RNTPC Paper No. 1/16
For Consideration by the
Rural and New Town
Planning Committee
on 8.1.2016

PROPOSED AMENDMENTS TO
THE APPROVED FANLING/SHEUNG SHUI OUTLINE ZONING PLAN NO. S/FSS/20

1. Introduction

This paper is to seek Members' agreement that:

(a) the proposed amendments to the approved Fanling/Sheung Shui Outline Zoning Plan (OZP) No. S/FSS/20 as shown on the draft Fanling/Sheung Shui OZP No. S/FSS/20A (**Annex B**) and its Notes (**Annex C**) 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 (**Annex D**) is an expression of the Town Planning Board (the Board)'s planning intentions and objectives for various land use zones of the OZP, and is suitable for exhibition together with the OZP and its Notes.

2. Status of the Current OZP

2.1 On 16.6.2015, the Chief Executive in Council (CE in C) approved the draft Fanling/Sheung Shui OZP No. S/FSS/19 under section 9(1)(a) of the Ordinance which was subsequently renumbered as S/FSS/20. On 19.6.2015, the approved Fanling/Sheung Shui OZP No. S/FSS/20 was exhibited for public inspection under section 9(5) of the Ordinance.

2.2 On 8.9.2015, the CE in C referred the approved Fanling/Sheung Shui OZP No. S/FSS/20 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The reference back of the OZP was notified in the Gazette on 25.9.2015 under section 12(2) of the Ordinance.

3. Background

3.1 On 17.9.2010 and 14.8.2015, the Board considered the findings of the 'Area Assessments of 2009 of Industrial Land in the Territory' (2009 Area Assessments) and the 2014 Area Assessments respectively, and endorsed the recommendations, which include, amongst others:

Fanling/Sheung Shui Planning Area 48 (Fanling Area 48)

(a) The site in Fanling Area 48, which is currently zoned "Industrial" ("I"), has potential for comprehensive residential development. This would help upgrade the existing environmental conditions in the area. The site should be rezoned to facilitate residential development thereat upon working out a feasible development option.

On Lok Tsuen Industrial Area (the Area)

(b) Retain the Area as "I" zone to cater for the strong demand for general logistics/warehousing;

(c) enhance the Area to better utilize the land resources, increasing employment opportunities and job variety;

(d) consideration may be given to disposing suitable government sites in the Area for industrial development which may act as a catalyst to encourage more redevelopment of existing industrial buildings (IBs) by the private sector; and

(e) subject to technical assessment on its feasibility, consideration may also be given to relaxing the existing development restrictions on the OZP to help optimize the utilization of sites and also encourage private redevelopments.

3.2 To take forward the recommendations of the 2009 and 2014 Area Assessments, Planning Department (PlanD) has undertaken a review on the concerned "I" zones on the Fanling/Sheung Shui OZP and the following amendments are proposed:

(a) rezoning of a site at Fanling Area 48 from "I" zone with a minor portion falling within "Green Belt" ("GB") zone to "Residential (Group A)3" ("R(A)3") and "Government, Institution or Community" ("G/IC") zones to facilitate a public housing development with schools and other Government uses respectively;

(b) revision to building height (BH) restriction from 25m to 65m (excluding basements) for the "I" zone of the Area with incorporation of a provision to exempt floor area used for public vehicle parks as required by the Government from plot ratio (PR)/gross floor area (GFA) calculations under the OZP;

(c) incorporation of a provision for minor relaxation on the PR and BH restrictions for "I" zone; and

(d) other minor technical amendments.

3.3 Moreover, with a view to supporting art development, relevant bureau and departments have investigated the feasibility of allowing 'Art Studio' in the industrial and Industrial-Office (I-O) buildings. As the key concern is on fire

safety, 'Art Studio' is considered acceptable in the industrial and I-O buildings if it does not involve direct provision of services or goods (e.g. hobby classes, seminars and sales of goods, art gallery and venue for rehearsal for art performance). The proposal was generally supported by the stakeholders with no objection from concerned Government departments. To take forward the above proposal, it is proposed to incorporate 'Art Studio (excluding those involving direct provision of services or goods)' as a Column 1 use in the "I" zone.

4. **The Proposed Amendments**

Fanling Area 48 (**Plans 1a, 2a, 2b, 3a, 4a to 4d** and **4g**)

4.1 The Fanling Area 48 is located at the fringe of Fanling New Town. The western part of the site is mostly private land currently occupied by temporary workshops, warehouses and various open storage uses. There is a temporary maintenance depot of the Highways Department at the northern boundary abutting Tai Wo Service Road West. A cluster of squatters/temporary domestic structures (collectively known as Ho Ka Yuen) is found on the Government land at the eastern part of the site. Based on observation from site inspection, the squatter area consists of roughly 40 residential dwellings (**Plan 2b**).

4.2 The site is situated at the foothill near Wo Hop Shek Village. To the north of the site is Tai Wo Service Road West. To the west is Wo Hop Shek Village. To the immediate east and south of the site are sloping areas covered by vegetation. To further south is Wo Hop Shek Cemetery and the traditional burial grounds of the indigenous villagers.

Amendment Item A – Proposed Public Housing Development (about 4.0 ha)

4.3 To follow up the recommendation of the 2009 Area Assessments (para.3(a) refers), the Housing Department (HD) has conducted a feasibility study for the proposed public housing development. In general, a domestic PR 6 has been proposed for most of the public housing sites identified for Fanling/Sheung Shui New Town. In view of the strategic location of the site at the gateway of the Fanling New Town and the need to optimize the development potential of the housing land, a maximum domestic PR of 6 has been proposed for working out the public housing development. Supporting G/IC facilities (subject to a maximum non-domestic PR of 0.5) would also be provided to serve the local residents. A stepped building height ranging from around 103mDP to 136mPD from the north along the Tai Wo Service Road West to the hillside at its south has been adopted. The proposed development intensity is compatible with the existing high-density residential developments in the vicinity such as Wah Sum Estate, Wah Ming Estate, Yung Shing Court, King Shing Court with a PR and BH ranging from 4 to 6 and 120mPD to 140mPD respectively (**Plan 1a**).

4.4 To take forward the proposed public housing development, it is proposed to rezone the site currently zoned "I" and "GB" to "R(A)3" for a public housing development and other supporting G/IC facilities. As HD has formulated an indicative development scheme for various technical assessments, it is considered appropriate to specify the maximum GFA of 178,100 m^2 and a maximum BH of

140mPD for the proposed "R(A)3" site to reflect the development parameters of the HD's development scheme. (**Drawings 1** and **2a** to **2d**).

Proposed Public Housing Development

4.5 The proposed development of the public housing site are summarized as follows:

Proposed Zoning	"R(A)3"
Zoning Area	about 4.0 ha
Maximum GFA	Total GFA of 178,100 m^2. (including non-domestic GFA of not more than 13,700 m^2) [1]
Maximum BH	140mPD (a stepped BH ranging from around 103mPD to 136mPD, which is about 29 to 40 storeys)
Estimated No. of Flats	about 4,000
Estimated Population	about 10,000
Other Supporting Facilities	retail; one 7-classroom kindergarten; 50-place day activity centre; 50-place hostel for severely mentally handicapped persons; covered walkway, refuse collection points; E&M facilities; carparking spaces and load/unloading facilities

4.6 The proposed public housing development will be guided by a planning brief which would set out the planning parameters, the design requirements as well as the technical assessments to be conducted for the public housing development. The proposed public housing development is targeted to be completed tentatively in 2027/28.

Technical Assessments

4.7 To ascertain the technical feasibility of the proposed housing development, various technical assessments including environmental assessment study (EAS), visual appraisal (VA), air ventilation assessment (Expert Evaluation) (AVA(EE)) and traffic impacts assessment (TIA) have been undertaken by HD. It has confirmed that the proposed development would not cause insurmountable problems on traffic and other infrastructural capacity as well as the environmental aspects. The findings were summarized in the following paragraphs.

[1] Equivalent to a domestic plot ratio of 6 and a non-domestic plot ratio of 0.5 based on the net site area of 2.74ha which has excluded the slope area and road.

Environmental Aspect

4.8 The EAS (Executive Summary of the EAS at **Appendix I**) conducted by HD indicates that the site for the proposed public housing development would not be subject to insurmountable environmental impacts. The Director of Environmental Protection (DEP) has no adverse comment on the EAS results.

4.9 Self-protecting building design has been adopted for residential blocks fronting Fanling Highway, while the other residential blocks behind have also been oriented to reduce the windows fronting the road as far as practicable. In order to further mitigate the road traffic noise impacts, acoustic fins, fixed glazing and acoustic windows would be adopted for the public housing development.

4.10 Regarding the air emission impacts, the development scheme has allowed adequate setback distance from the major roads to meet the minimum requirement as stipulated in the Hong Kong Planning Standards and Guidelines (HKPSG) and hence potential vehicular emission impact is not anticipated. A total of 9 chimneys at Wo Hop Shek Crematorium are identified within 500m of the site. Operation of the chimneys would be properly controlled by the Specified Process (SP) License under the Air Pollution Control Ordinance. The nearest sensitive uses of the proposed housing site are located at least 410m from the chimneys and can well satisfy the setback distance requirements as stipulated in the HKPSG[2]. Therefore, adverse chimney emission impact is not anticipated.

4.11 A preliminary land contamination site appraisal has been conducted. As high land contamination areas were identified at the north-western part of the proposed public housing development, a detailed land contamination assessment in accordance with Environmental Protection Department (EPD)'s Practice Guide should be carried out at detailed design stage to identify the remediation works as well as meet the remediation target before the commencement of development works.

Visual Aspect

4.12 The VA (**Appendix II** and **Drawings 2a** to **2d**) conducted by HD indicates that some degree of visual impacts to the general townscape of Fanling/Sheung Shui seem inevitable with public housing development further extending to the eastern fringe of the Fanling New Town. Nevertheless, disposition and design of the proposed public housing development would be sensitive to the surrounding environment. In order to reduce the visual impact, landscaped buffer, building separation gaps, stepped BH profile, careful design and façade treatment of the buildings, etc, would be considered at the detailed design stage.

4.13 The VA concluded that the proposed public housing development will not cause unacceptable visual impacts to the vicinity. The Chief Town Planner/Urban Design and Landscape, Planning Department (CTP/UD&L, PlanD) has no adverse comment on the VA. HD will continue to explore at the detailed design stage to further enhance the visual quality of the proposed public housing development.

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[2] According to Chapter 9 Environment of the HKPSG, the required separation distance between high-rise buildings and chimneys is 200m.

Air Ventilation Aspect

4.14 The AVA(EE) (**Appendix III**) conducted by HD shows that the annual prevailing wind directions are from east, east-northeast and east-southeast whereas the summer prevailing wind directions vary from east-southeast, east and southeast. For the consideration of wind permeability across the site of the public housing development, good design features will be adopted in the development scheme, including the creation of local air paths (at least 15m) with adequate building separation, reducing the podium level to 1-storey high and adopting stepped building height profile. These features would create two air paths within the site so to facilitate annual prevailing winds to flow across the site as well as penetrate into the adjacent neighborhoods on the leeside of the proposed public housing development.

4.15 With the above-mentioned features and measures, it is anticipated that the proposed public housing development will not result in significant adverse air ventilation impact on the surrounding areas. CTP/UD&L, PlanD has no adverse comment on the findings and recommendations of the AVA(EE).

Traffic Aspect

4.16 HD has undertaken a TIA to ascertain that the proposed public housing would not have adverse impacts on the traffic aspect. The TIA reveals that the associated junctions along the accessing / leaving routes would operate satisfactorily with spare capacity. Footbridge would be provided to connect the public housing development with the future bus-bus interchange at the opposite side of Fanling Highway. Future pedestrian condition was also assessed and no pedestrian circulation problems are envisaged. Provision of feeder services running between the sites and railway stations would be considered at implementation stage. C for T considers the TIA acceptable in principle. A summary of the TIA is at **Appendix IV**. Further assessment will be conducted at the detailed design stage to identify improvement measures and enhance the traffic condition within the area.

Infrastructure Aspect

4.17 Concerned departments, i.e. DEP, Chief Engineer/Mainland North (CE/MN) of Drainage Services Department (DSD) and Chief Engineer/Development (2) (CE/Dev(2)) of Water Supplies Department (WSD) have been consulted and it is confirmed that the proposed development would not cause any insurmountable problems on sewerage, drainage, and water supplies aspects and relevant technical assessments would be conducted at the detailed design stage.

Amendment Items B1 and B2 – Proposed Schools and Other Government Uses (about 0.9 ha and 1.2 ha respectively) (Plans 1a, 2a, 3a, 4a and 4e to 4g)

4.18 According to the advice of Education Bureau, two primary schools should be reserved at Fanling Area 48 to meet the demand of the proposed public housing development as well as other demand of Fanling/Sheung Shui New Town. It is proposed to rezone two sites of about 0.9 ha and 1.2 ha respectively from "I" and "GB" to "G/IC" zone to facilitate the development of two free-standing primary schools and other Government uses. For Amendment Item B1, the northern part of the site is primarily occupied by squatter settlements of Ho Ka Yuen mostly on Government land. For Amendment Item B2, the site immediately adjoining Wo

Hop Shek Village is currently occupied by temporary warehouses and workshops on private land.

4.19 Concerned departments including EPD, the Transport Department (TD), WSD, and DSD have been consulted on the proposed schools and Government uses in the proposed "G/IC" zone. The proposed development would not cause any insurmountable problems on environmental, traffic, sewerage, drainage and water supplies aspects and the concerned Government departments have no adverse comment on the proposed rezoning. While the proposed primary school (Amendment Item B1) is planned to be implemented to tie in with the proposed public housing development, the other proposed primary school (Amendment Item B2) is a reserve school site to meet the demand of Fanling/Sheung Shui New Town.

5. **On Lok Tsuen Industrial Area**

5.1 The Area is located at the fringe of Fanling New Town and adjacent to Luen Wo Hui with Fanling North (FLN) New Development Area (NDA) to the north. It is bounded by the Ma Wat River on its southern and eastern sides and the Sha Tau Kok Road and Jockey Club Road to its north and west (**Plans 1b** and **2c**). With a total area of 32.6 ha, the Area is the major employment node in the North District (with an estimate of about 6,500 workers).

5.2 To follow up the recommendations of the 2014 Area Assessments (para 3.1(b) to (e) refer), PlanD has undertaken a review on the restrictions on the development parameters of the industrial area and opportunities have also been taken to formulate a framework of local enhancement measures for incorporation in the On Lok Tsuen Layout Plan to guide the detailed district planning works. Details of the review of development parameters and enhancement measures are contained in the Planning Report on the Area at **Appendix V**. In brief, the review revealed, amongst others, that:

(a) development intensities in the Area are constrained by the existing infrastructure provision, particularly traffic and sewage. While an en-bloc increase in PR is not technically feasible at this stage, subject to detailed technical assessments there should be scope for individual sites to increase development intensities over PR 5 as stipulated under the OZP;

(b) the BH restriction of 25m under the OZP could be suitably relaxed to allow smaller building footprints with a view to enhancing the visual/air permeability and street environment; and

(c) effort should be made to provide sufficient public vehicle parking spaces (in particular medium/heavy goods vehicles) in the area to meet the strong local demand.

Proposed Amendments to the Notes of the OZP

5.3 The proposed amendments to the Notes of the OZP are as follows:

Proposed Amendments to the Notes of the OZP – Revision to BH restriction for the Area

5.4 The Area has been zoned "I" with restrictions of maximum PR of 5 and BH of 25m since 1987. In formulating these development parameters, due consideration had been given for the adjacent rural settings and the low to medium-rise development in Luen Wo Hui at that time. Such restrictions have, however, resulted in a relatively low BH profile with most of the existing IBs having a large site coverage of over 85%. With the planned FLN NDA development and new high-rise/high-density developments near Luen Wo Hui (e.g. Belair Monte and Green Code), coupled with the local aspirations for more at-grade greening areas, it is considered that the BH restriction could be relaxed to reflect the changes in planning circumstances. The relaxation in BH would facilitate building design with reduced footprint and thus enhance the visual/air permeability and street environment while allowing a greater flexibility in building design for the modern industrial uses.

5.5 Taking into account the development profile of the adjacent existing/planned development (mostly ranging from about 67m to 118m in height, which is equivalent to about 83mPD to 130mPD) and the findings of the AVA(EE), it is considered that the maximum BH for On Lok Tsuen could be increased from 25m to 65m (excluding basements). The proposed BH relaxation would enable individual sites within the "I" zone to accommodate the maximum PR5 as well the proposed setback/non-building area and the required public vehicle parking spaces (para. 5.7 below refers). The proposed maximum BH of 65m could generally be integrated with the overall BH profile stepping down from the high-rise development in the north to the low rise village settlement of Shung Him Tong and no insurmountable adverse visual impact to the surrounding area is anticipated.

5.6 Technical Assessments

5.6.1 AVA(EE) and VA for the Area have been conducted to ascertain the proposed relaxation of BH restrictions from 25m to 65m (excluding basements) would not have unacceptable adverse impacts on the surroundings.

Visual Aspect

5.6.2 The VA (**Appendix VI** and **Plans 6a to 6g**) conducted by PlanD indicates that the proposed revision to BH restriction in the Area from 25m to 65m (excluding basements) is considered not visually incompatible with the surrounding area. While the proposed BH relaxation may diminish some visual openness of the setting when viewing from the viewing points close to the Area, the overall visual impact is considered acceptable with mitigation measures. Taking into account the development profile of the adjacent existing/planned development, which is mostly ranging from 67m to 118m in height (equivalent to about 83mPD to 130mPD), the proposed maximum BH of 65m would be compatible with the overall townscape in the area allowing a height profile stepping down from Luen Wo Hui to the low-rise village settlement to its east. Although there are moderate visual impacts from some of the selected viewpoints due to their close proximity,

the overall visual impacts are considered acceptable. CTP/UD&L, PlanD has no comment on the proposed BH relaxation from the visual point of view.

Air Ventilation Aspect

5.6.3 According to the AVA(EE) (Appendix VII), both the annual wind and summer wind of the area mainly come from the northeast, east and southeast whereas there is also summer wind from the southwest. With the existing grid pattern of streets aligning with the prevailing wind directions and appropriate mitigation measures in place, the existing streets within On Lok Tsuen would function as air paths and allow wind flowing through On Lok Tsuen to the adjacent areas including Luen Wo Hui and Cheung Wah Estate and beyond. Therefore, the building height restriction of 65m (excluding basements) under the OZP, it is not expected to have significant air ventilation impact to the surrounding area.

5.6.3 However, due to the existing street pattern with narrow footpaths (less than 6m width), the proposed increase in BH from 25m to 65m (excluding basements) would result in some deep and long street canyons which will have weak eddies and air ventilation within the Area. To mitigate the potential air ventilation impacts, it is recommended to incorporate non-building area (NBA)/setback on sites upon development/redevelopment so that there can be building gaps of at least 15m in width in between development sites as far as possible. The requirement of the NBA/setback will be shown in the On Lok Tsuen Layout Plan to guide the detailed district planning works and processing of development/redevelopment proposals in the Area. The existing local open space/amenity zones within the Area can function as air paths and buffer zones for the wind wake areas and are therefore recommended to be maintained.

5.6.4 Relevant departments including TD and DEP have no adverse impacts on the proposed relaxation of BH from traffic and environment perspectives.

Proposed Provision in the Notes to Exempt Public Vehicle Parks as Required by the Government from PR Calculation under the OZP in relation to the Area

5.7 Currently, there are five Government sites being used for open area public vehicle parks in On Lok Tsuen providing a total of 280 parking spaces. Subject to the reprovisioning of these public vehicle parking spaces, there is opportunity to develop these government sites for industrial development to allow an optimum use of the scarce industrial land. Apart from these five public vehicle parks, TD estimated that an addition of 290 parking spaces (resulting in a total of 570 public vehicle parking spaces) are required to serve the area. Efforts should therefore be made to encourage provision of public vehicle parks in some of the industrial sites upon development/redevelopment to cater for the vehicle parking demand of the area. In general, public vehicle parking spaces are to be included in the PR calculation, so as to avoid excessive building bulk of the proposed development. Given the Area is subject to a maximum PR of 5, the proposed BH restriction of 65m (excluding basements) would have already provided the scope to accommodate the public vehicle parking spaces as required by the Government

without result in excessive building bulk. In order to facilitate the provision of sufficient industrial floorspace and ensure adequate supply of public vehicle parking spaces, it is proposed that the public vehicle parks to be required by the Government should be exempted from PR calculation under the Notes of the OZP. Therefore, in determining the maximum PR for respective sites in the Area, any floor space that is constructed or intended for use solely as public vehicle parks, as required by the Government, may be disregarded.

6 Technical Amendments

Amendment Item C1 – Revision to the annotation of the "Other Specified Uses" ("OU") zone for Mass Transit Railway from "Kowloon-Canton Railway Station" to "Railway Station" and Amendment Item C2 – Revision to the annotation of the "OU" zone for Mass Transit Railway from "Kowloon-Canton Railway" to "Railway"

6.1 These amendments are to update the annotation of the "OU" zones for Mass Transit Railway (**Plans 1a and 1c**).

Minor Boundary Adjustment

6.2 Opportunities have also been taken to adjust a minor strip of land (about 400m^2) at Fanling Area 48 from "I" to "V" zone to reflect the existing village setting of the Wo Hop Shek Village.

Proposed Amendments to the Notes of the OZP – Incorporation of a Provision for Minor Relaxation on PR/BH restrictions under the "I" zone

6.3 Under the current practice, a provision for minor relaxation would be provided in the Note of OZPs for the land use zones with restrictions on the development parameters. For consistency and to provide greater flexibility for development/redevelopment, it is proposed that a provision for minor relaxation of the PR and BH should be incorporated in the Notes of the OZP for the "I" zone. Any increase in development intensity more than the planned PR and BH as stipulated in the OZP would require submission of planning application and subject to detailed technical assessments (i.e. traffic, sewerage, environmental and water supplies). Relevant criteria for consideration of such relaxation, such as amalgamating smaller sites for better urban design, providing better streetscape, providing building separations, tree preservation, etc., would also be incorporated in the ES.

7 Provision of Open Space and G/IC Facilities (Appendix VIII)

7.1 The provision of open space and GIC facilities within the Planning Scheme Area of Fanling/Sheung Shui OZP has been assessed. There is sufficient provision of local open space and district open space (including the existing and planned provisions) within the Planning Scheme Area (about 60 ha and 30 ha respectively) to meet the planned population of about 290,000, including the estimated population of the proposed public housing development at Fanling Area 48.

7.2 As for the provision of secondary school, primary school and kindergarten, there would be adequate provisions of classrooms from kindergarten to secondary school based on the planned population of Fanling/Sheung Shui. The provision of social welfare and community facilities could generally meet the demand of the planned population.

7.3 According to the HKPSG, there will be a shortage of 431 hospital beds taken into account the expansion of the North District Hospital. Nevertheless, the provision of hospital beds would be monitored and addressed by the Hospital Authority on a regional basis. There is also a planned hospital at the Planning Area 28 of the Kwu Tung North NDA to cater the need of the North District.

8 Proposed Amendments to the Approved Fanling/Sheung Shui OZP

The proposed amendments to the approved Fanling/Sheung Shui OZP are shown on the draft Amendment Plan No. S/FSS/20A at **Annex B**. Details of the amendment items are as follows:

(a) Amendment Item A (about 4.0 ha) (**Plans 1a** and **2a**)
Rezoning of a site at Fanling Area 48 from "I" and "GB" to "R(A)3" with stipulation of a maximum BH restriction of 140mPD.

(b) Amendment Items B1 and B2 (about 0.9 ha and 1.2 ha respectively) (**Plans 1a** and **2a**)
Rezoning of two sites at Fanling Area 48 from "I" zone and "GB" to "G/IC" zone.

(c) Amendment Items C1and C2 (**Plan 1c**)
Revision to the annotation of the "Other Specified Uses" ("OU") zone for Mass Transit Railway from "Kowloon-Canton Railway Station" to "Railway Station", and revision to the annotation of the "OU" zone for Mass Transit Railway from "Kowloon-Canton Railway" to "Railway".

9 Proposed Amendments to the Notes of the Approved Fanling/Sheung Shui OZP

Amendments to the Notes of the OZP are shown on the revised Notes of the OZP at **Annex C** (with addition in **bold** and *italics* and deletions ~~cross out~~). The major amendments include:

"R(A)3" Zone

(a) Incorporation of GFA/BH restrictions for the new "R(A)3" zone in the Remarks of the Notes for the "R(A)" zone.

(b) Incorporation of exemption clause for GFA calculation for the new "R(A)3" zone in the Remarks of the Notes for "R(A)" zone

(c) Revision of the minor relaxation clause for GFA/BH restrictions to include the new "R(A)3" zone in the Remarks of the Notes for "R(A)".

"I" Zone

(d) Revision to the PR restriction from 5.0 to either 5.0 or the PR of the existing building, whichever is the greater for Planning Areas 4 and 30 and On Lok Tsuen (Planning Areas 25 and 26) under "I" zone.

(e) Revision to the BH restriction from 25m to 65m (excluding basements) or the BH of the existing building, whichever is the greater for On Lok Tsuen (Planning Areas 25 and 26) under "I" zone.

(f) Incorporation of exemption clause for public vehicle parks, as required by the Government, to be exempted from PR calculation for the Area under "I" zone.

(g) Incorporation of exemption clause for facilities ancillary and directly related to the development to be exempted from PR calculation under "I" zone.

(h) Incorporation of additional PR clause under the provision as set out in Regulation 22(1) or (2) of the Building (Planning) Regulation for "I" zone.

(i) Incorporation of minor relaxation clause for PR/BH restrictions in the Remarks of the Notes under the "I" zone.

(j) Incorporation of 'Art Studio (excluding those involving direct provision of services or goods)' as a Column 1 use under the "I" zone, and corresponding amendment to the 'Place of Recreation, Sports or Culture' use of the zone.

"OU" Zone

(k) Refinement to the Notes for the "OU" zone for Mass Transit Railway by updating the annotation and planning intention of the zone from "Kowloon-Canton Railway Station" to "Railway Station".

10 Explanatory Statement of the OZP

The ES of the OZP has been revised to take into account the proposed amendments as mentioned in paragraphs 8 and 9 above and to reflect the latest status and planning circumstances of the OZP. A copy of the revised ES is at **Annex D** (with addition in bold and italics and deletions ~~crossed out~~).

11 Plan Number

Upon gazetting, the draft OZP will be renumbered as S/FSS/21.

12 Consultation

Consultation with the Rural Committee and District Council

12.1 The Fanling District Rural Committee has been consulted on the major proposed amendments to the Fanling / Sheung Shui OZP. As the operation of the North District Council was suspended between October and December 2015, we have, on an informal basis, briefed key members of the Council and several members-elect. While they have not expressed in-principle objection to the proposed amendments, they have raised the following concerns:

(a) there may not be sufficient road and rail capacity to support the proposed public housing development at Fanling Area 48;

(b) adequate public transport services and G/IC facilities (such as wet market, multi-function room, local open space) should be provided to serve the future population and the local community in the area;

(c) opportunity should be made to provide residential care home for elderly home in the proposed public housing development to serve the elderly in North District;

(d) local community and infrastructure facilities such as the existing vacant village school in Wo Hop Shek, drainage and sewerage works should be enhanced/expanded to better serve the local community, in particular the Wo Hop Shek Village; and

(e) the proposed BH relaxation for the Area might still be insufficient for revitalizing the area and enhancing its job-generating capability.

Departmental Consultation

12.2 Relevant bureaux and departments have been consulted on the proposed amendments. Comments of the Director of Housing, C for T, CE/MN of DSD, CE/Dev(2) of WSD, Secretary for Education, DEP, Direction of Leisure and Cultural Services and CTP/UD&L of PlanD have been incorporated into the above paragraphs, where appropriate.

12.3 Apart from the above, the following departments have no objection to/no comment on the proposed amendments:

(a) District Lands Officer, North, Lands Department;
(b) Chief Estate Survey/Acquisition, Lands Department;
(c) District Officer (North), Home Affairs Department;
(d) Project Manager (New Territories East), Civil Engineering and Development Department;
(e) Head of Geotechnical Engineering Office, Civil Engineering and Development Department;
(f) Head of Civil Engineering Office, Civil Engineering and Development Department;
(g) Director of Leisure and Cultural Services Department;

(h) Chief Building Surveyor/New Territories West, Buildings Department;
(i) Chief Architect/Central Management Division 2, Architectural Services Department;
(j) Chief Highway Engineer/ New Territories East, Highways Department;
(k) Director of Agriculture, Fisheries and Conservation;
(l) Director of Health;
(m) Director of Social Welfare;
(n) Director of Food and Environmental Hygiene;
(o) Director of Electrical and Mechanical Services;
(p) Property Government Administrator;
(q) Director-General of Trade and Industry;
(r) Director of Fire Services; and
(s) Commissioner for Police.

Public Consultation

12.4 If the proposed amendments were agreed by the Committee, the draft OZP (to be re-numbered to S/FSS/21 upon exhibition) and its Notes will be suitable for exhibition under section 5 of the Ordinance. Members of the public can submit representations on the OZP to the Board during the two-month statutory public inspection period. The NDC and FDRC will be further consulted during the concerned OZP exhibition period.

13 Decision Sought

Members are invited to:

(a) agree to the proposed amendments to the approved Fanling/Sheung Shui OZP No. S/FSS/20 as mentioned in paragraphs 9 and 10 above;

(b) agree that the amendment Plan No. S/FSS/20A at **Annex B** (to be renumbered to S/FSS/21 upon gazetting) and its Notes at **Annex C** are suitable for exhibition for public inspection under section 5 of the Ordinance;

(c) adopt the revised ES at **Annex D** as an expression of the planning intentions and objectives of the Board for various land use zones on the draft Fanling/Sheung Shui OZP; and

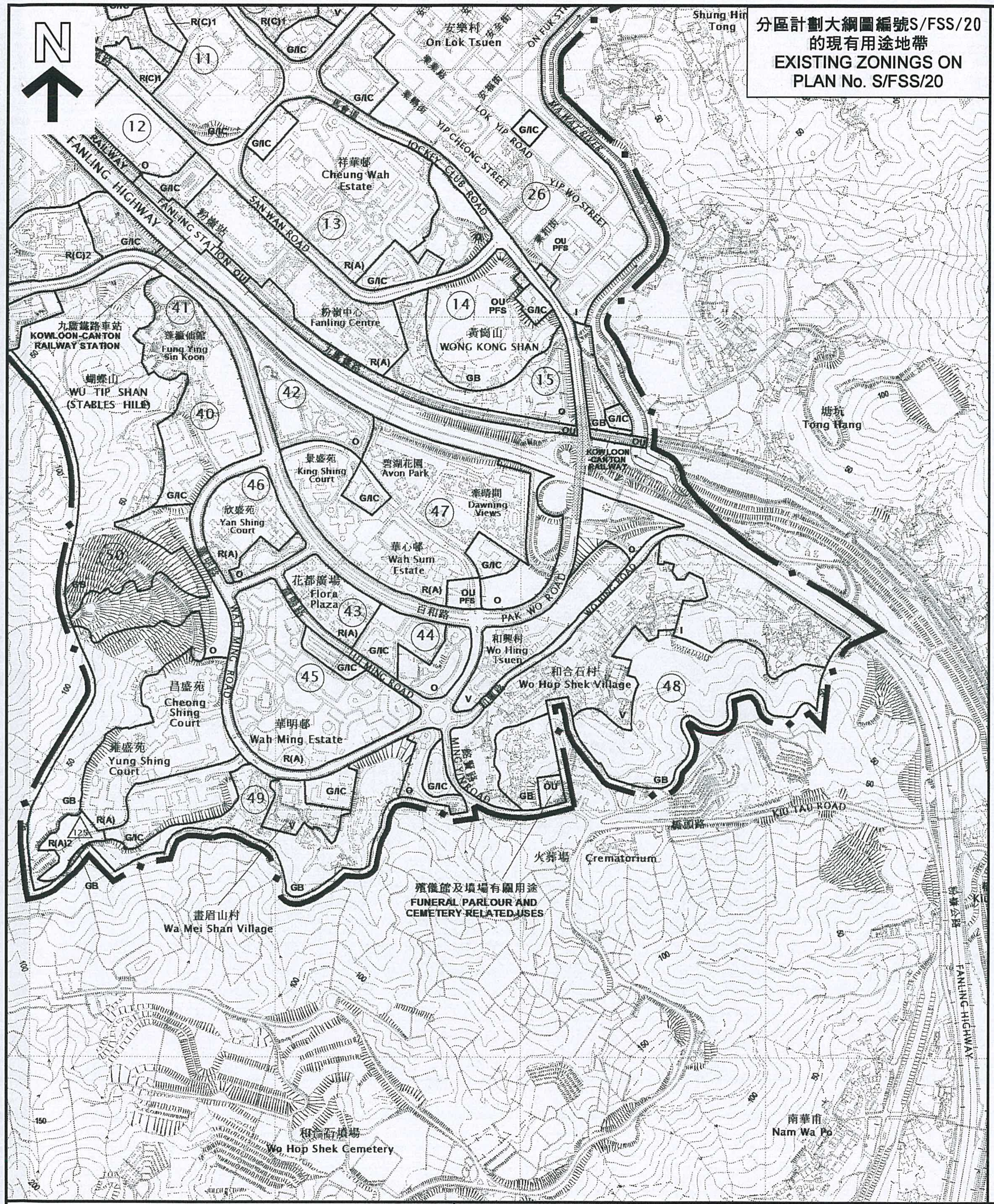
(d) agree that the revised ES at **Annex D** is suitable for exhibition for public inspection together with the draft OZP No. S/FSS/20A (to be renumbered to S/FSS/21 upon gazetting).

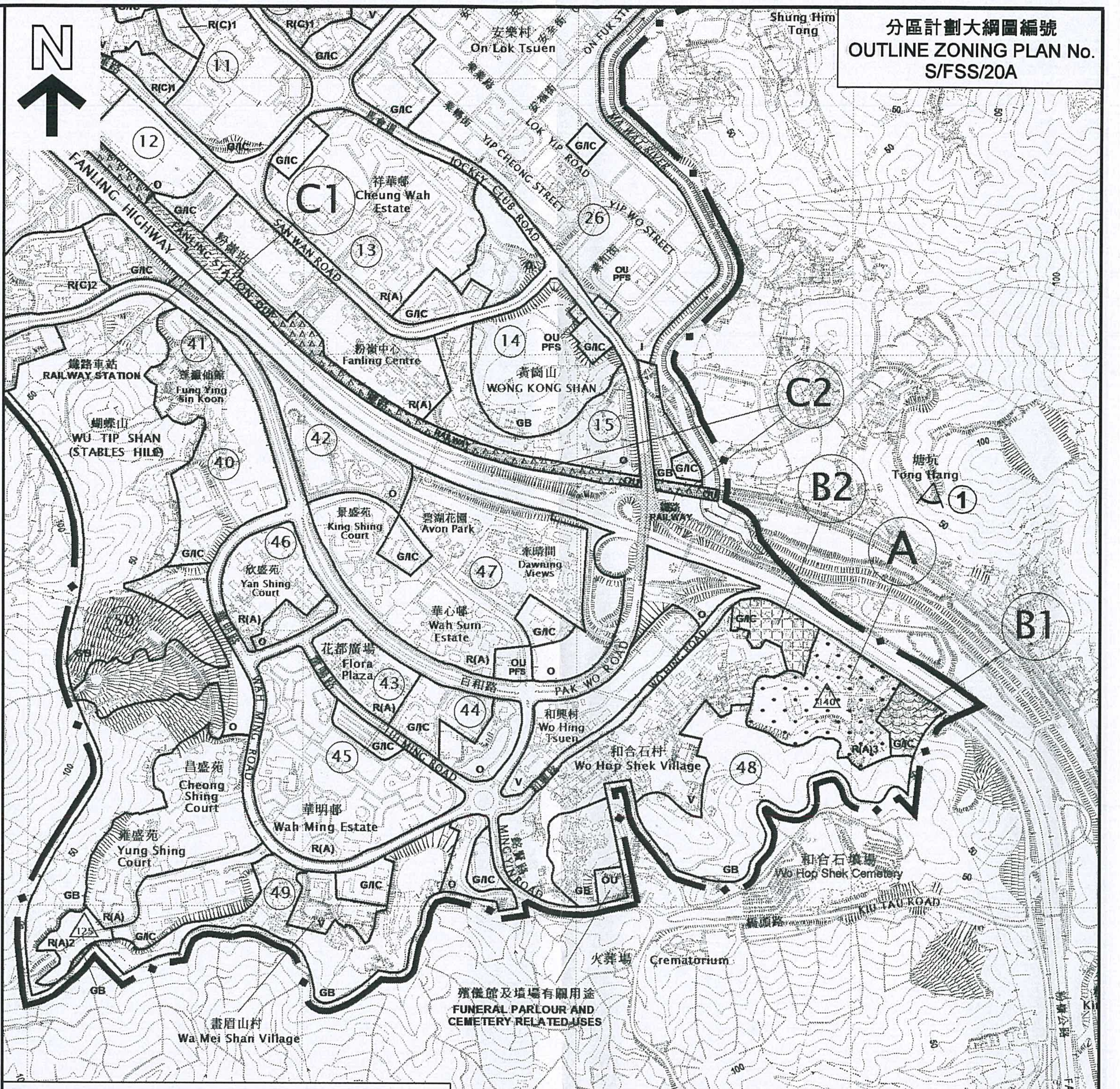
14 Attachments

Plans 1a to 1c	Location Plans
Plans 2a to 2c	Site Plans
Plans 3a and 3b	Aerial Photos
Plans 4a to 4g	Site Photos for Amendment Items A, B1, B2 and C
Plan 5	Site Photos showing On Lok Tsuen

Plans 6a to 6g	Photomontages for Developments in On Lok Tsuen with Proposed Building Height Restrictions provided by PlanD
Drawing 1	Conceptual Layout for the Proposed Public Housing Development
Drawings 2a to 2d	Photomontages for the Proposed Public Housing Development
Annex A	Approved Fanling/Sheung Shui OZP No. S/FSS/20 (A-3 size)
Annex B	Draft Fanling/Sheung Shui OZP No. S/FSS/20A
Annex C	Notes of the draft Fanling/Sheung Shui OZP No. S/FSS/20A
Annex D	Explanatory Statement of the draft Fanling/Sheung Shui OZP No. S/FSS/20A
Appendix I	Executive Summary of Environment Assessment Study for the Proposed Public Housing and School Developments at Fanling Area 48 provided by HD
Appendix II	Visual Appraisal for Fanling Area 48 provided by HD
Appendix III	Air Ventilation Assessment (Expert Evaluation) for Fanling Area 48 provided by HD
Appendix IV	Summary of Traffic Impact Assessment for Fanling Area 48provided by HD
Appendix V	Planning Report on Development Parameters and Enhancement Measures for On Lok Tsuen Industrial Area provided by PlanD (with Annex I - Propose Requirements for Potential Sites Annex II – Area Enhancement Measures Annex III - Air Ventilation Assessment (Expert Evaluation) Annex IV - Visual Appraisal Annex V - Landscape Appraisal)
Appendix VI	Provision of Open Space and Major GIC Facilities in the Fanling/Sheung Shui OZP

PLANNING DEPARTMENT
JANUARY 2016





圖例 LEGEND

A	由「工業」地帶及「綠化地帶」改劃為「住宅(甲類)3」地帶 AREA TO BE REZONED FROM "INDUSTRIAL" AND "GREEN BELT" TO "RESIDENTIAL (GROUP A)3"
B1	由「工業」地帶及「綠化地帶」改劃為「政府、機構或社區」地帶 AREA TO BE REZONED FROM "INDUSTRIAL" AND "GREEN BELT" TO "GOVERNMENT, INSTITUTION OR COMMUNITY"
B2	由「工業」地帶改劃為「政府、機構或社區」地帶 AREA TO BE REZONED FROM "INDUSTRIAL" TO "GOVERNMENT, INSTITUTION OR COMMUNITY"
140	最高建築物高度(在主水平基準上若干米) MAXIMUM BUILDING HEIGHT (IN METRES ABOVE PRINCIPAL DATUM)
① ◁	實地照片的觀景點 VIEWING POINT OF SITE PHOTO

本摘要圖於2015年12月30日擬備，
所根據的資料為於2015年6月16日
核准的分區計劃大綱圖編號S/FSS/20
EXTRACT PLAN PREPARED ON 30.12.2015
BASED ON OUTLINE ZONING PLAN No.
S/FSS/20 APPROVED ON 16.6.2015

位置圖 LOCATION PLAN

在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
作出的擬議修訂項目A、B1及B2
PROPOSED AMENDMENT ITEMS A, B1 AND B2
TO THE APPROVED FANLING / SHEUNG SHUI
OUTLINE ZONING PLAN No. S/FSS/20

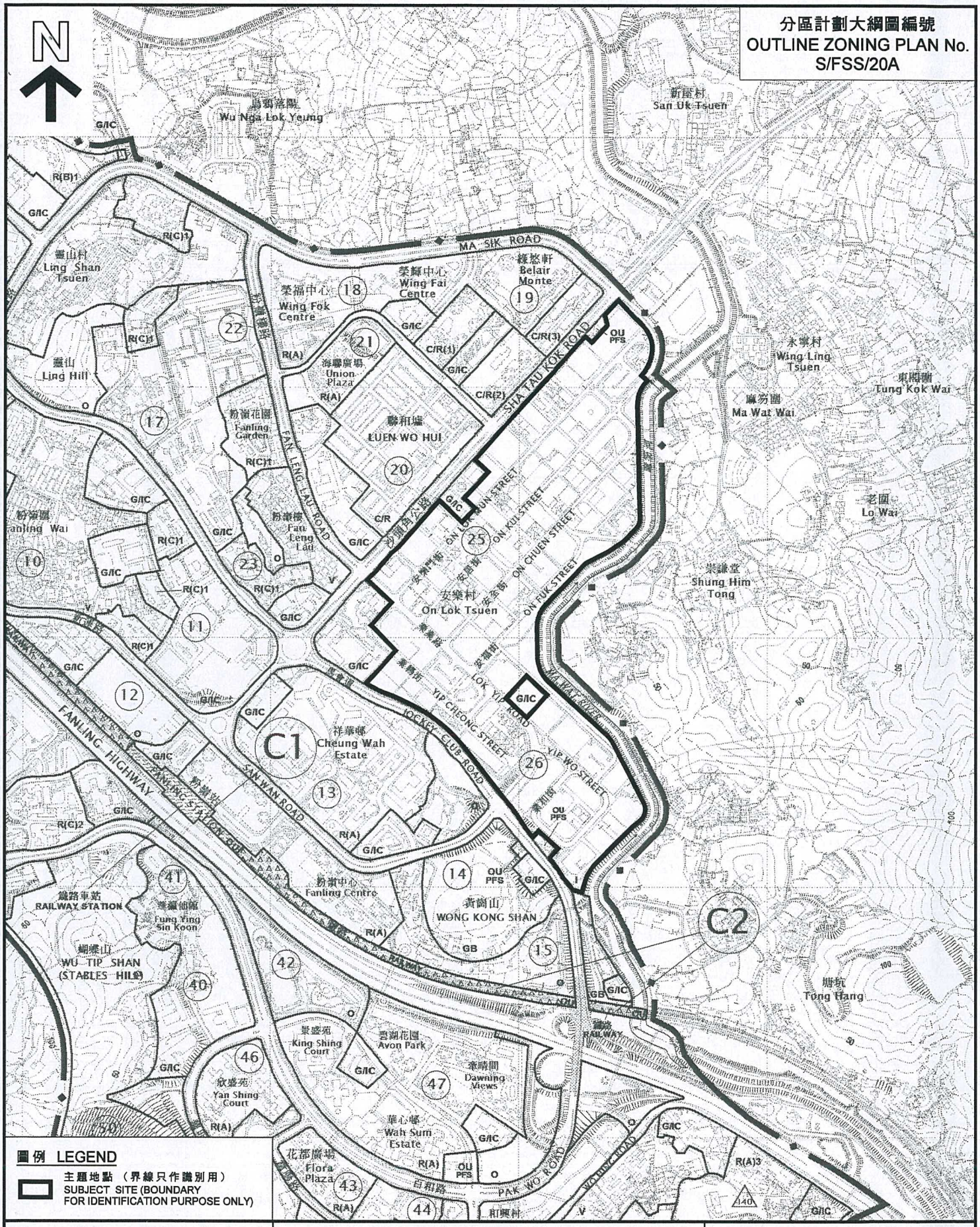
SCALE 1 : 10 000 比例尺

米 METRES 100 0 100 200 300 400 500 600 700 800 900 1 000 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
1a



本摘要圖於2015年12月30日擬備，
所根據的資料為於2015年6月16日
核准的分區計劃大綱圖編號S/FSS/20

EXTRACT PLAN PREPARED ON 30.12.2015
BASED ON OUTLINE ZONING PLAN No.
S/FSS/20 APPROVED ON 16.6.2015

位置圖 LOCATION PLAN

安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目

PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

SCALE 1 : 10 000 比例尺

米 METRES 100 0 100 200 300 400 500 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
1b

