

**PROPOSED AMENDMENTS TO
THE APPROVED PING SHAN OUTLINE ZONING PLAN NO. S/YL-PS/14**

1. Introduction

This paper is to seek Members' agreement that:

- (a) the proposed amendments to the approved Ping Shan Outline Zoning Plan (OZP) No. S/YL-PS/14 as shown on the draft OZP No. S/YL-PS/14A (**Attachment II**) and its Notes (**Attachment III**) are suitable for exhibition for public inspection under section 5 of the Town Planning Ordinance (the Ordinance); and
- (b) the revised Explanatory Statement (ES) of the OZP (**Attachment IV**) should be adopted as an expression of the Town Planning Board's (the Board's) planning intentions and objectives for the various land use zonings of the OZP and is suitable for exhibition together with the draft OZP.

2. Status of the Current OZP

- 2.1 On 8.5.2012, the Chief Executive in Council (CE in C) under section 9(1)(a) of the Ordinance approved the draft OZP which was subsequently renumbered as S/YL-PS/14. On 18.5.2012, the approved OZP No. S/YL-PS/14 (**Attachment I**) was exhibited for public inspection under section 9(5) of the Ordinance.
- 2.2 On 11.3.2014, the CE in C referred the approved Ping Shan OZP No. S/YL-PS/14 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. On 21.3.2014, the reference back was notified in the Gazette under section 12(2) of the Ordinance.

3. Background

- 3.1 To increase housing land supply, a review of "Green Belt" ("GB") sites for housing development had been conducted by the Planning Department (PlanD) in 2011 mainly focusing on land which had been de-vegetated, deserted or formed, near the fringes of new towns or planned New Development Areas, in close proximity to existing settlements, and/or accessible to existing roads. A number of sites were identified for further studies for residential purposes. Among these sites, a piece of land to the west of Long Ping Estate and the Yuen Long Industrial Estate (YLIE), partly zoned "GB" and partly zoned "Open Storage" ("OS") was identified suitable, subject to further feasibility

study, for public housing development and possible extension of YLIE, if required. A Planning and Engineering Study for the Public Housing Site and Yuen Long Industrial Estate (YLIE) Extension at Wang Chau was commissioned by the Housing Department (HD) in 2012.

- 3.2 The 2014 Policy Address also announced that except for the north of Hong Kong Island and Kowloon Peninsula, which are more densely populated, the Government considers it feasible to generally increase the maximum domestic plot ratio (PR) currently permitted for the other “density zones” in the territory by around 20% as appropriate. In implementing these measures, the Government will duly consider factors such as traffic and infrastructural capacities, local characteristics, existing development intensity and the various possible impacts of the proposed development on the areas concerned. The proposed public housing site at Wang Chau adjoins the Yuen Long New Town, which is a Density Zone 2 area with a PR of 5. The technical feasibility of increasing the development intensity of the site by 20% was undertaken in the study stated in paragraph 3.1 above.
- 3.3 In early 2014, the Planning and Engineering Study for the Public Housing Site and YLIE Extension at Wang Chau was completed. The Housing Department would take forward the public housing development in phases. A site to the west of Long Ping Estate and currently zoned “GB” in Wang Chau will be rezoned first for public housing development (**Plan 1**).

4. Rezoning of a Site to the West of Long Ping Estate for Public Housing Development (Proposed Amendment Item A)

The Site and its Surroundings

- 4.1 The site has a gross site area of about 5.67 ha. It is bounded by Long Ping Road to the east and south, Wing Ning Tsuen to the west and an area zoned “Conservation Area” (“CA”) to the north (Site A) (**Plan 1**). The site falls within “GB” zone and is occupied by farmland, fallow land, rural residential dwellings, temporary structures and open storage use (**Plan 2**). The site is accessible from Long Ping Road.
- 4.2 The site is at the north-western fringe of the Yuen Long New Town. The surrounding area of the site has the following characteristics (**Plans 2 to 4b**):
- (a) to the east across Long Ping Road is Long Ping Estate which is zoned “Residential (Group A)” (“R(A)”) with a permissible domestic PR of 5.0;
 - (b) to the south across Long Ping Road is Shui Tin Tsuen. Further south across the West Rail are Fung Chi Tsuen and Chun Hing San Tsuen. All these villages are zoned “V” on the Yuen Long OZP;
 - (c) to the west is Wing Ning Tsuen within “GB” zone on the Ping Shan OZP. Further west across the West Rail is an area zoned “Comprehensive Development Area” (“CDA”), which is currently

occupied by open storage/warehouse uses; and

- (d) to the north and north-west is vegetated land zoned “GB” and “CA” (**Plan 3**).

Rezoning Proposal

- 4.3 The development parameters of the proposed public housing development are as follows:

Gross Site Area	About 5.67 ha
Net Site Area	About 4.1 ha (excluding a road, areas for a school and other Government, institution or community facilities)
Maximum PR	6.0
Maximum Building Height (BH)	135 mPD (41 storeys) excluding basement
Estimated No. of Flats	About 4,000
Design Population	12,300 persons

- 4.4 An indicative layout is at **Attachment V**.

- 4.5 The HD has carried out assessments for the development of the proposed public housing development (paragraphs 4.7 to 4.15 below) and confirmed the technical feasibility for the development. Having regard to location of the site, the character of the surrounding area, the need to optimize the development potential of limited land resource to meet the housing need of the community, and the capacity of the infrastructure, environment and community facilities provisions, it is proposed to rezone the site from “GB” to “Residential (Group A) 4” (“R(A)4”) (**Plan 1**) for public housing development. The development restrictions of the proposed “R(A)4” zone are as follows:

Maximum PR	6.0
Maximum BH	135 mPD

- 4.6 A Planning Brief would be prepared to guide the public housing development.

Technical Assessments

Air Ventilation Assessment

- 4.7 According to the Housing, Planning and Lands Bureau Technical Circular No. 1/06 on Air Ventilation Assessments (AVA) setting out the guidance for applying AVA for Government projects, AVA would be required amongst others, for developments on sites of over 2 ha and with an overall plot ratio of 5 or above, sites located within breezeways, developments on waterfront sites with lot frontage exceeding 100m in length, or development proposals with total gross floor area (GFA) exceeding 100,000m². As the net site area for the proposed public housing site is about 4.1 ha with a maximum PR of 6, an AVA by Expert Evaluation (EE) has been conducted by HD to assess the likely impacts of the proposed public housing development on the pedestrian level

wind environment (**Attachment VI**).

- 4.8 The site is situated at the fringe of the Yuen Long New Town. It is enclosed by green belt and conservation area to the north, west and south and bounded by Long Ping Road to the east. According to the EE, the area is subject to annual prevailing winds from the north northeast (NNE), east northeast (ENE) and east (E) and summer prevailing winds from south southwest (SSW), southwest (SW) and west southwest (WSW). Under the above prevailing wind directions, in the immediate downwind areas behind the proposed development are the open green belt and conservation area, which are of low pedestrian frequency. Further downstream in the west, there are the village of Wing Ning Tsuen and an area zoned "Comprehensive Development Area" ("CDA"). However, given the separation distance, the proposed development is not expected to have any significant air ventilation impact on those areas. Notwithstanding, based on the conceptual design which features building gaps of about 10 to 15m wide, the EE recommends further enhancement of the overall permeability of the proposed development by widening the 10m gap separations between buildings as far as possible.
- 4.9 A quantitative AVA in accordance with the Housing, Planning and Lands Bureau Technical Circular No. 1/06 on AVA will be required in the Planning Brief to demonstrate at the detailed design stage the acceptability of the scheme of the proposed housing development in air ventilation terms.

Visual and Landscape Appraisals

- 4.10 To assess the visual impacts of the proposed public housing development, a Visual Appraisal (VA) has also been undertaken by HD. Photomontages have been prepared to illustrate the possible visual impacts of the proposed developments at the site. Suitable vantage points frequently visited by the public are selected for illustration (**Attachment VII**).
- 4.11 It is concluded that the proposed public housing development will not generate significant adverse visual impact on the surrounding area particularly when being viewed from a distance. However, with the long and narrow shape of the eastern part of the site limiting the scope for variation in building disposition, buildings thereon would likely be aligned in a linear array, resulting possibly long continuous building masses. Although the proposed primary school building to be built in the middle of the site would divide the development into two clusters, it is still necessary to incorporate in the overall design distinctive building height variations and discernible building gaps to reduce the perceived visual bulk. The requirement of such design measures will be stipulated in the Planning Brief to guide the development accordingly. The visual quality of the proposed public housing development would be further enhanced at the detailed design stage.
- 4.12 There are existing trees and vegetation on the site. Inevitably, the vegetation will be affected by the proposed development and tree felling would be necessary. Tree preservation and compensatory planting proposal will be required for the proposed development in accordance with DEVB Technical Circular (Works) No. 10/2013 for Government projects. Submission of tree preservation proposal and landscaping proposal/landscape master plan, where

appropriate, would be required in the Planning Brief.

Traffic Impact Assessment

- 4.13 A Traffic Impact Assessment (TIA) has been conducted for the proposed public housing development (**Attachment VIII**). Assessments for the design years 2025 and 2031 at the major road links and junctions under with and without development scenarios were undertaken. For the major road links, the contribution of traffic from the proposed public housing development is minimal and no road improvement works is required. For the major junctions, the assessment results indicate that all assessed junctions would be operating at satisfactory level. Future pedestrian conditions in design year 2025 and 2031 are also assessed, and no pedestrian circulation problems are anticipated. Based on the TIA, the proposed development would have no adverse traffic impact on the nearby road links, junctions and pedestrian facilities.

Drainage, Sewerage and Water Supply Impact Assessments

- 4.14 Preliminary assessments on drainage, sewerage and water supply aspects have also been carried out by the HD. No insurmountable problem is envisaged but some upgrading of existing drainage, sewerage and water supply systems would be required (**Attachment IX**). HD will carry out detailed technical studies for approval by the Government departments at the detailed design stage.
- 4.15 The CTP/UD&L, PlanD has no strong views on the air ventilation, visual, and landscape assessments. Concerned Government departments consulted including the EPD, the TD, the DSD and the WSD have no adverse comment on the proposed amendment for the public housing development from environmental, traffic, and infrastructural points of views.

5. Provision of GIC Facilities and Open Space in Ping Shan Area

- 5.1 The provision of GIC facilities and open space within the planning scheme area of the Ping Shan OZP has been assessed. Based on a planned population of about 61,300 persons, including the population of the proposed public housing development, the planned provision of major GIC facilities is generally sufficient. There will also be a surplus provision of local open space and district open space (**Attachment X**).
- 5.2 According to the Hong Kong Planning Standards and Guidelines (HKPSG), there will be a shortage of 338 hospital beds but the provision of hospital beds is on a regional basis which would be addressed by the Hospital Authority. Although a 24-classroom primary school and a 8-classroom kindergarten will be provided within the proposed public housing development, there will be a shortage of 46 secondary school classrooms, 63 primary school classrooms and 17 kindergarten classrooms in the Ping Shan OZP area. However, part of the Ping Shan OZP area falls within the proposed Hung Shui Kiu New Development Area (HSK NDA), which is currently under study. New education facilities serving the population in the HSK NDA would be provided according to the HKPSG.

6. **Proposed Amendment to the Matters shown on the OZP**

Amendment Item A

A site to the west of Long Ping Estate in Wang Chau is proposed to be rezoned from “GB” to “R(A)4”, with a maximum PR of 6.0 and a maximum BH of 135 mPD for public housing development with school and other Government, institution or community (G/IC) facilities (Site A, **Plan 1**).

7. **Proposed Amendments to the Notes of the OZP**

The proposed amendments to the Notes of the OZP with additions in ***bold and italics*** and deletions in ‘~~crossed-out~~’ are at **Attachment III** for Members’ consideration. The proposed amendments are summarised as follows:

The Notes of the “R(A)” zone is amended to include the remarks for sub-zone “R(A)4” to stipulate the maximum PR and maximum BH restrictions for the proposed public housing site in Wang Chau, and the planning intention of developing the site zoned “R(A)4” for public housing as mentioned in paragraph 6 above.

8. **Revision to the Explanatory Statement of the OZP**

The Explanatory Statement (ES) of the OZP has been revised to take into account the proposed amendments as mentioned in the above paragraphs. Opportunity is also taken to update the general information to reflect the latest circumstances within the planning scheme area of the OZP. A copy of the revised ES with the proposed additions highlighted in ***bold and italics*** and deletions in ‘~~crossed-out~~’ is at **Attachment IV**.

9. **Plan Number**

Upon exhibition for public inspection, the Plan will be renumbered as S/YL-PS/15.

10. **Consultation**

10.1 **Departmental consultation**

The proposed amendments have been circulated to the following relevant bureaux/departments for comment. Their comments have been incorporated in the proposed amendments where appropriate.

- Secretary of Food and Health (SFH)
- Secretary for Home Affairs (SHA)
- Secretary for Education (SED)
- Secretary for Transport and Housing (STH)

- District Officer (Yuen Long), Home Affairs Department (DO(YL), HAD)
- District Lands Officer/ Yuen Long, Lands Department (DLO/YL, LandsD)
- Commissioner for Transport (C for T)
- Director of Fire Services (D of FS)
- Chief Building Surveyor/New Territories West, Buildings Department (CBS/NTW, BD)
- Director of Environmental Protection (DEP)
- Chief Highway Engineer/New Territories West, Highway Department (CHE/NTW, HyD)
- Chief Engineer/Special Duties (Works), Civil Engineering and Development Department (CE/SD(W), CEDD)
- Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD)
- Chief Engineer/Development (2), Water Supplies Department (CE/Dev(2), WSD)
- Project Manager (New Territories North and West), Civil Engineering and Development Department (PM/NTN&W, CEDD)
- Director of Agriculture, Fisheries and Conservation (DAFC)
- Director of Leisure and Cultural Services (DLCS)
- Antiquities and Monuments Office, Leisure and Cultural Services Department (AMO, LCSD)
- Director of Social Welfare (DSW)
- District Commander/Yuen Long District, Hong Kong Police Force (DC/YLDIST, HKPF)
- Head of Geotechnical Engineering Office, Civil Engineering and Development Department (H(GEO), CEDD)
- Director-General of Civil Aviation (DG of CA)
- Director of Food and Environmental Hygiene (DFEH)
- Director of Electrical and Mechanical Services (DEMS)
- Director of Housing (D of H)
- Director of the Hong Kong Observatory (D of HKO)
- Government Property Administrator (GPA)
- Chief Town Planner/Urban Design & Landscape, Planning Department (CTP/UD&L, PlanD)
- Chief Architect/Central Management Division 2, Architectural Services Department (CA/CMD2, ArchSD)

10.2 Public Consultation

- 10.2.1 On 24.6.2014, the Yuen Long District Council (YLDC) was consulted and members of YLDC generally supported the proposed public housing development at Wang Chau.
- 10.2.2 The extract of the minutes of the YLDC meeting is at **Attachment XI**.
- 10.2.3 The YLDC will be consulted again on the proposed amendments during the statutory exhibition period of the draft Ping Shan OZP No. S/YL-PS/14A (to be renumbered as S/YL-PS/15 upon exhibition) under section 5 of the Ordinance.

11. Decision Sought

Members are invited to:

- (a) agree that the proposed amendments to the approved Ping Shan OZP No. S/YL-PS/14 and that the draft Ping Shan OZP No. S/YL-PS/14A at **Attachment II** (to be renumbered as S/YL-PS/15 upon exhibition) and its Notes at **Attachment III** are suitable for exhibition for public inspection under section 5 of the Ordinance; and
- (b) adopt the revised ES at **Attachment IV** for the draft Ping Shan OZP No. S/YL-PS/14A as an expression of the planning intention and objectives of the Board for various land use zones on the Plan and agree that the revised ES is suitable for exhibition together with the OZP.

12. Attachments

Attachment I	Approved Ping Shan Outline Zoning Plan No. S/YL-PS/14 (reduced scale plan only)
Attachment II	Draft Ping Shan Outline Zoning Plan No. S/YL-PS/14A
Attachment III	Notes of the Draft Ping Shan Outline Zoning Plan No. S/YL-PS/14A
Attachment IV	Explanatory Statement of the Draft Ping Shan Outline Zoning Plan No. S/YL-PS/14A
Attachment V	Indicative Layout of the Proposed Public Housing Development
Attachment VI	Report on Expert Evaluation on Air Ventilation Assessment
Attachment VII	Visual Appraisal Report
Attachment VIII	Traffic Impact Assessment
Attachment IX	Summary of Technical Assessments
Attachment X	Provision of Major Community Facilities and Open Space in Ping Shan
Attachment XI	Extract of the Minutes of YLDC Meeting held on 24.6.2014
Plans 1	Location plans
Plans 2	Site plans
Plans 3	Aerial photos
Plans 4a to 4b	Site photos

**PLANNING DEPARTMENT
OCTOBER 2014**



圖例 NOTATION		地帶
ZONES		
COMPREHENSIVE DEVELOPMENT AREA	CDA	綜合發展區
RESIDENTIAL (GROUP A)	RA(A)	住宅 (甲類)
RESIDENTIAL (GROUP B)	RB(B)	住宅 (乙類)
RESIDENTIAL (GROUP C)	RC(C)	住宅 (丙類)
RESIDENTIAL (GROUP E)	RE(E)	住宅 (戊類)
VILLAGE TYPE DEVELOPMENT	V	鄉村式發展
INDUSTRIAL	I	工業
INDUSTRIAL (GROUP B)	IB	工業 (丁類)
OPEN STORAGE	OS	露天貯物
GOVERNMENT, INSTITUTION OR COMMUNITY	GIC	政府、機構或社區
OPEN SPACE	O	休憩用地
RECREATION	REC	康樂
OTHER SPECIFIED USES	OU	其他指定用途
UNDETERMINED	U	未決定用途
GREEN BELT	GB	綠化地帶
CONSERVATION AREA	CA	自然保育區
COMMUNICATIONS		
RAILWAY AND STATION (ELEVATED)		鐵路及車站 (高架)
LIGHT RAIL		輕鐵
MAJOR ROAD AND JUNCTION		主要道路及路口
ELEVATED ROAD		高架道路
MISCELLANEOUS		
BOUNDARY OF PLANNING SCHEME		綠化範圍界線

土地用途及面積一覽表 SCHEDULE OF USES AND AREAS				用途
USES	大約總數及百分比 APPROXIMATE AREA & % 公頃 HECTARES	%	百分比	
COMPREHENSIVE DEVELOPMENT AREA	32.25	5.37		綜合發展區
RESIDENTIAL (GROUP A)	10.77	1.78		住宅 (甲類)
RESIDENTIAL (GROUP B)	15.78	2.63		住宅 (乙類)
RESIDENTIAL (GROUP C)	10.29	3.05		住宅 (丙類)
RESIDENTIAL (GROUP E)	4.54	0.76		住宅 (戊類)
VILLAGE TYPE DEVELOPMENT	117.02	19.66		鄉村式發展
INDUSTRIAL	9.86	1.64		工業
INDUSTRIAL (GROUP B)	12.22	2.04		工業 (丁類)
OPEN STORAGE	19.32	3.22		露天貯物
GOVERNMENT, INSTITUTION OR COMMUNITY	16.74	2.79		政府、機構或社區
OPEN SPACE	7.80	1.25		休憩用地
RECREATION	37.17	6.19		康樂
OTHER SPECIFIED USES	1.88	0.28		其他指定用途
UNDETERMINED	18.49	3.08		未決定用途
GREEN BELT	110.67	18.77		綠化地帶
CONSERVATION AREA	112.43	18.73		自然保育區
DRAINAGE CHANNEL	3.68	0.61		排水渠
RAILWAY	0.05	0.10		鐵路
MAJOR ROAD ETC.	41.84	6.99		主要道路等
TOTAL PLANNING SCHEME AREA	100.19	100.00		總劃範圍面積

夾附的《註釋》是這份圖則的一部分
THE ATTACHED NOTES ALSO FORM PART OF THIS PLAN

行政委員會行政會議於2012年5月8日 根據城市
規劃條例第9(1)及(2)條核准的圖則
APPROVED BY THE CHIEF EXECUTIVE IN COUNCIL UNDER
SECTION 9(1)(a) OF THE TOWN PLANNING ORDINANCE ON
8 MAY 2012

Signed: Ms Manda CHAN 譚美芝 簽署
CLERK TO THE EXECUTIVE COUNCIL 行政會議秘書

香港城市規劃委員會依據城市規劃條例擬備的屏山分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
PING SHAN - OUTLINE ZONING PLAN

SCALE 1:7500 比例尺

規劃署遵照城市規劃委員會指示編製
PREPARED BY THE PLANNING DEPARTMENT UNDER
THE DIRECTION OF THE TOWN PLANNING BOARD

圖則編號
PLAN No. S/YL-PS/14

圖例
NOTATION

ZONES		地帶
COMPREHENSIVE DEVELOPMENT AREA	CDA	綜合發展區
RESIDENTIAL (GROUP A)	R(A)	住宅 (甲類)
RESIDENTIAL (GROUP B)	R(B)	住宅 (乙類)
RESIDENTIAL (GROUP C)	R(C)	住宅 (丙類)
RESIDENTIAL (GROUP E)	R(E)	住宅 (戊類)
VILLAGE TYPE DEVELOPMENT	V	鄉村式發展
INDUSTRIAL	I	工業
INDUSTRIAL (GROUP D)	I(D)	工業 (丁類)
OPEN STORAGE	OS	露天貯物
GOVERNMENT, INSTITUTION OR COMMUNITY	GIC	政府、機構或社區
OPEN SPACE	O	休憩用地
RECREATION	REC	康樂
OTHER SPECIFIED USES	OU	其他指定用途
UNDETERMINED	U	未決定用途
GREEN BELT	GB	綠化地帶
CONSERVATION AREA	CA	自然保育區
COMMUNICATIONS		交通
RAILWAY AND STATION (ELEVATED)		鐵路及車站 (高架)
LIGHT RAIL		輕鐵
MAJOR ROAD AND JUNCTION		主要道路及路口
ELEVATED ROAD		高架道路
MISCELLANEOUS		其他
BOUNDARY OF PLANNING SCHEME		規劃範圍界線

土地用途及面積一覽表
SCHEDULE OF USES AND AREAS

USES	大約面積及百分比 APPROXIMATE AREA & %		用途
	公頃 HECTARES	百分比 %	
COMPREHENSIVE DEVELOPMENT AREA	32.25	5.37	綜合發展區
RESIDENTIAL (GROUP A)	16.44	2.74	住宅 (甲類)
RESIDENTIAL (GROUP B)	15.78	2.63	住宅 (乙類)
RESIDENTIAL (GROUP C)	18.28	3.05	住宅 (丙類)
RESIDENTIAL (GROUP E)	4.54	0.76	住宅 (戊類)
VILLAGE TYPE DEVELOPMENT	117.92	19.65	鄉村式發展
INDUSTRIAL	9.86	1.64	工業
INDUSTRIAL (GROUP D)	12.22	2.04	工業 (丁類)
OPEN STORAGE	19.32	3.22	露天貯物
GOVERNMENT, INSTITUTION OR COMMUNITY	16.74	2.79	政府、機構或社區
OPEN SPACE	7.50	1.25	休憩用地
RECREATION	37.17	6.19	康樂
OTHER SPECIFIED USES	1.68	0.28	其他指定用途
UNDETERMINED	18.49	3.08	未決定用途
GREEN BELT	113.01	18.83	綠化地帶
CONSERVATION AREA	112.43	18.73	自然保育區
DRAINAGE CHANNEL	3.68	0.61	排水道
RAILWAY	0.95	0.16	鐵路
MAJOR ROAD ETC.	41.93	6.98	主要道路等
TOTAL PLANNING SCHEME AREA	600.19	100.00	規劃範圍總面積

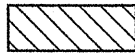
夾附的《註釋》屬這份圖則的一部分，
現經修訂並按照城市規劃條例第5條展示。
THE ATTACHED NOTES ALSO FORM PART OF THIS PLAN
AND HAVE BEEN AMENDED FOR EXHIBITION UNDER
SECTION 5 OF THE TOWN PLANNING ORDINANCE

核准圖編號 S/YL-PS/14 的修訂
AMENDMENT TO APPROVED PLAN No. S/YL-PS/14

AMENDMENT EXHIBITED UNDER SECTION 5
OF THE TOWN PLANNING ORDINANCE

按照城市規劃條例第5條
展示的修訂

AMENDMENT ITEM A



修訂項目 A 項

(參看附表)
(SEE ATTACHED SCHEDULE)

圖則編號
PLAN No. S/YL-PS/14A



香港城市規劃委員會依據城市規劃條例擬備的屏山分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
PING SHAN - OUTLINE ZONING PLAN

SCALE 1:7 500 比例尺
METRES 200 0 200 400 600 800 1 000 METRES

按照城市規劃條例第5條展示的
核准圖編號 S/YL-PS/14 的修訂
AMENDMENT TO APPROVED PLAN No. S/YL-PS/14 EXHIBITED
UNDER SECTION 5 OF THE TOWN PLANNING ORDINANCE ON

SECRETARY
TOWN PLANNING BOARD
城市規劃委員會秘書

規劃署遵照城市規劃委員會指示擬備
PREPARED BY THE PLANNING DEPARTMENT UNDER
THE DIRECTION OF THE TOWN PLANNING BOARD



~~APPROVED~~DRAFT PING SHAN OUTLINE ZONING PLAN NO. S/YL-PS/1414A

(Being an ~~Approved~~ a **Draft** Plan for the Purposes of the Town Planning Ordinance)

NOTES

(N.B. These form a part of the Plan)

- (1) These Notes show the uses or developments on land falling within the boundaries of the Plan which are always permitted and which may be permitted by the Town Planning Board, with or without conditions, on application. Where permission from the Town Planning Board for a use or development is required, the application for such permission should be made in a prescribed form. The application shall be addressed to the Secretary of the Town Planning Board, from whom the prescribed application form may be obtained.
- (2) Any use or development which is always permitted or may be permitted in accordance with these Notes must also conform to any other relevant legislation, the conditions of the Government lease concerned, and any other Government requirements, as may be applicable.
- (3) No action is required to make the use of any land or building which was in existence immediately before the first publication in the Gazette of the notice of the Lau Fau Shan and Tsim Bei Tsui Interim Development Permission Area (IDPA) Plan/draft Ping Shan Development Permission Area (DPA) Plan conform to this Plan, provided such use has continued since it came into existence. Any material change of such use or any other development (except minor alteration and/or modification to the development of the land or building in respect of such use which is always permitted) must be always permitted in terms of the Plan or in accordance with a permission granted by the Town Planning Board.
- (4) A use or development of any land or building permitted under an earlier draft or approved plan including Lau Fau Shan and Tsim Bei Tsui IDPA Plan/draft Ping Shan DPA Plan for the area and effected or undertaken during the effective period of that plan is always permitted under this Plan. Any material change of such use or any other development (except minor alteration and/or modification to the completed development of the land or building which is always permitted) must be always permitted in terms of the Plan or in accordance with a permission granted by the Town Planning Board.
- (5) Except to the extent that paragraph (3) or (4) applies, any use or development falling within the boundaries of the Plan and also within the boundaries of the Lau Fau Shan and Tsim Bei Tsui IDPA Plan/draft Ping Shan DPA Plan, unless always permitted in terms of the Plan, shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the Lau Fau Shan and Tsim Bei Tsui IDPA Plan/draft Ping Shan DPA Plan without permission from the Town Planning Board.

- (6) Except as otherwise specified by the Town Planning Board, when a use or material change of use is effected or a development or redevelopment is undertaken, as always permitted in terms of the Plan or in accordance with a permission granted by the Town Planning Board, all permissions granted by the Town Planning Board in respect of the site of the use or material change of use or development or redevelopment shall lapse.
- (7) Road junctions, alignment of roads and railway tracks, and boundaries between zones may be subject to minor adjustments as detailed planning proceeds.
- (8) The following uses or developments are always permitted on land falling within the boundaries of the Plan except (a) where the uses or developments are specified in Column 2 of the Notes of individual zones or (b) as provided in paragraph (9) in relation to areas zoned “Conservation Area”:
- (a) maintenance, repair or demolition of a building;
 - (b) provision, maintenance or repair of plant nursery, amenity planting, open space, rain shelter, refreshment kiosk, footpath, bus/public light bus/light rail stop or lay-by, cycle track, taxi rank, public utility pipeline, electricity mast, lamp pole, telephone booth, telecommunications radio base station, automatic teller machine and shrine;
 - (c) maintenance or repair of road, railway track, watercourse, nullah, sewer and drain;
 - (d) geotechnical works, local public works, road works, sewerage works, drainage works, environmental improvement works, marine related facilities and waterworks (excluding works on service reservoir) and such other public works co-ordinated or implemented by Government;
 - (e) rebuilding of New Territories Exempted House;
 - (f) replacement of an existing domestic building, i.e. a domestic building which was in existence on the date of the first publication in the Gazette of the notice of the Lau Fau Shan and Tsim Bei Tsui IDPA Plan/draft Ping Shan DPA Plan, by a New Territories Exempted House; and
 - (g) provision, maintenance or repair of a grave of an indigenous New Territories villager or a locally based fisherman and his family members for which permission has been obtained from Government.
- (9) In areas zoned “Conservation Area”,
- (a) the following uses or developments are always permitted:
 - (i) maintenance or repair of plant nursery, amenity planting, sitting out area, rain shelter, refreshment kiosk, road, watercourse, nullah, public utility pipeline, electricity mast, lamp pole, telephone booth, shrine and grave;
 - (ii) geotechnical works, local public works, road works, sewerage works, drainage works, environmental improvement works, marine related

facilities, waterworks (excluding works on service reservoir) and such other public works co-ordinated or implemented by Government; and

(iii) provision of amenity planting by Government; and

(b) the following uses or developments require permission from the Town Planning Board:

provision of plant nursery, amenity planting (other than by Government), sitting out area, rain shelter, refreshment kiosk, footpath, public utility pipeline, electricity mast, lamp pole, telephone booth and shrine.

(10) In any area shown as 'Road', all uses or developments except those specified in paragraphs (8)(a) to (8)(d) and (8)(g) above and those specified below require permission from the Town Planning Board:

road, toll plaza, on-street vehicle park, railway station and railway track.

(11) (a) Except in areas zoned "Conservation Area", temporary use or development of any land or building not exceeding a period of two months is always permitted provided that no site formation (filling or excavation) is carried out and that the use or development is a use or development specified below:

structures for carnivals, fairs, film shooting on locations, festival celebrations, religious functions or sports events.

(b) Except as otherwise provided in paragraph (11)(a), and subject to temporary uses for open storage and port back-up purposes which are prohibited in areas zoned "Conservation Area", temporary use or development of any land or building not exceeding a period of three years requires permission from the Town Planning Board. Notwithstanding that the use or development is not provided for in terms of the Plan, the Town Planning Board may grant permission, with or without conditions, for a maximum period of three years, or refuse to grant permission.

(c) Temporary use or development of land or building exceeding three years requires permission from the Town Planning Board in accordance with the terms of the Plan.

(12) Unless otherwise specified, all building, engineering and other operations incidental to and all uses directly related and ancillary to the permitted uses and developments within the same zone are always permitted and no separate permission is required.

(13) In the "Undetermined" zone, all uses or developments except those specified in paragraphs (8) and (11)(a) above require permission from the Town Planning Board.

(14) In these Notes, unless the context otherwise requires or unless as expressly provided below, terms used in the Notes shall have the meanings as assigned under section 1A of the Town Planning Ordinance.

“Existing building” means a building, including a structure, which is physically existing and is in compliance with any relevant legislation and the conditions of the Government lease concerned.

“New Territories Exempted House” means a domestic building other than a guesthouse or a hotel; or a building primarily used for habitation, other than a guesthouse or a hotel, the ground floor of which may be used as ‘Shop and Services’ or ‘Eating Place’, the building works in respect of which are exempted by a certificate of exemption under Part III of the Buildings Ordinance (Application to the New Territories) Ordinance (Cap. 121).

SCHEDULE OF USES

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COMPREHENSIVE DEVELOPMENT AREA

<p>Column 1</p> <p>Uses always permitted</p>	<p>Column 2</p> <p>Uses that may be permitted with or without conditions on application to the Town Planning Board</p>
	<p>Ambulance Depot</p> <p>Commercial Bathhouse/Massage Establishment</p> <p>Eating Place</p> <p>Educational Institution</p> <p>Exhibition or Convention Hall</p> <p>Flat</p> <p>Government Refuse Collection Point</p> <p>Government Use (not elsewhere specified)</p> <p>Hospital</p> <p>Hotel</p> <p>House (other than rebuilding of New Territories Exempted House or replacement of existing domestic building by New Territories Exempted House permitted under the covering Notes)</p> <p>Information Technology and Telecommunications Industries</p> <p>Institutional Use (not elsewhere specified)</p> <p>Library</p> <p>Market</p> <p>Off-course Betting Centre</p> <p>Office</p> <p>Petrol Filling Station</p> <p>Place of Entertainment</p> <p>Place of Recreation, Sports or Culture</p> <p>Private Club</p> <p>Public Clinic</p> <p>Public Convenience</p> <p>Public Transport Terminus or Station</p> <p>Public Utility Installation</p> <p>Public Vehicle Park (excluding container vehicle)</p> <p>Recyclable Collection Centre</p> <p>Religious Institution</p> <p>Research, Design and Development Centre</p> <p>Residential Institution</p> <p>School</p> <p>Shop and Services</p> <p>Social Welfare Facility</p> <p>Training Centre</p> <p>Utility Installation for Private Project</p>

(Please see next page)

COMPREHENSIVE DEVELOPMENT AREA (cont'd)

Planning Intention

This zone is intended for comprehensive development/redevelopment of the area for residential use with commercial, open space and other supporting facilities. The zoning is to facilitate appropriate planning control over the development mix, scale, design and layout of development, taking account of various environmental, traffic, infrastructure and other constraints.

Remarks

- (a) Pursuant to section 4A(2) of the Town Planning Ordinance, and except as otherwise expressly provided that it is not required by the Town Planning Board, an applicant for permission for development on land designated "Comprehensive Development Area" ("CDA") shall prepare a Master Layout Plan for the approval of the Town Planning Board and include therein the following information:
- (i) the area of the proposed land uses, the nature, position, dimensions, and heights of all buildings to be erected in the area;
 - (ii) the proposed total site area and gross floor area for various uses, total number of flats and flat size, where applicable;
 - (iii) the details and extent of Government, institution or community (GIC) and recreational facilities, public transport and parking facilities, and open space to be provided within the area;
 - (iv) the alignment, widths and levels of any roads proposed to be constructed within the area;
 - (v) the landscape and urban design proposals within the area;
 - (vi) programmes of development in detail;
 - (vii) an environmental assessment report to examine any possible environmental problems that may be caused to or by the proposed development during and after construction and the proposed mitigation measures to tackle them;
 - (viii) a drainage and sewerage impact assessment report to examine any possible drainage and sewerage problems that may be caused by the proposed development and the proposed mitigation measures to tackle them;
 - (ix) a traffic impact assessment report to examine any possible traffic problems that may be caused by the proposed development and the proposed mitigation measures to tackle them; and
 - (x) such other information as may be required by the Town Planning Board.

(Please see next page)

COMPREHENSIVE DEVELOPMENT AREA (cont'd)

Remarks (cont'd)

- (b) The Master Layout Plan should be supported by an explanatory statement which contains an adequate explanation of the development proposal, including such information as land tenure, relevant lease conditions, existing conditions of the site, the character of the site in relation to the surrounding areas, principles of layout design, major development parameters, design population, types of GIC facilities, and recreational and open space facilities.
- (c) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum plot ratio (PR)/gross floor area (GFA) and the maximum building height specified below:

<u>Location of "CDAs"</u>	<u>Maximum GFA/PR</u>	<u>Maximum Building Height</u>
The "CDA" west of Hung Tin Road in Hung Shui Kiu	A total GFA of 113,260m ²	20 storeys above a 3-storey podium
The "CDA" to the south of the West Rail Tin Shui Wai Station	A domestic PR of 5 or a non-domestic PR of 9.5	-
The "CDA" to the south-east of Tong Fong Tsuen and west of the junction of Ping Ha Road and Castle Peak Road	A total PR of 1.0	5 storeys including car park
The "CDA" to the north-east of the junction of Ping Ha Road and Castle Peak Road	A total PR of 1.0	5 storeys including car park
The "CDA" to the north-east of Long Tin Road	A total PR of 0.4	3 storeys including car park
The "CDA" to the west of Yung Yuen Road and north of Long Tin Road	A total PR of 0.4	3 storeys including car park
The "CDA" to the north-west of Long Ping Road	A total PR of 0.4	3 storeys including car park

- (d) The achievement of the maximum GFAs/ PRs is subject to the satisfactory demonstration to the Town Planning Board that a proposed development has taken account of the capacities of infrastructure and other environmental constraints on the site.

(Please see next page)

COMPREHENSIVE DEVELOPMENT AREA (cont'd)

Remarks (cont'd)

- (e) At the “CDA” zone to the south of the West Rail Tin Shui Wai Station, for a building that is partly domestic and partly non-domestic, the PR for the domestic part of the building shall not exceed the product of the difference between the maximum permitted non-domestic PR of 9.5 for the building and the actual non-domestic PR proposed for the building and the maximum permitted domestic PR of 5 for the building divided by the maximum permitted non-domestic PR of 9.5 for the building.
- (f) In determining the maximum PR/GFA for the purposes of paragraph (c) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker’s office, or caretaker’s quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded. For the “CDA” zone to the south of the West Rail Tin Shui Wai Station, the railway station development and the associated public transport facilities and GIC facilities as required by the Government shall be excluded from the PR calculation.
- (g) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the PR/GFA and building height restrictions stated in paragraph (c) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

RESIDENTIAL (GROUP A)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Ambulance Depot	Commercial Bathhouse/Massage Establishment
Flat	Eating Place
Government Use (not elsewhere specified)	Educational Institution
House	Exhibition or Convention Hall
Library	Government Refuse Collection Point
Market	Hospital
Place of Recreation, Sports or Culture	Hotel
Public Clinic	Institutional Use (not elsewhere specified)
Public Transport Terminus or Station (excluding open-air terminus or station)	Office
Religious Institution (Ancestral Hall only)	Petrol Filling Station
Residential Institution	Place of Entertainment
Rural Committee/Village Office	Private Club
School (in free-standing purpose-designed building only) #	Public Convenience
Social Welfare Facility	Public Transport Terminus or Station (not elsewhere specified)
Utility Installation for Private Project	Public Utility Installation
	Public Vehicle Park (excluding container vehicle)
	Religious Institution (not elsewhere specified)
	School (not elsewhere specified)
	Shop and Services
	Training Centre

In addition, the following uses are always permitted (a) on the lowest three floors of a building, taken to include basements; or (b) in the purpose-designed non-residential portion of an existing building, both excluding floors containing wholly or mainly car parking, loading/unloading bays and/or plant room:

Eating Place
Educational Institution
Institutional Use (not elsewhere specified)
Off-course Betting Centre
Office
Place of Entertainment
Private Club
Public Convenience
Recyclable Collection Centre
School
Shop and Services
Training Centre

(Please see next page)

RESIDENTIAL (GROUP A) (cont'd)

Planning Intention

This zone is intended primarily for high-density residential developments. Commercial uses are always permitted on the lowest three floors of a building or in the purpose-designed non-residential portion of an existing building. **For the “R(A)4” zone, the planning intention is for public housing development.**

Remarks

- (a) On land designated “Residential (Group A) 1”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building (except development or redevelopment to the use annotated with #) shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 2.66, a maximum site coverage of 66.6% and a maximum building height of 5 storeys (15m) including car park, or the plot ratio, site coverage and height of the building which was in existence on the date of the first publication in the Gazette of the notice of the draft development permission area plan, whichever is the greater. The lowest three floors could be used for commercial and car parking purposes which could have a maximum site coverage of 100%.
- (b) On land designated “Residential (Group A) 2”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 5, a maximum site coverage of 42% and a maximum building height of 12 storeys (36m) including car park, or the plot ratio, site coverage and height of the building which was in existence on the date of the first publication in the Gazette of the notice of the draft development permission area plan, whichever is the greater. The lowest three floors could be used for commercial and car parking purposes which could have a maximum site coverage of 100%.
- (c) On land designated “Residential (Group A) 3”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic gross floor area of 208,600m², a maximum non-domestic gross floor area of 13,500m² and a maximum building height of 90mPD.
- (d) **On land designated “Residential (Group A) 4”, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 6 and a maximum building height of 135mPD. In determining the maximum plot ratio, the area of any part of the site that is occupied or intended to be occupied by free-standing purpose-designed buildings (including both developed on ground and on podium level) solely for accommodating Government, institution or community facilities including school(s) as may be required by Government shall be deducted from calculation of the site area.**
- (de) In determining the maximum plot ratio/gross floor area and site coverage for the purposes of paragraphs (a) to (ed) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker’s office, or caretaker’s

quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.

- (ef) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/gross floor area, site coverage and building height restrictions stated in paragraphs (a) to (ed) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

RESIDENTIAL (GROUP B)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Flat	Ambulance Depot
Government Use (Police Reporting Centre, Post Office only)	Eating Place
House	Educational Institution
Library	Government Refuse Collection Point
Residential Institution	Government Use (not elsewhere specified)
School (in free-standing purpose-designed building only) #	Hospital
Utility Installation for Private Project	Hotel
	Institutional Use (not elsewhere specified)
	Market
	Off-course Betting Centre
	Office
	Petrol Filling Station
	Place of Entertainment
	Place of Recreation, Sports or Culture
	Private Club
	Public Clinic
	Public Convenience
	Public Transport Terminus or Station
	Public Utility Installation
	Public Vehicle Park (excluding container vehicle)
	Recyclable Collection Centre
	Religious Institution
	Rural Committee /Village Office
	School (not elsewhere specified)
	Shop and Services
	Social Welfare Facility
	Training Centre

Planning Intention

This zone is intended primarily for sub-urban medium-density residential developments in rural areas where commercial uses serving the residential neighbourhood may be permitted on application to the Town Planning Board.

(Please see next page)

RESIDENTIAL (GROUP B) (cont'd)

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building (except development or redevelopment to the use annotated with #) shall result in a total development and/or redevelopment in excess of the maximum plot ratio, site coverage and building height specified below, or the plot ratio, site coverage and height of the building which was in existence on the date of the first publication in the Gazette of the notice of the draft development permission area plan, whichever is the greater:

<u>Sub-area</u>	<u>Maximum No. of Storeys</u>	<u>Maximum Building Height</u>	<u>Maximum Plot Ratio</u>	<u>Maximum Site Coverage</u>
"R(B)1"	5 storeys including car park	15m	1.0	40%
"R(B)2"	6 storeys over single-storey car park	21m	1.26	40%

- (b) In determining the maximum plot ratio and site coverage for the purposes of paragraph (a) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, or caretaker's quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio, site coverage and building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

RESIDENTIAL (GROUP C)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Flat	Ambulance Depot
Government Use (Police Reporting Centre, Post Office only)	Eating Place
House	Educational Institution
Utility Installation for Private Project	Government Refuse Collection Point
	Government Use (not elsewhere specified)
	Hospital
	Hotel
	Institutional Use (not elsewhere specified)
	Library
	Petrol Filling Station
	Place of Recreation, Sports or Culture
	Private Club
	Public Clinic
	Public Convenience
	Public Transport Terminus or Station
	Public Utility Installation
	Public Vehicle Park (excluding container vehicle)
	Recyclable Collection Centre
	Religious Institution
	Residential Institution
	Rural Committee /Village Office
	School
	Shops and Services
	Social Welfare Facility
	Training Centre

Planning Intention

This zone is intended primarily for low-rise, low-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Town Planning Board.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 0.4 and a maximum building height of 3 storeys (9m) including car park, or the plot ratio, site coverage and height of the building which was in existence on the date of the first publication in the Gazette of the notice of the draft development permission area plan, whichever is the greater.

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RESIDENTIAL (GROUP C) (cont'd)

Remarks (cont'd)

- (b) In determining the maximum plot ratio for the purposes of paragraph (a) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, or caretaker's quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio and building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

RESIDENTIAL (GROUP E)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Schedule I: for open-air development or for building other than industrial building	
Ambulance Depot	Eating Place
Government Use (Police Reporting Centre, Post Office only)	Educational Institution
Rural Committee/Village Office	Flat
Utility Installation for Private Project	Government Refuse Collection Point
	Government Use (not elsewhere specified)
	House (other than rebuilding of New Territories Exempted House or replacement of existing domestic building by New Territories Exempted House permitted under the covering Notes)
	Institutional Use (not elsewhere specified)
	Library
	Market
	Office
	Petrol Filling Station
	Place of Entertainment
	Place of Recreation, Sports or Culture
	Private Club
	Public Clinic
	Public Convenience
	Public Transport Terminus or Station
	Public Utility Installation
	Public Vehicle Park (excluding container vehicle)
	Recyclable Collection Centre
	Religious Institution
	Residential Institution
	School
	Shop and Services
	Social Welfare Facility
	Training Centre

(Please see next page)

RESIDENTIAL (GROUP E) (cont'd)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
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Schedule II: for existing industrial development

Eating Place (Canteen only)	Office
Government Refuse Collection Point	Petrol Filling Station
Government Use (not elsewhere specified)	Public Convenience
Public Utility Installation	Public Vehicle Park (excluding container vehicle)
Recyclable Collection Centre	Shop and Services (ground floor only)
Rural Workshop	Vehicle Repair Workshop
Utility Installation for Private Project	Wholesale Trade
Warehouse (excluding Dangerous Goods Godown)	

Planning Intention

This zone is intended primarily for phasing out of existing industrial uses through redevelopment for residential use on application to the Town Planning Board. Whilst existing industrial uses will be tolerated, new industrial developments are not permitted in order to avoid perpetuation of industrial/residential interface problem.

Remarks

- (a) No new development shall exceed a maximum plot ratio of 0.6 and a maximum building height of 5 storeys including car park.
- (b) No addition, alteration and/or modification to or redevelopment of an existing building (except redevelopment to 'New Territories Exempted House') shall exceed the plot ratio and building height restrictions stated in paragraph (a) above, or the plot ratio, site coverage and height of the building which was in existence on the date of the first publication in the Gazette of the notice of the draft development permission area plan, whichever is the greater, subject to redevelopment to the plot ratio in the latter restriction shall be permitted only if the existing building is a domestic building.
- (c) In determining the maximum plot ratio for the purposes of paragraph (a) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, or caretaker's quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (d) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio and building height restrictions stated in paragraphs (a) and (b) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

VILLAGE TYPE DEVELOPMENT

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Agricultural Use Government Use (Police Reporting Centre, Post Office only) House (New Territories Exempted House only) On-Farm Domestic Structure Religious Institution (Ancestral Hall only) Rural Committee /Village Office	Burial Ground Eating Place Flat Government Refuse Collection Point Government Use (not elsewhere specified) # House (not elsewhere specified) Institutional Use (not elsewhere specified) # Market Petrol Filling Station Place of Recreation, Sports or Culture Private Club Public Clinic Public Convenience Public Transport Terminus or Station Public Utility Installation # Public Vehicle Park (excluding container vehicle) Religious Institution (not elsewhere specified) # Residential Institution # School # Shop and Services Social Welfare Facility # Utility Installation for Private Project

In addition, the following uses are always permitted on the ground floor of a New Territories Exempted House:

Eating Place
 Library
 School
 Shop and Services

(Please see next page)

VILLAGE TYPE DEVELOPMENT (cont'd)

Planning Intention

The planning intention of this zone is to reflect existing recognized and other villages, and to provide land considered suitable for village expansion and reprovisioning of village houses affected by Government projects. Land within this zone is primarily intended for development of Small Houses by indigenous villagers. It is also intended to concentrate village type development within this zone for a more orderly development pattern, efficient use of land and provision of infrastructures and services. Selected commercial and community uses serving the needs of the villagers and in support of the village development are always permitted on the ground floor of a New Territories Exempted House. Other commercial, community and recreational uses may be permitted on application to the Town Planning Board.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building (except development or redevelopment to those annotated with #) shall result in a total development and/or redevelopment in excess of a maximum building height of 3 storeys (8.23m) or the height of the building which was in existence on the date of the first publication in the Gazette of the notice of the Lau Fau Shan and Tsim Bei Tsui Interim Development Permission Area Plan/draft Ping Shan Development Permission Area Plan, whichever is the greater.
- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restriction stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.
- (c) Any filling of land/pond or excavation of land, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes (except public works co-ordinated or implemented by Government, and maintenance, repair or rebuilding works), shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the Lau Fau Shan and Tsim Bei Tsui Interim Development Permission Area Plan/draft Ping Shan Development Permission Area Plan without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance.

