

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 - NEW TOWNS AND URBAN AREA DEVELOPMENT Civil Engineering – Land development 786CL – Tung Chung New Town Extension

Members are invited to recommend to the Finance Committee –

- (a) the upgrading of part of **786CL**, entitled “Tung Chung New Town Extension – detailed design and site investigation”, to Category A at an estimated cost of \$729.5 million in money-of-the-day prices; and
- (b) the retention of the remainder of **786CL** in Category B.

PROBLEM

We need to carry out detailed design and site investigation works for the implementation of Tung Chung New Town Extension (TCNTE) for the first population intake by 2023 at the earliest.

/PROPOSAL

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Development, proposes to upgrade part of **786CL** to Category (Cat) A at an estimated cost of \$729.5 million in money-of-the-day (MOD) prices for engaging consultants to undertake the detailed design and site investigation works for the implementation of TCNTE.

PROJECT SCOPE AND NATURE

3. The part of **786CL** proposed to be upgraded to Cat A comprises –

(a) detailed design of the following –

- (i) reclamation works for about 130 hectares (ha) of land including construction of associated seawall and eco-shoreline for the development of TCNTE at Tung Chung East and a primary distributor road (Road P1);
- (ii) site formation works for about 10 ha of land for the development of TCNTE at Tung Chung West;
- (iii) engineering infrastructure works including roads, footbridges, drainage, sewerage, waterworks, sewage and salt water pumping stations, fresh water and salt water service reservoirs, and flood protection measures;
- (iv) provision of new cycle tracks connecting to the existing cycle track network;
- (v) a river park adjacent to a portion of Tung Chung River and de-channelisation of a section of Tung Chung River;
- (vi) landscaping, reprovisioning and ancillary works; and
- (vii) environmental mitigation measures including noise barriers for the works mentioned in (i) to (vi) above;

(b) associated site investigation works and supervision; and

/(c)

- (c) preparation of tender documents and assessment of tenders for the works described in items (a) and (b) above.

Layout plans showing the proposed works are at **Enclosures 1 and 2**.

4. Subject to funding approval of the Finance Committee (FC), we will commence the detailed design and associated site investigation works in mid-2016 for completion in 2021. To meet the programme, the Civil Engineering and Development Department (CEDD) has invited Expression of Interest on 23 December 2015 but the tender will only be awarded upon obtaining FC's funding approval.

5. We would retain the remainder of **786CL** in Cat B and seek funding in phases for such to dovetail with the implementation programme of TCNTE. The scope of the remainder mainly covers the construction and supervision of the works set out in paragraph 3(a) above.

JUSTIFICATION

6. The existing engineering infrastructure at Tung Chung New Town (TCNT) was completed in April 2003. The population of TCNT is about 80 000 now albeit the existing infrastructure could support a population of about 124 000. The Government has been planning to further develop the TCNT into a comprehensively planned new town with a larger population capacity and adequate local and regional community facilities.

7. The Planning Department and CEDD jointly commissioned the "Planning and Engineering Study on the Remaining Development in Tung Chung - Feasibility Study" (the P&E Study) in January 2012 to review the remaining development potential of TCNT. Following a three-stage public engagement exercise completed in October 2014, we have formulated a development proposal of TCNTE as shown on the Recommended Outline Development Plan and the major development parameters and land uses at **Enclosures 3 and 4**.

8. The proposed TCNTE will cover areas on the eastern and western flanks of the existing TCNT. It will provide about 49 400 residential flats for a population of about 144 400 as proposed under the P&E Study. It will also provide about 500 000 square metres (m²) gross floor area (GFA) for office use, 327 000m² GFA for retail use, and 50 000m² GFA for hotel use.

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9. Further, land is reserved in the extension areas for recreational, educational and community uses such as sports ground, post-secondary institution and clinic. At Tung Chung West, a channelised section of Tung Chung River at the northeast of Shek Lau Po together with the immediate upstream section up to Shek Mun Kap Road will be revitalised into a river park for recreational use with a view to enhancing ecology and promoting water-friendly culture. Upon completion of the proposed TCNTE, the total population capacity of Tung Chung will increase to about 268 400.