分區計劃大綱圖編號
OUTLINE ZONING PLAN No.
S/FSS/20A

N

圖例 LEGEND

C1 把劃為「其他指定用途」地帶作香港鐵路用途的註明，由「九廣鐵路車站」修定為「鐵路車站」
REVISION TO THE ANNOTATION OF THE "OTHER SPECIFIED USES" ("OU") ZONE FOR MASS TRANSIT RAILWAY FROM "KOWLOON-CANTON RAILWAY STATION" TO "RAILWAY STATION"

C2 把劃為「其他指定用途」地帶作香港鐵路用途的註明，由「九廣鐵路」修定為「鐵路」
REVISION TO THE ANNOTATION OF THE "OU" ZONE FOR MASS TRANSIT RAILWAY FROM "KOWLOON-CANTON RAILWAY" TO "RAILWAY"

本摘要圖於2015年12月30日擬備，
所根據的資料為於2015年6月16日
核准的分區計劃大綱圖編號S/FSS/20

EXTRACT PLAN PREPARED ON 30.12.2015
BASED ON OUTLINE ZONING PLAN No.
S/FSS/20 APPROVED ON 16.6.2015

位置圖 LOCATION PLAN

在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
作出的擬議修訂項目C1及C2
PROPOSED AMENDMENT ITEMS C1 AND C2
TO THE APPROVED FANLING / SHEUNG SHUI
OUTLINE ZONING PLAN No. S/FSS/20

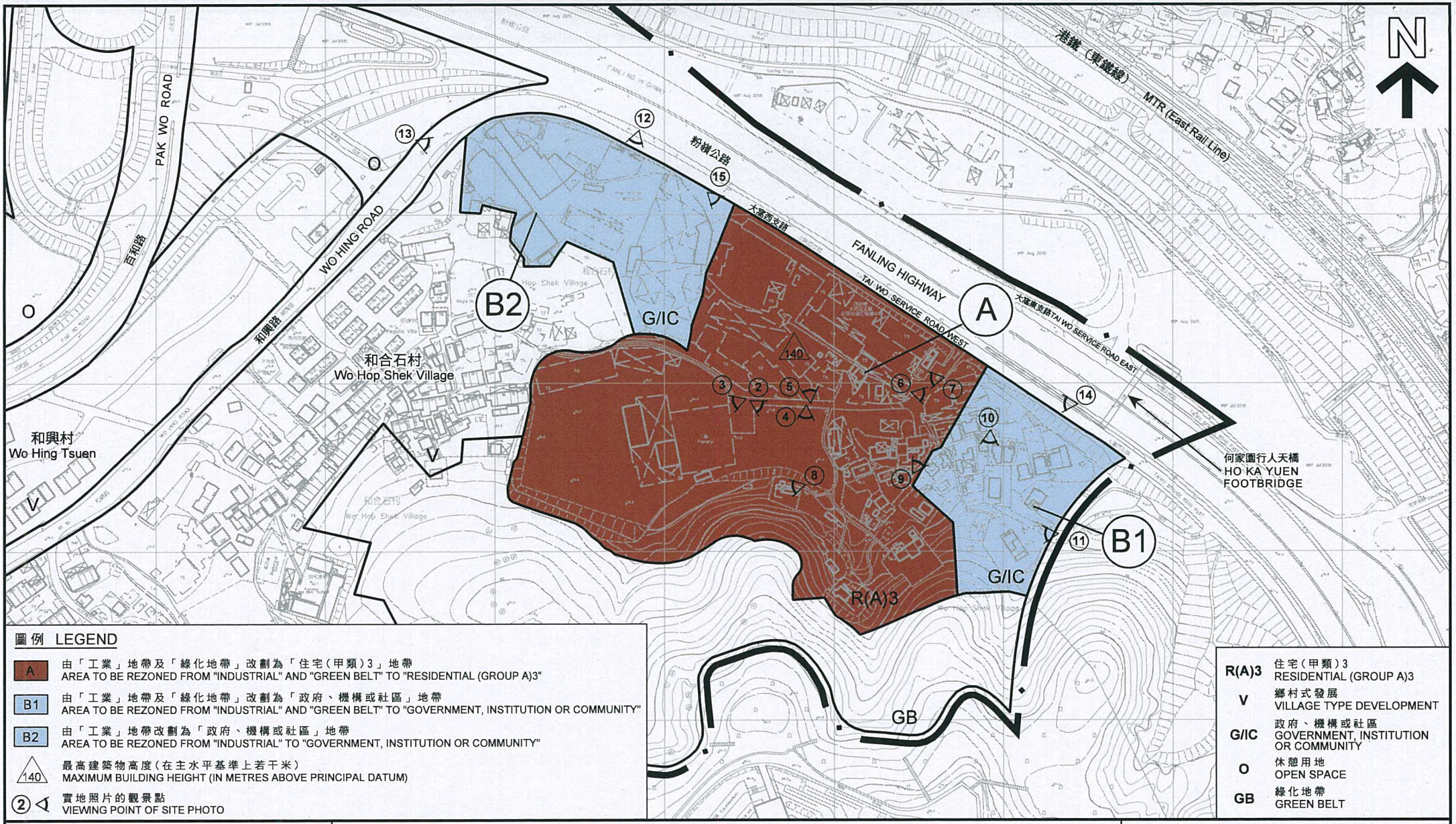
SCALE 1 : 15 000 比例尺

米 METRES 200 0 200 400 600 800 1 000 1 200 1 400 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
1c



圖例 LEGEND

A	由「工業」地帶及「綠化地帶」改劃為「住宅（甲類）3」地帶 AREA TO BE REZONED FROM "INDUSTRIAL" AND "GREEN BELT" TO "RESIDENTIAL (GROUP A)3"
B1	由「工業」地帶及「綠化地帶」改劃為「政府、機構或社區」地帶 AREA TO BE REZONED FROM "INDUSTRIAL" AND "GREEN BELT" TO "GOVERNMENT, INSTITUTION OR COMMUNITY"
B2	由「工業」地帶改劃為「政府、機構或社區」地帶 AREA TO BE REZONED FROM "INDUSTRIAL" TO "GOVERNMENT, INSTITUTION OR COMMUNITY"
140	最高建築物高度（在主水平基準上若干米） MAXIMUM BUILDING HEIGHT (IN METRES ABOVE PRINCIPAL DATUM)
②	實地照片的觀景點 VIEWING POINT OF SITE PHOTO

R(A)3	住宅（甲類）3 RESIDENTIAL (GROUP A)3
V	鄉村式發展 VILLAGE TYPE DEVELOPMENT
G/IC	政府、機構或社區 GOVERNMENT, INSTITUTION OR COMMUNITY
O	休憩用地 OPEN SPACE
GB	綠化地帶 GREEN BELT

本摘要圖於2015年12月30日擬備，
所根據的資料為測量圖編號
3-SW-13C、13D、18A和18B

EXTRACT PLAN PREPARED ON 30.12.2015
BASED ON SURVEY SHEETS Nos.
3-SW-13C, 13D, 18A AND 18B

平面圖 SITE PLAN

在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
作出的擬議修訂項目A、B1及B2
PROPOSED AMENDMENT ITEMS A, B1 AND B2
TO THE APPROVED FANLING / SHEUNG SHUI
OUTLINE ZONING PLAN No. S/FSS/20

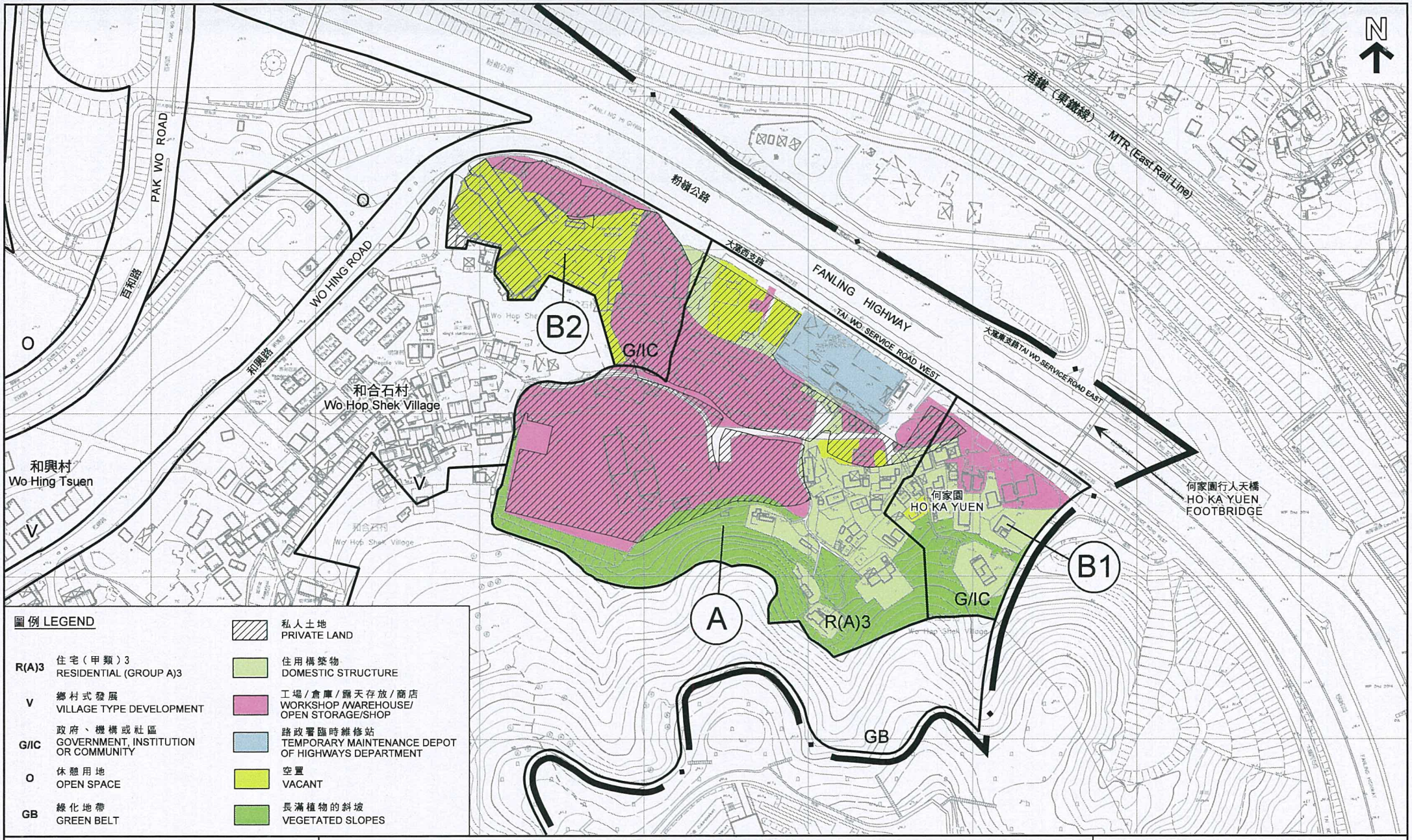
SCALE 1 : 3 000 比例尺

米 METRES 50 0 50 100 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
2a



圖例 LEGEND

R(A)3	住宅（甲類）3 RESIDENTIAL (GROUP A)3	私人土地 PRIVATE LAND
V	鄉村式發展 VILLAGE TYPE DEVELOPMENT	住用構築物 DOMESTIC STRUCTURE
G/IC	政府、機構或社區 GOVERNMENT, INSTITUTION OR COMMUNITY	工場/倉庫/露天存放/商店 WORKSHOP /WAREHOUSE/ OPEN STORAGE/SHOP
O	休憩用地 OPEN SPACE	路政署臨時維修站 TEMPORARY MAINTENANCE DEPOT OF HIGHWAYS DEPARTMENT
GB	綠化地帶 GREEN BELT	空置 VACANT
		長滿植物的斜坡 VEGETATED SLOPES

本摘要圖於2015年12月30日擬備，
所根據的資料為測量圖編號
3-SW-13C、13D、3-SW-18A及18B
EXTRACT PLAN PREPARED ON 30.12.2015
BASED ON SURVEY SHEETS No.
3-SW-13C, 13D, 3-SW-18A & 18B

註釋 Note :
(1) 2015年1月19及2015年1月22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 19.1.2015 and 22.1.2015

平面圖 SITE PLAN

現時的土地用途及土地類別
CURRENT LAND USES AND LAND STATUS
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
作出的擬議修訂項目A、B1及B2
PROPOSED AMENDMENT ITEMS A, B1 AND B2
TO THE APPROVED FANLING / SHEUNG SHUI
OUTLINE ZONING PLAN No. S/FSS/20

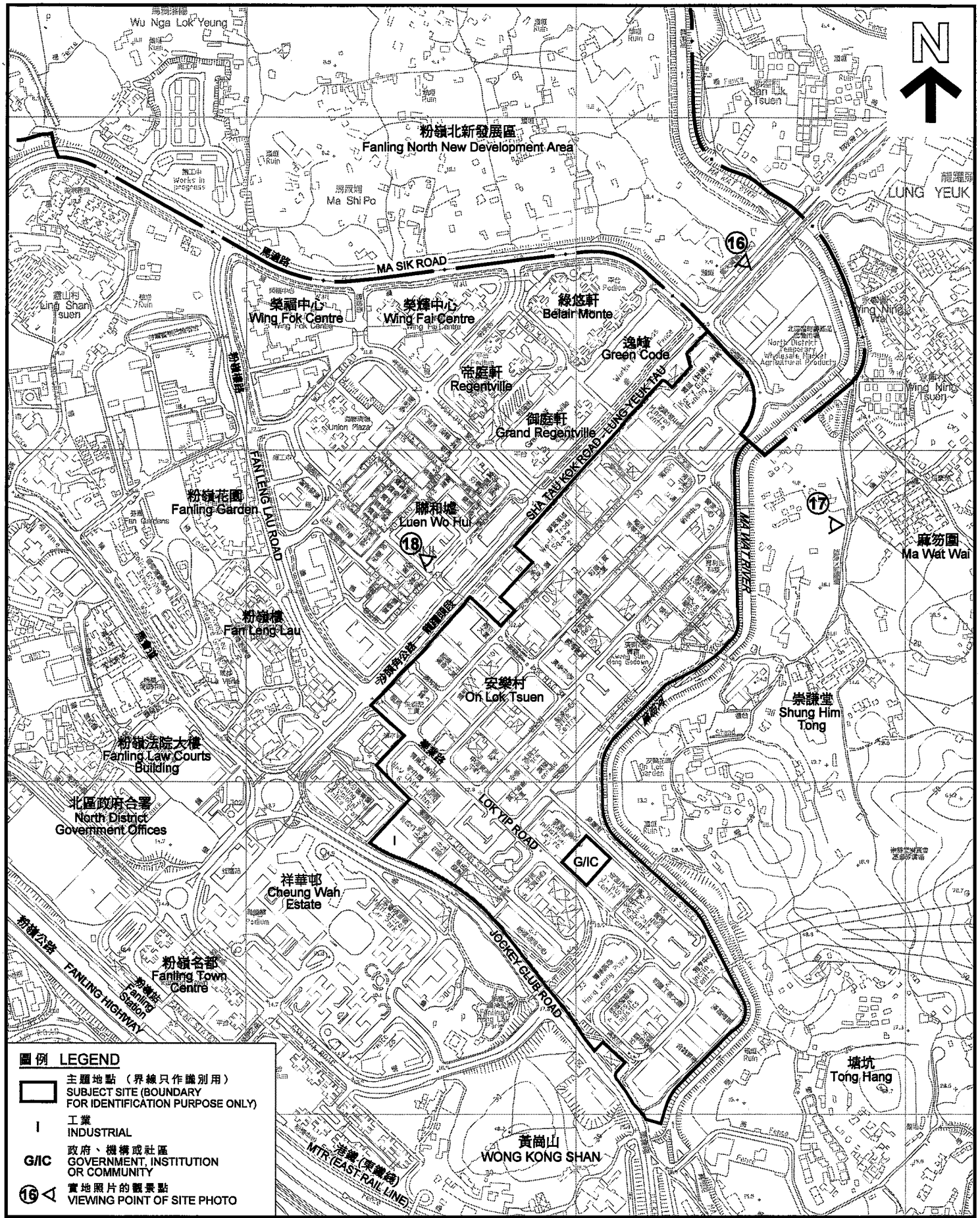
SCALE 1 : 3 000 比例尺

米 METRES 40 0 40 80 120 160 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
2b



圖例 LEGEND

- 主題地點（界線只作識別用） SUBJECT SITE (BOUNDARY FOR IDENTIFICATION PURPOSE ONLY)
- I 工業 INDUSTRIAL
- G/IC 政府、機構或社區 GOVERNMENT, INSTITUTION OR COMMUNITY
- 16 實地照片的觀景點 VIEWING POINT OF SITE PHOTO

本摘要圖於2015年12月28日擬備，所根據的資料為於地形圖編號 3-SW-A及C

EXTRACT PLAN PREPARED ON 28.12.2015 BASED ON TOPOGRAPHIC MAP Nos. 3-SW-A AND C

平面圖 SITE PLAN

安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目

PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20 "I" ZONE AT ON LOK TSUEN

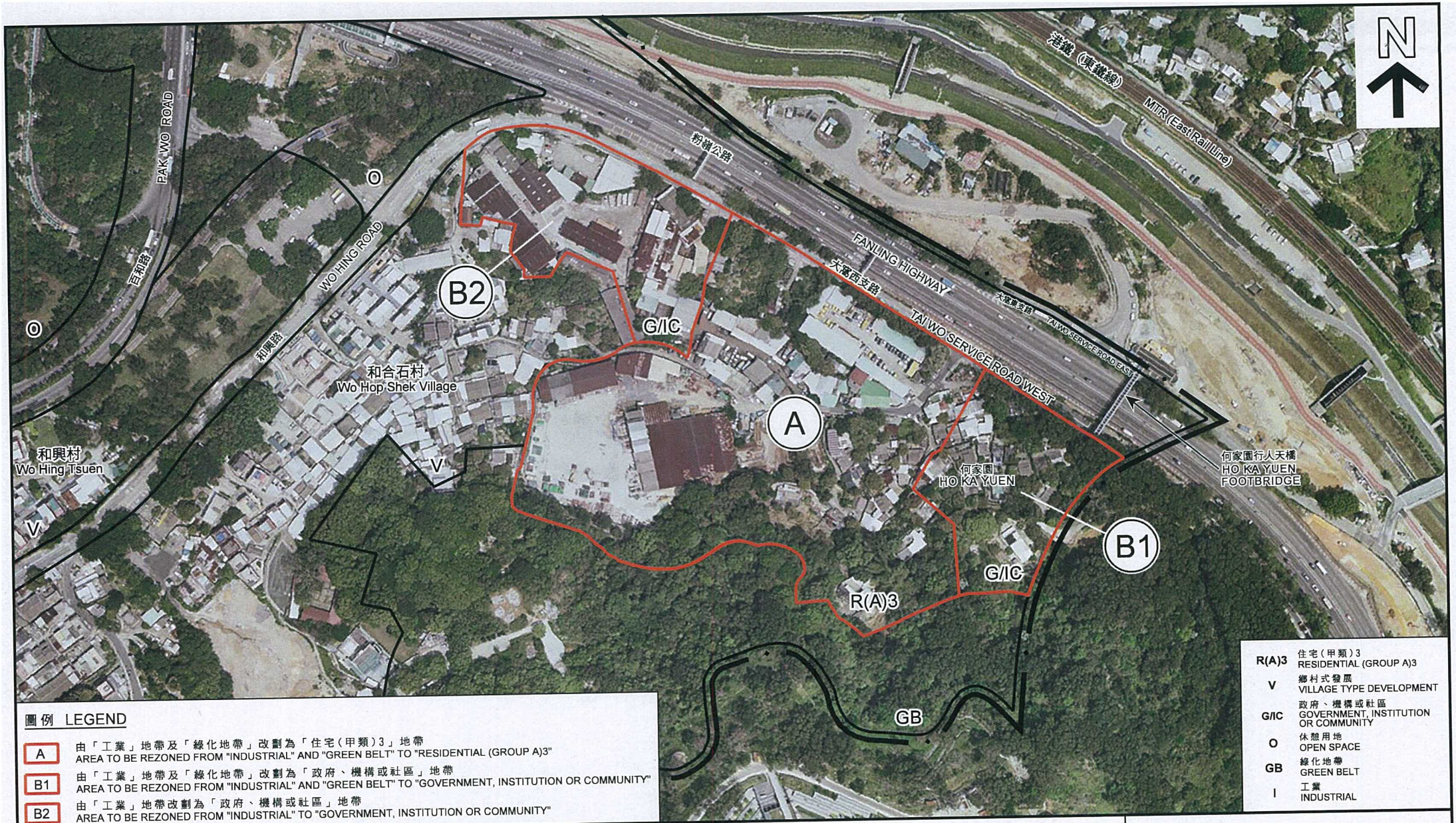
SCALE 1 : 7 500 比例尺

米 METRES 100 0 100 200 300 米 METRES

規劃署 PLANNING DEPARTMENT

參考編號 REFERENCE No. M/FS/15/89

圖 PLAN 2c



圖例 LEGEND

A	由「工業」地帶及「綠化地帶」改劃為「住宅（甲類）3」地帶 AREA TO BE REZONED FROM "INDUSTRIAL" AND "GREEN BELT" TO "RESIDENTIAL (GROUP A)3"
B1	由「工業」地帶及「綠化地帶」改劃為「政府、機構或社區」地帶 AREA TO BE REZONED FROM "INDUSTRIAL" AND "GREEN BELT" TO "GOVERNMENT, INSTITUTION OR COMMUNITY"
B2	由「工業」地帶改劃為「政府、機構或社區」地帶 AREA TO BE REZONED FROM "INDUSTRIAL" TO "GOVERNMENT, INSTITUTION OR COMMUNITY"

本摘要圖於2015年12月29日擬備，
所根據的資料為地政總署
於2014年4月12日拍得的航攝照片
編號CS51850
EXTRACT PLAN PREPARED ON 29.12.2015
BASED ON AERIAL PHOTO No. CS51850
TAKEN ON 12.4.2014 BY
LANDS DEPARTMENT

航攝照片 AERIAL PHOTO

在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
作出的擬議修訂項目A、B1及B2

PROPOSED AMENDMENT ITEMS A, B1 AND B2
TO THE APPROVED FANLING / SHEUNG SHUI
OUTLINE ZONING PLAN No. S/FSS/20

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN 3a

圖例 LEGEND

	主題地點（界線只作識別用） SUBJECT SITE (BOUNDARY FOR IDENTIFICATION PURPOSE ONLY)
I	工業 INDUSTRIAL
G/IC	政府、機構或社區 GOVERNMENT, INSTITUTION OR COMMUNITY

本摘要圖於2015年12月28日擬備，
所根據的資料為地政總署
於2015年4月15日拍得的航攝照片
編號CS59077、CS59078、CS59079、CS59134、
CS59135、CS59136、CS59196、CS59197及CS59198

EXTRACT PLAN PREPARED ON 28.12.2015
BASED ON AERIAL PHOTOS Nos.CS59077,
CS59078, CS59079, CS59134, CS59135,
CS59136, CS59196, CS59197 AND CS59198
TAKEN ON 15.4.2015 BY LANDS DEPARTMENT

航攝照片 AERIAL PHOTO

安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目

PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

SCALE 1 : 7 500 比例尺

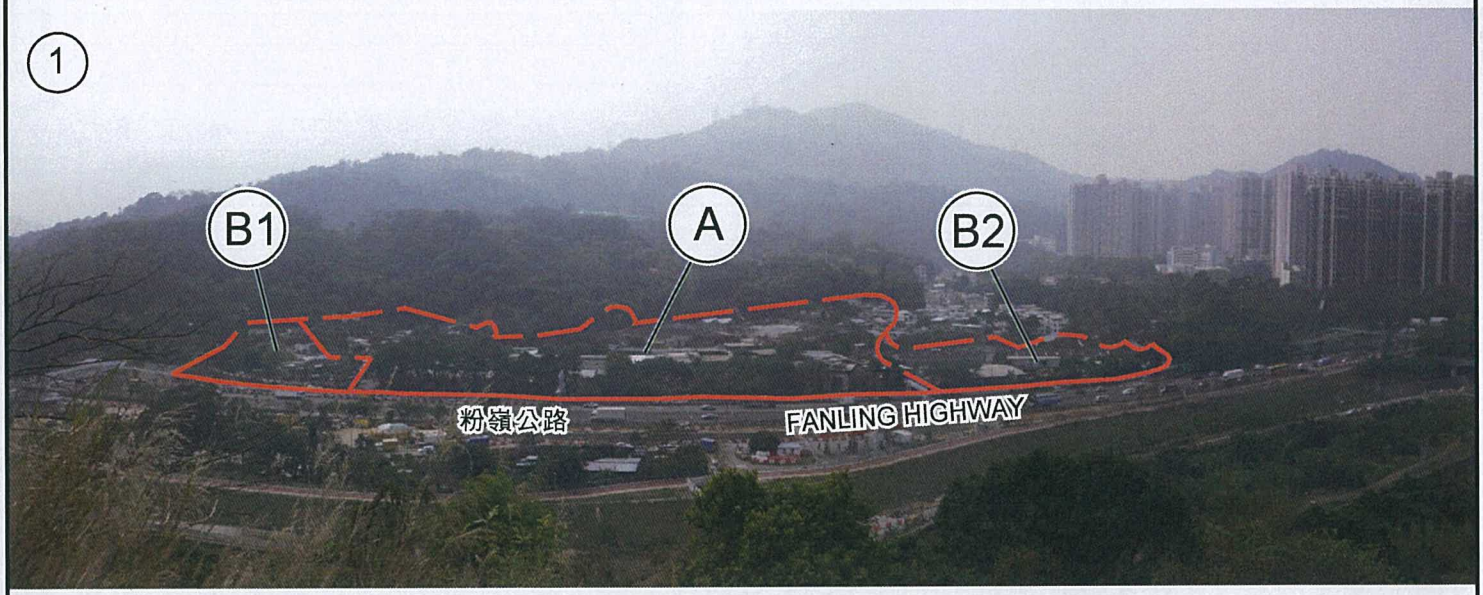
米 METRES 100 0 100 200 300 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
3b

1



2

界線只作識別用
BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

本圖於2015年12月29日擬備，所根據的資料為攝於2015年2月9日的實地照片

PLAN PREPARED ON 29.12.2015 BASED ON SITE PHOTOS TAKEN ON 9.2.2015

實地照片 SITE PHOTO

在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20作出的擬議修訂項目A、B1及B2

PROPOSED AMENDMENT ITEMS A, B1 AND B2 TO THE APPROVED FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
4a

3

4

5

本圖於2015年12月28日擬備，所根據的資料為攝於2015年2月9日的實地照片

PLAN PREPARED ON 28.12.2015 BASED ON SITE PHOTOS TAKEN ON 9.2.2015

實地照片 SITE PHOTO

在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20作出的擬議修訂項目A、B1及B2

PROPOSED AMENDMENT ITEMS A, B1 AND B2 TO THE APPROVED FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN 4b

本圖於2015年12月28日擬備，所根據的資料為攝於2015年2月9日的實地照片

PLAN PREPARED ON 28.12.2015 BASED ON SITE PHOTOS TAKEN ON 9.2.2015

實地照片 SITE PHOTO

在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20作出的擬議修訂項目A、B1及B2

PROPOSED AMENDMENT ITEMS A, B1 AND B2 TO THE APPROVED FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
4c

本圖於2015年12月28日擬備，所根據的資料為攝於2015年2月9日的實地照片

PLAN PREPARED ON 28.12.2015 BASED ON SITE PHOTOS TAKEN ON 9.2.2015

實地照片 SITE PHOTO

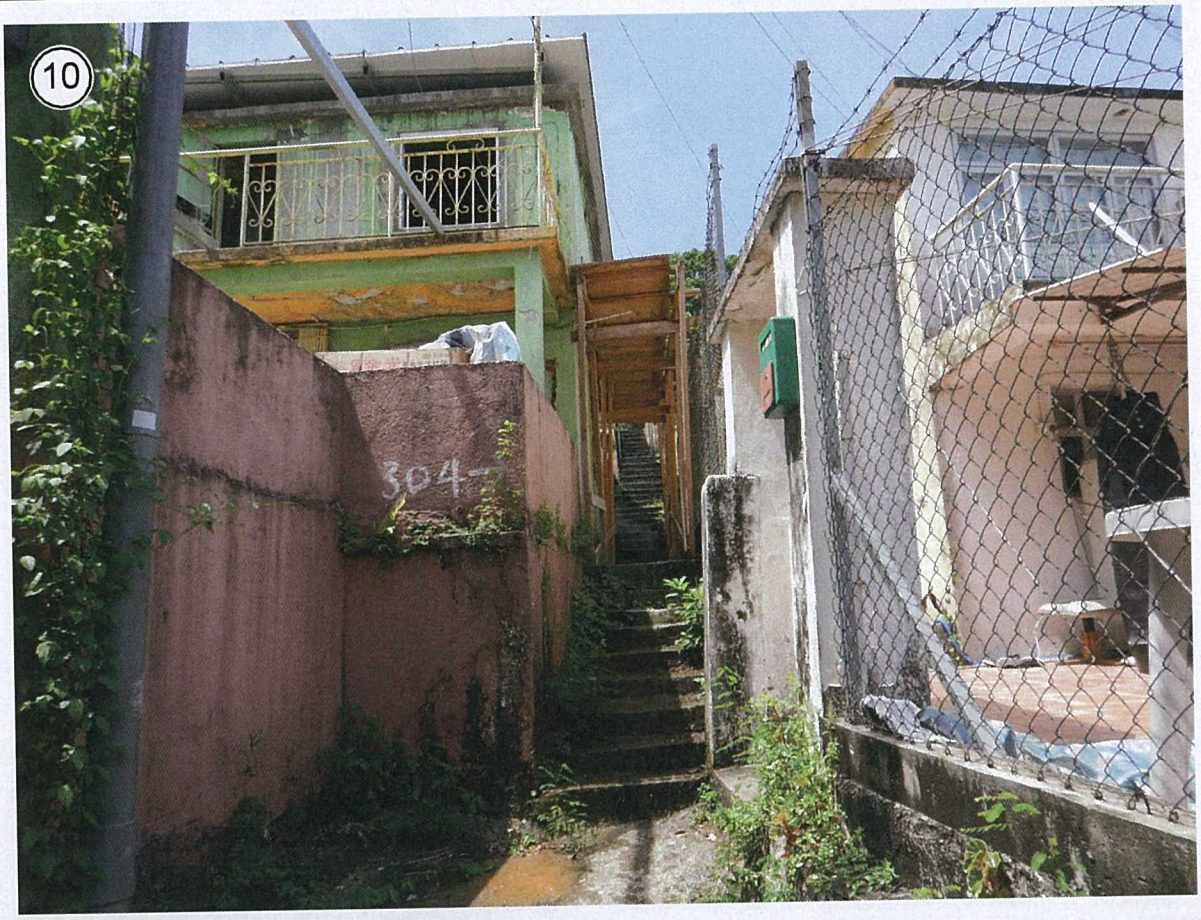
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20作出的擬議修訂項目A、B1及B2

PROPOSED AMENDMENT ITEMS A, B1 AND B2 TO THE APPROVED FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN 4d



本圖於2015年12月28日擬備，所根據的資料為攝於2015年2月9日的實地照片

PLAN PREPARED ON 28.12.2015 BASED ON SITE PHOTOS TAKEN ON 9.2.2015

實地照片 SITE PHOTO

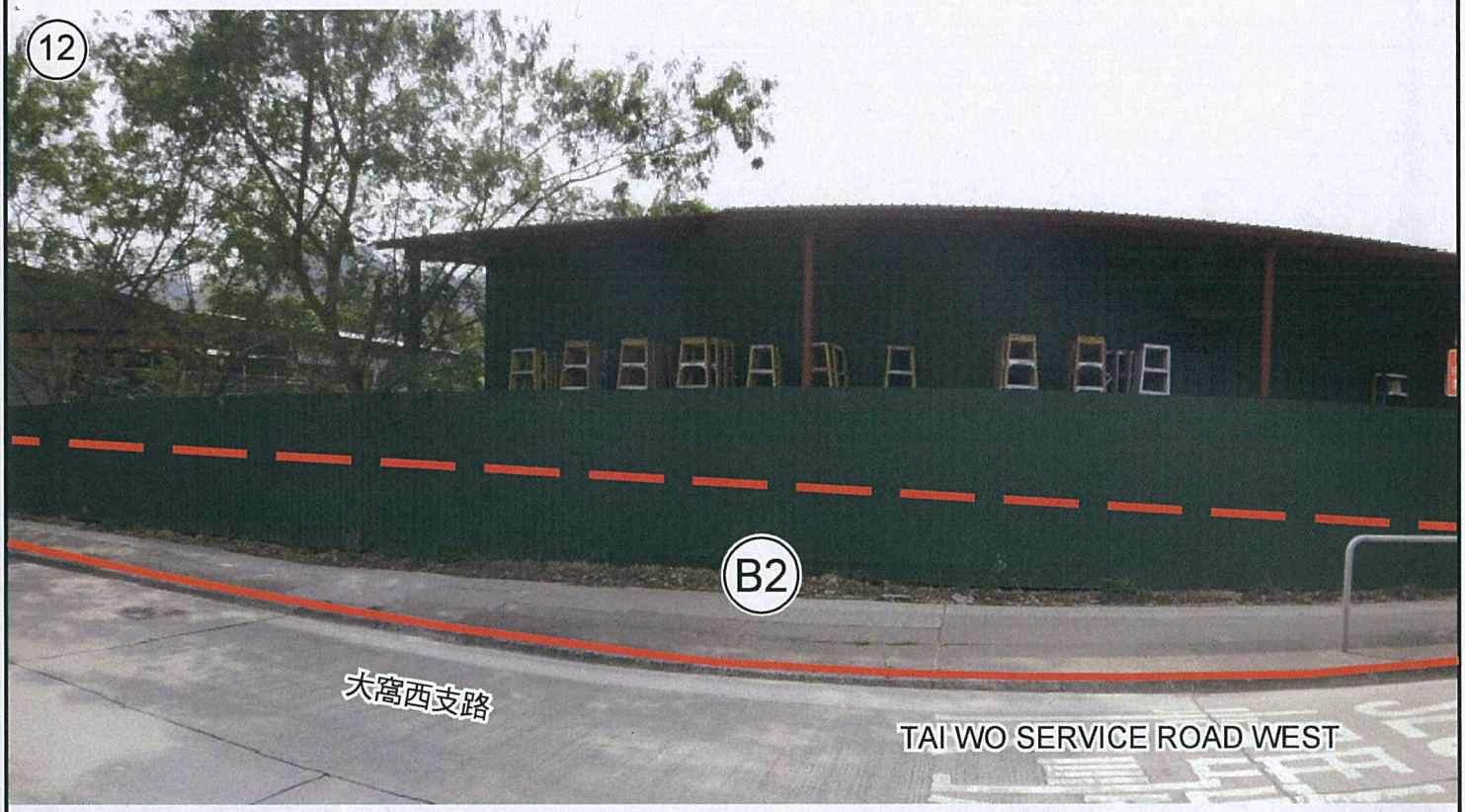
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20作出的擬議修訂項目A、B1及B2

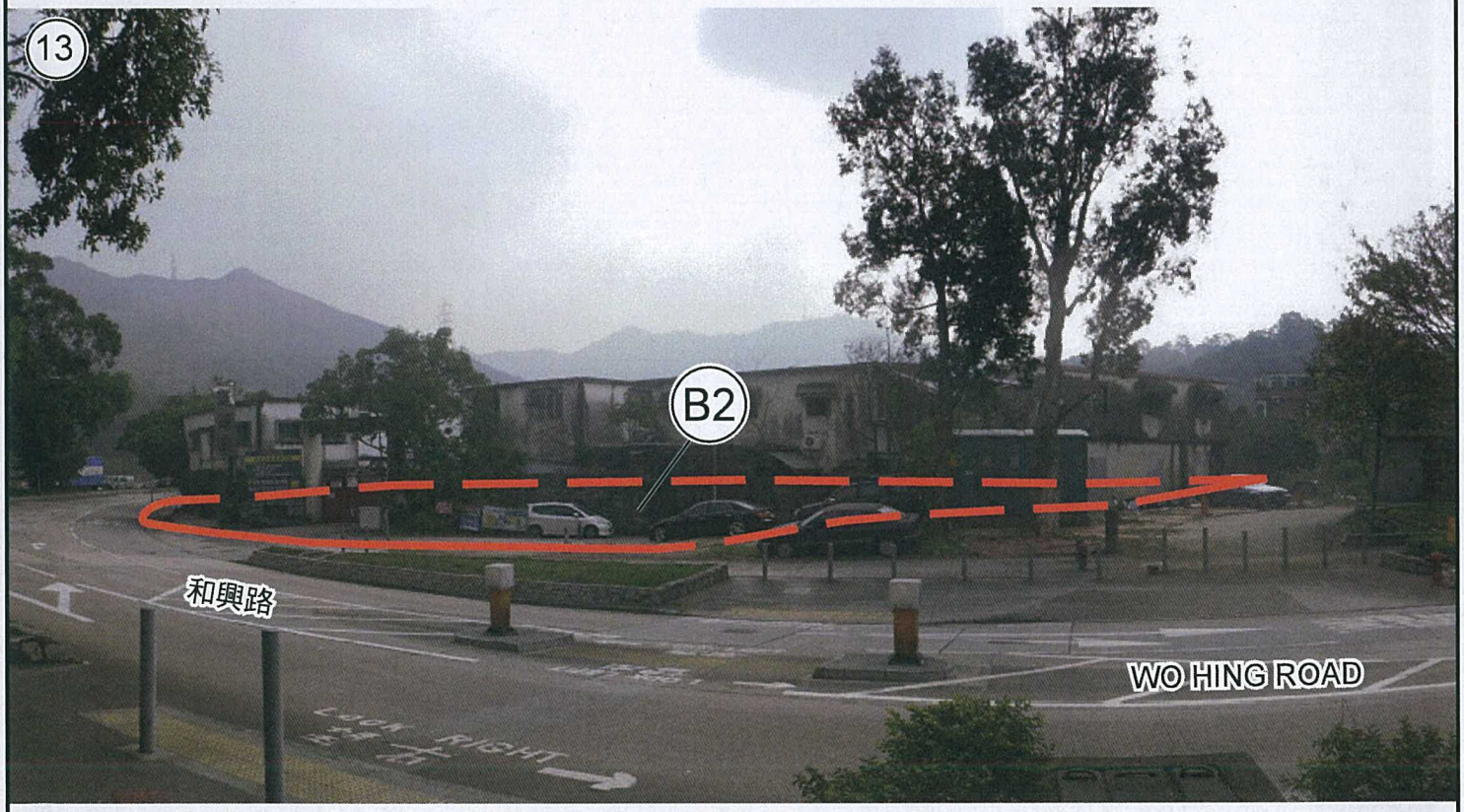
PROPOSED AMENDMENT ITEMS A, B1 AND B2 TO THE APPROVED FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN 4e





界線只作識別用
BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

本圖於2015年12月29日擬備，所根據的資料為攝於2015年2月9日的實地照片

PLAN PREPARED ON 29.12.2015 BASED ON SITE PHOTOS TAKEN ON 9.2.2015

實地照片 SITE PHOTO

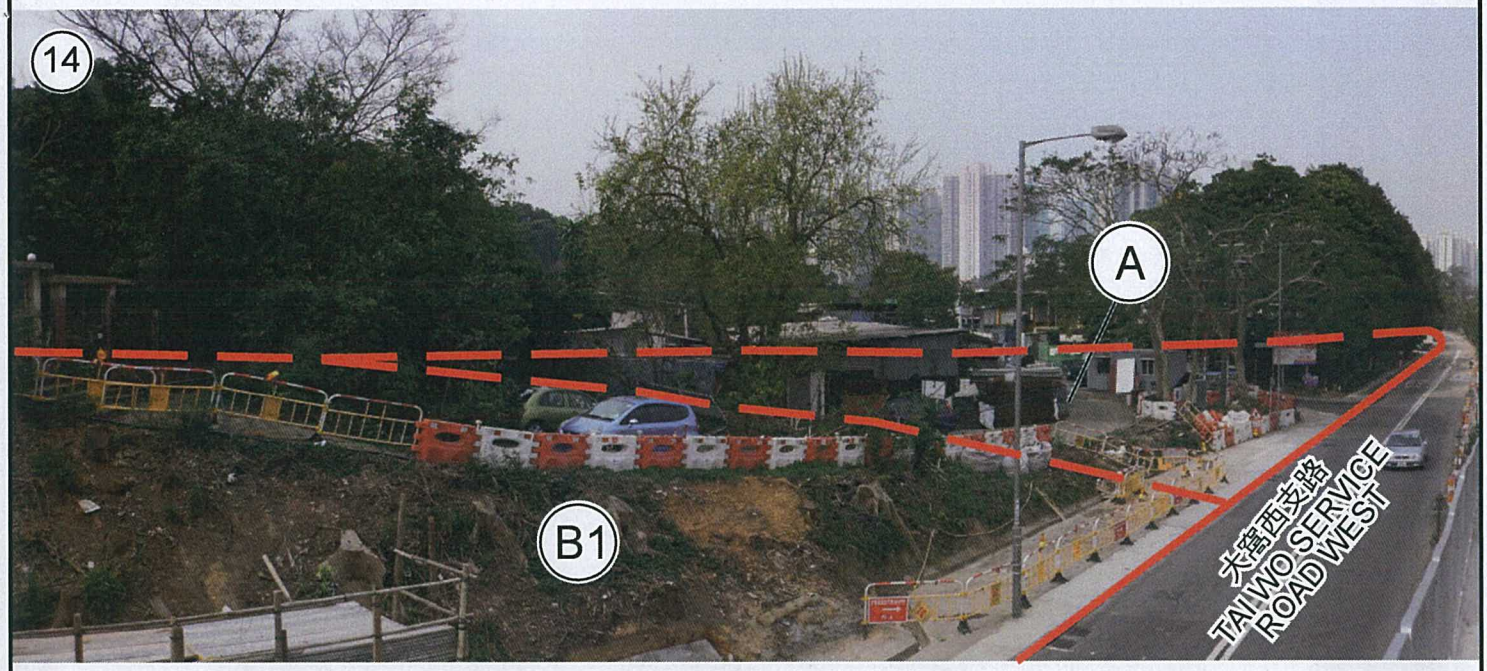
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20作出的擬議修訂項目A、B1及B2

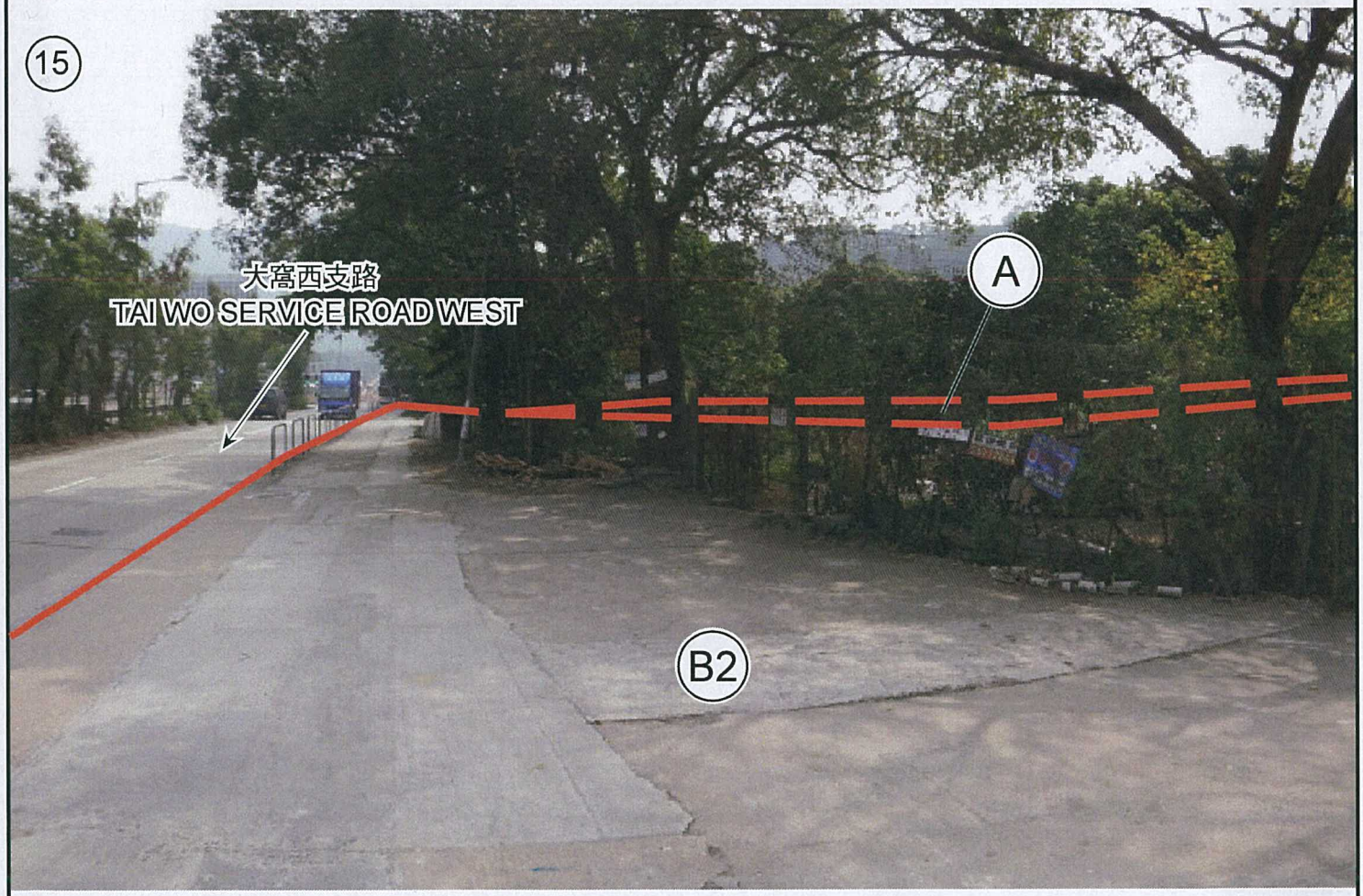
PROPOSED AMENDMENT ITEMS A, B1 AND B2 TO THE APPROVED FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
4f