INDUSTRIAL

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Ambulance Depot	Broadcasting, Television and/or Film Studio
Bus Depot	Cargo Handling and Forwarding Facility
Eating Place (Canteen, Cooked Food Centre only)	Asphalt Plant/Concrete Batching Plant
Government Refuse Collection Point	Container Vehicle Park/Container Vehicle Repair Yard
Government Use (not elsewhere specified)	Dangerous Goods Godown
Industrial Use (not elsewhere specified)	Eating Place (not elsewhere specified) (in wholesale conversion of an existing building only)
Information Technology and Telecommunications Industries	Educational Institution (in wholesale conversion of an existing building only)
Office (Audio-visual Recording Studio, Design and Media Production, Office Related to Industrial Use only)	Exhibition or Convention Hall
Public Convenience	Industrial Use (Bleaching and Dyeing Factory, Electroplating/Printed Circuit Board Manufacture Factory, Metal Casting and Treatment Factory/Workshop only)
Public Transport Terminus or Station	Institutional Use (not elsewhere specified) (in wholesale conversion of an existing building only)
Public Utility Installation	Off-course Betting Centre
Public Vehicle Park (excluding container vehicle)	Offensive Trades
Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation	Office (not elsewhere specified)
Recyclable Collection Centre	Open Storage
Research, Design and Development Centre	Petrol Filling Station
Shop and Services (Motor-vehicle Showroom on ground floor, Service Trades only)	Place of Entertainment (in wholesale conversion of an existing building only)
Utility Installation for Private Project	Place of Recreation, Sports or Culture
Vehicle Repair Workshop	Private Club
Warehouse (excluding Dangerous Goods Godown)	Public Clinic (in wholesale conversion of an existing building only)
	Religious Institution (in wholesale conversion of an existing building only)
	Shop and Services (not elsewhere specified) (ground floor only, except in wholesale conversion of an existing building and Ancillary Showroom# which may be permitted on any floor)
	Training Centre
	Vehicle Stripping/Breaking Yard
	Wholesale Trade

(Please see next page)

INDUSTRIAL (cont'd)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
In addition, the following uses are always permitted in the purpose-designed non-industrial portion on the lower floors (except basements and floors containing wholly or mainly car parking, loading/unloading bays and/or plant room) of an existing building, provided that the uses are separated from the industrial uses located above by a buffer floor or floors and no industrial uses are located within the non-industrial portion:	In addition, the following use may be permitted with or without conditions on application to the Town Planning Board in the purpose-designed non-industrial portion on the lower floors (except basements and floors containing wholly or mainly car parking, loading/unloading bays and/or plant room) of an existing building, provided that the use is separated from the industrial uses located above by a buffer floor or floors and no industrial uses are located within the non-industrial portion:
Eating Place Educational Institution Exhibition or Convention Hall Institutional Use (not elsewhere specified) Off-course Betting Centre Office Place of Entertainment Place of Recreation, Sports or Culture Private Club Public Clinic Religious Institution Shop and Services Training Centre	Social Welfare Facility (excluding those involving residential care)

Ancillary Showroom requiring planning permission refers to showroom use of greater than 20% of the total usable floor area of an industrial firm in the same premises or building.

Planning Intention

This zone is intended primarily for general industrial uses to ensure an adequate supply of industrial floor space to meet demand from production-oriented industries. Information technology and telecommunications industries and office related to industrial use are also always permitted in this zone.

(Please see next page)

INDUSTRIAL (cont'd)

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 2.5 and a maximum building height of 13.5m, or the plot ratio and height of the building which was in existence on the date of the first publication in the Gazette of the notice of the draft development permission area plan, whichever is the greater.
- (b) In determining the maximum plot ratio for the purposes of paragraph (a) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio and building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

INDUSTRIAL (GROUP D)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Eating Place (Canteen, Cooked Food Centre only)	Animal Boarding Establishment
Government Refuse Collection Point	Broadcasting Television and/or Film Studio
Government Use (not elsewhere specified)	Cargo Handling and Forwarding Facility
Industrial Use (not elsewhere specified)	Asphalt Plant/Concrete Batching Plant
Open Storage (not elsewhere specified)	Container Storage/Repair Yard
Public Convenience	Container Vehicle Park/Container Vehicle Repair Yard
Public Utility Installation	Dangerous Goods Godown
Public Vehicle Park (excluding container vehicle)	Eating Place (not elsewhere specified)
Recyclable Collection Centre	Offensive Trades
Rural Workshop	Open Storage of Cement/Sand
Shop and Services (Service Trades only)	Open Storage of Chemical Products/ Dangerous Goods
Utility Installation for Private Project	Petrol Filling Station
Vehicle Repair Workshop	Refuse Disposal Installation (Refuse Transfer Station only)
Warehouse (other than Dangerous Goods Godown)	Shop and Services (not elsewhere specified)
Wholesale Trade	Vehicle Stripping/Breaking Yard

Planning Intention

This zone is intended primarily for industrial uses that cannot be accommodated in conventional flatted factories due to extensive land and/or high ceiling requirements. It is also intended for the redevelopment of existing informal industrial uses, which are operated in workshop premises in rural area, to properly designed permanent industrial buildings.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 1.6, a maximum site coverage of 80% and a maximum building height of 13m, or the plot ratio, site coverage and height of the building which was in existence on the date of the first publication in the Gazette of the notice of the draft development permission area plan, whichever is the greater.

(Please see next page)

INDUSTRIAL (GROUP D) (cont'd)

Remarks (cont'd)

- (b) In determining the maximum plot ratio and site coverage for the purposes of paragraph (a) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio, site coverage and building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

OPEN STORAGE

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to The Town Planning Board
Agricultural Use	Cargo Handling and Forwarding Facility
Eating Place (Canteen only)	Cement Manufacturing
Government Refuse Collection Point	Asphalt Plant/Concrete Batching Plant
Government Use (not elsewhere specified)	Container Storage/Repair Yard
On-Farm Domestic Structure	Container Vehicle Park/Container Vehicle Repair Yard
Open Storage (not elsewhere specified)	Dangerous Goods Godown
Public Convenience	Eating Place (not elsewhere specified)
Public Utility Installation	Industrial Use (not elsewhere specified)
Public Vehicle Park (excluding container vehicle)	Open Storage of Cement/Sand
Rural Workshop	Open Storage of Chemical Products/Dangerous Goods
Shop and Services (Service Trades only)	Petrol Filling Station
Utility Installation for Private Project	Shop and Services (not elsewhere specified)
Vehicle Repair Workshop	Vehicle Stripping/Breaking Yard
Warehouse (excluding Dangerous Goods Godown)	Wholesale Trade

Planning Intention

This zone is intended primarily for the provision of land for appropriate open storage uses and to regularize the already haphazard proliferation of open storage uses. It provides for the orderly development of land for open storage uses that cannot be accommodated in conventional godown premises.

GOVERNMENT, INSTITUTION OR COMMUNITY

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Ambulance Depot	Animal Boarding Establishment
Animal Quarantine Centre (in Government building only)	Animal Quarantine Centre (not elsewhere specified)
Broadcasting, Television and/or Film Studio	Columbarium
Eating Place (Canteen, Cooked Food Centre only)	Correctional Institution
Educational Institution	Crematorium
Exhibition or Convention Hall	Driving School
Field Study/Education/Visitor Centre	Eating Place (not elsewhere specified)
Government Refuse Collection Point	Firing Range
Government Use (not elsewhere specified)	Flat
Hospital	Funeral Facility
Institutional Use (not elsewhere specified)	Helicopter Fuelling Station
Library	Helicopter Landing Pad
Market	Holiday Camp
Place of Recreation, Sports or Culture	Hotel
Public Clinic	House (other than rebuilding of New Territories Exempted House or replacement of existing domestic building by New Territories Exempted House permitted under the covering Notes)
Public Convenience	Off-course Betting Centre
Public Transport Terminus or Station	Office
Public Utility Installation	Petrol Filling Station
Public Vehicle Park (excluding container vehicle)	Place of Entertainment
Recyclable Collection Centre	Private Club
Religious Institution	Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation
Research, Design and Development Centre	Refuse Disposal Installation (Refuse Transfer Station only)
Rural Committee /Village Office	Residential Institution
School	Sewage Treatment/Screening Plant
Service Reservoir	Shop and Services
Social Welfare Facility	Utility Installation for Private Project
Training Centre	Zoo
Wholesale Trade	

Planning Intention

This zone is intended primarily for the provision of Government, institution or community facilities serving the needs of the local residents and/or a wider district, region or the territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institutional establishments.

OPEN SPACE

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Aviary Barbecue Spot Field Study/Education/Visitor Centre Park and Garden Pavilion Pedestrian Area Picnic Area Playground/Playing Field Public Convenience Sitting Out Area Zoo	Eating Place Government Refuse Collection Point Government Use (not elsewhere specified) Holiday Camp Place of Entertainment Place of Recreation, Sports or Culture Private Club Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Religious Institution Service Reservoir Shop and Services Tent Camping Ground Utility Installation for Private Project

Planning Intention

This zone is intended primarily for the provision of outdoor open-air public space for active and/or passive recreational uses serving the needs of local residents as well as the general public.

RECREATION

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Agricultural Use Barbecue Spot Field Study /Education/Visitor Centre Government Use (Police Reporting Centre only) Holiday Camp On-Farm Domestic Structure Picnic Area Place of Recreation, Sports or Culture Public Convenience Rural Committee /Village Office Tent Camping Ground	Animal Boarding Establishment Broadcasting, Television and/or Film Studio Cable Car Route and Terminal Building Eating Place Flat Golf Course Government Refuse Collection Point Government Use (not elsewhere specified) Helicopter Landing Pad Hotel House (other than rebuilding of New Territories Exempted House or replacement of existing domestic building by New Territories Exempted House permitted under the covering Notes) Place of Entertainment Private Club Public Utility Installation Public Vehicle Park (excluding container vehicle) Religious Institution Residential Institution Shop and Services Theme Park Utility Installation for Private Project Zoo

Planning Intention

This zone is intended primarily for recreational developments for the use of the general public. It encourages the development of active and/or passive recreation and tourism/eco-tourism. Uses in support of the recreational developments may be permitted subject to planning permission.

Remarks

- (a) No residential development (except 'New Territories Exempted House') shall result in a total development in excess of a maximum plot ratio of 0.2 and a maximum building height of 2 storeys (6m).
- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio and building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

(Please see next page)

RECREATION (cont'd)

Remarks (cont'd)

- (c) Any filling of land/pond or excavation of land, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes (except public works co-ordinated or implemented by Government, and maintenance, repair or rebuilding works), shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the draft development permission area plan without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance.

GREEN BELT

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Agricultural Use	Animal Boarding Establishment
Barbecue Spot	Broadcasting, Television and/or Film Studio
Government Use (Police Reporting Centre only)	Burial Ground
Nature Reserve	Columbarium (within a Religious Institution or extension of existing Columbarium only)
Nature Trail	Crematorium (within a Religious Institution or extension of existing Crematorium only)
On-Farm Domestic Structure	Field Study/Education/Visitor Centre
Picnic Area	Firing Range
Public Convenience	Flat
Tent Camping Ground	Golf Course
Wild Animals Protection Area	Government Refuse Collection Point
	Government Use (not elsewhere specified)
	Helicopter Landing Pad
	Holiday Camp
	House (other than rebuilding of New Territories Exempted House or replacement of existing domestic building by New Territories Exempted House permitted under the covering Notes)
	Petrol Filling Station
	Place of Recreation, Sports or Culture
	Public Transport Terminus or Station
	Public Utility Installation
	Public Vehicle Park (excluding container vehicle)
	Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation
	Religious Institution
	Residential Institution
	Rural Committee/Village Office
	School
	Service Reservoir
	Social Welfare Facility
	Utility Installation for Private Project
	Zoo

(Please see next page)

GREEN BELT (cont'd)

Planning Intention

The planning intention of this zone is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets. There is a general presumption against development within this zone.

Remarks

Any filling or excavation of land, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes (except public works co-ordinated or implemented by Government, and maintenance, repair or rebuilding works), shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the draft development permission area plan without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance.

CONSERVATION AREA

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Agricultural Use (other than Plant Nursery)	Barbecue Spot
Nature Reserve	Field Study/Education/Visitor Centre
Nature Trail	Government Refuse Collection Point
On-Farm Domestic Structure	Government Use (not elsewhere specified)
Picnic Area	Holiday Camp
Wild Animals Protection Area	House (Redevelopment only)
	Public Convenience
	Public Utility Installation
	Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation
	Tent Camping Ground
	Utility Installation for Private Project

Planning Intention

This zoning is intended to protect and retain the existing natural landscape, ecological or topographical features of the area for conservation, educational and research purposes.

There is a general presumption against development in this zone. In general, only developments that are needed to support the conservation of the existing natural landscape or scenic quality of the area or are essential infrastructure project with overriding public interest may be permitted.

Remarks

- (a) No redevelopment, including alteration and/or modification, of an existing house shall result in a total redevelopment in excess of the plot ratio, site coverage and height of the house which was in existence on the date of the first publication in the Gazette of the notice of the draft development permission area plan.
- (b) Any filling of land/pond or excavation of land, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes, shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the draft development permission area plan without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance.

OTHER SPECIFIED USES

For “Heritage and Cultural Tourism Related Uses” Only

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
	Eating Place Educational Institution Exhibition or Convention Hall Field Study/Education/Visitor Centre Government Use (not elsewhere specified) Hotel House (rebuilding of New Territories Exempted House only) Institutional Use (not elsewhere specified) Library Market Office Place of Entertainment Place of Recreation, Sports or Culture Private Club Public Convenience Public Utility Installation Public Vehicle Park (excluding container vehicle) Religious Institution Rural Committee/Village Office School Shop and Services Social Welfare Facility Training Centre Utility Installation for Private Project

Planning Intention

This zone is intended primarily to facilitate provision of heritage and cultural tourism related facilities or uses that are complementary to the Tsui Sing Lau Pagoda and Tat Tak Communal Hall as heritage attractions and visually compatible with the historical buildings.

Remarks

- (a) An applicant for permission for development on land designated “Other Specified Uses” annotated “Heritage and Cultural Tourism Related Uses” shall prepare a layout plan for the zone and other documents showing the following information for the consideration of the Town Planning Board:

(Please see next page)

OTHER SPECIFIED USES (cont'd)

For "Heritage and Cultural Tourism Related Uses" Only

Remarks (cont'd)

- (i) the area of proposed land uses, the nature, position, dimensions, and heights of all buildings to be erected in the area;
 - (ii) the proposed total site area and gross floor area for various uses and facilities;
 - (iii) the details and extent of the Government, institution or community (GIC) and recreational facilities, public transport and parking facilities, and open space to be provided within the area;
 - (iv) the alignment, widths and levels of any roads proposed to be constructed within the area;
 - (v) the landscape and design proposals within the area;
 - (vi) the details and programme of supply of utilities and infrastructure to meet the need of the proposed development;
 - (vii) a heritage impact assessment to examine any possible heritage problems that may be caused by the proposed development and the proposed mitigation measures to tackle them;
 - (viii) a visual impact assessment to examine any possible visual problems that may be caused by the proposed development and the proposed mitigation measures to tackle them; and
 - (ix) a traffic impact assessment report to examine any possible traffic problems that may be caused by the proposed development and the proposed mitigation measures to tackle them; and
 - (x) such other information as may be required by the Town Planning Board.
- (b) The layout plan should be supported by an explanatory statement which contains an adequate explanation of the development proposal, including such information as land tenure, relevant lease conditions, existing conditions of the site, the character of the site in relation to the surrounding areas, principles of layout design, major development parameters, and types of GIC and other facilities.
- (c) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 0.4 and a maximum building height of 10mPD, or the plot ratio and height of the existing building, whichever is the greater.

(Please see next page)

OTHER SPECIFIED USES (cont'd)

For "Heritage and Cultural Tourism Related Uses" Only

Remarks (cont'd)

- (d) In determining the maximum plot ratio for the purposes of paragraph (c) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (e) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio and building height restrictions stated in paragraph (c) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

(Please see next page)

OTHER SPECIFIED USES (cont'd)

For “Historical Building Preserved for Cultural and Community Uses” Only

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Exhibition or Convention Hall	Government Use (not elsewhere specified)
Field Study/Education/Visitor Centre	Institutional Use (not elsewhere specified)
Library	Place of Recreation, Sports or Culture
Rural Committee/Village Office	Religious Institution
	School
	Social Welfare Facility

Planning Intention

This zone is intended to preserve the Tsui Sing Lau Pagoda and Tat Tak Communal Hall as heritage attractions with the provision of cultural and community facilities for the enjoyment of the public.

Remarks

- (a) Any addition, alteration and/or modification to the existing building (except restoration works co-ordinated or implemented by Government and those minor alteration and/or modification works which are ancillary and directly related to the always permitted uses or the existing buildings) requires permission from the Town Planning Board under section 16 of the Town Planning Ordinance.
- (b) No addition, alteration and/or modification to the existing building shall result in a total development in excess of the maximum building height specified below, or the height of the existing building, whichever is the greater.

Site

Maximum Building Height

Tsui Sing Lau Pagoda
Tat Tak Communal Hall

3 storeys
1 storey

- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restriction stated in paragraph (b) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

(Please see next page)

OTHER SPECIFIED USES (cont'd)

For "Pumping Station and Associated Facilities" only

Column 1	Column 2
Uses always permitted	Uses that may be permitted with or without conditions on application to the Town Planning Board
As Specified on the Plan	Government Use (not elsewhere specified) Utility Installation not ancillary to the Specified Use

Planning Intention

This zone is intended primarily for the provision of pumping station, flood pond and associated facilities.

~~APPROVED-DRAFT~~ PING SHAN OUTLINE ZONING PLAN NO. S/YL-PS/4414A

EXPLANATORY STATEMENT

EXPLANATORY STATEMENT

APPROVED-DRAFT PING SHAN OUTLINE ZONING PLAN NO. S/YL-PS/4414A

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~~APPROVED-DRAFT~~ PING SHAN OUTLINE ZONING PLAN NO. S/YL-PS/1414A

(Being an ~~Approved~~-a **Draft** Plan for the Purposes of the Town Planning Ordinance)

EXPLANATORY STATEMENT

Note : For the purposes of the Town Planning Ordinance, this statement shall not be deemed to constitute a part of the Plan.

1. INTRODUCTION

This Explanatory Statement is intended to assist an understanding of the approved Ping Shan Outline Zoning Plan (OZP) No. S/YL-PS/14. It reflects the planning intention and objectives of the Town Planning Board (the Board) for various land-use zonings of the Plan.

2. AUTHORITY FOR THE PLAN AND PROCEDURE

- 2.1 Other than a site to the north of Shing Uk Tsuen which was previously included in the Lau Fau Shan and Tsim Bei Tsui Interim Development Permission Area (IDPA) Plan and was excised from the draft Lau Fau Shan and Tsim Bei Tsui OZP for inclusion into the Ping Shan OZP, the land covering the existing planning scheme area of Ping Shan was previously included in the Ping Shan Development Permission Area (DPA) Plan.
- 2.2 On 18 June 1993, the draft Ping Shan DPA Plan No. DPA/YL-PS/1 was exhibited for public inspection under section 5 of the Town Planning Ordinance (the Ordinance). On 28 May 1996, the then Governor in Council under section 9(1)(a) of the Ordinance approved the draft Ping Shan DPA Plan which was renumbered as DPA/YL-PS/2.
- 2.3 On 13 March 1995, under the power delegated by the then Governor, the then Secretary for Planning, Environment and Lands directed the Board, under section 3(1)(a) of the Ordinance, to prepare an OZP for the Ping Shan area.
- 2.4 On 14 June 1996, the draft Ping Shan OZP No. S/YL-PS/1 was exhibited for public inspection under section 5 of the Ordinance. The draft OZP was later amended and exhibited three times under section 7 of the Ordinance to reflect the changing circumstances.
- 2.5 On 22 February 2000, the Chief Executive in Council (CE in C), under section 9(1)(a) of the Ordinance, approved the draft Ping Shan OZP, which was renumbered as S/YL-PS/5.
- 2.6 On 20 February 2001, the CE in C referred the approved Ping Shan OZP No. S/YL-PS/5 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance.

- 2.7 On 30 March 2001, the draft Ping Shan OZP No. S/YL-PS/6 was exhibited for public inspection under section 5 of the Ordinance. The draft OZP was later amended and exhibited twice under section 7 of the Ordinance to reflect the changing circumstances.
- 2.8 On 1 April 2003, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Ping Shan OZP, which was subsequently renumbered as S/YL-PS/9.
- 2.9 On 8 July 2003, the CE in C referred the approved Ping Shan OZP No. S/YL-PS/9 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance.
- 2.10 On 26 March 2004, the draft Ping Shan OZP No. S/YL-PS/10 was exhibited for public inspection under section 5 of the Ordinance.
- 2.11 On 1 February 2005, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Ping Shan OZP, which was subsequently renumbered as S/YL-PS/11. On 18 February 2005, the approved Ping Shan OZP No. S/YL-PS/11 was exhibited under section 9(5) of the Ordinance.
- 2.12 On 1 June 2010, the CE in C referred the approved Ping Shan OZP No. S/YL-PS/11 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance.
- 2.13 On 5 November 2010, the draft Ping Shan OZP No. S/YL-PS/12, ~~incorporating amendments mainly to rezone two areas from “Undetermined” (“U”) to “Comprehensive Development Area” (“CDA”), “Government, Institution or Community” (“G/IC”), “Green Belt” (“GB”), “Village Type Development” and “Other Specified Uses”, and amendments to the remarks of the Notes for the “Residential (Group A)3” zone to increase the development intensity,~~ was exhibited for public inspection under section 5 of the Ordinance. ~~During the statutory public inspection period, no representation was received.~~
- 2.14 On 30 June 2011, the draft Ping Shan OZP No. S/YL-PS/13, ~~incorporating the amendments to the Notes of the “Industrial” zone,~~ was exhibited for public inspection under section 7 of the Ordinance. ~~During the statutory public inspection period, a supportive representation was received. On 16 September 2011, the representation was published for three weeks for public comments. Upon the expiry of the exhibition period, no comment was received.~~
- 2.15 On 8 May 2012, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Ping Shan OZP, which was subsequently re-numbered as S/YL-PS/14 ~~(the Plan)~~. On 18 May 2012, the approved Ping Shan OZP was exhibited for public inspection under section 9(5) of the Ordinance.
- 2.16 On 11.3.2014, the CE in C referred the approved Ping Shan OZP No. S/YL-PS/14 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance.**
- 2.17 On xx.xx.2014, the draft Ping Shan OZP No. S/YL-PS/15 (the Plan),**

incorporating amendments to rezone a site to the west of Long Ping Estate in Wang Chau from “GB” to “Residential (Group A) 4” (“R(A)4”) for public housing development and corresponding amendments to the Notes of the Plan, was exhibited for public inspection under section 5 of the Ordinance.

3. OBJECT OF THE PLAN

- 3.1 The object of the Plan is to indicate the broad land-use zonings and the transport networks for the Ping Shan area so that development and redevelopment within the area can be put under statutory planning control. It also provides the planning framework for preparing more detailed non-statutory plans which form the basis for public works planning and site reservation for various uses.
- 3.2 The Plan is to illustrate the broad principles of development and control. It is a small-scale plan and the transport alignments and boundaries between the land-use zones may be subject to minor adjustments as detailed planning proceeds.
- 3.3 Since the Plan is to show broad land use zonings, there would be cases that small strips of land not intended for building development purposes and carry no development right under the lease, such as the areas restricted for garden, slope maintenance and access road purposes, are included in the residential zones. The general principle is that such areas should not be taken into account in plot ratio and site coverage calculations. Development within residential zones should be restricted to building lots carrying development right in order to maintain the character and amenity of the Area and not to overload the road network in this Area.
- 3.4 The boundary of the Area is delineated having regard to physical and topographical features such as road, drainage channel and hills. Therefore, the Area boundary does not necessarily follow the Heung boundaries which are used for administration purpose only. Also, the name of the Plan is to follow that of the geographical area and has no implications on development rights, particularly Small House applications.

4. NOTES OF THE PLAN

- 4.1 Attached to the Plan is a set of Notes which shows the types of uses or developments which are always permitted within the area and in particular zones and which may be permitted by the Board, with or without conditions, on application. The provision for application for planning permission under section 16 of the Ordinance allows greater flexibility in land use planning and control of development to meet changing needs.
- 4.2 For the guidance of the general public, a set of definitions that explains some of the terms used in the Notes may be obtained from the Technical Services Division of the Planning Department and can be downloaded from the Board's

website at <http://www.info.gov.hk/tpb>.

5. THE PLANNING SCHEME AREA

- 5.1 The Planning Scheme Area (the Area) measures about 600.19 ha. It is located in the western part of the North West New Territories (NWNT). It is bounded by the Tin Shui Wai New Town in the north, Castle Peak Road in the south, Yuen Long New Town in the east and the Ha Tsuen/Tsing Shan Firing Range in the west. The boundary of the Area is shown by a heavy broken line on the Plan.
- 5.2 The Area is divided into two portions by Long Tin Road. The portion to the south-west of Long Tin Road consists mostly of low-lying flat land and a few wooded hills near existing villages. To the north-east of Long Tin Road are a group of knolls known as Kai Shan and the foothills and lowlands adjoining the Tin Shui Wai New Town to the west and the Yuen Long New Town to the east and south-east. The Area is mainly occupied by village settlements, vegetated hillslopes and industrial workshops. In recent years, most agricultural land along Ping Ha Road and Hung Tin Road has been converted for open storage and workshop uses. These uses have led to rapid degradation of the environment.
- 5.3 Residential development mainly concentrates along Castle Peak Road and in Hung Shui Kiu. At present, Hung Shui Kiu is a local centre. Hung Shui Kiu is intended to be developed as the district centre serving the Tuen Mun-Yuen Long Corridor Area (Corridor Area) with a mix of commercial, residential and Government, institution or community (GIC) uses. Another growth area would be Ping Shan South near Ping Shan San Tsuen, which is intended to serve as a local centre providing a smaller range of GIC facilities and lower order retail facilities.
- 5.4 In recognition of the traditional burial rights of the indigenous villagers, some burial grounds have been preserved near the existing recognized villages.

6. POPULATION

- 6.1 According to the ~~2006 Population By-census~~**2011 Census**, the population of the Area was about ~~14,490~~**16,150** persons. The population concentrates in and around fourteen recognized villages.
- 6.2 ~~Future expansion of the population in the Area will be concentrated in existing villages and the Hung Shui Kiu area, and along Castle Peak Road. It is estimated that the total planned population will~~**would** be about ~~39,100~~**61,300** persons.

7. OPPORTUNITIES AND CONSTRAINTS

7.1 Opportunities

- 7.1.1 The completion of the Light Rail (LR), Long Tin Road, Hung Tin Road, Yuen Long Highway and Route 3 have improved the accessibility of the Area. With the implementation of the West Rail (WR), the accessibility of the Area has further improved. Apart from the LR network which extends to Tin Shui Wai New Town, the WR passes through the northern periphery of the Area, with Tin Shui Wai Station located to the immediate south of Tin Shui Wai New Town. All these transport facilities have increased the development potential of the Area.
- 7.1.2 Most of the agricultural land in Ping Shan has been converted for vehicle park, open storage and workshop uses. There is limited prospect for reactivating agricultural activities as the cost of land is high.
- 7.1.3 Opportunities would be identified for environmental upgrading of the existing vehicle parks, open storages and workshops along Castle Peak Road, Long Ping Road and Long Tin Road. One possible way is through up-zoning of these sites to provide incentives for redevelopment and environmental upgrading.

7.2 Constraints

- 7.2.1 The WR is expected to pose constraints to the nearby developments in terms of access and environmental impact. Mitigation measures will be required when nearby development proceeds. Land uses designated on the OZP have to take into account the railway alignment as far as possible.
- 7.2.2 Areas adjoining Tin Shui Wai New Town along Ping Ha Road, Tin Fuk Road and Tin Tsz Road are located in the flood plain and flooding is evident. Development in such areas would need to incorporate drainage improvement works based on findings of drainage impact assessments.
- 7.2.3 There are fourteen recognized villages in the Area. Sufficient land has to be reserved for meeting the Small House demand as well as future expansion of these villages.
- 7.2.4 The potential areas for sub-urban development in Ping Shan are confined to the lowlands. The Kai Shan area is more suitable for conservation and recreational uses. In particular, the northern part of Kai Shan is within the Wetland Buffer Area of which the intention is to prevent development that would have a negative off-site disturbance impact on the ecological value of fish ponds in Deep Bay.

8. GENERAL PLANNING INTENTION

- 8.1 A large portion of the rural area in Ping Shan has been subjected to “urban transition” uses such as vehicle park, open storage, godown and workshop uses. As the Corridor Area falls outside new towns and has not been given priority in

Government's overall development strategy, public expenditure on the provision of major infrastructure facilities in the Area will be limited. With improvement in accessibility due to committed and planned transport links, these areas have potential in the long run for more comprehensive and orderly sub-urban development through public and private initiatives. As such, the general planning intentions for Ping Shan area are:

- (a) to encourage upgrading of the environment through comprehensively planned developments;
- (b) to exploit future development potential by developing growth areas where basic infrastructure has been planned or made available;
- (c) to reserve sufficient land for village expansion;
- (d) to reserve land for strategic road/LR/railway links;
- (e) to protect historical and cultural heritage sites; and
- (f) to conserve the natural landscape of the upland areas.

8.2 It is also the general planning intention to develop Hung Shui Kiu as the district centre to provide higher order commercial facilities for the Corridor Area. The area near Ping Shan San Tsuen would be developed into a local centre to provide lower order commercial and retailing facilities for the residents of the Area.

8.3 The areas along Castle Peak Road and the LR Corridor would be subject to traffic noise impact and the implementation of appropriate noise mitigation measures, such as the use of screening structures and self-protective building layout and design, to keep the environmental impacts within the established standards and guidelines is required.

8.4 In the designation of various zones in the Plan, considerations have been given to the natural environment, physical landform, existing settlements, land status, availability of infrastructure, local development pressures, Territorial Development Strategy Review and North West New Territories (Yuen Long District) Development Statements Study (NWNT DSS) under the NWNT Development Strategy Review. Other than the above, buildings and places of historical and archaeological interest would be preserved in the Area as far as possible.

9. LAND-USE ZONINGS

9.1 Comprehensive Development Area ("CDA") : Total Area : 32.25ha

9.1.1 This zone is intended for comprehensive development/redevelopment of the area for residential use with commercial, open space and other supporting facilities. It is to facilitate appropriate planning control over

the development mix, scale, design and layout of development, taking account of various environmental, traffic, infrastructure and other constraints. Although existing uses are tolerated, pursuant to section 4A(1) of the Ordinance, any development/redevelopment on sites under this zoning requires planning permission under section 16 of the Ordinance. Pursuant to section 4A(2) of the Ordinance, and except as otherwise expressly provided that it is not required by the Board, the applicant should prepare a Master Layout Plan (MLP) together with information specified in the Notes. The approved MLP shall be made available for public inspection in the Land Registry pursuant to section 4A(3) of the Ordinance.

9.1.2 Seven areas are zoned “CDA”. Two of them are located on the north side of Castle Peak Road at the junction with Ping Ha Road. They are currently occupied by light manufacturing factories, godowns and a few residential houses. The intention of these two “CDAs” is to encourage the phasing out of the existing industrial uses by redevelopment to residential uses. The “CDA” to the south of the WR Tin Shui Wai Station is to facilitate the implementation of comprehensive commercial/residential development on top of the proposed public transport interchange. The “CDA” in Hung Shui Kiu is proposed to be developed by the Mass Transit Rail Corporation (MTRC) to accommodate the LR facilities and associated commercial and residential development. An area bounded by Long Tin Road, Long Ping Road, and the WR viaduct are divided into three “CDAs”. The “CDA” at the central part of the area mainly consists of clusters of residential dwellings. The eastern and western “CDAs” of the area are occupied by temporary structures, vehicle parks, open storage yards, and workshops intermixed with scattered residential dwellings in a degraded or disorderly condition. The intention of these three “CDAs” is to facilitate comprehensive upgrading of the area for low-rise low-density development.

9.1.3 The maximum gross floor area (GFA), plot ratio (PR) and building height for the “CDAs” are specified as follows :

<u>Location of “CDAs”</u>	<u>Maximum GFA</u>	<u>Maximum PR</u>	<u>Maximum Building Height</u>
The “CDA” west of Hung Tin Road in Hung Shui Kiu	113,260m ²	-	20 storeys above a 3-storey podium
The “CDA” to the south of the WR Tin Shui Wai Station	-	A domestic PR of 5 or a non-domestic PR of 9.5	-
The “CDA” to the south-east of Tong Fong	-	1.0	5 storeys including car

<u>Location of “CDAs”</u>	<u>Maximum GFA</u>	<u>Maximum PR</u>	<u>Maximum Building Height</u>
Tsuen and west of the junction of Ping Ha Road and Castle Peak Road			park
The “CDA” to the north-east of the junction of Ping Ha Road and Castle Peak Road	-	1.0	5 storeys including car park
The “CDA” to the north-east of Long Tin Road	-	0.4	3 storeys including car park
The “CDA” to the west of Yung Yuen Road and north of Long Tin Road	-	0.4	3 storeys including car park
The “CDA” to the north-west of Long Ping Road	-	0.4	3 storeys including car park

9.1.4 For the three “CDA” zones, bounded by Long Tin Road, Long Ping Road and the WR viaduct, a maximum plot ratio of 0.4 and a maximum height of 3 storeys (including car park) are designated in view of the existing environmental and infrastructure constraints. However, given their strategic location between the Tin Shui Wai and Yuen Long New Towns, a higher development intensity could be considered through the rezoning procedure subject to demonstration by further technical assessments that the currently identified constraints can be overcome. Moreover, the CDAs are subject to adverse traffic noise, railway noise and industrial noise impacts. The building design of new developments/redevelopments should incorporate environmental mitigation measures, including self-protecting building layout design with no direct line of sight to the above-mentioned noise sources, noise barriers and adequate separation, where appropriate, to meet all relevant criteria under the Hong Kong Planning Standards and Guidelines. Planning briefs will be prepared to guide the developments.

9.1.5 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio/GFA and building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual merits.

9.2 Residential (Group A) (“R(A)”) : Total Area : ~~40.77~~ **16.44**ha

9.2.1 To reflect the planning intentions for developing Hung Shui Kiu and Ping Shan South as the district centre and local centre respectively, “R(A)” sites are designated in these areas primarily for high-density residential developments. Under this zoning, commercial uses are always permitted on the lowest three floors of a building or in the purpose-designed non-residential portion of an existing building. There are three sub-areas within this zone:

(a) Residential (Group A)1 (“R(A)1”) : Total Area : 1.24 ha

An area north of Castle Peak Road near Ping Shan San Tsuen is designated for “R(A)1” use. It is intended for residential development with commercial facilities to complement the role of the area as a local centre. Development within this zone is restricted to a maximum plot ratio of 2.66, a maximum site coverage of 66.6% and a maximum building height of 5 storeys (15m) including car park. The lowest three floors could be used for commercial and car parking uses which could have a maximum site coverage of 100%.

(b) Residential (Group A)2 (“R(A)2”) : Total Area : 3.01 ha

An area north of Castle Peak Road in Hung Shui Kiu is designated for “R(A)2” use. It is intended for residential development with higher order commercial facilities to strengthen the role of Hung Shui Kiu as a district centre. Development within this zone is restricted to a maximum plot ratio of 5, a maximum site coverage of 42% and a maximum building height of 12 storeys (36m) including car park. The lowest three floors could be used for commercial and car parking uses which could have a maximum site coverage of 100%.

(c) Residential (Group A)3 (“R(A)3”) : Total Area : 6.52 ha

The area in Hung Shui Kiu west of Hung Tin Road is zoned “R(A)3” and planned for public housing development. The area is subject to a maximum domestic GFA of 208,600m², a maximum non-domestic GFA of 13,500 m² including GIC and public transport facilities and a maximum building height of 90mPD. Various GIC facilities including kindergarten, integrated children and youth services centre, neighbourhood elderly centre, integrated vocational rehabilitation services centre, hostel for moderately mentally handicapped, a public transport interchange as well as open space will be provided in the development to serve the residents as well as to supplement provisions in the Hung Shui Kiu area. To increase visual permeability of the development, view corridors of at least 15m in width extending from a temple at the hilltop to the east of the

site across Hung Tin Road will be provided in the housing development. Details of the alignment and width of these view corridors has been specified in the Planning Brief for the development.

(d) **Residential (Group A) 4 (“R(A)4”) : Total Area : 5.67 ha**

The “R(A)4” zone to the west of Long Ping Estate in Wang Chau is intended for public housing development. Social welfare facilities, school(s) and local open space will be provided within the site. The area is subject to a maximum plot ratio of 6 and a maximum building height of 135mPD. In determining the maximum plot ratio, the area of any part of the site that is occupied or intended to be occupied by free-standing purpose-designed buildings (including both developed on ground and on podium level) solely for accommodating Government, institution or community facilities including school(s) as may be required by Government shall be deducted from calculation of the site area.

9.2.2 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio/GFA, site coverage and building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual merits.

9.2.3 However, for any existing building with plot ratio/GFA, site coverage and building height already exceeding the plot ratio/GFA, site coverage and building height restrictions as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

9.3 **Residential (Group B) (“R(B)”) : Total Area : 15.78 ha**

9.3.1 Land zoned “R(B)” is primarily intended for sub-urban medium-density residential developments in rural areas where commercial uses serving the residential neighbourhood may be permitted on application to the Board. There are two sub-areas within this zone:

(a) **Residential (Group B)1 (“R(B)1”) : Total Area : 3.91 ha**

Three areas are zoned “R(B)1”. Two of them are in Ping Shan South near Ping Shan San Tsuen. The third area is located to the north of Castle Peak Road and to the west of Yung Yuen Road. Development in this zone will be restricted to a maximum plot ratio of 1, a maximum site coverage of 40% and a maximum building height of 15m (5 storeys including car park).

(b) Residential (Group B)2 (“R(B)2”) : Total Area : 11.87 ha

Residential areas zoned “R(B)2” are located in Hung Shui Kiu and are reserved for sub-urban residential development. They are subject to a maximum plot ratio of 1.26, a maximum site coverage of 40% and a maximum building height of 21m (6 storeys over single-storey car park).

9.3.2 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio, site coverage and building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual merits.

9.3.3 However, for any existing building with plot ratio, site coverage and building height already exceeding the plot ratio, site coverage and building height restrictions as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

9.4 Residential (Group C) (“R(C)”) : Total Area : 18.28 ha

9.4.1 This zone is intended primarily for low-rise, low-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Board.

9.4.2 Under this zoning, residential developments are restricted to a maximum plot ratio of 0.4 and a maximum building height of 3 storeys (9m) including car park.

9.4.3 Two areas to the east of San Lee Uk Tsuen and to the south of Tin Sam respectively are zoned “R(C)” as they are constrained by the lack of proper access road. At present they are occupied by temporary structures for domestic purpose and rural workshops.

9.4.4 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio and building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual merits.

9.4.5 However, for any existing building with plot ratio and building height already exceeding the plot ratio and building height restrictions as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

9.5 Residential (Group E) (“R(E)”): Total Area : 4.54 ha

- 9.5.1 This zone is intended primarily for phasing out of existing industrial uses through redevelopment for residential use on application to the Board. Whilst existing industrial uses will be tolerated, new industrial developments are not permitted in order to avoid perpetuation of industrial/residential (I/R) interface problem.
- 9.5.2 Since it may not be possible to phase out all the industrial uses at once, it is important to ensure that the residential development will be environmentally acceptable and not subject to I/R interface problems. The applicant will be required to submit adequate information to demonstrate that the new development will be environmentally acceptable, and suitable mitigation measures, if required, will be implemented to address the potential I/R interface problems. In addition, the applicant will have to prove to the Board that the proposed development would have no or minimal adverse impact on the area in terms of environmental quality, land-use compatibility, infrastructural provision and traffic requirement.
- 9.5.3 Two areas are zoned “Residential (Group E)2”. One of these areas is to the west of Yung Yuen Road. Another area is near the interchange junction of Long Tin Road and Castle Peak Road. Development in this zone will be restricted to a maximum plot ratio of 0.6 and a maximum building height of 5 storeys including car park.
- 9.5.4 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio and building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual merits.
- 9.5.5 However, for any existing building with plot ratio and building height already exceeding the plot ratio and building height restrictions as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

9.6 Village Type Development (“V”) : Total Area : 117.92 ha

- 9.6.1 The planning intention of this zone is to reflect existing recognized and other villages, and to provide land considered suitable for village expansion and reprovisioning of village houses affected by Government projects. Land within this zone is primarily intended for development of Small Houses by indigenous villagers. It is also intended to concentrate village type development within this zone for a more orderly development pattern, efficient use of land and provision of infrastructures and services. Selected commercial and community uses serving the needs of the villagers and in support of the village development are always permitted on the ground floor of a New

Territories Exempted House. Other commercial, community and recreational uses may be permitted on application to the Board.

- 9.6.2 In recognition of the development rights of the indigenous villagers, the fourteen recognized villages within the Area including Ng Uk Tsuen, Shing Uk Tsuen, Tai Tseng Wai, Fung Ka Wai, Ha Mei San Tsuen, Ping Shan San Tsuen, Tong Fong Tsuen, Sheung Cheung Wai, Hang Mei Tsuen, Hang Tau Tsuen, Kiu Tau Wai, Hung Uk Tsuen, San Lee Uk Tsuen and Tin Sam and their expansion areas are zoned “V”.
- 9.6.3 The “V” zone includes a site to the north of Shing Uk Tsuen which was excised from the draft Lau Fau Shan and Tsim Bei Tsui OZP.
- 9.6.4 The boundaries of the “V” zones are drawn up having regard to the existing settlements, village “environs”, topography, site constraints, the anticipated Small House demand for the next ten years and the provision of public services. Village expansion areas and other infrastructural improvements will be guided by detailed layout plans where applicable.
- 9.6.5 Any proposed village type development adjacent to industrial establishments/zones should also provide necessary mitigation measures to minimize the I/R interface problems.
- 9.6.6 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual merits.
- 9.6.7 However, for any existing building with building height already exceeding the building height restrictions as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

9.7 Industrial (“I”) : Total Area : 9.86 ha

- 9.7.1 This zone is intended primarily for general industrial uses to ensure an adequate supply of industrial floor space to meet demand from production-oriented industries. Information technology and telecommunications industries and office related to industrial use are also always permitted in this zone.
- 9.7.2 Offices related to industrial use, being an integral part of industrial function, are also permitted as of right in the “I” zone. However, general commercial and office uses, other than those permitted in Column 1 and in the purpose-designed non-industrial portion on the lower floors of an existing building, will require planning permission from the Board. Some specified industrial uses, offensive trades or dangerous goods godown will also require planning permission from the Board.

- 9.7.3 Development in this zone is subject to a maximum plot ratio of 2.5 and a maximum building height of 13.5m. This would ensure that any new development/redevelopment would be compatible with the building heights and density of the existing industrial establishments in the surrounding areas and with the village environment nearby.
- 9.7.4 The industrial area in Kiu Tau Wai is zoned “I”. To minimize adverse impact caused to the surrounding area, any proposed development in the area should provide the necessary mitigation measures.
- 9.7.5 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio and building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual merits.
- 9.7.6 However, for any existing building with plot ratio and building height already exceeding the plot ratio and building height restrictions as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

9.8 Industrial (Group D) (“I(D)”) : Total Area : 12.22 ha

- 9.8.1 This zone is intended primarily for industrial uses that cannot be accommodated in conventional flatted factories due to extensive land and/or high ceiling requirements. It is also intended for the redevelopment of existing informal industrial uses, which are operated in workshop premises in rural area, to properly designed permanent industrial buildings.
- 9.8.2 New industrial developments are encouraged to be constructed in permanent structures. Each establishment should be provided with water supply and connections for sewage disposal. To avoid pollution, new sites shall be connected to a Government reticulatory sewer system or contain satisfactory on-site sewage treatment facilities. New industrial development should demonstrate that the nature of their operations could not be accommodated in conventional flatted factory accommodation. Developments are restricted to a maximum plot ratio of 1.6, a maximum site coverage of 80% and a maximum building height of 13m.
- 9.8.3 An area to the west of Hung Uk Tsuen is zoned “I(D)”. The area is at present occupied by warehouse and workshop uses. Apart from reflecting the existing land uses, the zoning aims to provide sufficient land for informal industrial development to support industrial activities in Kiu Tau Wai Industrial Area to the immediate north.

9.8.4 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio, site coverage and building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual merits.

9.8.5 However, for any existing building with plot ratio, site coverage and building height already exceeding the plot ratio, site coverage and building height restrictions as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

9.9 Open Storage ("OS") : Total Area : 19.32 ha

9.9.1 This zone is intended primarily for the provision of land for appropriate open storage uses and to regularize the already haphazard proliferation of open storage uses. It provides for the orderly development of land for open storage uses that cannot be accommodated in conventional godown premises.

9.9.2 Specified open storage uses such as container storage, vehicle stripping/breaking yard and storage of dangerous goods, which may cause environmental nuisance, safety hazards or transport problems require permission from the Board. Development proposals for such purposes have to clearly demonstrate that they would have no adverse environmental, drainage, traffic and other impacts on the surrounding areas. Other storage uses (not elsewhere specified), such as storage of agricultural products, construction materials (except storage of cement/sand) and equipment, which will unlikely cause adverse environmental, drainage or transport problems, are always permitted.

9.9.3 The area to the south-west of Yuen Long Industrial Estate at Wang Chau is zoned "OS". It is mostly occupied by open storage of container vehicles. Any further development of similar uses in the area will be expected to provide mitigation measures to prevent environmental degradation.

9.10 Government, Institution or Community ("G/IC") : Total Area : 16.74 ha

9.10.1 This zone is intended primarily for the provision of GIC facilities serving the needs of the local residents and/or a wider district, region or the territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institutional establishments.

9.10.2 Land zoned "G/IC" in the Area includes the Wang Chau Fresh Water Service Reservoir, the Old Ping Shan Police Station (Ping Shan Tang Clan Gallery), electricity substations for railways, a community centre for ethnic minorities, public library cum indoor recreation centre under

construction, sites reserved for area community centre, post office and clinic in Hung Shui Kiu, and the existing and proposed schools.