10. The proposed TCNTE was included in both the 2014 and 2015 Policy Addresses as a key land supply measure. The first population intake is targeted for 2023 at the earliest.

11. To ensure the timely provision of infrastructure to achieve the first population intake by 2023, we need to start the detailed design and site investigation works for TCNTE in mid-2016. As with other works projects, the proposed detailed design and associated site investigation works would proceed in parallel with statutory town planning process, public consultation, statutory environmental impact assessment process, statutory process for the reclamation plan and land clearance preparation, etc.

FINANCIAL IMPLICATIONS

12. We estimate the cost of the proposed detailed design and associated site investigation works to be \$729.5 million in MOD prices, broken down as follows –

| | | \$ million |
|-----|---|--------------------------|
| (a) | Consultants' fees for | 384.2 |
| | (i) detailed design | 356.2 |
| | (ii) preparation of tender documents and assessment of tenders | 27.3 |
| | (iii) management of resident site staff (RSS) for supervision of site investigation works | 0.7 |
| | | /\$ million |

| | | \$ million | |
|-----|--|------------|----------------------------|
| (b) | Remuneration of RSS for site investigation works | 14.0 | |
| (c) | Site investigation works | 150.0 | |
| (d) | Contingencies | 54.8 | |
| | Sub-total | 603.0 | (in September 2015 prices) |
| (e) | Provision for price adjustment | 126.5 | |
| | Total | 729.5 | (in MOD prices) |

13. Due to insufficient in-house resources, we propose to engage consultants to undertake the detailed design and supervision of the associated site investigation works. A breakdown of the estimate for consultants' fees and RSS costs by man-months is at **Enclosure 5**.

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

| Year | \$ million (Sept 2015) | Price adjustment factor | \$ million (MOD) |
|-------------|---------------------------|-------------------------------|---------------------|
| 2016 – 2017 | 55.0 | 1.05875 | 58.2 |
| 2017 – 2018 | 162.0 | 1.12228 | 181.8 |
| 2018 – 2019 | 114.4 | 1.18961 | 136.1 |
| 2019 – 2020 | 116.4 | 1.26099 | 146.8 |
| 2020 – 2021 | 146.0 | 1.32719 | 193.8 |
| 2021 – 2022 | 9.2 | 1.39355 | 12.8 |
| | 603.0 | | 729.5 |

/15.

15. We have derived the MOD estimates on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period from 2016 to 2022. We will invite tender for the detailed design on a lump sum basis with provision for price adjustment. We will procure the site investigation works under standard re-measurement contracts because the quantity of works involved may vary depending on the actual ground conditions. The contracts for site investigation works will provide for price adjustment.

16. The proposed detailed design and associated site investigation works will not give rise to any recurrent consequences.

PUBLIC CONSULTATION

17. From 2012 to 2014, we conducted under the P&E Study a three-stage public engagement exercise on the development proposal of TCNTE. The Legislative Council Panel on Development (Panel) was consulted on 28 June 2012, 28 May 2013, 28 October 2014 and 3 December 2014 as part of the public engagement exercise. We last consulted the Panel on 22 December 2015 regarding the current funding application. While Members supported the funding application, they requested the Government to provide a breakdown of the expenditures under the cost items "consultants' fees for detailed design" and "consultants' fees for preparation of tender documents and assessment of tenders" to the Public Works Subcommittee. The breakdown is at **Enclosure 6**. The public also supported the early implementation of TCNTE to meet the housing, economic and social needs.

18. We briefed the Islands District Council (IsDC) on 7 September 2015 on the progress of the P&E Study, major public views collected through the Stage 3 public engagement, and the implementation plan and programme of TCNTE. The IsDC supported the implementation of TCNTE.

19. The draft Outline Zoning Plans (OZPs) for TCNTE were considered and agreed by the Town Planning Board on 11 December 2015 as suitable for exhibition for public inspection under the Town Planning Ordinance (TPO) (Cap. 131). We gazetted the draft OZPs under the TPO in tandem with the gazettal of the reclamation required under the Foreshore and Sea-bed (Reclamations) Ordinance (Cap. 127) on 8 January 2016 for the implementation of the TCNTE.