界線只作識別用
BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

本圖於2015年12月29日擬備，所根據的資料為攝於2015年2月9日的實地照片

PLAN PREPARED ON 29.12.2015 BASED ON SITE PHOTOS TAKEN ON 9.2.2015

實地照片 SITE PHOTO

在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20作出的擬議修訂項目A、B1及B2

PROPOSED AMENDMENT ITEMS A, B1 AND B2 TO THE APPROVED FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
4g

本圖於2015年12月28日擬備，所根據的資料為攝於2015年11月12, 18及20日的實地照片

PLAN PREPARED ON 28.12.2015 BASED ON SITE PHOTOS TAKEN ON 12, 18 AND 20.11.2015

實地照片 SITE PHOTO

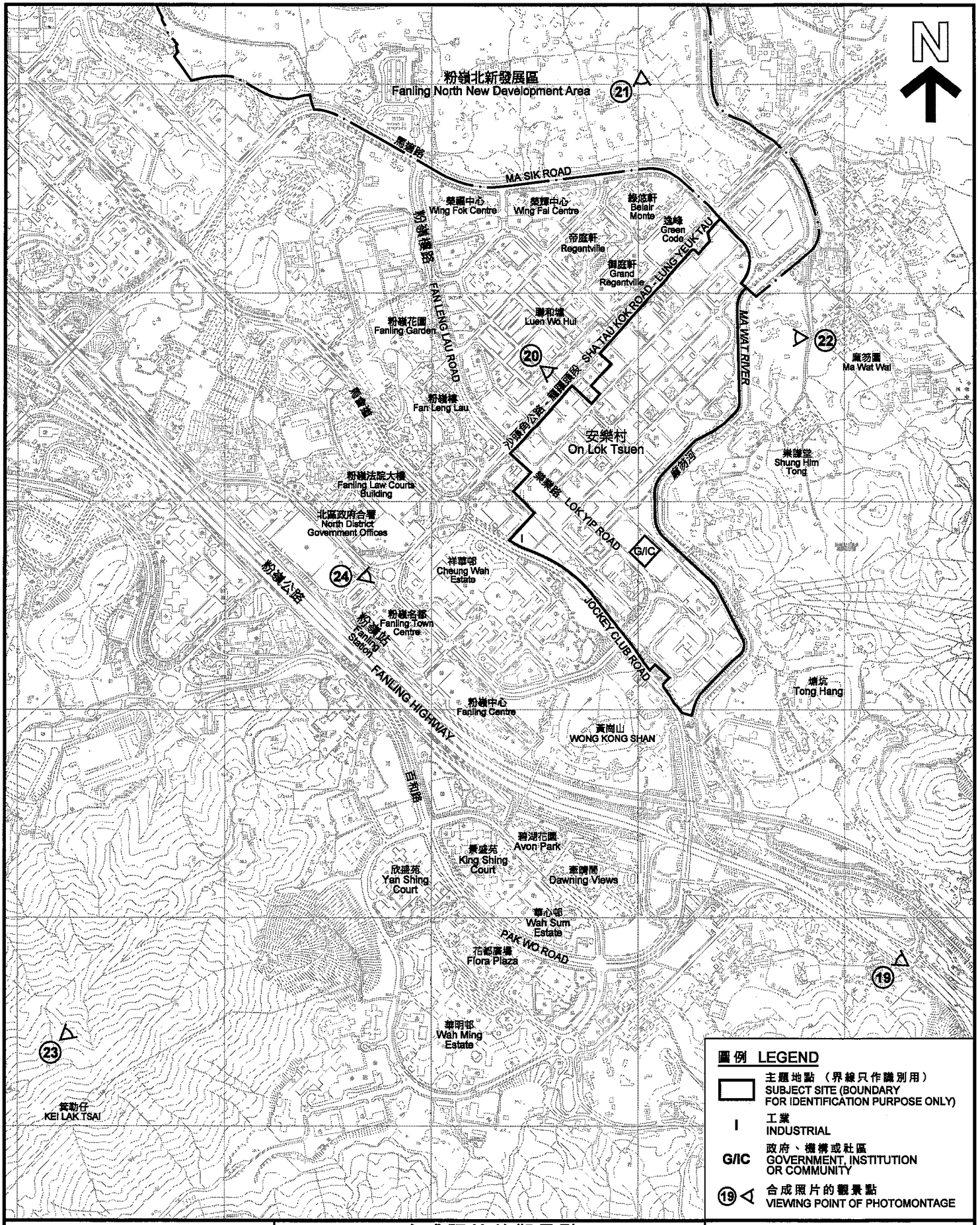
安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目

PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN 5



本摘要圖於2015年12月28日擬備，
所根據的資料為於地形圖編號
3-SW-A、3-SW-B、3-SW-C及3-SW-D

EXTRACT PLAN PREPARED ON 28.12.2015
BASED ON TOPOGRAPHIC MAP Nos.
3-SW-A, 3-SW-B, 3-SW-C AND 3-SW-D

合成照片的觀景點
VIEWPOINTS OF PHOTOMONTAGE

安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目

PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

SCALE 1 : 12 000 比例尺

米 METRES 120 0 120 240 360 480 600 米 METRES

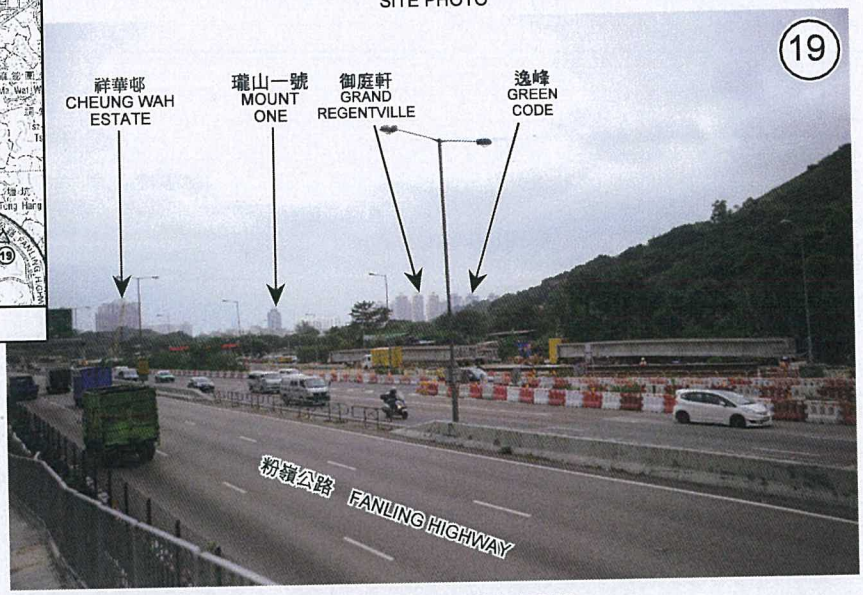
規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

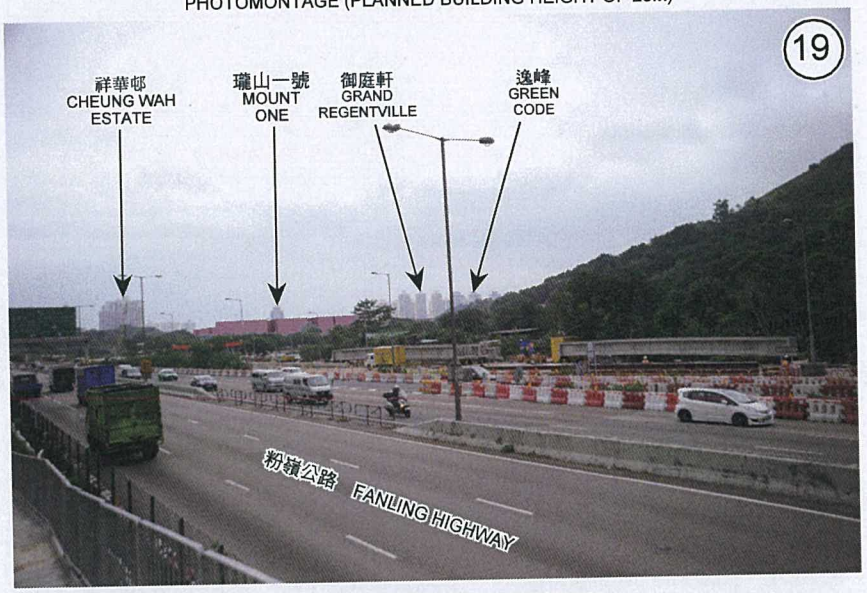
圖 PLAN
6a

位置圖 KEY PLAN

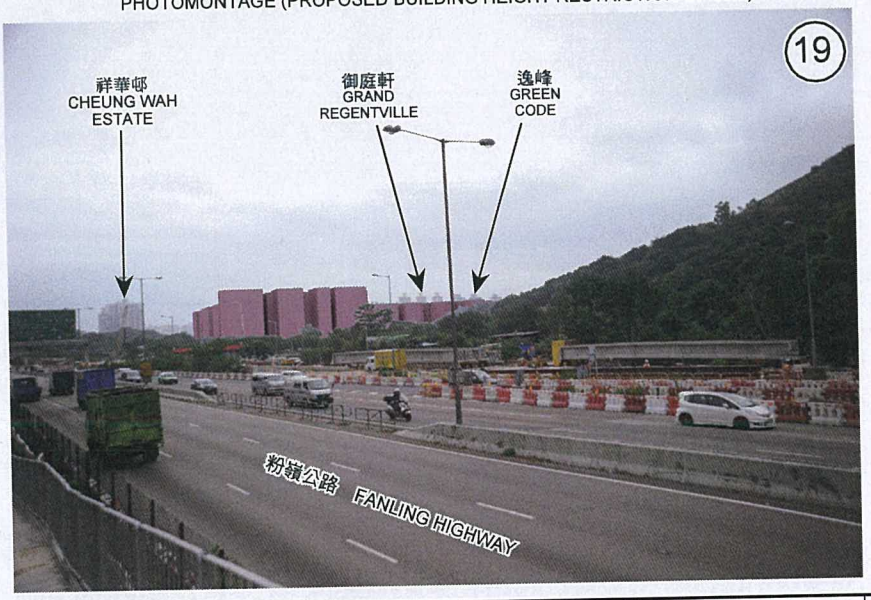
實地照片
SITE PHOTO



合成照片（計劃建築物高度25米）
PHOTOMONTAGE (PLANNED BUILDING HEIGHT OF 25M)



合成照片（擬議建築物高度限制65米）
PHOTOMONTAGE (PROPOSED BUILDING HEIGHT RESTRICTION OF 65M)



圖例 LEGEND

主題地點
SUBJECT SITE

本圖於2015年12月22日擬備，
所根據的資料為攝於
2015年11月12日的實地照片

PLAN PREPARED ON 22.12.2015
BASED ON SITE PHOTO
TAKEN ON 12.11.2015

合成照片 PHOTOMONTAGE

在粉錦公路的行人天橋的觀景點
VIEWING POINT AT FOOTBRIDGE AT FANLING HIGHWAY

安樂村的「工業」地帶
在粉嶺 / 上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目
PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

規劃署
PLANNING
DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
6b

位置圖 KEY PLAN

實地照片
SITE PHOTO

合成照片（計劃建築物高度25米）
PHOTOMONTAGE (PLANNED BUILDING HEIGHT OF 25M)

合成照片（擬議建築物高度限制65米）
PHOTOMONTAGE (PROPOSED BUILDING HEIGHT RESTRICTION OF 65M)

圖例 LEGEND

主題地點
SUBJECT SITE

本圖於2015年12月22日擬備，
所根據的資料為攝於
2015年11月20日的實地照片

PLAN PREPARED ON 22.12.2015
BASED ON SITE PHOTO
TAKEN ON 20.11.2015

合成照片 PHOTOMONTAGE

在聯和墟的觀景點
VIEWING POINT AT LUEN WO HUI

安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目
PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

規劃署
PLANNING DEPARTMENT

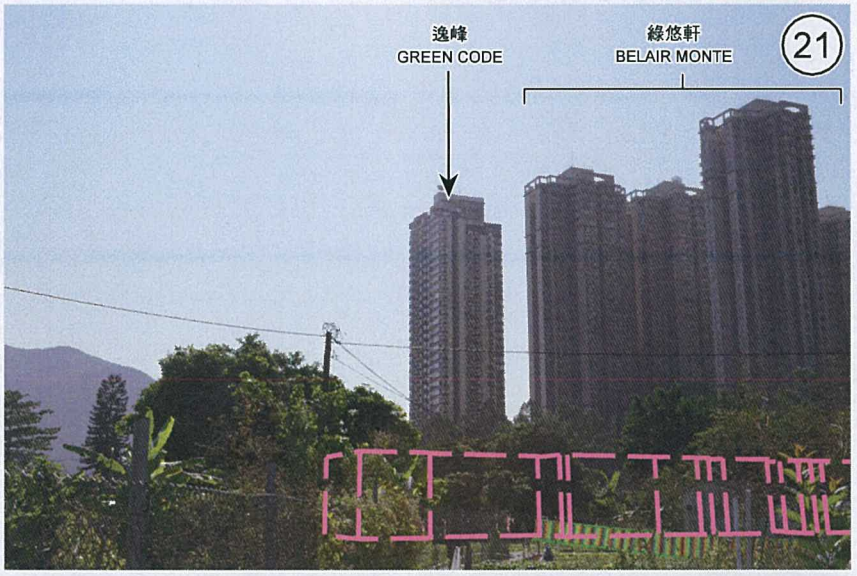
參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
6c

位置圖 KEY PLAN

實地照片
SITE PHOTO

合成照片（計劃建築物高度25米）
PHOTOMONTAGE (PLANNED BUILDING HEIGHT OF 25M)



合成照片（擬議建築物高度限制65米）
PHOTOMONTAGE (PROPOSED BUILDING HEIGHT RESTRICTION OF 65M)

圖例 LEGEND

主題地點
SUBJECT SITE

本圖於2015年12月22日擬備，
所根據的資料為攝於
2015年12月18日的實地照片

PLAN PREPARED ON 22.12.2015
BASED ON SITE PHOTO
TAKEN ON 18.12.2015

合成照片 PHOTOMONTAGE

在馬屎埔的觀景點
VIEWING POINT AT MA SHI PO
安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目
PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

規劃署
PLANNING DEPARTMENT

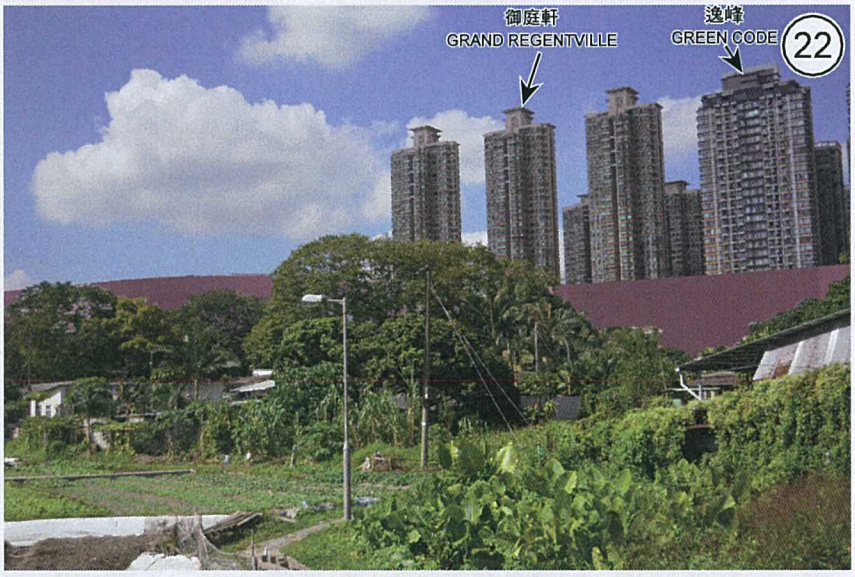
參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
6d

位置圖 KEY PLAN

實地照片
SITE PHOTO

合成照片（計劃建築物高度25米）
PHOTOMONTAGE (PLANNED BUILDING HEIGHT OF 25M)



合成照片（擬議建築物高度限制65米）
PHOTOMONTAGE (PROPOSED BUILDING HEIGHT RESTRICTION OF 65M)

圖例 LEGEND

主題地點
SUBJECT SITE

本圖於2015年12月22日擬備，
所根據的資料為攝於
2015年11月18日的實地照片
PLAN PREPARED ON 22.12.2015
BASED ON SITE PHOTO
TAKEN ON 18.11.2015

合成照片 PHOTOMONTAGE

在龍躍頭文物徑的觀景點
VIEWING POINT AT LUK YEUK TAU HERITAGE TRAIL
安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目
PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

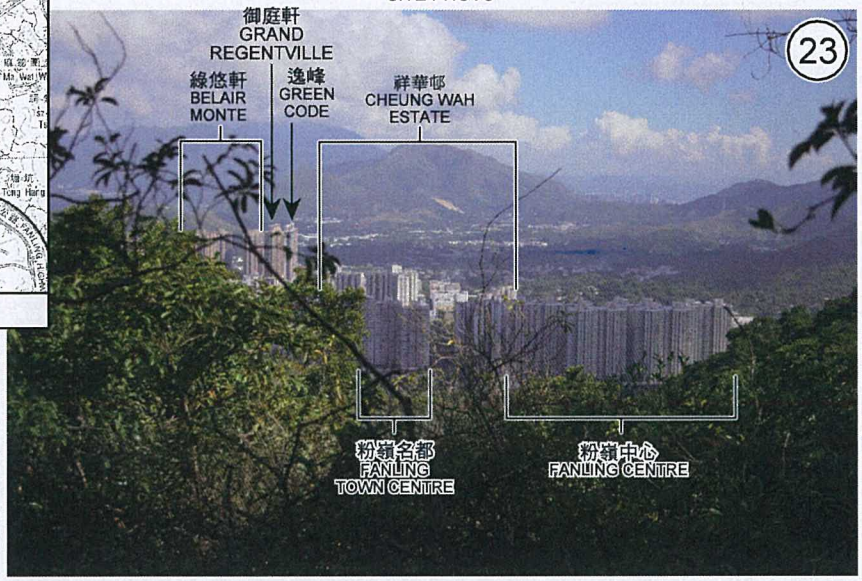
規劃署
PLANNING
DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

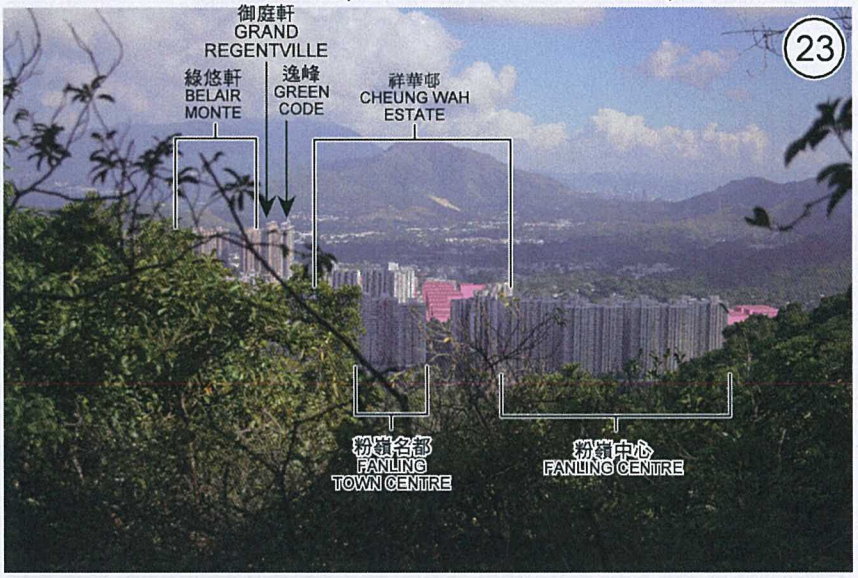
圖 PLAN
6e

位置圖 KEY PLAN

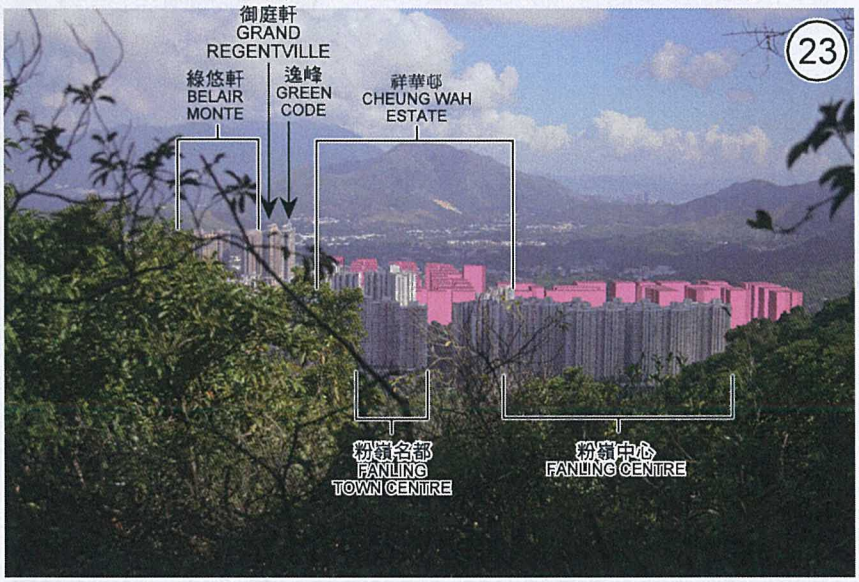
實地照片
SITE PHOTO



合成照片（計劃建築物高度25米）
PHOTOMONTAGE (PLANNED BUILDING HEIGHT OF 25M)



合成照片（擬議建築物高度限制65米）
PHOTOMONTAGE (PROPOSED BUILDING HEIGHT RESTRICTION OF 65M)



圖例 LEGEND

主題地點
SUBJECT SITE

本圖於2015年12月22日擬備，
所根據的資料為攝於
2015年11月18日的實地照片
PLAN PREPARED ON 22.12.2015
BASED ON SITE PHOTO
TAKEN ON 18.11.2015

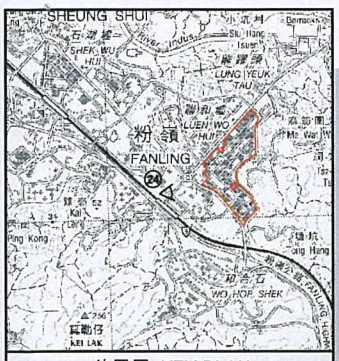
合成照片 PHOTOMONTAGE

在蝴蝶山的觀景點
VIEWING POINT AT WU TIP SHAN (STABLES HILL)
安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目
PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

規劃署
PLANNING
DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
6f



位置圖 KEY PLAN

實地照片
SITE PHOTO

合成照片（計劃建築物高度25米）
PHOTOMONTAGE (PLANNED BUILDING HEIGHT OF 25M)

合成照片（擬議建築物高度限制65米）
PHOTOMONTAGE (PROPOSED BUILDING HEIGHT RESTRICTION OF 65M)

圖例 LEGEND

主題地點
SUBJECT SITE

本圖於2015年12月22日擬備，
所根據的資料為攝於
2015年11月14日的實地照片

PLAN PREPARED ON 22.12.2015
BASED ON SITE PHOTO
TAKEN ON 14.11.2015

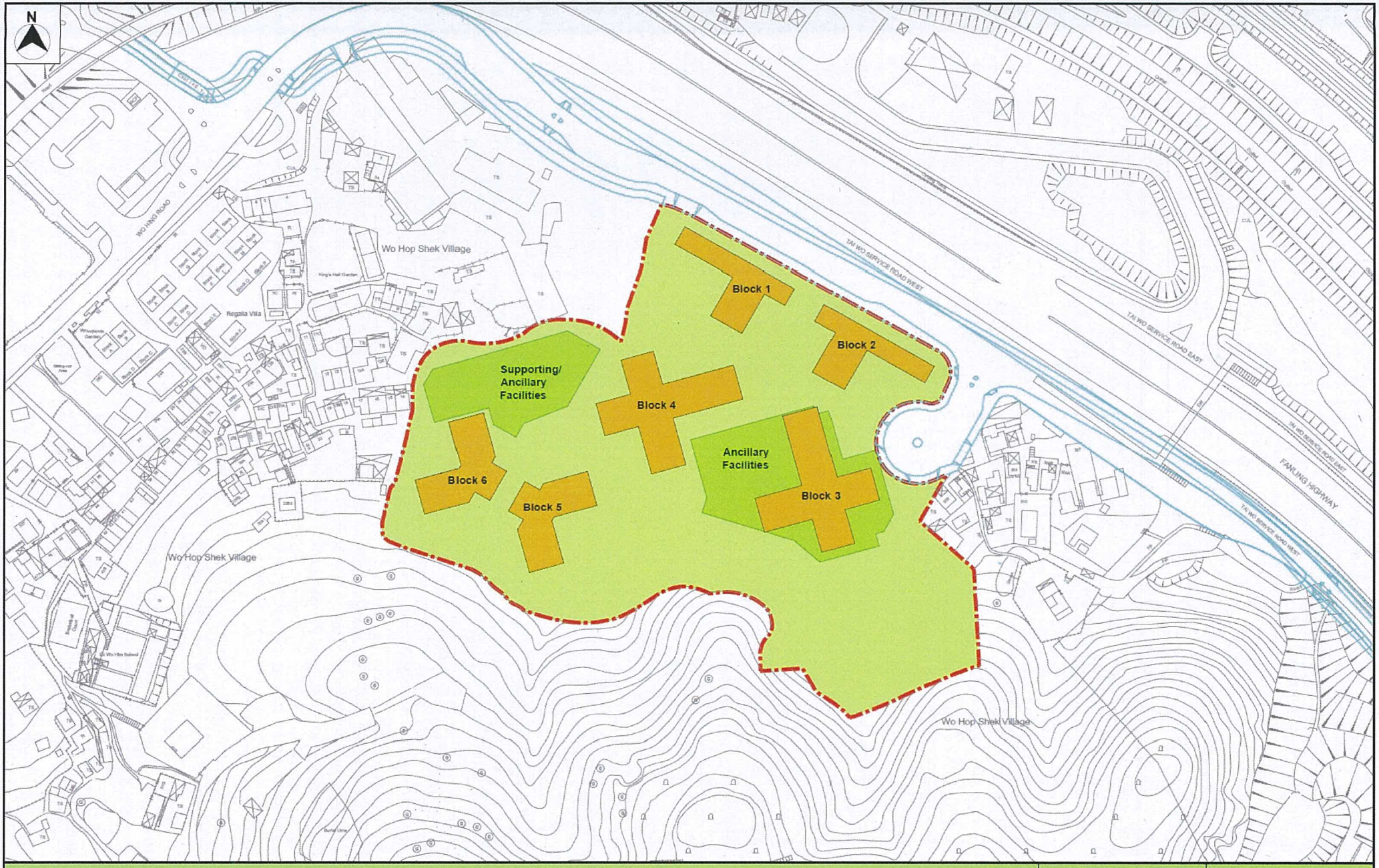
合成照片 PHOTOMONTAGE

在新運路行人天橋的觀景點
VIEWING POINT AT FOOTBRIDGE AT SAN WAN ROAD
安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目
PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/89

圖 PLAN
6g



Fanling Area 48 PRH Development
- Conceptual Layout Plan (For Reference Only and Suject to Design Review)

DRAFT

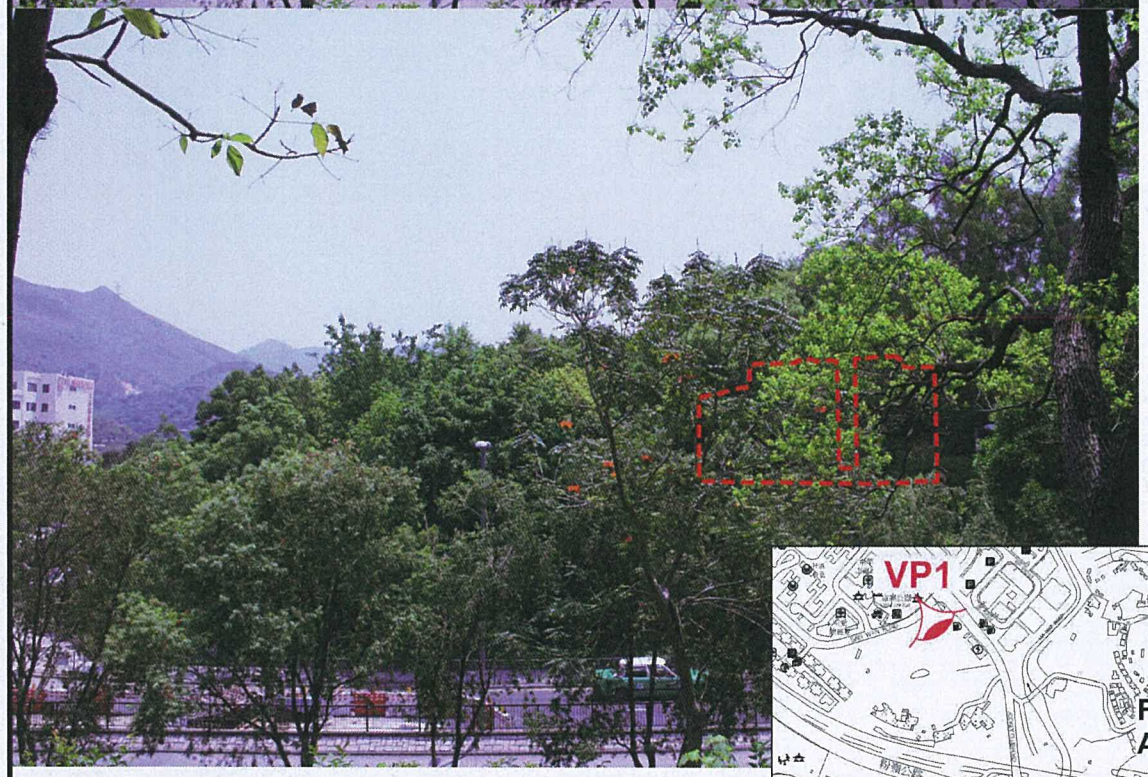
Drawing No. : FL48/48A/SITE/A/PR-05
Scale 1 : 1500 (A3)
Date : 03-12-2015

房屋署
HOUSING DEPARTMENT

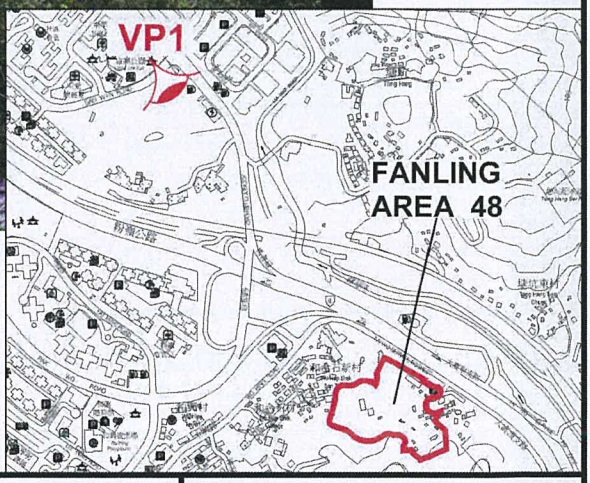
參考編號
REFERENCE No. M/FS/15/89

繪圖 DRAWING 1

With Existing View



With Proposed Development



LEGEND:

Behind Vegetation

PHOTOMONTAGE AT VIEWING POINT VP1
(VIEW FROM FANLING HONG LOK PARK)

HOUSING DEPARTMENT
PLANNING SECTION

PLAN 1

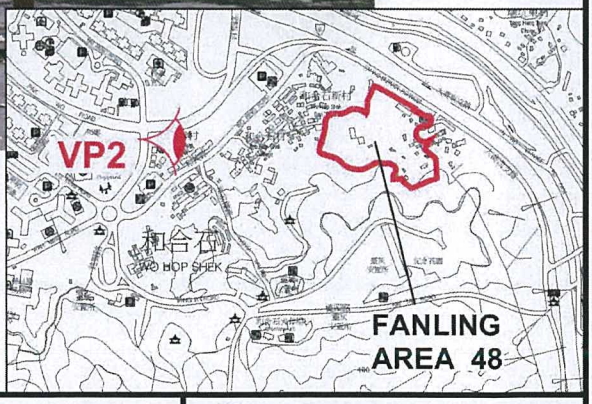
DATE : 1. 6. 2015

15_0627N_vp1

參考編號 REFERENCE No.	M/FS/15/89	繪圖 DRAWING 2a

With Existing View

With Proposed Development



PHOTOMONTAGE AT VIEWING POINT VP2
(VIEW FROM CROSSWALK OUTSIDE WO HING PLAYGROUND)

HOUSING DEPARTMENT
PLANNING SECTION

PLAN 2

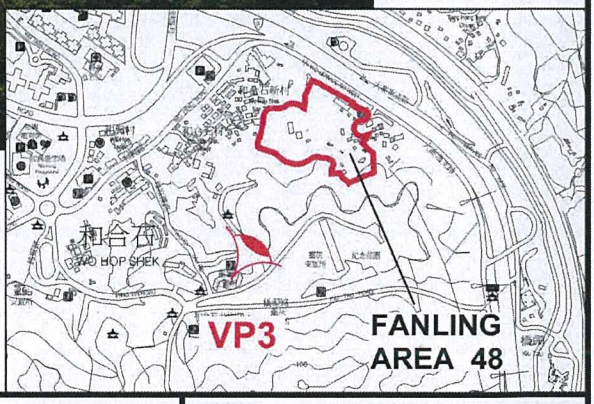
DATE :
1. 6. 2015

15_0627N_vp2

參考編號 REFERENCE No.	M/FS/15/89	繪圖 DRAWING 2b

With Existing View

With Proposed Development



PHOTOMONTAGE AT VIEWING POINT VP3
(VIEW FROM WO HOP SHEK CREMATORIUM)

HOUSING DEPARTMENT
PLANNING SECTION

PLAN 3

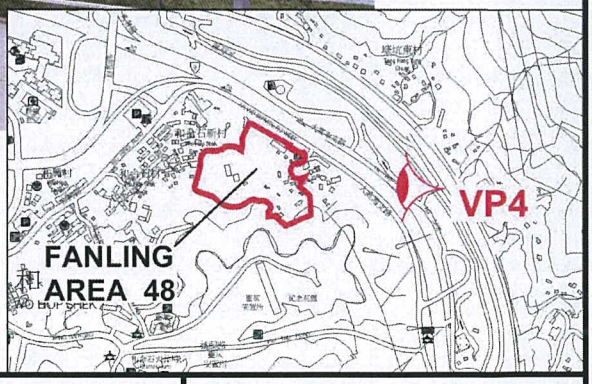
DATE :
4. 6. 2015

15_0627N_vp3

參考編號 REFERENCE No.	M/FS/15/89	繪圖 DRAWING 2c

With Existing View

With Proposed Development



PHOTOMONTAGE AT VIEWING POINT VP4
(VIEW FROM AN EXISTING BRIDGE AT TAI WO SERVICE ROAD EAST)

HOUSING DEPARTMENT
PLANNING SECTION

PLAN 4	DATE : 1. 6. 2015

15_0627N_vp4

參考編號 REFERENCE No. M/FS/15/89	繪圖 DRAWING 2d

Annex A

圖例
NOTATION

ZONES		地帶
COMPREHENSIVE DEVELOPMENT AREA	CDA	綜合發展區
COMMERCIAL / RESIDENTIAL	C/R	商業 / 住宅
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）
VILLAGE TYPE DEVELOPMENT	V	鄉村式發展
INDUSTRIAL	I	工業
GOVERNMENT, INSTITUTION OR COMMUNITY	G/IC	政府、機構或社區
OPEN SPACE	O	休憩用地
OTHER SPECIFIED USES	OU	其他指定用途
UNDETERMINED	U	未決定用途
GREEN BELT	GB	綠化地帶

COMMUNICATIONS		交通
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
PLANNING AREA NUMBER	(1)	規劃區編號
MAXIMUM BUILDING HEIGHT (IN METRES ABOVE PRINCIPAL DATUM)	110	最高建築物高度（在主水平基準上若干米）
PETROL FILLING STATION	P F S	加油站

土地用途及面積一覽表
SCHEDULE OF USES AND AREAS

USES	大約面積及百分率 APPROXIMATE AREA & %		用途
	公頃 HECTARES	% 百分率	
COMPREHENSIVE DEVELOPMENT AREA	3.16	0.47	綜合發展區
COMMERCIAL / RESIDENTIAL	22.07	3.31	商業 / 住宅
RESIDENTIAL (GROUP A)	110.68	16.59	住宅（甲類）
RESIDENTIAL (GROUP B)	8.18	1.23	住宅（乙類）
RESIDENTIAL (GROUP C)	22.92	3.43	住宅（丙類）
VILLAGE TYPE DEVELOPMENT	83.26	12.48	鄉村式發展
INDUSTRIAL	56.80	8.51	工業
GOVERNMENT, INSTITUTION OR COMMUNITY	101.72	15.24	政府、機構或社區
OPEN SPACE	44.23	6.63	休憩用地
OTHER SPECIFIED USES	35.82	5.37	其他指定用途
UNDETERMINED	0.90	0.13	未決定用途
GREEN BELT	69.70	10.45	綠化地帶
RIVER CHANNEL	24.25	3.63	河道
MAJOR ROAD ETC.	83.56	12.53	主要道路等
TOTAL PLANNING SCHEME AREA	667.25	100.00	規劃範圍總面積

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

行政長官會同行政會議於２０１５年６月１６日　根據城市規劃條例第９（１）（ａ）條核准的圖則
APPROVED BY THE CHIEF EXECUTIVE IN COUNCIL UNDER SECTION 9(1)(a) OF THE TOWN PLANNING ORDINANCE ON 16 JUNE 2015

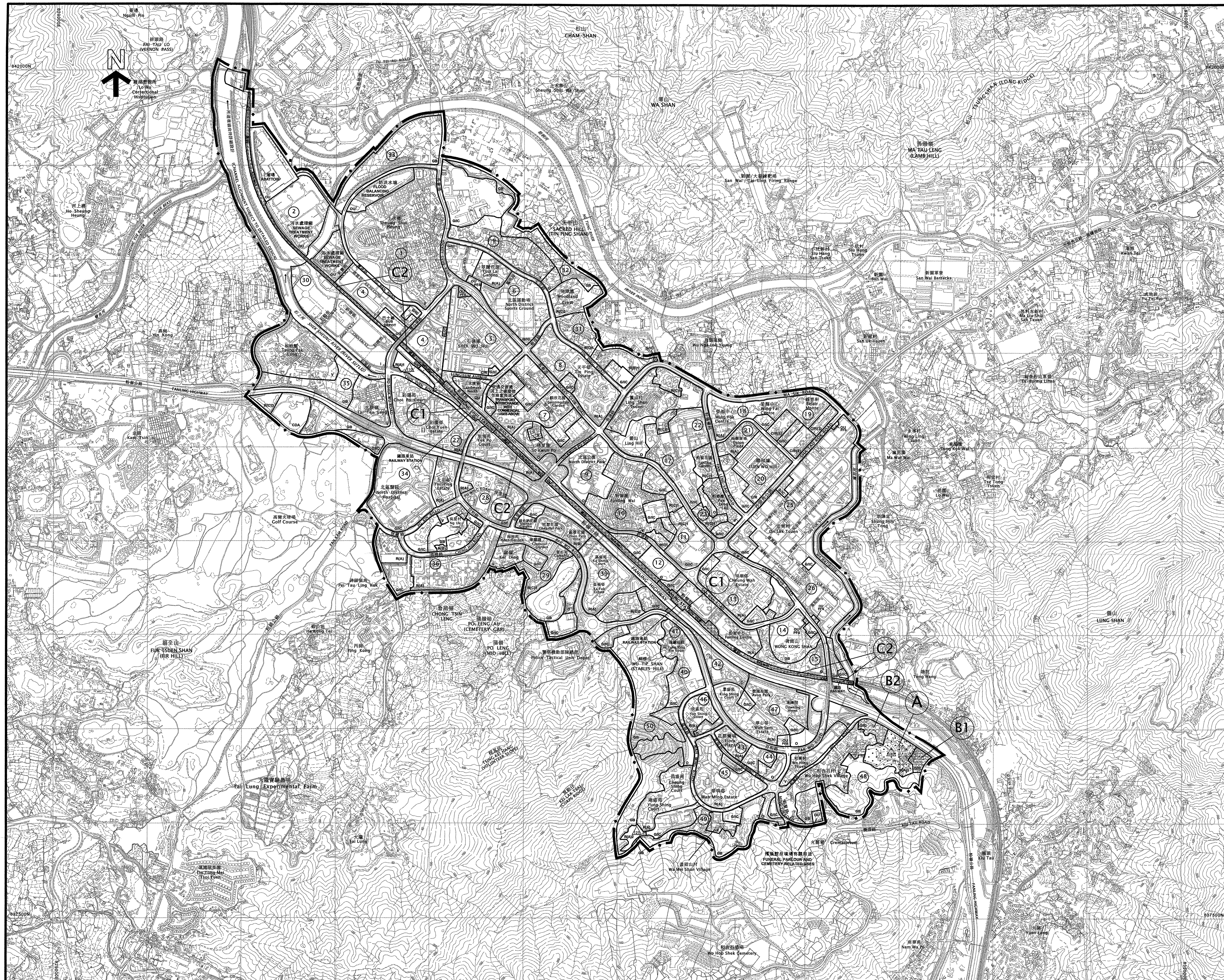
Ms Kinnie WONG 黃潔怡女士
CLERK TO THE EXECUTIVE COUNCIL 行政會議秘書

香港城市規劃委員會依據城市規劃條例擬備的粉嶺／上水分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
FANLING / SHEUNG SHUI - OUTLINE ZONING PLAN

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

圖則編號 PLAN No. **S/FSS/20**

Annex B



圖例
NOTATION

ZONES		地帶
COMPREHENSIVE DEVELOPMENT AREA	CDA	綜合發展區
COMMERCIAL / RESIDENTIAL	C/R	商業 / 住宅
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）
VILLAGE TYPE DEVELOPMENT	V	鄉村式發展
INDUSTRIAL	I	工業
GOVERNMENT, INSTITUTION OR COMMUNITY	G/IC	政府、機構或社區
OPEN SPACE	O	休憩用地
OTHER SPECIFIED USES	OU	其他指定用途
UNDETERMINED	U	未決定用途
GREEN BELT	GB	綠化地帶

COMMUNICATIONS	交通
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
PLANNING AREA NUMBER	1	規劃區編號
MAXIMUM BUILDING HEIGHT (IN METRES ABOVE PRINCIPAL DATUM)	125	最高建築物高度（在主水平基準上若干米）
PETROL FILLING STATION	P F S	加油站

土地用途及面積一覽表
SCHEDULE OF USES AND AREAS

USES	大約面積及百分率 APPROXIMATE AREA & %		用途
	公頃 HECTARES	% 百分率	
COMPREHENSIVE DEVELOPMENT AREA	3.16	0.47	綜合發展區
COMMERCIAL / RESIDENTIAL	22.07	3.31	商業 / 住宅
RESIDENTIAL (GROUP A)	114.70	17.19	住宅（甲類）
RESIDENTIAL (GROUP B)	8.18	1.23	住宅（乙類）
RESIDENTIAL (GROUP C)	22.92	3.43	住宅（丙類）
VILLAGE TYPE DEVELOPMENT	83.30	12.48	鄉村式發展
INDUSTRIAL	51.57	7.73	工業
GOVERNMENT, INSTITUTION OR COMMUNITY	103.81	15.56	政府、機構或社區
OPEN SPACE	44.23	6.63	休憩用地
OTHER SPECIFIED USES	35.82	5.37	其他指定用途
UNDETERMINED	0.90	0.13	未決定用途
GREEN BELT	68.78	10.31	綠化地帶
RIVER CHANNEL	24.25	3.63	河道
MAJOR ROAD ETC.	83.56	12.53	主要道路等
TOTAL PLANNING SCHEME AREA	667.25	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/FSS/20 的修訂
AMENDMENTS TO APPROVED PLAN No. S/FSS/20

AMENDMENTS 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
AMENDMENT ITEM B1	修訂項目B1項
AMENDMENT ITEM B2	修訂項目B2項
AMENDMENT ITEM C1	修訂項目C1項
AMENDMENT ITEM C2	修訂項目C2項

（參看附表）
(SEE ATTACHED SCHEDULE)

香港城市規劃委員會依據城市規劃條例擬備的粉嶺／上水分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
FANLING / SHEUNG SHUI - OUTLINE ZONING PLAN

SCALE 1:10 000 比例尺

米 METRES 250 0 500 1 000 1 500 METRES 米

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

圖則編號 PLAN No. **S/FSS/20A**

Annex C

~~APPROVED~~ ***DRAFT*** FANLING/SHEUNG SHUI OUTLINE ZONING PLAN NO. S/FSS/20***A***

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

NOTES

(N.B. These form 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) (a) No action is required to make the existing use of any land or building conform to this Plan until there is a material change of use or the building is redeveloped.