9.11 Open Space (“O”) : Total Area : 7.50 ha

9.11.1 This zone is intended primarily for the provision of outdoor open-air public space for active and/or passive recreational uses serving the needs of local residents as well as the general public.

9.11.2 Land zoned for open space use is found in the Hung Shui Kiu district centre north of Castle Peak Road, in the northern part of Hung Shui Kiu east of San Lee Uk Tsuen, west of Hung Uk Tsuen, and south-west of Ping Shan San Tsuen along Castle Peak Road. Besides providing recreational opportunities for the public, the open space sites also serve as a buffer between residential uses and other incompatible uses e.g. industrial and open storage uses. Additional open spaces will be provided within the residential sites and the “CDAs”.

9.12 Recreation (“REC”) : Total Area : 37.17 ha

9.12.1 This zone is intended primarily for recreational developments for the use of the general public. It encourages the development of active and/or passive recreation and tourism/eco-tourism. Uses in support of the recreational developments may be permitted subject to planning permission.

9.12.2 Under this zoning, residential development which should be ancillary to recreational use may be permitted on application to the Board. The development intensity should be in line with the rural setting and therefore shall not result in a total development in excess of a maximum plot ratio of 0.2 and a maximum building height of 2 storeys (6m). Generally, the applicant has to demonstrate to the Board that the proposed development would have no or minimal adverse effects on the environment and infrastructure provision.

9.12.3 In achieving the planning objective to encourage compatible recreation activities in the Area, the area north of Ha Mei San Tsuen between Kai Shan and Tin Shui Wai New Town is zoned “REC”.

9.12.4 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio and building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual merits.

9.12.5 However, for any existing building with plot ratio and building height already exceeding the plot ratio and building height restrictions as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

9.13 Undetermined (“U”) : Total Area : 18.49 ha

9.13.1 This zone denotes areas where detailed planning studies are required.

9.13.2 Within the “U” zone, any developments or redevelopments are required to prepare MLPs for approval of the Board to ensure that the future planning of the area would not be jeopardized, the environment would not be adversely affected and the infrastructure, GIC facilities and open spaces are adequately provided. The MLPs should take into account the railway alignment. The type of development should be compatible with the surrounding area and the development intensity should take into account the rural characteristics of the area. Environmental Impact Assessment should be undertaken to address the possible environmental impact from the WR. Necessary mitigation measures should also be provided to minimize the adverse impact generated by and/or on the proposed development.

9.13.3 The areas to the west of Tin Sam, to the east of Hung Tin Road and south of Ping Ha Road are zoned “U”. They are within the study area of the Hung Shui Kiu New Development Area (HSK NDA) Planning and Engineering Study. The study is to formulate feasible development proposals for the NDA to address the long-term housing, social, environmental and economic needs and to propose a development scheme and programme for the timely implementation of the HSK NDA project. At present, the sites are mainly occupied by temporary structures, abandoned farmland, open storage of containers, workshops and village houses.

9.14 Green Belt (“GB”) : Total Area : ~~448.67~~**113.01**ha

9.14.1 The planning intention of this zone is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl, as well as to provide passive recreational outlets. There is a general presumption against development within this zone. However, limited developments may be permitted with or without conditions on application to the Board, and each application will be considered on its individual merits taking into account the relevant Town Planning Board Guidelines.

9.14.2 The “GB” zones in the Area cover the vegetated knolls to the west of the Yuen Long Sewerage Treatment Works, the foothills and lowlands to the south of Kai Shan, the vegetated knolls to the east, south and west of Long Tin Road and to the east of Hung Tin Road, and the lowlands near the foothills of Yuen Tau Shan and a strip of land underneath and to the north of the West Rail viaduct near Yung Yuen Road.

9.15 Conservation Area (“CA”) : Total Area : 112.43 ha

9.15.1 This zoning is intended to protect and retain the existing natural landscape, ecological or topographical features of the area for conservation, educational and research purposes. There is a general presumption against development in this zone.

9.15.2 In general, only developments that are needed to support the conservation of the existing natural landscape or scenic quality of the area or are essential infrastructure project with overriding public interest may be permitted. Uses related to conservation purposes such as nature reserve and nature trail are permitted as of right. Only a selective range of uses such as public convenience and tent camping ground which would have insignificant impact on the environment and infrastructural provision may be permitted with or without conditions on application to the Board.

9.15.3 Areas under this zoning comprise the hilly areas of Yuen Tau Shan and Kai Shan. They also include the permitted burial grounds.

9.16 Other Specified Uses (“OU”) : Total Area : 1.68 ha

9.16.1 This zone covers land annotated for the following specific uses:

~~Historical~~ Historic Building Preserved for Cultural and Community Uses

9.16.2 The Tsui Sing Lau Pagoda and Tat Tak Communal Hall, which are ~~respectively a declared monuments and a Grade I historical building~~, are included in this zone. The planning intention is to preserve the Tsui Sing Lau Pagoda and Tat Tak Communal Hall as local heritage attractions with the provision of cultural and community facilities for the enjoyment of the public. Developments within this zone are subject to maximum height of three storeys and one storey for Tsui Sing Lau Pagoda and Tat Tak Communal Hall respectively. Any addition, alteration and/or modification to the existing buildings (except restoration works co-ordinated or implemented by Government and those minor alteration and/or modification works which are ancillary and directly related to the always permitted uses or the existing buildings) requires permission from the Board.

Heritage and Cultural Tourism Related Uses

9.16.3 Two pieces of land around the Tsui Sing Lau Pagoda (about 3,180 m²) and in front of the Tat Tak Communal Hall (about 1,783 m²) are under this zone. The planning intention is to facilitate provision of heritage and cultural tourism related facilities or uses that are complementary to the Tsui Sing Lau Pagoda and Tat Tak Communal Hall as heritage attractions and encourage compatible developments around the historical buildings. Developments in this zone are subject to a

maximum plot ratio of 0.4 and a maximum building height of 10mPD. It is also the intention of this zone that any proposed development shall cover the whole zone. Any developments or redevelopments are required to prepare a layout plan for approval of the Board. The planning application should demonstrate the nature and scale of the proposed use/development would be compatible with the heritage setting of the historical buildings in terms of building height and design, and that the proposed developments would be sustainable in heritage, visual and traffic terms. Heritage, visual and traffic impact assessments should be undertaken to address any possible heritage, visual and traffic problems. Necessary landscape and design measures should also be provided to minimize any adverse impacts on the historical buildings.

9.16.4 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio and building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual merits.

9.16.5 However, for any existing building with plot ratio and building height already exceeding the plot ratio and building height restrictions as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

Pumping Station and Associated Facilities

9.16.6 This zone covers the existing Sheung Cheung Wai First and Second Floodwater Pumping Stations and the associated flood pond which are used for preventing flooding in the villages.

10. COMMUNICATIONS

10.1 Roads and Railways

10.1.1 The Area is mainly served by Castle Peak Road and the LR network. It is connected to the Deep Bay area and Tin Shui Wai New Town by Tin Ha Road, Hung Tin Road, Long Tin Road and Ping Ha Road. With the completion of Route 3, the accessibility of the Area has been greatly improved.

10.1.2 The WR provides a sub-regional passenger link connecting the NWNT to the urban areas. It provides a domestic passenger line from Hung Hom, Kowloon to Tuen Mun via East Tsim Sha Tsui, Austin, Nam Cheung, Mei Foo, Tsuen Wan West, Kam Sheung Road, Yuen Long, Long Ping, Tin Shui Wai and Siu Hong.

10.1.3 The Kong Sham Western Highway passes through the western part of the Area. It is a carriageway linking the Shenzhen Bay Bridge at its

landing point in Ngau Hom Shek with the Yuen Long Highway at Lam Tei.

10.1.4 A cycling entry/exit hub would be provided at an area to the north of the West Rail viaduct near West Rail Tin Shui Wai Station as a part of the comprehensive cycle track system connecting North West New Territories with North East New Territories. The cycling entry/exit hub will provide facilities including information board, cycle parking spaces, toilets and cycle rental/return kiosk and food kiosk, practicing area and sitting-out area. The proposed cycling hub has been authorized under the Roads (Works, Use and Compensation) Ordinance.

10.1.5 It is also intended that the road junctions especially those along the Castle Peak Road should be improved through comprehensive planning.

10.2 Public Transport

The Area is at present served by road- and rail-based public transport including LR, buses, minibuses and taxis linking to Tin Shui Wai New Town in the north, Hung Shui Kiu in the west, and Yuen Long New Town in the east.

11. UTILITY SERVICES

11.1 Water Supply

Wang Chau Service Reservoir is located in the Area. The existing water treatment works capacity available in the NWNT will soon be fully committed. Further treatment works capacity, if required, would be made available from the future extension to Ngau Tam Mei Water Treatment Works. **Extension of water supply system will be required if there is a substantial increase in the future water demand arising from development proposals for large residential developments.**

11.2 Sewerage and Sewage Treatment

Although a large part of the Area has been served by sewerage network, some areas within the Area are still not served by the sewerage network. Stringent effluent treatment standards are still required in these unsewered areas in the interim period before connection can be made to Government sewers. As such, future development proposals in the Ping Shan area would need to demonstrate that they have satisfactory arrangements for connection with the trunk sewers.

11.3 Electricity

The Area has long been supplied with electricity. It is anticipated that there will not be any problem in the provision of electricity supply to the Area.

11.4 Gas

Gas mains have been laid from Ping Ha Road via Hung Tin Road to Castle Peak Road. Piped gas supply is made available in the Area.

12. CULTURAL HERITAGE

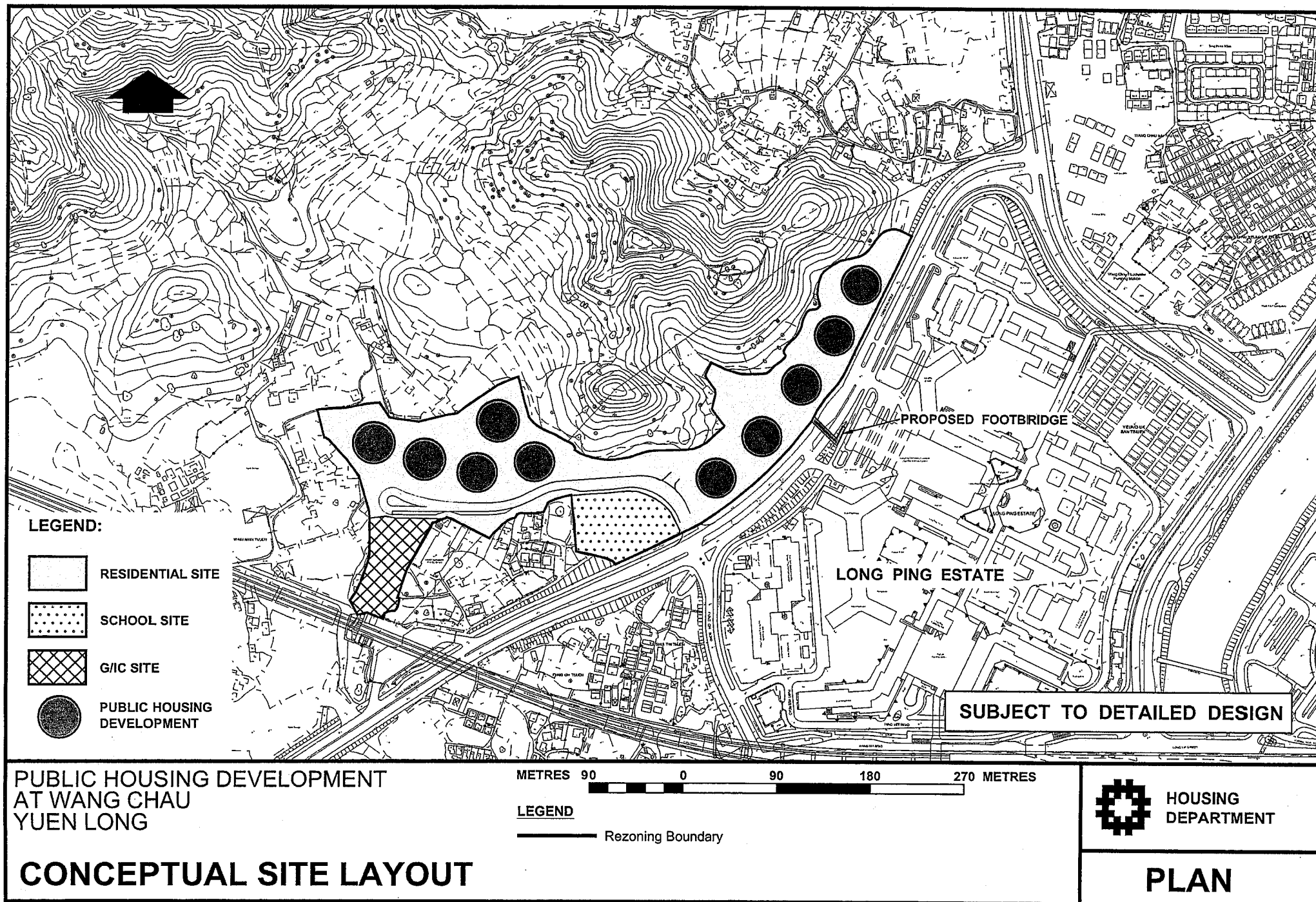
There are ~~four~~**five** declared monuments located within the Area, i.e. Tang Ancestral Hall, Yu Kiu Ancestral Hall, Yan Tun Kong Study Hall ~~and~~, Tsui Sing Lau Pagoda, **and Tat Tak Communal Hall**. A number of graded historic buildings/structures are located within the Area. Details of these historic buildings ~~are available on~~**have been uploaded onto** the official website of the ~~Antiquities and Monument Office (AMO) of the Leisure and Cultural Services Department at <http://www.amo.gov.hk>~~**Antiquities Advisory Board (AAB) at <http://www.aab.gov.hk>**. Moreover, the Sheung Cheung Wai Site of Archaeological Interest is located within the Area. The site of archaeological **interest** and graded historical buildings/structures are worthy of preservation. Prior consultation with the **Antiquities and Monuments Office (AMO) of the Leisure and Cultural Services Department (LCSD)** should be made if any development, redevelopment or rezoning proposal might affect ~~the above site of archaeological interest, monuments, graded and proposed graded historical buildings/structures~~**the site of archaeological interest, monuments, graded/proposed graded historic buildings/structures and new items pending for grading assessment** and their immediate environs. If disturbance of the site of archaeological **interest** ~~and sites of archaeological potential~~ is unavoidable, a detailed Archaeological Impact Assessment for development works within the sites may be required by AMO.

13. IMPLEMENTATION

- 13.1 The Plan provides a broad land-use framework for development control and implementation of planning proposals. More detailed plans will be prepared as a basis for public works planning and private developments.
- 13.2 At present, there is no overall programme for the provision of infrastructure within the Area. The implementation process will be in stages and may stretch over a long period depending on the availability of resources. It will be undertaken through the participation of both the public and private sectors.
- 13.3 The provision of infrastructure, e.g. road widening and laying of services, will be implemented through the Public Works Programme and the Local Public Works Improvement Programmes as and when resources are available. Private developments will be effected principally through private sector initiatives to develop or redevelop their properties in accordance with the zoned uses indicated on the Plan, provided that their proposals have met the Government requirements.

14. PLANNING CONTROL

- 14.1 The types of permitted developments and uses within the Area are listed in the Notes to the Plan. Unless otherwise specified, all building, engineering and other operations incidental to and all uses directly related and ancillary to the permitted developments and uses within the same zone are always permitted and no separate permission is required.
- 14.2 Uses of land or building which were in existence immediately before the first publication in the Gazette of the notice of the IDPA Plan/draft DPA Plan and which are not in compliance with the terms of the Plan may have adverse impact on the environment, drainage and traffic of the area. Although no action is required to make such use conform to the Plan, any material change of such use or any other development (except minor alteration and/or modification to the development of the land or building in respect of such use which is always permitted) must be always permitted in terms of the Plan or, if permission is required, in accordance with a permission granted by the Board. The Board will consider these applications on their individual merits. Those alteration and/or modification works which may lead to an environmental improvement or upgrading to the Area may be considered favourably by the Board.
- 14.3 Planning applications to the Board will be assessed on individual merits. In general, the Board, in considering the planning applications, will take into account all relevant planning considerations which may include the departmental outline development plans and layout plans, and the guidelines published by the Board. The outline development plans and the layout plans are available for public inspection at the Planning Department. Guidelines published by the Board are available from the Board's website, the Secretariat of the Board and the Technical Services Division of the Planning Department. Application forms and Guidance Notes for planning applications can be downloaded from the Board's website and are available from the Secretariat of the Board, and the Technical Services Division and the relevant District Planning Office of the Planning Department. Applications should be supported by such materials as the Board thinks appropriate to enable it to consider the applications.
- 14.4 Any development, other than those referred to in paragraph 14.1 above or in conformity with this Plan or with the permission of the Board, undertaken or continued on or after 18 June 1993 on land included in a plan of the Ping Shan DPA or on or after 17 August 1990 on land included in a plan of the Lau Fau Shan and Tsim Bei Tsui IDPA, may be subject to enforcement proceedings under the Ordinance. Any filling of pond/land and excavation of land in relevant zoning referred to in the Notes of relevant zone without the permission from the Board may also be subject to enforcement proceedings.



Hong Kong Housing Authority
**Public Housing Development at
Wang Chau, Yuen Long**
Air Ventilation Assessment
(Expert Evaluation)

REP-035-00

Issue 2 | 14 August 2014

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

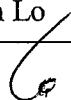

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ARUP

Document Verification

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1 Introduction

1.1 Project Background

Ove Arup & Partners Hong Kong Limited (Arup) was appointed by Hong Kong Housing Authority (HKHA) to conduct an air ventilation assessment (AVA) for the proposed public housing (PH) development at a potential site at Wang Chau, Yuen Long. The location of the project site and its environs in the vicinity are shown in **Figure 1.1**.

The project site is bounded by Long Ping Road and Long Ping Estate to the east, Chun Hing San Tsuen, Shui Tin Tsuen and Fung Chi Tsuen to the south, Wing Ning Tsuen and Long Tin Road to the west, as well as a hilly terrain to the north. The site area is about 5.6ha.

The site currently falls within an area zoned "Green Belt" (GB) according to the Approved Ping Shan Outline Zoning Plan (OZP) No. S/YL-PS/14. Rezoning is required for the proposed PH site.

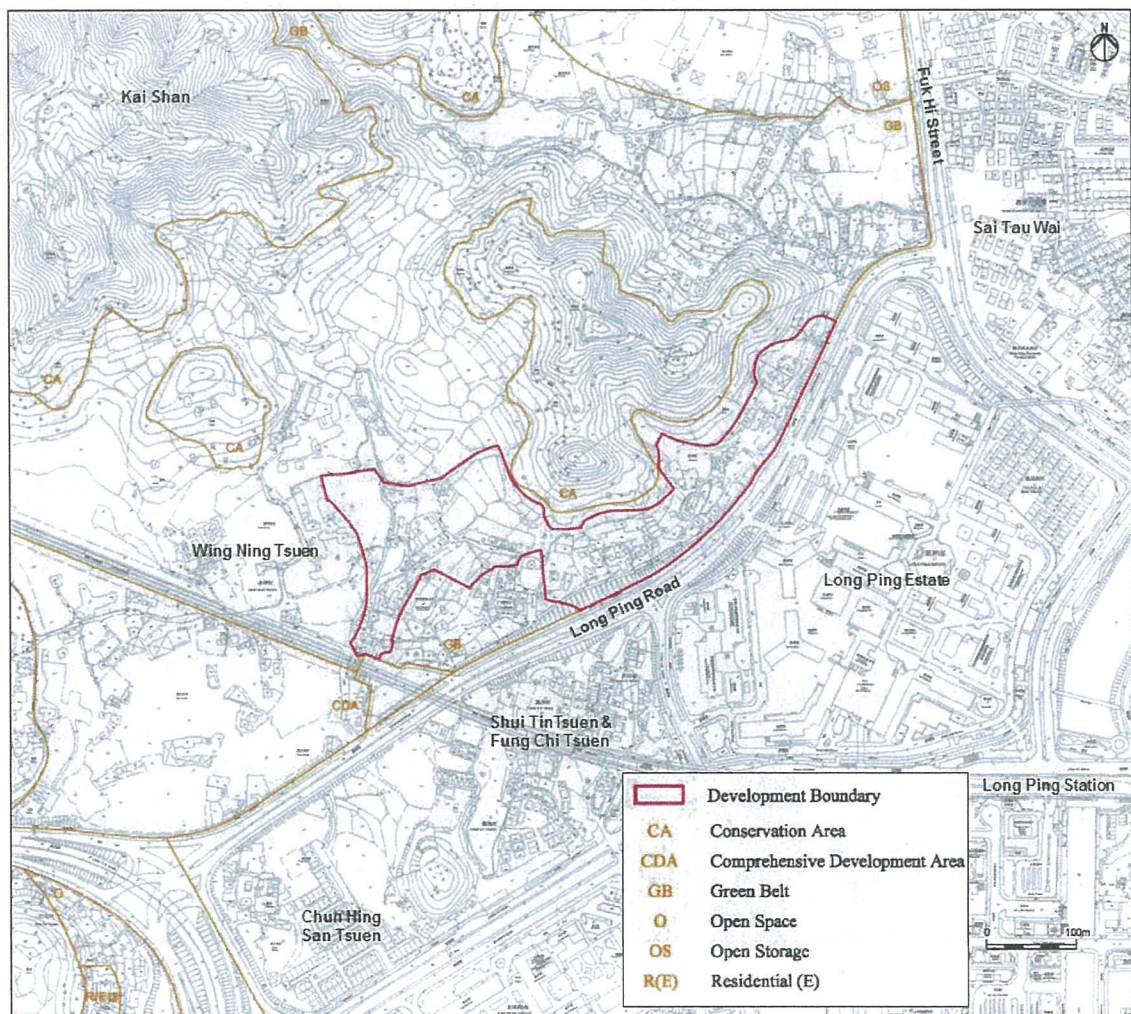


Figure 1.1 Location of project site

1.2 Purpose of the Report

The purposes of this report are:

- (1) Identify the site wind availability;
- (2) Evaluate the site wind characteristics on the proposed development;
- (3) Evaluate the effect of proposed development on the air ventilation; and
- (4) Identify problem areas and recommend improvements to the proposed development.

2 Study Area

The site is currently occupied by farmland, fallow land, rural residential dwellings, temporary structures and few open storages. The surrounding areas of the Project site are characterized by a mixture of various land uses. These include high-rise residential developments, villages and low-rise residential developments, natural landscapes, burial grounds and graves, open storage uses, major roads and railway tracks. **Figure 2.1a** shows the location of the project site and its environs in the vicinity and **Figure 2.1b** shows the photos of different land use surroundings.

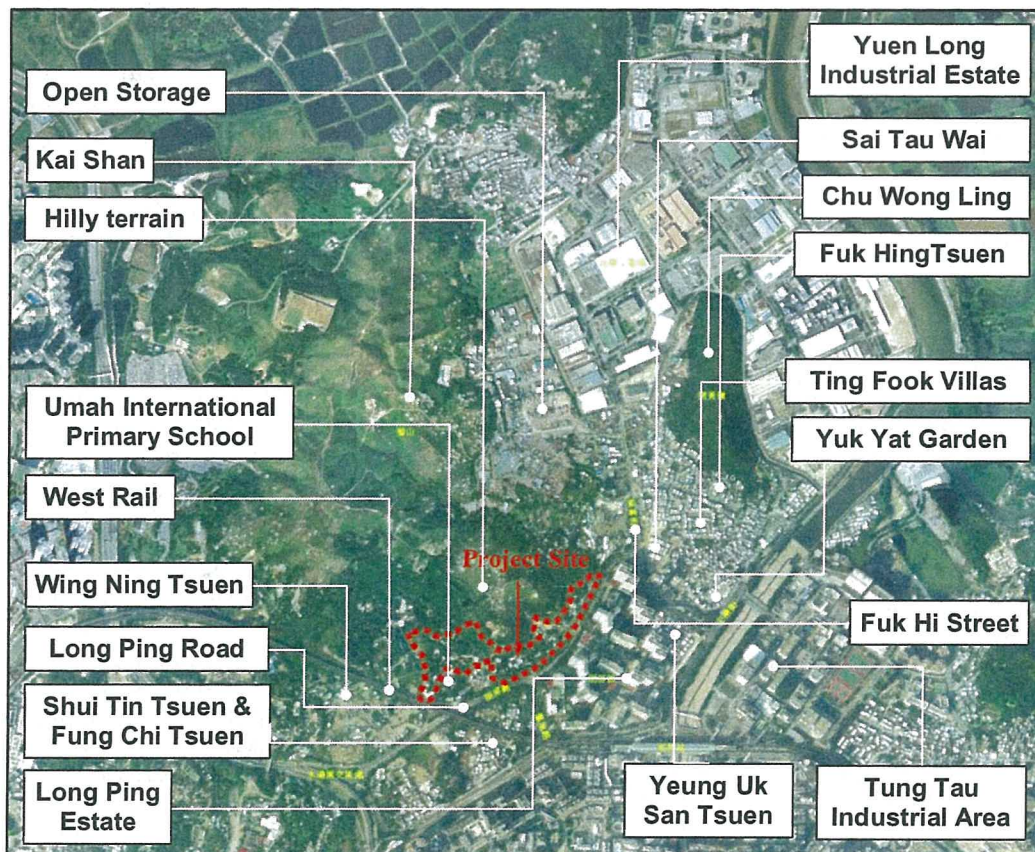
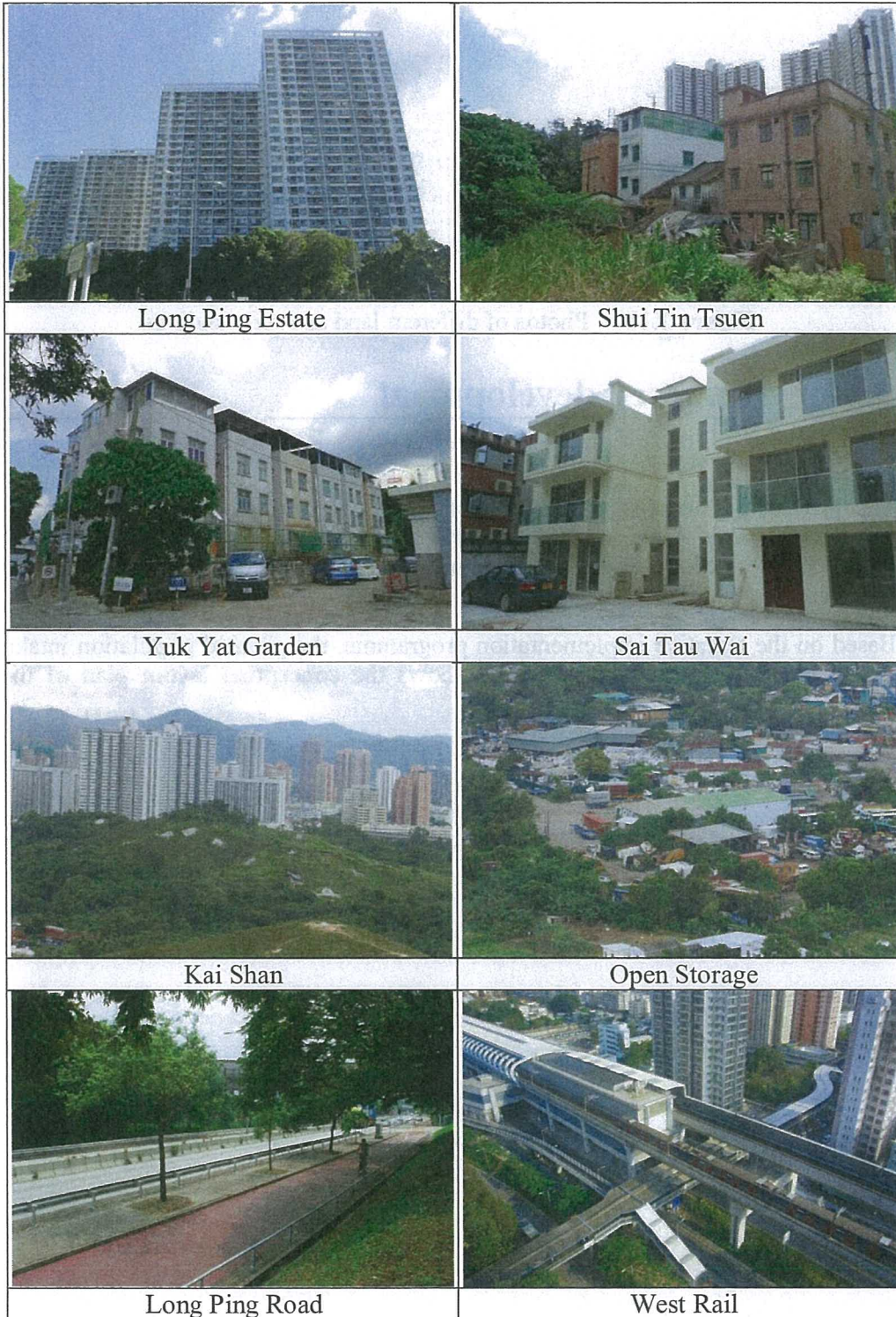


Figure 2.1a Location of project site and its environs in the vicinity



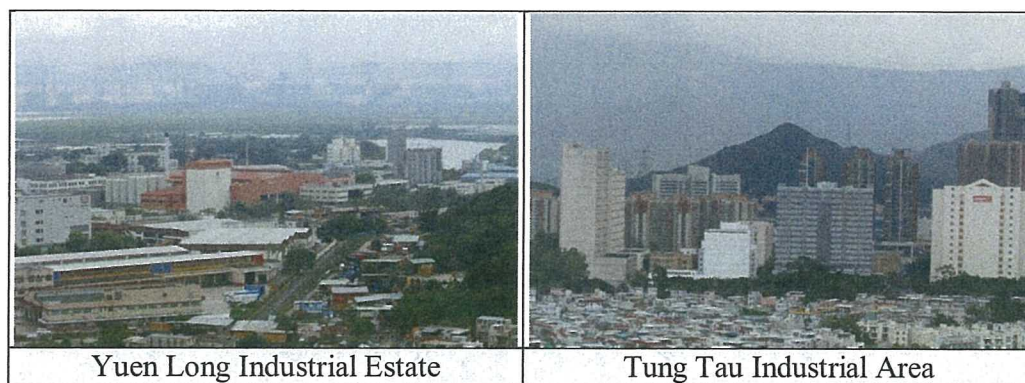


Figure 2.1b Photos of different land use surroundings

3 Proposed development

Development Proposal

The proposed development site consists of 10 residential building blocks for Home Ownership Scheme (HOS) and Public Rental Housing (PRH), car parks, retails, one social welfare block, one 24-classroom primary school, and complementary recreational facilities.

Based on the tentative implementation programme, the planned population intake would be in year 2025. **Figure 3.1** shows the conceptual layout plan of the proposed PH development

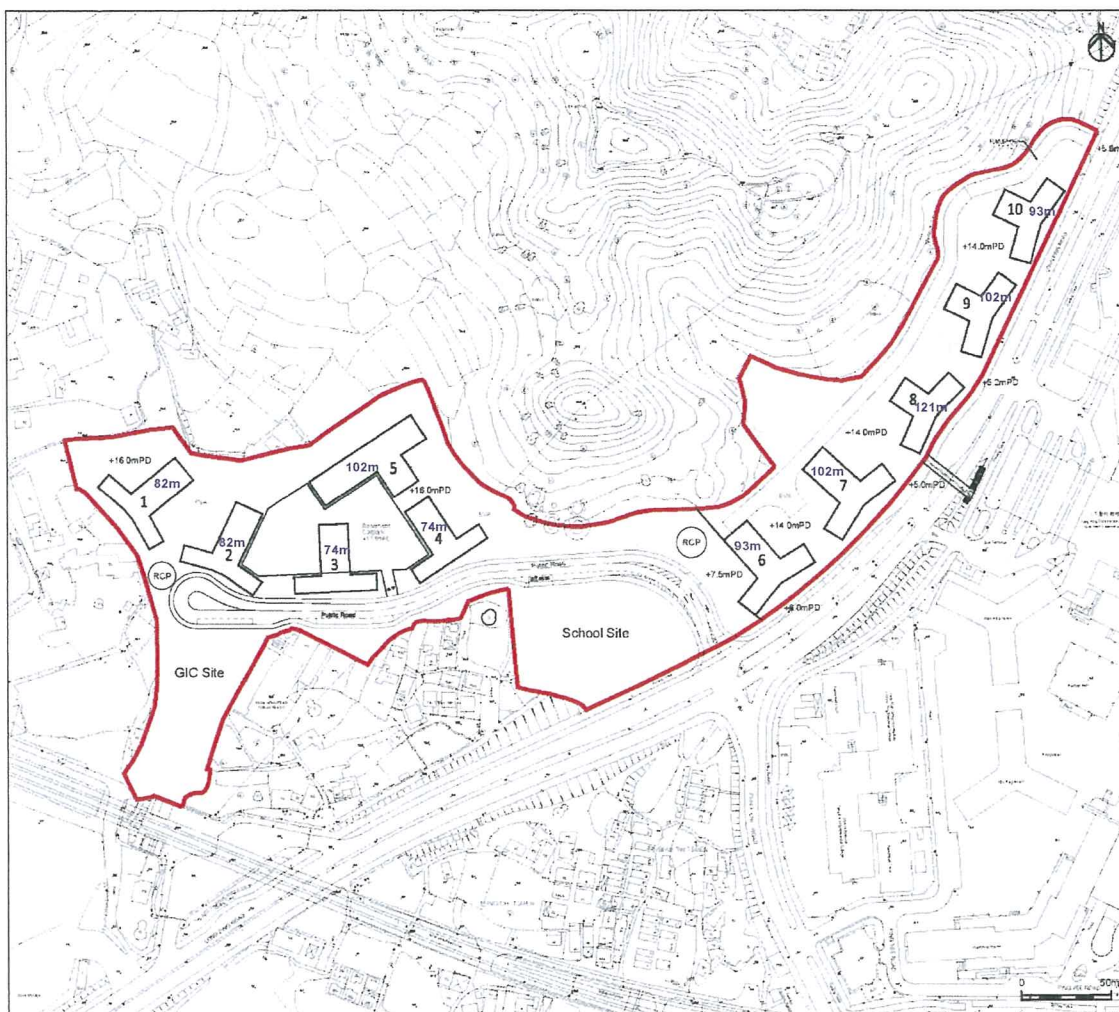


Figure 3.1 Conceptual layout plan of proposed PH development

Development Parameters

The planning parameters are yet to be confirmed at the stage of the study. For the purpose of this AVA, the expert evaluation is based on the tentative planning parameters as summarized in **Table 3.1** below.

Table 3.1: Summary of development parameters

Development	Parameter
Maximum Plot Ratio	6.0
Total number of flats	About 4,000 flats (subject to detailed design)
Design population	About 12,300 persons (subject to flat number)
Total Gross Floor Area	About 246,000m ² (subject to detailed design)
Primary School	One 24 Classroom Primary School (subject to detailed design and EDB's funding)
Social Welfare Facilities	Subject to detailed design and SWD's funding

Height Profile

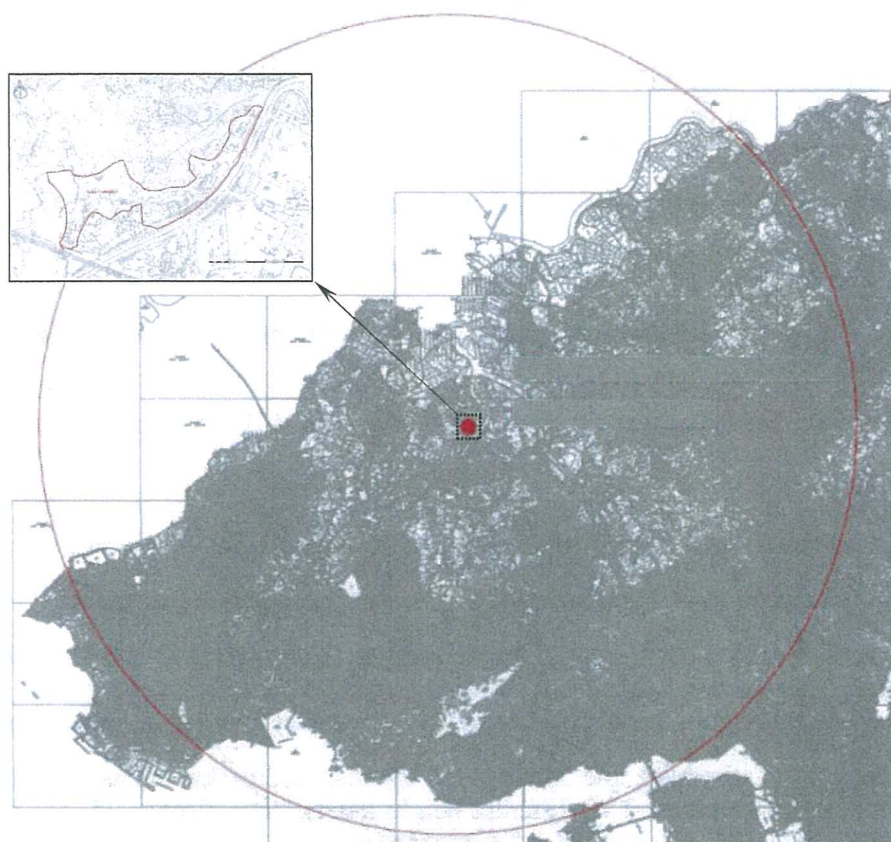
The conceptual layout of the proposed buildings within the development site is shown in **Figure 3.1** and tentative height profile of the proposed buildings is presented in **Table 3.2**. The platform level of the western site is 16mPD and that of eastern site is 14mPD. The heights of the western residential building blocks range from 74m to 102m above ground (i.e. about 90mPD to 118mPD); while that of the eastern residential building blocks range from 93m to 121m above ground (i.e. about 107 mPD to 135mPD). The Social Welfare Block is of 18m above ground (i.e. about 35mPD). The primary school is of 28m above ground (i.e. about 45mPD).

Table 3.2: Height Profile of Development

	Building Height (m above ground)	Building Height (mPD)
Residential Buildings		
Block 1 (HOS)	82	98
Block 2 (HOS)	82	98
Block 3 (HOS)	74	90
Block 4 (HOS)	74	90
Block 5 (HOS)	102	118
Block 6 (PRH)	93	107
Block 7 (PRH)	102	116
Block 8 (PRH)	121	135
Block 9 (PRH)	102	116
Block 10 (PRH)	93	107
Social Welfare Block	18	35
Primary School	28	45

4 Site Wind Availability Assessment

A 1:4,000 scale topographical model with 3 m in radius (equivalent to 12 km in radius in actual scale) was established. It covered the surrounding area up to a distance not less than 10 km from the proposed development site. A B5000 Digital Topographic Map was used for the model construction. The modelling area is shown in **Figure 4.1**.



(a)



(b)

Figure 4.1 SWAS modelling area: (a) digital map; (b) topographic map.

The approach wind field (mean wind profile, turbulence intensity profile and longitudinal turbulence spectrum) in the wind tunnel was adjusted according to the Japanese wind load code of AIJ-2004.

The mean wind speed profile was adjusted to follow the power law:

$$U(z) = U_{ref} (z / z_{ref})^{\alpha}. \quad (1)$$

where α is the power exponent and U_{ref} is the reference mean wind speed at the reference height of z_{ref} .

The turbulence profile was adjusted according to the AIJ-2004 wind code:

$$I(z) = 0.1(z / z_G)^{-\alpha-0.05}. \quad (2)$$

where z_G stands for the gradient height, and α is the power exponent.

The von Karman model was adopted for the wind turbulence spectrum.

The wind tunnel measurements were taken at 22.5° intervals for the full 360° azimuth (i.e., 16 wind directions) at the geometric centre of the physical model. The wind directions were defined as positive travelling clockwise from the north.

For each wind direction, the mean wind speeds, turbulence intensities and yaw angles were determined at 10 different height levels, equivalent to 25, 50, 75, 100, 150, 200, 250, 300, 400 and 500m in actual scale.

The wind roses at WGL for both the annual and summer winds are shown in **Figure 4.2**, based on records during 2000-2013 (speed unit: m/s) and measured by the cup anemometer installed at a height of 82.7m above the mean sea level, or 28 m atop the Waglan Island zenith. There are three prevailing wind directions for the annual wind: east, with a wind occurrence frequency of 19%; east-northeast, with an occurrence frequency of 18%; and north, with an occurrence frequency of 12%. For the summer wind, there are two dominant wind directions: southwest, with an occurrence frequency of 20%, and east, with an occurrence frequency of 13%.

The details of the site wind availability shall refer to Final Technical Report No. 3H (TR-3H) Preferred Option and Technical Assessment – Air Ventilation Assessment submitted in June 2014.

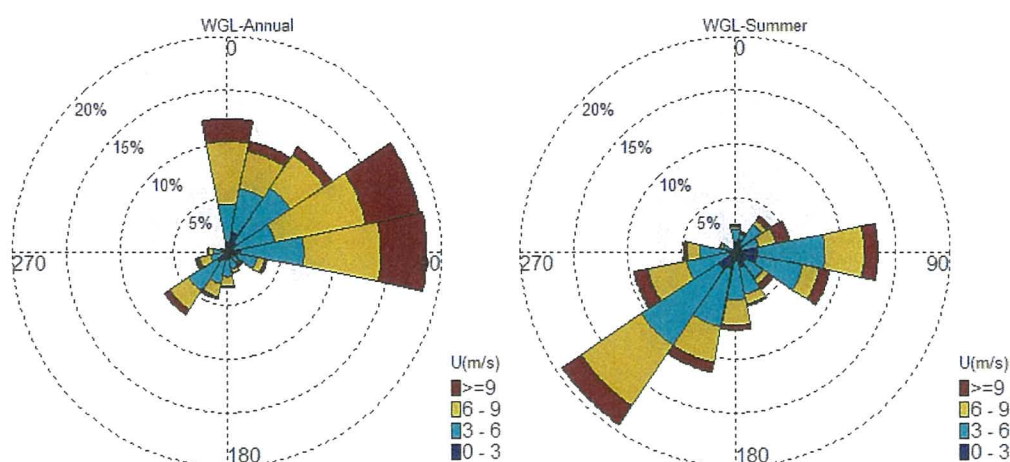


Figure 4.2 Wind roses of daily mean wind at the WGL station (13 years' data)

The estimated wind roses of the annual winds and summer winds at different height levels are shown in **Figure 4.3** and **Figure 4.4** respectively. **Tables 4.1** and **4.2** summarize the probability of 16 wind directions at 25m, 150m and 500m.

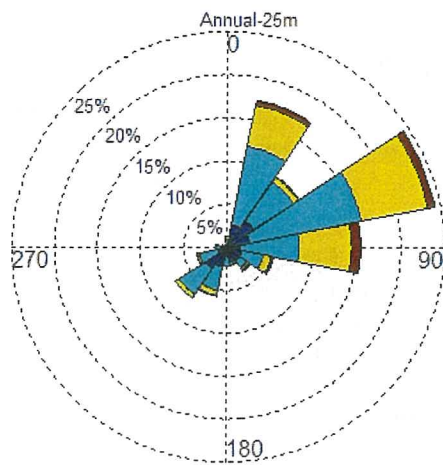
According to the wind rose plots shown in **Figures 4.3 – 4.4**, there are three prevailing directions for the annual winds at the lower and middle atmospheric boundary layers: north-northeast (NNE), east-northeast (ENE) and east (E). Northeast (NE) is another dominant direction at the upper height levels above 200 m. Similarly, as shown in **Figure 4.4**, there are also three prevailing directions for the summer winds at the lower and middle atmospheric boundary layers: southwest (SW), south-southwest (SSW) and west-southwest (WSW). East-southeast (ESE) is another prevailing azimuth at the upper height levels.

