	10.7
(i) contract administration	9.3
(ii) management of resident site staff (RSS)	1.4
(k) Remuneration of RSS	14.5

/(1)

³ The estimated cost is based on an indicative list of furniture and equipment required.

		\$ million	
(l)	Contingencies	46.1	
	Sub-total	507.1	(in September 2014 prices)
(m)	Provision for price adjustment	97.7	
	Total	604.8	(in MOD prices)

We propose to engage consultants to undertake contract administration and site supervision for the project. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at Enclosure 7. As the building to be constructed is close to slopes, we have allowed \$50 million in the cost estimate for the necessary geotechnical works. A higher piling cost has also been allowed to cope with the geotechnical constraint. The estimated construction unit cost, represented by the building and building services costs, is \$20,077 per m² of CFA in September 2014 prices. We consider this unit cost comparable to that of similar projects built by the Government.

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

Year	\$ million (Sept 2014)	Price adjustment factor	\$ million (MOD)
2015 – 2016	50.0	1.06000	53.0
2016 – 2017	130.0	1.12360	146.1
2017 – 2018	190.0	1.19102	226.3
2018 – 2019	70.0	1.26248	88.4
2019 – 2020	40.0	1.32876	53.2
2020 – 2021	27.1	1.39519	37.8
	507.1		604.8

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9. 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 2015 to 2021. We will deliver the construction works through a lump-sum contract because we can clearly define the scope of the works in advance. The contract will provide for price adjustment.

10. We estimate the annual recurrent expenditure arising from this project to be \$4.8 million.

PUBLIC CONSULTATION

11. We consulted the Housing and Environmental Hygiene Committee of the Sai Kung District Council on 16 January 2014. Members of the Committee were generally supportive.

12. We consulted the Legislative Council Panel on Security (the Panel) on 18 March 2014. Members of the Panel supported the project.

ENVIRONMENTAL IMPLICATIONS

13. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We carried out a preliminary environmental review for the project in February 2013 which concluded that the project would not cause long-term environmental impacts. We have included in the project estimates the cost to implement suitable mitigation measures to control short-term environmental impacts.

14. During construction, we will control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the relevant contract. These include the use of silencers, mufflers, acoustic linings or shields and the building of barrier walls for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel washing facilities.

15. At the planning and design stages, we have considered measures to reduce the generation of construction waste where possible (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste (e.g. use of excavated materials for filling within the site) 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 facilities⁴. 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 the generation of construction waste.

16. 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 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.

17. We estimate that the project will generate in total about 13 140 tonnes of construction waste. Of these, we will reuse about 1 570 tonnes (12%) of inert construction waste on site and deliver 9 660 tonnes (73.5%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 1 910 tonnes (14.5%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$0.5 million for this project (based on a unit charge rate of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation).

HERITAGE IMPLICATIONS

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

/LAND

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

LAND ACQUISITION

19. The project does not require any land acquisition.

ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

20. This project will adopt various forms of energy efficient features and renewable energy technologies, including lift power regeneration; and photovoltaic system.

21. For greening features, we will provide roof and podium planters. For recycled features, we will adopt rainwater recycling system for irrigation.

22. The total estimated additional cost for adoption of the above features is around \$7.7 million (including \$50,000 for energy efficient features), which has been included in the cost estimate of this project. The energy efficient features will achieve 1.5% energy savings in the annual energy consumption with a payback period of about 6 years.

BACKGROUND INFORMATION

23. We upgraded **65JA** to Category B in October 2010. We engaged consultants to undertake various services, including natural terrain hazard study, layout design and other environmental investigations in February 2012, topographical survey in May 2012, ground investigation in August 2012, Section 16 planning application under Town Planning Ordinance (Cap. 131) in February 2012, detailed design in December 2013 and preparation of tender documents. The total estimated cost is about \$11.4 million. We charged this amount to block allocation **Subhead 3100GX** "Project feasibility studies, minor investigations and consultants' fees for items in Category D of the Public Works Programme".

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24. Of the 187 trees within the project boundary, 124 trees will be preserved. The proposed works will involve the felling of 63 trees. All trees to be removed are not important trees⁵. We will incorporate planting proposals as part of the project, including the planting of about 27 trees, 5 500 shrubs and 15 m² groundcovers.