(b) Any material change of use or any other development (except minor alteration and/or modification to the development of the land or building in respect of the existing use which is always permitted) or redevelopment must be always permitted in terms of the Plan or, if permission is required, in accordance with the permission granted by the Town Planning Board.

(c) For the purposes of sub-paragraph (a) above, "existing use of any land or building" means-

(i) before the publication in the Gazette of the notice of the first statutory plan covering the land or building (hereafter referred as 'the first plan'),

- a use in existence before the publication of the first plan which has continued since it came into existence; or

- a use or a change of use approved under the Buildings Ordinance which relates to an existing building; and

(ii) after the publication of the first plan,

- a use permitted under a plan which was effected during the effective period of that plan and has continued since it was effected; or

- a use or a change of use approved under the Buildings Ordinance which relates to an existing building and permitted under a plan prevailing at the time when the use or change of use was approved.

(4) 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.

(5) Road junctions, alignments of roads and railway tracks, and boundaries between zones may be subject to minor adjustments as detailed planning proceeds.

(6) Temporary uses (expected to be 5 years or less) of any land or building are always permitted as long as they comply with any other relevant legislation, the conditions of the Government lease concerned, and any other Government requirements, and there is no need for these to conform to the zoned use or these Notes. For temporary uses expected to be over 5 years, the uses must conform to the zoned use or these Notes.

(7) The following uses or developments are always permitted on land falling within the boundaries of the Plan except where the uses or developments are specified in Column 2 of the Notes of individual zones :

(a) provision, maintenance or repair of plant nursery, amenity planting, open space, rain shelter, refreshment kiosk, road, bus/public light bus stop or lay-by, cycle track, taxi rank, nullah, public utility pipeline, electricity mast, lamp pole, telephone booth, telecommunications radio base station, automatic teller machine and shrine;

(b) 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

(c) maintenance or repair of watercourse and grave.

(8) In any area shown as 'Road', all uses or developments except those specified in paragraph (7) above and those specified below require permission from the Town Planning Board:

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

(9) In the "Undetermined" zone, all uses or developments except those specified in paragraph (7) above require permission from the Town Planning Board.

(10) 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.

(11) In these Notes,

"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).

~~APPROVED~~ ***Draft*** FANLING/SHEUNG SHUI OUTLINE ZONING PLAN NO. S/FSS/20***A***

Schedule of Uses

COMPREHENSIVE DEVELOPMENT AREA

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 Eating Place Educational Institution Flat Government Refuse Collection Point Government Use (not elsewhere specified) Hospital Hotel House 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 School Shop and Services Social Welfare Facility Training Centre Utility Installation for Private Project

Planning Intention

This zone is intended for comprehensive development/redevelopment of the area for residential use with the provision of 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.

(Please see next page)

COMPREHENSIVE DEVELOPMENT AREA (Cont'd)

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" 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 landscaping 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)

(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 a maximum plot ratio of 0.8, a maximum site coverage of 27% and a maximum building height of 3 storeys over one-storey carport.

(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, 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.

(e) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/site coverage/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.

COMMERCIAL/RESIDENTIAL

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 Eating Place Educational Institution (in a commercial building or in the purpose-designed non-residential portion[@] of an existing building only) Exhibition or Convention Hall Flat Government Use (not elsewhere specified) Hotel House Library Market Off-course Betting Centre Office Place of Entertainment Place of Recreation, Sports or Culture Private Club Public Clinic Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Residential Institution School (in free-standing purpose-designed school building, in a commercial building or in the purpose-designed non-residential portion[@] of an existing building only) Shop and Services (not elsewhere specified) Social Welfare Facility Training Centre Utility Installation for Private Project Wholesale Trade	Broadcasting, Television and/or Film Studio Commercial Bathhouse/Massage Establishment Educational Institution (not elsewhere specified) Government Refuse Collection Point Hospital Institutional Use (not elsewhere specified) Petrol Filling Station Public Convenience Recyclable Collection Centre Religious Institution School (not elsewhere specified) Shop and Services (Motor-vehicle Showroom only)

[@]Excluding floors containing wholly or mainly car parking, loading/unloading bay and/or plant room

Planning Intention

This zone is intended primarily for commercial and/or residential development. Commercial, residential and mixed commercial/residential uses are always permitted.

(Please see next page)

COMMERCIAL/RESIDENTIAL (Cont'd)

Remarks

(a) No new development shall exceed the maximum plot ratio/gross floor area and building height specified below:

Sub-area	Maximum Plot Ratio/ Gross Floor Area	Maximum Building Height
C/R (with site area less than 340m²)	domestic plot ratio of 3.9 or non-domestic plot ratio of 6.7	20 metres
C/R (with site area 340m² and greater)	domestic plot ratio of 5.0 or non-domestic plot ratio of 9.5	81 metres
C/R(1)	domestic plot ratio of 5.0 or non-domestic plot ratio of 9.5	135mPD
C/R(2)	domestic gross floor area (GFA) of 35,292m² and non-domestic GFA of 48,848m² (of which not less than 27,277m² of the non-domestic GFA should be for Government uses)	135mPD
C/R(3)	domestic plot ratio of 5.0 or non-domestic plot ratio of 9.5	123mPD

For new development of a building that is partly domestic and partly non-domestic, the plot ratio for the domestic part of the building shall not exceed the product of the difference between the maximum permitted non-domestic plot ratio for the building and the actual non-domestic plot ratio proposed for the building and the maximum permitted domestic plot ratio for the building divided by the maximum permitted non-domestic plot ratio for the building. The maximum permitted domestic and non-domestic plot ratios are as stipulated above.

(b) No 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 relevant maximum domestic and/or non-domestic plot ratio(s) stated in paragraph (a) above, or the domestic and/or non-domestic plot ratio(s) of the existing building, whichever is the greater, subject to, as applicable –

(i) the plot ratio(s) of the existing building shall apply only if any addition, alteration and/or modification to or redevelopment of an existing building is for the same type of building as the existing building, i.e. domestic, non-domestic, or partly domestic and partly non-domestic building; or

(ii) the maximum domestic and/or non-domestic plot ratio(s) stated in paragraph (a) shall apply if any addition, alteration and/or modification to or redevelopment of an existing building is not for the same type of building as the existing building, i.e. domestic, non-domestic, or partly domestic and partly non-domestic building.

(c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/gross floor area/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 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 Flat Government Use (not elsewhere specified) House Library Market Place of Recreation, Sports or Culture Public Clinic Public Transport Terminus or Station (excluding open-air terminus or station) Public Vehicle Park (excluding container vehicle) (on land designated "R(A)1" only) Residential Institution School (in free-standing purpose-designed building only) Social Welfare Facility Utility Installation for Private Project	Commercial Bathhouse/ Massage Establishment Eating Place Educational Institution Exhibition or Convention Hall Government Refuse Collection Point Hospital Hotel Institutional Use (not elsewhere specified) Office Petrol Filling Station Place of Entertainment Private Club Public Convenience Public Transport Terminus or Station (not elsewhere specified) Public Utility Installation Public Vehicle Park (excluding container vehicle) (not elsewhere specified) Religious Institution 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.

Remarks

(a) On land designated "Residential (Group A)1" ("R(A)1"), 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 gross floor area (GFA) of 69,500m^2 and a maximum building height in terms of metres above Principal Datum as stipulated on the Plan or the GFA and height of the existing building, whichever is the greater.

(b) On land designated "Residential (Group A)2" ("R(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 GFA of 38,500m^2 and a maximum building height in terms of metres above Principal Datum as stipulated on the Plan or the GFA and height of the existing building, whichever is the greater.

(c) ***On land designated "Residential (Group A)3" ("R(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 GFA of 178,100m^2 and a maximum building height in terms of metres above Principle Datum as stipulated on the Plan or the GFA and height of the existing building, whichever is the greater.***

(d) In determining the maximum GFA for the purposes of paragraphs (a)***,*** ~~and~~ (b) ***and (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.

(e) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the GFA/building height restrictions stated in paragraphs ***(a)***, ~~***and***~~ ***(b)*** and ***(c)*** 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 Government Use (Police Reporting Centre, Post Office only) House Library Residential Institution School (in free-standing purpose-designed building only) Utility Installation for Private Project	Ambulance Depot Eating Place Educational Institution Government Refuse Collection Point Government Use (not elsewhere specified) Hospital 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 School (not elsewhere specified) Shop and Services Social Welfare Facility Training Centre

Planning Intention

This zone is intended primarily for medium-density residential developments 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) On land designated "Residential (Group B)1", 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 3.0 and a maximum building height of 20 storeys.

(b) On land designated "Residential (Group B)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 5.0 and a maximum building height of 39 storeys above two-storey car-parking podium.

(c) In determining the maximum plot ratio for the purposes of paragraphs (a) and (b) 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/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.

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 Government Use (Police Reporting Centre, Post Office only) House Utility Installation for Private Project	Ambulance Depot Eating Place Educational Institution 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 School Shop 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.

(Please see next page)

RESIDENTIAL (GROUP C) (Cont'd)

Remarks

(a) On land designated "Residential (Group C)1", 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 0.8, a maximum site coverage of 50%, and a maximum building height of 3 storeys over one-storey carpark or the height of the existing building, whichever is the greater.

(b) On land designated "Residential (Group C)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 1.5 and a maximum building height of 12 storeys including carpark.

(c) On land designated "Residential (Group C)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 gross floor area of 5,504m^2, a maximum site coverage of 24% and a maximum building height of 4 storeys over one-storey carpark.

(d) In determining the maximum plot ratio/gross floor area/site coverage for the purposes of paragraphs (a), (b) and (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.

(e) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/gross floor area/site coverage/building height restrictions stated in paragraphs (a), (b) and (c) 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 designate both existing recognized villages and areas of land considered suitable for village expansion. 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 existing building, 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.

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 ***Art Studio (excluding those involving direct provision of services or goods)*** Bus Depot Cargo Handling and Forwarding Facility (not elsewhere specified) Eating Place (Canteen, Cooked Food Centre only) Government Refuse Collection Point Government Use (not elsewhere specified) Industrial Use (not elsewhere specified) Information Technology and Telecommunications Industries Office (Audio-visual Recording Studio, Design and Media Production, Office Related to Industrial Use only) Public Convenience 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 Recyclable Collection Centre Research, Design and Development Centre Shop and Services (Motor-vehicle Showroom on ground floor, Service Trades only) Utility Installation for Private Project Vehicle Repair Workshop Warehouse (excluding Dangerous Goods Godown)	Broadcasting, Television and/or Film Studio Cargo Handling and Forwarding Facility (Container Freight Station, free-standing purpose-designed Logistics Centre only) Concrete Batching Plant Container Vehicle Park/Container Vehicle Repair Yard Dangerous Goods Godown Eating Place (not elsewhere specified) (in wholesale conversion of an existing building only) Educational Institution (in wholesale conversion of an existing building only) Exhibition or Convention Hall Industrial Use (Bleaching and Dyeing Factory, Electroplating/Printed Circuit Board Manufacture Factory, Metal Casting and Treatment Factory/Workshop only) Institutional Use (not elsewhere specified) (in wholesale conversion of an existing building only) Off-course Betting Centre Offensive Trades Office (not elsewhere specified) Open Storage Petrol Filling Station Place of Entertainment (in wholesale conversion of an existing building only) Place of Recreation, Sports or Culture ***(not elsewhere specified)*** Private Club 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 (in wholesale conversion of an existing building only) 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 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:
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.

Remarks

(a) ***On land designated "Industrial" at Planning Areas 4 and 30,*** ~~No~~ 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 5.0, and a maximum building height of 25 metres or ***the plot ratio and*** the height of the existing building, whichever is the greater.

(b) On land designated "Industrial" at Planning Areas 25 and 26, 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 5.0, and a maximum building height of 65 metres (excluding basements) or the plot ratio and the height of the existing building, whichever is the greater.

(c) In determining the maximum plot ratio for the purposes of paragraph (b) above, any floor space that is constructed or intended for use solely as public vehicle park, as required by the Government, may be disregarded.

(d) In determining the maximum plot ratio for the purposes of paragraphs (a) and (b) 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) Where the permitted plot ratio as defined in Building (Planning) Regulations is permitted to be exceeded in circumstances as set out in Regulation 22(1) or (2) of the said Regulations, the plot ratio for the building on land to which paragraphs (a) and (b) applies may be increased by the additional plot ratio by which the permitted plot ratio is permitted to be exceeded under and in accordance with the said Regulation 22(1) or (2), notwithstanding that the relevant maximum plot ratio specified in paragraphs (a) and (b) above may thereby be exceeded.

(f) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio and/or 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.

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 Quarantine Centre (in Government building only) Broadcasting, Television and/or Film Studio Eating Place (Canteen, Cooked Food Centre only) Educational Institution Exhibition or Convention Hall Field Study/Education/Visitor Centre Government Refuse Collection Point Government Use (not elsewhere specified) Hospital Institutional Use (not elsewhere specified) Library Market Place of Recreation, Sports or Culture Public Clinic Public Convenience Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Recyclable Collection Centre Religious Institution Research, Design and Development Centre Rural Committee/Village Office School Service Reservoir Social Welfare Facility Training Centre Wholesale Trade	Animal Boarding Establishment Animal Quarantine Centre (not elsewhere specified) Columbarium Correctional Institution Crematorium Driving School Eating Place (not elsewhere specified) Flat Funeral Facility Helicopter Landing Pad Holiday Camp Hotel House Off-course Betting Centre Office Petrol Filling Station Place of Entertainment Private Club Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation Refuse Disposal Installation (Refuse Transfer Station only) Residential Institution Sewage Treatment/Screening Plant Shop and Services Utility Installation for Private Project Zoo

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	Cable Car Route and Terminal Building
Barbecue Spot	Eating Place
Field Study/Education/Visitor Centre	Government Refuse Collection Point
Park and Garden	Government Use (not elsewhere specified)
Pavilion	Holiday Camp
Pedestrian Area	Place of Entertainment
Picnic Area	Place of Recreation, Sports or Culture
Playground/Playing Field	Private Club
Public Convenience	Public Transport Terminus or Station
Sitting Out Area	Public Utility Installation
Zoo	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.

OTHER SPECIFIED USES

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board

For "Transport Interchange with Commercial Uses Above" only

Eating Place
Educational Institution
Exhibition or Convention Hall
Government Use (not elsewhere specified)
Hotel
Library
Off-course Betting Centre
Office
Place of Entertainment
Private Club
Public Clinic
Public Convenience
Public Transport Terminus or Station
Public Utility Installation
Public Vehicle Park (excluding container vehicle)
Recyclable Collection Centre
School
Shop and Services
Utility Installation for Private Project

Ambulance Depot
Broadcasting, Television and/or Film Studio
Commercial Bathhouse/Massage Establishment
Flat
Government Refuse Collection Point
Petrol Filling Station
Place of Recreation, Sports or Culture
Religious Institution
Residential Institution

Planning Intention

This zone is primarily to provide land for a public transport interchange with commercial uses above.

(Please see next page)

OTHER SPECIFIED USES (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
For "~~Kowloon-Canton~~ Railway Station" only	
~~Kowloon-Canton~~ Railway Station	Government Use (not elsewhere specified) Public Utility Installation Utility Installation for Private Project

Planning Intention

This zone is primarily to provide land for ~~Kowloon-Canton~~ Railway Station.

For All Other Sites (Not Listed Above)

As Specified on the Plan	Government Use (not elsewhere specified) Public Utility Installation Utility Installation for Private Project

Planning Intention

This zone is primarily to provide/reserve land for specific purposes and uses.

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 Barbecue Spot Government Use (Police Reporting Centre only) Nature Reserve Nature Trail On-Farm Domestic Structure Picnic Area Public Convenience Tent Camping Ground Wild Animals Protection Area	Animal Boarding Establishment Broadcasting, Television and/or Film Studio Burial Ground Cable Car Route and Terminal Building Columbarium (within a Religious Institution or extension of existing Columbarium only) Crematorium (within a Religious Institution or extension of existing Crematorium only) Field Study/Education/Visitor Centre Firing Range Flat Golf Course Government Refuse Collection Point Government Use (not elsewhere specified) Helicopter Landing Pad Holiday Camp House 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

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.

Annex D

~~APPROVED~~ *DRAFT* FANLING/SHEUNG SHUI OUTLINE ZONING PLAN NO. S/FSS/20*A*

EXPLANATORY STATEMENT

~~Approved~~ *Draft* Fanling/Sheung Shui Outline Zoning Plan No. S/FSS/20*A*

Explanatory Statement

CONTENTS Page

~~APPROVED~~ *DRAFT* FANLING/SHEUNG SHUI OUTLINE ZONING PLAN NO. S/FSS/20*A*

(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~~ ***draft*** Fanling/Sheung Shui Outline Zoning Plan (OZP) No. S/FSS/20***A***. 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 On 8 July 1986, the then Secretary for Lands and Works, under the power delegated by the then Governor, directed the Board under section 3 of the Town Planning Ordinance (the Ordinance) to prepare an OZP for Fanling/Sheung Shui area.

2.2 On 23 October 1987, the draft Fanling/Sheung Shui OZP No. S/FSS/1 was exhibited for public inspection under section 5 of the Ordinance. The OZP was subsequently amended several times and exhibited for public inspection under section 7 of the Ordinance.

2.3 On 22 June 1999, the Chief Executive in Council (CE in C), under section 9(1)(a) of the Ordinance, approved the draft Fanling/Sheung Shui OZP, which was subsequently renumbered as S/FSS/8. On 10 April 2001, the CE in C referred the approved OZP to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The OZP was subsequently amended and exhibited for public inspection under section 5 of the Ordinance.

2.4 On 22 October 2002, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Fanling/Sheung Shui OZP, which was subsequently renumbered as S/FSS/10. On 8 July 2003, the CE in C referred the approved OZP to the Board for amendment under section 12(1)(b)(ii) of the Ordinance.

2.5 On 31 October 2003, the draft Fanling/Sheung Shui OZP No. S/FSS/11 was exhibited for public inspection under section 5 of the Ordinance. During the exhibition period, no objection was received.

2.6 On 5 October 2004, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Fanling/Sheung Shui OZP, which was subsequently renumbered as S/FSS/12. On 15 October 2004, the approved Fanling/Sheung Shui OZP No. S/FSS/12 was exhibited for public inspection under section 9(5) of the Ordinance.

2.7 On 3 January 2006, the CE in C referred the approved Fanling/Sheung Shui OZP No. S/FSS/12 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance.

2.8 On 31 March 2006, the draft Fanling/Sheung Shui OZP No. S/FSS/13 was exhibited for public inspection under section 5 of the Ordinance. During the two-month exhibition period, no representation was received.

2.9 On 27 March 2007, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Fanling/Sheung Shui OZP, which was subsequently renumbered as S/FSS/14. On 2 November 2010, the CE in C referred the approved Fanling/Sheung Shui OZP No. S/FSS/14 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance.

2.10 On 30 June 2011, the draft Fanling/Sheung Shui OZP No. S/FSS/15, was exhibited for public inspection under section 5 of the Ordinance. One valid representation was received during the two-month exhibition period. The representation was noted by the Board on 3 February 2012.

2.11 On 5 June 2012, the CE in C under section 9(1)(a) of the Ordinance, approved the draft Fanling/Sheung Shui OZP, which was subsequently re-numbered as S/FSS/16. ~~On 15 June 2012, the approved Fanling/Sheung Shui OZP No. S/FSS/16 was exhibited for public inspection under section 9(5) of the Ordinance.~~

~~2.12~~ On 8 January 2013, the CE in C referred the approved Fanling/Sheung Shui OZP No. S/FSS/16 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. ***The OZP was subsequently amended once and exhibited under section 5 of the Ordinance.***

~~2.13 On 25 January 2013, the draft Fanling/Sheung Shui OZP No. S/FSS/17 incorporating amendments mainly to rezone two sites in Planning Area 27 and Planning Area 49 to "Residential (Group A)1" ("R(A)1") and "Residential (Group A)2" ("R(A)2") respectively to facilitate public rental housing developments, was exhibited for public inspection under section 5 of the Ordinance. During the two-month exhibition period, a total of four representations were received. On 5 April 2013, the Board published the representations for three weeks for public comments and two comments were received. After giving consideration to the representations and comment on 28 June 2013, the Board decided not to propose any amendment to the draft OZP to meet the representations.~~

2.1~~4~~2 On 10 September 2013, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Fanling/Sheung Shui OZP, which was subsequently renumbered as S/FSS/18. ~~On 27 September 2013, the approved Fanling/Sheung Shui OZP No. S/FSS/18 was exhibited for public inspection under section 9(5) of the Ordinance.~~

~~2.15~~ On 5 November 2013, the CE in C, under section 12(1)(b)(ii) of the Ordinance, referred the approved OZP to the Board for amendment. ~~The reference back of the approved OZP was notified in the Gazette on 15 November 2013 under section 12(2) of the Ordinance.~~***The OZP was subsequently amended once and exhibited under section 5 of the Ordinance.***

~~2.16 On 20 December 2013, the draft Fanling/Sheung Shui OZP No. S/FSS/19 was exhibited for public inspection under section 5 of the Ordinance. The main amendments on the Plan included the excision of the northern and north-eastern parts of the planning scheme area and two strips of land along Shek Sheung River, and incorporation of two strips of land along Sheung Yue River and Shek Sheung River into the draft Fanling/Sheung Shui OZP so as to reflect the boundaries of the Fanling North and Kwu Tung North New Development Areas (NDAs). During the exhibition period, a total of six representations were received. On 15 April 2014, the Board published the representations for three weeks for public comments and no comment was~~

~~received.~~

~~2.17 On 25 September 2014, the Chief Executive, under section 8(2) of the Ordinance, agreed to extend the statutory time limit for the Board to submit the draft OZP to the CE in C for approval for a period of six months until 20 May 2015.~~

~~2.18 On 9 January 2015, the Board considered the representations and agreed to defer the decisions on the representation to the OZP such that the decisions on all representations in respect of the OZPs relating to the Kwu Tung North and Fanling North NDAs could be made together. On 28 April 2015, the Board decided not to propose any amendment to the draft OZP to meet the representations under section 6B(8) of the Ordinance.~~

2.1~~5~~3 On 16 June 2015, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Fanling/Sheung Shui OZP, which was subsequently renumbered as S/FSS/20. On 19 June 2015, the approved Fanling/Sheung Shui OZP No. S/FSS/20 ~~(the Plan)~~ was exhibited for public inspection under section 9(5) of the Ordinance.

2.14 On 8 September 2015, the CE in C, under section 12(1)(b)(ii) of the Ordinance, referred the approved Fanling/Sheung Shui OZP to the Board for amendment. The reference back of the OZP was notified in the Gazette on 25 September 2015 under section 12(2) of the Ordinance.

2.15 On xxxx 2016, the draft Fanling/Sheung Shui OZP No. S/FSS/21 (the Plan) was exhibited for public inspection under section 5 of the Ordinance. The main amendments on the Plan included (i) the rezoning of a site at Fanling/Sheung Shui Planning Area 48 mainly zoned "Industrial" ("I") with a minor portion falling within "Green Belt" ("GB") zone to "Residential (Group A)3" ("R(A)3") zone to facilitate a public housing development, and "Government, Institution or Community" ("G/IC") zones for schools and other Government uses; and (ii) revision to building height restriction from 25m to 65m (excluding basements) in On Lok Tsuen (Planning Areas 25 and 26).

3. OBJECT OF THE PLAN

3.1 The object of the Plan is to indicate the broad land use zones and major road network for the Fanling/Sheung Shui New Town so that development and redevelopment of land within the New Town 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 planning control only. It is a small-scale plan and the road alignments and boundaries between the land use zones may be subject to minor alterations as detailed planning proceeds.

3.3 Since the Plan is to show broad land use zonings, there would be situations in which 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 calculation. Development within residential zones should be restricted to building lots carrying development right in order to maintain the character and amenity of the Fanling/Sheung Shui area and not to overload the road network in this

area.

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 Planning Scheme 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) covered by the Plan is approximately 667 hectares. It generally coincides with the existing area for the Fanling/Sheung Shui New Town. The boundary of the Area is shown by a heavy broken line on the Plan.

5.2 The New Town is located in the river plains associated with Rivers Ng Tung (Indus), Shek Sheung (Sutlej), Sheung Yue (Beas) and Ma Wat. The main features delineating the New Town boundary are Tin Ping Shan and Ma Sik Road to the north, Ma Wat River to the east and the foothills of Wo Hop Shek Cemetery and golf course to the south and west.

5.3 The Area includes several large traditional villages, notably Sheung Shui Heung and Fanling Wai, and the two existing market towns of Shek Wu Hui and Luen Wo Hui. Some public housing estates and private residential developments have been developed around these market towns.

6. POPULATION

According to the 2011 Census, the total population of the Area was about 254,300 persons. It is expected that the total planned population of the Area would be about ~~326,000~~ ***290,300*** persons.

7. LAND USE ZONINGS

7.1 "Comprehensive Development Area" ("CDA") : Total Area 3.16 ha

7.1.1 The planning intention of this zone is for comprehensive development/redevelopment of the area for residential use with the provision of 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.

7.1.2 A site located in the western periphery of Fanling/Sheung Shui New Town in Planning Area 35 is designated as "CDA", within which any development or redevelopment proposals will be subject to a

maximum plot ratio of 0.8, a maximum site coverage of 27% and a maximum building height of 3 storeys over one-storey carport.

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

7.1.4 Any development proposal in the zone requires the approval of the Board by way of a planning application under section 16 of the Ordinance. A Master Layout Plan (MLP) should be submitted in accordance with the requirements as specified in the Notes of the Plan for the approval of the Board under section 4A(2) of the Ordinance. A copy of the approved MLP will be made available in the Land Registry for public inspection pursuant to section 4A(3) of the Ordinance.

7.1.5 By requiring submission of MLP for approval of the Board, it allows the Board to exercise appropriate planning control on the design, layout and provision of facilities of the future development within this zone.

7.1.6 The "CDA" site will share a common ingress/egress point with the adjoining low-rise, low-density residential development.

7.2 "Commercial/Residential" ("C/R") : Total Area 22.07 ha

7.2.1 The planning intention of this zone is intended primarily for commercial and/or residential development. Commercial, residential and mixed commercial/residential uses are always permitted.

7.2.2 The existing market towns of Shek Wu Hui and Luen Wo Hui are zoned "C/R". This implies that sites may be developed for either residential or commercial uses, or with purpose-designed buildings containing both commercial and residential accommodation.

7.2.3 Except for the sub-areas of this zone, i.e. "C/R(1)", "C/R(2)" and "C/R(3)", for sites with an area of less than 340m^2, only buildings of up to 20m in height with a maximum domestic plot ratio of 3.9 or a maximum non-domestic plot ratio of 6.7 will be permitted. In order to encourage the amalgamation of sites for more comprehensive development, the height limit has been relaxed to 81m with a maximum domestic plot ratio of 5.0 or a maximum non-domestic plot ratio of 9.5 for sites of 340m^2 or greater.

7.2.4 Three sub-areas to the north-east of Luen Wo Hui in Planning Area 19 are under this zone, namely "C/R(1)", "C/R(2)" and "C/R(3)". For "C/R(1)", development is subject to a maximum building height of 135 mPD and a maximum domestic plot ratio of 5.0 or a maximum non-domestic plot ratio of 9.5. For "C/R(2)", development is subject to a maximum building height of 135 mPD, a maximum domestic gross floor area (GFA) of 35,292m^2 and a maximum non-domestic GFA of 48,848m^2, of the latter, not less than 27,277m^2 for Government uses. For "C/R(3)", development is subject to a maximum building height of 123 mPD and a maximum domestic plot ratio of 5.0 or a maximum non-domestic plot ratio of 9.5.

7.2.5 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio,

GFA and building height restrictions stated above may be considered by the Board through the planning permission system. Each proposal will be considered on the individual planning merits.

7.3 "Residential (Group A)" ("R(A)") : Total Area ~~110.68 ha~~ ***114.19 ha***

7.3.1 The planning intention of this zone is 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.

7.3.2 The "R(A)" zone includes sites for private residential developments in proximity to the two existing market towns, ~~Kowloon-Canton~~***Mass Transit*** Railway (~~KCR~~***MTR***) ***Sheung Shui and*** Fanling Station***s*** as well as existing and proposed public housing estates, home ownership schemes and high-density private housing schemes. A range of compatible non-residential uses including a number of commercial uses on the lowest three floors of the buildings are always permitted within this zone.

7.3.3 This zoning includes ~~two~~ ***three*** sub-areas which are subject to the following development restrictions:

"Residential (Group A)1" ("R(A)1") : Total Area 1.24 ha

(a) The planned public housing development at Choi Yuen Road in Planning Area 27 is under this zoning. Development/redevelopment within this zoning is subject to a maximum total GFA of 69,500m^2 and a building height restriction as shown on the Plan, or the GFA and height of the existing building, whichever is the greater. The building height restriction stipulated on the Plan is the maximum permitted height. Staggered building heights ranging from 24 to 32 storeys (including podium levels) should be adopted to create a stepped height profile.

(b) Suitable provision has been incorporated in the Notes for the reprovisioning of an existing public car park on site as part of the proposed development as required by the Transport Department.

"Residential (Group A)2" ("R(A)2") : Total Area 0.82 ha

(c) The planned public housing development to the south of Yung Shing Court in Planning Area 49 is under this zoning. Development/redevelopment within this zoning is subject to a maximum total GFA of 38,500m^2 and a building height restriction as shown on the Plan, or the GFA and height of the existing building, whichever is the greater. A landscape area as a non-building transition zone would be provided at the southwestern portion as specified in the development concept plan in the Planning Brief for the proposed development.

"Residential (Group A)3" ("R(A)3"): Total Area 3.50 ha

(d) The planned public housing development in Planning Area 48 is under this zoning. Development/redevelopment within this zoning is subject to a maximum total GFA of 178,100 m^2 and

a building height restriction as shown on the Plan, or the GFA and height of existing building, whichever is the greater. While the building height restriction stipulated on the Plan is the maximum permitted height, a discernible stepped height profile should be adopted to enhance the visual compatibility of the development with the surroundings.

7.3.4 Minor relaxation of the GFA and building height restrictions for the "R(A)1", ~~and~~ "R(A)2" ***and "R(A)3"*** zones may be considered by the Board on application under section 16 of the Town Planning Ordinance. Each application for minor relaxation of GFA/building height restrictions will be considered on its own merits.

7.4 "Residential (Group B)" ("R(B)") : Total Area 8.18 ha

7.4.1 The planning intention of this zone is primarily for medium-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Board.

7.4.2 Developments within the "R(B)" zone will be basically for residential use, although there is provision in the Notes for planning application to be made to the Board for a limited range of commercial or community type uses.

7.4.3 A site in Planning Area 31 is zoned "R(B)1" which is subject to a maximum plot ratio of 3.0 and a maximum building height of 20 storeys. Another site in Planning Area 36 is zoned "R(B)2". This site is subject to a maximum plot ratio of 5.0 and a maximum building height of 39 storeys above two-storey car-parking podium.

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

7.5 "Residential (Group C)" ("R(C)") : Total Area 22.92 ha

7.5.1 The planning intention of this zone is primarily for low-rise, low-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Board.

7.5.2 In terms of use, the "R(C)" zone is similar to but slightly more restrictive than the "R(B)" zone. However, its most notable feature is that the height of buildings, plot ratio and site coverage will be limited to ensure that developments are in character with the nearby traditional villages and attractive countryside areas, and that the road and utility service infrastructure are not over-loaded. Under this zone, there are three sub-areas, namely "R(C)1", "R(C)2" and "R(C)3". For "R(C)1", development is subject to a maximum plot ratio of 0.8, a maximum site coverage of 50% and a maximum height of 3 storeys over one-storey carpark or the height of the existing building, whichever is the greater whereas development within the "R(C)2" is restricted to a maximum plot ratio of 1.5 and a maximum height of 12 storeys including carpark. For "R(C)3" development, development is subject to a maximum GFA of 5,504m^2, a maximum site coverage of 24% and a maximum height of 4 storeys over one-storey carpark.

7.5.3 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 stated above may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.

7.6 "Village Type Development" ("V") : Total Area ~~83.26 ha~~ ***83.30 ha***

7.6.1 The planning intention of this zone is to designate both existing recognized villages and areas of land considered suitable for village expansion. 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.

7.6.2 In order to ensure that any future development or redevelopment within these villages would retain the village character, a maximum building height of 3 storeys (8.23m) or the height of the existing building, whichever is the greater, is imposed under this zoning.

7.6.3 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the building height restriction stated above may be considered by the Board through the planning permission system. Each proposal will be considered on the individual planning merits.

7.7 "Industrial" ("I") : Total Area ~~56.80 ha~~ ***51.57 ha***

7.7.1 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. However, general commercial and office uses, other than those permitted in the purpose-designed non-industrial portion on the lower floors of an existing building, will require planning permission from the Board.

7.7.2 ***This zone covers*** ~~industrial land~~ ***areas at*** ~~In addition to the existing industrial areas of~~ ***the north-western periphery of Sheung Shui (Planning Areas 4 and 30) and*** On Lok Tsuen (Planning Area***s*** 25 ***and 26***), ***Fanling***. ~~, other areas intended for industrial use are planned in the south-eastern (Planning Area 48) and north-western (Planning Area 30) periphery of the New Town.~~

7.7.3 ~~In view of the peripheral location of the sites and infrastructural limitations, development within this zone~~ ***Planning Areas 4 and 30*** is subject to a maximum plot ratio of 5.0, and a maximum building height of 25m or ***the plot ratio and*** height of the existing building, whichever is the greater.

7.7.4 On Lok Tsuen in Planning Areas 25 and 26 is close to the East Rail Fanling Station and a major employment node for Fanling/Sheung Shui New Town and the North District. Developments within On

Lok Tsuen are subject to a maximum plot ratio of 5 and a maximum building height of 65m (excluding basements) which is compatible with the overall townscape in the area allowing a height profile stepping down from Luen Wo Hui to the low-rise village settlement to its east.

7.***7.5*** ***There is a strong demand for public vehicle parks in On Lok Tsuen to serve the local need. In order to facilitate provision of industrial floorspace while ensuring adequate provision of public vehicle parking spaces for the area, in determining the maximum plot ratio for development in the On Lok Tsuen Industrial Area, any floor space that is constructed or intended for use solely as public vehicle parks, as required by the Government, may be disregarded in the calculation of GFA.***

7.7.6 ***Future development/redevelopment of sites within On Lok Tsuen is encouraged to adopt building design with reduced footprint to enhance the air and visual permeability and provide more opportunity for at-grade greening and better streetscape. Consideration would be given to providing non-building area (NBA)/setback/amenity area at appropriate location upon development/redevelopment. Such requirements would be shown in the On Lok Tsuen Layout Plan to guide the detailed district planning works and processing of development/redevelopment proposals in the Area. To better serve the workers and enhance vitality of the area, food outlets and local retail stores on the ground floor of industrial buildings along major pedestrian routes within On Lok Tsuen would be considered subject to approval of the Board.***

7.7.7 ***To provide incentive for development/redevelopment within this zone, minor relaxation of the plot ratio/building height restriction may be considered by the Board on application under section 16 of the Ordinance. Each application for minor relaxation of plot ratio/building height restriction will be considered on its individual merits. Relevant considerations including amalgamating smaller sites for achieving better layout design and local area improvement, providing better streetscape/good quality street level public space, innovative building design and other planning merits will be taken into account in considering such applications.***

7.8 "Government, Institution or Community" ("G/IC") : Total Area ~~101.72 ha~~ ***103.81 ha***

7.8.1 The planning intention of this zone is primarily for the provision of Government, institution and 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. Smaller sites have generally been absorbed into other compatible zones on the Plan and many facilities such as schools and social centres will be provided within public housing estates and other mixed-use developments and have not been shown separately on the Plan.

7.8.2 Some examples of major regional and district facilities are the Police Driving School of the Hong Kong Police Force in Planning Area 17, the Sheung Shui Divisional Police Station in Planning Area 25, the North District Hospital in Planning Area 34, the swimming pool complex adjacent to a large recreational open space in Planning Area 12, an indoor recreational centre, an integrated sports complex and a

swimming pool complex in Planning Area 6, the Government Offices and the Fanling Law Courts Building in Planning Area 11 and indoor recreational centres in Planning Areas 28 and 44.

7.8.3 Planned developments include a cross-district community cultural centre in Planning Area 11 ~~and~~, a community hall in Planning Area 44 ***and primary schools in Planning Area 48***.

7.9 "Open Space" ("O") : Total Area 44.23 ha

7.9.1 The planning intention of this zone is 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.

7.9.2 District open spaces within the New Town, including the North District Park in Planning Areas 7 and 9, are within this zoning. Smaller local open spaces will be provided as appropriate within other zones such as "Residential", "Industrial" and "Government, Institution or Community" as part of detailed planning.

7.10 "Other Specified Uses" ("OU") : Total Area 35.82 ha

7.10.1 The planning intention of this zone is primarily to provide/reserve land for specific purposes and uses.

7.10.2 Sites reserved for specific uses such as abattoir, sewage treatment works, bus depot, flood balancing reservoir, ~~KCR~~ ***MTR*** Stations and petrol filling stations are included in the "OU" zone, and the specified uses are indicated on the Plan. Of particular note is Landmark North, which is located near the ~~KCR~~ ***MTR*** Sheung Shui Station in Planning Area 7. It is a major transport interchange and public car park with commercial uses including shops and offices above.

7.11 "Undetermined" ("U") : Total Area 0.90 ha

This zone denotes land reserved to meet unforeseen requirements in the longer term and areas where further detailed planning study is required to identify the most appropriate use of land.

7.12 "Green Belt" ("GB") : Total Area ~~69.70 ha~~ ***68.78 ha***

7.12.1 Areas within the New Town boundary which are unsuitable for or are to be protected from encroachment by urban development are included within the "GB" zone. This includes areas with attractive landscape, such as peripheral hills and fung shui features. The "GB" zoning can facilitate conservation as well as provide opportunities for additional outdoor recreational outlets.

7.12.2 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. Any application for development will be considered by the Board on individual merits. For the general reference of the public, the Board has published a set of guidelines for 'Application for Development within "Green Belt" zone under section 16 of the Town Planning Ordinance'. The 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.

8. COMMUNICATIONS

8.1 Roads

8.1.1 Only the major road network required to serve the New Town is shown on the Plan. This basically consists of the trunk road, namely Fanling Highway and the district distributor roads. Only a few major local distributor roads are shown.

8.1.2 The trunk road caters for through traffic and provides a high standard road link to the other New Towns including Tai Po, Sha Tin and Yuen Long and the main urban areas of Kowloon and Hong Kong.

8.1.3 The district distributor roads provide access to and between various planning areas within the New Town. Three connections are provided between the trunk road and the distributor road system via grade-separated junctions.

8.2 Mass Transit Railway (MTR)

Fanling/Sheung Shui New Town is served by the MTR which provides an important transport link between the Fanling/Sheung Shui New Town and Kowloon as well as between the Hong Kong Special Administrative Region and the Mainland. There are two railway stations, Fanling and Sheung Shui, within the Area.

8.3 Others

8.3.1 Public transport interchange facilities are provided in Planning Areas 7 and 13 adjacent to the railway stations. A major bus terminus is also provided in Planning Area 19 and a district bus terminus is provided in Planning Area 45. A public transport interchange has been provided within the public housing estate in Planning Area 36. In addition, local bus and taxicab termini are also provided in some public housing estates and at strategic locations.

8.3.2 A comprehensive system of segregated cycle tracks and pedestrian routes has been substantially completed throughout Fanling and Sheung Shui.

9. UTILITY SERVICES

9.1 Water Supply

Supply of fresh water to the Area is provided by Sheung Shui Water Treatment Works via Table Hill, Tong Hang and Kwu Tung Fresh Water Service Reservoirs. A new Ping Che Fresh Water Service Reservoir has also been commissioned. Currently, temporary mains fresh water for flushing is provided to the Area as supply of seawater flushing is not available.

9.2 Town Gas

Town gas supply is available in Fanling/Sheung Shui since completion of the gas production plant in Tai Po. The trunk main runs alongside the Fanling Highway.

9.3 Electricity

The Area is supplied with electricity and sites for electricity substations have been provided in detailed planning.

9.4 Sewage Treatment

The New Town is served by the sewage treatment works in Planning Area 2, together with trunk sewers and pumping stations in Planning Area 25. To cope with the new development, the upgrading of the sewage treatment works in Planning Area 2 from 80,000m^3/d to 93,000m^3/d has been completed. Besides, under the recommendations of the 'Review of the North District and Tolo Harbour Sewerage Master Plans', a revised Sewerage Master Plan is to be formulated for the provision of adequate sewage collection, treatment and disposal facilities for the Area and other parts of the North District up to 2016.

10. CULTURAL HERITAGE

There is one declared monument located within the Area, i.e. Liu Man Shek Tong (Ancestral Hall) in Sheung Shui. There are graded and proposed graded historic buildings within the Area. On 19 March 2009, the Antiquities Advisory Board (AAB) released the list of 1,444 historic buildings, in which some buildings within the Area have been given proposed gradings. Details of these historic buildings have been uploaded onto the website of the AAB at http://www.aab.gov.hk. A number of proposed gradings of historic buildings have been endorsed by AAB, which are remarked on the list of 1,444 historic buildings in AAB's website. The AAB also released a list of new items in addition to the list of 1,444 historic buildings. These items are subject to grading assessment by the AAB. Details of the list of 1,444 historic buildings and the new items have been uploaded onto the website of the AAB at http://www.aab.gov.hk. Prior consultation with the Antiquities and Monuments Office of the Leisure and Cultural Services Department should be made if any development, redevelopment or rezoning proposals might affect the above declared monument, historic buildings/structures, new items pending grading assessment and their/its immediate environs.

11. IMPLEMENTATION

11.1 Although existing uses non-conforming to the statutory zonings are tolerated, any material change of use and any other development/redevelopment must be always permitted in terms of the Plan or, if permission is required, in accordance with the permission granted by the Board. The Board has published a set of guidelines for the interpretation of existing use in the urban and new town areas. Any person who intends to claim an 'existing use right' should refer to the guidelines and will need to provide sufficient evidence to support his claim. The enforcement of the zonings mainly rests with the Buildings Department, the Lands Department and the various licensing authorities.

11.2 This Plan provides a broad land use framework within which more detailed non-statutory plans for the Area are prepared by the Planning Department. These detailed plans are used within the Government as the basis for public works planning and site reservation. Disposal of sites is undertaken by the Lands Department. Public works projects are co-ordinated by the Civil Engineering and Development Department in conjunction with the client departments and the works departments, such as the Architectural Services Department and the Highways Department. In the implementation of the Plan, the North District Council would be consulted as appropriate.

11.3 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 guidelines published by the Board. The outline development plans and 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.

TOWN PLANNING BOARD
~~JUNE 2015~~*JANUARY 2016*

Executive Summary

An Environmental Assessment Study has been conducted on a potential site at Fanling Area 48 to support the rezoning for public housing and school developments with respect to the Hong Kong Planning Standards and Guidelines (HKPSG). The subject site is located at the southwest of Fanling Highway and Tai Wo Service Road West, and east of Wo Hop Shek San Tsuen.