/ENVIRONMENTAL

ENVIRONMENTAL IMPLICATIONS

20. The proposed detailed design and associated site investigation works are not designated projects under the Environmental Impact Assessment (EIA) Ordinance (Cap. 499) and would not generate adverse environmental impacts. An EIA on TCNTE was completed under the P&E Study and the EIA report was submitted to the Director of Environmental Protection (DEP) under the EIA Ordinance on 8 October 2015. The EIA report was exhibited for public inspection on 4 December 2015 for a period of 30 days. DEP will take into account comments from the public and the Advisory Council on the Environment when considering the approval of the EIA report.

21. The proposed site investigation works will only generate minimal construction waste. We will consider measures to minimise generation of construction waste and to reuse or recycle construction waste during site investigation works.

HERITAGE IMPLICATIONS

22. The proposed detailed design and associated site investigation works will not affect any declared monuments, proposed monuments, graded historic sites or buildings, or government historic sites as identified by the Antiquities and Monuments Office. Appropriate measures to mitigate possible impacts on Ma Wan Chung Site of Archaeological Interest and Sha Tsui Tau Site of Archaeological Interest due to the proposed development will be implemented in accordance with the recommendations of the EIA report.

LAND ACQUISITION

23. The proposed detailed design and associated site investigation works do not require any land acquisition. The details and scope of the land acquisition required for the implementation of TCNTE will be ascertained in the detailed design stage.

BACKGROUND INFORMATION

24. On 8 July 2011, the FC approved the upgrading of **712CL** “Planning and Engineering Study on the Remaining Development in Tung Chung” to Cat A at an approved project estimate of \$44 million in MOD prices for engaging consultants to undertake the P&E Study. The P&E Study has been completed substantially in December 2015.

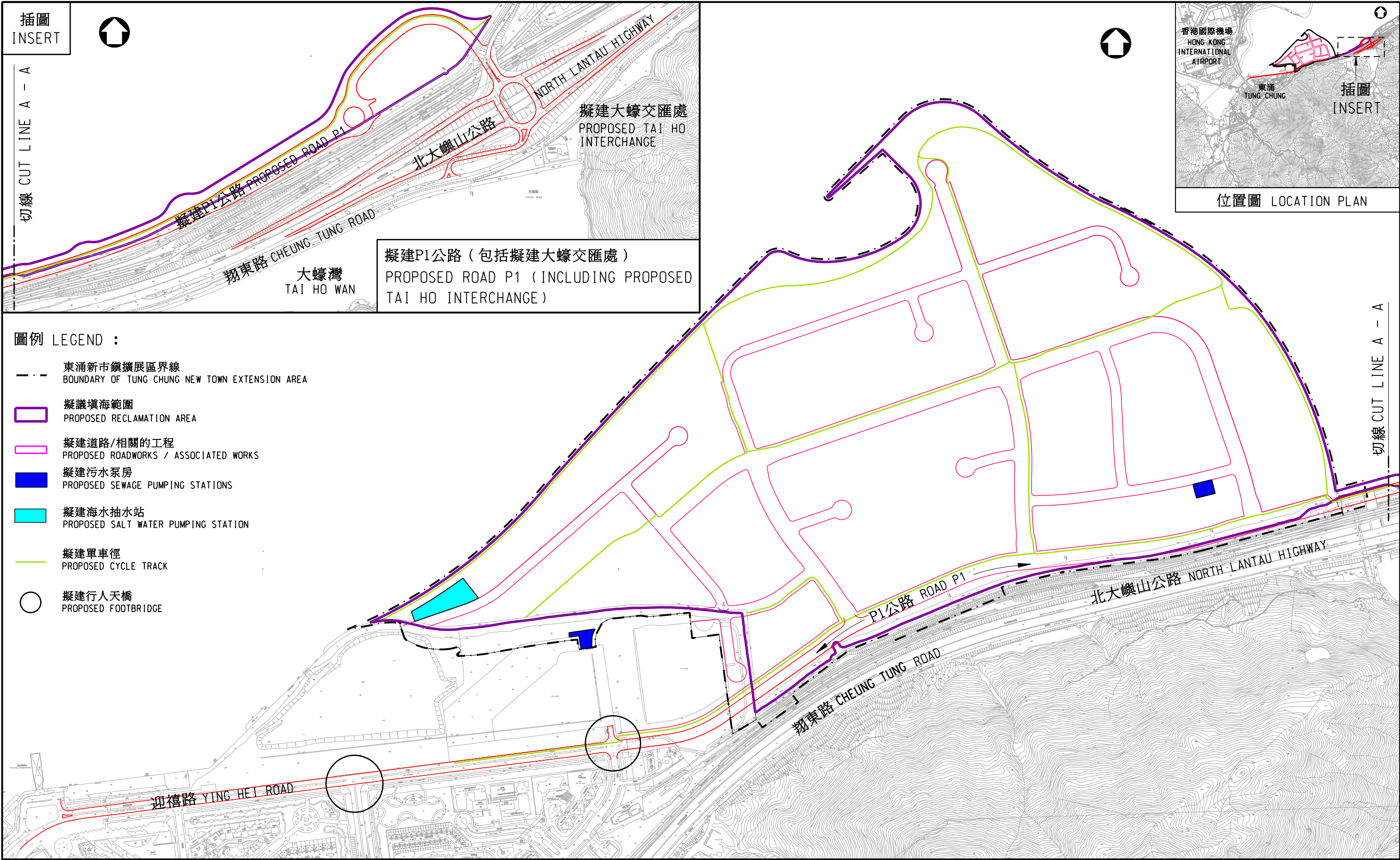
/25.