Table 4.1: Directional occurrence frequency of annual wind (%)

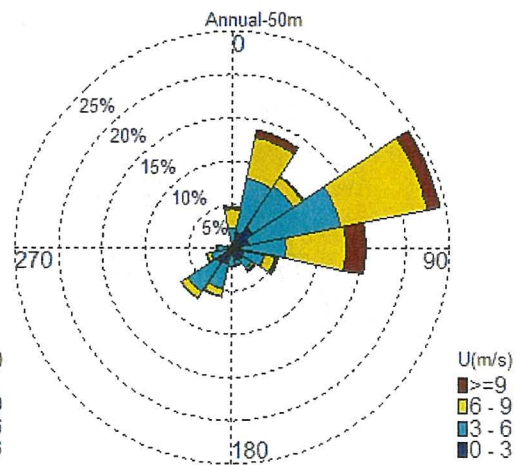
Height	N	NNE	NE	ENE	E	ESE	SE	SSE
25m	1.31	17.34	9.93	24.28	15.45	5.43	3.25	2.06
150m	4.81	13.86	9.93	24.31	15.45	5.45	3.25	2.06
500m	4.81	13.86	15.93	18.31	15.45	6.97	1.72	2.06
Height	S	SSW	SW	WSW	W	WNW	NW	NNW
25m	2.10	5.79	7.04	3.55	1.30	0.61	0.16	0.32
150m	2.11	5.79	7.03	3.01	1.27	1.22	0.16	0.31
500m	2.11	3.51	9.31	3.01	1.25	1.21	0.16	0.30

Table 4.2: Directional occurrence frequency of summer wind (%)

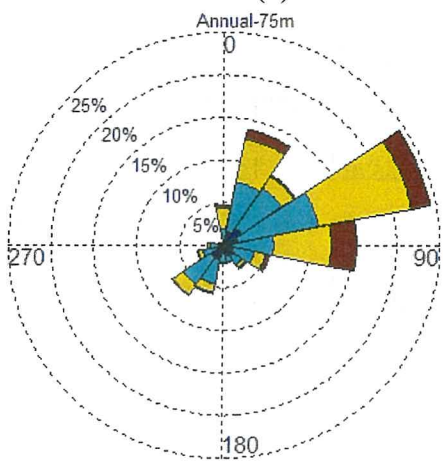
Height	N	NNE	NE	ENE	E	ESE	SE	SSE
25m	0.24	3.22	2.62	7.53	8.98	9.30	8.21	5.16
150m	1.08	2.37	2.62	7.55	8.97	9.32	8.21	5.17
500m	1.07	2.36	4.98	5.16	8.96	13.29	4.23	5.18
Height	S	SSW	SW	WSW	W	WNW	NW	NNW
25m	4.75	13.97	19.40	10.93	3.46	1.51	0.25	0.33
150m	4.75	13.97	19.40	9.57	3.04	3.30	0.25	0.33
500m	4.74	7.88	25.51	9.57	3.05	3.30	0.25	0.32



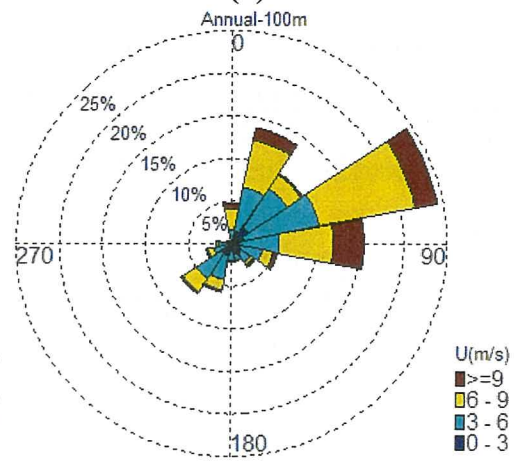
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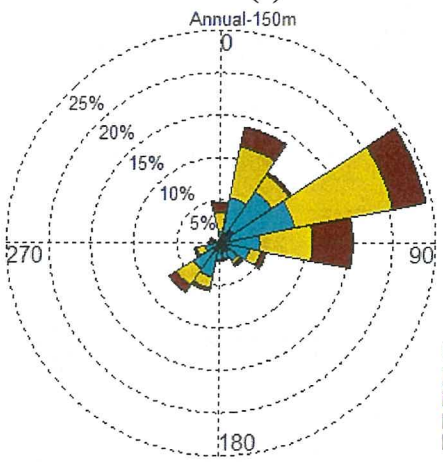
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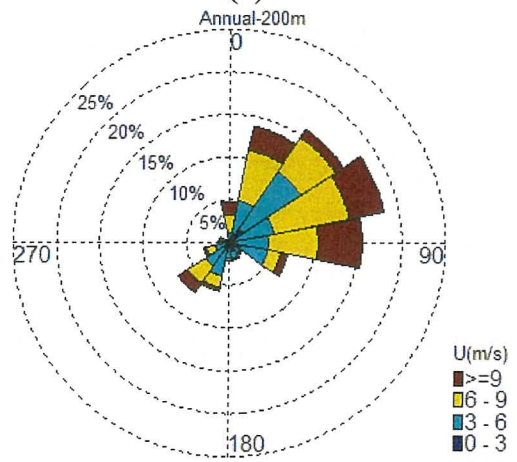
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(d)



(e)



(f)

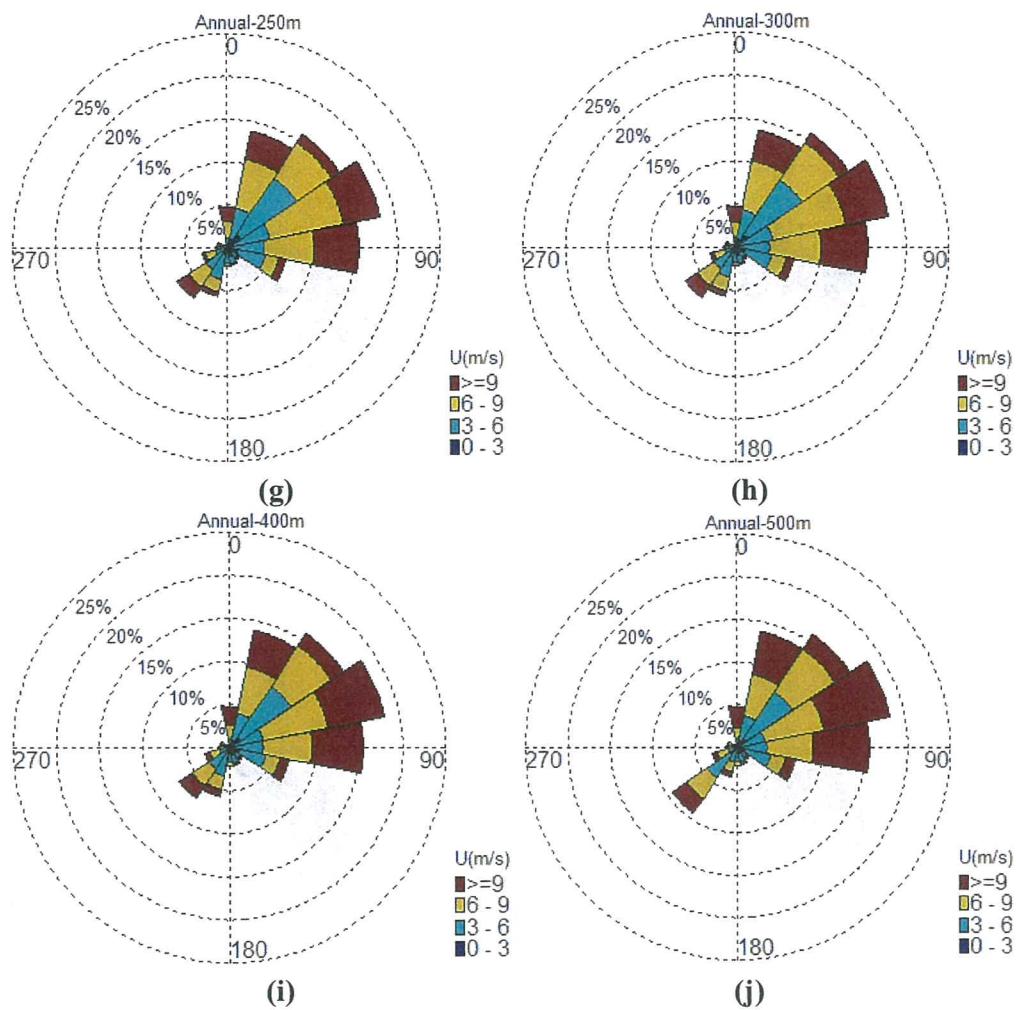
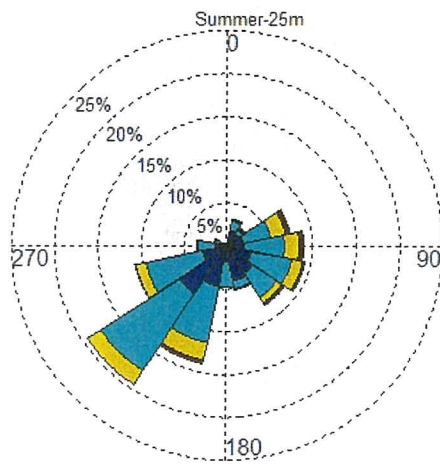
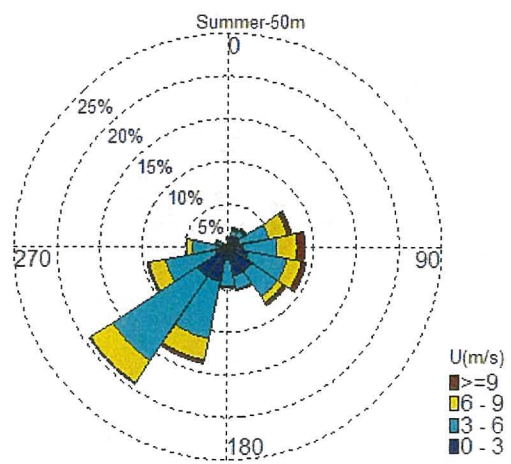


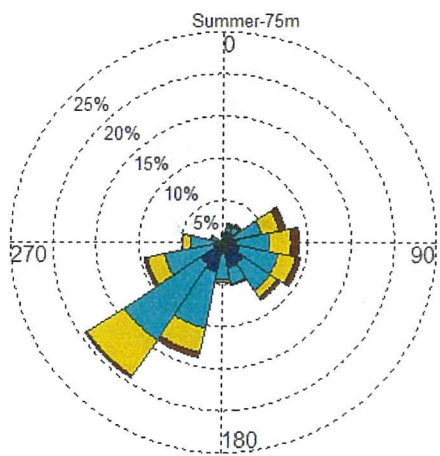
Figure 4.3 Wind roses at different height levels above the proposed development site under annual wind condition
(a) 25 m; (b) 50 m; (c) 75 m; (d) 100 m; (e) 150 m; (f) 200 m;
(g) 250 m; (h) 300 m; (i) 400 m; (j) 500 m.



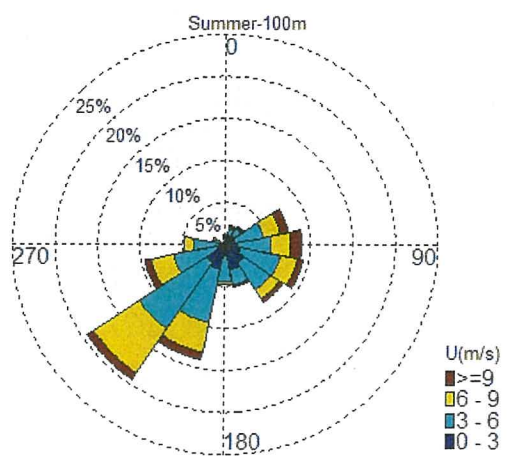
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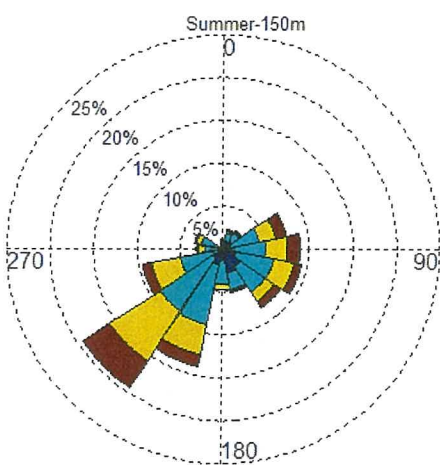
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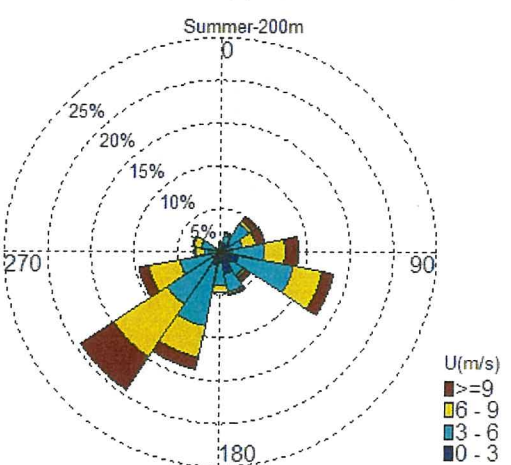
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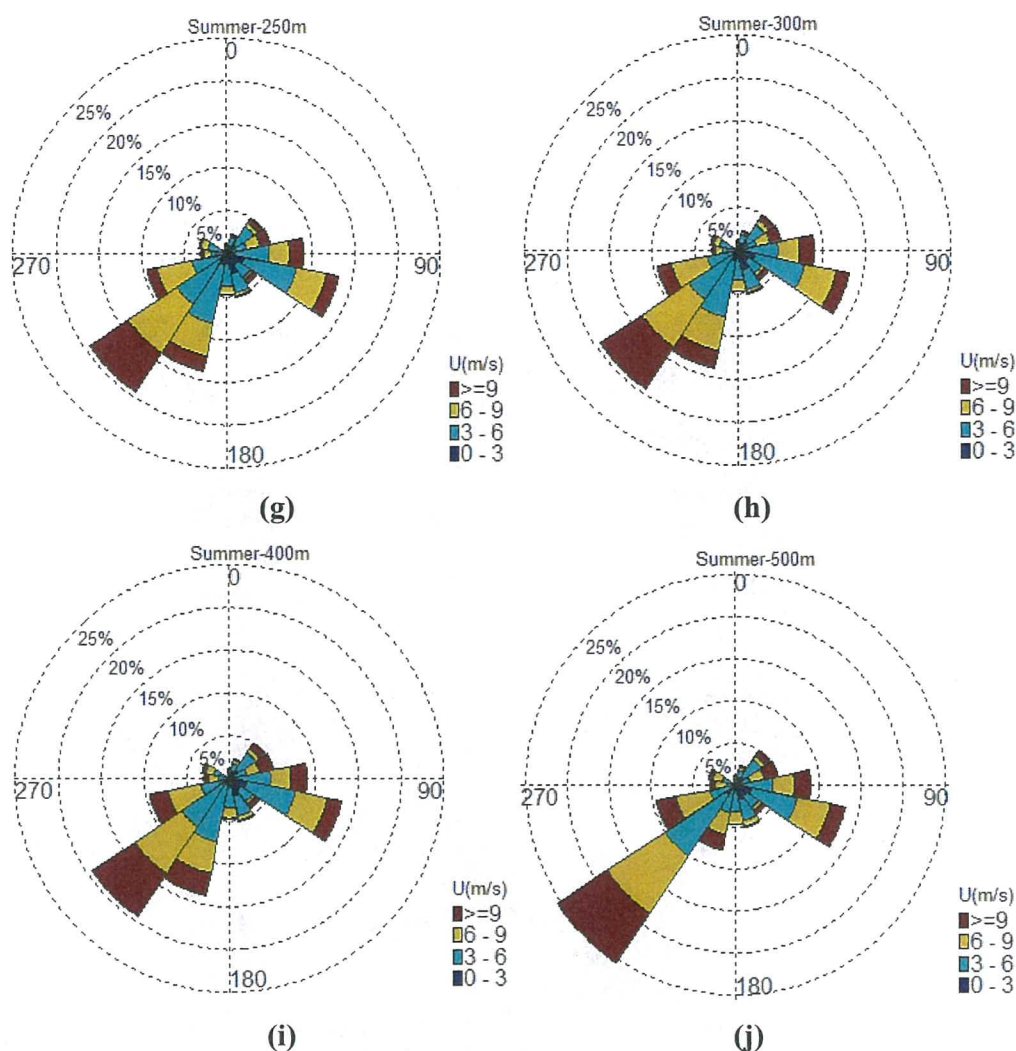


Figure 4.4 Wind roses at different height levels above the proposed development site under summer wind condition
(a) 25 m; (b) 50 m; (c) 75 m; (d) 100 m; (e) 150 m; (f) 200 m;
(g) 250 m; (h) 300 m; (i) 400 m; (j) 500 m.

5 Existing Conditions

The existing building height in the vicinity of the development site is shown in **Figure 5.1**. The existing site characteristics include the followings:

Road pattern within the district: The Fuk Hi Street is oriented in N-S direction whilst the Long Ping road is oriented in NE – SW direction. These two roads are considered as the major wind pathways. In addition, several minor roads in the vicinity also act as potential air pathways.

Distribution of building height: The built area generally exhibits a low to medium height profile with 3-storey village houses to the south, southwest and northeast of the project site, and open storage, temporary structures and scattered low rise buildings to the north of the project site. They are not expected to block the wind from northeastern and southwestern directions. Long Ping Estate is the

tallest development in the vicinity of the project site with Double H blocks of approx. 28 storeys, New Slab blocks of approx. 23 storeys, and Trident (i.e. Y-shape) blocks of approx. 35 storeys. Open spaces are identified in between the buildings.

Hilly Terrain: To the north and northwest, the project site is surrounded by a hilly terrain with a ridgeline of about 50mPD. Chu Wong Ling is located to the northeast side further away from the project site with a ridgeline of 40-50mPD.

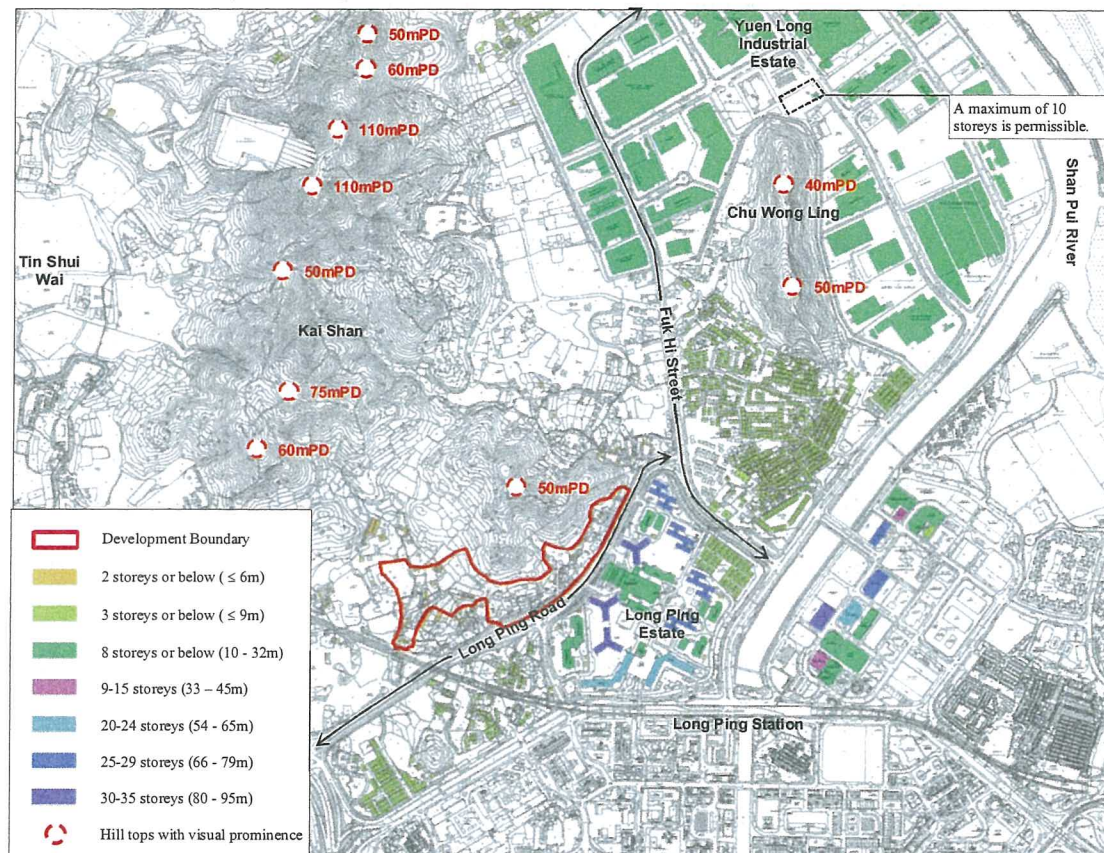


Figure 5.1 Existing building height in the vicinity

5.1 Annual Wind Conditions

Section 4 has identified the annual prevailing wind directions as north-northeast (NNE), east-northeast (ENE) and east (E) wind. **Figure 5.2** shows the prevailing winds for the existing scenario under the annual conditions. The major breezeways are marked by blue arrows.

To the NNE direction of the proposed development, it comprises mainly low rise residential buildings (~3 storeys), Chu Wong Ling (with ridgeline of about 50 mPD) and low rise industrial buildings (~ 8 storeys) inside the Yuen Long Industrial Estate. Given the low rise nature of the buildings, it would not block the wind flow. Besides, the length in N-S direction of Chu Wong Ling is around 580m and the length in the E-W direction of Chu Wong Ling is around 180m. Given the elliptical shape of Chu Wong Ling, it is anticipated that it would also

not block the NNE wind. The NNE wind will flow along the two sides of Chu Wong Ling, and will penetrate into the site through Long Ping Road. Another pathway will flow over the hill and pass over the proposed site towards Hang Tau Tsuen.

To the ENE direction and E direction of the proposed development, it comprises some low rise residential building (~ 3 storeys), Long Ping Estate and Tung Tau Industrial Area. Although there are several high rise buildings (~ 29 – 35 storeys) inside Long Ping Estate and Tung Tau Industrial Area, the ENE and E wind can still penetrate into the site from the open spaces in between the buildings. After the wind passes through the proposed site, it will flow uphill towards Tin Shui Wai.

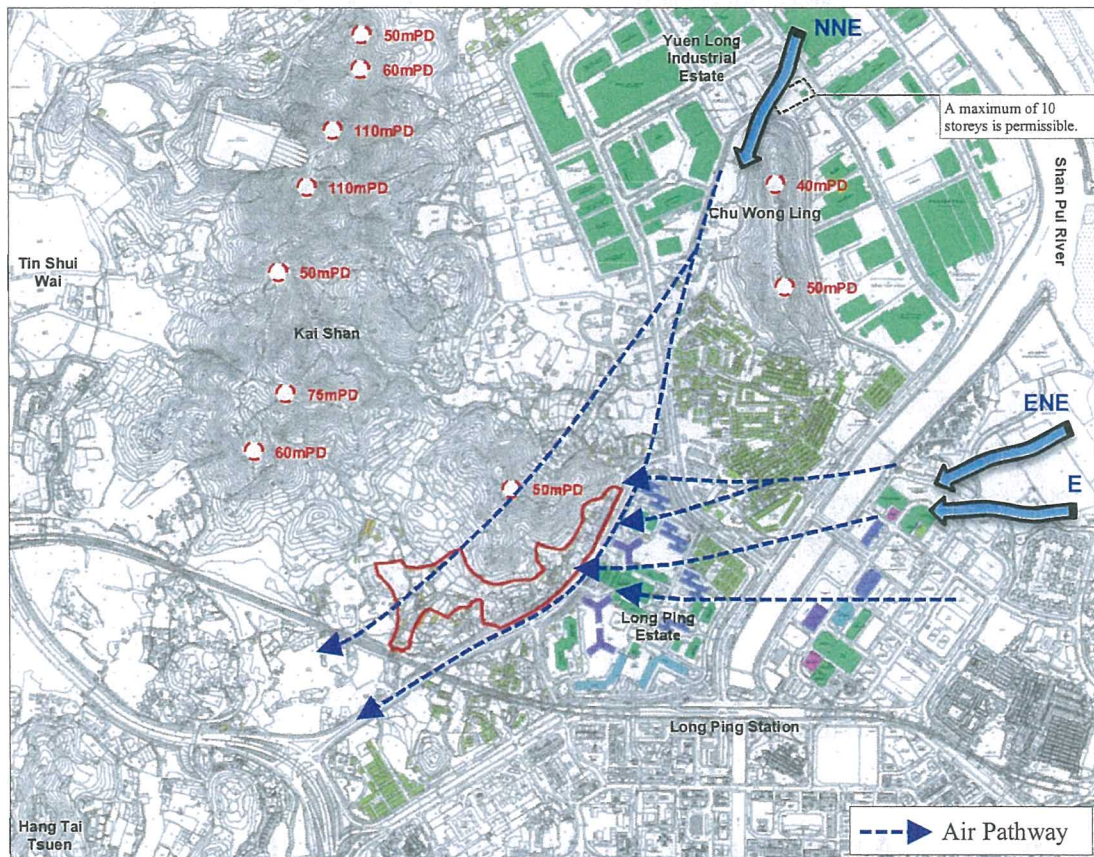


Figure 5.2 Existing wind environment under NNE / ENE / E direction (annual conditions)

5.2 Summer Wind Conditions

Section 4 has identified the summer prevailing wind directions as southwest (SW), south-southwest (SSW) and west-southwest (WSW). **Figure 5.3** shows the prevailing winds for the existing condition under the summer wind conditions. The major breezeways are marked by orange arrows.

To the SW, SSW and WSW direction of the proposed development, it comprises mainly low rise buildings such as Hang Tau Tsuen, Chun Hing San Tsuen, Shui

Tin Tsuen, etc. These low-rise buildings would not block the wind flow. The SW / SSW / WSW winds will penetrate into the site through Long Ping Road. Another pathway will pass over the proposed development, uphill and then downhill towards the Yuen Long Industrial Estate.

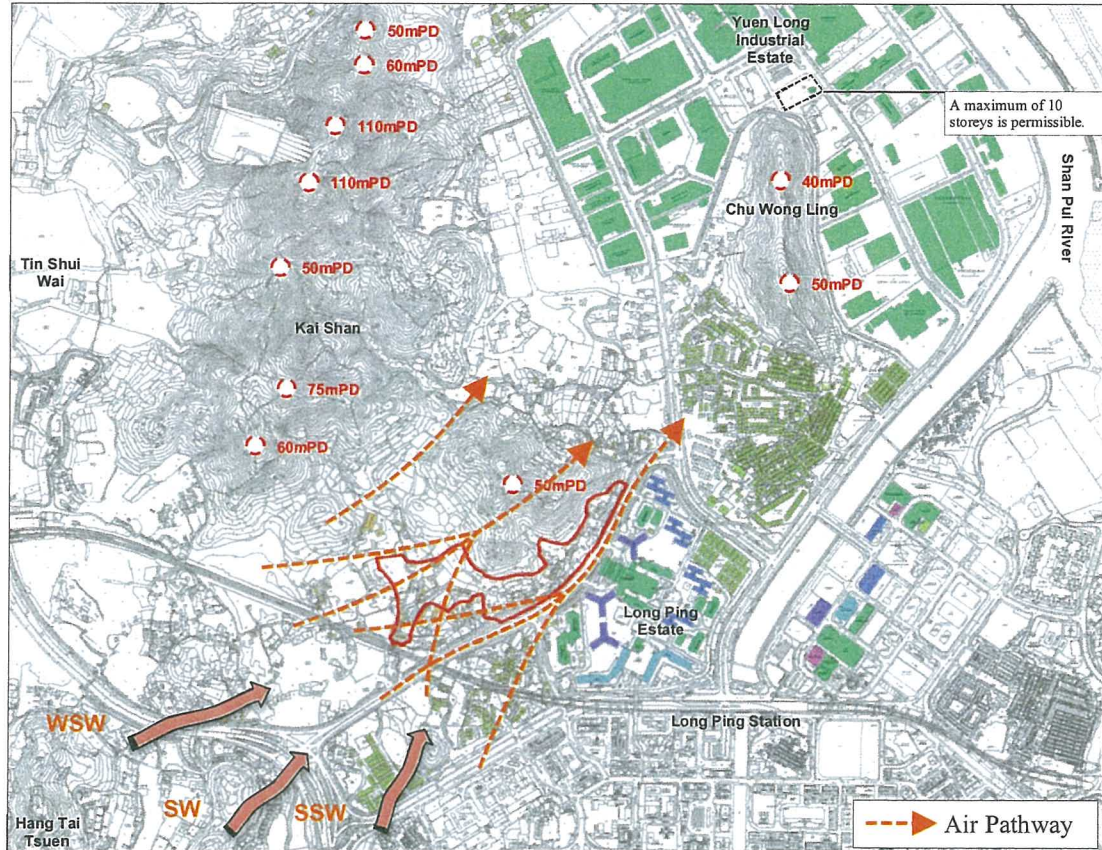


Figure 5.3 Existing wind environment under SW, SSW and WSW direction (summer conditions)

6 Air Ventilation Assessment for the Proposed Development

6.1 Annual Wind Conditions

Under the annual prevailing winds, the air flows are indicated by blue arrows and light blue arrows shown in **Figure 6.1**. During the NNE wind, main breezeway will follow the hill profile and road orientation. Hence, wind will flow along Long Ping Road and the perimeter of the hill (together with the EVA running along the site platform of blocks 6 to 10). It is anticipated that it changes direction a little bit. In between the two wind breezeways, some weaker air pathways may exist between the buildings to allow wind penetration into building blocks 6 – 10 and the school site.

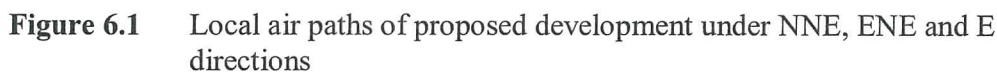
Another air pathway will flow over the hill slope of around 50m high and penetrate into the building blocks 1 – 5. To increase the permeability of the wind to the site and social welfare block and reduce the formation of the wake area affecting the Fung Chi Tsuen and Shui Tin Tsuen, building separations of 10m to >15m amongst the buildings (shown in **Figure 6.1**) have been allowed. For Umah International Primary School, which is located to the south of the development, the wind can penetrate to the site through the building gap of the development. Hence the development's influence to the ventilation of the school is expected to be minor.

Nevertheless, two weaker air pathways between building blocks 4 and 5, and between building blocks 1 and 2 are identified.

To allow a better penetration of wind to the pedestrian level, stepping building height for the building blocks 6 -10 (varying from about 107 mPD to max. 135 mPD) have been designed to optimise the wind capturing potential of the development itself. Hence, the variation in building height profile would enhance air movements, allow wind deflection and avoid air stagnation at pedestrian level. The effectiveness of the stepping building height will be studied in separate initial AVA study.

During the ENE and E wind, the air pathways will penetrate into the proposed development through the building gaps (shown as light blue arrows in **Figure 6.1**) and the proposed road in front of building blocks 1 – 4. In the downstream of building blocks 6-10, it is the hill. Hence, the wake effect of the wind will have no impact on it. To increase the permeability of the wind, building separations of 10m to >15m amongst the buildings (shown in **Figure 6.1**) have been allowed. Nevertheless, weaker air pathways between building blocks 4 and 5 and between building blocks 9 and 10 have been identified. For the Wing Ning Tsuen, it is at about 100m from the proposed buildings (i.e. block 1) of the development. It is anticipated that the wake effect of the buildings will have less impact on it under the E/ENE wind.

To allow the better penetration of wind to the pedestrian level, stepping building height for the building blocks 1 -5 (varying from about 90 mPD to about 118 mPD) have been adopted to optimise the wind capturing potential of the development itself. The effectiveness of the stepping building height will be studied in separate initial AVA study.



Under the summer prevailing winds, the air flows are indicated by orange arrows in **Figure 6.2**. During the SW, SSW and WSW winds, the air will flow along Long Ping Road and the perimeter of the hill (together with the EVA running along the site platform of block 6 to 10) to penetrate into the school site and building blocks 6 - 10. The stepping building height for the building blocks 6 -10 (varying from about 107 mPD to max. 135 mPD) would increase wind capturing potential of the development itself. Under summer wind, the proposed buildings do not block the main wind corridor. The development's influence to the downstream area is expected to be minor.

REP-035-00 | Issue 2 | 14 August 2014
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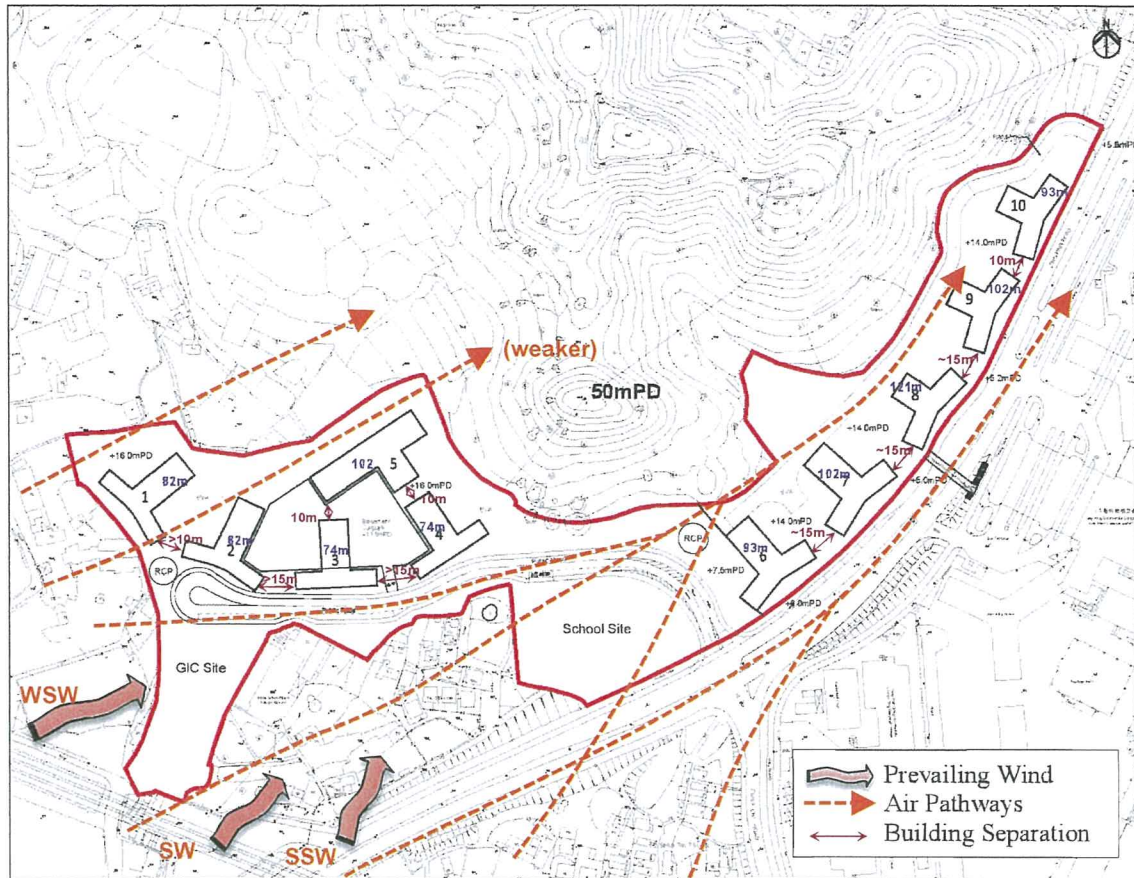


Figure 6.2 Local air paths of proposed development under SSW, SW and WSW directions

7 Recommendations

Two possible measures are recommended for the proposed development to further enhance the air ventilation:

1. Widen the separations between the residential blocks 1 and 2, blocks 4 and 5, blocks 3 and 5 and blocks 9 and 10 by re-orientating and/or re-positioning of the buildings to allow more or wider local air paths as far as possible;
2. Shorten the northern wing of the block 3 and block 4 as far as possible to allow a wider passageway and hence more smooth air flow.

8 Conclusion

The expert evaluation aims at providing qualitative analysis of wind performance of the project site based on the planning of the proposed development and assessing the effects of the proposed development on the surrounding areas. An AVA Initial Study is still required after the rezoning process in order to

quantitatively estimate the wind performance at the pedestrian level on and around the site, to derive the airflow patterns and to provide better illustrations of the ventilation performance of the proposed development.

Visual Appraisal for the Proposed Public Housing Development at Wang Chau

1. Visual Context

- 1.1 The Site is bounded by Long Ping Road in its east and situated opposite to Long Ping Estate. The site has an area of approximately 5.7 ha (**Plan 1 refers**). Currently, it is occupied by orchards, fallow land, rural residential dwellings, temporary structures and open storage uses. It is currently zoned “GB” on the Approved Ping Shan OZP No. S/YL-PS/14 (**Plan 2 refers**).
- 1.2 The characteristics of the surroundings of the sites as listed as follows:
- Long Ping Estate, a high density public housing development is situated at the eastern side of the site. It comprises 15 residential blocks. Their building heights range from 20 to 35 no. of storeys (i.e. about 63mPD to 102mPD).
 - Low rise village dwellings, temporary structures and open storage are located in the south, southwest and northeast of the project site.
 - A range of low wooded hills (about 50mPD) is located in the north of the site.

Generally, except Long Ping Estate, the area in the vicinity of the site is characterized by rural settings comprising mainly low rise village housings/temporary structures (**Plan 2 refers**).

2. Proposed Development (Plan 3)

- 2.1 According to the latest proposal, the public housing development site will accommodate a total of about 4,000 public housing flats. The school site will accommodate a 24 classroom primary school and the G/IC site will accommodate a block for social welfare facilities.
- 2.2 As per latest scheme, 10 residential blocks of about 25 to 41 storeys will be provided. Residential blocks will be arranged in two clusters. Five of which are arranged in a linear array parallel to Long Ping Road. The remaining 5 residential blocks will be located at the remaining part of the site near to the West Rail viaduct. Their building heights range from 90 to 135mPD (subject to detailed design and further studies). A G/IC site next to the West Rail Viaduct is reserved to house a free standing block of social welfare facilities. A site at the junction of Fung Chi Road and Long Ping Road is reserved for a 24 classroom

primary school and is situated between the two clusters of the residential blocks.

- The development parameters of the proposed public housing development and other facilities at the Site are listed as follows:

Table: 1.1 Major Development Parameters

		Remarks
Gross Site Area:	About 5.7 ha	Subject to detailed survey of the site area.
Public Housing Development Site :	About 4.1 ha	The public housing development site area shall exclude the site area of GIC, school, public road which are subject to detailed design.
Maximum Plot Ratio:	6.0	
Maximum Building Height:	+135mPD (41 storeys (excluding basement))	No. of storeys is provided for reference only
Gross Floor Area within Public Housing Development:	Total: 246,000 m ²	Subject to detailed survey of site area and design.
Total No. of Flats:	About 4,000 flats	Subject to detailed design.
Design Population:	About 12,300 persons	Subject to flat number
School Site:	Site Area: About 0.5 ha	For 1 primary school with 24 classrooms
GIC Site	Site Area: About 0.5 ha	A free standing block is proposed to accommodate the social welfare facilities.

GIC Provision	1 no. of Primary School (with 24 classrooms) 1 no. of Kindergarten (with 8 classrooms)	
Local Open Space	About 12,300 sq.m.	Subject to population
Social Welfare Facilities	1) Day Activity Centre 1 no. 2) Hostel for Severely Mentally Handicapped Persons 1 no. 3) Hostel for Moderately Mentally Handicapped Persons 1 no. 4) Integrated Vocational and Rehabilitation Services Centre 1 no. 5) Supported Hostel for Mentally Handicapped Persons 1 no. 6) Residential Care Home for the Elderly 1 no. 7) Day Care Centre for the Elderly 1 no. 8) Integrated Family Service Centre 1 no.	The social welfare facilities are subject to detailed design and SWD's funding availability.
Proposed Amendments in Zoning:	Residential (Group A)4	
Types of Uses:	Public housing, retail provision, local recreation provision, road and parking provision, school, and social welfare facilities	

3. Viewing Points (VPs)

- 3.1 The following five viewing points (VPs) from different directions and distances are selected (**Figure 1 refers**). These VPs represent the views from pedestrian nodes which are accessible by the public.

VP1	Fu Yip Street next to Yuen Long Trading Centre
VP2	Chun Hing San Tsuen
VP3	Fuk Hi Street Intersection
VP4	Kai Shan Facing Southeast
VP5	Chu Wong Ling

4. Visual Appraisal

VP1 - Fu Yip Street next to Yuen Long Trading Centre

- 4.1 This view point is at Fu Yip Street which is easily accessible and popular to the commuters walking to/from Tung Tau Industrial Area. The photomontage to illustrate the possible visual impact of the proposed public housing development is at **Figure 2**. Residential blocks of Long Ping Estate and the trees along Wang Lok Street have occupied most of the foreground of the photomontage. The proposed development is compatible with Long Ping Estate in terms of massing and land use. No significant visual obstruction to nearby visual resources is caused by the proposed development. The impact on public viewers is negligible having regard to the existing visual context. The visual impact from this viewpoint is acceptable.

VP2 – Chun Hing San Tsuen

- 4.2 This viewing point is at Chun Hing San Tsuen which is a low- rise private housing development 300m southwest of the Site. The photomontage to illustrate the possible visual impact of the proposed public housing site is in **Figure 3**. This view point represents the views of villagers/local residents toward the proposed development. At ground level, the view is blocked by existing built structures/vegetation and the West Rail viaduct. The building masses of the proposed development will block substantial part of the sky view. Compared to nearby low rise village housings and Long Ping Estate, its building masses impose significant visual impact in the photomontage. However, no visual resources like ridgelines, scenic areas are affected by the proposed development.

VP3 – Fuk Hi Street Intersection

- 4.3 This viewing point is at the intersection of Fuk Hi Street and Long Ping Road which is only about 100m northeast from the Site. It is located at a common pedestrian route. This view point represents the views of pedestrians towards the proposed development. The photomontage to illustrate the possible visual impact of the proposed public housing development is at **Figure 4**. Only minor part of the sky view is covered by the building mass of the proposed development. The proposed development seems to be an extension of the existing Long Ping Estate. Visual harmony can be seen in this visual context.

No visual resources are affected by the proposed development. The impact on public viewers is negligible having regard to the existing visual context. The visual impact from this viewpoint is acceptable.

VP4 – Kai Shan Facing Southwest

- 4.4 This viewing point is at the high point at Kai Shan which is about 1000m northwest from the Site. It is popular to the public for hiking and has a panoramic view over the site and the Yuen Long Town Centre. This view point represents the views of occasional visitors towards the proposed development. The photomontage to illustrate the possible visual impact of the proposed public housing development is at **Figure 5**. When viewed from the viewing point at Kai Shan, the proposed development is shown in two new clusters of building masses in the front edge of the Yuen Long Town and the proposed low rise school development between the clusters would allow a vista through the site to the town and the mountain behind. The stepped height profile of the proposed development is visually compatible with the general building profile in Yuen Long Town Centre. No visual obstruction to the ridgeline of Ho Hok Shan and Tai Lam Country Park has been made. The visual impact is generally acceptable for public viewers having regard to the existing visual context.

VP5 - Chu Wong Ling

- 4.5 This viewing point is at the high point of Chu Wong Ling, about 600m northeast of the Site. It is popular to the public for hiking. This view point represents the views of occasional visitors towards the proposed development. Photomontage to illustrate the possible visual impact of the proposed public housing site is in **Figure 6**. Residential blocks of Long Ping Estate and the woodland have occupied most of the foreground of the photomontage. Part of the sky view and the view of the hill at the backdrop are blocked by the building masses of the proposed development. The visual impact to the public viewers will be significantly affected.

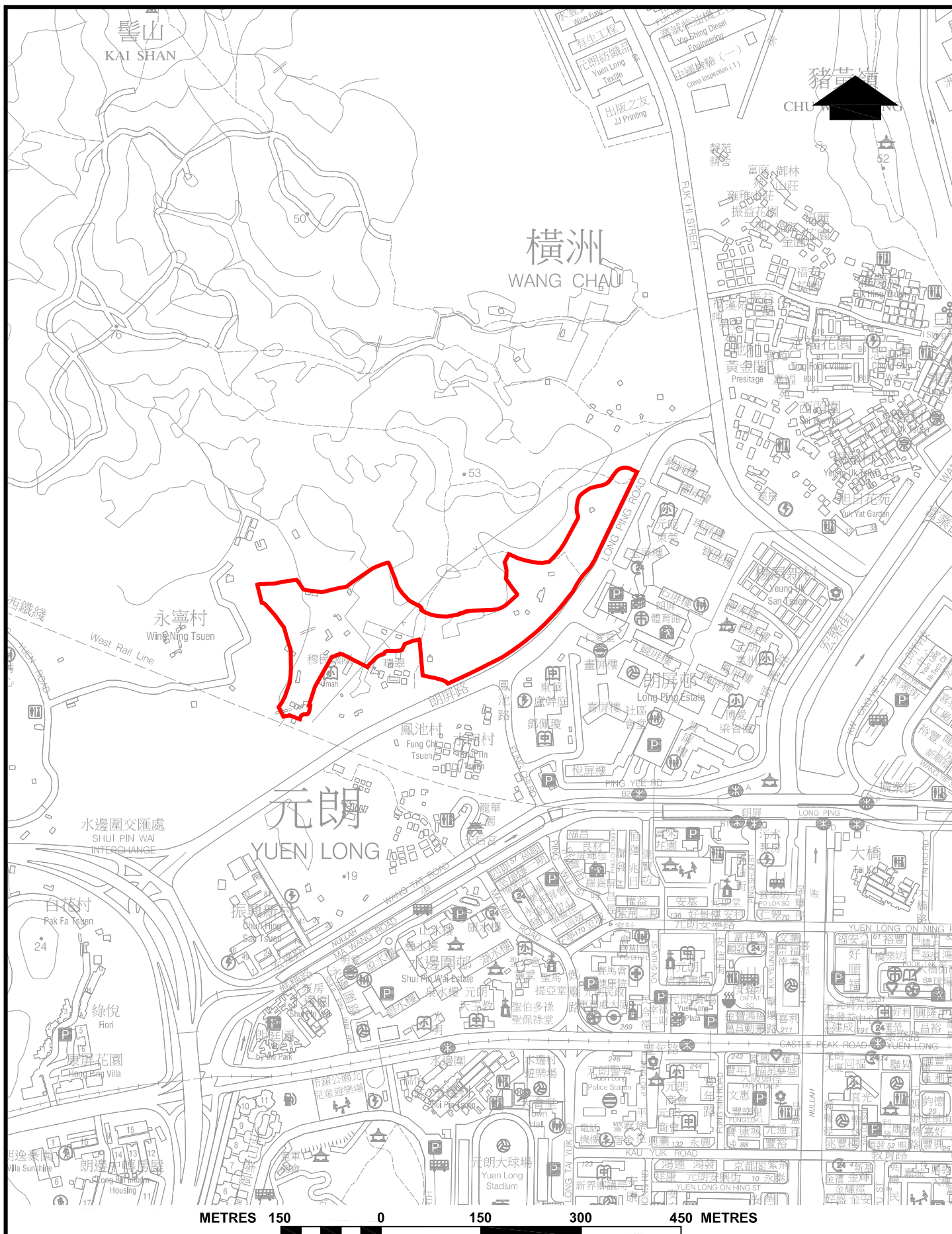
5. Conclusion

- 5.1 Amongst the visual impacts presented from VP1 to VP5, the overall visual impacts from VP1 (Fu Yip Street next to Yuen Long Trading Centre), VP3 (Fuk Hi Street Intersection) and VP4 (Kai Shan) are not significant and they are generally acceptable in view of their visual compatibility with the built environment shown in the photomontages in terms of their building form, scale

and masses. No visual obstruction to the nearby visual resources has been made.

- 5.2 For VP2 (Chun Hing San Tsuen) and VP5 (Chu Wong Ling), since the building masses of the proposed development have substantially blocked part of the sky views/mountain backdrop in the photomontages and their visual impacts are significant for the viewers (i.e. local residents for VP2; occasional visitors for VP5).
- 5.3 To minimize the visual impacts, various considerations have been made. Due to its irregular site configuration and the proposed development parameters, high rise housing blocks in cluster form are inevitably necessary to optimize its development intensity. The scope for rearrangement of disposition of residential blocks is limited and needs to be further studied. Its rural setting, to a large extent, will lead to significant contrast of the visual impact before and after the proposed development. However, HD has already deployed distinctive height variations and building gaps between the building blocks to mitigate its visual impacts of its building mass. The building height variations and building gaps will be further studied in the detailed design stage. Visual interest will be considered for incorporation into the new building outlook to enhance the visual quality of the proposed public housing development.