In process of building layout development for Scheme 48A, due consideration has been given to avoiding adverse noise impacts arising from the heavily trafficked Fanling Highway. Self-protecting building design has been adopted for the residential blocks fronting the Fanling Highway; while the other residential blocks behind have also been orientated to reduce the view angle to the road as far as practicable. Feasibility of installing additional at-source mitigation measures on Fanling Highway and Fanling Bypass under Northeast New Territories New Development Area (NENT-NDA) to protect the subject site has also been explored, but it was advised by CEDD that amendment to the scope including the extent and form of the noise mitigation measures under NENT-NDA would not be considered. Road traffic noise assessment indicates that without mitigation measures, the maximum noise level would be up to 73 dB(A) and the noise compliance rate is 83.0%.

In order to mitigate the adverse road traffic noise impacts, acoustic fins, fixed glazing and acoustic windows have been adopted. As advised by the Project Team, it is very unlikely that the adoption of both acoustic window and fixed glazing side window in the same unit could comply with the ventilation and prescribed window requirements and to be approved by ICU. This EAS for rezoning purpose has therefore presented the mitigated scenario based on this assumption. With implementation of the recommended mitigation measures, a minimum noise compliance rate of 90.9% could be achieved and the maximum noise level is 73dB(A). Nonetheless, subject to the findings of the indoor ventilation study to be carried out in next stage, if the ventilation and prescribed window requirements could be met for the flat unit with both acoustic window and fixed glazing side window and approved by ICU, HKHA commits to provide both measures to all the concerned flats to further improve the noise compliance rate. Once the findings of the indoor ventilation study are available, the proposed acoustic window and fixed glazing side window will be revisited; and other noise mitigation measures, such as acoustic fins at side window etc, should be considered exhaustively. A revised EAS report will be submitted for endorsement.

The kindergarten and social welfare facility would comply with the respective road traffic noise criteria for educational institution and domestic, office and other uses except diagnostic uses, respectively. Should there be sensitive uses for diagnostic such as physiotherapy room, sick bay etc., appropriate noise mitigation measures might be required to ensure the compliance of the more stringent criterion of 55dB(A). Upon receipt of the layout plan, assessment shall be revisited.

Although the Education Bureau plans to implement the primary school site to tie in with the proposed housing development, there are no confirmed programme and school layout plan available at this stage. For the purpose of this EAS, a “without school” scenario has been assumed for the noise assessments. A full detailed assessment study on the school site is required by EDB to assess the extent of impacts and mitigation measures during the detailed design stage of the study when layout plan and implementation programme is confirmed.

There are a number of local industries with fixed noise sources being operated at the northwest of the subject site. Two of them will be resumed to cater the land requirement for Tai Wo Service Road West realignment undertaken under NENT-NDA. Fixed noise impact assessment has been carried out and results indicate that the predicted noise levels at the representative receivers would comply with the criteria. No mitigation measure is therefore required.

The current scheme has allowed adequate setback distance from the major roads to meet the minimum requirement as stipulated in HKPSG and hence potential vehicular emission impact is not anticipated. During the detailed design stage, EDB should ensure the active and passive sensitive uses of the school development plan could satisfy the HKPSG requirements. Based on the chimney survey, a total of 9

chimneys at Wo Hop Shek Crematorium are identified within 500m of the subject site. Operation of the chimneys should be properly controlled by the SP license under the Air Pollution Control Ordinance. The nearest sensitive uses of the housing development site and the boundary of proposed primary school site are located at some 410-513m from the chimneys and can well satisfy the setback distance requirements as stipulated in HKPSG. Adverse chimney emission impact is therefore not anticipated.

A preliminary land contamination site appraisal has been conducted and some locations are identified with high land contamination potential. Recommendation for further studies including SI works has been made. Detailed land contamination assessment will be carried out by CEDD to determine the type and extent of contamination in the later stage.

It is concluded that there are no insurmountable environmental impacts on the subject site at Fanling Area 48 for public housing and school developments.

Visual Appraisal for Proposed Public Housing Development at Fanling Area 48

1. Site Particulars and Proposed Development

1.1 The subject site (about 3.5 ha; excluding the proposed public cul-de-sac) is mainly zoned "I" (about 2.7 ha) and with a minor portion at the south falling within "GB" zone (about 0.8 ha) on the prevailing Draft Fanling / Sheung Shui OZP no. S/FSS/19. The site's western part is mostly private land currently occupied by temporary workshops, warehouses and open storage uses while the eastern part consists of squatter settlements of Ho Ka Yuen mostly on government land. There is also a temporary maintenance depot of Highways Department at the northern boundary abutting Tai Wo Service Road West.

1.2 The subject site is located at the eastern fringe of the Fanling New Town. It is bounded by Tai Wo Service Road West and Fanling Highway in the north and the natural hillslope in the south, beyond which is the Wo Hop Shek Cemetery including crematorium and columbarium. To the immediate east are woodland and the rural settlement of Kau Lung Hang. To the west are the village settlements of Wo Hop Shek Village and Wo Hing Tsuen. High-rise clusters of the town centre development of Fanling New Town are located to the further west mainly around the MTR station and the southern / south-eastern peripheral area of Fanling New Town, such as Wah Ming Estate, Wah Sum Estate, Flora Plaza and Yung Shing Court. Please refer to **Drawing A** for details.

1.3 As agreed with Planning Department (PlanD), the site will be rezoned to an Residential (Group A) ("R(A)") zone for public housing development, which will be subject to a maximum total GFA of 178,100 m^2. Under such planning controls, total of 6 domestic blocks range from about 104 mPD (29 storeys) to 136 mPD (39 domestic storeys plus one podium storey) with about 4,060 flats could be built. Please refer to **Drawing B** for details.

2. Viewpoints (VPs)

2.1 As agreed with PlanD, the following four VPs from different directions and distances were selected (**Drawing A** refers). These VPs represent the views of pedestrian nodes which are accessible by the public and/or from key public open spaces:

VP 1	Fanling Hong Lok Park
VP 2	Crosswalk outside Wo Hing Playground
VP 3	Wo Hop Shek Crematorium
VP 4	On an existing bridge at Tai Wo Service Road East

2.2 Given that the line of sight from Tong Hang Service Reservoir to the subject site is blocked by existing trees / vegetation in between, we opine that the proposed public housing development would not induce adverse visual impact to the Reservoir. As such no detail assessment for the reservoir is conducted.

3. Visual Appraisal

Fanling Hong Lok Park (**Plan 1** refers)

3.1 The park represents a local vantage point in the area. Although it is relatively far away from the site (about 800m), the Fanling Hong Lok Park is one of the well-utilized open space in the vicinity. To ensure that the view for the park visitors would not be comprised, VA is conducted to assess the potential visual impact from the proposed public housing development.

3.2 As demonstrated by the photomontage, the view from the park towards the site is primarily shielded by existing trees. Direct sight to the proposed public housing development is not envisaged. As such the quality of the view from the users of the park would therefore not be affected.

Wo Hing Playground (**Plan 2** refers)

3.3 Most of the view from the crosswalk outside the Playground to the proposed public housing developments would mostly be screened off by existing trees and vegetation. Given that there is frequent traffic at the nearby road junction of this VP and the pedestrians who use the crosswalk would not stay stationary for long time, the proposed public housing development would not induce adverse visual impact to the users of the playground / the concerned crosswalk.

Wo Hop Shek Crematorium (**Plan 3** refers)

3.4 A view to Lung Shan is offered from VP3 at Wo Hop Shek Crematorium. The existing view from VP3 is mainly consisted of natural greenery and ridgeline against the open sky view. The existing developments at Fanling New Town and certain low rise village developments, which mainly adjoining the subject site's western boundary can also be seen from this VP. (Photo of the existing view at **Plan 3** refers).

3.5 The proposed development would unavoidably compromise such existing view in certain degree. Nevertheless, as demonstrated from the respective photomontage at **Plan 3**, dense clusters of existing trees and vegetation in between have partially

screened off the proposed public housing development. The building separation gaps between the building blocks (**Drawing B** refers) would make the proposed development more visually permeable, which would further reduce the visual impact. To address the juxtaposition of the proposed public housing development with the immediate low rise development, a stepped building height profile ascending from west to east would be adopted (**Drawing B** refers). Lastly, due consideration will be given to providing a landscape buffer of sufficient width along the western boundary at detailed design stage. As such we opine that the visual impact to VP3 is acceptable.

On an existing bridge at Tai Wo Service Road East (**Plan 4** refers)

3.6 A view to Fanling New Town is offered from VP4 at the bridge. The existing view from VP4 is dominated by natural greenery and open sky view with the buildings at the Fanling New Town as part of the backdrop (Photo of the existing view at **Plan 4** refers).

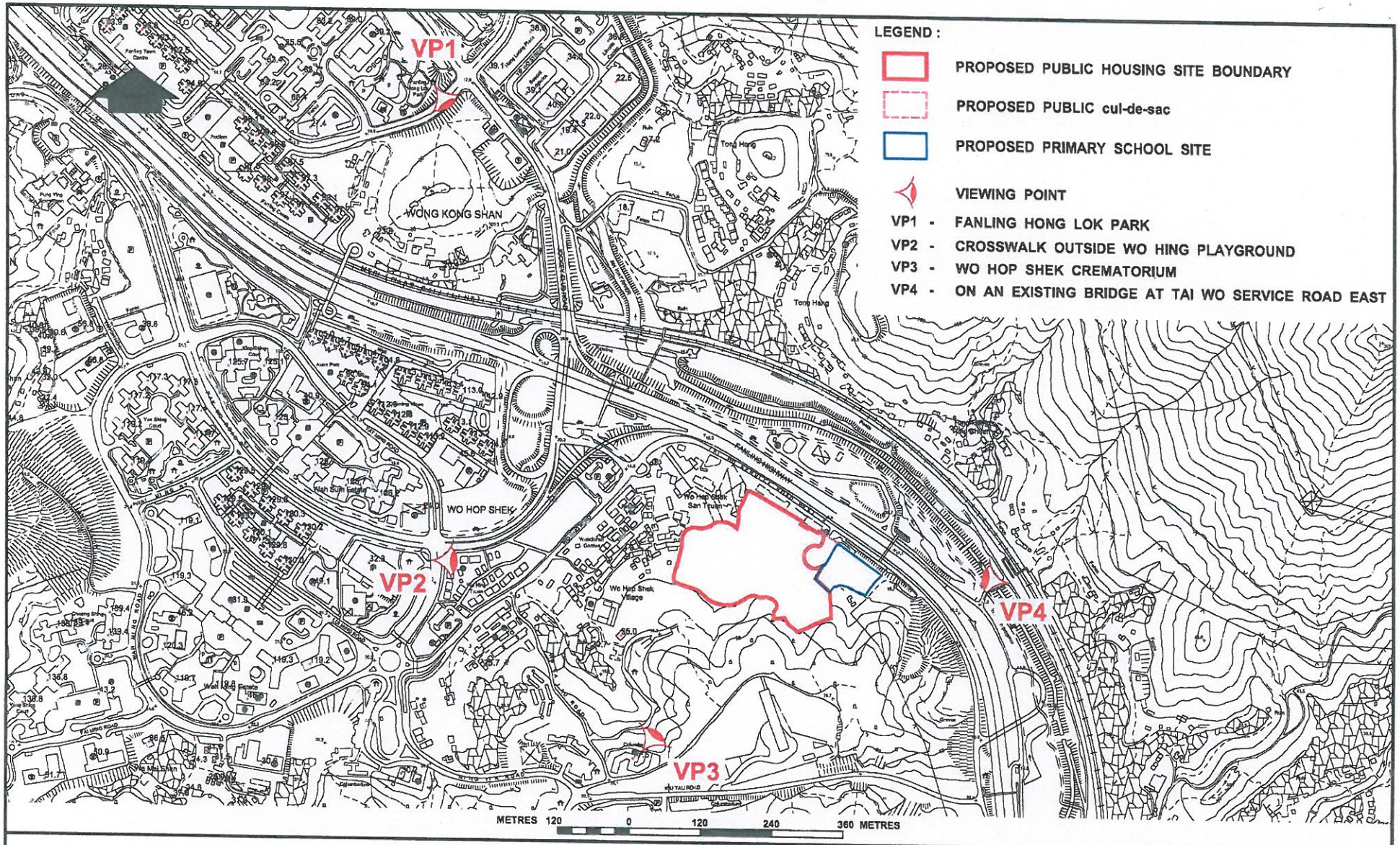
3.7 While the proposed public housing development would unavoidably compromise the existing view in certain degree, the proposed development somehow can fit into the view as being an extension of the Fanling New Town's development (respective Photomontage at **Plan 4** refers). Besides, travelers of the bridge usually would not staying stationary on the bridge for long time. To further mitigate the visual impact, a stepped building height profile ascending from north to south would be adopted (**Drawing B** refers). Due consideration will also be given to the design and treatment of the building (e.g. adopting façade color that would make the proposed buildings fit into the background environment, composition of different but similar façade color to break down the scale of the proposed buildings, or minor architectural features to minimize plain wall effect), especially the two single aspect blocks fronting Fanling Highway at detailed design stage. In view of all the above factors, we opine that the visual impact to VP4 is acceptable.

4. Conclusion

4.1 With further public housing developments extending to the east fringe of the established Fanling New Town, there would undeniably be some changes to the general townscape, and some degree of visual impact would seem inevitable. Nevertheless, disposition and design of the proposed public housing developments in this area would be sensitive to the surrounding environment. In order to reduce visual impact, landscaped buffer, building separation gaps, stepped building height profile, careful design and treatment of the buildings, etc, could be considered and they would help to

integrate the proposed public housing development to the neighborhood's context. Furthermore, as the existing use at the subject site are mainly industrial uses and squatter settlements, replacing the aforesaid uses with an organized and carefully designed public housing development would have improved the townscape.

4.2 Based on the above, it is concluded that the proposed public housing development will not cause unacceptable visual impact to the subject vicinity or create unacceptable adverse visual impact to the users of various local open spaces in the subject vicinity. Appropriate landscape / design measures at the detailed design stage could be considered to further enhance the visual quality of the proposed public housing development.



PUBLIC HOUSING SITE AT FANLING AREA 48 - PROPOSED VIEWING POINTS FOR VISUAL APPRAISAL

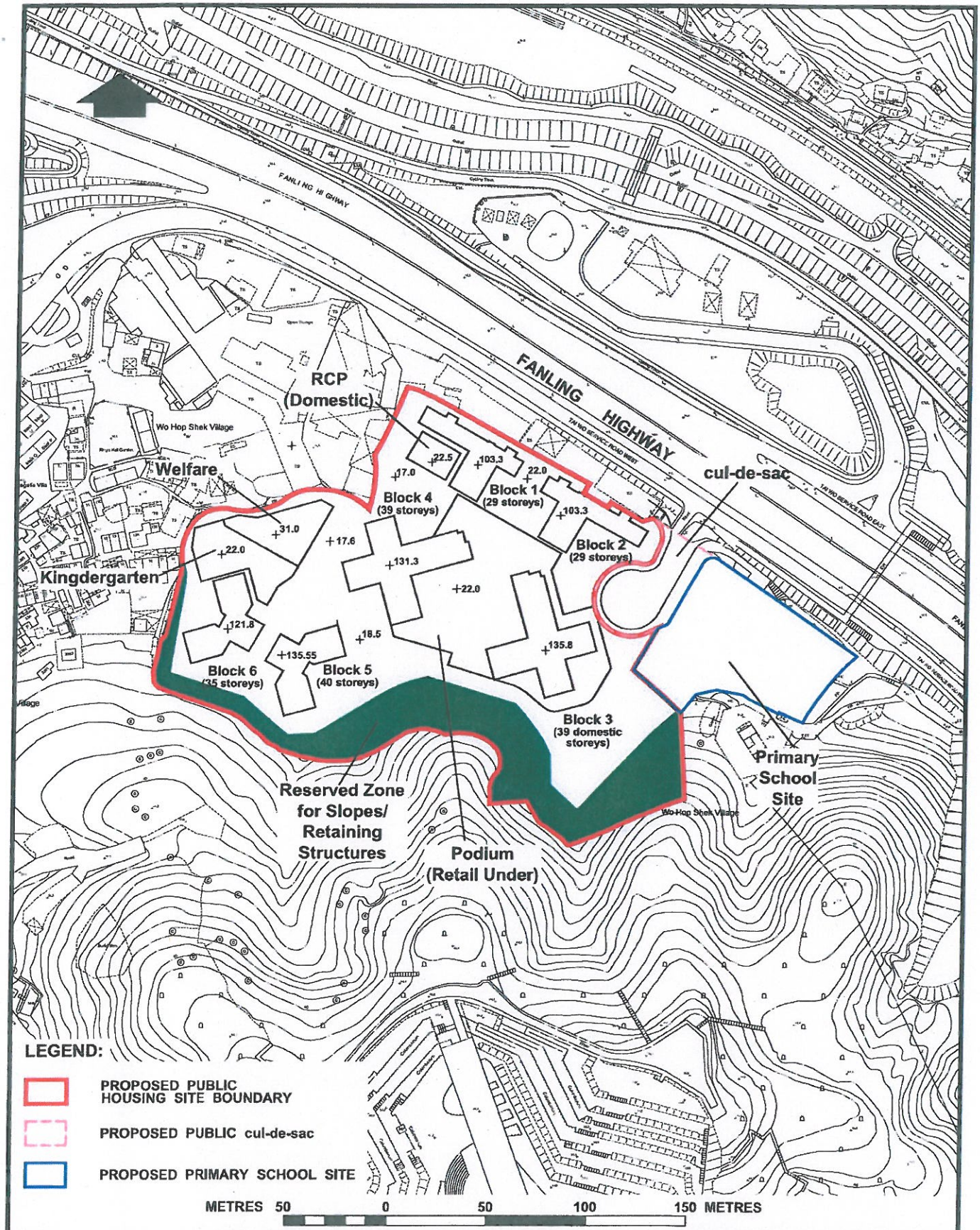
HOUSING DEPARTMENT
PLANNING SECTION

DRAWING A

DATE :
5. 6. 2015

BASE EXTRACTED FROM SHT. Nos. 3-SW-A, B, C & D

15_0627N_DrawingA



FANLING AREA 48
TENTATIVE LAYOUT
(MAY BE CHANGED SUBJECT TO DETAIL DESIGN)

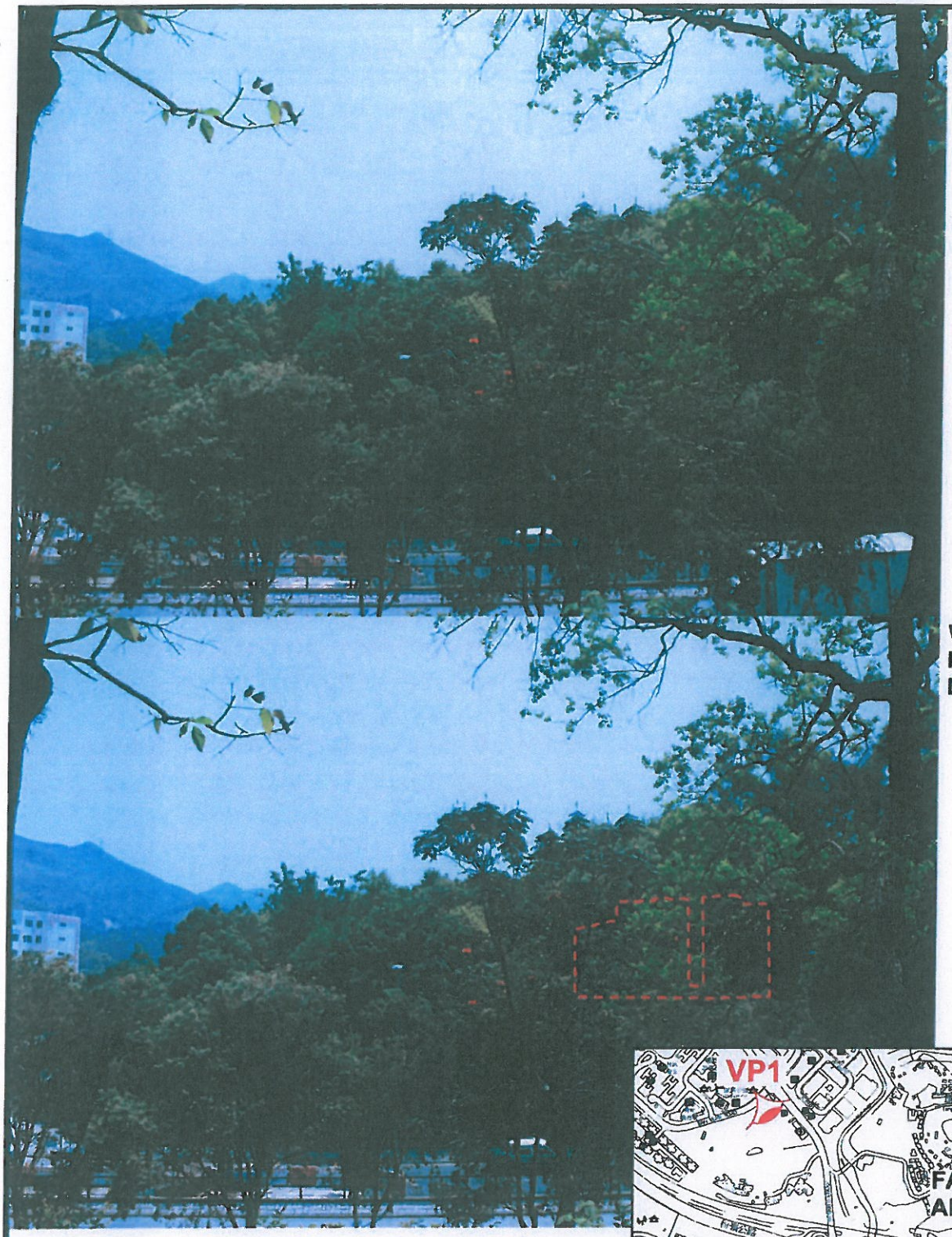
HOUSING DEPARTMENT
PLANNING SECTION

DRAWING B

DATE :
5. 6. 2015

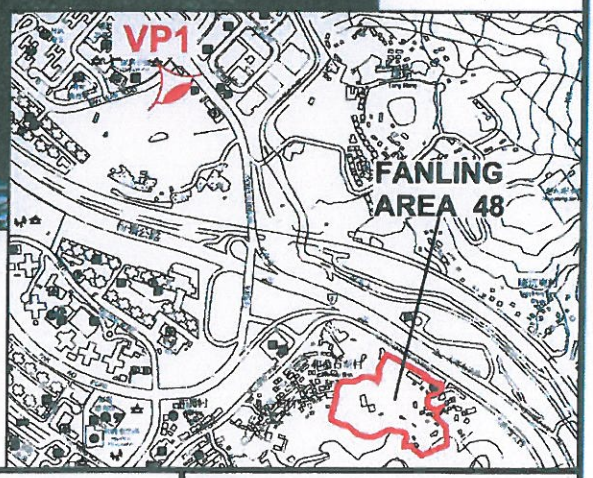
BASE EXTRACTED FROM SHT. Nos. 11-SW-13C & 18A

15_0627N_DrawingB



With Existing View

With Proposed Development



LEGEND:

Behind Vegetation

PHOTOMONTAGE AT VIEWING POINT VP1
(VIEW FROM FANLING HONG LOK PARK)

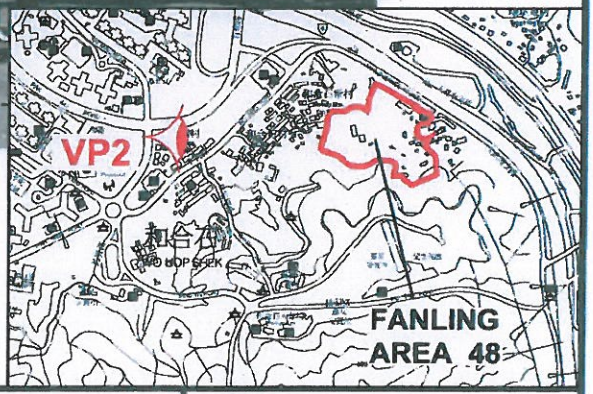
HOUSING DEPARTMENT
PLANNING SECTION

PLAN 1	DATE : 1. 6. 2015

15_0627N_vp1

With Existing View

With Proposed Development



PHOTOMONTAGE AT VIEWING POINT VP2
(VIEW FROM CROSSWALK OUTSIDE WO HING PLAYGROUND)

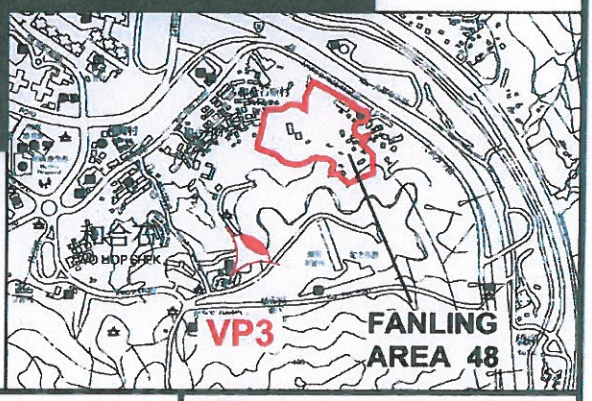
HOUSING DEPARTMENT
PLANNING SECTION

PLAN 2	DATE : 1. 6. 2015

15_0627N_vp2

With Existing View

With Proposed Development



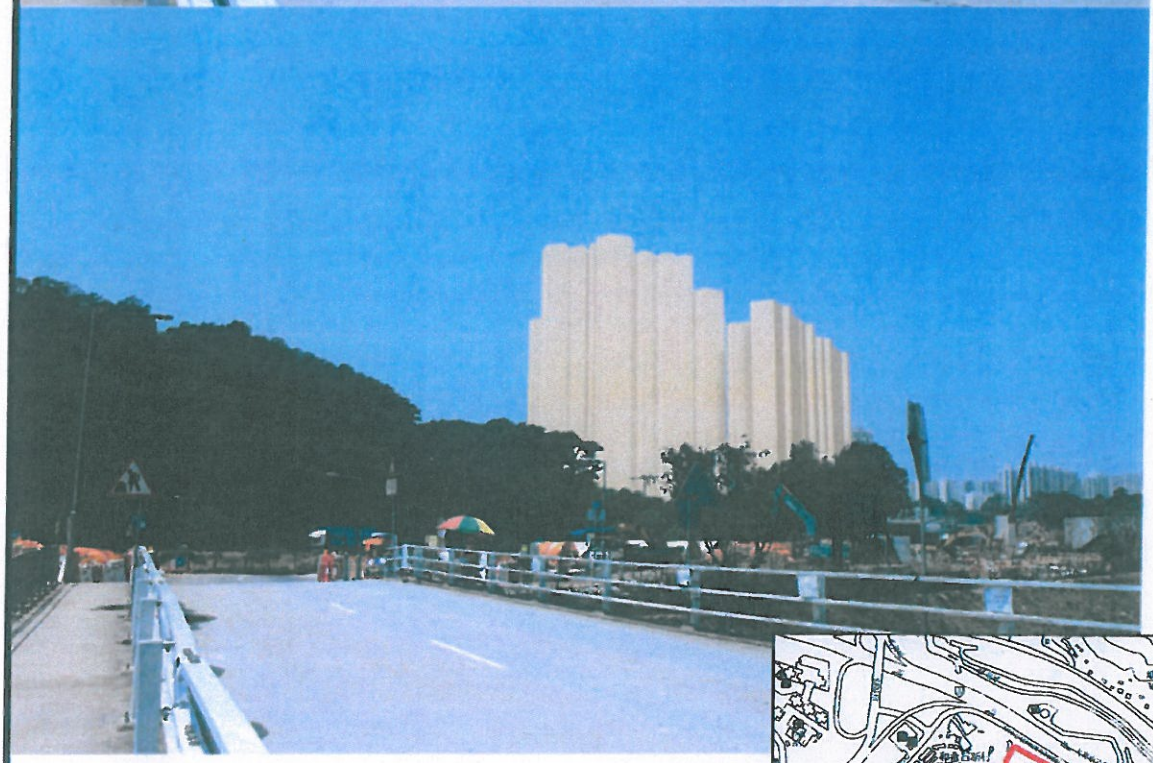
PHOTOMONTAGE AT VIEWING POINT VP3
(VIEW FROM WO HOP SHEK CREMATORIUM)

HOUSING DEPARTMENT
PLANNING SECTION

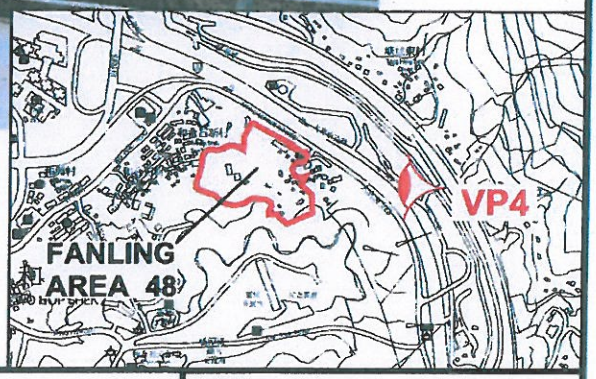
PLAN 3	DATE : 4. 6. 2015

15_0627N_vp3

With Existing View



With Proposed Development



PHOTOMONTAGE AT VIEWING POINT VP4

(VIEW FROM AN EXISTING BRIDGE AT TAI WO SERVICE ROAD EAST)

HOUSING DEPARTMENT
PLANNING SECTION

PLAN 4

DATE :
1. 6. 2015

15_0627N_vp4

Hong Kong Housing Authority

Proposed Public Rental Housing Development at Fanling Area 48, New Territories, Hong Kong

Air Ventilation Assessment - Expert Evaluation

Issue 1 rev.4 | 27 April 2015

Job number 226853-03

Ove Arup & Partners Hong Kong Ltd
Level 5 Festival Walk
80 Tat Chee Avenue
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Hong Kong
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ARUP

Hong Kong Housing Authority

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ARUP

Document Verification

ARUP

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Document title	Air Ventilation Assessment - Expert Evaluation	File reference
Document ref		

Revision	Date				
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		Name	various	Emma Leung	Sui-Hang Yan
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			Prepared by	Checked by	Approved by
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Issue 1 rev.4	27 Apr 2015	Filename	AVA_EE_Fanling48_v10.docx		
		Description	First Issue Revision 4		
			Prepared by	Checked by	Approved by
		Name	Javier Yip	Camby Se	Sui-Hang Yan
		Signature			

Fi

Contents

1 Introduction

1.1 Project Background

The Proposed Public Rental Housing Development at Fanling Area 48 (the Proposed Development) and some of its adjacent lands were identified to have rezoning potential in the "Area Assessment 2009 of Industrial Land in the Territory" conducted by the Planning Department (PlanD) previously. The aforesaid recommendation was also endorsed by the Town Planning Board (TPB) in September 2010. To take forward the recommendation, PlanD is going to propose Outline Zoning Plan (OZP) amendment to TPB to facilitate the Proposed Public Housing Development at the project site soon. This Air Ventilation Assessment (AVA) – Expert Evaluation is one of the technical assessments to support the concerned OZP amendment and no planning application is involved at this stage.

Ove Arup & Partners Hong Kong Ltd (Arup) was commissioned by the Hong Kong Housing Authority (HKHA) to conduct an Air Ventilation Assessment (AVA) – Expert Evaluation for the Proposed Development to support part of the respective OZP amendment, which is going to be proposed by PlanD to the TPB later.

1.2 Objective

The objective of this study is to evaluate the wind performance of the Development using the methodology of Air Ventilation Assessment, based on the "Housing Planning and Lands Bureau – Technical Circular No. 1/06, Environment, Transport and Works Bureau – Technical Circular No. 1/06" issued on 19th July 2006 (the Technical Circular) and "Technical Guide for Air Ventilation Assessment for Development in Hong Kong – Annex A" (the Technical Guide). This report presents the findings for Stage 1 AVA Study – Expert Evaluation.

1.3 Study Tasks

The major task of this study is to undergo an expert evaluation on the characteristics of the site wind available in the area of development and assessment of the wind performance under the existing developmental situation and the proposed building design in a qualitative way. The expert evaluation will cover the following tasks:

- To assess wind conditions,
- To analyse characteristics and performance of wind with site condition,
- To locate problematic areas,
- To identify merits and drawbacks of the present design features, and
- To advise mitigation measures where necessary.

2 Site Characteristics & Wind Condition

2.1 Site Characteristics

The Proposed Development is located in the Fanling area and it is surrounded by hilly terrains as shown in Figure 1. The hills are located in the east, south and west sides of the project site. This valley topography could help channel the prevailing winds across the site.

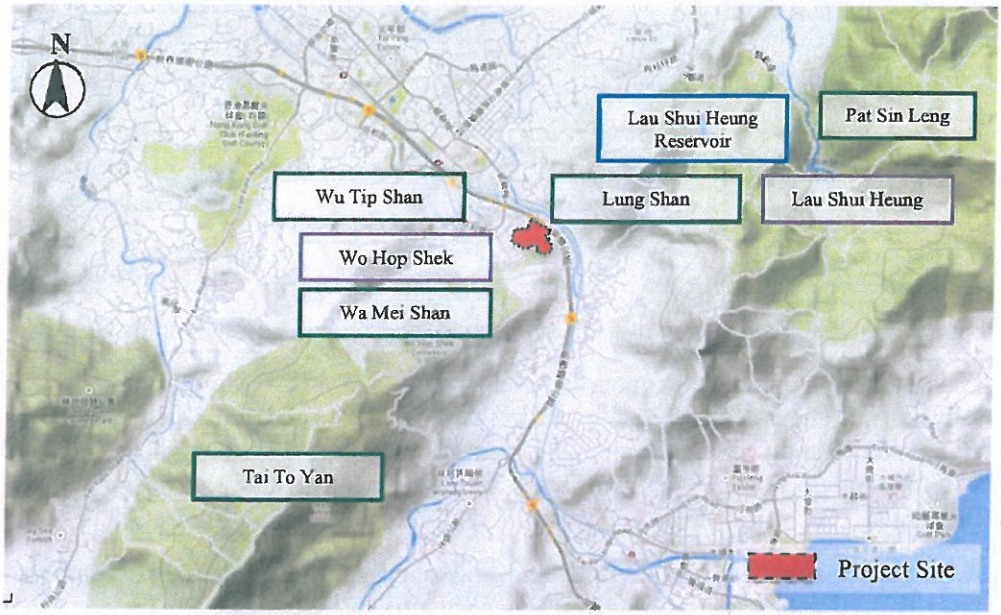


Figure 1 Valley topography of whole district of Fanling (Source: Google Maps)

On the regional basis as shown in Figure 1, the Proposed Development is located between Wo Hop Shek and Lau Shui Heung in Fanling to form part of the public housing master-project in Fanling New Town. It is enclosed by the Tai Wo Service Road West and Wo Hing Road to the northwest of the Development. Referring to in Figure 2, the subject vicinity is mainly zoned as 'Agriculture' (AGR)', 'Green Belt '(GB), 'Industrial' (I), 'Open Space'(O), 'Village Type Development' (V) and 'Other Specified Use' (OU) under the Draft Fanling/Sheung Shui OZP No. S/FSS/19 and Draft Lung Yeuk Tau and Kwan Tei South OZP No. S/NE-LYT/15 while the existing condition of the project site comprises low-rise villages and factories.

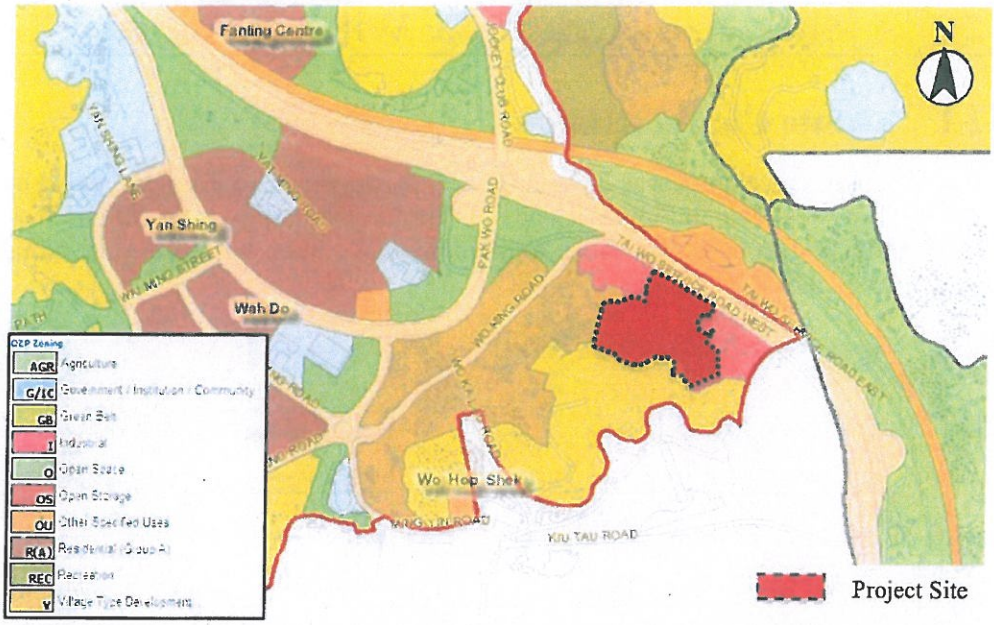


Figure 2 Outline Zoning Plan of Fanling/Sheung Shui (Source: Town Planning Board)

The southern side of the Proposed Development is Wo Hop Shek Cemetery with hilly terrain and lots of greenery while the low rise residential clusters, such as Wing's Villa and Cyber Domaine, are located at the north. Some high rise clusters (i.e. Dawning Views, Wah Sum Estate and Wah Ming Estate) are located at the western side. A simple topography of the region is indicated in Figure 3.

A strip of green belt, agricultural land and open space lies in the northeast-to-southwest direction, stretching from Lung Shan to Wa Mei Shan.

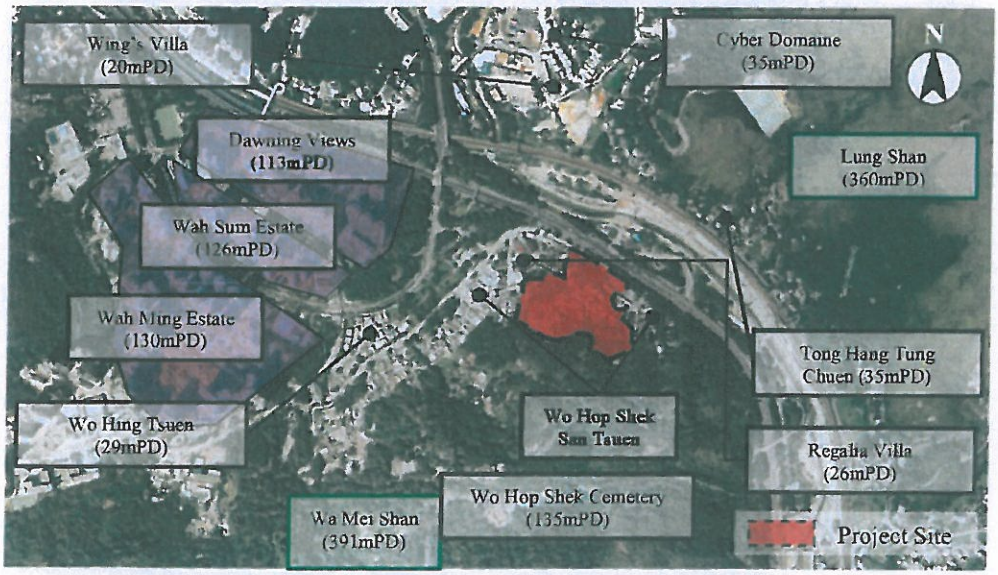


Figure 3 Location of the Project Site and its surrounding developments

2.2 Wind Data

In identifying the annual and summer prevailing wind directions suitable for the evaluation of this project location, three major sources of wind data are discussed for this Study Area, including measured data from the nearby Hong Kong Observatory (HKO) weather stations, simulated MM5 data and Wind Tunnel Data from expert evaluation for Fanling New Development Area.

2.2.1 Hong Kong Observatory Data (HKO)

There are 2 weather stations of the HKO identified close to the Project Site as shown in Figure 4.

From the HKO reports on Tai Po[1], the annual and summer wind roses measured are shown in Figure 5 and Figure 6. The measured data of the recent 15 years show that the annual prevailing wind directions are NE, ENE and E while the summer (June to August) prevailing ones are SE, WSW and W.

Reports from the other nearby Observatory station at Ta Kwu Ling[2] suggest that the annual prevailing wind directions are N, E and ESE while the summer prevailing ones are E, ESE and SE. The wind roses are shown in Figure 7 and Figure 8.

However, the data from the latter station are comparably of less value for reference in this case as the weather stations are located on the other side of Lung Shan / Pak Hok Shan, which are more susceptible to the E prevailing wind from the plain terrain in the east (i.e. Kong Yiu). This trend may not be so applicable to the Project Site due to the topographical difference.

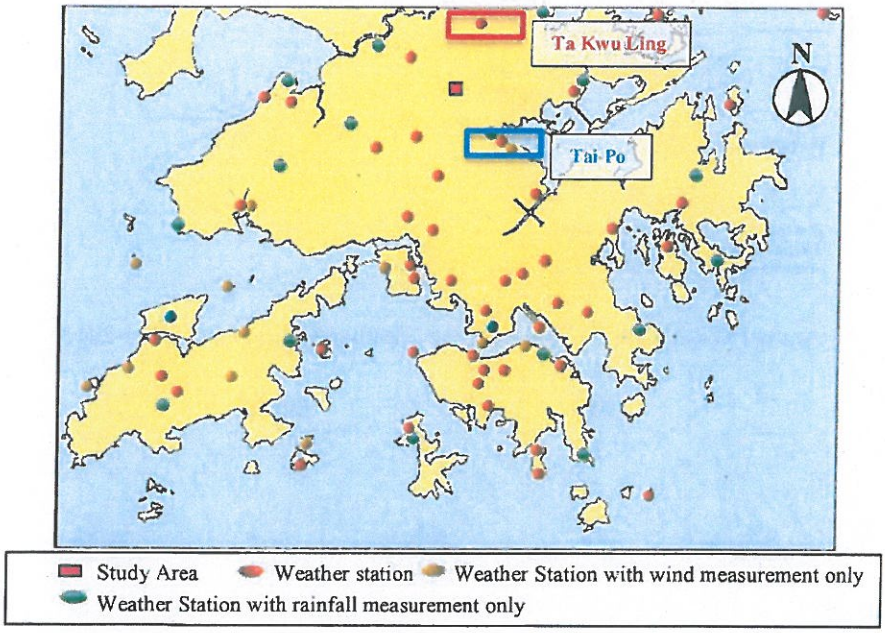


Figure 4 Observatory Weather Stations in Hong Kong

[1] http://www.weather.gov.hk/cis/region_climat/TP/TP_windrose_year_e.htm
[2] http://www.weather.gov.hk/cis/region_climat/TKL/TKL_windrose_year_e.htm

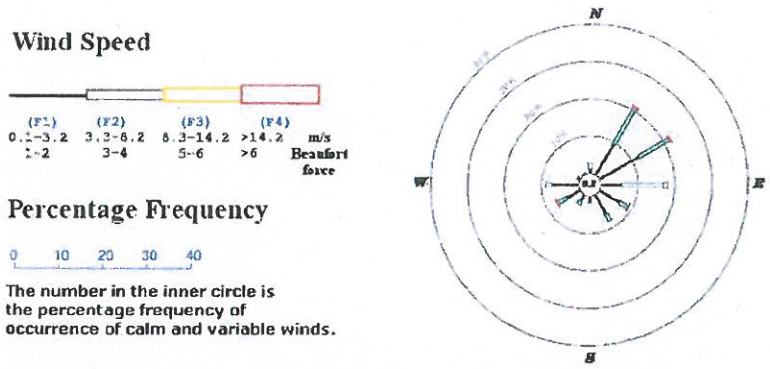


Figure 5 Annual Wind Rose of Tai Po Weather Station from 2000-2013

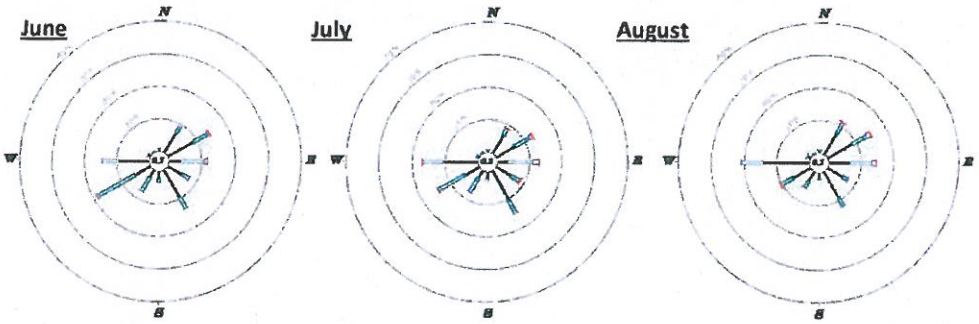


Figure 6 Summer (June to August) Wind Rose of Tai Po Weather Station from 2000-2013

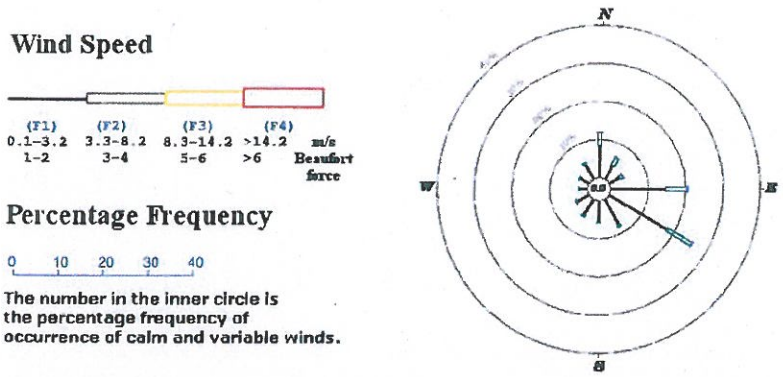


Figure 7 Annual Wind Rose of Ta Kwu Ling Weather Station from 1986-2013

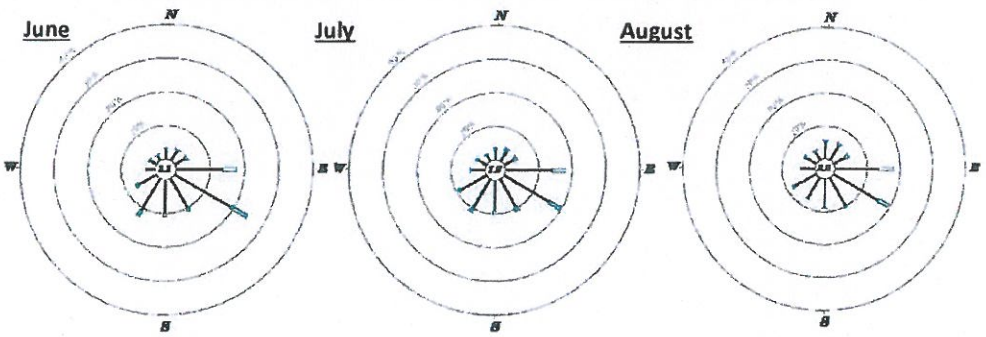


Figure 8 Summer (June to August) Wind Rose of Ta Kwu Ling Station from 1986-2013

2.2.2 MM5 Wind Data

The 5th-generation NCAR/Penn State Mesoscale Model (MM5) data quoted in Expert Evaluation for the Fanling Area[3] is used as the second reference for this study. According to Site Wind Availability Data for Hong Kong from the Planning Department, the wind availability data for the Proposed Development in Fanling district obtained from the MM5 simulation are shown in Figure 9. With reference to the Expert Evaluation for the Fanling Area, the annual prevailing winds are ENE and E winds.