25. We upgraded **786CL** to Cat B in September 2014.

26. No registered old and valuable trees have been identified at TCNTE. The proposed site investigation works will not involve any tree removal or planting proposals. We will take into consideration the need for tree preservation, and formulate tree preservation, removal, compensatory and new planting proposals during the detailed design stage. Such proposals will be implemented in the construction phase.

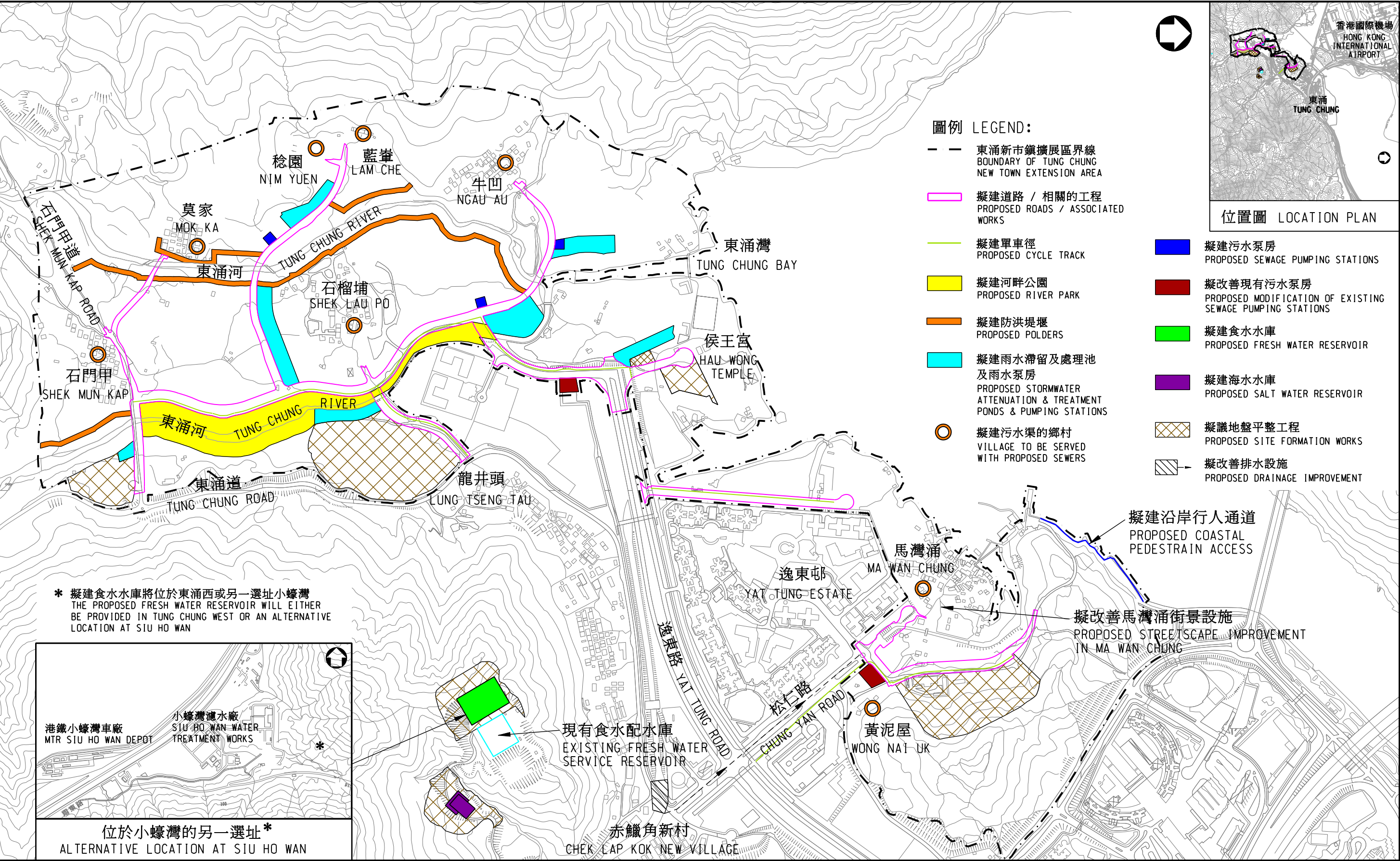
27. We estimate that the proposed detailed design and associated site investigation works will create about 80 jobs (40 for labourers and another 40 for professional or technical staff), providing a total employment of 2 600 man-months.