Housing Department
August 2014



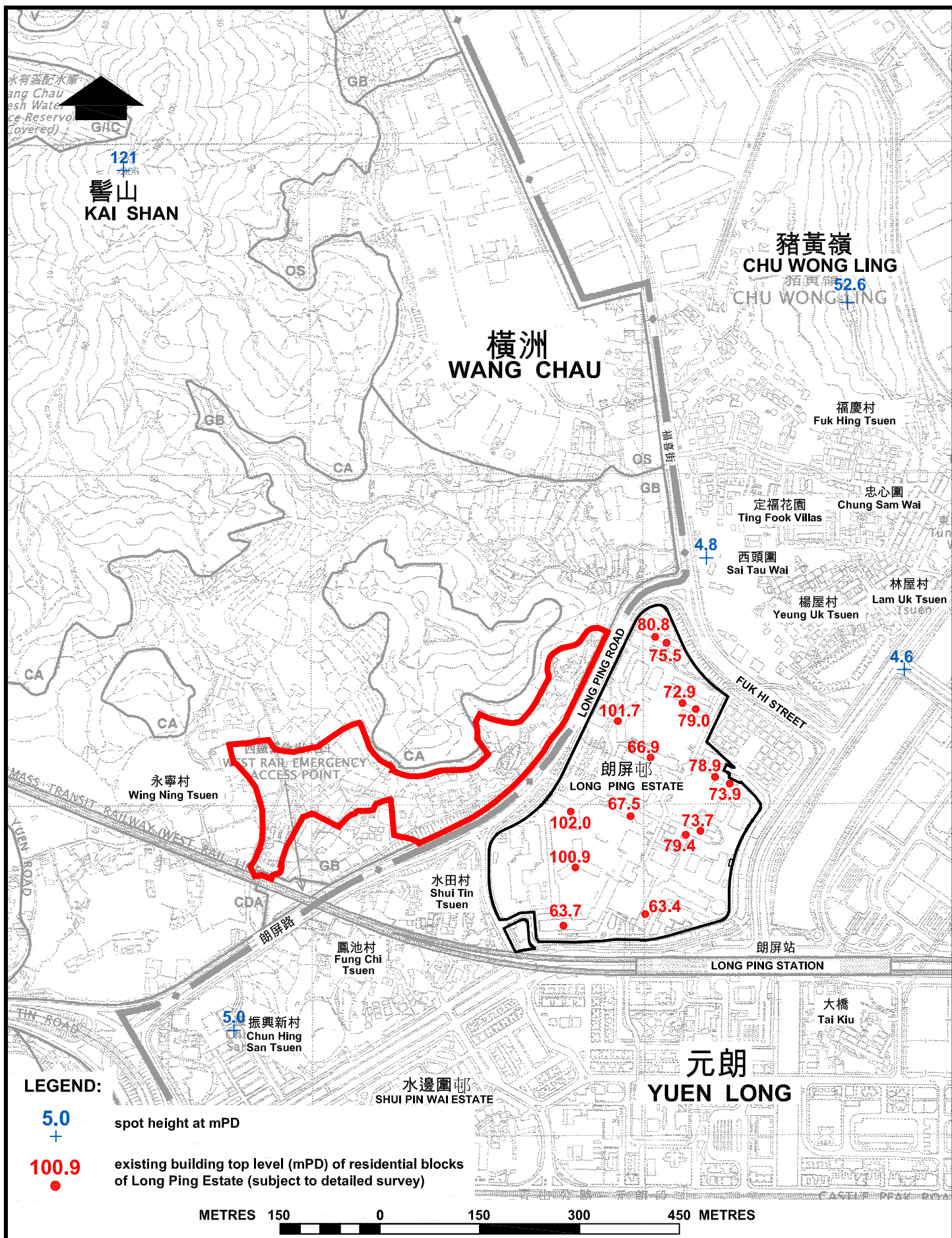
WANG CHAU



HOUSING DEPARTMENT
PLANNING SECTION

PLAN 1

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15. 8. 2014



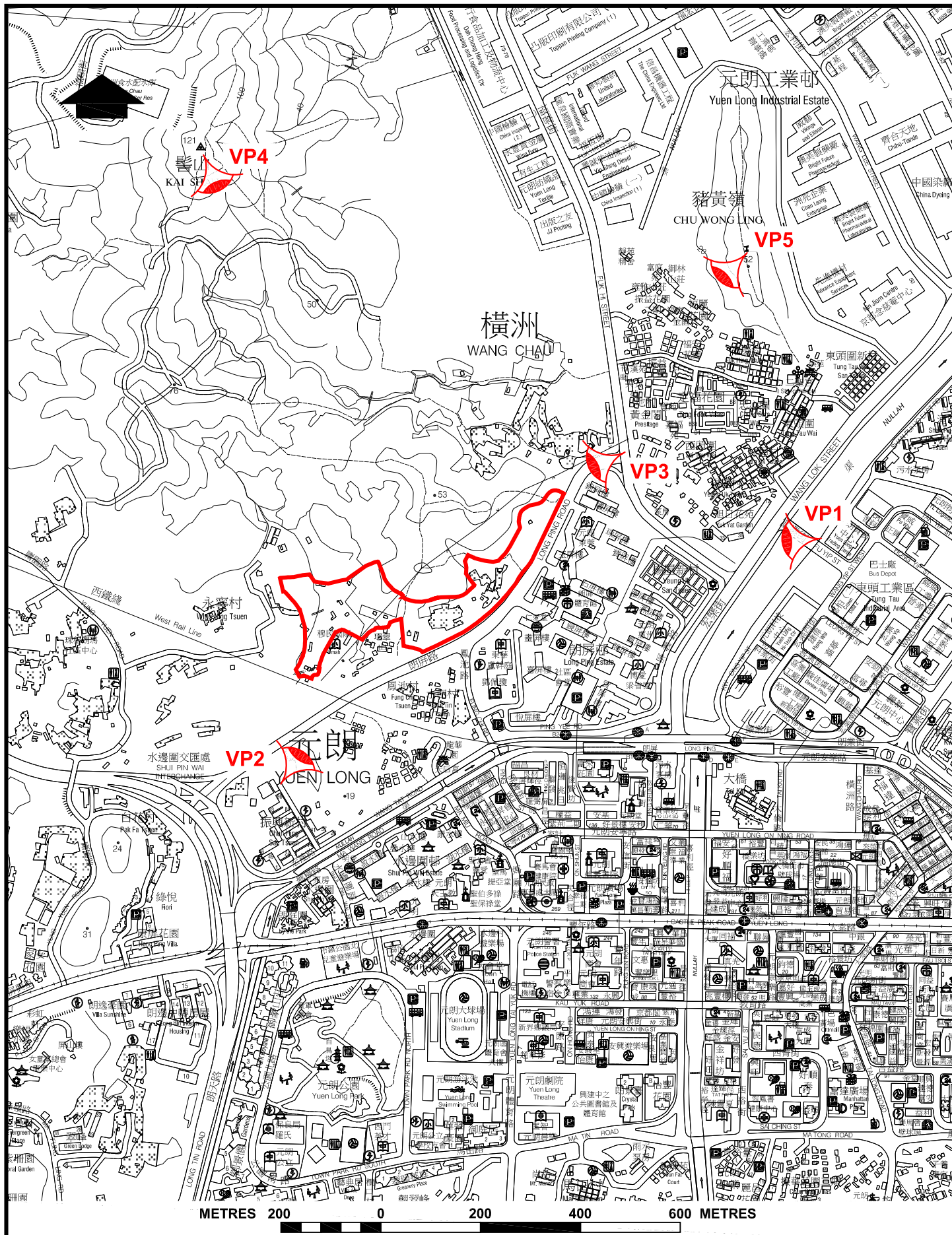
SURROUNDING AREA OF WANG CHAU



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PLANNING SECTION

PLAN 2

DATE :
15. 8. 2014



VIEWING POINTS LOCATION PLAN



HOUSING DEPARTMENT
PLANNING SECTION

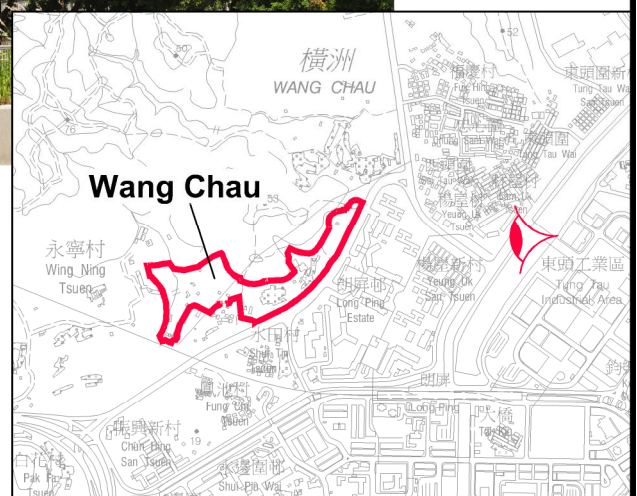
Figure 1

DATE :
21. 8. 2014

Existing View



With Proposed Development



PHOTOMONTAGE FROM VIEWING POINT 1



**HOUSING DEPARTMENT
PLANNING SECTION**

Figure 2

**DATE :
21. 8. 2014**

The Site

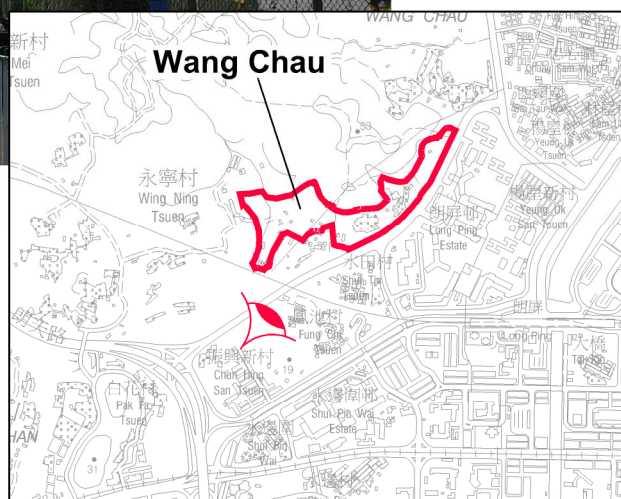
Existing
View



Long Ping
Estate

Proposed Public Housing Development (max. 135mPD)

With
Proposed
Development



PHOTOMONTAGE FROM VIEWING POINT 2



HOUSING DEPARTMENT
PLANNING SECTION

Figure 3

DATE :
21. 8. 2014



Existing View



With Proposed Development



PHOTOMONTAGE FROM VIEWING POINT 3



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PLANNING SECTION**

Figure 4

**DATE :
21. 8. 2014**

Existing View

Sun Yuen
Long
Centre

YOHO
Midtown

The Site

Villa
by the
Park

Long Ping Estate

Shui Pin Wai Estate

**With
Proposed
Development**

Proposed Public Housing Development
(max. 135mPD)



PHOTOMONTAGE FROM VIEWING POINT 4



**HOUSING DEPARTMENT
PLANNING SECTION**

Figure 5

**DATE :
21. 8. 2014**



**Existing
View**



**With
Proposed
Development**



PHOTOMONTAGE FROM VIEWING POINT 5



**HOUSING DEPARTMENT
PLANNING SECTION**

Figure 6

**DATE :
21. 8. 2014**

Hong Kong Housing Authority
Agreement No. CB20120293
Public Housing Development at
Wang Chau, Yuen Long

Technical Report
Transport and Traffic Impact
Assessment

REP-031-02

Issue 1 | 23 September 2014

IMPORTANT – CONFIDENTIALITY

This project and study shall be kept confidential and any information contained in and/or related to the project/study shall not be disclosed to any person not involved in the project/study.

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

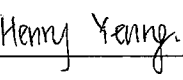
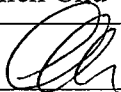
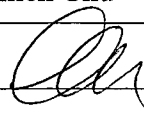
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Document Verification

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EXECUTIVE SUMMARY

A transport and traffic impact assessment (TTIA) has been conducted for the proposed public housing development (PH) site at Wang Chau, Yuen Long. The proposed development site will consist of residential buildings for Home Ownership Scheme (HOS) and Public Rental Housing (PRH), car parks, retails, social welfare block, one 24-classroom primary school, and complementary recreational facilities. In addition, a kindergarten and an Estate Management Office (EMO) will also be planned within the PH site.

The TTIA is to ascertain the effects of the proposed development on the traffic infrastructure and transport provision in the vicinity of Project site and recommend necessary enhancement to the local traffic system. The assessment has already taken into account a number of major developments in the vicinity of the Project site including North East New Territories New Development Area, Lok Ma Chau Loop Development Area, Hung Shui Kiu New Development Area, Kam Tin South development, Yuen Long South Development, Long Bin housing Development, as well as some residential developments such as Long Ping Station North and South Development, and ex-Yuen Long Estate development.

To appreciate the existing traffic conditions, assessment for the base year 2012 at the major road links and junctions were undertaken. It is revealed that all assessed road links and junctions are currently operating at satisfactory level.

A new access road will be provided to serve the PH site. The proposed access road will be in single-2 lane configuration, which will be adequate to cater the traffic demand from the future development. A staggered pedestrian crossing at the access road leading to PH site will be provided. Under this proposed scheme, it is anticipated that the overall junction performance will be operating at satisfactory level.

Assessments for the design years 2025 and 2031 at the major road links and junctions under with and without development scenarios were undertaken. For the major road links, results indicate that all assessed road links will still be performing at satisfactory level, except for the eastbound of L2 (Yuen Long Highway – Tong Yan San Tsuen Interchange & Shap Pat Heung Interchange) where the V/C ratio will start to exceed the capacity in 2025 and increase to 1.16 in 2031 for both the with and without development scenarios. By comparing the V/C ratio of L2 for the without development scenario in 2025 and 2031, the contribution of traffic from the proposed developments on L2 is only minimal. Therefore, the exceedance is contributed from the growth of regional traffic and the impact of the subject development is negligible. No road improvement works due to the proposed development is required. For the major junctions, results indicate that all assessed junctions will be operating at satisfactory level.

The existing road-based and rail-based public transport services in vicinity of the Project site have been reviewed. To encourage the use of public transport, a GMB lay-by and a Taxi stand at the access road of the development site and bus lay-bys along the two sides of Long Ping Road are proposed. One bus route and one to two GMB routes are initially recommended. It is anticipated that the service capacity of the proposed public transport facilities will adequately cater for the future demand after the completion of the development. It shall be noted that the final operation plan of the public transport would still be subject to future demand, and would need to be revisited by the respective operators. Re-routing of existing

public transport services along Long Ping Road to the development site could also supplement these proposed public transport services.

Future pedestrian conditions in design year 2025 and 2031 were also assessed. Based on the LOS assessment, the major pedestrian facilities in design year 2025 and 2031 are predicted to operate at LOS C or above. No pedestrian circulation problems are anticipated. In addition to the existing pedestrian network, a public footbridge across Long Ping Road connecting the public housing site to the Long Ping Estate will be required on the perspective of pedestrian flow. With the consideration of future pedestrian flows, the proposed public footbridge should be 3m wide in order to attain a LOS C.

Based on the traffic and pedestrian analysis, the proposed PH development in Wang Chau will have no adverse traffic impact on the nearby road links, junctions and pedestrian facilities. The conclusion therefore is that the proposed development is acceptable from the traffic point of view.

1 INTRODUCTION

1.1 Background

- 1.1.1 Ove Arup & Partners Hong Kong Limited (Arup) was appointed by Hong Kong Housing Authority (HKHA) to conduct a transport and traffic impact assessment (TTIA) for a proposed public housing (PH) development at a potential site at Wang Chau, Yuen Long. The location of the project site and its environs in the vicinity are shown in **Figure 1.1.1**.
- 1.1.2 This TTIA is to ascertain the effects of the proposed development on the traffic infrastructure and transport provision in the vicinity of Project site, including the proposed future road connection to/from surrounding road network for the proposed PH development, and associated facilities particularly with respect to the performances of the affected junctions in the vicinity. Any necessary enhancement and improvements to the local traffic system will be recommended.
- 1.1.3 The site currently falls within an area zoned "Green Belt" (GB) according to the Approved Ping Shan Outline Zoning Plan (OZP) No. S/YL-PS/14. Rezoning is required for the proposed PH site.

1.2 Objective of the Report

- 1.2.1 The principal objective of the report is to support the proposed development by addressing the traffic-related issues and ensuring that the proposed development would be feasible in traffic terms without causing adverse impact on the surrounding road network.
- 1.2.2 Major tasks to achieve the objective are summarized as follows:
- Review the available traffic data/information for forecasting future traffic and pedestrian flow and pattern;
 - Conduct traffic counts and surveys and collect any other data for validating the transport models for the base year;
 - Forecast traffic and pedestrian flow and pattern generated and attracted by the proposed PH development in the vicinity of the Project site. The detailed methodology for traffic and pedestrian flow and pattern forecasts shall be agreed by Transport Department (TD);
 - Examine the adequacy of the capacity of the existing and planned road and pedestrian networks and major interchanges/junctions in the vicinity of the Project site; and recommend additional transport infrastructure, if any, to cater for the additional traffic generated from the PH development;

- Assess the likely traffic impact due to the PH development and associated facilities on the road network capacity, traffic and pedestrian circulation, car parking, loading and unloading facilities and lay-bys, and develop traffic improvement schemes, where appropriate, to mitigate any traffic impact;
- Review the public transport demand arising from the PH developments and associated facilities; and recommend the necessary public transport services and the associated public transport facilities. These tasks shall be conducted in close liaison with transport operations divisions of TD.

1.3 Structure of this Report

1.3.1 The structure of this Technical Report is as follows:

- | | |
|-----------|---|
| Section 1 | Introduces the project background, objectives and as well as the main tasks of the study. |
| Section 2 | Presents the planning parameters of the proposed development for technical assessment. |
| Section 3 | Presents the technical approach of TTIA. |
| Section 4 | Presents the proposed traffic management measures to the external road network. |
| Section 5 | Presents the provision of transport facilities. |
| Section 6 | Presents the findings of TTIA. |
| Section 7 | Presents the findings of pedestrian impact assessment. |
| Section 8 | Conclusion. |

1.4 Nomenclature and Abbreviations

1.4.1 The following **Table 1.1.1** lists out the meaning of abbreviation for expressions adopted in this report:

Table 1.1.1 Abbreviations

Abbreviations	Term
AOI	Area of Influence
BDM	Base District Traffic Model
DBPS	District-Based Parking Standards
GB	Green Belt
GFA	Gross Floor Area
GIC	Government/ Institution/ Community
HKPSG	Hong Kong Planning Standards and Guidelines
HOS	Home Ownership Scheme
HyD	Highways Department
HKHA	Hong Kong Housing Authority
LATM	Local Area Traffic Model
LOS	Level of Service
LRT	Light Rail Transit
NOFA	Net Operating Floor Area

Abbreviations	Term
OS	Open Storage
OZP	Outline Zoning Plan
PCU	Passenger Car Unit
PDZ	Planning Data Zone
PH	Public Housing
PlanD	Planning Department
PRH	Public Rental Housing
TD	Transport Department
TPDM	Transport Planning and Design Manual
TPEDM	Territorial Population and Employment Data Matrix
TTIA	Transport and Traffic Impact Assessment
TM	Transport Model
WC	Wang Chau
WR	West Rail
YLIE	Yuen Long Industrial Estate

2 PROJECT DESCRIPTION

2.1 Site Location

- 2.1.1 The Project site is bounded by Long Ping Road and Long Ping Estate to the east, Chun Hing San Tsuen, Shui Tin Tsuen and Fung Chi Tsuen to the south, Wing Ning Tsuen and Long Tin Road to the west, as well as Kai Shan to the north as indicated in **Figure 1.1.1**. The gross site area is about 5.6ha.

2.2 Existing Conditions

- 2.2.1 According to the Approved Ping Shan Outline Zoning Plan (OZP) No. S/YL-PS/14, the PH site is zoned as “Green Belt” (GB). It is currently occupied by farmland, fallow land, rural residential dwellings, temporary structures and few open storages.
- 2.2.2 The surrounding areas of the Project site are characterized by a mixture of various land uses. These include high-rise residential development, villages and low-rise residential developments, natural landscapes, burial grounds and graves, open storage uses, major roads and railway tracks.

2.3 Proposed Public Housing Site

Development Proposal

- 2.3.1 The PH site consists of residential buildings for Home Ownership Scheme (HOS) and Public Rental Housing (PRH), car parks, retails, social welfare block, one 24-classroom primary school, and complementary recreational facilities. In addition, a kindergarten and an Estate Management Office (EMO) have also been planned within the PH site. **Figure 2.3.1** shows the locations of the proposed PH development.
- 2.3.2 Retail facilities are planned strategically along Long Ping Road to allow street-front shops to serve the future residents. The social welfare block at the south-western tip would accommodate various welfare facilities.

Development Parameters

- 2.3.3 The planning parameters are yet to be confirmed at the stage of the study. As for a conservative approach, it is assumed that the total number of flats is capped at 5,000 units with PRH / HOS ratio of 50:50 for technical assessment purpose. Development parameters of the proposed development for this TTIA are summarized in **Table 2.3.1**.

- 2.3.4 Based on the tentative implementation programme, the PH site would be developed in a single phase, and the planned population intake would be in year 2025.

Table 2.3.1 Summary of Development Parameters Adopted for the TTIA

Development	Parameter
HOS	2,500 flats
PRH	2,500 flats
Retail	3,209 GFA (m ²)
Primary School	24 Classrooms
Social Welfare Facilities	4,450 NOFA (m ²)

Note:

1. GFA denotes Gross Floor Area
2. NOFA denotes Net Operating Floor Area

3 TECHNICAL APPROACH OF TRANSPORT AND TRAFFIC ASSESSMENT

3.1 Proposed Area of Influence (AOI)

- 3.1.1 For the purpose of this TTIA, an Area of Influence (AOI) is proposed and presented in **Figure 3.1.1**. It covers the critical road junctions and road networks, which may be affected by the proposed development in Wang Chau. Necessary data and information within the AOI have been collected and assembled for assessments.

3.2 Planning Assumptions

- 3.2.1 The 2009-based Territorial Population and Employment Data Matrix (TPEDM) has been released by Planning Department (PlanD) in August 2011. It serves as the major input assumptions in the transport model which translates the demographic data into traffic and transport demand. The TPEDM covers base year 2009 and design years 2011, 2016, 2021, 2026 and 2031.
- 3.2.2 The TPEDM presents the population and employment assumptions by 405 Planning Data Zones (PDZs). The population and employment data for the corresponding PDZs within the AOI are presented in **Tables 3.2.1** below.

Table 3.2.1 Population and Employment Data for the Corresponding PDZs within the AOI

PDZ	Year					
	2009	2011	2016	2021	2026	2031
Design Population						
232	8,333	9,299	10,262	11,137	12,041	11,519
177	46,067	45,253	44,636	45,602	46,500	55,322
314	9,484	9,585	9,416	9,786	10,482	10,060
179	8,130	10,526	14,990	15,264	16,007	15,304
178	10,140	10,320	11,336	14,229	21,966	21,526
315	28,532	28,485	27,761	28,773	30,694	29,775
180	14,100	14,173	21,108	21,655	22,763	21,775
Employment						
232	4,800	4,720	4,398	4,571	4,179	3,871
177	8,408	8,344	8,463	8,696	8,812	8,744
314	4,600	4,005	4,018	3,945	3,918	3,890
179	1,786	2,149	3,183	3,189	3,172	3,122
178	13,660	13,552	15,840	16,374	17,256	16,911
315	16,066	15,829	15,679	15,069	14,831	14,628
180	3,365	2,505	4,254	4,230	4,184	4,100

3.3 Other Developments

- 3.3.1 There are some other major developments in the vicinity of the Project site, such as North East New Territories New Development Area, Lok Ma Chau Loop Development Area, Hung Shui Kiu New Development Area, Kam Tin South development, Yuen Long South Development, Long Bin housing Development. They may not be fully updated in 2009-based TPEDM. With reference to other concurrent studies, the population and employment assumptions of these major developments have been incorporated to update the TPEDM for the relevant PDZ zones as appropriate.
- 3.3.2 In addition, there are some residential developments in the vicinity of the Project site, such as Long Ping Station North and South Development, and ex-Yuen Long Estate development. The planning and employment assumptions of these residential developments have also been reviewed and incorporated into the development of traffic forecast, as appropriate.

3.4 2-Tier Transport Modelling

- 3.4.1 A two-tier modelling approach was adopted. The upper tier involved the use of Arup's in-house CTS-compatible TM which produced traffic forecasts on a strategic basis. The cordoned matrices from the TM would then be input into the lower tier LATM which would be used to predict the future year traffic flow on a more local perspective. The modelling approach is illustrated in **Figure 3.4.1** and also elaborated in the following sections.

Upper Tier Model

- 3.4.2 Arup's in-house CTS-compatible TM was applied as the upper tier model. The planning assumption as discussed in **Sections 3.2 & 3.3** had been incorporated into the TM. Adopting this TM would ensure compatibility with current government studies and would allow factors affecting global travel behaviour such as economic growth to be taken into account. The TM was capable of producing trip matrices for the base and future years based on demographic and socio-economic data such as population, employment and income etc., through which this traditional four-stage TM reflected trip generation/attraction, modal split, trip distribution, and trip assignment throughout the territory. The TM also offered the advantage of being capable of reflecting the traffic impacts especially the mode choice caused by changes of fundamental assumptions such as the demographic, socio-economic and infrastructures. It was hence recommended to adopt this model as the basis, and updated using the latest available planning data, land use data, planned and committed new infrastructures and local developments in the AOI for this study.
- 3.4.3 In order to ensure the traffic patterns predicted by the model could reasonably replicate the current traffic condition and hence provided confidence in forecasting the future year traffic, the output from the base year TM was compared against observed traffic flows as

published in the Annual Traffic Census for both the AM and PM peak hours. Year 2009 was selected as the Base Year of the TM.

Lower Tier Model

- 3.4.4 Matrices cordoned from the TM were input into the LATM. Despite the LATM only performs traffic assignment, it offered the benefit of giving more detailed accounting of queuing, junction control and delays, making it more suitable for the evaluation of localized traffic impacts.
- 3.4.5 The development of the LATM would follow the same approach as TD's latest 2008-based BDTM. The compatibility between the 2 tiers was ensured by the control of the external trip ends, which were essentially the link flows of San Tin Highway, Kam Tin Road, Kam Sheung Road, Tai Lam Tunnel, Yuen Long Highway – Lam Tei and Castle Peak Road – Lam Tei, obtained from the TM. In other words, the LATM would consistent with the TM in terms of the socio-economic, transport infrastructure, road network, planning data and all relevant transport policy assumptions. The link flows and junction turning counts on a more local level would be produced by the LATM assignments for subsequent impact assessments.
- 3.4.6 Validation was also carried out for the LATM and additional focus was given to the comparison of observed and modelled flows at both strategic and local road links. Supplementary traffic survey had been conducted to provide traffic flows and turning counts which were not available in the Annual Traffic Census.
- 3.4.7 As survey counts represented the Year 2012 observed traffic flows, it was proposed to adopt Year 2012 as the LATM base year, and the LATM was validated to Year 2012 conditions. Trip matrices cordoned from the validated TM for the LATM model validation was projected from Year 2009 to 2012 by making reference to the published growth factors of various road links in AOI according to the Annual Traffic Census 2009 and 2012.
- 3.4.8 The LATM has been developed for the area of North West New Territories, where the area of Wang Chau, Yuen Long has been included.

3.5 Planning Assumptions for Project Site

Design Years and Development Parameters Adopted

- 3.5.1 Considering the implementation programme, traffic impact due to the PH developments in design years 2025 and 2031 would be assessed. The development parameters adopted in the corresponding assessment years should be referred to **Table 2.3.1**.

Adopted Trip Rates for PH Development

- 3.5.2 To estimate the traffic generation of the proposed development, reference has been made to traffic generation survey conducted at the

existing similar developments in Yuen Long and Sha Tin areas where experience similar environment as the proposed PH site.

- 3.5.3 The surveys were undertaken during the periods 07:30 – 09:30 and 17:30 – 19:30 hours on a normal weekday. Surveyors were deployed to conduct classified traffic count surveys on the vehicular trips entering to and leaving from the selected developments. The observed peak traffic generation rates are tabulated in **Table 3.5.1**. The trip rates obtained from survey were compared against the trip rates stated in Transport Planning and Design Manual (TPDM) as shown in **Table 3.5.2**.

Table 3.5.1 Summary on Surveyed Trip Rates at Similar Development

Survey Location	Development Type	Unit	AM Peak		PM Peak	
			Generation Rate	Attraction Rate	Generation Rate	Attraction Rate
Yiu On Estate (Sha Tin)	PRH	pcu/hr/flat	0.0259	0.0157	0.0146	0.0179
Long Ping Estate (Yuen Long)	PRH	pcu/hr/flat	0.0246	0.0219	0.0120	0.0181
Kam Ying Court (Sha Tin)	HOS	pcu/hr/flat	0.0354	0.0186	0.0164	0.0245

Table 3.5.2 Summary on Trips Rates Stated in TPDM

Development Type	Upper / Mean / Lower	Unit	AM Peak		PM Peak	
			Generation Rate	Attraction Rate	Generation Rate	Attraction Rate
PRH (Average Flat Size 40 sqm)	Upper	pcu/hr/flat	0.0539	0.0439	0.0278	0.0339
	Mean		0.0432	0.0326	0.0237	0.0301
	Lower		0.0325	0.0213	0.0196	0.0263
HOS (Average Flat Size 50 sqm)	Upper	pcu/hr/flat	0.0761	0.0573	0.035	0.0451
	Mean		0.0622	0.0426	0.0297	0.0401
	Lower		0.0483	0.0279	0.0244	0.0351
Retail	Upper	pcu/hr/10	0.3307	0.3342	0.3839	0.4504
	Mean	0 sqm	0.2296	0.2434	0.3100	0.3563
	Lower	GFA	0.1285	0.1525	0.2360	0.2622

Note:

1. The values underlined indicate the trip rate adopted for assessment.

- 3.5.4 It is generally observed that the surveyed trips rates were lower for both generation and attraction for both AM and PM peaks. It is therefore recommended to adopt the lower values of TPDM as underlined in **Table 3.5.2** for assessment. For retail, the mean trip rates as stated in TPDM has been assumed.
- 3.5.5 For primary school, trip rates have been assumed by making reference to Transport Department's Technical Circular No. 05/2006 – Traffic Generation Survey 2006, as shown in **Table 3.5.3**.

Table 3.5.3 Summary on Trips Rates Stated in Transport Department's Technical Circular No. 05/2006 – Traffic Generation Survey 2006

Development Type	Unit	AM Peak		PM Peak	
		Generation Rate	Attraction Rate	Generation Rate	Attraction Rate
Primary School	pcu/hr/30classrooms	7	30	1	1

Design Year Traffic Generation for the Proposed Development

3.5.6 Based on the development parameters and the proposed trip rates as discussed in the sub-sections above, the total AM / PM peak hour vehicular traffic trips generated / attracted by the proposed development site are computed and shown in **Table 3.5.4**.

Table 3.5.4 Traffic Generation by the Proposed Development (in units of pcu/hr)

Development Type	Unit	AM Peak		PM Peak	
		Generation	Attraction	Generation	Attraction
Design Years 2025 and 2031					
PRH	pcu/hr	82	54	49	66
HOS	pcu/hr	121	70	61	88
Retail	pcu/hr	8	8	10	12
Primary School	pcu/hr	6	24	1	1
Total		217	156	121	167

3.5.7 It is noted that the trips generated / attracted by social welfare facilities fall outside the commuter peak hours, these trips are therefore excluded from the estimation of vehicular trip generation.

4 PROPOSED TRAFFIC ARRANGEMENT

4.1 Vehicular Access Arrangement

- 4.1.1 By studying the existing road network in the vicinity of the AOI, and the need to maintain the accessibility of the proposed development, the main road access for the PH site has been proposed.
- 4.1.2 The key objective of the vehicular access arrangement is established with due consideration to cater for the new demands from the developments, as well as improvements to the adjoining areas. The proposed new access road is shown in **Figure 4.1.1**.
- 4.1.3 Vehicular traffic to and from the PH site would take the routes through either Long Ping Road or Fung Chi Road. The vehicular access routings connecting to and from the PH site are illustrated in **Figure 4.1.1**. Details of the road access are discussed in the following section.

4.2 Proposed Access Road for Public Housing Site

- 4.2.1 The proposed access road would extend northwards from the junction and continue towards the west near the proposed GIC site. The proposed access road is in single-2-lane configuration. The cross section of the proposed access road is shown in **Figure 4.2.1**.
- 4.2.2 Based on traffic forecast results, the critical peak hour 2-way traffic flow in year 2031 is about 370 pcu/hr. Considering the design capacity of 1,800 pcu/hr for a single-2 lane access road, the V/C is about 0.21. Therefore, it is anticipated that the proposed access road in its single-2 lane configuration would be adequate to cater the traffic demand from the future development.
- 4.2.3 Due to the physical constraints of the site, the proposed access road would rise from the existing level at around +5.9mPD on Long Ping Road, then levels at +16.0mPD at upper platform of HOS site with a combination of gradient ranging between 4% to 8%.
- 4.2.4 In terms of the accessibility to eastern portion of the site, a primary access to the car parking and loading/unloading area has been proposed. A right turn pocket has also been proposed to minimise the interruption on prevailing traffic. A secondary access has been proposed on Long Ping Road opposite Kam Ping House of Long Ping Estate, which is intended for emergency uses only (as shown in **Figure 4.1.1**).
- 4.2.5 Run in/outs have been considered for western portion of the site and the GIC facility. However, the arrangement of the run-in/outs is yet to be determined at this stage of the study and is subject to the detailed design of the developments.

- 4.2.6 For the school site, a pick-up/drop-off area and a run in/out (as shown in **Figure 4.1.1**) have been proposed. A minimum sight distance of 50m has been allowed.
- 4.2.7 A GMB lay-by and a Taxi stand have been planned at the access road (as shown in **Figure 4.1.1**). The proposed GMB lay-by could serve as feeder services to bring residents to West Rail Long Ping MTR Station, and its details are discussed in **Section 5**.
- 4.2.8 The requirement for greening on roads has been reviewed with reference to Development Bureau's Technical Circular No. 2/2012 "Allocation of Space for Quality Greening on Roads". As stipulated in the Technical Circular, localised discontinuities of greening zones for standard provision of traffic and transport facilities, such as vehicular run-in/out, pedestrian crossings, bus stops, taxi stands, etc. would be allowed and sufficient clearance between proposed trees and roadside facilities should also be allowed for consideration of road safety. Other than these, sound justifications with alternative greening measures for the exemption should be provided such as (i) difficulty in maintenance of the planting at traffic-sensitive locations such as high speed roads/expressways; (ii) significant constraints on existing site areas (e.g. road widening projects restricted by buildings, or locations with unfavourable conditions for healthy planting); (iii) not cost-effective, e.g., requiring resumption of a substantial amount of private land, incurring considerable maintenance costs, requiring a substantial amount of site formation works in return of a greening effect that is disproportionate to the costs or resources involved, etc.
- 4.2.9 In consideration of the proposed access road, it would accommodate a large number of traffic and transport facilities. Along the western bound of the road, a pick-up/drop-off area (about 60m) for the school site, a GMB lay-by (about 40m), a Taxi Stand (about 30m) and a run-in/out for the GIC site would need to be allowed. Besides, sufficient sightline distances should be allowed for the entire curvature of the road around the school and a section of road to west of the school pick-up/drop-off area so as to maintain a clear visibility for road safety purpose. As such there is limited space for roadside greenings on the western bound of the road. On the eastern bound, greening zone is constrained by a run-in/out for refuse collection point, two car parking run-ins, two EVA run-in/outs and pedestrian crossings (location to be determined in detailed design stage). Sufficient sightline distance is also required at the curvature of the road junction. Besides for the section of road to the west of the school pick-up/drop-off area, substantial amount of site formation work (i.e. bored pile wall) is proposed and if greening zone is considered, additional resumption of land and graves to its north is required which is considered not cost-effective and not acceptable from social perspectives. Therefore the remaining space that could be allocated for possible quality greenings is also limited.

- 4.2.10 Taking into consideration of the above constraints including the road safety, the proposed traffic and transport facilities, additional resumption of land and grave required, as well as the target of maximising the net site area for PH development, greening zone on the proposed access road will be proposed as far as possible and where considered not practicable, alternative greening measures within the housing site will be provided.

4.3 Proposed Staggered Crossing Arrangement

- 4.3.1 As shown in **Figure 4.1.1**, a staggered pedestrian crossing with a central island will be provided at the access road leading to PH site. The crossing would be arranged such that pedestrians stepping onto the refuge island always turn towards the approaching traffic to give them a better view of it for safety reasons. Under this proposed scheme, it is anticipated that the overall junction performance would be operating at satisfactory level and the details of future year assessment are presented in **Section 6.3**.

5 PROVISION OF TRANSPORT FACILITIES

5.1 Existing Public Transport Services

Road-based Public Transport Services

- 5.1.1 Two bus termini can be found in the vicinity of the Project site. They are located at Wang Lee Street and Long Ping Estate respectively. At present Long Ping bus terminus provides service for 8 franchised bus routes, and 3 of which terminate at the terminus. A summary of public transport services operating in the vicinity of the Project site are shown in **Figure 5.1.1** and **Table 5.1.1**.

Table 5.1.1 Public Transport Services Operating in the Vicinity of the Project site

Route No	Origin / Destination	
Franchised Bus (FB)		
68A	Long Ping Estate Bus Terminus	Tsing Yi Railway Station Bus Terminus
76K	Long Ping Estate Bus Terminus	Wah Ming Bus Terminus
263M	Fu Tai Estate Bus Terminus	Tsing Yi Railway Station Bus Terminus
264M	Tin Yan Estate Bus Terminus	Tsing Yi Railway Station Bus Terminus
268B	Long Ping Railway Station	Hung Hom Ferry Concourse Bus Terminus
268C	Long Ping Railway Station	Kwun Tong Ferry Bus Terminus
269D	Tin Fu	Lek Yuen Bus Terminus
276	Tin Tsz Bus Terminus	Sheung Shui Bus Terminus
276P	Tin Tsz Bus Terminus	Sheung Shui Bus Terminus
B1	Tin Shui Wai Railway Station	Lok Ma Chau Spur Line
E34	Tin Shui Wai Town Centre Bus Terminus	Airport (Ground Transportation Centre) Terminus
K66	Long Ping Estate Bus Terminus	Tai Tong Bus Terminus
K68	Yuen Long Industrial Estate Bus Terminus	Yuen Long Park
K73	Tin Heng Estate Public Transport Interchange	Yuen Long Plaza
K74	Tin Shui Bus Terminus	Yuen Long (East) Public Transport Interchange
N269	Tin Tsz Bus Terminus	Mei Foo Bus Terminus
N30	Yuen Long (East) Bus Terminus	Tung Chung Railway
Green Minibus (GMB)		
74	Yuen Long (Fook Hong Street) Minibus Terminus	Shing Uk Tsuen
74A	Yuen Long (Fook Hong Street) Minibus Terminus	Tung Tau Wai
77	Tin Shui Wai Town Centre Public Transport Interchange	Lok Ma Chau (San Tin) Public Transport Interchange
77A	Grandeur Terrace Terminus	Pok Oi Hospital Terminus
79S	Tin Chung Court Bus Terminus	Lok Ma Chau Control Point

Rail-based Public Transport Services

- 5.1.2 The West Rail (WR) line forms part of the strategic rail network in Hong Kong, which links Northwest New Territories with main urban area. The first phase of West Rail (WR) has been in operation since 20 December 2003 providing a railway connection between Tuen Mun to Sham Shui Po via Yuen Long. The second phase of WR was completed in 2009 and the operation began on 16 August 2009. This phase has extended the service from Nam Cheong Station in Sham Shui Po to Hung Hom Station via Austin Station in Jordan and Tsim Sha Tsui East Station.
- 5.1.3 Long Ping Station is located at the southeast of the proposed PH site. The proposed PH site is largely covered by the 500m rail catchment of the Long Ping Station (the commonly agreed acceptable walking distance for railway services in Hong Kong). There are seven exits / entrances provided in Long Ping Station. Exit A is the nearest entrance to the proposed PH site.
- 5.1.4 Comprehensive rail passenger surveys have been conducted at the entries / exits of the Long Ping Station. It is observed that the existing AM peak hour total entry and exit rail passenger flow of Long Ping Station are about 4,400 and 2,600 passengers per hour.

5.2 Proposed Public Transport Facilities

- 5.2.1 In support of the transport strategy to promote the use of public transport facilities, a GMB lay-by at the access road of development site and bus lay-bys along the two sides of Long Ping Road are proposed. The following sub-sections present a preliminary estimate on the public transport demand and the recommended public transport requirements to cater the future demand generated by the PH site.

Public Transport Demand

- 5.2.2 Based on Arup's in-house CTS-compatible TM, it is estimated that the modal share of rail-based and road-based public transport in Wang Chau were about 58% and 24% respectively as shown in **Table 5.2.1**. The higher modal share of rail-based public transport in Wang Chau as compared to the modal share of entire Yuen Long District can be attributed by its proximity to the West Rail Long Ping MTR station.
- 5.2.3 The reliance of short-shuttle trips for rail passenger from the development site to West Rail Long Ping MTR Station has also been reviewed. Considering a large portion of the PH site are within the rail catchment area, it is therefore assumed that all the rail-based public transport trips generated by PRH site would be walk trips, while half of the rail-based public transport trips generated by HOS site would be walk trips and the remaining half would use GMB as the feeder services. The assumptions for the public transport demand generated by the primary school follows the same as HOS site.

Table 5.2.1 Modal Share of Yuen Long and Wang Chau

Area	Private Mode	Public Transport	
		Rail	Road-based
Yuen Long	21%	48%	31%
Wang Chau	18%	58%	24%

5.2.4

The demand on public transport, both short-shuttle trips to West Rail Long Ping MTR Station and external bus services, by person trips generated and attracted by the development site was estimated by making reference to the Arup's in-house pedestrian trip surveys conducted for similar developments. For PRH and HOS, the surveyed pedestrian trip generation rates were applied to the proposed number of flats to derive the trips, while for primary school site, the surveyed pedestrian trip generation rates were applied to the proposed number of classrooms. The trip rates and the estimated pedestrian trips are tabulated in **Table 5.2.2** and **Table 5.2.3**.

Table 5.2.2 Pedestrian Generation Rates

Development Type	Unit	AM Peak		PM Peak	
		Generation Rate	Attraction Rate	Generation Rate	Attraction Rate
PRH	persons/hr/flat	0.464	0.201	0.194	0.440
HOS	persons/hr/flat	0.494	0.081	0.158	0.298
Primary School	Persons/hr/classroom	4.733	17.533	1.467	0.333

5.2.5

For the retail and social welfare facilities, since they are expected to serve mainly the site residents, and it will only induce minimal pedestrian trips on the external walkway network during commuter peak hours. These development types are therefore excluded from the estimation of pedestrian trip generation.

Table 5.2.3 Estimated Demand on Public Transport (in units of persons/hr)

Development Type	Unit	AM Peak			PM Peak		
		Generation	Attraction	2-way	Generation	Attraction	2-way
Estimated Trips for 2,500 PRH Flats	persons/hr	1,160	503	1,663	485	1,100	1,585
Estimated Trips for 2,500 HOS Flats	persons/hr	1,235	203	1,438	395	745	1,140
Estimated Trips for 24 classroom primary school	persons/hr	114	421	535	35	8	43
Total		2,509	1,127	3,636	915	1,853	2,768

Table 5.2.4 Estimated Demand on Road-based Public Transport and Short-shuttle Trips using GMB Feeder Services (in units of persons/hr)

Development Type	Road-based Public Transport	Rail-based Public transport - GMB feeder services
PRH	334	0
HOS	356	430
Primary School	33	40
Total	723	470

Note:

1. To account for the peak within the peak hour, a surge factor of 1.2 was applied to estimate the demand.

- 5.2.6 Based on the critical peak hour one-way total demand (about 2,509 persons/hr) i.e. AM peak generation as indicated in **Table 5.2.3**, it is estimated that there are some 730 and 470 persons per hour demand on road-based public transport and short-shuttle trips using GMB feeder services (as shown in **Table 5.2.4**).

Preliminary Layout and Service Capacity of the Proposed Public Transport Facilities

- 5.2.7 The preliminary layouts of the proposed lay-by at the access road of development site and bus lay-bys along the two sides of Long Ping Road are shown in **Figure 4.1.1**. The proposed lay-by at the access road would accommodate 1 GMB bay and 1 taxi bay; while the proposed bus lay-by would accommodate 1 bus bay for each direction of Long Ping Road. **Table 5.2.5** summarizes the provision of the proposed public transport facilities.

Table 5.2.5 Summary on Provision of the Proposed Public Transport Facilities

Location	Facility Type	Provision
Long Ping Road (for each direction)	Bus Bay	52m
Access road of development site	Green Minibus (GMB)	40m
	Taxi	30m

Note:

1. With reference to TPDM, the width of the single width bus bay is 3.5m and the length is 40.0m which allows 1 boarding/alighting space and 2 spaces for stacking. If only one route is assigned to this bay, there will be 2 stacking spaces for the bus route. However, these spaces are not used by buses of other routes even if the spaces are not occupied;
2. With reference to TPDM, public light bus bays should be 3.0m wide between kerbs with a minimum length of 30 metres for 4 PLBs. At least one double-width bay should be provided to facilitate bypassing. A passenger platform with shelter and queue railing should have a minimum width of 2.5m and minimum 2.0m wide without shelter; and
3. With reference to TPDM, taxi stands should be 3.0m in width from the kerb with a minimum length for 3 taxis. The length of taxi stand should accommodate some stacking requirements of off-peak hours when turn over is low.

- 5.2.8 A preliminary estimate of the road-based public transport requirements to meet the demand as described above is shown in **Table 5.2.6**. 1 bus route and 1 - 2 GMB routes are initially recommended. The service capacity of the proposed public transport facilities (1,000 and 500 persons per hour for franchised bus and GMB, respectively) would adequately cater for the road-based public transport demand (730 persons per hour) and feeder to rail-based public transport demand using GMB services (470 persons per hour) from the developments.

- 5.2.9 It shall be noted that the final operation plan of the public transport would be subject to future demand, and would need to be revisited by the respective operators. Re-routing of existing public transport services along Long Ping Road to the development site could also supplement these proposed public transport services.

Table 5.2.6 Estimates on Service Capacity

	Franchised Bus	GMB
Number of routes provided	1	1 - 2
Proposed AM peak headway (minutes)	7	2
Capacity (persons)	135	16
Occupancy rate in AM peak	0.9	1.0
Estimated service capacity in AM peak (persons per hour)	1,000	500

5.3 Parking and Servicing Facilities Provisions of the Proposed Developments

- 5.3.1 Private car, motorcycle, and light goods vans parking spaces and loading/unloading bays would be provided inside the proposed developments.
- 5.3.2 The proposed parking and servicing requirements are estimated in accordance with the District-Based Parking Standards (DBPS), TD's Departmental Circular No. 2/2012, and the Hong Kong Planning Standards and Guidelines (HKPSG). **Tables 5.3.1** summarises the requirements for the PH site.

Table 5.3.1 Summary on the Parking and Servicing Requirements for the PH Site

Facilities	Standard
PRH - Domestic	
Private Car	Lower – 1 per 41 flats Higher – 1 per 37 flats
Motorcycle	1 per 210 flats
Light Goods Vans	Lower – 1 per 400 flats Higher – 1 per 300 flats
Loading/Unloading Bay	1 per block
Accessible Car Parking	Subject to the total no. of car parking space in lot: 1-50 = 1 51-150 = 2 151-250 = 3 251-350 = 4 351-450 = 5 Above 450 = 6
PRH – Non-Domestic (Retail/Commercial)	
Private Car	Lower – 1 per 300 sqm GFA Higher – 1 per 200 sqm GFA
Loading/Unloading Bay	Lower – 1 per 1200 sqm GFA Higher – 1 per 800 sqm GFA

Facilities	Standard
Accessible Car Parking	Subject to the total no. of car parking space in lot:
	1-50 = 1
	51-150 = 2
	151-250 = 3
	251-350 = 4
	351-450 = 5
	Above 450 = 6
HOS - Domestic	
Private Car	Lower – 1 per 19 flats Higher – 1 per 13 flats
Motorcycle	1 per 110 flats
Bicycle	1 per 7.5 flats
Loading/Unloading Bay	1 per block
Visitor Car Parking	Lower – 2 per block Higher – 3 per block
Accessible Car Parking	Subject to the total no. of car parking space in lot:
	1-50 = 1
	51-150 = 2
	151-250 = 3
	251-350 = 4
	351-450 = 5
	Above 450 = 6

5.3.3

With reference to the development parameters and assumptions presented in **Section 3.5** and the parking and loading/unloading facilities requirements as shown in **Tables 5.3.1**, the recommended car parking and loading/unloading facilities for the proposed PH site are summarised in **Tables 5.3.2**. In view of the transport strategy and the close proximity to West Rail Long Ping MTR Station as discussed in **Sections 5.1** and **5.2**, it is proposed to adopt the low-end provision.