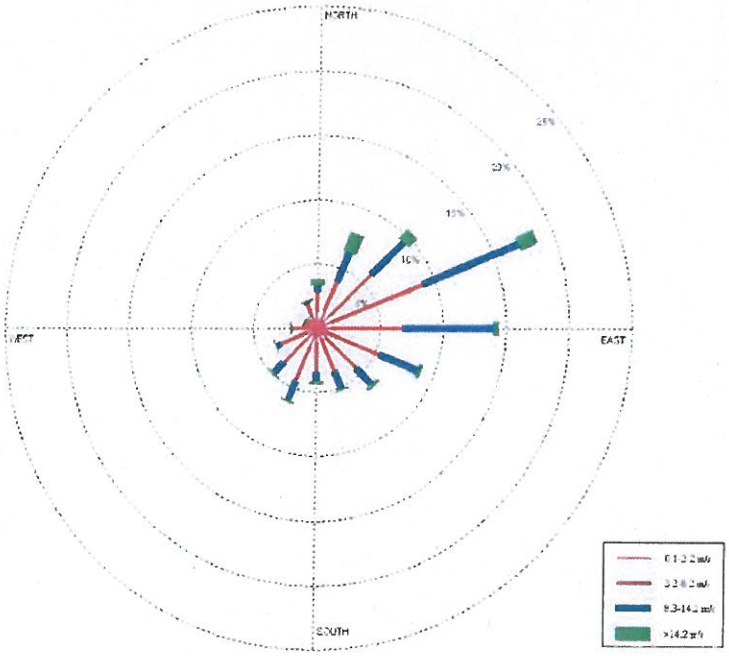


Figure 9 Wind rose (596m) for the Fanling District obtained from MM5 database at [25,38]

According to the Expert Evaluation final report on Tai Po Area[4] by the School of Architecture, the Chinese University of Hong Kong, the wind data simulated by the Hong Kong University of Science and Technology using the MM5 are considered one of the references for this study.

Location B, the closest to the Proposed Development (Figure 10), has E and ESE as the annual prevailing wind and E, ESE, SE and SSE as the summer prevailing ones. The annual and summer wind roses of the location B at 120m and 450m are extracted and illustrated in Figure 11 and Figure 12 respectively.

[3] http://www.pland.gov.hk/pland_en/misc/MM5/index.html
[4] *Cat. A1 – Term Consultancy for Expert Evaluation & Advisory Services on Air Ventilation Assessment (PLNQ 37 /2007): Tai Po Area*, 2014, School of Architecture, the Chinese University of Hong Kong, p.15-19

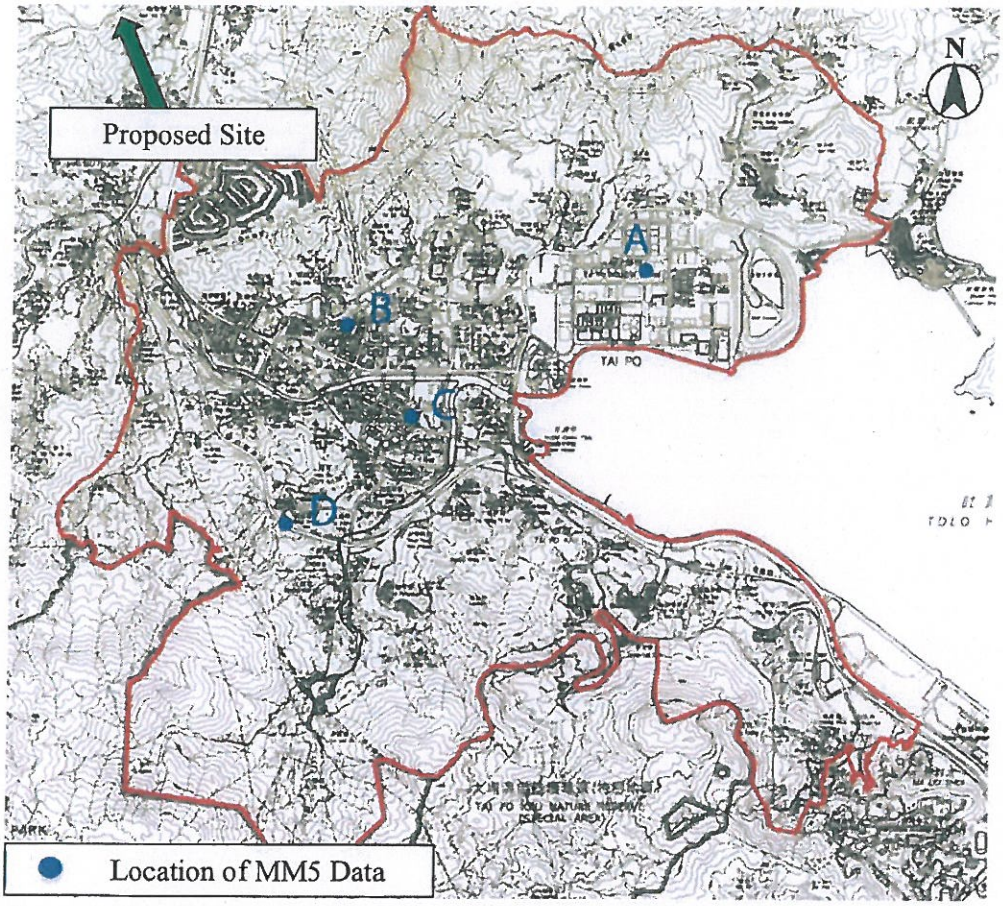


Figure 10 Location B for MM5 Data Simulation by the HKUST

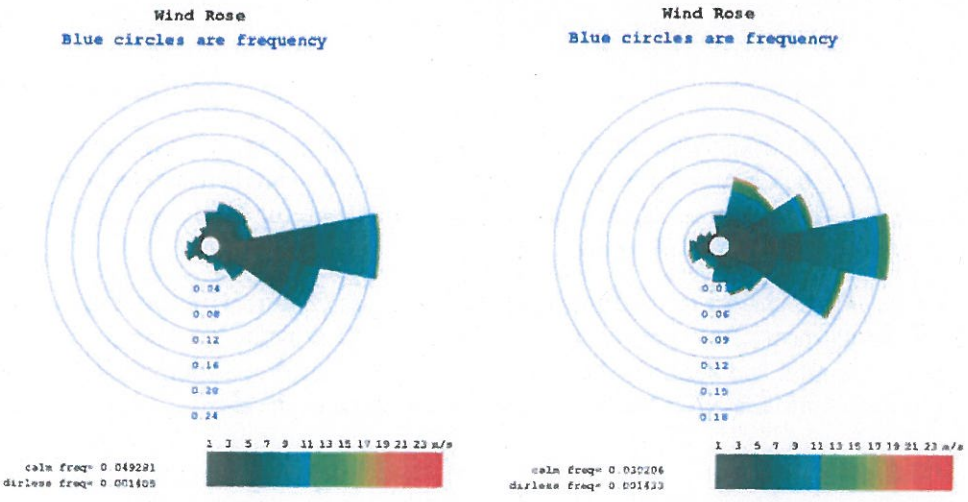


Figure 11 Annual MM5 Wind Roses at Location B (left: 120m & right: 450m)

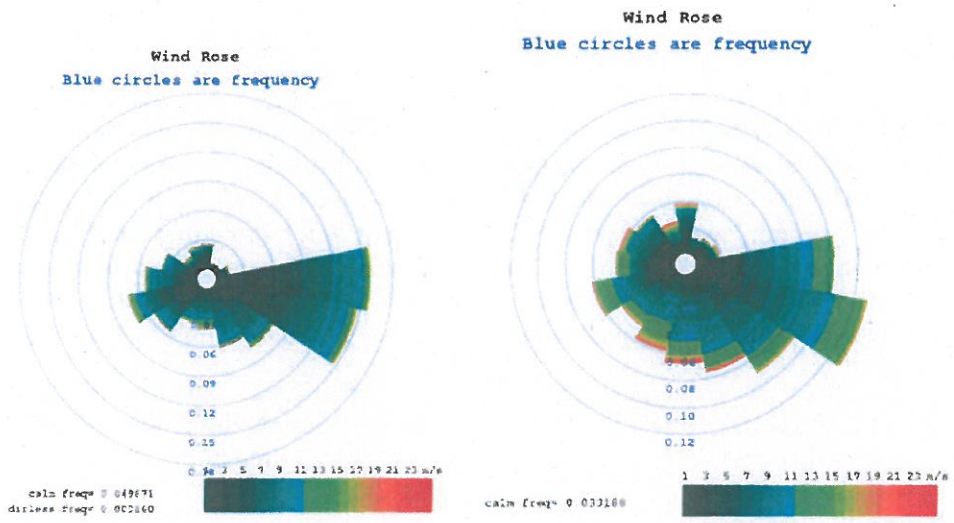


Figure 12 Summer MM5 Wind Roses at Location B (left: 120m & right: 450m)

2.2.3 Expert Evaluation for Fanling North New Development Area (FLN NDA)

The Wind Tunnel Test Data, which is classified as the data of Site Wind Availability, employed in the Air Ventilation Assessment Expert Evaluation Executive Summary for Fanling North (FLN)[5], which is situated at least 1.8km away from the Development, was conducted by the Civil Engineering and Development Department and Planning Department.

The annual prevailing wind directions from the Air Ventilation Assessment Expert Evaluation Executive Summary are N, ENE and E while the summer ones are E, S, SW. It should be noticed that the study area for the expert evaluation is closer to the project site where more land-breezes can come in from a narrow angle of southwest wind, especially in summer.

[5] *Air Ventilation Assessment Expert Evaluation Executive Summary for Fanling North (FLN):* Agreement No. CE61/2007(CE), North East New Territories New Development Areas, Planning and Engineering Study – Investigation, Civil Engineering and Development Department and Planning Department.

2.2.4 Summary of Site Wind Availability

The three previous sub-sections of analysed data are tabulated in Table 1. All data — with less focus on the data from the HKO Ta Kwu Ling as described in Section 2.2.1 — basically reflects similar annual prevailing wind directions which are **E, ENE and ESE**, whereas the summer prevailing wind directions varies from **E, ESE and SE**. The ESE wind is regarded as the major summer prevailing wind due to the open path along Fanling Highway (major breezeway) providing necessary air ventilation to the Development. On the other hand the N wind is less likely across the project site as the hills of Lung Shan / Pat Sin Leng are situated in the north. Figure 13 illustrates the annual and summer prevailing wind of the Development.

There is a breezeway along the site as shown in Figure 13 between the orange dotted lines. Sea breeze is unlikely to the Project Site because Fanling is located inner in the valley. However, land breeze from SSE and S is possible as it passes down the slope of Wa Mei Shan towards the Project Site.

Table 1 Comparison of All Scenarios of Prevailing Winds in Fanling

Prevailing Wind Direction	Annual	Summer
HKO (Tai Po)	NE / ENE / E	SE / WSW / W
HKO (Ta Kwu Ling)	E / ESE / N	E / ESE / SE
MM5 [25,38]	ENE / E	(N/A)
MM5 HKUST (Location B, EE study of Tai Po Area)	E / ESE	E / ESE / SE / SSE
Executive Summary (EE of Fanling North NDA)	N, ENE, E	E, S, SW
Applicable in Present Study	**E, ENE, ESE**	**E, ESE, SE**

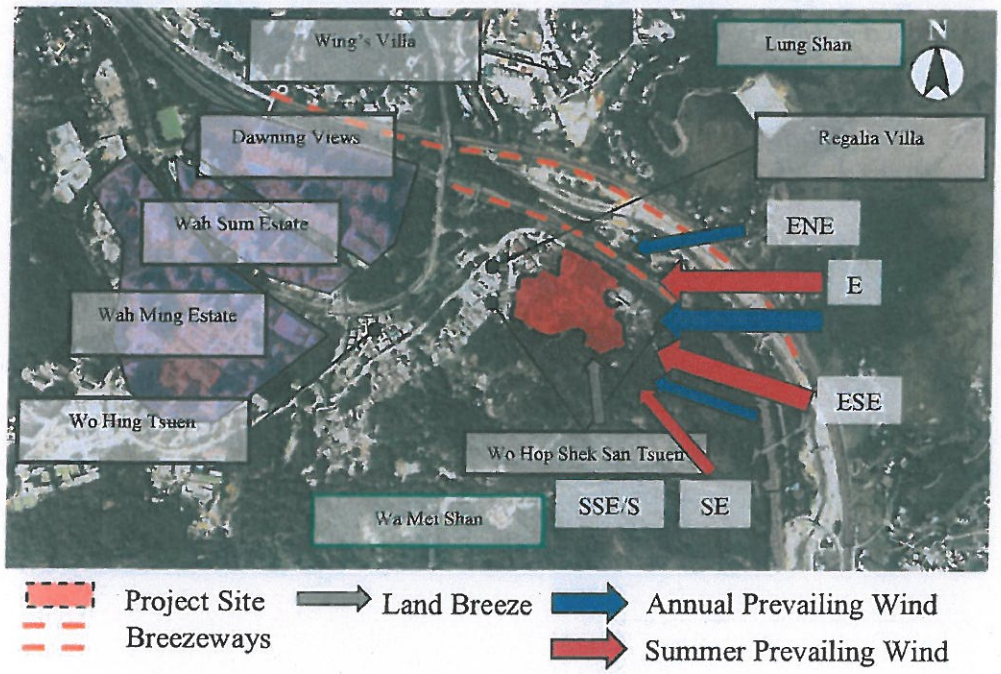


Figure 13 Annual and Summer prevailing winds in Fanling

3 Expert Evaluation of Air Ventilation Under Existing Condition

3.1 East-Northeast / East / East-Southeast Prevailing Winds

East-northeast (ENE), east (E) and east-southeast (ESE) winds are the annual prevailing ones, but two of them also prevail in summer. In the presence of Lung Shan / Pat Sin Leng, these three prevailing winds would mainly blow from the mountain and Taipo over Fanling Highway, Tai Wo Service Road West, Pak Wo Road and Wo Hing Road.

Fanling Highway and Tai Wo Service Road together form a long stretch of breezeway primarily for the ESE wind. The wind goes further along Fanling Highway and Tai Wo Service Road towards inner Fanling and Sheung Shui. Some of the ESE wind also comes down from Wa Mei Shan next to the Project Site and across Wo Hop Shek Cemetery and would head towards Wah Ming Estate and Wah Sum Estate along Pak Wo Road as its downwind regions. (Figure 14)

The two other winds, E and ENE, mainly come from the land/mountain breeze of Lung Shan / Pat Sin Leng. Some of the wind crosses open space and low-rise building clusters on the other side of Fanling Highway and eventually merges with the highway as its breezeway, whereas some other wind blows across or next to the Project Site, Wo Hop Shek San Tsuen and Regalia Villa, and then towards Wah Ming Estate and Wah Sum Estate along Pak Wo Road. The other path of these two wind would be across Wa Mei Shan and Wo Hop Shek Cemetery and then over Wo Hing Tsuen along Wo Hing Road. (Figure 15 & Figure 16)

Notably, there may be some extension of the existing 3 to 6-metre-high vertical noise barriers along parts of Tai Wo Service Road and Fanling Highway (undertaken by the CEDD), which may influence the wind flow of low altitude across the Development.

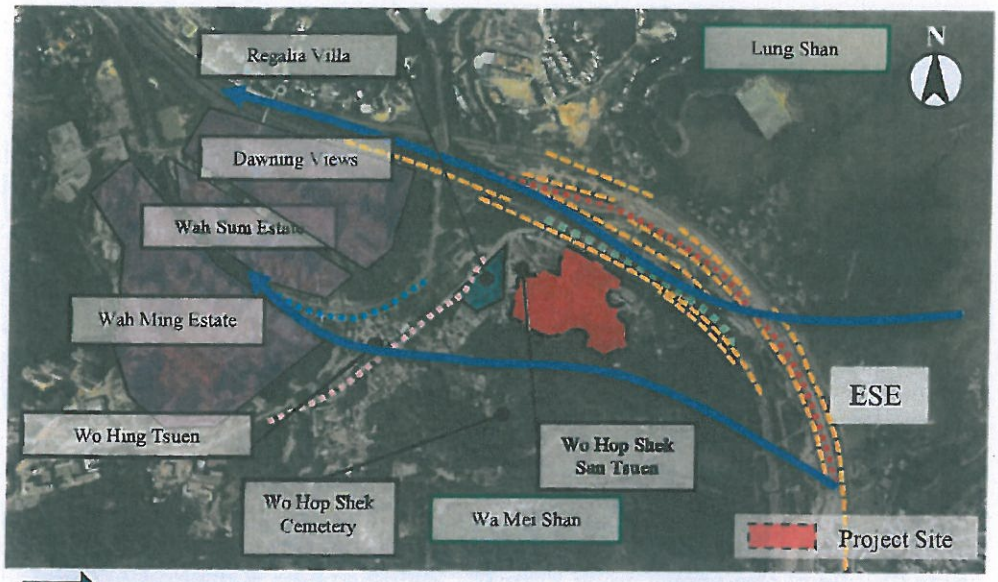


Figure 14 Existing wind environment under ESE prevailing wind condition

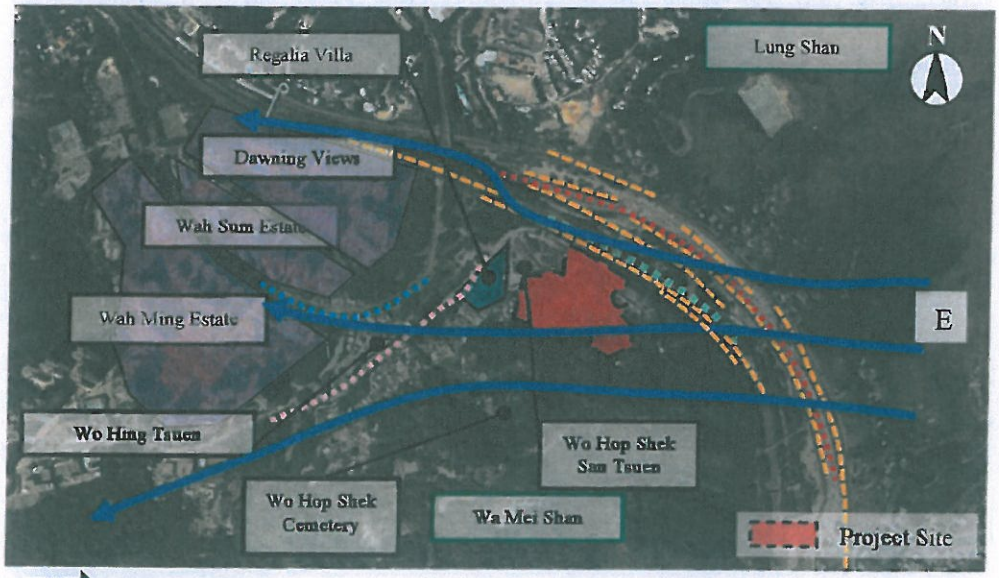


Figure 15 Existing wind environment under E prevailing wind condition

ENE Prevailing Wind
3m to 6m-tall Noise Barrier (existing and proposed by CEDD)
Fanling Highway
Wo Hing Road
Tai Wo Service Road West
Pak Wo Road

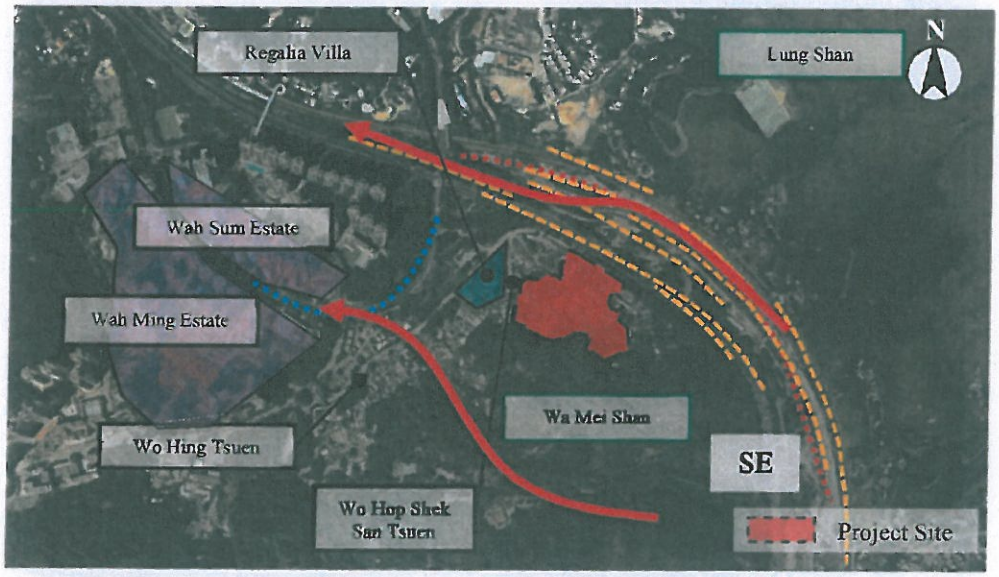
Figure 16 Existing wind environment under ENE prevailing wind condition

3.2 Southeast Prevailing Wind & South and South-southeast Land Breeze

The Southeast (SE) wind which prevails in summer blows from Taipo along Fanling Highway. The wind would then be slightly deflected to go down the rest of Fanling Highway as its breezeway. Some SE wind may also come from the land breeze of Wa Mei Shan to the Project Site and the existing low-rise building clusters of Wo Hop Shek San Tsuen and Wo Hing Tsuen, and eventually go down along Pak Wo Road as a breezeway towards Wah Ming Estate and Wah Sum Estate in the downwind region. (Figure 17)

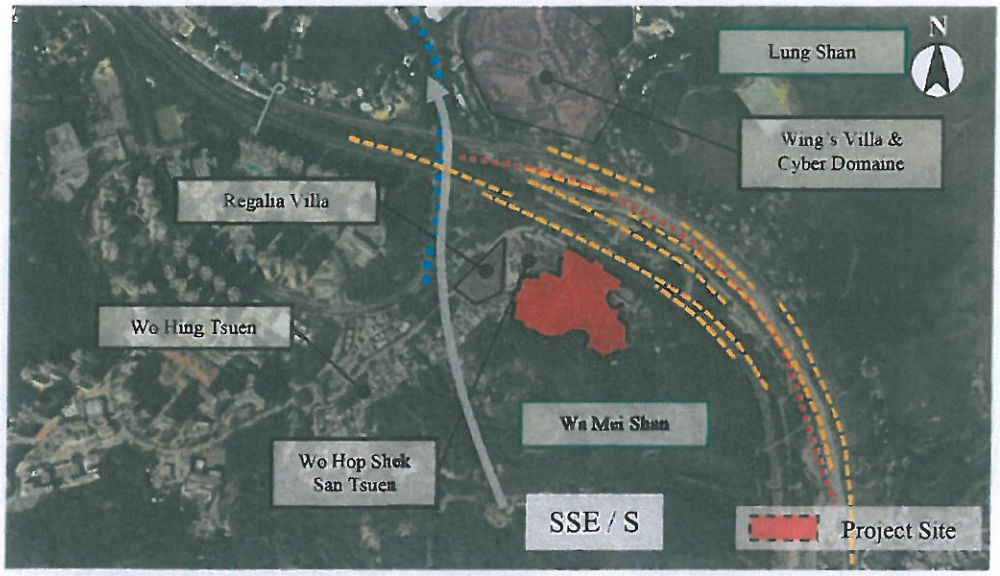
The South-southeast (SSE) and South (S) landbreeze comes from the downward slope of Wa Mei Shan to the low-rise building clusters of Wo Hop Shek San Tsuen as well as Regalia Villa and reaches parts of Pak Wo Road and Jockey Club Road as its breezeway towards Fanling North. (Figure 18)

All these breezeways would not be influenced by the Proposed Development at the district level because the project site has a certain distance away from them.



SE Prevailing Wind — Fanling Highway
3 to 6m-tall Noise Barrier (existing and proposed by CEDD)
Pak Wo Road

Figure 17 Existing wind environment under SE prevailing wind condition



SSE / S Land Breeze

3 to 6m-tall Noise Barrier (existing and proposed by CEDD)

Jockey Club Road & Pak Wo Road

Fanling Highway

Figure 18 Existing wind environment under S/SSE land breeze condition

4 Plan of Proposed Development

The Proposed Development will replace the existing factory, open storage, workshop and squatter settlements within the project site with a public housing estate of 6 blocks with building heights up to 140mPD.

Table 2 The design details of proposed Fanling Area 48

Gross Site Area of the Proposed Public Rental Housing	Around 3.5ha
Domestic Plot Ratio	6.0 (max.)
Domestic GFA	About 176,000 m^2
Non-domestic Plot Ratio	0.5
Non-domestic GFA	About 5,500 m^2
Non-domestic Building Height	3.5 to 5.5m (Welfare Block: 13.5m)

In order to enhance the wind permeability and to minimise the influence to the existing / planned surrounding developments, the Proposed Development has incorporated the followings wind enhancement features in the design:

- Local air paths of width 15m minimum due to wide building separation between adjacent building blocks
- Podium level minimised to a height of 1 storey (i.e. only G/F); and
- Stepped Profile of Building Heights.

In total, there are two local paths created in the Proposed Development to channel most of the prevailing winds. Their details are highlighted on the following plans and their effectiveness for the individual winds is discussed in Section 5.

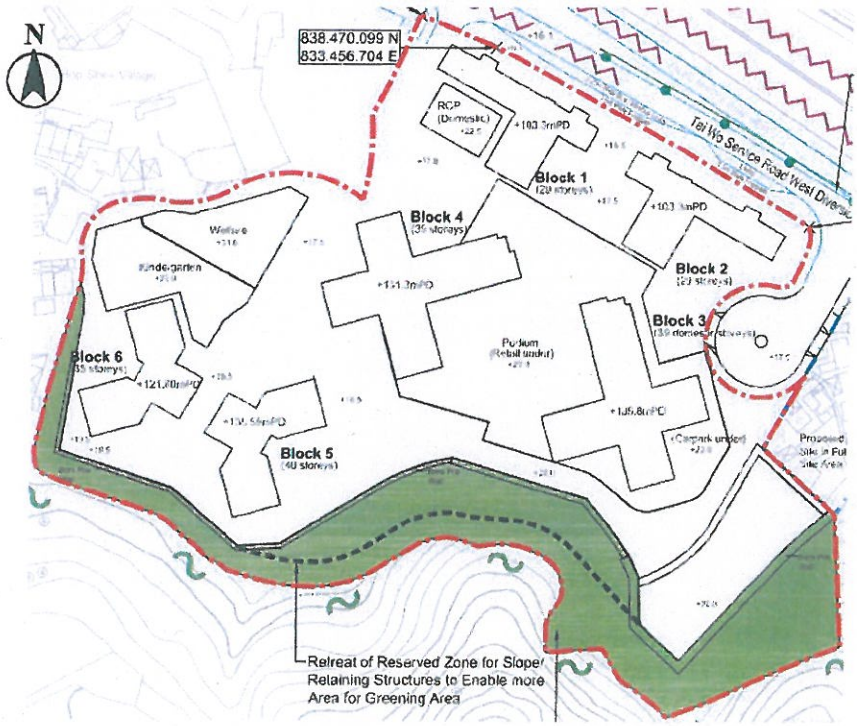


Figure 19 Master Layout Plan of the Proposed Development

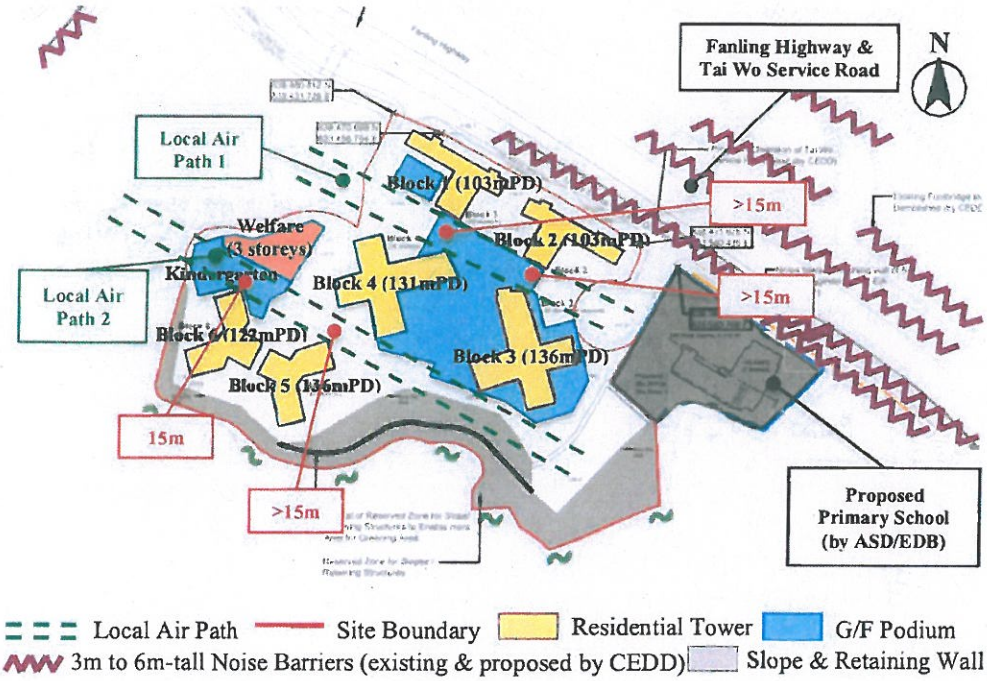


Figure 20 Physical Dimensions of Local Air Paths 1 & 2

To the immediate east of the Development there is another vacant site for a future primary school to be built by the Architectural Services Department (ASD) and operated by the Education Bureau (EDB). With the preliminary design and construction programme unavailable at the moment, the building footprint of the school indicated in Figure 20 and other subsequent figures is assumed in the present study.

5 Evaluation of Air Ventilation with the Proposed Development

5.1 East / East-Southeast Prevailing Wind Conditions

Under E / ESE prevailing wind conditions, which are the major prevailing ones in summer and throughout the year, the wind flow would be deflected by the topography adjacent to the Proposed Development. It is generally channelled along Fanling Highway and Tai Wo Service Road West. Some breezes also come from the hilly open space, the low-rise building blocks in the E / ESE directions. The two prevailing winds are indicated by **blue** arrows in Figure 21 and Figure 22.

Local Air Paths 1 & 2 are created by at least 15m-wide separations of building blocks between:

- Blocks 1 and 4,
- Blocks 2 and 3,
- Blocks 4 and 5, and
- Block 6 and the (proposed) welfare building of 3 storeys.

The ESE wind utilises both local air paths while the E wind is likely to use only Local Air Path 1 in order to reduce the impact of the Proposed Development on the downwind regions, which are low-rise (2 to 4-storey-high) residential/factory blocks or open space of Wo Hop Shek San Tsuen, Regalia Villa (near side), Dawning Views (far side under ESE wind), Pak Wo Road and Wah Sum Estate (far side under E wind).

However, the 3 to 6-metre-high noise barriers and the reserved area for retaining walls and structures (undertaken by the CEDD) along Fanling Highway and Tai Wo Service Road, which are located on the upwind side, would shield a portion of the incoming E / ESE wind towards the Proposed Development at the low level. As a compensation, the podium structures of the Proposed Development are specifically limited to one-storey height (3.5 to 5.5m) along these two local air paths so as to minimise the impedance of incoming wind at the low level and bring down the prevailing winds gradually to the pedestrian level over a certain distance behind the Project Site (Figure 23 to Figure 25).

As indicated in Figure 23 and Figure 24, there may be a wake-zone or turbulent eddy flow adjacent to the podium structures, the noise barriers and the retaining walls on the Project Site. With the podia of the proposed development minimised to a height of 1 storey, the impact of the Development on the wake-zone behind these two local air paths (i.e. the 2 to 4-storey-high buildings of Wo Hop Shek San Tsuen and Regalia Villa in the downwind region) can be limited within a small local area.

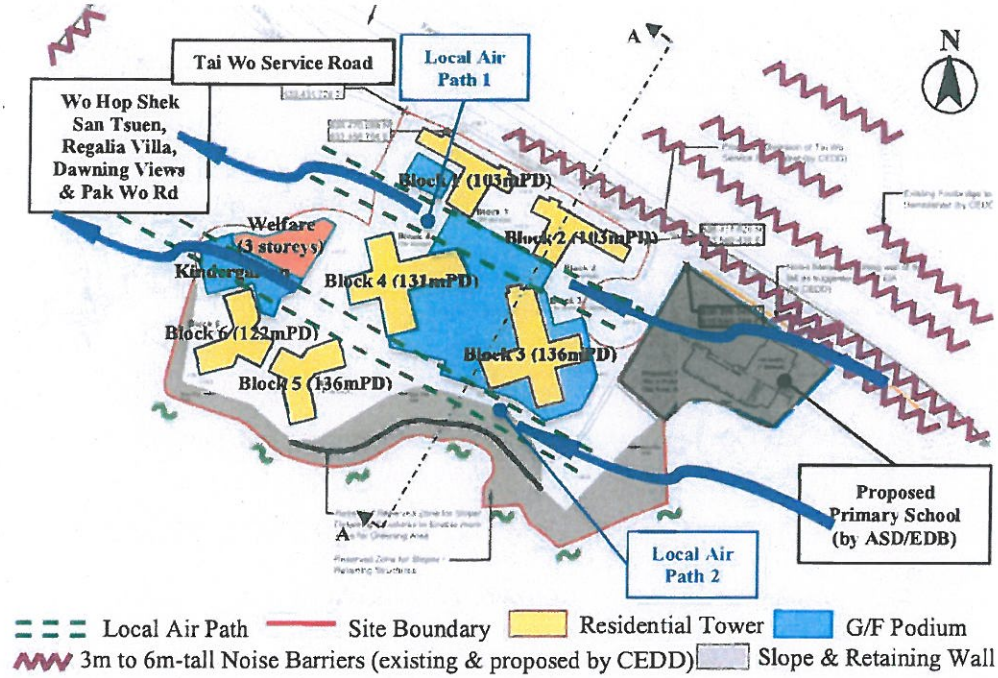


Figure 21 Air paths of the Proposed Development under ESE wind condition

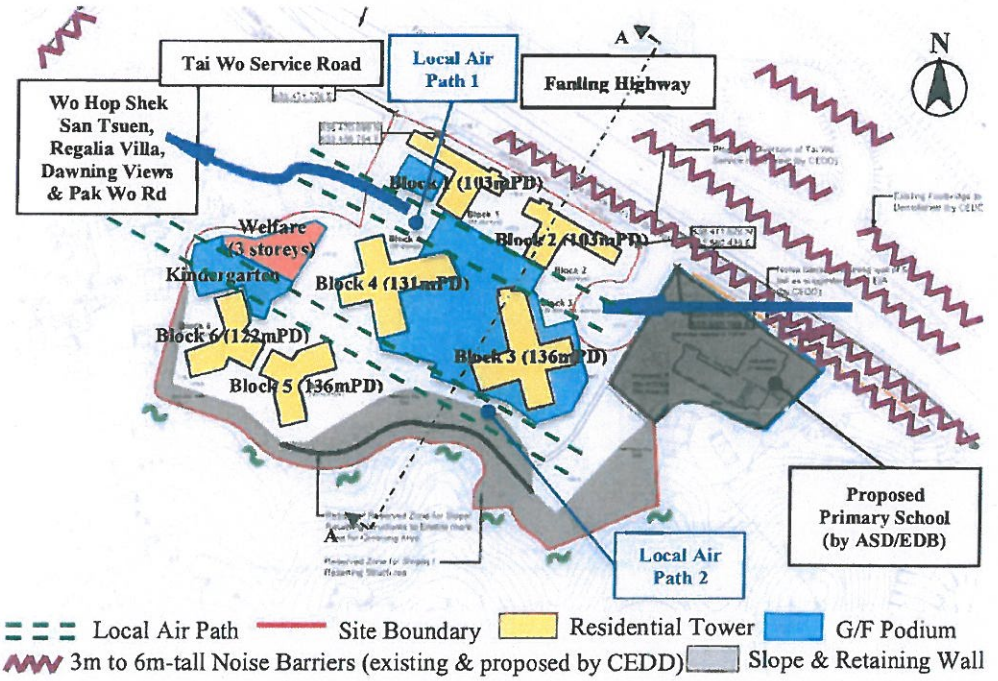


Figure 22 Air paths of the Proposed Development under E wind condition

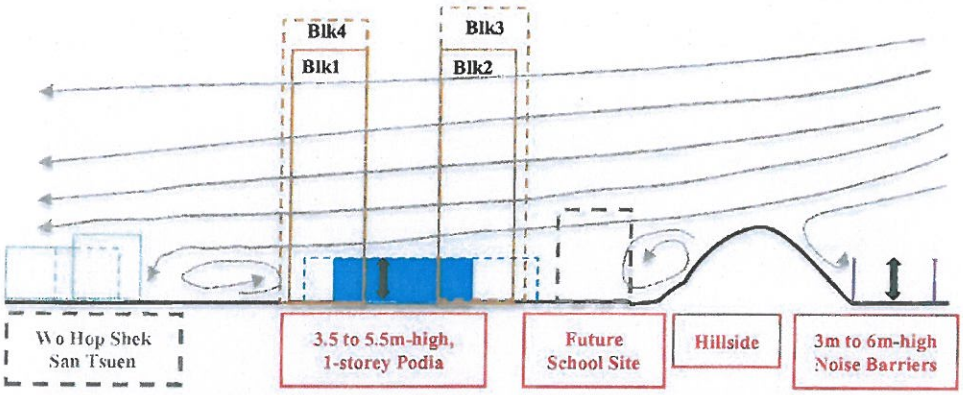


Figure 23 Conceptual longitudinal sectional diagram of E/ESE wind flow along Local Air Path 1 in Fanling Area 48

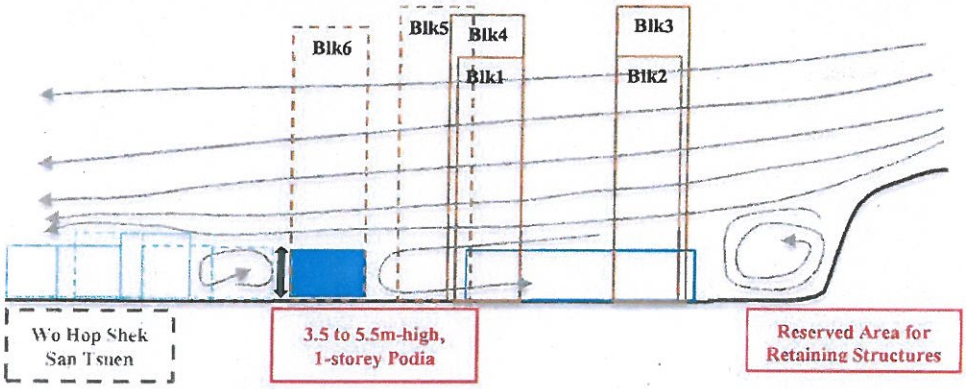


Figure 24 Conceptual longitudinal sectional diagram of E/ESE wind flow along Local Air Path 2 in Fanling Area 48

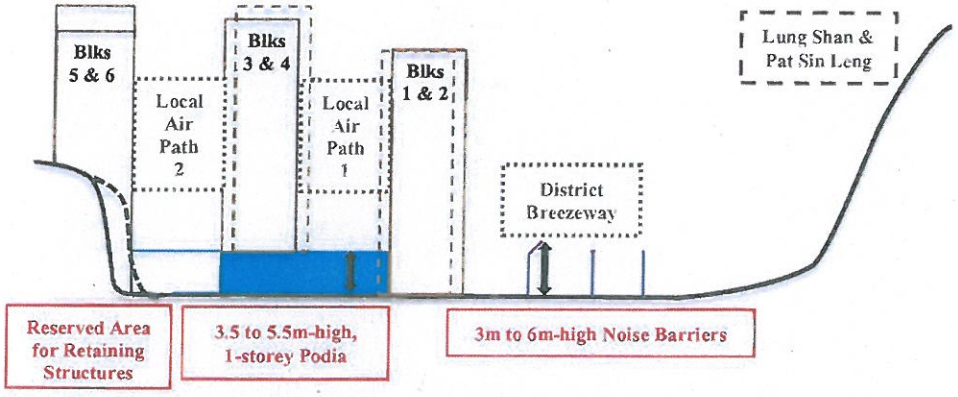


Figure 25 Conceptual A-A cross-sectional diagram of Local Air Paths 1 & 2

The stepped profile created by the low building heights of Blocks 1 and 2 and the high building heights of Blocks 3 and 4 assists the ventilation by capturing high-level airstreams of the E and even ENE prevailing winds and downwashing them to the pedestrian level of Local Air Path 1.

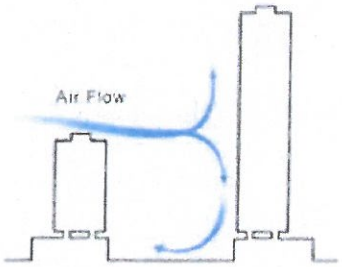


Figure 26 Stepped profile of building heights (Source: Urban Design Guidelines, PlanD)

5.2 Southeast Prevailing Wind Condition

The Southeast (SE) wind prevails in summer. As the incoming winds enter the Proposed Development from the SE side of the mountain Wa Mei Shan, the building separations between proposed domestic blocks would facilitate the penetration of SE wind to the lee-side of the Proposed Development, i.e. Wo Hop Shek San Tsuen (near side) and Fanling Highway.

Part of the SE wind would eventually flow towards Jockey Club Road, Wing's Villa and Cyber Domaine on the other side of Fanling Highway via Local Air Path 1 of the Proposed Development. The summer SE prevailing wind is indicated by **pink** arrows in Figure 27.

They blow along Local Air Paths 1 and 2 in a manner similar to that of the E/ESE prevailing wind as shown in Figure 23 and Figure 24. With these two local air paths, the impact on the surrounding neighbourhoods is reduced by the permeability of the Proposed Development.