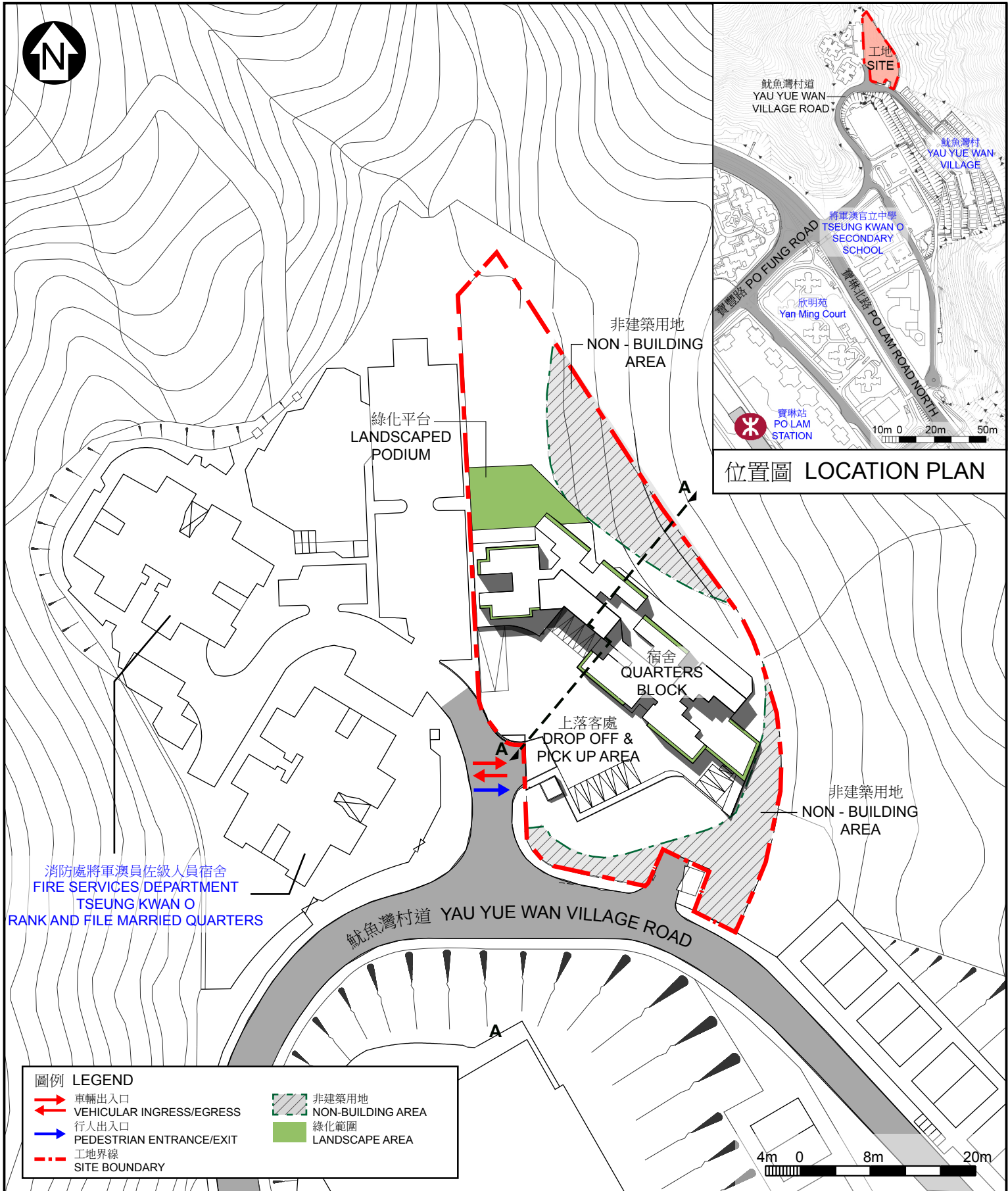
25. We estimate that the proposed works will create about 251 jobs (215 for labourers and another 36 for professional/technical staff) providing a total employment of 4 810 man-months.

26. This paper supersedes PWSC(2014-15)15 which was not discussed by the Public Works Subcommittee during the 2013-14 legislative session. The programme, phasing of expenditure and estimated cost of the project have been updated due to the lapse of time.