Table 5.3.2 Recommended Provision of Car Parking and Loading/Unloading Facilities

Facilities	Standard	Recommended Provision
PRH – Domestic		
Private Car	Lower – 1 per 41 flats	61
Motorcycle	1 per 210 flats	12
Light Goods Vans	Lower – 1 per 400 flats	7
Loading/Unloading Bay	1 per block	5
Accessible Car Parking	Subject to the total no. of car parking space in lot: 51-150 = 2	2
PRH – Non-Domestic		
Private Car	Lower – 1 per 300 sqm GFA	11
Loading/Unloading Bay	Lower – 1 per 1200 sqm GFA	3
Accessible Car Parking	Subject to the total no. of car parking space in lot: 1-50 = 1	1
HOS – Domestic		
Private Car	Lower – 1 per 19 flats	132
Motorcycle	1 per 110 flats	23
Bicycle	1 per 7.5 flats	334
Loading/Unloading Bay	1 per block	5

Facilities	Standard	Recommended Provision
Visitor Car Parking	Lower – 2 per block	10
Accessible Car Parking	Subject to the total no. of car parking space in lot: 51-150 = 2	2

Note:

1. Estimates based on the 50%:50% split of PRH and HOS. of the total no. of 5,000 flats.
2. Estimates based on the 50%:50% split of PRH and HOS. of the total no. of 10 blocks.
3. Estimates based on the total no. of retail 3,209 sqm GFA.

6 TRAFFIC IMPACT ASSESSMENT

6.1 Existing Road Network

- 6.1.1 The existing major transportation linkages are shown in **Figure 6.1.1**. The main road network in the vicinity includes Yuen Long Highway, Long Tin Road and Castle Peak Road – Yuen Long Section. These roads would serve as the main external road access for the Project site. In addition, Fung Chi Road, Fuk Hi Street, Long Ping Road and Wang Lok Street would serve as the connections between the proposed PH site and Yuen Long Town.

Yuen Long Highway

- 6.1.2 Yuen Long Highway is an expressway in a dual-3 configuration, running in the east-west direction at the south of Yuen Long Town. It connects Tsing Long Highway in the east and Tuen Mun Road in the west. It caters mainly for traffic between New Territories West and Kowloon. Pok Oi Interchange is located at the junction amongst Yuen Long Highway and Castle Peak Road – Yuen Long Section, whereby majority of the traffic to Yuen Long Town from Kowloon will utilise this interchange. Pok Oi Interchange is currently operating over its capacity. Traffic queues are generally observed on the slip roads between Yuen Long Highway and Pok Oi Interchange. Tong Yan San Tsuen Interchange is located at the junction amongst Yuen Long Highway and Long Tin Road, whereby majority of the traffic to Yuen Long Town from Tuen Mun will utilise this interchange. Tong Yan San Tsuen Interchange is currently operating well within its capacity during normal peaks hours.

Long Tin Road

- 6.1.3 Long Tin Road is a primary distributor in dual carriageway configuration with 2 traffic lanes running in northbound and 3 traffic lanes running in southbound. It spans from Tin Tze Road in the north near Tin Tsz Estate and Yuen Long Highway in the south near The Eldorado. It currently serves as a major connector road between Yuen Long Highway, Castle Peak Road – Ping Shan, Wang Tat Road, Ma Wang Road, Long Ping Road as well as Tin Tsz Road in Tin Shui Wai.

Castle Peak Road – Yuen Long Section

- 6.1.4 Castle Peak Road – Yuen Long (Yuen Long Main Road) is a district distributor in dual carriageway configuration with one traffic lane running in each direction. It is the traditional main road in Yuen Long running in the middle of the town. Over the decades, Yuen Long expanded and Castle Peak Road was evolved as a main traffic street characterised with heavy people movements and immense kerb side activities. Most of the traffic was diverted to use Long Yip Street/Ma Wang Road/Wang Tat Road and Yuen Long Highway instead leaving most of the public transport services behind. Providing the Light Rail Transit (LRT) in the middle of the carriageway further pushed the

motorized traffic away from the Castle Peak Road and thus public transport services dominate traffic on it.

Fuk Hi Street

- 6.1.5 Fuk Hi Street is a local distributor in single-2 configuration with one traffic lane running in each direction. It is the key western access to Yuen Long Industrial Estate. It connects Long Ping Road to the south, which links to Long Tin Road and eventually to Yuen Long Highway. Numerous frontal vehicular accesses can be found along Fuk Hi Street with frequent on-street loading / unloading activities.

Long Ping Road

- 6.1.6 Long Ping Road is a district distributor in dual-2 configuration. It connects Fuk Hi Street in the north at the northern end of Long Ping Estate and Long Tin Road in the south near Chun Hing San Tsuen. It currently serves as a major connecting road between Yuen Long Industrial Estate (YLIE), Long Ping Estate, Tin Shui Wai and Yuen Long Highway.

Wang Lok Street

- 6.1.7 Wang Lok Street is a local distributor in dual-2 configuration. It is the key vehicular access to YLIE in the east. It connects Wang Tat Road / Long Yip Street in the south near Long Ping Station of West Rail. Wang Lok Street also provides access to Tung Tau Industrial Area via Fu Yip Street. Numerous frontal vehicular accesses can be found along Wang Lok Street with frequent on-street loading / unloading activities.

Wang Tat Road / Long Yip Street

- 6.1.8 Wang Tat Road / Long Yip Street is a primary distributor in a single-3 configuration running in the eastbound direction only. It connects Shui Pin Wai Interchange in the west and Castle Peak Road – Yuen Long in the east. It serves as a key traffic corridor in Yuen Long complement to Castle Peak Road.

Yuen Long On Lok Road / Ma Wang Road

- 6.1.9 Yuen Long On Lok Road / Ma Wang Road is a primary distributor in a single-3 configuration running in the westbound direction only. It connects Shui Pin Wai Interchange in the west and Castle Peak Road – Yuen Long in the east. It also serves as a key traffic corridor connecting Yuen Long Highway and the northern part of Yuen Long. Three intersections can be found between Wang Tat Road / Long Yip Street and Yuen Long On Lok Road / Ma Wang Road which enables the access between YLIE, Tung Tau Industrial Area, Yuen Long Town as well as Yuen Long Highway.

6.2 Base Year Traffic Condition

6.2.1 The traffic condition of the base year 2012 at major roads are presented in Link flow (in units of pcu/hr), and Volume/Capacity (V/C) ratio in **Table 6.2.1**. The location of the road links is shown in **Figure 6.1.1**. Volume to Capacity (VC) Ratio indicates the proportion of peak hour traffic flow to the capacity of a road link. A higher VC ratio of a road indicates a heavy usage of the road link in concern, inter alia. Reviewing the VC ratio of major road link in the area helps identifying the spare capacity in the existing road network. Making a better use of the road network helps minimising the additional capital investment for further development in Yuen Long.

Table 6.2.1 Traffic flow (in pcu/hr) and V/C ratio of Existing Major Road Links

Key Corridors	Road Type	Configuration	Design Capacity	2012 Peak Hour Flow (pcu/hr)		2012 Peak Hour V/C Ratio		
				AM	PM	AM	PM	
L1 – Yuen Long Highway – Tin Shui Wai West Interchange & Tong Yan San Tsuen Interchange	EB	EX	D3	6,100	3,510	3,230	0.58	0.53
	WB				3,290	3,410	0.54	0.56
L2 – Yuen Long Highway – Tong Yan San Tsuen Interchange & Shap Pat Heung Interchange	EB	EX	D3	6,100	4,300	3,950	0.70	0.65
	WB				4,030	4,180	0.66	0.68
L3 – Long Tin Road – Castle Peak Road – Yuen Long & Yuen Long Highway	SB	PD	D3	6,100	4,100	2,260	0.67	0.37
	NB				2,660	2,900	0.44	0.48
L4 – Long Ping Road – Shui Pin Wai Interchange & Fung Chi Road	EB	DD	D2	2,850	600	660	0.21	0.23
	WB				750	800	0.26	0.28

Note:

1. A V/C ratio below 1.0 is considered acceptable. A V/C ratio above 1.0 indicates the onset of mild congestion and a V/C ratio between 1.0 and 1.2 would indicate a manageable degree of congestion. A V/C ratio above 1.2 indicates the onset of more serious congestion.
2. Calculated traffic flow with reference to Annual Traffic Census 2012.

6.2.2 The results indicate that all assessed road links are currently operating at satisfactory level.

6.2.3 The major junctions in the vicinity of the Project site have been identified, and their locations are shown in **Figure 6.1.1**. The traffic condition for the base year 2012 at these major junctions are presented in Reserved Capacity (RC) for signal-controlled junction and Design Flow to Capacity (DFC) ratio for priority junction in **Table 6.2.2**. The base year 2012 peak hour traffic flow are presented in **Figure 6.2.1**.

Table 6.2.2 Assessment on Existing Major Junctions

Junction	Junction Type	2012	
		AM	PM
J1 – Fuk Hi Street / Long Ping Road	Signal	48.6%	>50%
J2 – Fuk Hi Street / Wang Lok Street	Signal	45.0%	47.2%
J3 – Long Ping Road / Fung Chi Road	Signal	>50%	>50%

Junction	Junction Type	2012	
		AM	PM
J4 – Fung Chi Road / Wang Tat Road / Ma Wang Road / Ping Wui Street	Signal	38.1%	>50%
J5 – Wang Lok Street / Wang Tat Road / Long Yip Street / Yuen Long On Lok Road / Ma Wang Road	Signal	34.8%	>50%
J6 – Po Yip Street / Long Yip Street / Yuen Long On Lok Road	Signal	41.1%	>50%
J7 – Shui Bin Wai Interchange	Signal	>50%	>50%
J8 – Long Ping Road / Long Ping Estate Ingress	Priority	0.39	0.47
J9 – Long Ping Road / Long Ping Estate Egress	Priority	0.78	0.63

Note:

1. A signal-controlled junction with a Reserved Capacity (RC) of 0% implies that it is operating at capacity while a negative RC suggests that it is over capacity.
2. For priority junctions and roundabouts, the performance indicator is the Design Flow to Capacity (DFC) ratio. A DFC ratio less than 1.0 (or in positive percentage) indicates that the junction is operating within design capacity. A DFC ratio greater than 1.0 (or in negative percentage) indicates that the junction is overloaded, resulting in traffic queues and longer delay time to the minor arm traffic.

6.2.4 The results indicate that all the assessed junctions are currently operating at satisfactory.

6.3 Future Year Assessment

6.3.1 The traffic forecast for the design year 2025 and 2031 at major roads under with and without development scenarios are presented in Link flow (in units of pcu/hr) and Volume/Capacity (V/C) ratio in **Table 6.3.1**. The location of the road links is shown in **Figure 6.1.1**.

Table 6.3.1 Traffic Forecast Result of Major Road Links for Design Years 2025 and 2031 (Traffic flow in pcu/hr and V/C ratio)

Road Link		Road Type	Design Capacity	2025 Without Development		2025 With Development		2031 Without Development		2031 With Development	
				AM	PM	AM	PM	AM	PM	AM	PM
L1 - Yuen Long Highway – Tin Shui Wai West Interchange & Tong Yan San Tsuen Interchange	EB	EX	6,100	5,060 (0.83)	4,700 (0.77)	5,075 (0.83)	4,722 (0.77)	5,816 (0.95)	5,897 (0.97)	5,829 (0.96)	5,912 (0.97)
	WB			5,332 (0.87)	4,340 (0.71)	5,364 (0.88)	4,364 (0.72)	6,078 (1.00)	5,353 (0.88)	6,098 (1.00)	5,371 (0.88)
L2 - Yuen Long Highway – Tong Yan San Tsuen Interchange & Shap Pat Heung Interchange	EB	EX	6,100	6,318 (1.04)	5,840 (0.96)	6,326 (1.04)	5,866 (0.96)	7,095 (1.16)	7,009 (1.15)	7,106 (1.16)	7,037 (1.15)
	WB			4,520 (0.74)	4,585 (0.75)	4,539 (0.74)	4,607 (0.76)	4,943 (0.81)	5,405 (0.89)	4,958 (0.81)	5,429 (0.89)
L3 - Long Tin Road – Castle Peak Road – Yuen Long & Yuen Long Highway	SB	PD	6,100	4,420 (0.72)	3,397 (0.56)	4,456 (0.73)	3,422 (0.56)	4,990 (0.82)	4,110 (0.67)	5,013 (0.82)	4,128 (0.68)
	NB			2,430 (0.40)	3,053 (0.50)	2,455 (0.40)	3,083 (0.51)	2,440 (0.40)	3,171 (0.52)	2,459 (0.40)	3,195 (0.52)
L4 - Long Ping Road – Shui Pin Wai Interchange & Fung Chi Road	EB	PD	2,850	594 (0.21)	578 (0.20)	629 (0.22)	641 (0.23)	606 (0.21)	583 (0.20)	636 (0.22)	644 (0.23)
	WB			575 (0.20)	795 (0.28)	681 (0.24)	870 (0.31)	649 (0.23)	846 (0.30)	749 (0.26)	914 (0.32)

Note:

1. A V/C ratio below 1.0 is considered acceptable. A V/C ratio above 1.0 indicates the onset of mild congestion and a V/C ratio between 1.0 and 1.2 would indicate a manageable degree of congestion. A V/C ratio above 1.2 indicates the onset of more serious congestion.

6.3.2 The results indicate that all assessed road links would be operating at satisfactory level except for the eastbound of L2 (Yuen Long Highway – Tong Yan San Tsuen Interchange & Shap Pat Heung Interchange) where the V/C ratio would start to exceed the capacity in 2025 and increase to 1.16 in 2031 for both the with and without development scenarios. By comparing the V/C ratio of L2 for the without development scenario in 2025 and 2031, the contribution of traffic from the proposed developments in Wang Chau on L2 is minimal. Therefore, the exceedance is contributed from the growth of regional traffic and the impact of the subject development is negligible. No road improvement works due to the proposed development is required.

6.3.3 The traffic forecast for the design years 2025 and 2031 at major junctions under with and without development scenarios are presented in Reserved Capacity (RC) for signal-controlled junction and Design Flow to Capacity (DFC) ratio for priority junction in **Table 6.3.2**. The design years 2025 and 2031 peak hour traffic flow under with and without development scenarios are presented in **Figure 6.3.1** to **Figure 6.3.4**.

Table 6.3.2 Traffic Forecast Result of Major Junctions for Design Years 2025 and 2031

Junction	Junction Type	2025 Without development		2025 With development		2031 Without development		2031 With development	
		AM	PM	AM	PM	AM	PM	AM	PM
J1 Fuk Hi Street / Long Ping Road	Signal	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%
J2 Fuk Hi Street / Wang Lok Street	Signal	41%	29%	32%	25%	32%	27%	25%	25%
J3 Long Ping Road / Fung Chi Road (Note 3)	Signal	>50%	>50%	38%	33%	>50%	>50%	38%	27%
J4 Fung Chi Road / Wang Tat Road / Ma Wang Road	Signal	41%	>50%	40%	>50%	24%	>50%	19%	>50%
J5 Wang Lok Street / Wang Tat Road / Ma Wang Road / Long Yip Street / Yuen Long On Lok Road (Note 4)	Signal	40%	>50%	33%	>50%	12%	>50%	10%	>50%
J6 Po Yip Street / Long Yip Street / Yuen Long On Lok Road (Note 5)	Signal	>50%	>50%	>50%	>50%	46%	>50%	38%	>50%
J7 Shui Bin Wai Interchange	Signal	>50%	>50%	>50%	>50%	>50%	>50%	49%	>50%
J8 Long Ping Road / Long Ping Estate Ingress	Priority	0.41	0.50	0.41	0.50	0.46	0.50	0.46	0.50
J9 Long Ping Road / Long Ping Estate Egress	Priority	0.88	0.70	0.89	0.70	0.89	0.70	0.89	0.70

Note:

1. A signal-controlled junction with a Reserved Capacity (RC) of 0% implies that it is operating at capacity while a negative RC suggests that it is over capacity.
2. For priority junctions and roundabouts, the performance indicator is the Design Flow to Capacity (DFC) ratio. A DFC ratio less than 1.0 (or in positive percentage) indicates that the junction is operating within design capacity. A DFC ratio greater than 1.0 (or in negative percentage) indicates that the junction is overloaded, resulting in traffic queues and longer delay time to the minor arm traffic.
3. For the without development scenario, J3 would remain the same as existing. For the with development scenario, a staggered pedestrian crossing will be provided at the access road leading to the PH site;
4. It is assumed that the proposed junction improvement works proposed by West Rail Long Ping South Development would be in place as shown in **Figure 6.4.1**.
5. It is assumed that the proposed junction improvement works proposed by Highways Department (HyD) would be in place as shown in **Figure 6.4.2**.

- 6.3.4 The results indicate that all assessed junctions would be operating at satisfactory level in design years 2025 and 2031. As mentioned in **Section 4.3**, a staggered pedestrian crossing at the access road leading to PH site will be provided. No other improvement work due to the development is required.

7 PEDESTRIAN IMPACT ASSESSMENT

7.1 Existing Pedestrian Condition

Existing Pedestrian Network

- 7.1.1 **Figure 7.1.1** shows the inventory of existing pedestrian network in close vicinity of the Project site. The existing footpaths (particularly along Long Ping Road Northern Footpath, Pedestrian Crossing across Long Ping Road, Fung Chi Road Eastern Footpath, and Wang Tat Road Northern Footpath) provide the major pedestrian connection between the proposed PH site and West Rail Long Ping MTR Station.
- 7.1.2 In addition, pedestrian can use the elevated walkway system through Long Ping Estate as an alternative to gain access to West Rail Long Ping MTR Station.

Existing Pedestrian Condition

- 7.1.3 Pedestrian count surveys were conducted on a normal weekday in close vicinity of the Project site. It is anticipated that the peak pedestrian flows would be critical during the commuting period. The counts were undertaken during the periods 0730-0930 and 1730-1930 hours. The morning and evening peak hours were found to be 0730-0830 and 1830-1930 hours respectively. Based on the pedestrian count surveys, the existing pedestrian condition has been assessed under the “Level of Service” approach.

Level of Service (LOS)

- 7.1.4 According to the definition in TPDM (Volume 6, Chapter 10, Section 10.4.2), “Level of Service” is primarily based on the density of people in a given space and has six levels. **Table 7.1.1** shows the details of these six LOS levels which are ‘quantified’ in terms of pedestrian flow rates.
- 7.1.5 For the purposes of this pedestrian impact assessment, a LOS of C or above would be considered acceptable.

Table 7.1.1 Level of Service (LOS) for Walkway

LOS	Flow rate (ped/min/m)	Description
A	≤ 16	Pedestrians basically move in desired paths without altering their movements in response to other pedestrians. Walking speeds are freely selected, and conflicts between pedestrians are unlikely.
B	16 - 23	Sufficient space is provided for pedestrians to freely select their walking speeds, to bypass other pedestrians and to avoid crossing conflicts with others. At this level, pedestrians begin to be aware of other pedestrians and to respond to their presence in the selection of walking paths.

LOS	Flow rate (ped/min/m)	Description
C	23 - 33	Sufficient space is available to select normal walking speeds and to bypass other pedestrians primarily in unidirectional stream. Where reverse direction or crossing movement exist, minor conflicts will occur, and speed and volume will be somewhat lower.
D	33 - 49	Freedom to select individual walking speeds and bypass other pedestrians is restricted. Where crossing or reverse-flow movements exist, the probability of conflicts is high and its avoidance requires changes of speeds and position. The LOS provides reasonable fluid flow; however considerable friction and interactions between pedestrians are likely to occur.
E	49 - 75	Virtually, all pedestrians would have their normal walking speeds restricted. At the lower range of this LOS, forward movement is possible only by shuffling. Space is insufficient to pass over slower pedestrians. Cross- and reverse-movement are possible only with extreme difficulties. Design volumes approach the limit of walking capacity with resulting stoppages and interruptions to flow.
F	> 75	Walking speeds are severely restricted. Forward progress is made only by shuffling. There are frequent and unavoidable conflicts with other pedestrians. Cross- and reverse-movements are virtually impossible. Flow is sporadic and unstable. Space is more characteristics of queued pedestrians than of moving pedestrian streams.

7.1.6

Table 7.1.2 presents the results of the assessment on LOS of the major existing footpaths. To account for the peak within the peak hour, a surge factor of 1.2 was applied to the pedestrian flow rates to represent the peak 5-minute situation for the pedestrian serviceability assessments. **Figure 7.1.1** shows the location of the assessed pedestrian facilities.

Table 7.1.2 Assessment on LOS of Existing Footpaths

Location	Type	Clear Width (m)	Ped Flow 2-way (ped/hr)		Ped Flow Rate (ped/m/min)		LOS	
			AM	PM	AM	PM	AM	PM
F1 Long Ping Road (Northern Footpath)	Footpath	3.6	147	248	1.1	1.9	A	A
F2 Fung Chi Road (Eastern Footpath)	Footpath	3	181	315	1.8	3.2	A	A
F3 Wang Tat Road (Northern Footpath)	Footpath	3	176	262	1.8	2.6	A	A

Notes:

1. Clear width in metres based on on-site measurement.
2. Pedestrian flow rates are computed based on effective width, by assuming 0.5m lateral clearance on both sides.

7.1.7

The results indicate all assessed existing footpaths are operating with LOS A. This indicates that there are currently no pedestrian circulation problems.

7.2 Proposed Pedestrian Access Arrangement – A Proposed Public Footbridge across Long Ping Road

- 7.2.1 In addition to the existing pedestrian network as mentioned in **Section 7.1**, a public footbridge across Long Ping Road connecting the PH site to the Long Ping Estate would be required on the perspective of pedestrian flow. **Figure 4.1.1** shows the location of the proposed public footbridge. The justifications and requirements of the proposed public footbridge are discussed in details in the following sections.

Justifications for the proposed public footbridge

- 7.2.2 Justification for the proposed public footbridge as a part of the pedestrian network after the completion of the PH development has been established and reviewed with reference to the factors listed in TPDM (Volume 2, Chapter 3, Section 3.7.7.2). The review indicates that the criteria are largely fulfilled.

Road safety and capacity considerations - The junction Long Ping Road / Fung Chi Road primarily operates to maximize vehicular green times. It is generally unwelcome for pedestrians to wait for a junction signal cycle to walk across Long Ping Road. On one hand, some impatient pedestrians may try to cross Long Ping Road even under pedestrian red signal. On the other hand, if higher priority is put on the pedestrian crossing, the performance of vehicular traffic would unavoidably deteriorate. Considering both road safety and junction capacity issues, there is a necessity to provide a grade separated footbridge as a better alternative to the pedestrians in order to segregate pedestrians from vehicular traffic.

The desired pedestrian path - The proposed public footbridge would form a central part of the desired pedestrian path, connecting the PH development to the West Rail system and the Yuen Long Town area. As compared to the at grade pedestrian crossing, it is anticipated that the proposed public footbridge would effectively divert the pedestrians from using the pedestrian crossing across Long Ping Road and would provide a more convenient and direct access to West Rail Long Ping MTR Station and to area of Yuen Long Town.

The connectivity of the facility with nearby developments and walkway systems - The proposed public footbridge would be strategically located at front door of the PH site. It would serve as a convenient walking access for promoting residents using the West Rail system. The connectivity between the PH site and the Yuen Long town area would also be enhanced.

Public opinions - It is expected that the public would generally welcome a better pedestrian connection between the proposed development at Wang Chau and the West Rail Long Ping MTR Station with enhanced road safety and convenience.

Requirement of the proposed public footbridge

- 7.2.3 Several requirements should be considered in the design and implementation process of the proposed public footbridge, including:
- Barrier-free access and lift elevator should be provided at both ends.
 - For the end connecting the proposed PH development, direct linkage to the retail facilities of the PRH site should be provided.
 - For the end connecting the Long Ping Commercial Complex, direct linkage to the complex would be subject to liaison with LINK during detailed design stage.
 - 3m width of the proposed public footbridge (The width requirement is assessed in **Section 7.3** below).
 - The completion of the proposed public footbridge should tie in with the completion of the proposed PH development.

7.3 Future Pedestrian Condition***Pedestrian Trip Generation***

- 7.3.1 As discussed in **Section 5.2**, it is anticipated that the proposed development would generate / attract some 3,700 and 2,800 two-way pedestrian flows during the AM and PM peak hours (in units of persons per hour), as recapped in **Table 7.3.1**.

Table 7.3.1 Summary on Pedestrian Trip Generations in AM/PM Peak Hour (persons/hr)

Development Type	Unit	AM Peak			PM Peak		
		Generation	Attraction	2-way	Generation	Attraction	2-way
Estimated Trips for 2,500 PRH Flats	persons/hr	1,160	503	1,663	485	1,100	1,585
Estimated Trips for 2,500 HOS Flats	persons/hr	1,235	203	1,438	395	745	1,140
Estimated Trips for 24 classroom primary school	persons/hr	114	421	535	35	8	43
Total		2,509	1,127	3,636	915	1,853	2,768

- 7.3.2 For the retail and social welfare facilities, since they are expected to serve mainly the site residents, and it will only induce minimal pedestrian trips on the external walkway network during commuter peak hours. These development types are therefore excluded from the estimation of pedestrian trip generation.

Pedestrian Desire Lines

- 7.3.3 Pedestrian desire lines represent linkages of key trip generation and attraction areas that may be the source and destination of pedestrians.
- 7.3.4 The main pedestrian desire line during the peak hours would be from the Project site towards the public transport facilities in the area (i.e. West Rail Long Ping MTR Station). It is anticipated that majority of pedestrians would travel from the PH site along Long Ping Road Northern Footpath, the proposed public footbridge across Long Ping Road, Fung Chi Road Eastern Footpath, and Wang Tat Road Northern Footpath. **Figure 7.3.1** shows the major pedestrian routing.
- 7.3.5 For the purpose of assessment, it is assumed that amongst 58% rail-based public transport trips, all rail-based public transport trips generated/attracted by PRH site would be walk trips using the pedestrian facilities from/to West Rail Long Ping MTR Station, while half of rail-based public transport trips generated/attracted by HOS site would be walk trips using the pedestrian facilities from/to West Rail Long Ping MTR Station. In addition, 24% of road-based public transport trips generated/attracted by both PRH and HOS sites would also use the pedestrian facilities. The assumptions for pedestrian trips generated / attracted by the primary school follows the same as HOS site.
- 7.3.6 **Table 7.3.2** presents the assumed two-way pedestrian trips using pedestrian facilities.

Table 7.3.2 Assumed 2-way Pedestrian Trips Using Pedestrian Facilities (persons/hr)

Component	AM Peak	PM Peak
Road-based Public Transport Walk trips from/to bus stops	1047	796
Rail-based Public Transport Walk trips from/to West Rail Long Ping MTR Station	1,843	1,515
Total	2,890	2,311

Notes:

1. To account for the peak within the peak hour, a surge factor of 1.2, was applied.

Background Pedestrian Flow Forecast

- 7.3.7 Pedestrian flows adopted in the study were primarily based on the existing pedestrian counts undertaken. A suitable growth factor was then applied to forecast the background pedestrian flow in future years. The growth factor was derived based on TM for which the methodology has been discussed in **Section 3**.

Future Pedestrian Condition

- 7.3.8 Taking into account the background pedestrian flows and pedestrian trips due to the proposed development, a forecast LOS assessment for the design years 2025 and 2031 are shown in **Table 7.3.3** and **Table 7.3.4**.

Table 7.3.3 Assessments on LOS of Existing Footpaths in Design Year 2025

Location	Clear Width (m)	Ped Flow without Development (persons/hr)		Ped Flow with Development (persons/hr)		Ped Flow Rate without Development (persons/m/min)		Ped Flow Rate with Development (persons/m/min)		LOS without Development		LOS with Development	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
F1	3.6	151	254	3,042	2,566	1.2	2.0	23.4	19.7	A	A	C	B
F2	3	185	323	2,030	1,838	1.9	3.2	20.3	18.4	A	A	B	B
F3	3	180	268	2,024	1,783	1.8	2.7	20.2	17.8	A	A	B	B

Notes:

1. Please refer to Figure 7.3.1 for the location of the assessed pedestrian facilities.
2. Clear width in metres based on on-site measurement.
3. Computed based on effective width, by assuming 0.5m lateral clearance on both sides.

Table 7.3.4 Assessments on LOS of Existing Footpaths in Design Year 2031

Location	Clear Width (m)	Ped Flow without Development (persons/hr)		Ped Flow with Development (persons/hr)		Ped Flow Rate without Development (persons/m/min)		Ped Flow Rate with Development (persons/m/min)		LOS without Development		LOS with Development	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
F1	3.6	152	257	3,194	2,823	1.2	2.0	24.6	21.7	A	A	C	B
F2	3	188	327	2,217	2,164	1.9	3.3	22.2	21.6	A	A	B	B
F3	3	182	272	2,207	2,055	1.8	2.7	22.1	20.5	A	A	B	B

Notes:

1. Please refer to Figure 7.3.1 for the location of the assessed pedestrian facilities.
2. Clear width in metres based on on-site measurement.
3. Computed based on effective width, by assuming 0.5m lateral clearance on both sides.

7.3.9 The results indicate all assessed pedestrian footpaths in design years 2025 and 2031 are predicted to operate with LOS C or above. It is anticipated that the impact due to the proposed PH development on existing pedestrian network would be minimal.

Width Requirements for the Proposed Public Footbridge across Long Ping Road

7.3.10 Based on the estimation of pedestrian trip generation, it is anticipated that the critical two-way pedestrian flows using the proposed public footbridge are some 2,900 pedestrians per hour, as shown in **Table 7.3.5**.

Table 7.3.5 Anticipated Two-way Pedestrian Trips Using the Proposed Public Footbridge

Component	Critical 2-way Pedestrian trips (persons/hr)
Road-based Public Transport Walk trips from/to bus stops	1,047
Rail-based Public Transport Walk trips from/to West Rail Long Ping MTR Station	1,843
Total	2,890

- 7.3.11 The required and recommended actual width of the proposed public footbridge under a Level of Service (LOS) of C is summarized in **Table 7.3.6**.

Table 7.3.6 Required and Recommended Actual Width under LOS of C

Location	Anticipated Critical 2-way Pedestrian Flow (ped/hr)	Required Effective Width under LOS C (m) (Note 1)	Required Actual Width under LOS C (m) (Note 2)	Recommended Actual Width (m)
Proposed Public Footbridge across Long Ping Road	2,900	1.7	2.7	3.0

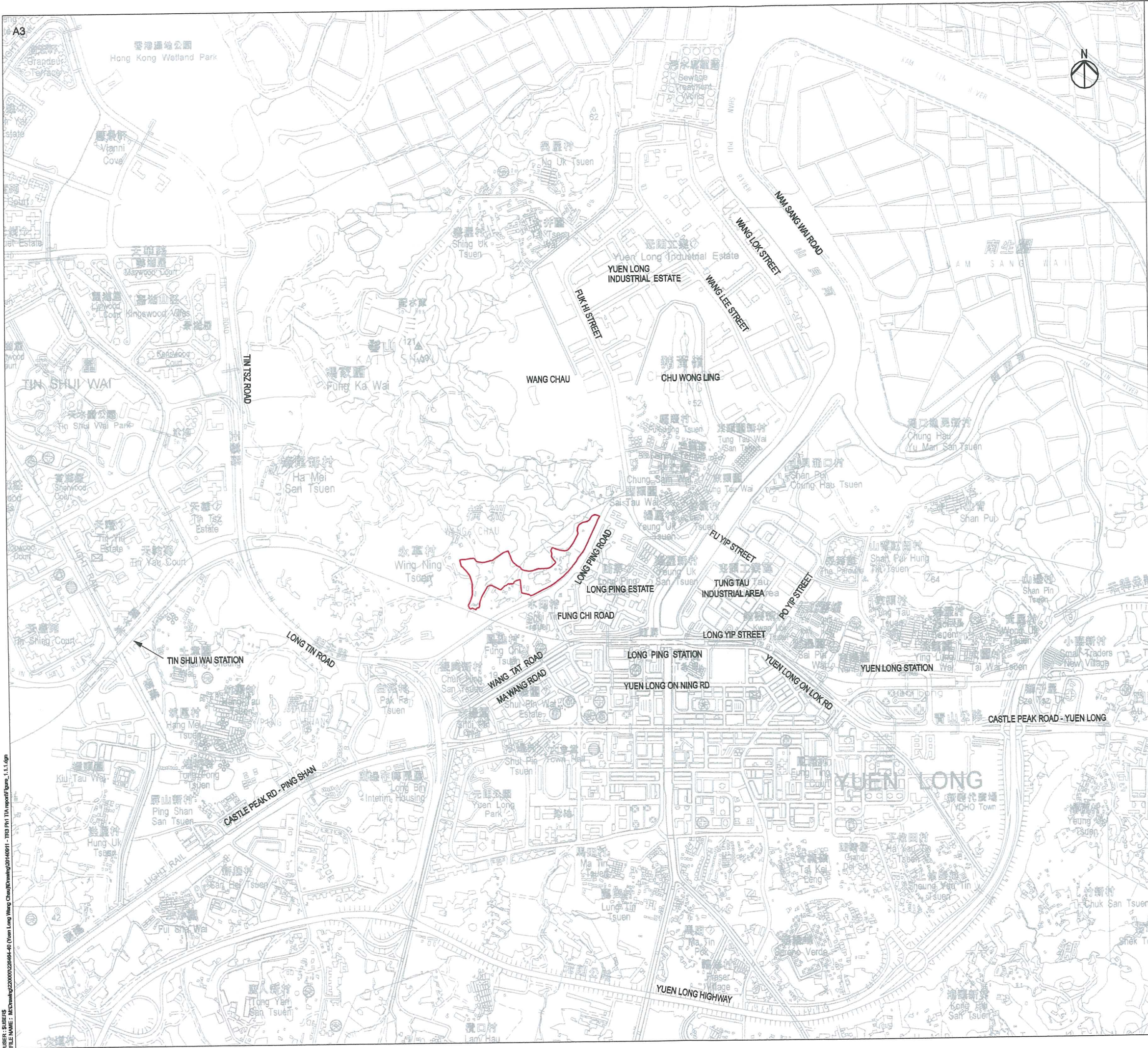
Notes:

1. Middle level of LOS C, i.e. pedestrian flow rate of 28 ped/m/min was adopted.
2. Width accommodates 0.5m lateral clearance on both sides.

8 CONCLUSIONS

- 8.1.1 This Transport and Traffic Impact Assessment (TTIA) is to ascertain the effect of the proposed development in Wang Chau, Yuen Long on the traffic infrastructure and transport provision.
- 8.1.2 Assessment for the base year 2012 at the major road links and junctions has revealed that all assessed road links and junctions are currently operating at satisfactory level.
- 8.1.3 A new access road will be provided to serve the PH site. The proposed access road would be in single-2 lane configuration, which would be adequate to cater the traffic demand from the future development. A staggered pedestrian crossing at the access road leading to PH site would be provided. Under this proposed scheme, it is anticipated that the overall junction performance would be operating at satisfactory level.
- 8.1.4 For the major road links, results indicate that all assessed road links would still be performing at satisfactory level for the design years 2025 and 2031, except for the eastbound of L2 (Yuen Long Highway – Tong Yan San Tsuen Interchange & Shap Pat Heung Interchange) where the V/C ratio would start to exceed the capacity in 2025 and increase to 1.16 in 2031 for both the with and without development scenarios. By comparing the V/C ratio of L2 for the without development scenario in 2025 and 2031, the contribution of traffic from the proposed developments on L2 is only minimal. Therefore, the exceedance is contributed from the growth of regional traffic and the impact of the subject development is negligible.
- 8.1.5 For the major junctions, results indicate that all assessed junctions will be operating at satisfactory level.
- 8.1.6 A GMB lay-by and a Taxi stand at the access road of the development site and bus lay-bys along the two sides of Long Ping Road have been proposed. One bus route and one to two GMB routes are initially recommended. It is anticipated that the service capacity of the proposed public transport facilities would adequately cater for the future demand after the completion of the development.
- 8.1.7 Based on the LOS assessment, the major pedestrian facilities in design year 2025 and 2031 are predicted to operate at LOS C or above. No pedestrian circulation problems are anticipated.
- 8.1.8 A public footbridge across Long Ping Road connecting the public housing site to the Long Ping Estate would be required on the perspective of pedestrian flow. With the consideration of future pedestrian flows, the proposed public footbridge should be 3m wide in order to attain a LOS C.
- 8.1.9 Based on the above analysis, the proposed development in Wang Chau would have no adverse traffic impact on the nearby road links, junctions and pedestrian facilities. The conclusion therefore is that the proposed development is acceptable from the traffic point of view.

Figures



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 PUBLIC HOUSING SITE

A	FIRST ISSUE	KHC	09/13
Rev	Description	By	Date
Consultant			

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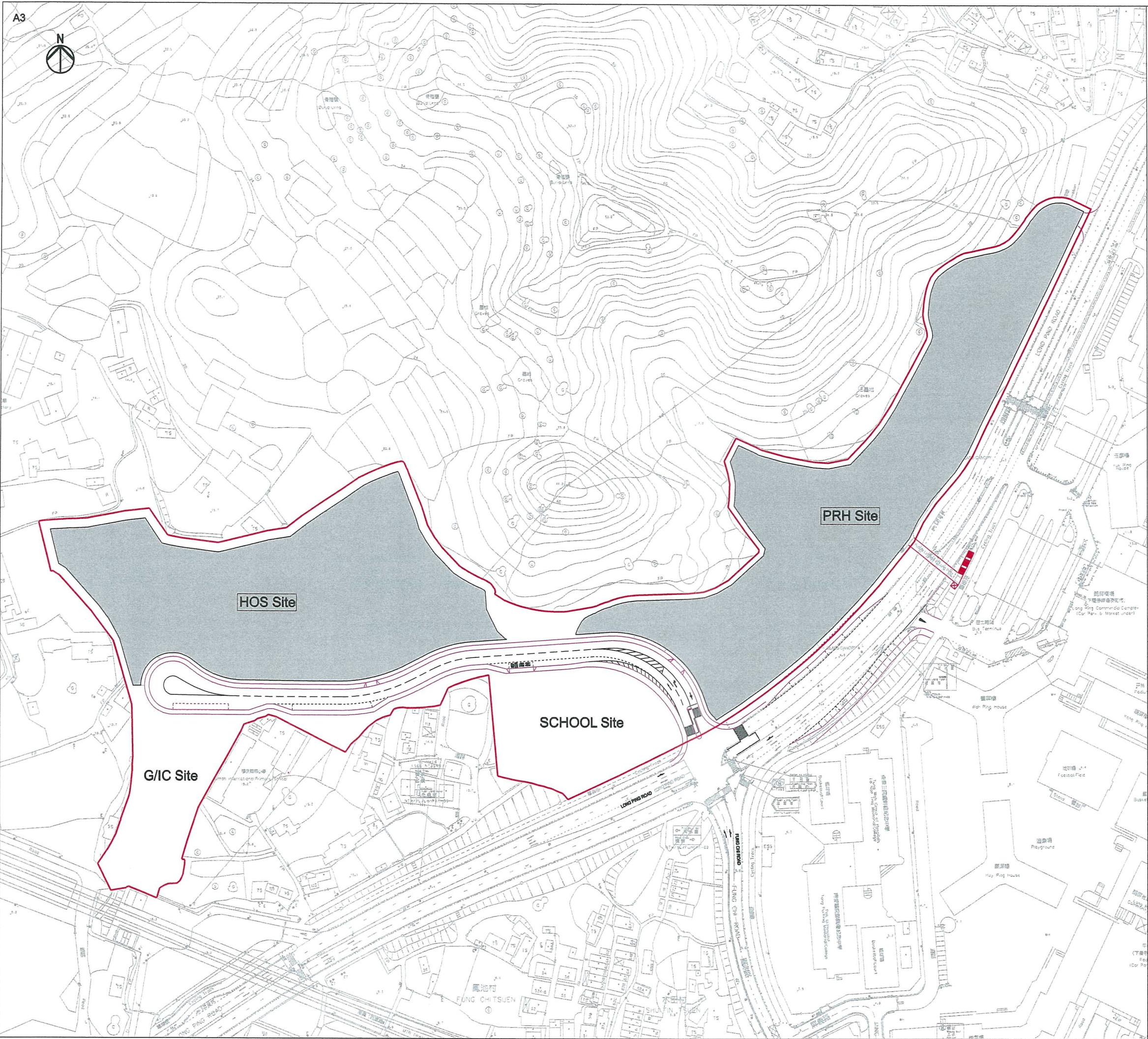
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Public Housing Development at Wang Chau, Yuen Long

Drawing title
LOCATION OF PROJECT SITE

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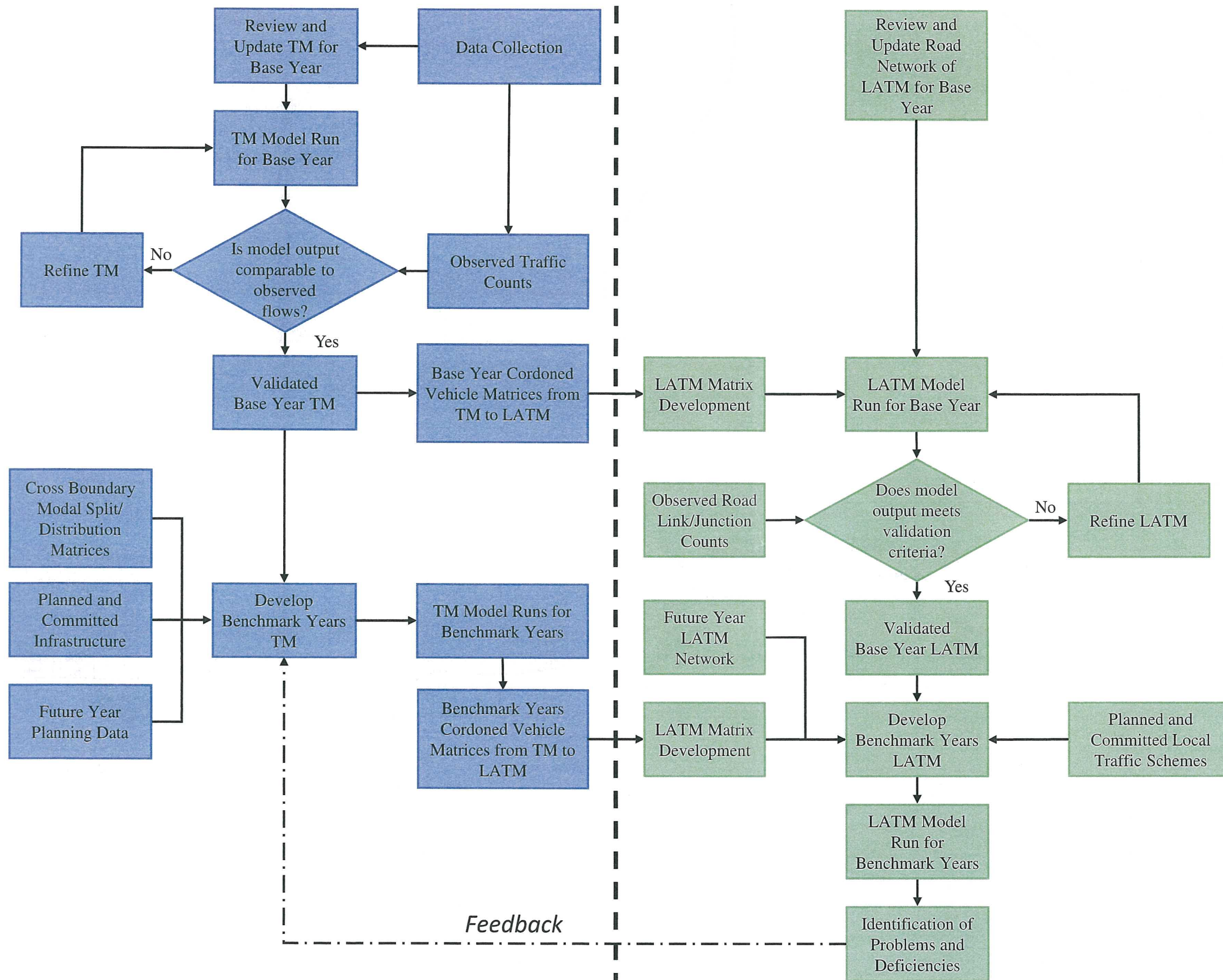
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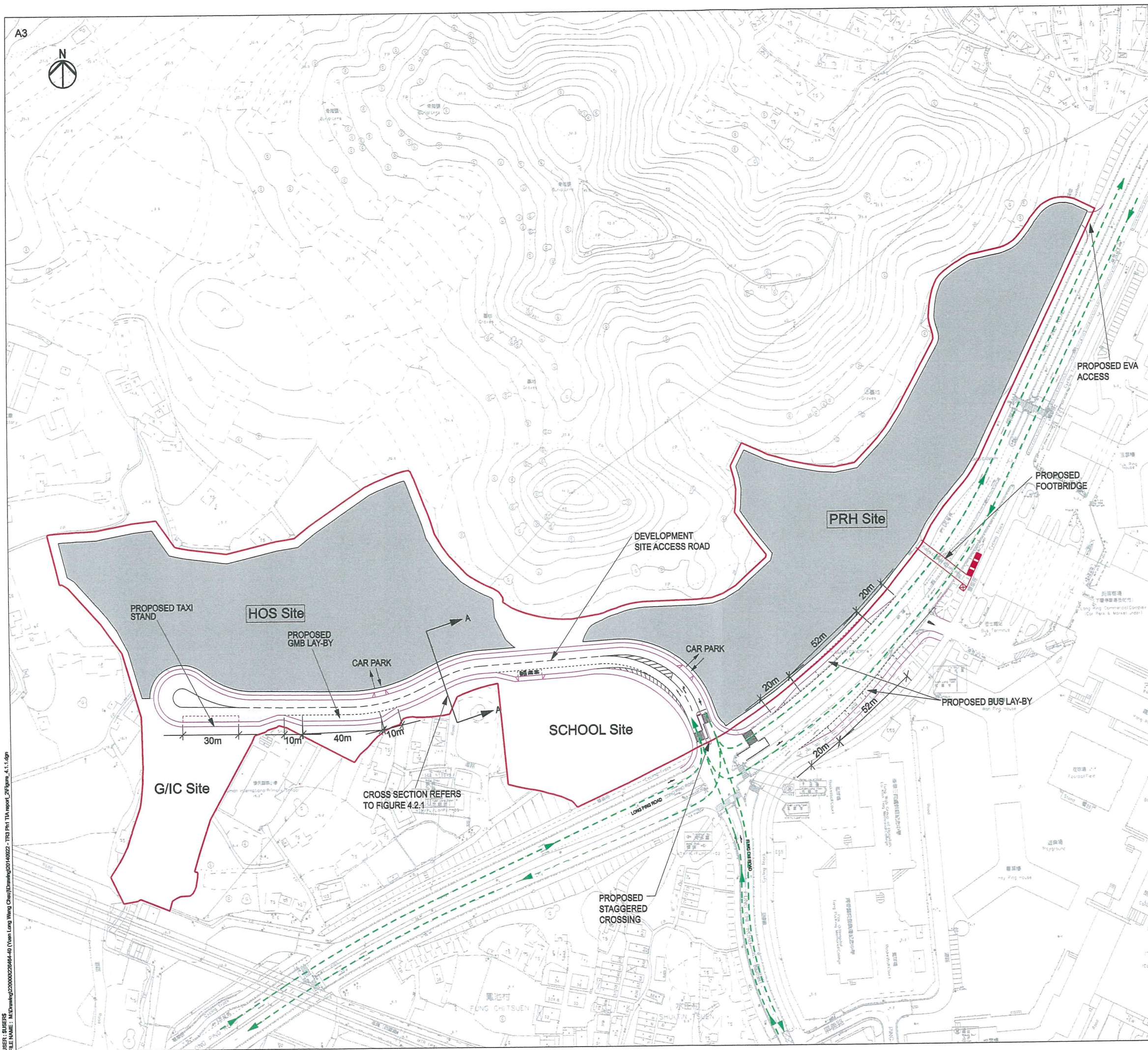
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MASTER LAYOUT PLAN			
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FIGURE 2.3.1		A	
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Upper Tier - Transport Model (TM)