Development Bureau
February 2016



圖則名稱 drawing title

東涌新市鎮擴展工程項目平面圖 - 東涌東及P1公路
TUNG CHUNG NEW TOWN EXTENSION PROJECT LAYOUT PLAN - TUNG CHUNG EAST AND ROAD P1



圖則名稱 drawing title

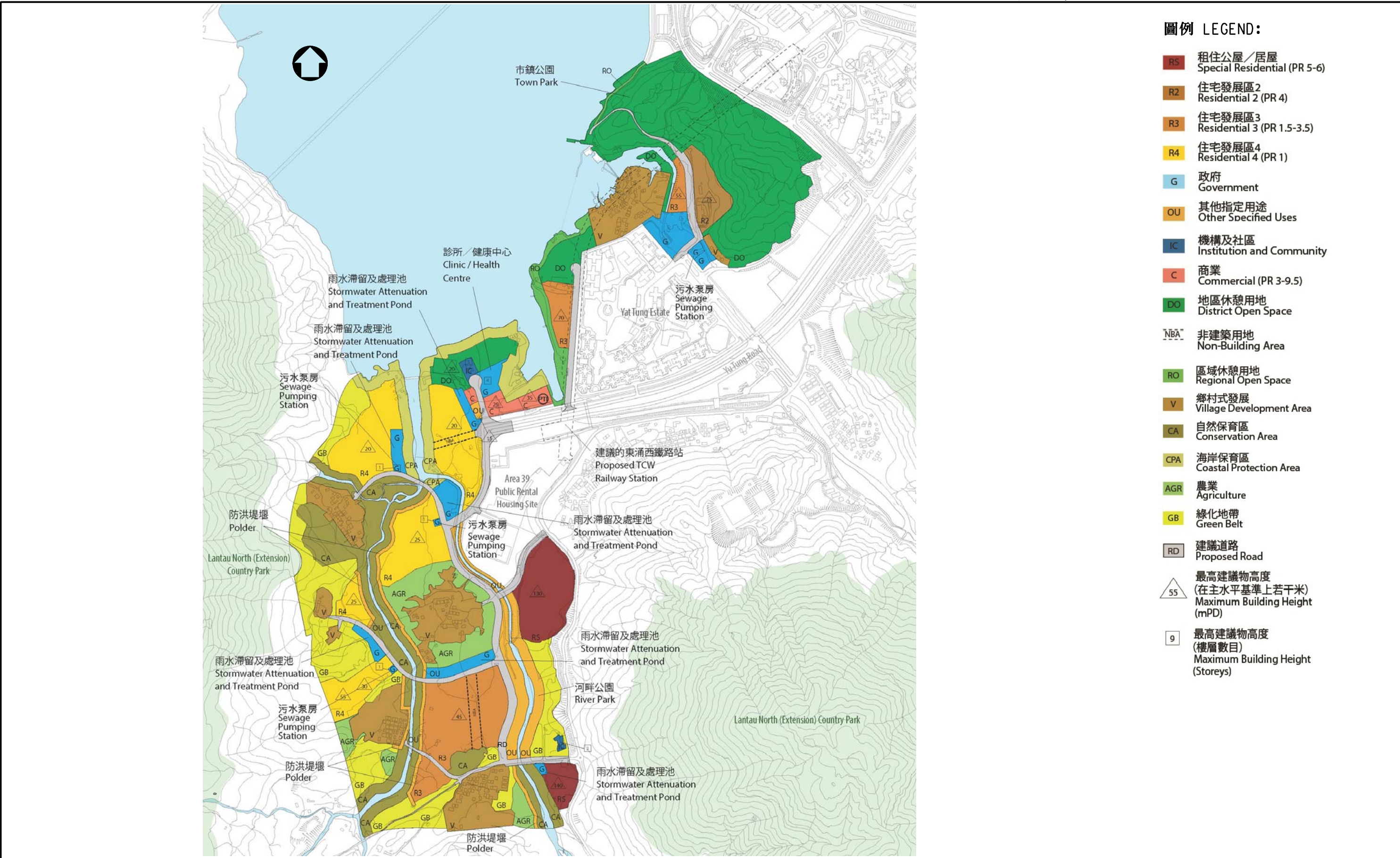
東涌新市鎮擴展工程項目平面圖 - 東涌西
TUNG CHUNG NEW TOWN EXTENSION PROJECT LAYOUT PLAN - TUNG CHUNG WEST



圖則名稱 drawing title

東涌東建議發展大綱圖

RECOMMENDED OUTLINE DEVELOPMENT PLAN OF TUNG CHUNG EAST



圖則名稱 drawing title

東涌西建議發展大綱圖
RECOMMENDED OUTLINE DEVELOPMENT PLAN OF TUNG CHUNG WEST

| 住宅供應、新增人口及職位 Housing Supply, New Population and Job Opportunities | 東涌東 Tung Chung East (TCE) | | 東涌西 Tung Chung West (TCW) | | 總計 Total | |
|--|--------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|--------------------------------------|-----------------------------------|
| 估計新增住宅量(約) Estimated No. of Flats to be provided (about) | 40,800 | | 8,600 | | 49,400 | |
| | 資助房屋 Subsidized Housing 25,700 | 私人住宅 Private Housing 15,100 | 資助房屋 Subsidized Housing 5,200 | 私人住宅 Private Housing 3,400 | 資助房屋 Subsidized Housing 30,900 | 私人住宅 Private Housing 18,500 |