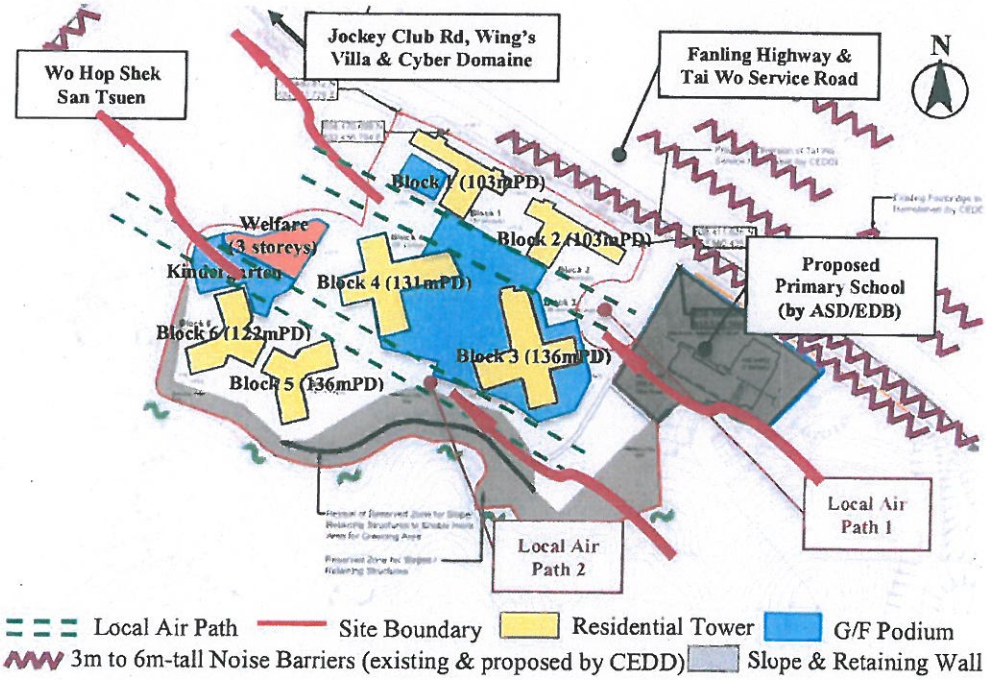


Figure 27 Air paths of the Proposed Development under SE wind condition

5.3 Special Remarks on Future Planning

Nevertheless, as analysed in the previous sections, two remarks should be documented for future consideration:

- Location and orientation of buildings, likely of height 7 to 8 storeys, on the future primary school's site (**dark grey block** in Figure 28) should be carefully conceived by the Education Bureau (EDB) / Architectural Services Department (ASD) as it may affect the present designed features for wind enhancement;
- Noise barriers may be installed alongside the future Tai Wo Service Road by the Civil Engineering and Development Department (CEDD), which may also affect some of the upwind regions. However, the effect would be minimal provided that the proposed tallness of 3 to 6 metres is similar to that of the 1-storey podia in the Proposed Development.

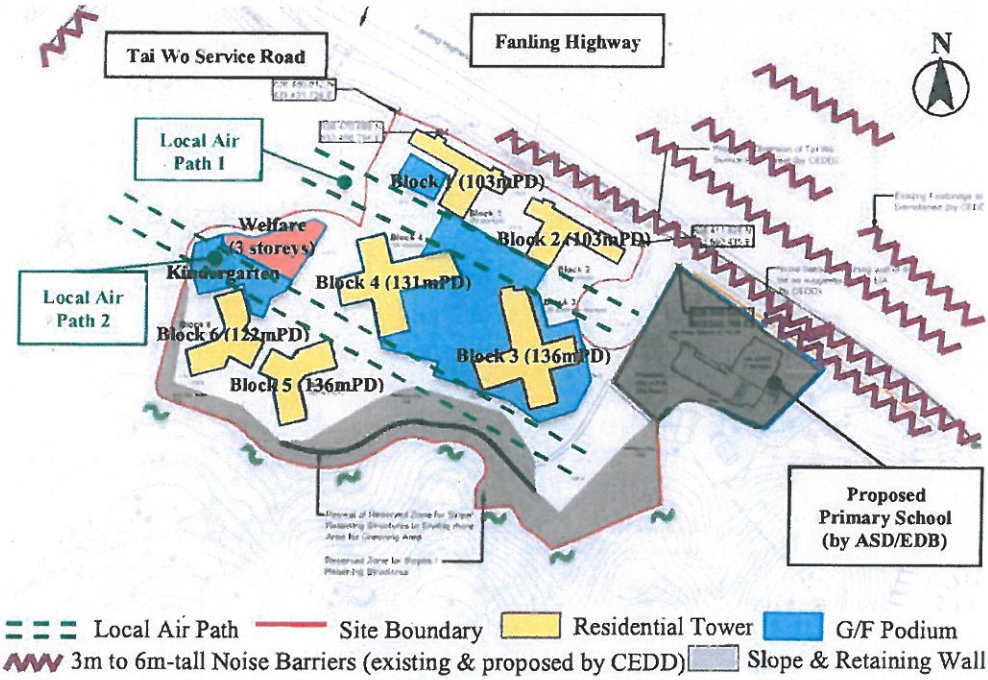


Figure 28 Special Remarks on Future Planning

5.4 Suggested Additional Features for Wind Enhancement

There is one more design feature that could be considered for incorporation into the Proposed Development to further enhance the air ventilation in one of the said local air paths for E and ESE prevailing winds (as indicated in **brown** colour in Figure 29):

- Relocating a portion of G/F retail area at some wings underneath the tower of Block 4 to make more clearance of G/F along Local Air Path 1, so that high-level airstreams of the prevailing winds could more easily descend to the pedestrian level of downwind region, e.g. Wo Hop Shek San Tsuen and Regalia Villa.

Despite the possible extension of 3-to-6m-high noise barrier along Fanling Highway and Tai Wo Service Road West & East (**purple zigzag lines**), which might hamper the effectiveness of the created local air paths in channelling the prevailing winds on the near side, the prevailing winds, particularly ENE, would eventually descend to the ground level of open area on the far side, such as Wo Hop Shek San Tsuen and Wo Hing Road.

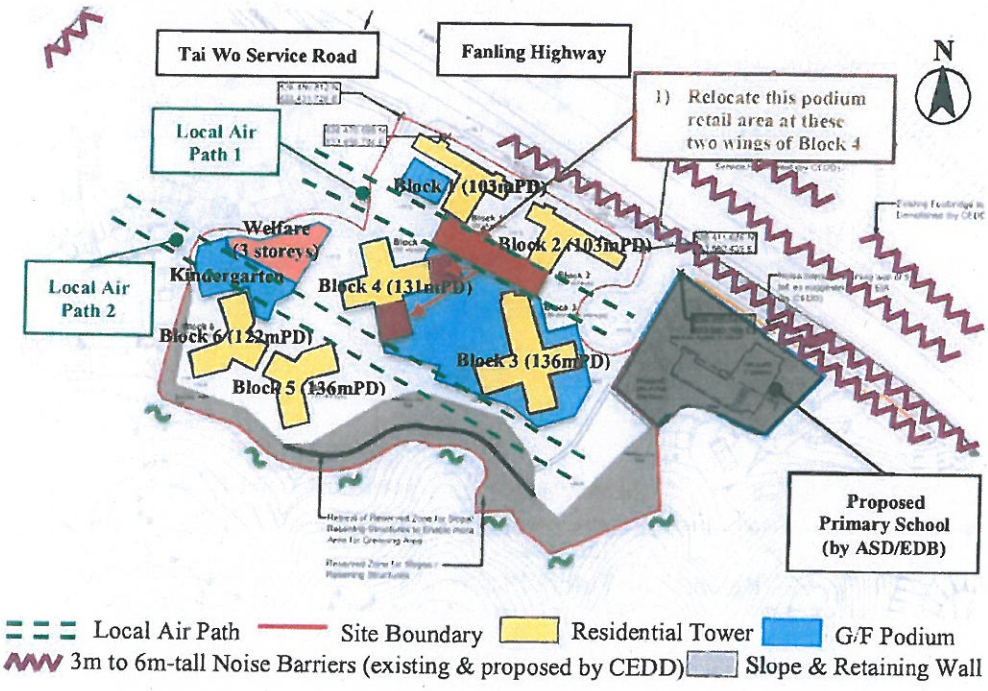


Figure 29 Possible additional design features for wind enhancement

6 Further Studies

The Expert Evaluation aims at providing qualitative analysis of wind performance of the project site based on the planning of the Proposed Development. To quantitatively assess the wind performance at the pedestrian level on and around the site with mitigation and enhancement measures and to derive the airflow patterns, an AVA Initial Study would be suggested after the rezoning process in order to provide better illustrations of the ventilation performance of the Proposed Development.

According to the Technical Circular, Computational Fluid Dynamics (CFD) coupled with available wind data is considered the appropriate tool for AVA Initial Study to determine the Velocity Ratio (VR) at different concerned locations. The model should contain information of the surrounding buildings and site topography from the platform of Geographical Information System (GIS). The airflow distribution within the studied area, being affected by the site-specific design and the nearby topography, should be visualised under the prevailing year-round wind conditions.

7 Conclusions

Arup was commissioned by the HKHA to carry out an AVA – Expert Evaluation for the Proposed Public Rental Housing Development at Fanling Area 48 (the Proposed Development).

Among various sources of wind data, the annual prevailing winds are E (major), ENE and ESE directions and the summer ones are ESE (major), E and SE directions. Land breeze comes from SSE and S directions.

Notwithstanding most of the low-rise vicinities and some high-rise residential clusters around the project site, the Proposed Development still adopts the following design features for the consideration of wind permeability across the project site:

- Local air paths of width 15m minimum due to wide building separations between adjacent building blocks,
- Podium level minimised to a height of 1 storey (i.e. only G/F), and
- Stepped Profile of Building Heights.

These design features create a total of 2 nos. of local air paths within the Project Site to cater for the annual and summer prevailing winds and are expected to minimise the impact on the surrounding ventilation performance by allowing wind penetration into the adjacent neighbourhoods potentially on the leeside of the Development:

- Wo Hop Shek San Tsuen and Regalia Villa,
- Dawning Views,
- Pak Wo Road,
- Jockey Club Road, and
- Wing's Villa and Cyber Domaine.

One more design feature could be considered for incorporation into the Proposed Development to enhance the air ventilation:

- Relocating a portion of G/F retail area at some wings underneath the tower of Block 4 to make more clearance of G/F along Local Air Path 1, so that high-level airstreams of the prevailing winds could more easily descend to the pedestrian level of downwind region.

An Initial Study of AVA using Computational Fluid Dynamics (CFD) technique is recommended after the process of rezoning to assess the effectiveness of the mitigation measures and further recommended measures at the stage of detailed design.

Appendix IV

7 Summary and Conclusions

7.1.1 Arup was appointed by Hong Kong Housing Authority to conduct a Traffic Impact Assessment (TIA) study for the rezoning of a potential site at Area 48, Fanling (the Site) for the proposed public housing and school developments (the Proposed Developments).

7.1.2 The proposed public housing development will comprise of about 4,054 flats and associated facilities. Education Bureau (EDB) plans to initiate school building programme for a 24-classroom primary school to tie in with the proposed public housing development.

7.1.3 To appreciate the existing traffic conditions, comprehensive classified traffic counts were conducted at the key junctions in the vicinity of the Site. Junction capacity analyses have been carried out at the key junctions along the key access routes of the Site. Results of the analysis indicate that all junctions in the vicinity of the Site are currently operating satisfactorily with spare capacity during both morning and evening peaks, except for R3 - Po Shek Wu Road Interchange.

7.1.4 Junction capacity assessment was undertaken at population intake year and 5 years after the population intake year. All analysed results revealed that the associated junctions along the accessing/ leaving routes are still performing satisfactorily with spare capacity. It is considered that the traffic impact caused by the Proposed Developments is minimal and can be smoothly accommodated by the road network.

7.1.5 Future pedestrian condition was also assessed. Based on the LOS assessment, the pedestrian facilities are predicted to operate at Level of Service C or better, and V/C ratio < 1. Based on these results, no pedestrian circulation problems are envisaged.

7.1.6 Based on a survey of the existing bus and GMB stops along Tai Wo Service Road West, it was found that the existing public transport services have spare capacity to serve some demand generated by the proposed development. Provision of feeder services running between the Site and the railway station was also considered.

7.1.7 The parking and loading/unloading facilities for the proposed public development are generally proposed in accordance with the District-Based Parking Standards (DBPS) and TD's Departmental Circular No. 2/2012. The exact parking and loading/unloading facilities for the proposed school development are subject to EDB and ArchSD's review.

7.1.8 The Proposed Developments at Fanling Area 48 would not generate any negative impact on the surrounding road network. Junctions in the vicinity of the Site will perform within capacity. Site access, pedestrian movement and public transport issues were also addressed. The conclusion of the TIA therefore is that the proposed development is acceptable from the traffic point of view.

PLANNING REPORT ON
ON LOK TSUEN INDUSTRIAL AREA, FANLING

JANUARY 2016

[Draft]

CONTENT **Page**

Attachments

1. INTRODUCTION

1.1 Purpose of the Planning Report

The purpose of this Planning Report is to give an account of the background and an appraisal of the existing conditions, characteristics and development requirements of the On Lok Tsuen Industrial Area (the Area) in Fanling (**Plan 1**), New Territories. It also serves as a summary of the review on the development restrictions of the Outline Zoning Plan (OZP), which has been undertaken as to follow up the recommendations of the 2014 Area Assessments. Opportunities have also been taken to identify a framework of enhancement measures with a view to better utilizing the limited industrial land resources and provide guidance for future development/redevelopment of the Area and district planning works of the area.

1.2 Background

1.2.1 In view of the concern on the utilisation of the IBs in the territory as well as the changing needs of the industrial and business sectors, Planning Department (PlanD) has been conducting the Area Assessments of Industrial Land in the Territory since 1999. PlanD completed the 2014 Area Assessments of the Industrial Land in the Territory (2014 Area Assessments) in mid-2015. The objectives of the 2014 Area Assessments are mainly to have an updated overview of the existing IBs in "I" and "Other Specified Uses" annotated "Business" ("OU(B)") zones in terms of their utilisation of key types of industries as well as trend analysis. 26 "I" areas were covered in 2014 Area Assessments. They include six areas on Hong Kong Island, two areas in Kowloon, four areas in Kwai Tsing/Tsuen Wan, seven areas in the Northeast New Territories (NENT), and seven areas in the Northwest New Territories (NWNT).

1.2.2 Vacancy rate of IBs in "I" area has decreased from about 6.5% in 2009 to about 3.5% in 2014, while the usage for both industrial and non-industrial uses has stabilised during the same period with about 48.9% GFA for industrial use in 2014. The industrial areas have continued to contribute to economic activities in various districts.

1.2.3 There is still a genuine need for

industrial floorspace. Sufficient amount of GFA in IBs needs to be provided to particularly meet the increasing demand for general logistics and warehousing use as well as the demand from manufacturing business relating to local consumption and supporting operations and functions of the city.

1.2.4 For the Area, the 2014 Area Assessments put forth the following recommendations:

(a) to retain the Area as "I" zone to cater for the strong demand for general logistics/warehousing arising from the significant growth of the trade and logistics sector;

(b) to enhance the Area to better utilize the land resources, increasing employment opportunities and job variety and help achieve a more balanced distribution of homes and jobs in the district;

(c) consideration may be given to disposing suitable government sites in the Area for commercial/office and/or logistics/ warehousing developments. These new developments may act as a catalyst to encourage more redevelopment of existing IBs by the private sector; and

(d) subject to technical assessment on its feasibility, consideration may also be given to relaxing the existing development restrictions on the OZP to help optimize the utilization of sites and also encourage private redevelopments.

1.2.5 To follow up on the recommendations of the 2014 Area Assessments, PlanD has undertaken a review on the development restrictions for the Area under the OZP. Opportunities have also been taken to identify a framework of enhancement measures with a view to better utilizing the limited industrial land resources and provide guidance for future development/redevelopment of the Area.

2. On Lok Tsuen Industrial Area

2.1 Location

2.1.1 The Area, covering a total area of about 32.6 ha, is located at the eastern fringe of Fanling/Sheung Shui New Town and adjacent to Luen Wo Hui Market with Fanling North (FLN) New Development Area (NDA) being in the vicinity to its north across Sha Tau Kok Road/Ma Sik Road.

2.1.2 The area is bounded by the Ma Wat River on its southern and eastern sides and the Sha Tau Kok Road and Jockey Club Road to its north and west respectively. The location of the Area is shown at **Plan 2**.

2.2 Existing OZP Restrictions

The Area is the largest "Industrial" ("I") area in the territory in terms of land area and number of industrial buildings (IBs), as well as the major employment node in the North District. It is zoned mainly "I" on the Fanling/Sheung Shui OZP No. S/FSS/20 since 1987 with some GIC facilities, local open space and amenity. Currently, the developments within "I" zone are subject to a maximum plot ratio (PR) and building height (BH) restrictions of 5 and 25m respectively on the Fanling/Sheung Shui OZP.

2.3 Land Status

The area is predominantly used for traditional general industrial uses, mainly warehouse/ storage uses and car-repairing workshops. Majority (about 16.1ha/68%) of the sites within the Area are privately owned (**Plan 3**), except four open-air public vehicle parks, several site under Government land allocations/short term tenancies, riverside amenity area along Ma Wat River and other amenity areas which are Government land (GL) (about 7.5ha/32%) (**Plan 3**).

2.4 Characteristics of Existing IBs

2.4.1 Based on the 2014 Area Assessments, there are a total of 98 IBs in the Area and all of them are seven storeys or below in height, among which over one-third (36 buildings) are temporary structures of one to two storeys. 73 of the IBs are under single ownership and the remaining 25 are under multiple ownership. In terms of age, 61 buildings are 15-29 years old and 28 are 30 years or above. The remaining 9 buildings are less than 15 years old. In terms of condition, 58 buildings are in fair condition

and 34 are in poor condition. The remaining six buildings are in good condition. **Plan 4** has summarized the basic characteristics of the existing IBs in the Area.

2.4.2 The overall vacancy of the Area is 5.0%, which is relatively higher than the territorial figure of 3.5% for all "I" areas and the average of 2.8% for the seven areas in the Northeast New Territories. About 8.2% of the units are divided into subunits, involving about 13.4% of the GFA.

2.4.3 In terms of usage, about 64.6% of the GFA is still for industrial use. About 52.9% is for Warehouse/Storage use, mostly in flatted factory buildings. The second and third largest users are Office (about 12.3%) and Manufacturing/Workshop (about 11.7%) respectively. The largest manufacturing business identified is car repairing occupying about 35.7% of the Manufacturing/Workshop GFA, most of which is in the temporary structures of one to two storeys. Other Uses takes up about 2.3% of the GFA, of which about 1.8% is for research and development/testing centre.

2.4.4 The pace of new development/redevelopment in the area is generally slow. In the last five years, only four new IBs were completed. Three of them are predominantly for Warehouse/Storage use while the remaining one is mainly for Office use.

2.5 Employment Characteristics

In terms of employment, about 6,490 workers are estimated to be engaged in the occupied non-subdivided units of the IBs in the Area, including about 1,502 workers (23.1%) in the manufacturing business and about 4,988 workers (76.9%) in the non-manufacturing business. The overall figure accounts for about 14.4% of the total of 45,103 persons engaged (other than those in the civil services) in various business/industries in the North District identified by C&SD in June 2014.

2.6 Development Opportunities and Constraints

Locational Advantage

2.6.1 Strategically located near the existing Man Kam To, Lo Wu, Lok Ma Chau Spur Line Boundary Control Points as well as the

planned Liantang/Heung Yuen Wai Boundary Control Point, the industrial area would have the opportunity to capitalize on the economic interaction between Hong Kong and the Mainland. The Area is also well-served by the East Rail and external/internal road network.

2.6.2 The existing Fanling/Sheung Shui New Town and the planned Kwu Tung North (KTN) and FLN NDAs in its proximity would provide a sufficient supply of labour force and supporting infrastructure/facilities. Land has been reserved in KTN NDA for Business and Technology Park as well as research and development uses. In this regard, the Area has potential to turn into a robust economic and employment node for industrial sectors, particularly general logistics industries and high-value added manufacturing industries.

Potential of Redevelopment/Development

2.6.3 As mentioned in paragraph 2.3.1, majority (68%) of the land in the Area is privately-owned. On the other hand, according to the 2014 Area Assessments, a number of the sites in the core of the Area have not been fully developed to the maximum PR 5 permissible under the OZP (**Plan 4**).

2.6.4 Having regard to existing development intensities, the building age/condition and land ownership (as detailed in paragraph 2.3 and 2.4), there is great potential for redevelopment, especially at the core of the Area (shown at **Plan 4**). However, according to the 2014 Area Assessments, only four new IBs completed in the last five years.

Infrastructure Constraint

2.6.5 According to the Transport Department (TD), the junctions at Sha Tau Kok Road/Ma Sik Road/On Kui Street (J1) and Sha Tau Kok Road/Lok Yip Road (J2), which provide external vehicular access to the Area, are already over-loaded although most of the sites in the Area have not been fully developed to its maximum intensity of PR 5 whereas the junction at Jockey Club Road/Lok Yip Road (J3) is operating within capacity for the time being (**Plan 1**). Upon the completion of the proposed Lung Shan Tunnel and trunk road works associated with Liantang/Heung Yuen Wai Boundary Control Point project,

the planned upgrading works at J1 in relation to the proposed public housing development at Queen's Hill and the proposed Fanling Bypass, with the development/redevelopment of the Area to its full potential, the congestion at J1 and J2 will be ameliorated but will be operating close to its design capacity. Any increase in development intensity higher than the planned PR 5 as per the OZP should be subject to detailed traffic assessments.

2.6.6 The local community including the North District Council has been asking that additional parking spaces be provided in the Fanling/Sheung Shui area. TD also advised that there is a strong parking demand in particular the medium goods/heavy goods vehicles type's parking spaces to serve the local community in the area. Apart from parking and loading/unloading facilities required under Hong Kong Planning Standards and Guidelines (HKPSG) being provided within individual IBs, provision of public vehicle parks within individual IBs upon new development/redevelopment should be explored.

2.6.7 The Area falls within the catchment of the Shek Wu Hui Sewage Treatment Works (STW). Environmental Protection Department (EPD) advised that the STW has allowed for the sewage flow generated from the existing/planned industrial uses as set out in the OZP. However, any increase in the development intensity may generate additional sewage flow and its feasibility has to be confirmed by technical assessments.

2.6.8 According to the Water Supplies Department (WSD), additional water demand arising from the planned development in the area has been allowed in the water supply system with the completion of the planned upgrading works in the Sheung Shui/Fanling area (under PWP Item No. 9350WF and 9355WF for construction of a service reservoir and associated trunk and distribution mains).

3. REVIEW OF DEVELOPMENT PARAMETERS

The 2014 Area Assessments suggested that, inter alia, consideration may be

given to relaxing the existing development restrictions of the Area on the OZP to help optimize the utilization of sites and encourage private redevelopments.

Under the OZP No. S/FSS/20, development/redevelopment in the Area is subject to the restrictions of a maximum PR of 5 and BH of 25m. In addition, there is currently no provision for minor relaxation of the concerned development restrictions in the Notes of the "I" zone under the current OZP.

3.1 Plot Ratio

3.1.1 With regard to the maximum PR restriction, development intensities at the Area are constrained by the existing infrastructure provision, particularly traffic and sewage, and any increase in development intensities over PR 5 would need to be subject to technical assessments to demonstrate that the proposed increase in development intensity is sustainable. As such, an en-bloc increase in PR is not proposed at this stage.

3.1.2 Currently, there are five Government sites being used for open area public vehicle parks in the Area providing a total of 280 parking spaces. Subject to the reprovisioning of these car parking spaces, there is opportunity to develop these government sites for industrial development to allow an optimum use of the scarce industrial land. Apart from these five public vehicle parks, TD estimated that an addition of 290 parking spaces (resulting in a total of 570 vehicle car parking spaces are required to serve the industrial area. Efforts should therefore be made to encourage provision of public vehicle parks in some of the industrial sites upon development/redevelopment to cater for the car parking demand of the area. In order to facilitate provision of industrial floorspace and ensure adequate supply of car parking spaces, it is proposed that the public vehicle parks to be required by the Government should be exempted from PR calculation under the Notes of the OZP. Therefore, in determining the maximum PR for respective sites the Area, any floor space that is constructed or intended for use solely as public vehicle parks, as required by the Government, may be disregarded.

3.2 Building Height

3.2.1 The Area has been zoned "I" with restrictions of maximum PR of 5 and BH of 25m since 1987. In formulating these development parameters, due consideration had been given for the adjacent rural settings and the low to medium-rise development in Luen Wo Hui at that time.

3.2.2 The existing BH restriction of 25m has resulted in a relatively low BH profile with most of the existing IBs having a large site coverage of over 85%. With the implementation of the Sustainable Building Design Guidelines (SBD Guidelines) and local aspirations of more at-grade greening and building setback to enhance the visual/air permeability and street environment, it is considered that the BH restrictions could be suitably relaxed to provide an opportunity for new development or redevelopment with reduced site coverage.

3.2.3 Given that there is no important landmark or ridgeline to preserve in the vicinity, it is considered appropriate to continue expressing the BH restriction in terms of absolute BH instead of mPD. Such BH restriction would allow all IBs within the Area to have the same development opportunity regardless the site formation level of individual sites. With the various site level within the Area, it would also enable a more interesting BH profile.

3.2.4 Based on a broad assessment, it is proposed that the BH restriction should be relaxed from 25m to 65m (excluding basements development), which is equivalent to about 75.8mPD to 81.6mPD given the site level of the Area is about 10.8mPD to 16.6mPD. The proposed BH restriction of 65m should be adequate for individual sites in the Area to accommodate the maximum PR of 5 as well as the proposed setback/non-building area (NBA) and the possible public vehicle parking requirement as required by TD.

3.2.5 By relaxing the BH restriction to 65m, it will provide more flexibility in terms of building design and allow taller industrial buildings with smaller footprint and thereby provide more opportunity for at-grade greening. The development profile of the

adjacent existing/planned development is mostly ranging from about 67m to 118m in height (equivalent to about 83mPD to 130mPD).

3.2.6 The proposed maximum BH of 65m (excluding basements development) in the Area is considered not visually incompatible with the overall townscape in the area allowing a height profile stepping down from Luen Wo Hui to the low-rise village settlement of Shung Him Tong to its east. Given that proposed revision to BH restriction generally aligns with the development profile of the existing/planned developments within Luen Wo Hui from about 81m to 118m (equivalent to about 93mPD to 130mPD) through the Area to the low-rise village settlement of Shung Him Tong (at about 20mPD), it is considered that the proposed BH restriction would integrate with such urban fabric in the future townscape and significant visual impact to the surrounding area is not anticipated.

3.3 Minor Relaxation of PR and BH

It is proposed that a provision should be added in the Note of "I" zone to allow for minor relaxation of the PR and BH restrictions on a case-by-case basis through the planning application system taking into account individual merits and/or site circumstances. Each application for minor relaxation of PR/BH restriction will be considered on its individual merits. Relevant considerations including amalgamating smaller sites for achieving better layout design and local area improvement, providing better streetscape/good quality street level public space, innovative building design and other planning merits will be taken into account in considering such applications.

3.4 Proposed OZP Amendments

The proposed OZP amendments will incorporate an increase in BH from 25m to 65m and a remark in the Notes of the "I" zone to allow for minor relaxation of PR and BH restrictions subject to approval by the Board. Relevant considerations of minor relaxation will also be incorporated in the Explanatory Statement to guide the future development/redevelopment in the Area.

4. LOCAL AREA ENHANCEMENT

At present, the Area is dilapidated with rundown warehouses and car repairing workshops (34 of 98 existing IBs are in poor conditions as mentioned in paragraph 2.4.1) with relatively high vacancy rate of 5.0%. The following framework of area enhancement measures is therefore proposed with a view to providing a more attractive environment for redevelopment into a more vibrant employment node:

4.1 Enhancing Linkage with the Adjacent Activity Nodes

4.1.1 Revitalization of the Area would provide more job opportunities for the local residents in Luen Wo Hui, Cheung Wah Estate as well as the FLN NDA, where public and private housing developments will be available in year 2023 under the Advanced Works of the NDA development. By providing local job opportunities, it can alleviate the traffic demand on the local road network and reduce the needs for commuting.

4.1.2 Although the Area is close to the East Rail Fanling Station and the residential neighbourhoods, it is quite isolated as the pedestrian linkages are broken by the busy thoroughfare of Sha Tau Kok Road, Jockey Club Road and San Wan Road and its existing pedestrian connections are mostly in the form of subways (**Plan 5**). As such, it is proposed to enhance the linkage of the Area to the adjacent activity nodes (**Plan 6**) by:

(a) enhancing linkage to East Rail Fanling Station by improving the pedestrian facilities along Sha Tau Kok Road through widening and repaving of pedestrian pavement;

(b) improving the connection to the FLN NDA to link up the existing covered walkway;

(c) strengthening existing connection to Luen Wo Hui; and

(d) creating new connection point to Cheung Wah Estate.

4.1.3 Conceptual ideas of the improvement measures are provided at **Annex II**.

4.2 Enhancing Pedestrian Environment and Walkability within On Lok Tsuen Industrial Area

Lok Ming Street is currently an important east-west pedestrian connection bringing people from Luen Wo Hui residential neighbourhood (via a sub-way) to the core of the Area. Another common north-south pedestrian access is from Cheung Wa Estate then via walking through the narrow back-lanes sandwiched between Jockey Club Road and Yip Cheong Street. Improvement measures are proposed to enhance the walking environment and walkability of these two main pedestrian access by widening the pavement (building setback may be required for some private lots and government sites), improving roadside amenity, providing at-grade crossings and subway (**Plan A** of **Annex II**). Commercial uses such as food outlets and local retail stores will also be encouraged at the ground floor of IBs along Lok Ming Road with a view to serving the needs of the workers and enhancing the vibrancy of the core of the Area.

4.3 Enhancement of Leisure Space and Amenity Area

4.3.1 Unlike some other older industrial areas in the urban area, the Area is a lush area enriched with mature trees, especially along Sha Tau Kok Road and Jockey Club Road, and pockets of local open space filled with plants and greens. Adequate local open space and sports grounds have also been provided at appropriate locations in the Area to serve the working population.

4.3.2 In order to form a more comprehensive landscaped walkway and open space network, a 2m wide amenity area along Lok Ming Street and On Fuk Street linking the existing landscaped area along Ma Wat River and the local open space along these two streets is proposed to enhance the local landscape resources.

4.3.3 In addition, it is proposed to improve the existing amenity facilities at the western end of Lok Ming Street and to provide appropriate public facilities such as sitting benches, picnic tables, pavement enhancement, thematic planting, etc. at the eastern end of Lok Ming Street along Ma Wat River to enhance the public enjoyment of the riverside amenity area. The existing mature valuable trees including Old Valuable Trees (OVTs) within the Area will be preserved as far as possible.

4.3.4 With the proposed improvement works above, the amenity area

along Ma Wat River would provide a green spine, which would further extend to the north linking the proposed riverside promenade along Ng Tung River within the FLN NDA, whereas the proposed greening and landscape improvement works along Lok Ming Street, On Fuk Street and the southern part of Lok Yip Road would form the green fingers for the Area (**Plan B** of **Annex II**).

4.4 Other Improvement Measures

4.4.1 To enhance the linkage as well as to optimize the potential recreation value for the Area, it is also proposed to provide new cycling tracks along Lok Ming Street, On Fuk Street and Lok Yip Road to link up the existing cycling system along Sha Tau Kok Road and Jockey Club Road. To facilitate an integrated planning for the area, there is an opportunity to relocate the mini-bus terminal/taxi lay-by fronting the Luen Wo Market to the existing open car park on Luen Fat Street and convert the vacated space (**Plan A** of **Annex II**) into an open piazza, which can act as a focal point for the local community as well as a place for ad-hoc functions.

4.4.2 The proposed framework on area enhancement measures as set out in paragraphs 4.1 to 4.3 above (refer to **Annex II**) would be shown in the On Lok Tsuen Layout Plan to guide the detailed district planning works, processing of development/redevelopment proposals in the Area and the implementation of enhancement measures. Concerned departments in carrying out their respective works projects in the area would also be requested to take account of the proposed enhancement measures as far as possible. The scope and implementation details of the proposed enhancement measures would be further developed as necessary subject to further consultation with relevant departments and local community.

5. TECHNICAL ASSESSMENTS

Technical assessments including air ventilation impact assessment (AVA), visual appraisal (VA) and landscape appraisal (LA) have been carried out and their reports are attached at Annexes III to V. For the AVA and VA, the

assessments have been carried out under the worst case scenario and on the assumption that the floor area used for public vehicle park as required by the Government would be exempted from PR calculation under the OZP. The major findings of these technical reports are provided below:

5.1 Air Ventilation Assessment

5.1.1 An air ventilation assessment (Expert Evaluation) (AVA(EE)) has been conducted for the Area. According to the AVA(EE), both the annual wind and summer wind of the area come from the northeast (NE), east (E) and southeast (SE) whereas there is also summer wind from the southwest (SW). Currently, there are some low-rise, low density village type developments to the north, east and southeast of the area. They would not affect the prevailing north-easterly, easterly and south-easterly winds flowing into the Area. Although there are some middle-rise and high-rise developments in the southwest (i.e. Cheung Wah Estate) of the Area, it would not significantly affect the south-westerly wind penetrating into the Area as there are some gaps between the buildings in Cheung Wah Estate.

5.1.2 With the existing grid pattern of streets aligning with the prevailing wind directions and provision of NBA or setbacks on some of the industrial sites (Figure 7.6 of the AVA(EE)), the existing streets within the Area would function as air paths and allow wind flowing through the Area to the adjacent areas including Luen Wo Hui and Cheung Wah Estate and beyond. Therefore, the BH restriction of 65m (excluding basements) under the OZP and the exemption of public vehicle park from PR calculation under the OZP, it is not expected to have significant air ventilation impact to the surrounding area.

5.1.3 However, under the prevailing wind from the NE, SE and SW, the proposed increase in BH will create some wake areas on the leeward side of developments. Due to the existing street pattern with narrow footpaths (less than 6m) in between, the proposed increase in BH would result in some deep and long street canyons with a height/width (HW) ratio above 4:1 and a length/width (L/W) ratio above 20:1, perpendicular to

the prevailing winds. As such, the ground level of canyons, even with downwash effects, will have very weak eddies and air ventilation.

5.1.4 To mitigate the air ventilation impacts, it is recommended to incorporate NBA or setbacks on sites upon development/redevelopment so that there can be building gaps of at least 15m in width in between development sites as far as possible. The existing local open space/amenity zones within the Area can function as air paths and buffer zones for the wind wake areas and are therefore recommended to be maintained.

5.2 Visual Appraisal

5.2.1 The Area is located at the eastern fringe of Fanling/Sheung Shui New Town on a flat land with site level ranging from 6mPD to 12mPD. To the Northwest (NW) and west (W), the skyline is dominated by the existing private residential developments (namely, Regetville, Grand Regetville and Green Code) which have the BH of about 123 to 135mPD. To the SW of the area is Cheung Wah Estate which has a height profile ranging from about 83mPD to 111mPD. To the east is the low-rise village settlement of Shung Him Tong with height of about 20mPD, which is surrounded by knolls to the east and south with the height of the peaks of about 55mPD to 71mPD. The area to the north is zoned "Residential (Group B)" for the medium-density residential developments subject to a maximum BH of 60mPD to 75mPD. Taking into account the development profile of the adjacent existing/planned development, which is mostly ranging from about 67m to 118m in height (equivalent to about 83mPD to 130mPD), the proposed maximum BH of 65m would be compatible with the overall townscape in the area allowing a height profile stepping down from Luen Wo Hui to the low-rise village settlement to its east.

5.2.2 A total of 6 local vantage points from different directions and distances are selected for assessing the visual impact of the proposed increase of BH:

- VP1: from footbridge at Fanling Highway
- VP2: from Luen Wo Hui

- VP3: from Ma Shi Po, Fanling
- VP4: from Luk Yeuk Tau Heritage Trail
- VP5: from Wu Tip Shan
- VP6: from footbridge at San Wan Road.

5.2.3 Due to the distance between the selected vantage points and the Area, the visual impacts from VP1 and 5 are insignificant and considered acceptable. While the visual openness from VP2 would be reduced as the vantage point is located in close proximity to the Area, the development of public open piazza in front of the Luen Wo Market and local aspirations of more at-grade greening and building setback would enhance the visual permeability of the Area and alleviate the visual impact of proposed BH increase to the neighbourhood area. Given the distance between VP4 and the Area, the visual openness and permeability would be reduced by the proposed development resulting in moderate visual impact. However, the development will be partially screened by existing trees and vegetation and the existing view from the viewing point is dominated by the high-rise residential development at Luen Wo Hui (about 81m to 118m), the proposed maximum BH of 65m of the Area is considered not incompatible with the overall townscape.

5.2.4 Taking into account of the visual impacts from all 6 selected vantage points, while the proposed BH of 65m (excluding basements) and the exemption of public vehicle park as required by the Government for PR calculation under OZP would inevitably detract from the visual openness of the locality especially when viewed at close range, the overall visual impact would not be incompatible with the existing new town developments in the surrounding areas. The proposed area enhancement measures such as the development of public open piazza in front of the Luen Wo Market as well as the provisions of building setback and at-grade greening would enhance the amenity and visual permeability of the Area

5.3 Landscape Appraisal

5.3.1 The Area is characterized by low and medium-rise industrial buildings in very dense

arrangements and in variable conditions with medium landscape value. Given the current proposal of relaxing the BH restriction from 25m to 65m (excluding basements), there are opportunities to improve the street environment by providing more at-grade greening and tree planting.

5.3.2 Unlike some other older industrial areas in the urban area, the Area is rich with landscape resources, they include 3 Old and Valuable Trees (OVT) on On Chuen Street and in the On Lok Tsuen Sitting-Out Area No. 2, mature tree groups in the existing car parking lots, roadside amenity areas, riverside areas and public open spaces including On Lok Mun Street Playground and On Fuk Street; roadside planters along Jockey Club Road and Lok Ming Street. There are also many native and exotic tree species such as *Bischofia javanica (秋楓), Eucalyptus spp. (桉屬), Clausena lansium (黃皮), Grevillea robusta (銀樺), Bombax ceiba (木棉), Ficus spp. (榕屬), Bischofia polycarpa (重陽木), Acacia confusa (台灣相思), Cinnamomum camphora (樟樹)* etc. found within the Area. They all are considered of high landscape value and are recommended to be preserved as far as feasible.

5.3.3 In order to form a more comprehensive landscaped walkway and open space network, landscaping or peripheral planning at individual site should in general be encouraged upon redevelopment or when opportunity arises. In particular, a number of landscape enhancement measures are proposed (para. 4.3 refers), they include: a) two green fingers to be provided along Lok Ming Street and On Fuk Street where 2m amenity area will be provide linking the existing landscaped area along Ma Wat River and the local open spaces; and 2) a green spine will be provide by improving the existing amenity facilities in the open space along Ma Wat River.

6. CONCLUSION

6.1 Based on the 2014 Area Assessments, the Area is predominantly used for traditional general industrial uses, mainly for warehouse/storage and car –repairing workshops. With relatively high vacancy rate (5.0%) of the IBs, majority of them (74%) are in single ownership, 28% are

over 30 years old and 35% are in poor condition, the Area possesses good potential for redevelopment. However, the pace of new development/redevelopment in the area is generally slow in recent years. The 2014 Area Assessments therefore recommended that while the Area should be retain as "I" to cater for the strong demand for logistics/warehousing uses, consideration should be given to relaxing the existing development restrictions on the OZP to help optimize the utilization of sites and encourage private redevelopments.

6.2 En-bloc increase in the development intensities for the Area over PR 5 as per OZP restriction is constrained by the existing and planned infrastructure provision, mainly traffic and sewage treatment facilities. However, PR increase for individual sites could be considered subject to technical assessments for consideration by the Town Planning Board. Given the acute needs of parking spaces in the Area, it is proposed that public vehicle parks as required by the Government to be provided in the IBs upon redevelopment should be exempted from GFA/PR calculation under the OZP. According to the VA and AVA(EE) conducted for the Area, the proposed exemption of GFA calculation for public vehicle parks as required by the Government would not induce insurmountable adverse visual and air ventilation impacts.

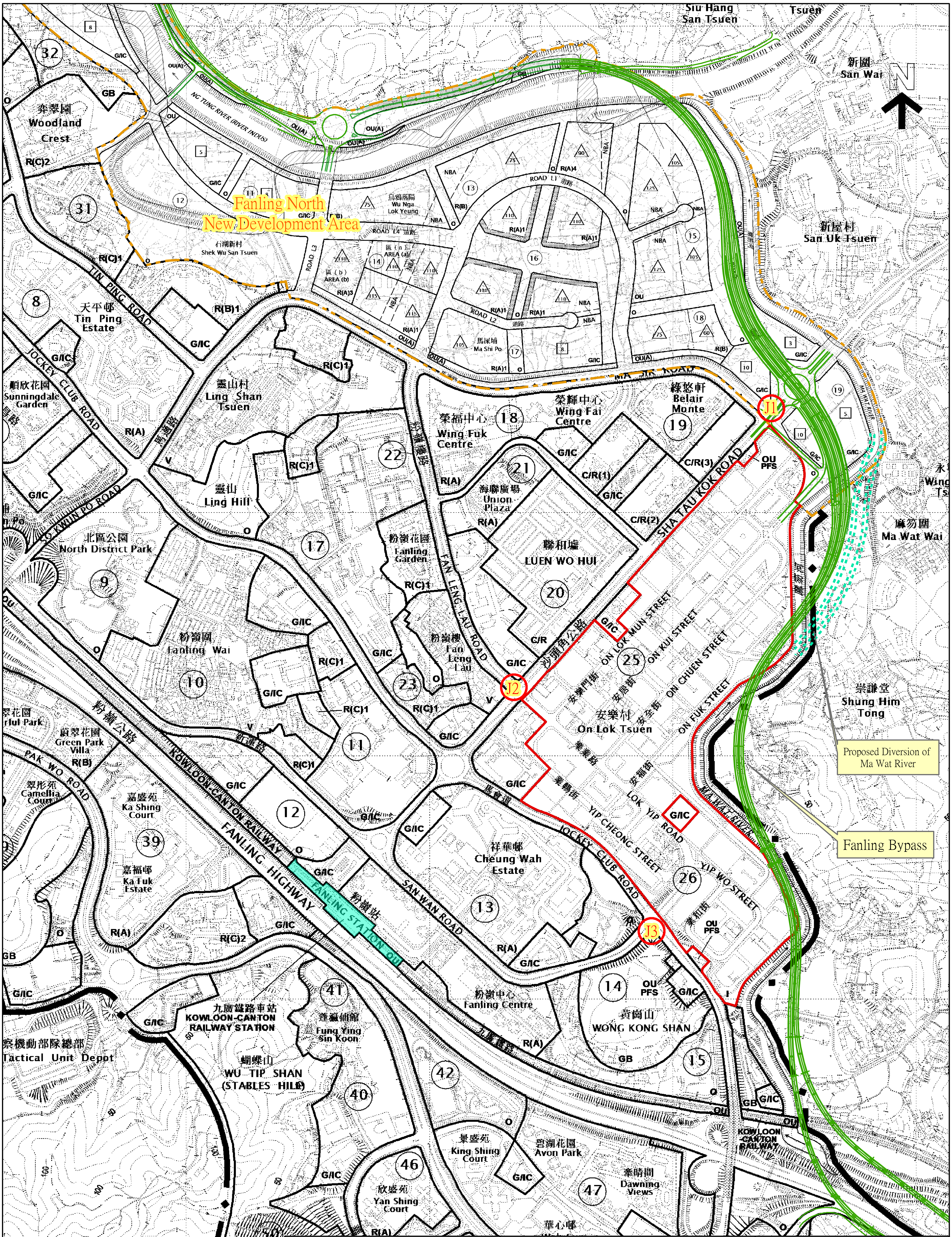
6.3 The BH restriction under the OZP is recommended to be relaxed from 25m to 65m (excluding basements). Such BH would be generally in line with the urban design principle with a height profile stepping down from Luen Wo Hui to the low-rise village settlement of Shung Him Tong to its east. It would also allow more flexibility in building design and provide more opportunity for smaller footprint/site coverage and thus at-grade greening upon redevelopment and thereby enhancing the visual/air permeability and street environment. The proposed maximum BH of 65m (excluding basements development) has already taken into account the maximum PR restriction, the proposed setback/NBA required and the possible public vehicle parking requirement as require by the Government for some sites.

6.4 A series of area enhancement measures are proposed with a view to revitalizing the Area, they include a) strengthening the linkage between the Area to its neighbours including the East Rail Fanling Station, FLN NDA, Luen Wo Hui and Cheung Wah Estate; b) enhancing the pedestrian environment and walkability within the Area such as

pedestrian pavement widening and provision of amenity area along the major pedestrian routes; c) enhancing the existing local open space and amenity area to form a green spine along Ma Wat River and two green fingers along Lok Ming Street and On Fuk Street; and d) other measures including provision of cycling tracks and converting the Luen Wo Market into a public piazza.