Lower Tier - Local Area Traffic Model (LATM)



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PROPOSED TRANSPORT MODELLING APPROACH															
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- PUBLIC HOUSING SUTE
- VEHICULAR ACCESS ROUTINGS

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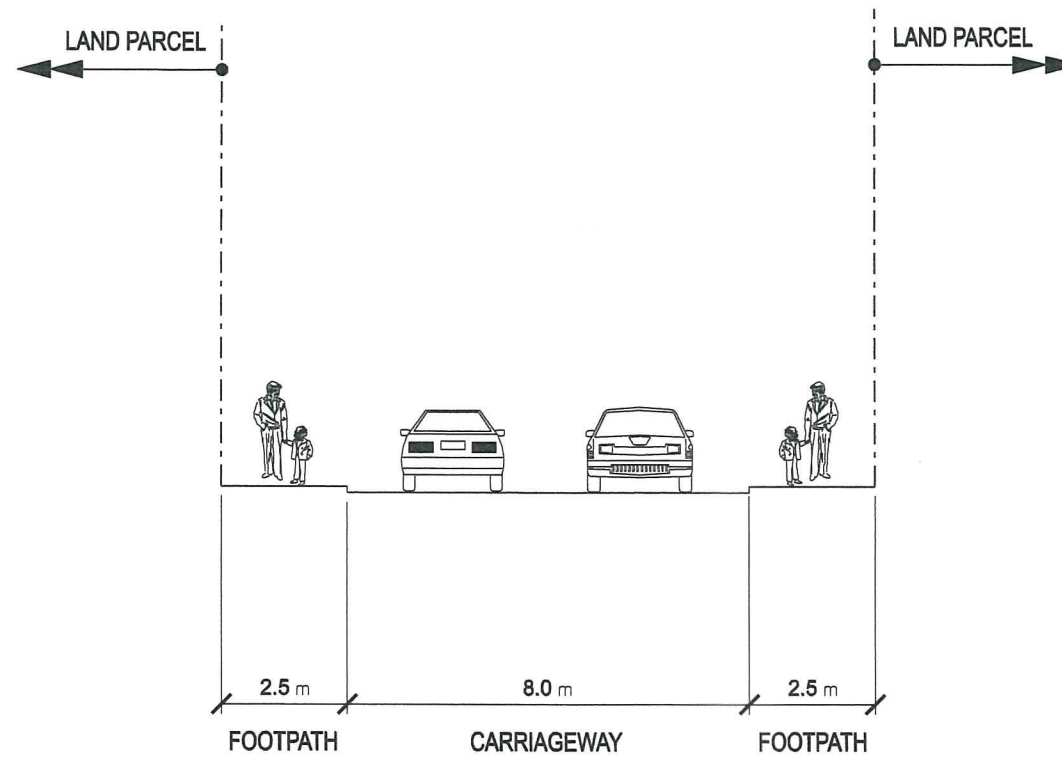
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Public Housing Development at Wang Chau, Yuen Long

Drawing title
PROPOSED ACCESS ROAD FOR
PUBLIC HOUSING SITE


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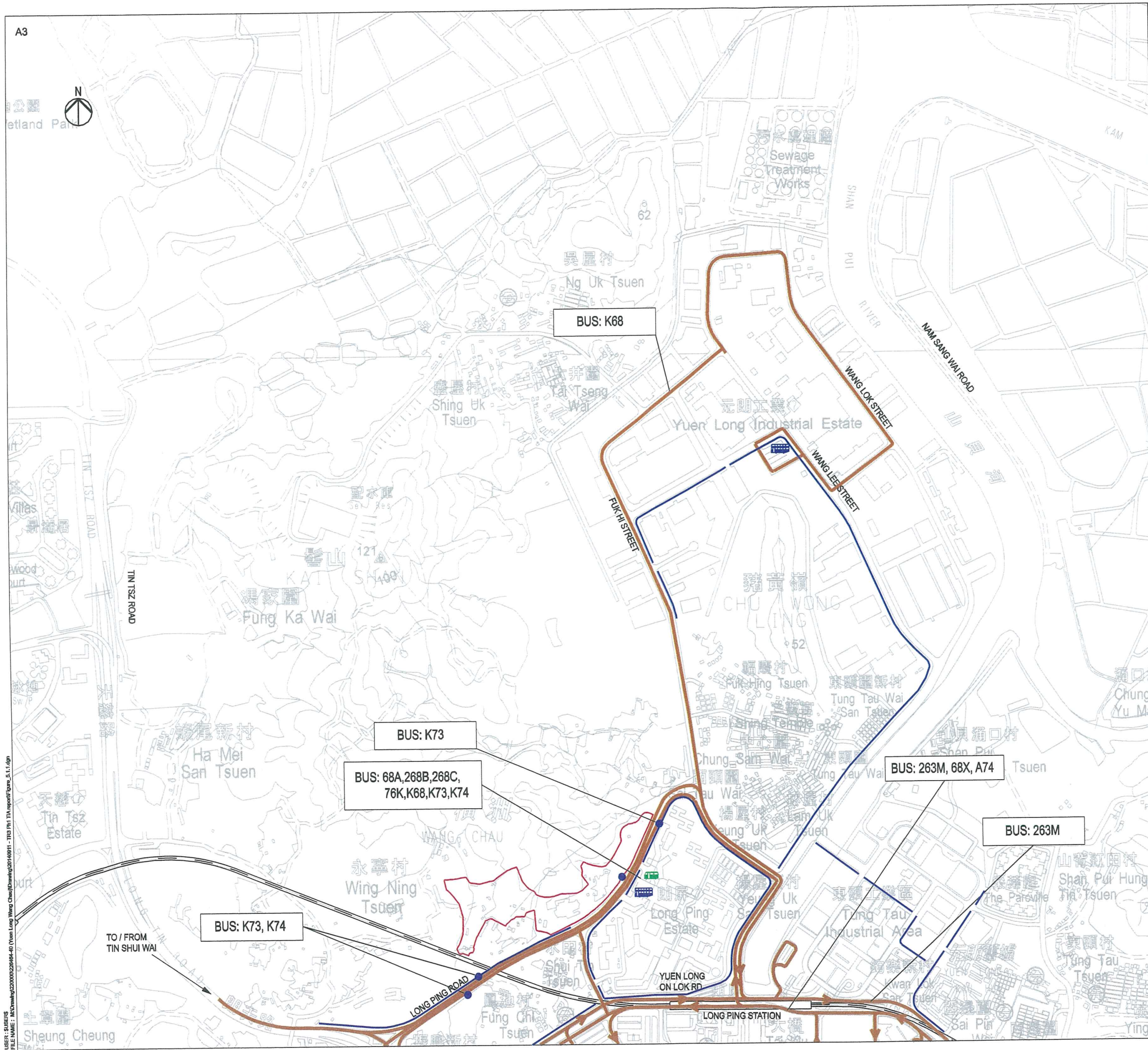


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SECTION A - A

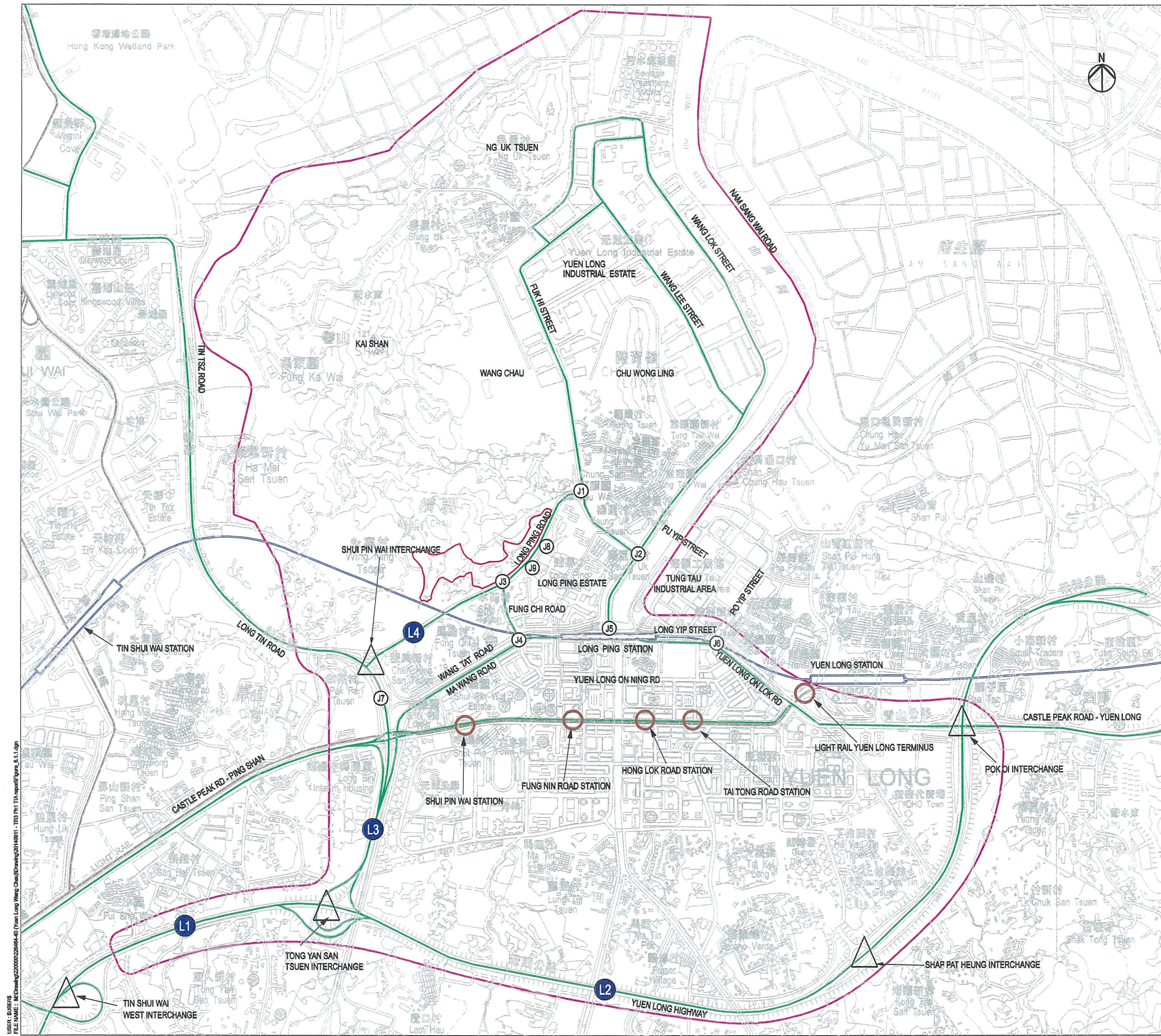
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- LEGEND:
- PUBLIC HOUSING SITE
 - WEST RAIL
 - BUS ROUTE
 - CYCLE TRACK
 - BUS TERMINUS
 - GMB TERMINUS
 - BUS LAY-BY (LONG PING ROAD)

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- LEGEND:
- AREA OF INFLUENCE
 - PUBLIC HOUSING SITE
 - EXISTING RAILWAY LINE (LRT)
 - EXISTING RAILWAY LINE (WEST RAIL)
 - EXISTING ROAD
 - MAJOR INTERCHANGE
 - SURVEYED JUNCTION
 - ROAD LINK

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Public Housing Development at Wang Chau, Yuen Long

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AND RAIL NETWORK

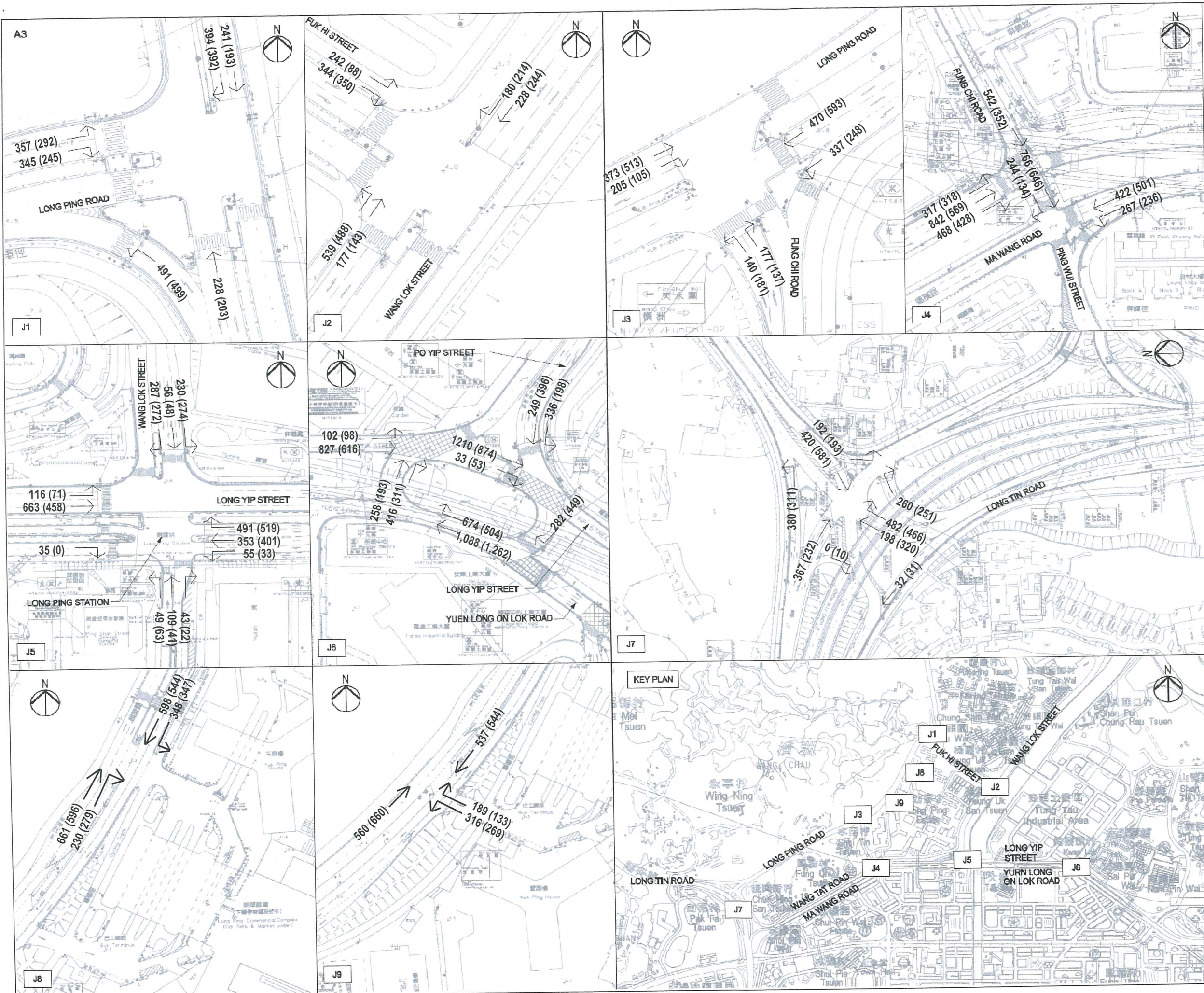
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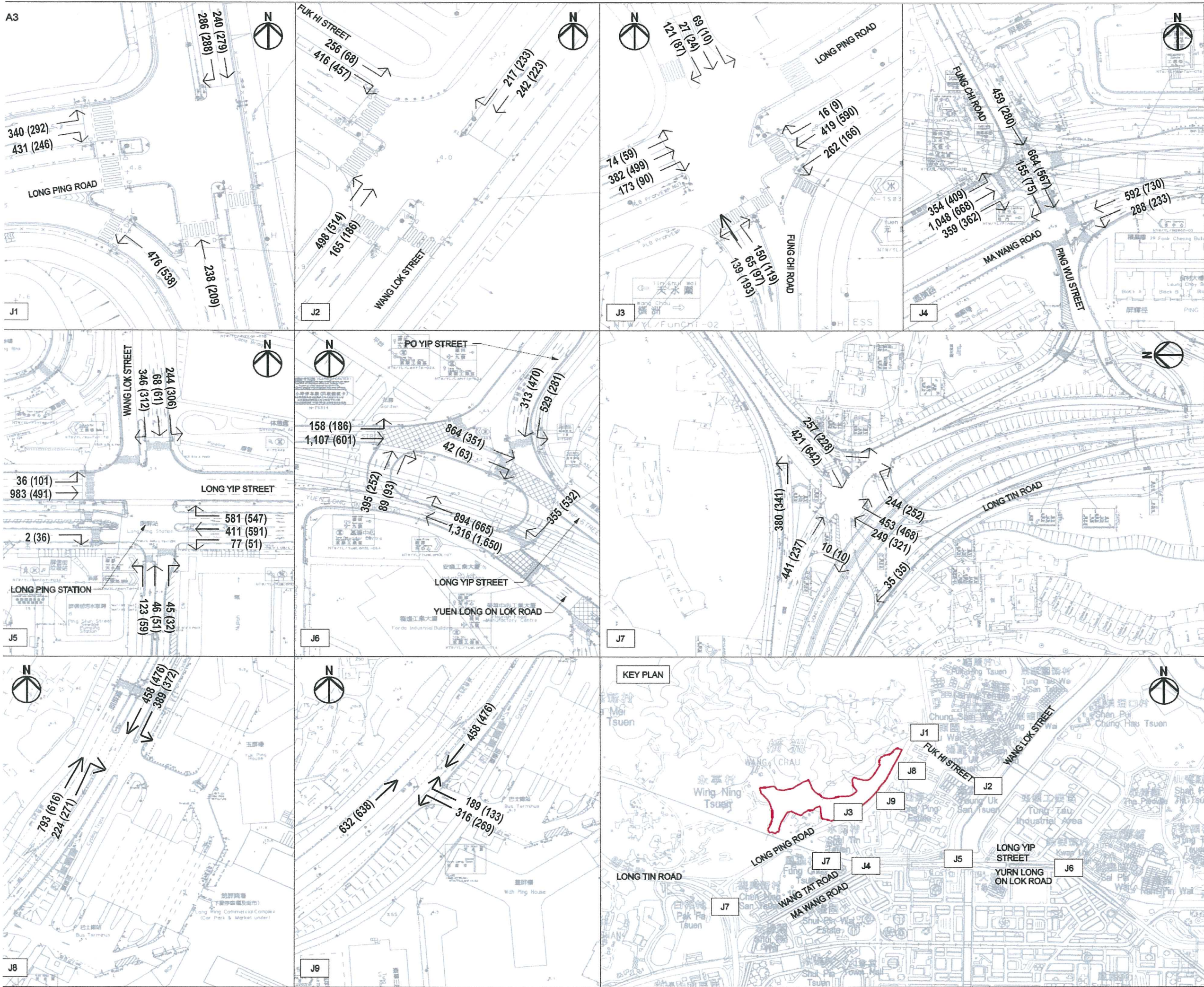
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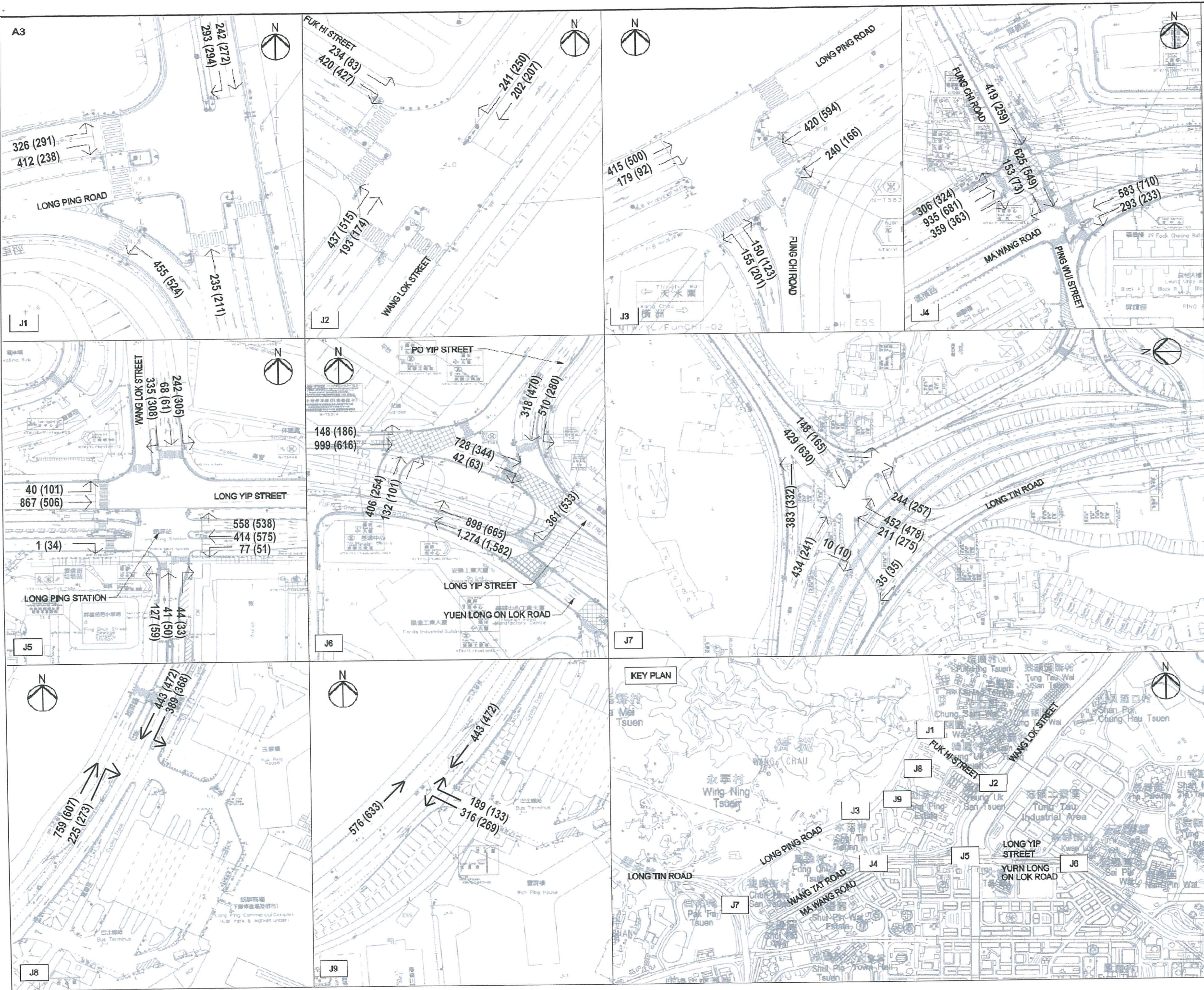


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DESIGN YEAR 2025 UNDER WITH DEVELOPMENT SCENARIO			
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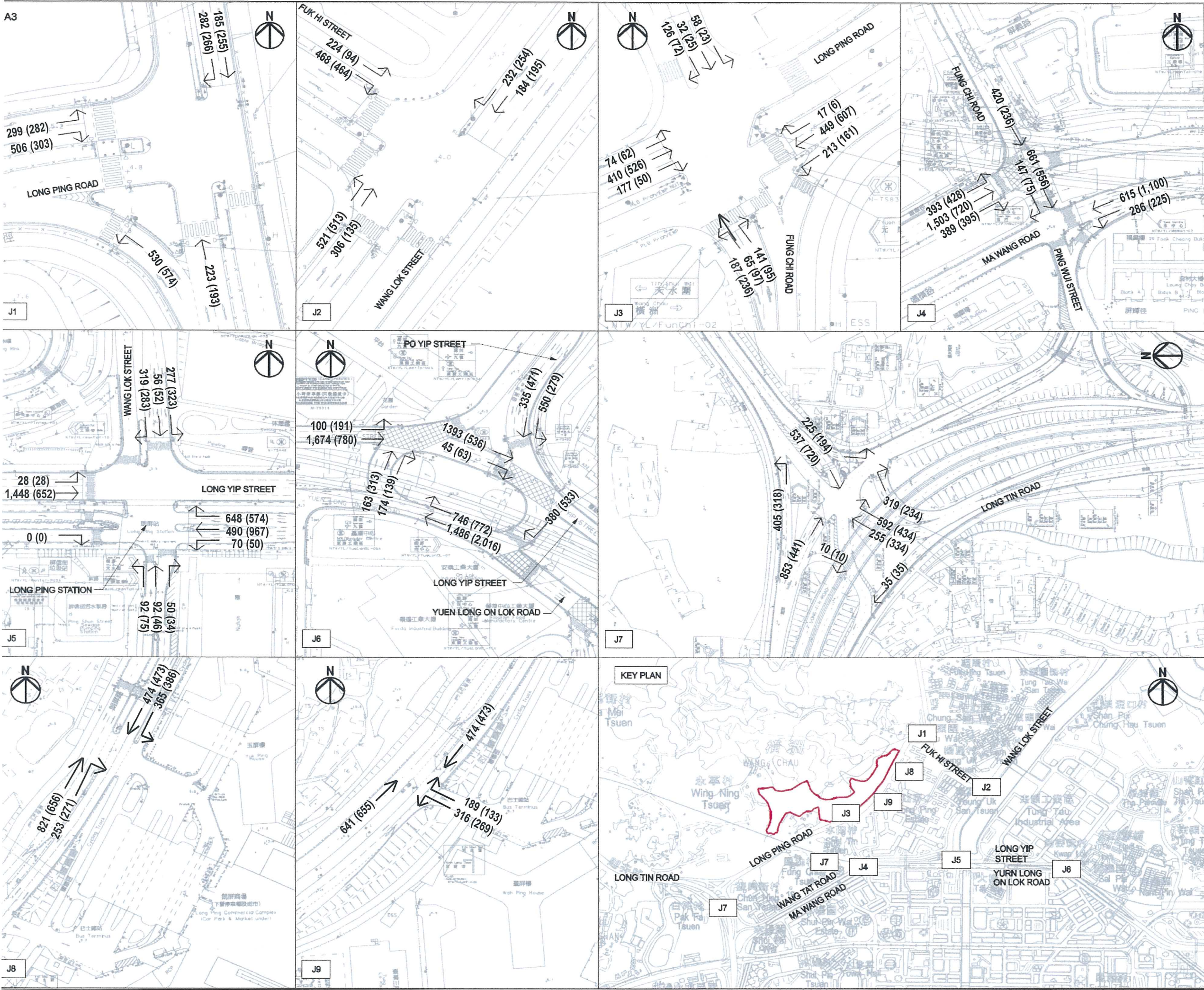


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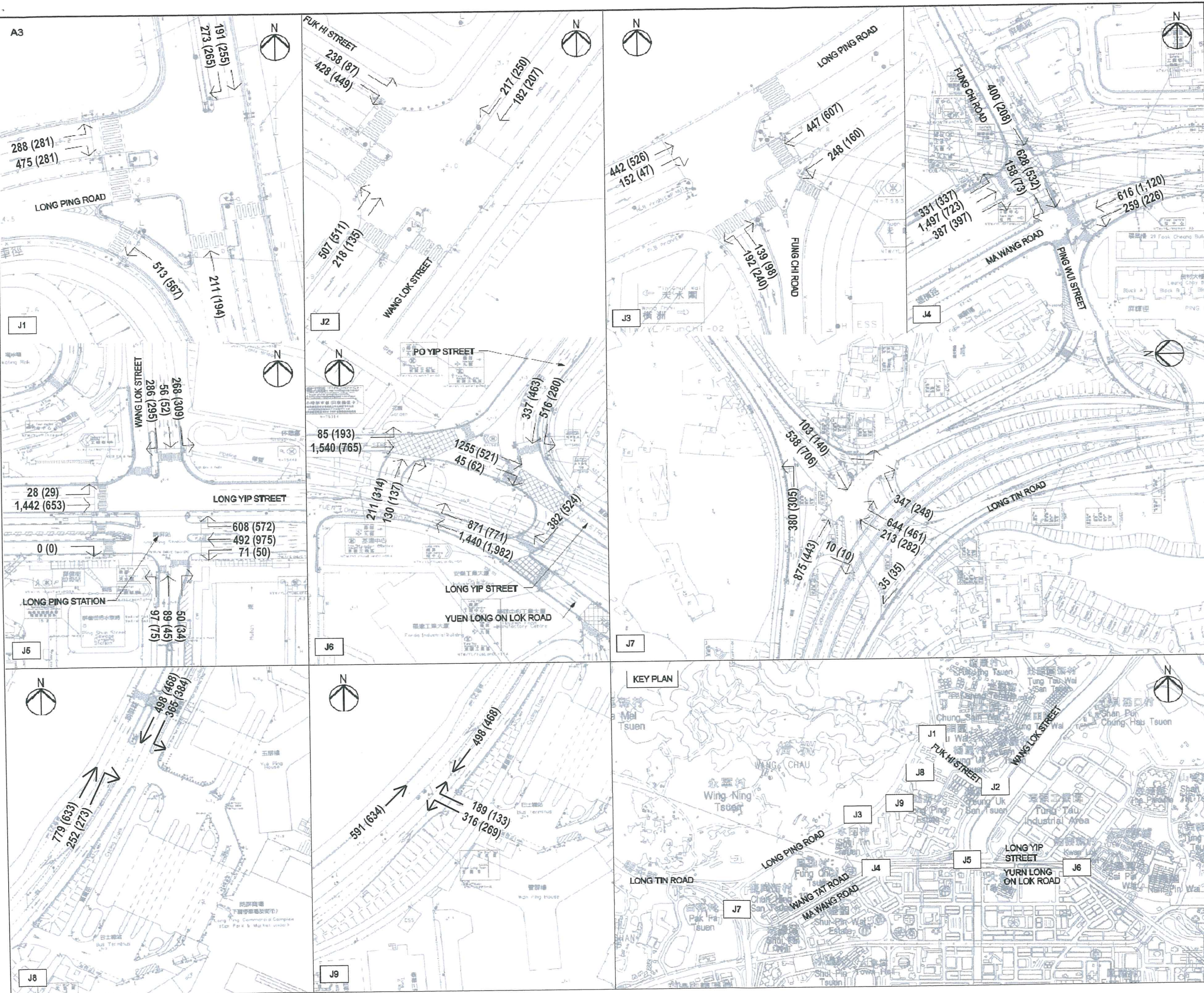


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DESIGN YEAR 2031 UNDER WITH DEVLEOPMENT SCENARIO PEAK HOUR TRAFFIC FLOW			
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FIGURE 6.3.3			A
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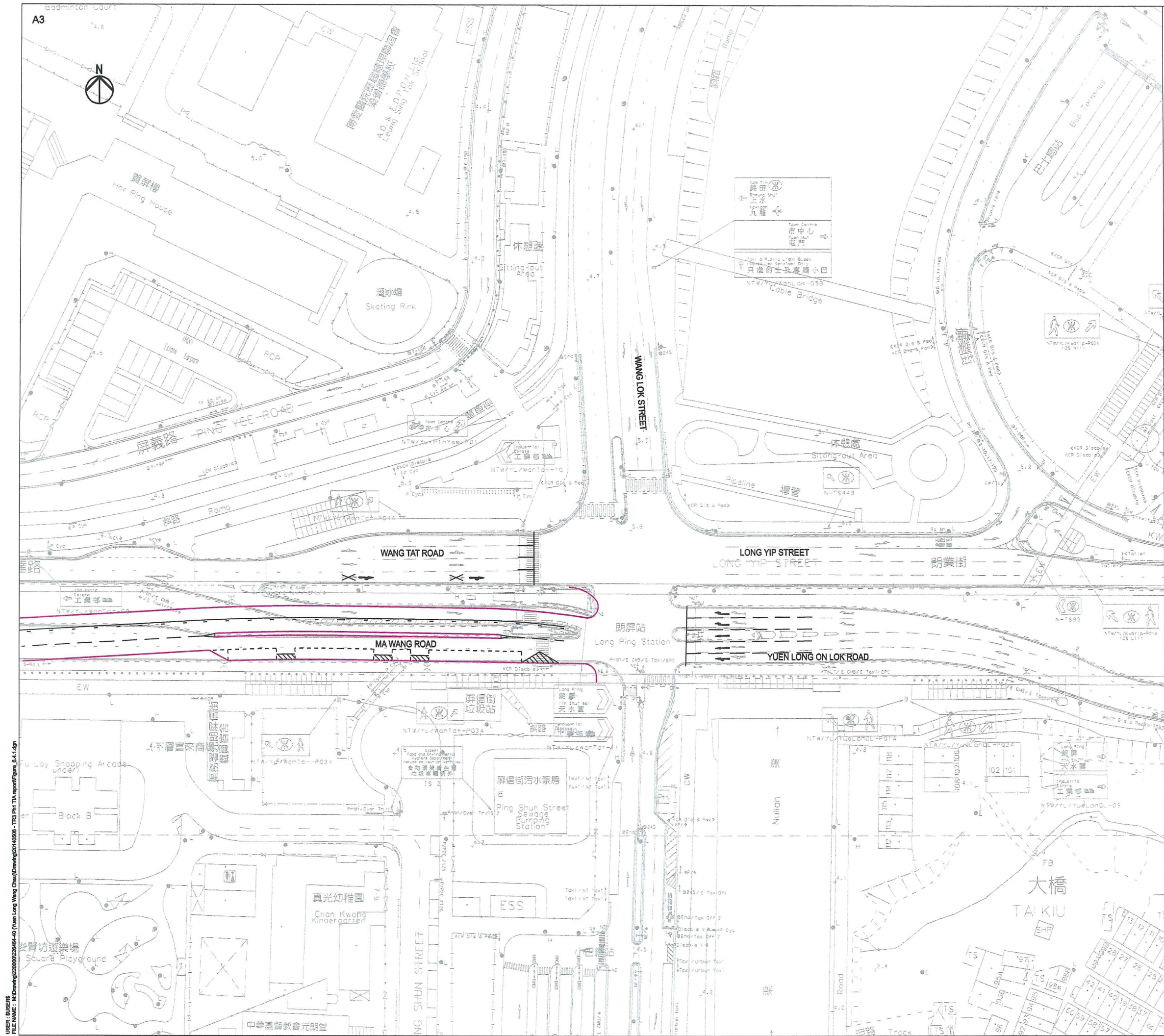


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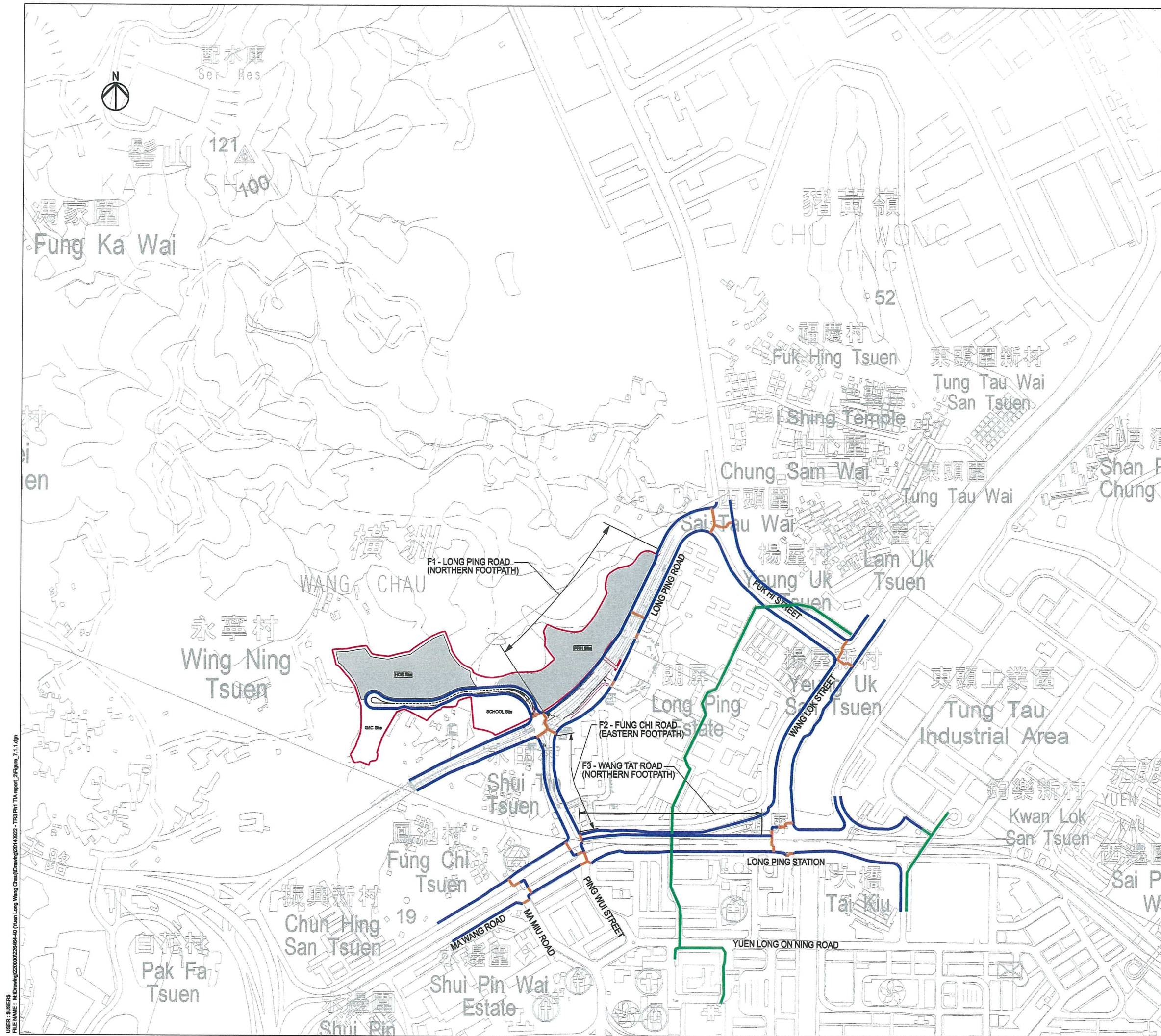
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WANG TAT ROAD / LONG YIP STREET /
YUEN LONG ON LOK ROAD / MA WANG ROAD
(BY OTHER)


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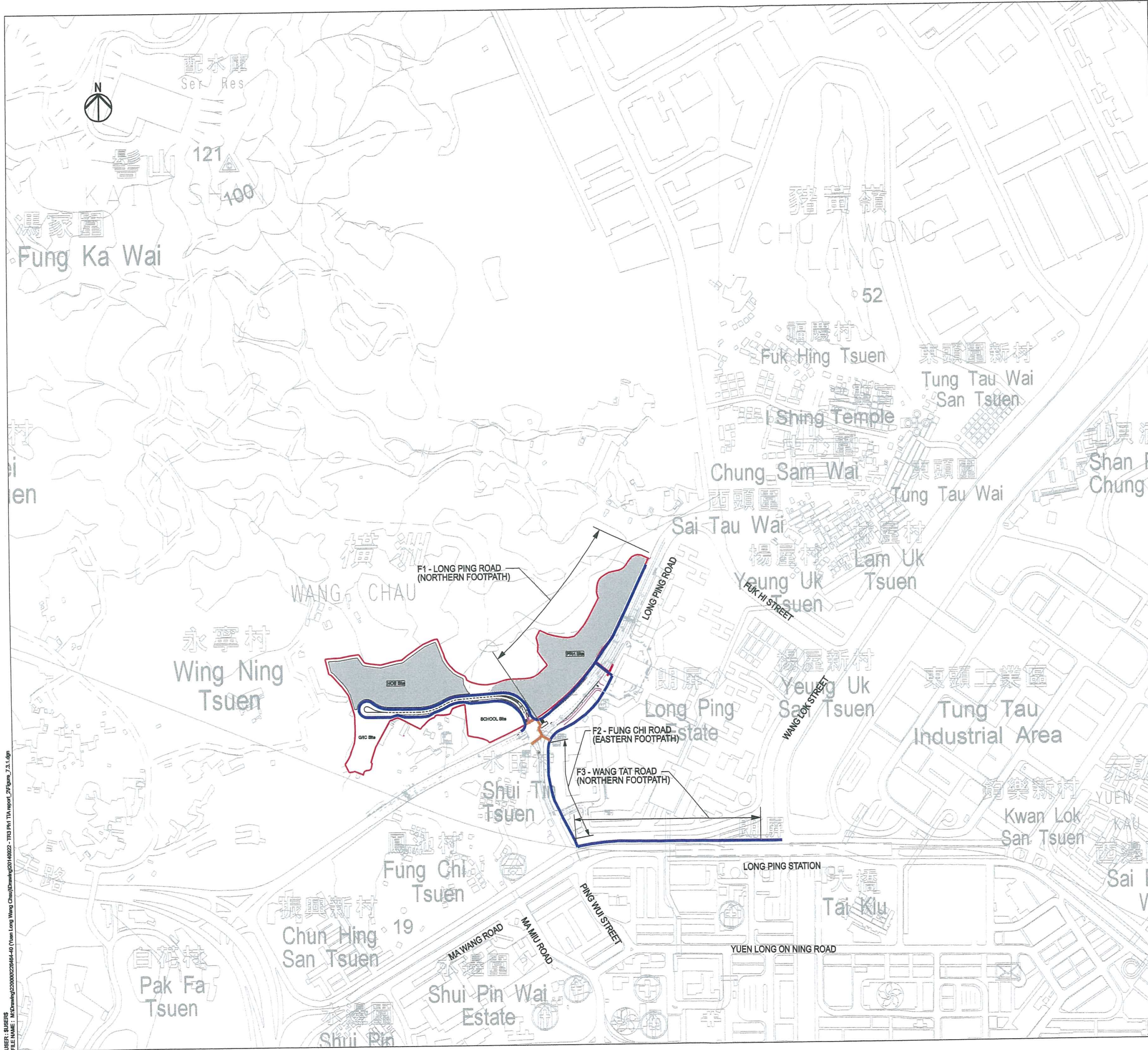
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- LEGEND:
- ELEVATE WALKWAY
 - AT-GRADE FOOTPATH
 - PEDESTRIAN CROSSING
 - F1 FOOTPATH

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Public Housing Development at Wang Chau, Yuen Long			
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PEDESTRIAN FACILITIES IN THE VICINITY OF THE PROJECT SITE			
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- LEGEND:
- MAJOR PEDESTRIAN ROUTING
 - F1 FOOTPATH
 - PEDESTRIAN CROSSING

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Public Housing Development at Wang Chau, Yuen Long

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MAJOR PEDESTRIAN ROUTING FROM PROJECT SITE TO PUBLIC TRANSPORT FACILITIES

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Brief Summary of Assessments for The Proposed Public Housing Development at Wang Chau

1. INTRODUCTION

- 1.1 The site is currently zoned as “Green Belt” (“GB”) on the Approved Ping Shan Outline Zoning Plan (OZP) No. S/YL-PS/14. With a view to facilitating public housing development, amendments to the OZP to rezone the site to “Residential (Group 4)” (“R(A)4”) is required.
- 1.2 The associated broad technical assessments are undertaken to facilitate PlanD’s zoning amendments to the OZP for the proposed public housing development at Wang Chau (the Site).

2. PROPOSED PUBLIC HOUSING DEVELOPMENT

- 2.1 The Site is about 5.67 hectares in size and located in Yuen Long District. It is bounded by Long Ping Road to the east, Chun Hing San Tsuen, Shui Tin Tsuen and Fung Chi Tsuen to the south, Wing Ning Tsuen and Long Tin Road to the west, as well as Kai Shan to the north. It is currently occupied by farmland, fallow land, rural residential dwellings, temporary structures and open storage uses.
- 2.2 The proposed public housing development has a net site area of about 4.1 ha. A plot ratio of 6.0 with maximum building height of 135mPD is proposed. The total Gross Floor Area for public housing development is about 246,000 sq.m. A total of about 4,000 public housing flats will be provided and the design population is about 12,300. Based on the preliminary conceptual layout, major development parameters of the proposed public housing development and other facilities at the Site are as follows:

Table: 2.1 Major Development Parameters

		Remarks
Gross Site Area:	About 5.67 ha	Subject to detailed survey of the site area.
Public Housing Development	About 4.1 ha	The public housing

Site :		development site area shall exclude the site area of GIC, school, public road which are subject to design.
Maximum Plot Ratio:	6.0	
Maximum Building Height:	+135mPD (41 storeys (excluding basement))	No. of storeys is provided for reference only
Gross Floor Area within Public Housing Development:	Total: 246,000 m ²	Subject to detailed survey of site area and design.
Total No. of Flats:	About 4,000 flats	Subject to detailed design.
Design Population:	About 12,300 persons	Subject to flat number
School Site:	Site Area: About 0.5 ha	For 1 primary school with 24 classrooms
GIC Site	Site Area: About 0.5 ha	An individual GIC Block is proposed to accommodate the social welfare facilities
GIC Provision	1 no. of Primary School (with 24 classrooms) 1 no. of Kindergarten (with 8 classrooms)	
Local Open Space	About 12,300 sq.m.	Subject to population
Social Welfare Facilities	1) Day Activity Centre 1 no. 2) Hostel for Severely Mentally Handicapped Persons 1 no. 3) Hostel for Moderately Mentally Handicapped Persons 1 no.	The social welfare facilities are subject to detailed design and SWD's

	4) Integrated Vocational and Rehabilitation Services Centre 1 no. 5) Supported Hostel for Mentally Handicapped Persons 1 no. 6) Residential Care Home for the Elderly 1 no. 7) Day Care Centre for the Elderly 1 no. 8) Integrated Family Service Centre 1 no.	funding availability.
Proposed Amendments in Zoning:	Comprehensive Development Area	
Types of Uses:	Public housing, retail provision, local recreation provision, parking provision, school, and social welfare facilities	

3. SUMMARY OF BROAD TECHNICAL ASSESSMENTS

Drainage Impact

- 3.1 Peripheral u-channel are proposed along the site boundary facing slope to intercept runoff from the Kai Shan hillside. Runoff collected by the u-channels would be directly connected to the drainage system along public roads or routed along the boundary to the nearest public road. Due to the increase in paved area of the Site, the peak surface runoff from the site to the existing downstream drainage system will be increased. Besides, change of landuse from village areas to urban areas will increase the flood protection requirement from 1 in 10yr to 1 in 50yr. Upgrading of existing drainage system along Long Ping Road and Fuk Hi Street would be required.

Sewerage Impact

- 3.2 The Site is located within Yuen Long Sewerage Catchment. The existing sewage flow within Yuen Long Sewerage Catchment is treated at the existing Yuen Long Sewage Treatment Works (YLSTW). It was agreed with Environmental Protection Department (EPD) and Drainage Services Department (DSD) that the sewage flows from the proposed Wang Chau developments shall be conveyed to YLSTW and the

proposed Effluent Polishing Scheme (EPS) upgrading works at YLSTW to be carried out by DSD would be designed to cater for the additional sewage flow from the proposed developments.

- 3.3 The EPS Study for YLSTW will review the design capacity requirement to take into account the additional sewage arising from this development. It is understood that adoption of advanced sewage treatment technologies at YLSTW would be investigated under the EPS Study by DSD. Pollution load from the additional sewage from the proposed developments will be offset by removing other existing pollution sources from the catchment. Therefore, there shall be no adverse impact on compliance with requirements of 'No net increase in pollution loads to Deep Bay'. Upgrading of existing sewerage system along Long Ping Road and Fung Chi Road would be required.