Security Bureau
October 2014

⁵ “Important trees” refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

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

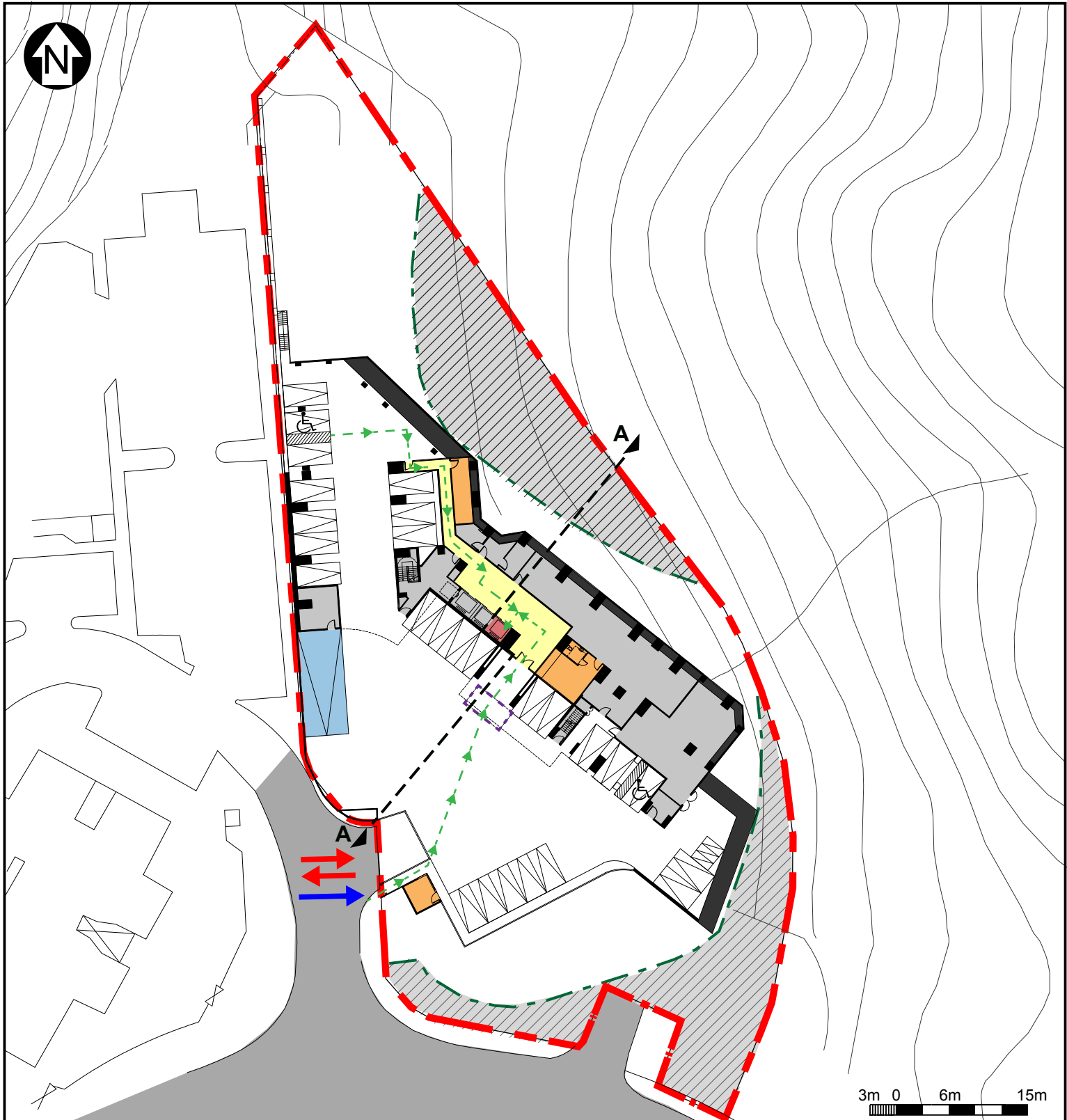


工地平面圖
SITE LAYOUT
PLAN

65JA
將軍澳鯉魚灣村道香港海關員佐級職員宿舍建造工程
Construction of rank and file quarters for Customs and
Excise Department at Yau Yue Wan Village Road,
Tseung Kwan O



ARCHITECTURAL
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DEPARTMENT 建築署