| | 63% | 37% | 60% | 40% | 63% | 37% |
| 估計新增人口(約) Estimated New Population (about) | 118,900 | | 25,500 | | 144,400 | |
| 估計新增職位(約) Estimated New Job Opportunities (about) | 40,000 | | | | | |

| 主要土地用途 Land Uses | 住宅(東涌東,除都會中心區) Residential (TCE, excluding Metro Core Area) | 住宅(東涌西) Residential (TCW) | 都會中心區 Metro Core Area | 商業(東涌東) Commercial (TCE) | 商業(東涌西) Commercial (TCW) | 政府、機構或社區 Government, Institution or Community | 休憩用地 Open Space | 保育相關用途 Conservation Related Uses | 鄉村、道路及其他用途 Village, Road and Other Uses | 總計 Total |
|-------------------------------|--|------------------------------|----------------------------|-----------------------------|-----------------------------|--|--------------------|-------------------------------------|--|-------------|
| 大約面積(公頃) Approx. Area (ha) | 44.0 | 27.9 | 7.6 | 7.6 | 1.1 | 21.4 | 49.0 | 28.6 | 63.0 | 250.2 |
| 地積比 Plot Ratio | 2.5 - 6.5 | 1 - 6 | 住宅 Domestic 6 | 3 - 9.5 | 2 - 3 | 不適用 N/A | 不適用 N/A | 不適用 N/A | 不適用 N/A | 不適用 N/A |
| | | | 非住宅 Non-domestic 2.5 | | | | | | | |