Water Supply

- 3.4 The Project site is located at the boundaries of supply zones between Wang Chau Fresh Water Service Reservoir (WCFWSR), Tan Kwai Tsuen North Fresh Water Service Reservoir (TKTNFWSR) and Ngau Tam Mei Fresh Water Primary Service Reservoir (NTMFWPSR). The NTMFWPSR already reached its capacity and it should have no spare capacity to cater for any additional water demand from the Project site. Furthermore, there were other proposed developments at Yuen Long South which might have implications on TKTNFWSR. Therefore, it is proposed to supply water to the Project site solely from WCFWSR. Based on preliminary assessment, it is found that WCFWSR should have enough capacity to cater for the additional water demand arising from the proposed developments. Extension and upgrading of existing water supply system along Long Ping Road and Fuk Hi Street would be required.
- 3.5 Other technical assessments like Air Ventilation Assessment, Visual Appraisal and Traffic Impact Assessment on the preliminary public housing scheme have been provided separately.

Housing Department

October 2014

Provision of GIC Facilities and Open Space in Ping Shan

Type of Facilities	Hong Kong Planning Standards and Guidelines (HKPSG)	HKPSG Requirement (based on planned population)	Provision		Surplus/ Shortfall (against planned provision)
			Existing Provision	Planned Provision	
District Open Space	10 ha per 100,000 persons	5.6 ha	0	6.16	+0.56 ha
Local Open Space	10 ha per 100,000 persons	5.6 ha	1.71	7.76	+2.16 ha
Secondary School	1 whole-day classroom for 40 persons aged 12-17	73 classrooms	27	27	-46 classrooms
Primary School	1 whole-day classroom for 25.5 persons aged 6-11	93 classrooms	6	30	-63 classrooms [#]
Kindergarten/ Nursery	26 classrooms for 1,000 children aged 3 to 6	32 classrooms	0	15	-17 classrooms [#]
District Police Station	1 per 200,000 to 500,000 persons	0.12	0	0	-0.12
Divisional Police Station	1 per 100,000 to 200,000 persons	0.31	0	0	-0.31
Hospital	5.5 beds per 1,000 persons	338 beds	0 beds	0 beds	-338 beds [*]
Clinic/Health Centre	1 per 100,000 persons	0.61	0	0	-0.61
Magistracy (with 8 courtrooms)	1 per 660,000 persons	0.09	0	0	-0.09
Integrated Children and Youth Services Centre	1 for 12,000 persons aged 6-24	0.69	0	1	+0.31
Integrated Family Services Centre	1 for 100,000 to 150,000 persons	0.37	0	1	+0.63
Library	1 district library for every 200,000 persons	0.31	1	1	+0.69
Sports Centre	1 per 50,000 to 65,000 persons	0.86	1	1	+0.14
Sports Ground/ Sport Complex	1 per 200,000 to 250,000 persons	0.22	0	0	-0.22
Swimming Pool Complex - standard	1 complex per 287,000 persons	0.2	0	0	-0.2

New education facilities serving the population in the HSK NDA would be provided according to the HKPSG.

* Hospital bed provision is determined on a regional basis. The regional deficit would be addressed by Food and Health Bureau and Hospital Authority.

會議記錄於 2014 年 9 月 2 日獲通過，無需修訂。

元朗區議會二零一四年度第三次會議記錄

日期：二零一四年六月二十四日(星期二)

時間：上午九時三十分至下午五時四十五分

地點：元朗橋樂坊二號元朗政府合署十三樓元朗區議會會議廳

<u>出席者</u>	<u>出席時間</u>	<u>離席時間</u>
主席： 梁志祥議員, BBS, MH, JP	(會議開始)	(會議結束)
副主席： 王威信議員	(會議開始)	(會議結束)
議員： 湛家雄議員, BBS, MH, JP	(會議開始)	(會議結束)
陳美蓮議員	(會議開始)	(會議結束)
陳思靜議員	(會議開始)	(會議結束)
張木林議員	(會議開始)	(會議結束)
程振明議員	(會議開始)	(會議結束)
趙秀嫻議員	(會議開始)	(下午 5:00)
莊健成議員	(會議開始)	(下午 5:10)
徐君紹議員	(會議開始)	(會議結束)
郭慶平議員	(會議開始)	(下午 3:00)
郭 強議員, MH	(會議開始)	(會議結束)
鄺俊宇議員	(會議開始)	(會議結束)
黎偉雄議員	(會議開始)	(會議結束)
劉桂容議員	(上午 11:15)	(會議結束)
李月民議員, MH	(會議開始)	(會議結束)
梁福元議員	(會議開始)	(會議結束)
呂 堅議員	(下午 12:50)	(會議結束)
陸頌雄議員	(會議開始)	(下午 3:50)
麥業成議員	(會議開始)	(下午 5:10)
文志雙議員	(會議開始)	(下午 2:20)
文光明議員	(會議開始)	(會議結束)
沈豪傑議員	(會議開始)	(下午 5:00)
蕭浪鳴議員	(會議開始)	(會議結束)
戴耀華議員, MH, JP	(會議開始)	(會議結束)
鄧焯謙議員	(上午 9:55)	(會議結束)
鄧卓然議員	(會議開始)	(下午 2:20)
鄧慶業議員	(會議開始)	(會議結束)
鄧賀年議員	(會議開始)	(下午 5:00)
鄧家良議員	(會議開始)	(會議結束)

鄧貴有議員	(會議開始)	(會議結束)
鄧廣成議員, MH	(會議開始)	(下午 5:30)
鄧勵東議員	(會議開始)	(下午 2:20)
曾憲強議員, MH	(會議開始)	(下午 5:00)
曾樹和議員	(會議開始)	(會議結束)
黃卓健議員	(會議開始)	(會議結束)
黃煒鈴議員	(會議開始)	(下午 2:45)
黃偉賢議員	(會議開始)	(下午 5:00)
邱帶娣議員, BBS, MH	(會議開始)	(會議結束)
姚國威議員	(會議開始)	(會議結束)
袁敏兒議員	(會議開始)	(會議結束)

秘書：林家馨女士

元朗民政事務處署理高級行政主任(區議會)

列席者 麥震宇先生, JP

黃智華先生

蔡松霖先生

鄭少玫女士

蕭夢蜚女士

葉永祥先生

陳輔民先生

張培仲先生

曾祥達先生

邵韻儀女士

李揚道先生

趙莉莉女士

莫慧詩女士

張惠英女士

劉榮想先生

林偉葉女士

梁佩賢女士

元朗民政事務專員

元朗民政事務助理專員(一)

元朗民政事務助理專員(二)

元朗民政事務處高級聯絡主任(市區)

元朗民政事務處高級聯絡主任(鄉郊)

土木工程拓展署總工程師/新界 1(新界西及北)

教育局總學校發展主任(元朗)

食物環境衛生署元朗區環境衛生總監

香港警務處元朗警區指揮官

香港警務處元朗警區警民關係主任(元朗區)

房屋署物業管理總經理(屯門及元朗)

地政總署地政專員(元朗地政處)

地政總署行政助理/地政(元朗地政處)

康樂及文化事務署元朗區康樂事務經理

規劃署屯門及元朗西規劃專員

社會福利署元朗區福利專員

運輸署總運輸主任/新界西北

議程第二項

朱注良先生

容長能先生

林德強先生

簡國治先生

朱家敏女士

房屋署總土木工程師(2)

房屋署高級土木工程師(6)

房屋署高級規劃師(4)

規劃署高級城市規劃師/屯門 2

奧雅納工程顧問董事

議程第三項

錢敏儀女士	規劃署粉嶺、上水及元朗東規劃專員
曾炤基先生	規劃署高級城市規劃師
彭婉珊女士	規劃署助理城市規劃師
鄧錦輝先生	土木工程拓展署總工程師/新界 2(新界西及北)
姚展先生	香港鐵路有限公司城市規劃主管
陳霖生先生	香港鐵路有限公司項目及物業傳訊高級經理
吳家華先生	香港鐵路有限公司高級城市規劃經理
何紹南先生	MVA(交通技術顧問)技術董事

議程第四項

徐偉樂先生	土木工程拓展署高級工程師
丘家泰先生	規劃署總工程師
馮志慧女士	規劃署高級城市規劃師
楊詠珊女士	奧雅納工程顧問董事
朱家敏女士	奧雅納工程顧問董事
劉慧璋女士	奧雅納工程顧問規劃師

缺席者 周永勤議員 (因事請假)

* * * * *

歡迎詞

主席歡迎各位議員及部門代表出席元朗區議會二零一四年度第三次會議，並特別歡迎新任食物環境衛生署(食環署)元朗區環境衛生總監張培仲先生，接替已退休的石如東先生，以及新任香港警務處元朗警區警民關係主任邵韻儀女士。

2. 主席表示黃偉賢議員、鄺俊宇議員及郭慶平議員建議討論「要求盡快興建西鐵北環綫」。由於上述議題屬交通及運輸事宜，故建議可交由元朗區議會轄下交通及運輸委員會處理。黃偉賢議員查詢元朗區議會過去有否就北環綫的相關事宜作出討論，並表示如議員曾於元朗區議會會議上討論北環綫事宜，有關議題應繼續由元朗區議會跟進。另外，他希望主席日後透過元朗區議會秘書處盡早通知相關議員有關處理議題的安排。

3. 主席表示元朗區議會曾討論興建北環綫的事宜，並會考慮將有關議程列入下一次元朗區議會會議的議程。他表示如議員對議程有任何查詢，歡迎直接與他本人聯絡。

第一項：通過元朗區議會二零一四年度第二次會議記錄

4. 議員一致通過元朗區議會二零一四年度第二次會議記錄。

第二項：橫洲公營房屋發展計劃暨諮詢擬議修訂《屏山分區計劃大綱核准圖編號 S/YL-PS/14》

(區議會文件 2014／34 及 47 號)

5. 主席請議員參閱第 34 及 47 號文件，內容分別關於房屋署簡介橫洲公營房屋發展計劃(橫洲發展計劃)的方案，以及規劃署介紹《屏山分區計劃大綱核准圖編號 S/YL-PS/14》(大綱圖)的擬議修訂。由於有關大綱圖的擬議修訂涉及一幅位於橫洲朗屏邨側的土地，即橫洲發展計劃擬議興建房屋的地盤，故建議一併討論上述兩份文件。

6. 除了規劃署的常設部門代表劉榮想先生外，主席歡迎下列人士出席是次會議：

房屋署

總土木工程師

朱注良先生

高級土木工程師

容長能先生

高級規劃師

林德強先生

規劃署

高級規劃師/屯門 2

簡國治先生

奧雅納工程顧問

董事

朱家敏女士

7. 朱注良先生、朱家敏女士及劉榮想先生簡介上述兩份文件，並希望議員就橫洲發展計劃及大綱圖的擬議修訂提出意見。

8. 鄧慶業議員認為相關部門應就大綱圖的擬議修訂先諮詢屏山鄉鄉事委員會。主席查詢規劃署是否已就有關擬議修訂諮詢屏山鄉鄉事委員會。

9. 劉榮想先生回應表示，房屋署代表早前已與屏山鄉鄉事委員會就橫洲發展計劃的方案交換意見，並澄清修訂項目 B 純粹為技術性修訂，以反映已落成的住宅發展項目(即芙蓉園)，亦不會對當區產生負面影響。如有需要，規劃署樂意向屏山鄉鄉事委員會簡介大綱圖的擬議修訂。

10. 主席表示，根據既有程序，除非相關鄉事委員會認為沒有需要，否則相關部門應先諮詢鄉事委員會，再諮詢元朗區議會。曾樹和議員查詢有關技術性修訂的詳情。

11. 劉榮想先生解釋，「綜合發展區」地帶的規劃意向是促使市區重整，有關地帶內的發展必須根據《城市規劃條例》交由城市規劃委員會(城規會)審批，而城規會亦會盡快改劃已完成發展的「綜合發展區」，以反映其實際土地用途。他指出芙蓉園的發展是按照二零零四年獲城規會批准的規劃申請而興建，有關的許可條件亦已全部履行，因此，規劃署建議對大綱圖作出技術性修訂，即把有關土地由「綜合發展區」改劃為「住宅(乙類)3」，以反映已落成住宅發展的地積比率、建築物高度及上蓋面積。他強調此技術性修訂純粹描述有關土地的發展限制，並不會對當區造成實質影響。

12. 曾樹和議員備悉有關擬議修訂項目的詳情。鄧慶業議員備悉有關擬議修訂項目的詳情。另外，他希望相關部門改善芙蓉園一帶交通擠塞的情況。

13. 黃偉賢議員建議維持擬議修訂項目 B 的土地用途，以便政府或私營發展商日後收購芙蓉園的業權，一併在芙蓉園一帶的「綜合發展區」地帶進行大型發展。

14. 劉榮想先生回應如下：

- (1) 「綜合發展區」地帶的設立旨在方便當局因應環境、交通和基礎設施等各種限制，對發展的組合、規模、設計和佈局實施適當的規劃管制；

- (2) 就涉及私人土地的「綜合發展區」地帶，基於業權分散會影響在有關土地上進行發展計劃的實施機會，故在劃設「綜合發展區」地帶時，大部分私人土地通常應由單一業權所擁有。然而，城規會會採取較為務實的處理方式，按個別情況考慮容許分階段發展「綜合發展區」地帶的每幅用地。對於並非由單一業權所擁有的「綜合發展區」用地，倘若發展商能夠證明已盡量收購該幅用地的餘下土地以進行發展，但仍然無法與土地擁有人達成協議，城規會會考慮容許發展計劃分期推行；
- (3) 一般而言，發展商會透過收購尚有剩餘地積比率的地盤，規劃房屋項目，以提升發展的增值空間。然而，由於芙蓉園已分層出售導致業權相當分散，而有關住宅項目落成僅數年，故相信業主未必有意在短期內出售業權，加上芙蓉園的發展已達「綜合發展區」的地積比率上限，難以提供足夠的經濟誘因予發展商進行收購及重建計劃；及
- (4) 城規會在審批芙蓉園的規劃發展時已充分考慮毗鄰「綜合發展區」地帶的情況。

15. 鄧慶業議員表示曾與房屋署就橫洲發展計劃交換意見，並讚賞署方從善如流，能因應附近村落居民的意見將預計人口大幅下調至約 12 000 人。就發展項目的交通安排，他欣悉新增人口日後可透過擬建的行人天橋便捷地往返朗屏邨及西鐵朗屏站，而發展用地亦已預留通道供巴士及小巴等公共運輸服務之用。另外，他建議相關部門在推行房屋發展計劃時，必須一併提供足夠的康樂及休憩設施，以滿足新增人口的實際需要。他亦關注未來十年元朗區將有多個大型房屋發展項目相繼落成，希望相關部門盡快訂定長遠而有效的整體交通規劃，積極改善區內的行人環境及交通配套，以確保基建容量能配合人口增長。

16. 湛家雄議員, BBS, MH, JP 表示根據《城市規劃條例》(第 131 章)的一般規定，「綠化地帶」內不應該進行發展，城規會只會在非常特殊的情況下才考慮在容許「綠化地帶」進行新發展的申請，而有關申請必須具備有力的規劃理據。他指出橫洲發展計劃的用地並非「棕地」，認為政府以房屋供應短缺為由將「綠化地帶」改劃為「綜合發展區」或會違反既有的規劃準則。另外，他查詢有關計劃所提供的泊車位數目，並反映水邊圍交匯處，以及福喜街、朗屏路及鳳池路一帶不時出現交通擠塞的情況，關注發展計劃所帶來的路面交

通流量有可能超出附近主要交通道路的承受能力，加上區內正同時進行多項房屋土地規劃發展，故建議相關部門加強協調並制訂長遠整體交通規劃。他並希望有關部門能因應元朗區的整體發展提供足夠及完善的社區配套，配合人口增長。

17． 鄭俊宇議員希望相關部門以天水圍的發展經驗作參考，在規劃房屋發展時應一併考慮社區的人口承載能力，以及提供完善的交通、醫療、學校及社區設施，避免再次因缺乏相關配套而影響當區居民生活，甚至造成社會問題。他對於文件提及的交通影響評估結果表示保留，關注擬建行車路與朗屏路形成的十字路口可能引起交通問題，並認為現時西鐵綫的容量難以應付新增人口所帶來的運輸需求，故建議房屋署與相關部門作出協商及研究改善方案，例如將西鐵列車車廂由目前的七卡增至九卡。

18． 梁福元議員知悉芙蓉園的地積比率已達發展上限。就橫洲發展計劃，他表示發展用地鄰近髻山的認可殯葬區，希望相關部門避免影響附近村落的風水。他亦指出發展用地只有一個車輛通道出入口連接朗屏路及鳳池路，擔心有關路口的容量不敷應用，故建議在擬建的連接道路加設迴旋處，並於地盤的「政府、機構或社區用地」旁開闢新路口，以疏導車流，避免出現交通擠塞的情況。另外，他表示元朗區尚有不少土地可供房屋發展之用，希望相關部門在推行各項房屋計劃時，必須制訂長遠而有效的整體規劃，並提供完善的交通及社區配套，以配合發展需要。

19． 陸頌雄議員反映現時公共租住房屋(公屋)輪候冊的申請高達 24 萬宗，故支持政府因應市民殷切的住屋需求而積極增加公屋供應。他建議政府在興建公營房屋時採取綜合發展模式，例如將公屋大廈低層用作興建綜合服務大樓、社區中心及會堂、圖書館及體育館等社區設施，以及建造地下停車場，以善用有限的土地資源提供更切合居民需要的配套。另外，他希望相關部門提供有關零售設施的資料，如商舖數目、貨品種類及營運模式等詳情。

20． 麥業成議員認為橫洲發展計劃的「一字型」樓宇佈局會造成屏風效應，故建議調整樓宇位置，以改善景觀及空氣流通，減少對朗屏邨居民的影響。他亦建議為連接發展用地與朗屏邨的擬建行人天橋安裝升降機，並關注有關行人天橋難以負荷逾 12 000 新增人口的需求，希望相關部門改善行人道路網絡，以加強與毗鄰地區的連接。另外，他指出有關發展計劃以鐵路為主要的對外公共交通工具，大部分新增人口日後將會經朗屏邨內的公共通道往

返西鐵朗屏站，而朗屏邨現正由業主立案法團管理，擔心引起維修及保養的爭議，希望房屋署跟進有關事宜。此外，他希望了解各項擬建公共設施的詳細規劃，並認為在推行房屋計劃時必須一併制訂完善的社區配套，以免令周邊地區的社區設施超出負荷。

21. 文光明議員認為橫洲發展計劃的人口密度過高，擔心影響居民的居住環境。他認同政府有需要增加房屋供應以滿足市民的住屋需求，但當局需平衡區內現有交通基建及社區配套的容量以配合未來的人口增長。另外，他建議興建更多大型商場配合居民的購物需要，同時亦可疏導人流，紓緩元朗市中心的擁擠情況。

22. 曾樹和議員支持橫洲發展計劃，認為有助紓緩公屋輪候需時的情況。他讚賞房屋署就有關計劃充分諮詢屏山鄉鄉事委員會，並能因應意見修訂選址及減少單位數目。另外，他認為交通規劃必須符合元朗區議會的要求，並建議擴大收地範圍至此計劃以北之土地，以利用有關土地增建康樂設施。

23. 黃偉賢議員擔心因土地供應緊絀為由而輕易改劃「綠化地帶」土地用途作房屋發展成為壞先例，並指出朗天路與西鐵路軌之間的「綜合發展區」地帶可供發展大型房屋計劃，認為橫洲發展計劃的選址是「捨易取難」，當中涉及的改劃土地程序導致此公營房屋項目需於二零二五年方可完成。另外，他反映有不少巴士及重型車輛經朗屏路進出元朗工業邨，多年來對朗屏邨居民造成噪音滋擾，而部分擬建的住宅樓宇及學校亦毗鄰朗屏路，希望相關部門盡快研究改善措施。此外，他查詢受清拆影響的居民數目，並建議下調樓宇高度及善用地積比率以興建多層的社區設施。

24. 姚國威議員關注現時公屋輪候需時的情況，認為橫洲發展計劃有助解決市民殷切的住屋需求。另外，他指出部分擬議的樓宇位置與「政府、機構或社區」用地及西鐵朗屏站相距甚遠，故建議修訂整體設施及樓宇佈局，並希望相關部門詳細研究發展計劃所帶來的新增運輸需求，從而制訂便利居民的公共運輸計劃。他亦希望政府參考天水圍的發展經驗，在推行房屋計劃時一併規劃完善的配套，包括足夠的原區就業機會、公營街市及泊車位等，以滿足居民的實際需要。

25. 郭強議員, MH 反映現時香港整體房屋供應短缺，公屋輪候時間普遍超逾三年，加上配額及計分制令年輕人需等候多年方可獲編配公屋單位，故支持橫洲發展計劃，並希望政府積極增加房屋土地供應，以滿足市民殷切的住屋需求。他認為有關發展計劃可容納更多人口，惟對於屏山鄉鄉事委員會的意見表示尊重，故支持房屋署因應有關鄉事委員會的意見而減少單位數目。另外，他建議相關部門制訂完善的對外交通網絡，例如規劃新巴士路線，以及改善發展用地與西鐵朗屏站的連接等，方便居民出入。

26. 朱注良先生綜合回應如下：

- (1) 感謝議員就橫洲發展計劃提出多項意見；
- (2) 因應市民對房屋的殷切需求，署方已就橫洲發展計劃進行詳細的技術評估，結果顯示位於橫洲朗屏邨側的「綠化地帶」適宜用作興建公營房屋，而有關計劃亦不會對當區產生負面影響，故擬議改劃上述「綠化地帶」以發展公營房屋；
- (3) 署方已委託顧問公司進行交通影響評估，研究範圍包括車輛出入口安排、道路管理措施、公共運輸服務需求，公共交通交匯處及附近路口的影響。由於橫洲發展計劃鄰近水邊圍交匯處，故預計駕駛者日後主要由發展用地經朗屏路往水邊圍交匯處，再進入朗天路及元朗公路，並強調評估結果顯示，附近主要交通路口的容量均足以應付有關發展計劃所帶來的新增車輛流量，故不會對現有道路網絡造成不良影響；
- (4) 署方現階段正就更改土地用途進行諮詢，在完成有關程序後，將盡快展開收地程序及土地平整工程等前期工作，預計橫洲發展計劃於二零二五年完成。由於規劃及諮詢過程需時，故有關發展計劃的細節尚待設計，然而署方必定會積極採納議員就設計方案所提出的意見，並會於稍後就計劃的詳細設計諮詢元朗區議會；
- (5) 考慮到部分擬議住宅樓宇將會沿朗屏路興建，署方在詳細設計階段將會制訂適當交通噪音紓解措施，如採取單向式的建築物設計、興建隔音屏障，以及於住宅單位內安裝隔音窗戶等，以減少對居民的影響；及

- (6) 根據初步估計，有關計劃的六成發展用地為私人土地，當中包括 79 個地段，涉及 20 多間房屋及數十間搭建物。署方現時尚未啟動收地程序，稍後會按照政府當時的相關政策及準則釐定補償金額。

27 · 劉榮想先生綜合回應如下：

- (1) 在全港法定圖則中被劃為「綠化地帶」的土地面積共約 15 200 公頃。為釋放更多土地作房屋發展，署方正有序地進行全港性「綠化地帶」檢討，由第一階段集中處理沒有植被、荒廢或已平整的「綠化地帶」，進展至現時第二階段檢視位於市區和新發展區邊緣、緩衝及保育價值較低的「綠化地帶」，以研究有關用地是否適合改作住宅用途；
- (2) 現時香港房屋短缺的情況嚴重，政府有需要採取中短期措施增加及加快房屋土地供應以提供更多住宅單位。由於接近已發展土地或公共道路旁的「綠化地帶」毗鄰現有交通基建和供水排污等配套，故有關土地具優勢改作房屋用途，因此署方建議改劃多幅鄰近已發展區但已受破壞或生態價值較低的「綠化地帶」用地，總面積約 150 公頃，佔全港「綠化地帶」用地僅約 1%，如成功通過改劃並撥作房屋發展，可提供約 90 000 個住宅單位，其中超過四分之三為公營房屋；
- (3) 屏山分區計劃大綱圖中的「綠化地帶」總面積約 118 公頃，因應橫洲發展計劃而擬議改劃的「綠化地帶」面積僅約 5.6 公頃，佔整體不足百分之五，而當中更有不少為已荒廢的農地，或是被用作露天貯物倉及搭建寮屋。規劃署與房屋署在物色公營房屋用地時已充分考慮有關土地的實際情況及周邊現存的基礎設施，以期在短期內增加公營房屋供應；
- (4) 署方及其他相關部門一直相當關注元朗市中心擁擠的情況，故在錦田南及八鄉土地用途檢討，以及洪水橋新發展區規劃及工程研究內已規劃發展新商業核心地帶，例如西鐵錦上路站上蓋擬建大型購物中心，而洪水橋新發展區內亦預留商業用地作興建商業設施及酒店之用，以期疏導人流；
- (5) 備悉議員關注區內現有交通基建及配套難以配合多個房屋土地規劃發展所帶來的新增人口，並表示運輸署及其他相關部門代

表將會出席元朗區議會包括轄下新成立的「元朗交通基建改善研究工作小組」，與議員共同商討及參與研究交通基建方面的工作。他希望議員理解整體長遠規劃需時，署方會適時就各項發展計劃的詳細方案諮詢元朗區議會，並歡迎議員提出建議；

- (6) 區內現有的社區設施足以應付未來人口增長所帶來的需求，署方會密切留意不同設施的供求情況，並會適時採取相應改善措施；
- (7) 強調改劃土地程序並不會窒礙橫洲發展計劃的進度，並指出由於有關發展用地涉及不少私人土地，而收地及建築工作需時執行，故預計整個發展項目需時 11 年；
- (8) 對於有議員建議另覓選址，他指出位於朗天路與西鐵路軌之間的「綜合發展區」地帶亦涉及大量私人土地，地積比率亦僅為 0.4 倍，相信需要更長時間進行改劃、收地工作及基建工程；及
- (9) 橫洲發展計劃的地盤面積約為 5.6 公頃，公營房屋土地則佔約 4.1 公頃，而房屋署並不能透過下調「學校」及「政府、機構或社區」用地的地積比率而增加住宅單位供應。另外，房屋署與其他相關部門一直保持緊密溝通，以規劃及興建能切合居民需要的社區設施。

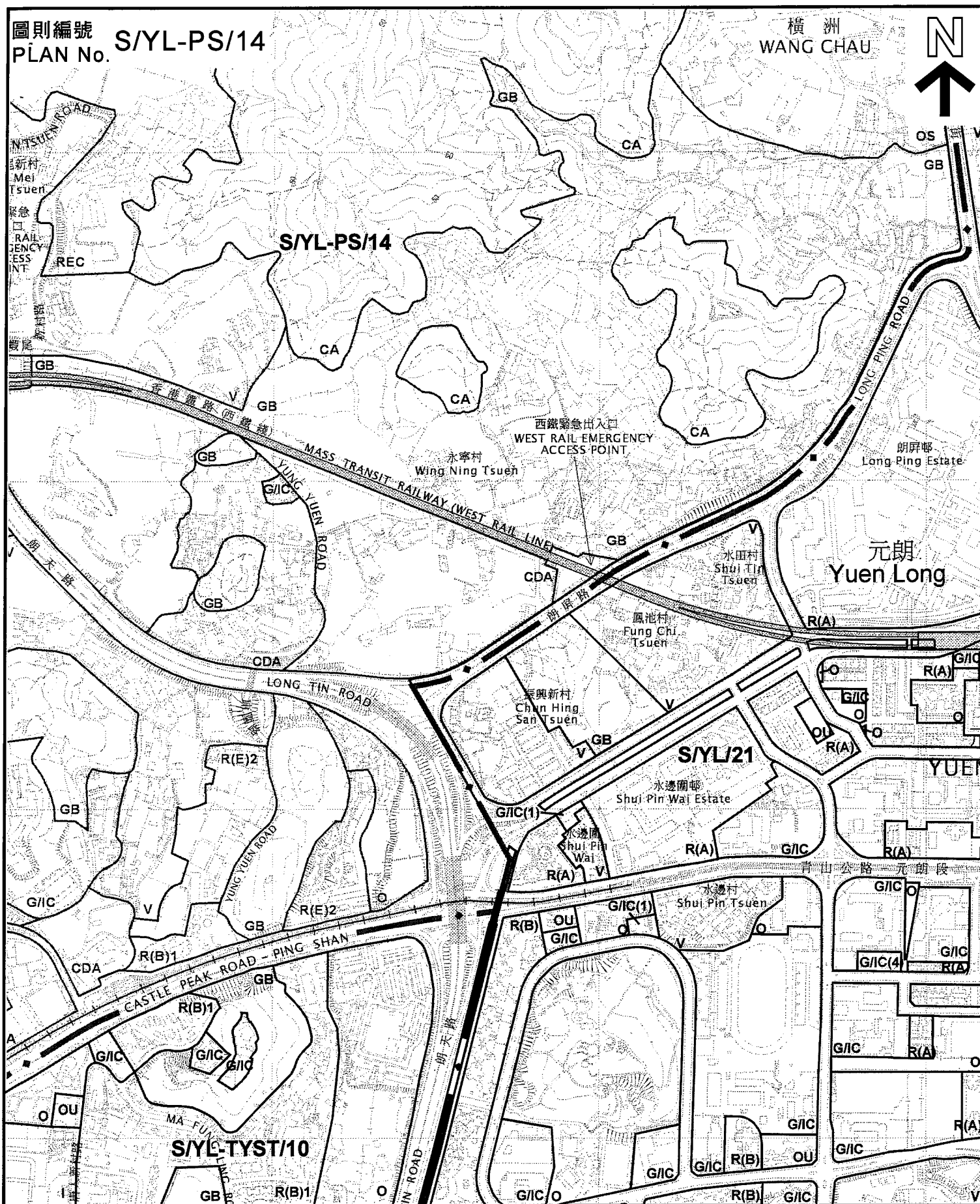
28． 主席總結，感謝相關部門及顧問公司代表出席是次會議介紹上述兩份文件，並聽取議員的意見。他表示發言的議員原則上支持橫洲發展計劃，希望相關部門考慮採納議員的建議，包括增建連接發展用地與周邊地區的行人過路設施、適當擴大收地範圍以興建康樂及休憩設施等，以及調整樓宇高度及佈局以免造成屏風效應，減少對朗屏邨及附近村落居民的影響。他希望相關部門繼續廣泛聽取意見，並盡快就有關發展計劃的詳細設計諮詢元朗區議會轄下的文康、社區服務及房屋事務委員會(文委會)。

第三項：錦田南及八鄉土地用途檢討

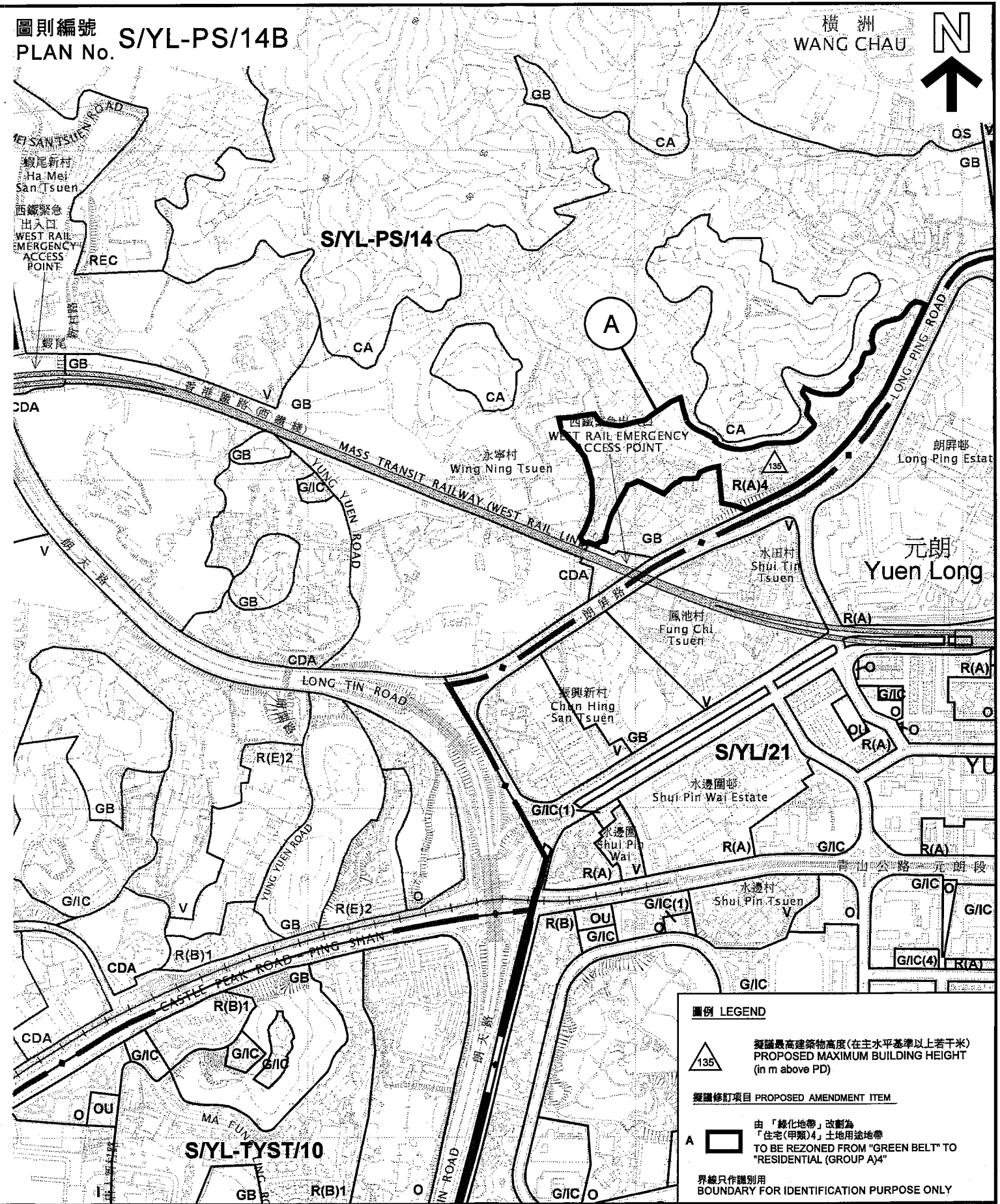
(區議會文件 2014／第 35 號)

29． 主席請議員參閱第 35 號文件及於席上提交的文件，內容分別關於錦田南及八鄉土地用途檢討的建議，以及八鄉鄉事委員會就「有關錦田南及八鄉土地規劃事」的意見。

圖則編號
PLAN No. S/YL-PS/14



圖則編號
PLAN No. S/YL-PS/14B



位置圖 LOCATION PLAN

擬就屏山分區計劃大綱核准圖編號S/YL-PS/14作出修訂 - 項目A
PROPOSED AMENDMENTS TO THE APPROVED PING SHAN
OUTLINE ZONING PLAN No. S/YL-PS/14 - ITEM A

SCALE 1:7 500 比例尺
METRES 100 0 100 200 300 METRES

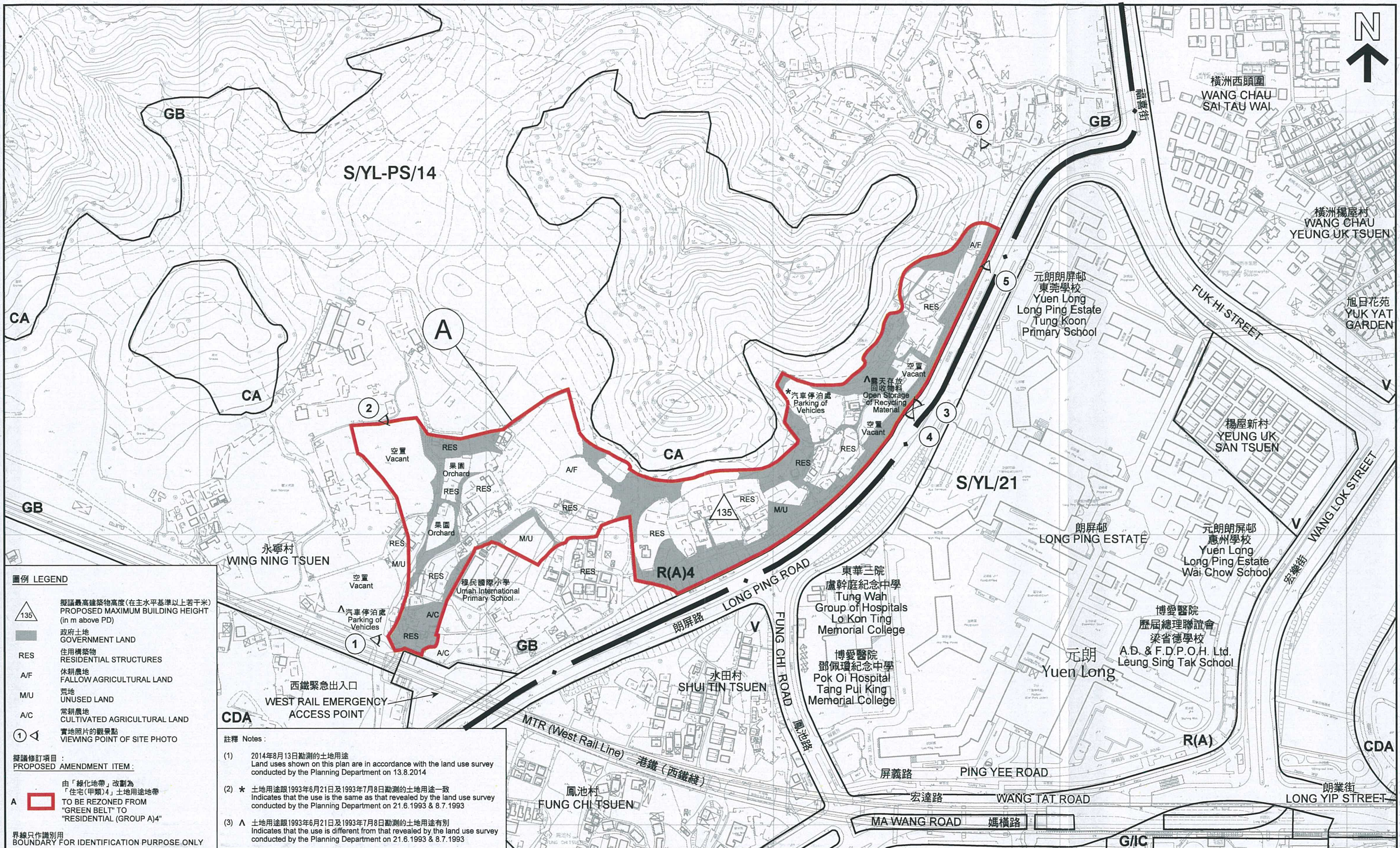
本摘要圖於2014年10月14日擬備，
所根據的資料為於2012年5月8日
核准的分區計劃大綱圖編號 S/YL-PS/14
EXTRACT PLAN PREPARED ON 14.10.2014
BASED ON OUTLINE ZONING PLAN No.
S/YL-PS/14 APPROVED ON 8.5.2012

規劃署
PLANNING DEPARTMENT



參考編號 REFERENCE No.
M/TM/14/140

圖 PLAN
1



圖例 LEGEND

- △ 135 擬議最高建築物高度(在主水平基準以上若干米)
PROPOSED MAXIMUM BUILDING HEIGHT
(in m above PD)
- 政府土地
GOVERNMENT LAND
- RES 住用建築物
RESIDENTIAL STRUCTURES
- A/F 休耕農地
FALLOW AGRICULTURAL LAND
- M/U 荒地
UNUSED LAND
- A/C 常耕農地
CULTIVATED AGRICULTURAL LAND
- ① 實地照片的觀景點
VIEWING POINT OF SITE PHOTO

擬議修訂項目：
PROPOSED AMENDMENT ITEM:

- 由「綠化地帶」改劃為
「住宅(甲類)4」土地用途地帶
TO BE REZONED FROM
"GREEN BELT" TO
"RESIDENTIAL (GROUP A)4"

界線只作識別用
BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

CDA

註釋 Notes:

- (1) 2014年8月13日勘測的土地用途
Land uses shown on this plan are in accordance with the land use survey conducted by the Planning Department on 13.8.2014
- (2) * 土地用途跟1993年6月21日及1993年7月8日勘測的土地用途一致
Indicates that the use is the same as that revealed by the land use survey conducted by the Planning Department on 21.6.1993 & 8.7.1993
- (3) ^ 土地用途跟1993年6月21日及1993年7月8日勘測的土地用途有別
Indicates that the use is different from that revealed by the land use survey conducted by the Planning Department on 21.6.1993 & 8.7.1993

平面圖 SITE PLAN

擬就屏山分區計劃大綱核准圖編號S/YL-PS/14作出修訂

項目A
PROPOSED AMENDMENTS TO THE APPROVED PING SHAN
OUTLINE ZONING PLAN No. S/YL-PS/14
- ITEM A

本摘要圖於2014年10月14日擬備，所根據的
資料為測量圖編號 6-NW-4C, D, 9A和B
EXTRACT PLAN PREPARED ON 14.10.2014
BASED ON SURVEY SHEETS No.
6-NW-4C, D, 9A & B

SCALE 1:3 000 比例尺
米 60 0 60 120 米
METRES

規劃署
PLANNING DEPARTMENT

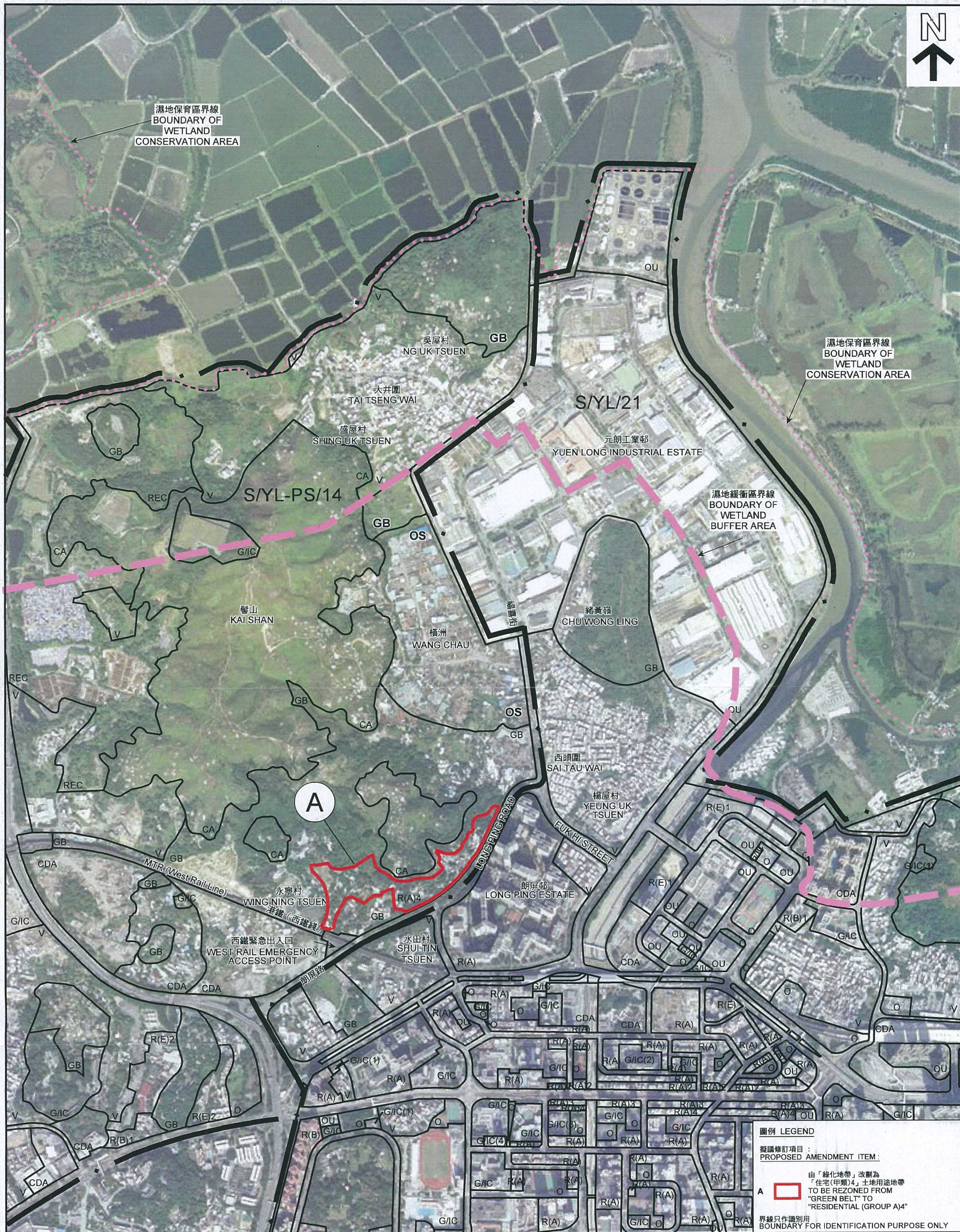


參考編號 REFERENCE No.

M/TM/14/140

圖 PLAN

2



本摘要圖於2014年10月14日擬備，所根據
的資料為地政總署於2013年11月26日拍得
的航攝照片編號 CW104497
EXTRACT PLAN PREPARED ON 14.10.2014
BASED ON AERIAL PHOTO No.
CW104497 TAKEN ON 26.11.2013
BY LANDS DEPARTMENT

航攝照片 AERIAL PHOTO
屏山分區計劃大綱核准圖編號S/YL-PS/14的更改擬議修訂
- 項目A
REVISED PROPOSED AMENDMENTS TO THE APPROVED PING SHAN
OUTLINE ZONING PLAN No. S/YL-PS/14
- ITEM A

規劃署
PLANNING
DEPARTMENT



參考編號
REFERENCE No.
M/TM/14/140

圖 PLAN
3

港鐵（西鐵線）
MTR (WEST RAIL LINE)

1

項目A
ITEM A



2

項目A
ITEM A



3

項目A
ITEM A

朗屏邨
LONG PING ESTATE

朗屏路
LONG PING ROAD



主題地點界線只作識別用
SUBJECT SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

實地照片 SITE PHOTO

屏山分區計劃大綱圖編號S/YL-PS/14的擬議修訂
- 項目A
PROPOSED AMENDMENTS TO PING SHAN
OUTLINE ZONING PLAN No. S/YL-PS/14
- ITEM A

規劃署
PLANNING
DEPARTMENT



參考編號
REFERENCE No.
M/TM/14/140

圖 PLAN
4a

本圖於2014年10月14日擬備，所根據的
資料為攝於2014年8月13日的實地照片
PLAN PREPARED ON 14.10.2014
BASED ON SITE PHOTO
TAKEN ON 13.8.2014



主題地點界線只作識別用
SUBJECT SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

本圖於2014年10月14日擬備，所根據的
資料為攝於2014年8月13日的實地照片
PLAN PREPARED ON 14.10.2014
BASED ON SITE PHOTO
TAKEN ON 13.8.2014

實地照片 SITE PHOTO

屏山分區計劃大綱圖編號S/YL-PS/14的擬議修訂
- 項目A
PROPOSED AMENDMENTS TO PING SHAN
OUTLINE ZONING PLAN No. S/YL-PS/14
- ITEM A

規劃署
PLANNING
DEPARTMENT



參考編號
REFERENCE No.
M/TM/14/140

圖 PLAN
4b