圖例 LEGEND

- | | | | | |
|-----------------------------------|---|---------------------------------|------------------------------|---|
| 車輛出入口
VEHICULAR INGRESS/EGRESS | 非建築用地
NON-BUILDING AREA | 圍牆
BARRIER WALL | 暢通易達升降機
ACCESSIBLE LIFT | 落客處
DROP-OFF |
| 行人出入口
PEDESTRIAN ENTRANCE/EXIT | 公用地方
COMMON AREA | 附屬設備
ANCILLARY FACILITIES | 無障礙通道
BARRIER-FREE ACCESS | 暢通易達停車位
ACCESSIBLE CAR PARKING SPACE |
| 工地界線
SITE BOUNDARY | 機房/樓梯/升降機
PLANT ROOMS/STAIRCASES/LIFTS | 裝卸貨區
LOADING & UNLOADING BAY | | |

地下平面圖
GROUND
FLOOR PLAN

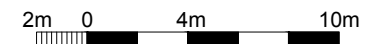
65JA
將軍澳鮑魚灣村道香港海關員佐級職員宿舍建造工程
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圖例 LEGEND					
	公用地方 COMMON AREA		G級單位 G-GRADE UNITS		平台 FLAT ROOF
	機房/樓梯/升降機 PLANT ROOMS/STAIRCASES/LIFTS		綠化範圍 LANDSCAPE AREA		暢通易達升降機 ACCESSIBLE LIFT



二至四樓平面圖
2ND TO 4TH FLOOR PLAN

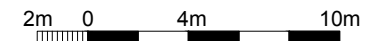
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圖例 LEGEND			
	公用地方 COMMON AREA		暢通易達升降機 ACCESSIBLE LIFT
	機房/樓梯/升降機 PLANT ROOMS/STAIRCASES/LIFTS		G級單位 G-GRADE UNITS
	F級單位 F-GRADE UNITS		



五至十八樓平面圖
5TH TO 18TH FLOOR PLAN

65JA
將軍澳鯪魚灣村道香港海關員佐級職員宿舍建造工程
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工地界線
SITE BOUNDARY

工地界線
SITE BOUNDARY

機電房
PLANT ROOM

綠化天台
LANDSCAPED
ROOF

最高建築物高度：
主水平基準以上86米
MAXIMUM BUILDING
HEIGHT: 86mPD

十八樓
18/F

單位 七及八
FLATS 7&8

單位 三至六
FLATS 3 TO 6

五樓
5/F

二樓
2/F

公用地方
AMENITY / COMMUNAL AREA

地面層
G/F

更亭
GUARD
HOUSE

車輛出入口
VEHICULAR
INGRESS/EGRESS
行人出入口
PEDESTRIAN
ENTRANCE/EXIT

26mPD

LIFT SHAFT 升降機槽

大堂
LOBBY

非建築用地
NON
BUILDING
AREA

入口
ENTRANCE

戶外停車場
OUTDOOR CARPARK

圖例 LEGEND

- | | |
|--|---|
|  公用地方
COMMON AREA |  G級單位
G-GRADE UNITS |
|  機房/樓梯/升降機
PLANT ROOMS/STAIRCASES/LIFTS |  F級單位
F-GRADE UNITS |

2m 0 4m 10m

剖面圖 A-A
SECTION A-A

65JA
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PERSPECTIVE VIEW FROM SOUTHWEST DIRECTION (ARTIST'S IMPRESSION)

從西南面望向擬建宿舍的構思透視圖

構思圖
ARTIST'S
IMPRESSION

65JA
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**65JA – Construction of rank and file quarters for Customs and Excise
Department at Yau Yue Wan Village Road, Tseung Kwan O**

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

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Consultants' fees for contract administration (Note 2)	Professional	–	–	–	5.7
	Technical	–	–	–	<u>3.6</u>
				Sub-total	9.3
(b) Resident site staff (RSS) costs (Note 3)	Professional	53	38	1.6	6.1
	Technical	251	14	1.6	<u>9.8</u>
				Sub-total	15.9
Comprising -					
(i) Consultants' fees for management of RSS				1.4	
(ii) Remuneration of RSS				14.5	
				Total	<u>25.2</u>

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS supplied by the consultants. (Subject to approval of the Finance Committee, MPS salary point 38 = \$71,385 per month and MPS salary point 14 = \$24,380 per month.)
2. The consultants' fees for contract administration are calculated in accordance with the existing consultancy agreement for the design and construction of **65JA**. The assignment will only be executed subject to Finance Committee's funding approval to upgrade **65JA** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.