圖則名稱 drawing title

東涌新市鎮擴展主要土地用途及發展參數
TUNG CHUNG NEW TOWN EXTENSION MAJOR LAND USES AND DEVELOPMENT PARAMETERS

786CL (Part) – Tung Chung New Town Extension

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2015 prices)

| | | | Estimated man- months | Average MPS* salary point | Multiplier (Note 1) | Estimated fee (\$million) |
|--------------------------|---|--|-----------------------------|------------------------------------|------------------------|---------------------------------|
| (a) | Consultants' staff cost ^(Note 2) | | | | | |
| | (i) | Detailed design | | | | |
| | | Professional | 2 360 | 38 | 2.0 | 350.3 |
| | | Technical | 116 | 14 | 2.0 | 5.9 |
| | (ii) | Preparation of tender documents and assessment of tenders | | | | |
| | | Professional | 180 | 38 | 2.0 | 26.7 |
| | | Technical | 11 | 14 | 2.0 | 0.6 |
| | | | | | Sub-total | 383.5 |
| (b) | Resident site staff (RSS) costs ^(Note 3) | | | | | |
| | | Professional | 90 | 38 | 1.6 | 10.7 |
| | | Technical | 98 | 14 | 1.6 | 4.0 |
| | | | | | Sub-total | 14.7 |
| | Comprising - | | | | | |
| | (i) | Consultants' fees for management of RSS for site investigation works | | | | 0.7 |
| | (ii) | Remuneration of RSS for site investigation works | | | | 14.0 |
| | | | | | Total | 398.2 |
| * MPS = Master Pay Scale | | | | | | |

Notes

1. A multiplier of 2.0 is applied to the average MPS salary point to estimate the full staff cost including the consultants' overheads and profits as the staff will be employed in the consultants' offices. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS supplied by the consultants (as at now, MPS point 38 = \$74,210 per month and MPS point 14 = \$25,505 per month).
2. The actual man-months and fees will only be known after we have selected the consultants through the usual competitive fee bidding system.
3. The actual man-months and fees will only be known after completion of the site investigation works.

Breakdown of the expenditure under the cost items “consultants’ fees for detailed design” and “consultants’ fees for preparation of tender documents and assessment of tenders”

The proposed TCNTE will cover areas on the eastern and western flanks of the existing TCNT, namely Tung Chung East (TCE) and Tung Chung West (TCW). The TCE will be formed by reclamation and supporting infrastructure including roads, sewerage, drainage and water supply will be provided on the reclaimed land. For TCW, site formation works and supporting infrastructure works together with ecological enhancement measures including a river park will be carried out. Having regard to the nature and geographic location of the proposed works for TCE and TCW as well as the scale of the works concerned, we plan to procure the consultancy service for detailed design and site investigation works of the project under two consultancy agreements, i.e. one for TCE and the other for TCW.

2. We will invite tender on a lump sum basis. A breakdown of the concerned expenditure on various major items based on our estimated consultants’ manpower input is shown below for members’ reference:

| Consultants’ fees | Breakdown | | \$ million (in Sept 2015 prices) |
|---|-----------|-------|-------------------------------------|
| | TCE | TCW | |
| (a) detailed design for | | | |
| (i) reclamation works | 104.3 | - | |
| (ii) site formation works | - | 29.4 | |
| (iii) engineering infrastructure and ancillary works | 116.5 | 106.0 | |
| | 220.8 | 135.4 | |
| Sub-total | | | 356.2 |
| (b) preparation of tender documents and assessment of tenders | 16.9 | 10.4 | |
| Sub-total | | | 27.3 |