6.5 The proposed framework on area enhancement measures would be incorporated into the On Lok Tsuen Layout Plan to guide the detailed district planning works. The scope and implementation details of the proposed enhancement measures would be further developed as necessary subject to further consultation with relevant departments and local community.

PLANNING DPEARTMENT
JANUARY 2016



Legend

🟥 On Lok Tsuen Industrial Area

Reference SO/FS3

Extracted from

OZP Plan No. : S/FLN/2

Exhibition Date : 19-June-2015

Date : 25-November-2015

Location Plan
On Lok Tsuen, Fanling

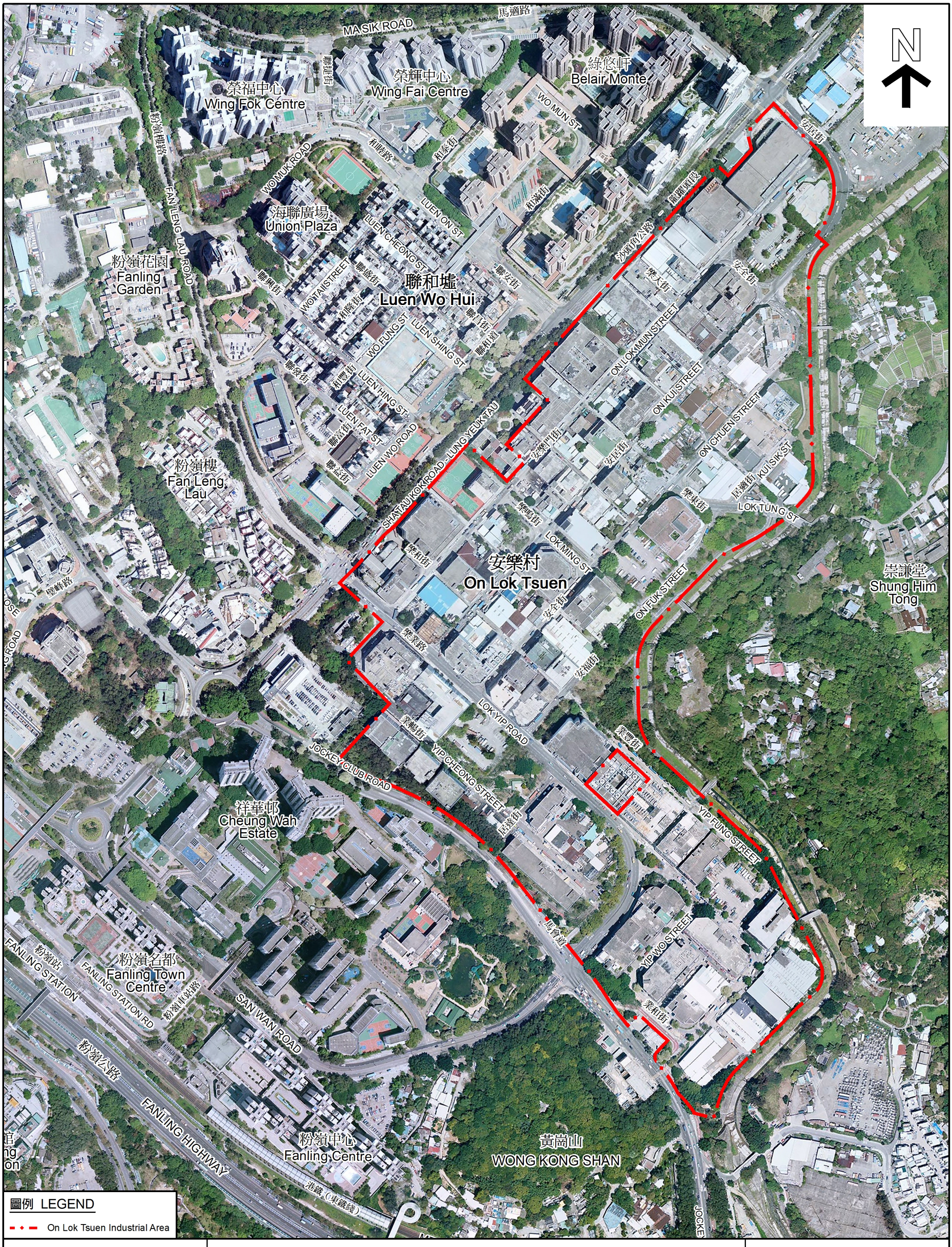
Scale 1: 7000

Site Boundary Subject to Detailed Land Survey

Fanling, Sheung Shui and Yuen Long East District Planning Office

PLANNING DEPARTMENT

PLAN 1



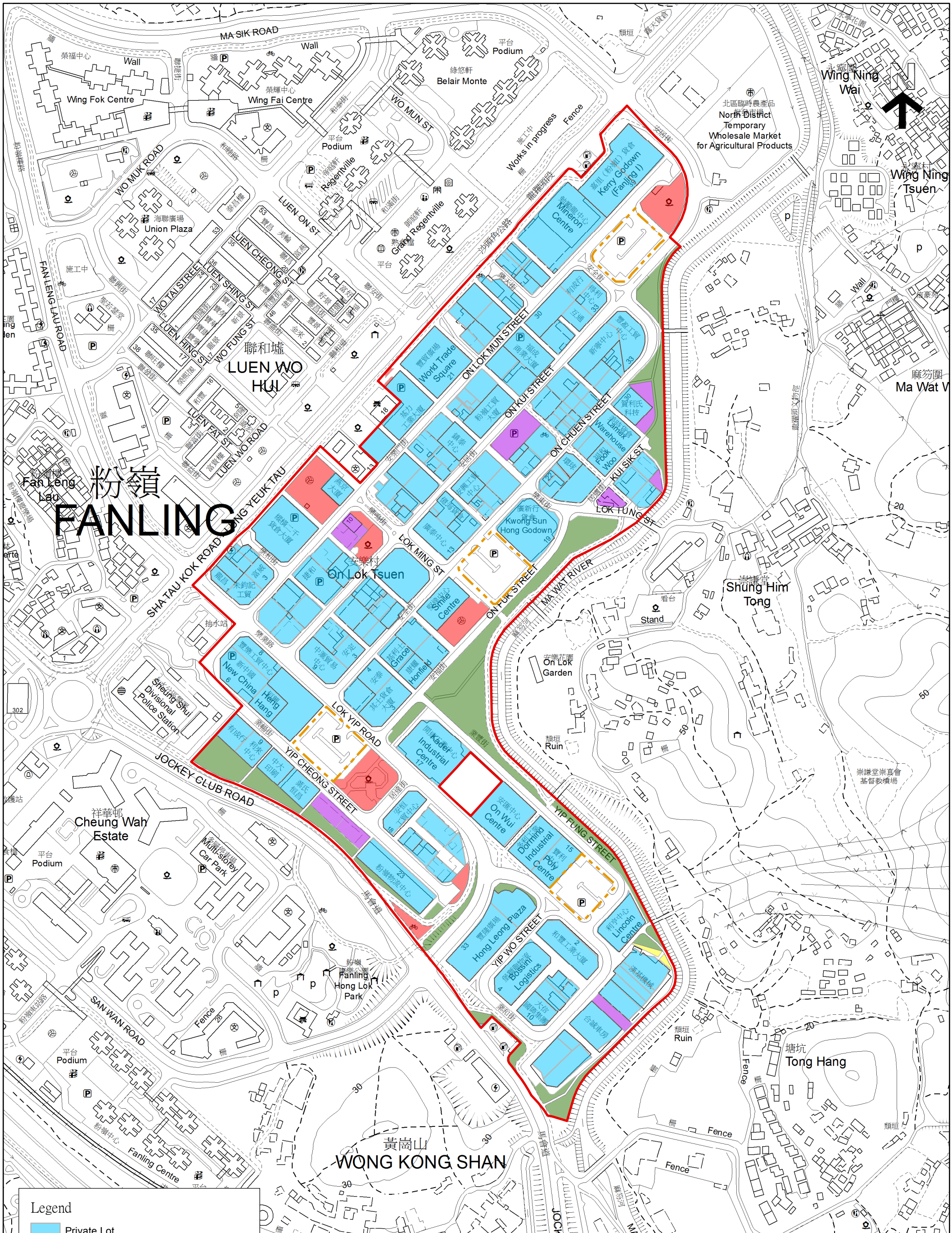
本摘要圖於2015年11月17日擬備，
所根據的資料為地政總署
於2015年4月15日拍得的航攝照片
編號CS59077、CS59078、CS59079、CS59134、CS59135、CS59136、CS59196、CS59197及CS59198
EXTRACT PLAN PREPARED ON 17.11.2015
BASED ON AERIAL PHOTOS Nos.CS59077、CS59078、CS59079、CS59134、CS59135、CS59136、CS59196、CS59197 AND CS59198

AERIAL PHOTO ON LOK TSUEN

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/84

圖 PLAN
2



Reference	SO/FS3
Extracted from	1:5000 Survey Sheet No : 3-SW-A 3-SW-C
Date	17-November-2015

Land Status Plan
On Lok Tsuen, Fanling

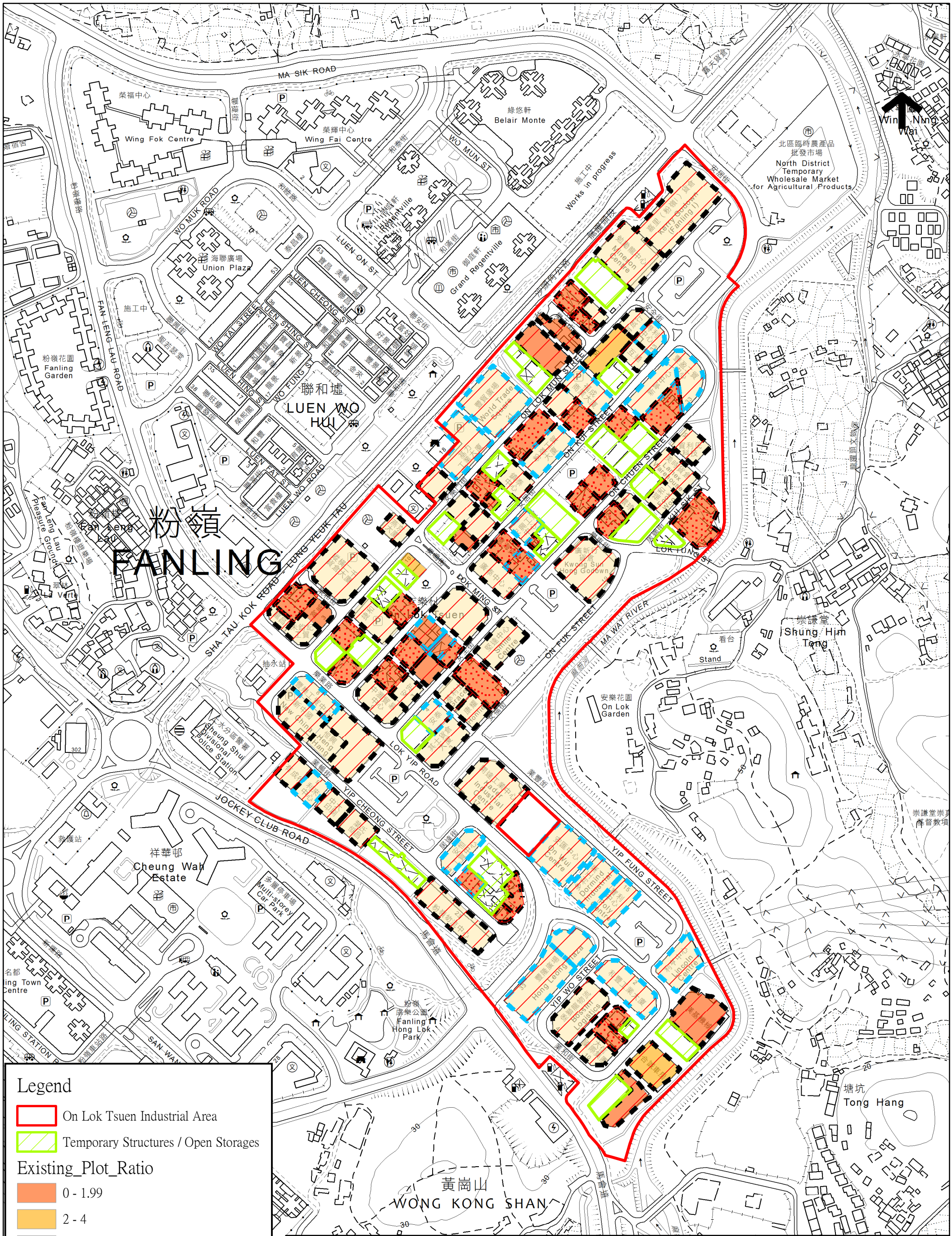
Scale 1: 4000

Site Boundary Subject to Detailed Land Survey

Fanling, Sheung Shui and Yuen Long East District Planning Office

PLANNING DEPARTMENT

PLAN 3



Legend

- On Lok Tsuen Industrial Area
- Temporary Structures / Open Storages

Existing_Plot_Ratio

- 0 - 1.99
- 2 - 4
- Over 4
- Single Ownership
- Multiple Ownership
- Age Below 30
- Age Above 30

Reference

Extracted from

1:5000 Survey Sheet No :
3-SW-A
3-SW-C

Date : 11-December-2015

Potential Redevelopment Sites

Scale 1: 4000

Site Boundary Subject to Detailed Land Survey

Fanling, Sheung Shui and Yuen Long East District Planning Office

PLANNING DEPARTMENT

PLAN 4

圖例 LEGEND

- 安樂村工業區 On Lok Tsuen Industrial Area
- 現時主要行人連接 Existing Major Pedestrian Linkage
- 隧道 Subway
- 行人過路處 Pedestrian Crossing
- 架空行人天橋 Elevated Walkway
- 鄰舍休憩用地 / 美化市容 Local Open Space / Amenity
- 學校 School

聯和墟 Luen Wo Hui

安樂村 On Lok Tsuen

祥華邨 Cheung Wah Estate

粉嶺站 Fanling Station

本摘要圖於2015年11月17日擬備，
所根據的資料為地形圖編號
3-SW-A 及 3-SW-C

EXTRACT PLAN PREPARED ON 17.11.2015
BASED ON TOPOGRAPHIC MAP NOS.
3-SW-A AND 3-SW-C

EXISTING MAJOR PEDESTRIAN LINKAGE ON LOK TSUEN

SCALE 1:4 000

米 Meters 100 0 100 200 300 米 Meters

規劃署 PLANNING DEPARTMENT

參考編號 REFERENCE No. M/FS/15/84

圖 PLAN 5

PROPOSED ENHANCEMENT MEASURES

- Enhanced Pedestrian Linkage
- Potential Green Spine / Green Finger
- Proposed Pedestrian Crossing / Subway
- Proposed / Existing Cycle Track
- Activity Node

N

龍躍頭 LUNG YEUK TA

粉嶺北新發展區 Fanling North New Development Area

To FLN NDA

To FLN NDA

To Luen Wo Hui

To Cheung Wa Estate

Improvement to Sha Tau Kok Road

Connection to FLN NDA

Green Spine

Green Finger

New connection to Cheung Wah Estate

本摘要圖於2015年12月11日擬備，
所根據的資料為地形圖編號
3-SW-A 及 3-SW-C

EXTRACT PLAN PREPARED ON 11.12.2015
BASED ON TOPOGRAPHIC MAP NOS.
3-SW-A AND 3-SW-C

PROPOSED AREA ENHANCEMENT MEASURES ON LOK TSUEN

SCALE 1:5 000 比例尺

米 Meters 100 0 100 200 300 米 Meters

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/84

圖 PLAN
6

Annex I

Planning Report on On Lok Tsuen Industrial Area, Fanling
Basic characteristics of On Lok Tsuen

(a) ***Utilization*** (**Plans 3 to 4**): All of the 98 private industrial buildings (IBs) are of seven storeys or below in height, among which over one third are temporary structures of one to two storeys. About 40% of the IBs have a PR of below 4 (**Plan 4**). The existing IBs provide a total of about 529,478m^2 industrial gross floor area (GFA). However, the overall vacancy rate of the IBs is relatively high at 5.0%, as compared with the 3.5% for all "Industrial" ("I") areas in the territory and the 2.8% for the "I" areas in the Northeast New Territories.

(b) ***Building age/condition*** (**Plans 4**): a majority of the IBs (about 74.5%) is under single ownership. A total of 28 IBs (28.6%) are 30 years or above; and 34 IBs (34.7%) are in poor condition which is much higher than the overall territorial figure of 15.1% for all the IBs in areas zoned "I".

(c) ***Usage***: The industrial area is predominantly used for traditional general industrial uses, mainly warehouse/ storage uses and car-repairing workshops. About 52.9% of the GFA is for warehouse/storage use. The second and third largest users are office (12.3%) and manufacturing/workshop (11.7%). The largest manufacturing business identified is car repairing occupying about 37.5% of the manufacturing/workshop GFA identified.

(d) ***Employment opportunities*** – a total of about 6,500 workers are estimated to be engaged in the IB units, including 1,500 workers in the manufacturing business while 5,000 in non-manufacturing business with the majority (about 3,480 workers) in the business of "Transportation, Storage, Postal and Courier Services".

(e) ***Slow pace of new development/redevelopment*** : only four new IBs have been completed in the last five years. Three of them are predominantly for warehouse/storage use while the remaining one is mainly for office use.

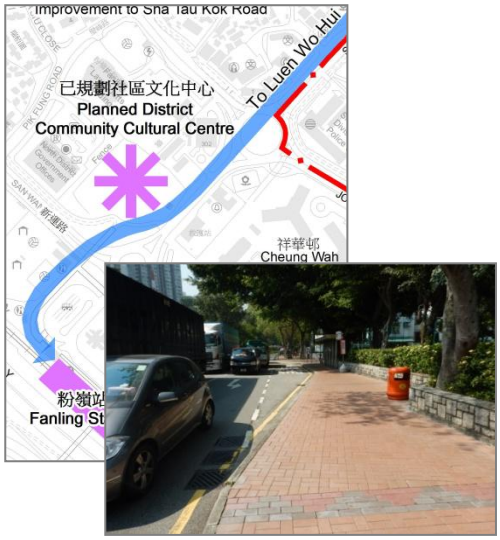
Annex II

Planning Report on On Lok Tsuen Industrial Area, Fanling
Proposed Area Enhancement Measures
(Conceptual Ideas)

I. Enhancing Linkage with the Adjacent Activity Nodes (Plan A) :

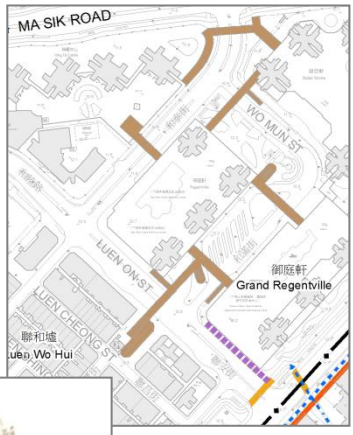
Linkage to East Rail Fanling Station

(i) To enhance walkability from East Rail Fanling Station to On Lok Tsuen – this will include widening (to 4m wide) and repaving of certain sections of sidewalk along Sha Tau Kok Road and Jockey Club Road, improvement of pedestrian signage, roadside amenity and at-grade pedestrian pavements.

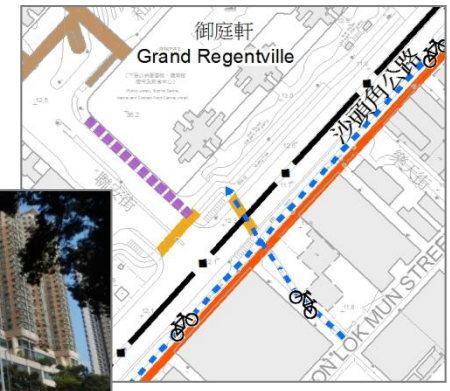


Linkage to Fanling North NDA

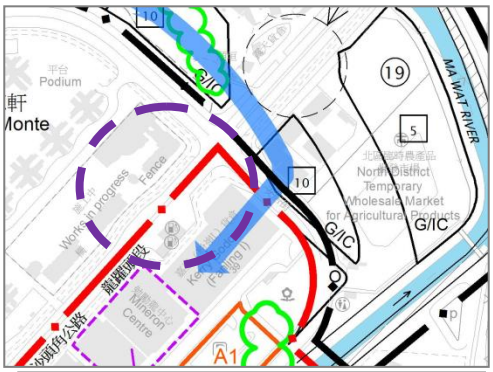
(ii) To strengthen the pedestrian connection between the eastern district node of FLN NDA to Luen Wo Hui and On Lok Tsuen – this will include improvement to the elevated walkway system in Wing Fai Centre and Belair Monte connecting to the crossing at Ma Sik Road (which will further link to the proposed covered walkway mentioned in (iv) below).



(iii) To provide a covered walkway along Luen On Street connecting the existing elevated walkway system linking Wing Fai Centre and Belair Monte to the subway across Sha Tau Kok Road; and



(iv) To examine the feasibility of providing a more direct pedestrian connection linking the eastern district node of FLN NDA. Provision of a new footbridge system could be considered in future, which will include provision of new footbridge at the Kerry Godown site linking to the "G/IC" site to its north upon redevelopment and also a footbridge between the two "G/IC" site to the north of On Lok Tsuen.



Linkage to Luen Wo Hui

(v) To strengthen the connection at Luen Hing Street to the second subway across Sha Tau Kok Road – the existing taxi and green minibus stands is proposed to be relocated to the open car park site at Luen Fat Street so that the space in front of the Luen Wo Market can be converted into a public open piazza (see paragraph (d) below) where it will be connected to On Lok Tsuen via the existing subway;

Linkage to Cheung Wah Estate

(vi) To examine the feasibility of providing a direct pedestrian connection from Cheung Wah Estate to On Lok Tsuen. A 3.25m wide setback will also be required at Sites A5 and A6 for widening the existing pedestrial passageway linking to Cheung Wah Estate;

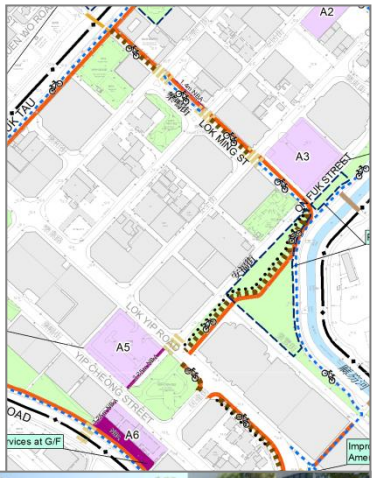
II. **Enhancing pedestrian environment and walkability within On Lok Tsuen (Plan A)**

North-south Connection - Lok Ming Street

(i) To enhance the walking environment and streetscape, it is proposed to widen the pavement to a width of about 4m with a 2m amenity/tree planting strip. Building setback will be required for some of the existing IB sites upon redevelopment. Pedestrian crossings are also proposed at On Lok Mun Street, On Kui Street and On Chuen Street for pedestrian safety. Provision of commercial uses such as food outlets and local retail stores along Lok Ming Road will be encouraged to serve the needs of the workers and local community.

East-west Connection – New Green Walkway

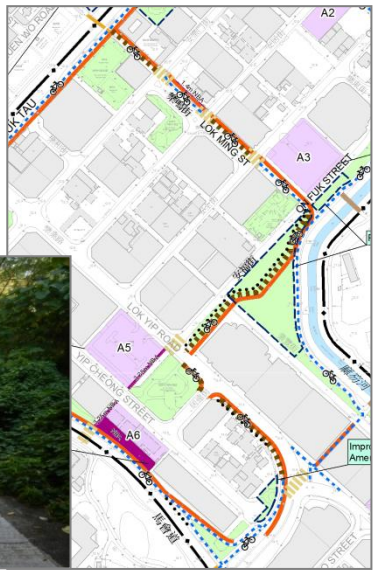
(ii) The existing pavement along the eastern side of On Fuk Street will be widened to provide a 4m wide walkway connecting Jockey Club Road and Lok Ming Road with signal crossings proposed at Yip Cheong Street and Lok Yip Road. The proposed connection would align with the adjacent local open/amenity area along On Fuk Street to provide a green walkway. A secondary east-west green connection linking the existing Fanling Hong Lok Park across Lok Yip Road to Yip Fung Street, i.e. the



existing Fanling Hong Park subway is proposed to extend to cross under Lok Yip Road towards Yip Fung Street, for better pedestrian safety.

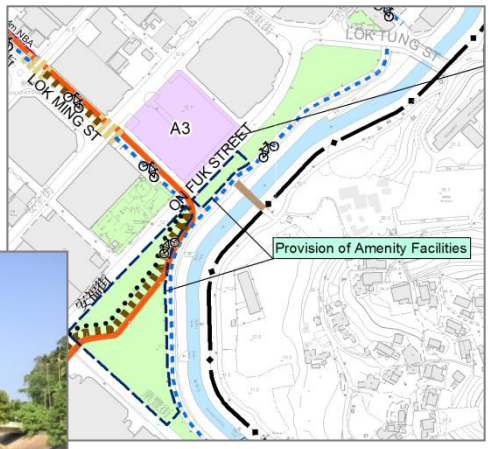
III. Improvement of the local cycling network (Plan A)

Currently, there are some unconnected cycling tracks within On Lok Tsuen, i.e. broken sections along Lok Ming Street and Lok Yip Road and along Ma Wat River. It is proposed to provide new cycling tracks along Lok Ming Street, On Fuk Street and Lok Yip Road to link up the existing cycling system along Sha Tau Kok Road and Jockey Club Road.

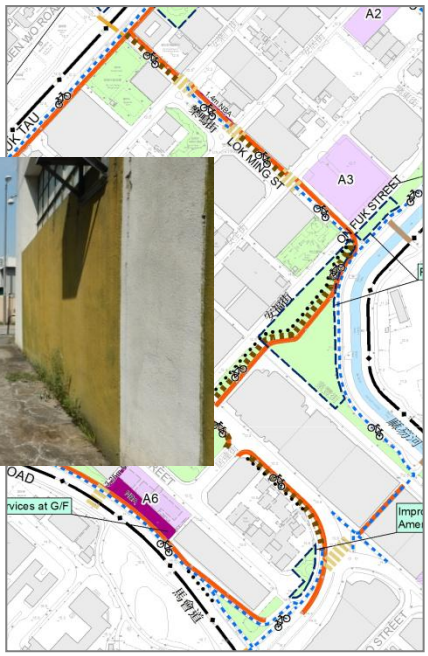


IV. Enhancement of Leisure Space and Amenity Area (Plans A & B)

(i) Enhancing the existing open space along Ma Wat River to form a green spine – to enhance the landscape design of the existing open space and provide appropriate public facilities such as benches and outdoor tables at the eastern end of Lok Ming Street along Ma Wat River for public enjoyment. The proposed green spine would further extend to the northern direction linking the proposed river promenade along Ng Tung River within the FLN NDA.



(ii) Enhancing the amenity area along Lok Ming Street and On Fuk Street to form the green fingers - 2m amenity area will be provided along these two streets to link up the existing local open space and the landscaped area along Ma Wat River.



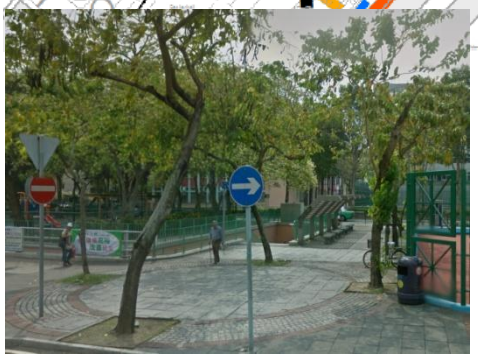
(iii) Enhancement of the existing local open space facilities at the western end of Lok Ming Street so that it can be connected to the proposed public piazza at Luen Wo Market through the existing subway.

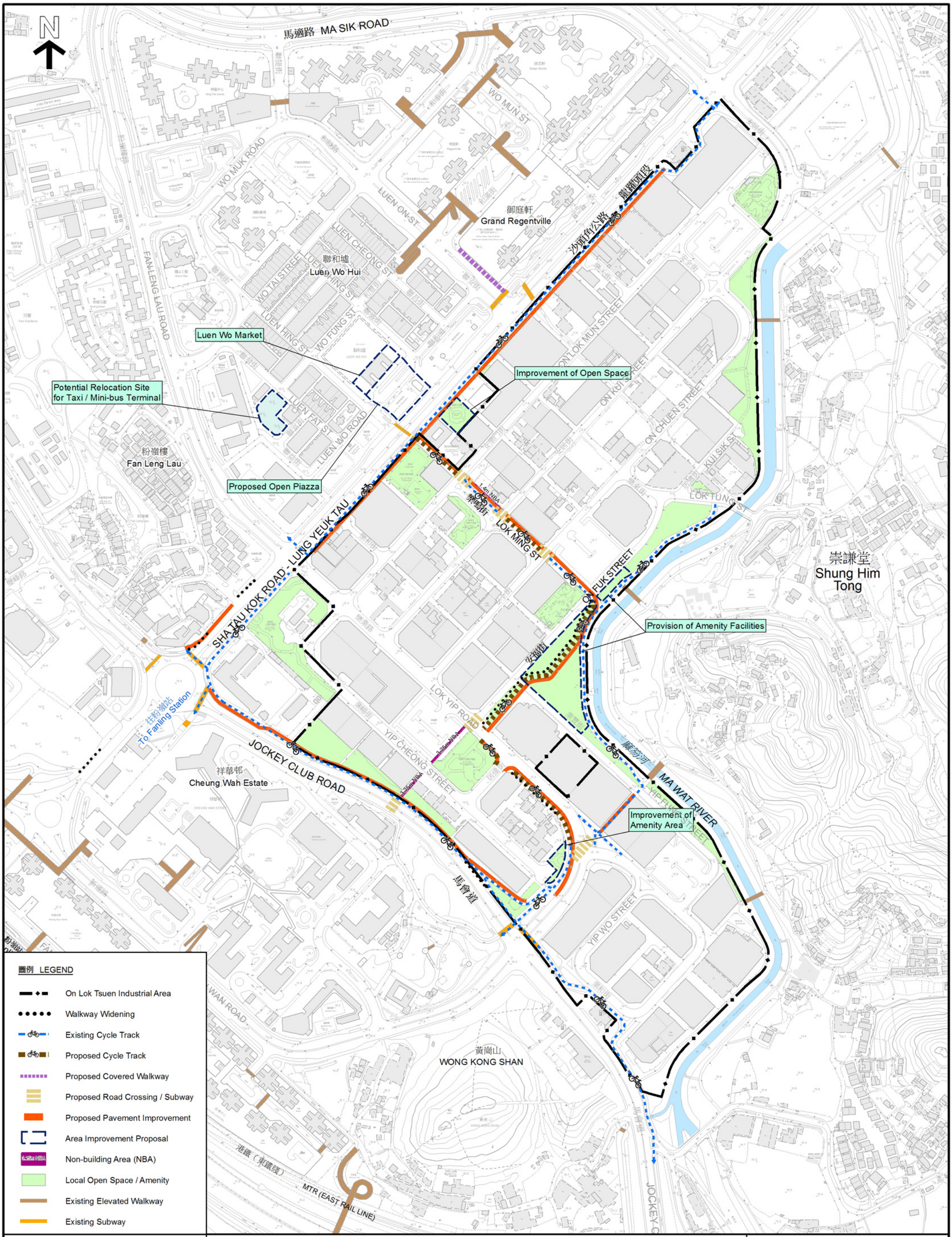
A Landscape Concept Plan illustrating the overall landscaping proposal for the Area is attached at **Plan B**.

V. Revitalization of Luen Wo Tsuen to its Immediate North (Plan A)

To the north across Sha Tau Kok Road is the Luen Wo Market which is a Grade 3 historic building built in 1951. Members of North District Council has put forward a proposal to revitalize the Market by injecting commercial and community functions into the historic building and thereby repositioning it as a development core. The market building covers a relatively small area of 611 m^2 and is one of the potential sites being considered for inclusion into the Revitalising Historic Buildings Through

Partnership Scheme for adaptive re-use. To facilitate an integrated planning for the area, there is an opportunity to relocate the adjoining mini-bus terminal/taxi lay-by to the existing open car park on Luen Fat Street. This would provide an open piazza acting as a focal point for the local community as well as a place for ad-hoc functions.





本摘要圖於2015年12月11日擬備，
所根據的資料為測量圖編號
3-SW-12B & 3-SW-7D
EXTRACT PLAN PREPARED ON 11.12.2015
BASED ON SURVEY SHEET Nos.
3-SW-12B & 3-SW-7D

INDICATIVE ENHANCEMENT MEASURES ON LOK TSUEN

SCALE 1 : 4 000 比例尺

米 Meters 100 0 100 200 300 米 400 Meters

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/84

圖 PLAN A

- EXISTING TREE GROUP ALONG RIVERFRONT AND ALONG ROADSIDE AMENITY PLANTER
- EXISTING TREE GROUP RECOMMENDED TO BE PRESERVED WITHIN POTENTIAL G.L.
- LARGE MATURE TREE RECOMMENDED TO BE PRESERVED WITHIN POTENTIAL G.L.
- EXISTING OVT
- EXISTING PARK
- EXISTING SPORT VENUE
- PROPOSED TREE PLANTING
- PROPOSED THEMATIC PLANTING / SPECIAL FEATURE TREE
- PROPOSED RIVERBANK ENHANCEMENT
- PROPOSED PLANTER ENHANCEMENT
- PROPOSED PAVEMENT ENHANCEMENT
- ON LOK TSUEN INDUSTRIAL AREA
- PROPOSED CYCLE TRACK

EXISTING TREE GROUP RECOMMENDED TO BE PRESERVED

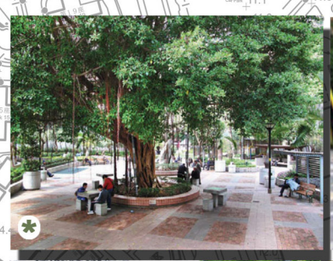
EXISTING TREE GROUP RECOMMENDED TO BE PRESERVED

N

EXISTING TREE GROUP ALONG CYCLE PARKING AREA

TREE FOR SHADING AND PAVING ENHANCEMENT

ENHANCED PAVEMENT DESIGN



PROPOSED PLAZA FRONTING LUEN WO HUI

THEMATIC PLANTING

RIVERBANK ENHANCE-

PAVEMENT AND PLANTER ENHANCEMENT ALONG ROADSIDE

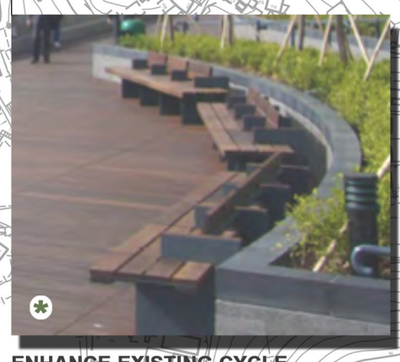
EXISTING TREE GROUP ALONG ROADSIDE AMENITY PLANTER

LANDSCAPE TREATMENTS/ DESIGNS FOR SEATING OPPORTUNITY AND PASSIVE RECREATION USE

PAVEMENT AND PLANTER ENHANCEMENT ALONG CYCLE TRACK

MATURE TREE GROUP RECOMMENDED TO BE PRESERVED

ENHANCEMENT PAVEMENT AND CYCLE TRACK



ENHANCE EXISTING CYCLE PARKING AREA TO PROVIDE RECREATION / AMENITY

Source Reference:

* Tree and Landscape map, Greening,Landscape & Tree Management Section, Development Bureau.
* Integrated Landscape Design Framework, Greening, Landscape & Tree Management Section, Development Bureau.

本摘要圖於2015年11月30日擬備，所根據的資料為城市設計及園藝組圖則編號 M/UD/15/72 圖三

EXTRACT PLAN PREPARED ON 30.11.2015 BASED ON UD&L PLAN NO. M/UD/15/72 PLAN 3

CONCEPTUAL LANDSCAPE ENHANCEMENT PLAN

米 Meter 100 0 100 200 米 300 Meter

規劃署 PLANNING DEPARTMENT

參考編號 REFERENCE No. M/FS/15/84

圖 PLAN B

CONSULTANCY STUDY FOR AIR VENTILATION ASSESSMENT SERVICES

Cat. A1– Term Consultancy for Expert Evaluation and Advisory Services on Air Ventilation Assessment (PLNQ 56/2012)

Draft Final Report

For an Instructed Project at On Lok Tsuen, Fanling

December 2015

……

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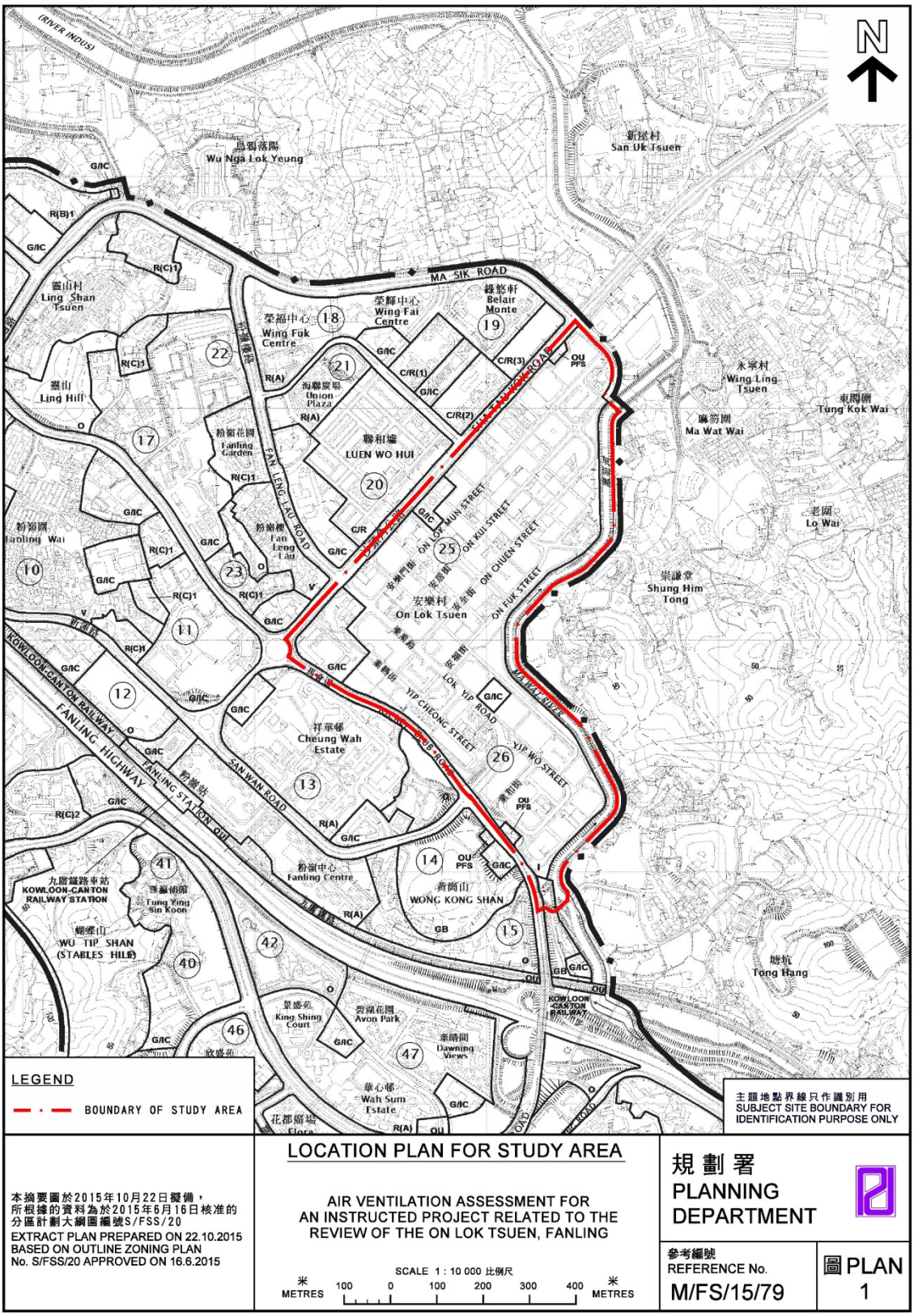
The Study Area



Expert Evaluation Report

for an Instructed Project at On Lok Tsuen, Fanling

Executive summary

0.1 Wind Availability

(a) The annual wind of the study area mainly comes from the northeast (NE), east (E) and southeast (SE). The summer wind of this area mainly comes from east (E) southeast (SE) and southwest (SW).

0.2 Existing Conditions

(a) The study area is located in On Lok Tsuen, Fanling. It is bounded by Sha Tau Kok Road-Lung Yeuk Tau, Jockey Club Road and Ma Wat River. Currently, the buildings in the study area are low-rise developments with building heights lower than 40mPD.

(b) There are some low-rise, low-density village type development lower than 40mPD to the north, east and southeast of the study area. They would not affect the prevailing north-easterly, easterly and south-easterly winds flowing into the study area. There are some mid-rise and high-rise developments over 80mPD in Cheung Wah Estate southwest of the study area. They will not significantly affect the south-westerly wind penetrating into the study area as there are some gaps between the buildings in Cheung Wah Estate as air paths. The northwest wind is not the prevailing wind of the study area. Thus the high-rise developments over 80mPD northwest of the study area would not affect any prevailing winds penetrating into the study area.

0.3 Expert Evaluation of the Study area

(a) The AVA Study has assessed the wind performance for On Lok Tsuen and its surrounding for the proposed relaxation on building height restriction from 25m to 65m (excluding basement). Under the AVA Study, the worst case scenario has been assumed and the implications of exemption of public vehicle park for plot ratio calculation under the OZP have also been taken into account.

(b) In general, air ventilation can achieve better performance if measures, such as breezeways, air paths, open spaces, gaps between buildings and building permeability especially near ground level, are applied. Considering the current air paths in the study area, imposing non-building area in the study area would be effective to enhance the air ventilation performance for the study area and surrounding areas.

(c) Under the prevailing wind from the northeast, east, southeast and southwest, the future developments in this study area will create some wake areas on the

leeward side of developments. The depth of possible wake areas is at least the maximum absolute building height (around 65m) or the width of the building.

(d) With the building height increasing up to 65m, it is possible that the study area will form some deep and long canyons with an H/W (Height / Width) ratio above 4:1 and an L/W (Length / Width) ratio above 20:1 perpendicular to the prevailing winds. For a deep canyon beyond a H/W ratio of 2:1, the ground level of canyons, even with the so call downwash effects, will have very weak eddies and air ventilation. Furthermore, for longer street canyons, corner vortices fade with increasing street length. It is recommended that the Length of the street sections (L) should be less than 100m long.

(e) To mitigate the impacts mentioned in (c) and (d) and consider insufficient air paths in the study area, it is recommended to incorporate some 15-20m wide Non-Building Areas (NBAs) in the study area. These NBAs can break down the long street canyon to aid the lateral flow induced by corner eddies entering into the street canyon. Moreover, with the existing grid pattern of streets aligning with the prevailing wind directions, these NBAs can function as air paths for the study area and surrounding areas. NBAs 1-5 can be the air paths for the south-easterly winds flowing through the study area and further into the surrounding areas including Sha Tau Kok Road-Lung Yeuk Tau and Luen Wo Hui. NBAs 6-8 can be the air paths for the north-easterly and south-westerly wind flowing through the study area and also let north-easterly wind penetrating into Jockey Club Road and Fanling Government Primary School. NBA 9 can function as an air path channelling the north-easterly and south-westerly wind through the study area and surrounding areas. Finally, NBA 10 can be the entrance for south-easterly wind flowing into Yip Wo ST, Lok Yip RD and further into Luen Wo Hui. Given that designated NBAs would be fulfilled as recommended, the study area with 65m building height restriction would have no significant impacts on the surrounding areas.

(f) However, even with the proposed NBAs, some NE-SW orientated narrow streets in the central part of On Lok Tsuen with possible high H/W ratio (>4:1) will hinder the lateral and vertical air flow into the middle parts of street canyons under south-easterly wind perpendicular to those streets. In addition, some developments in the southeastern corner of the study area will possibly have large frontal areas (frontal width over 120m) under norther-easterly and south-easterly winds respectively. These narrow streets and developments with possible large frontal areas will cause some local air ventilation issues. To enhance the air ventilation performance in the study area, it is recommended, at building design stage, that project proponents in these areas causing local air ventilation issues should refer to the design guidelines of Building Setback, Building Disposition and Building Permeability in "Hong Kong Planning Standard and Guidelines" (HKPSG) and follow the building separation requirement (20-33.3%) in the "Sustainable Building Design Guidelines".

0.4 Further Work

(a) Given that both designated NBAs and requirement of building separation requirements would be fulfilled as recommended, the study area would have no major air ventilation issues. If these requirements cannot be met, further quantitative AVA studies should be conducted to assess their air ventilation performance.

Expert Evaluation Report

for an Instructed Project at On Lok Tsuen, Fanling

1.0 The Assignment

1.1 The Planning Department completed the updated Area Assessment of Industrial Land in the Territory in 2015. The On Lok Tsuen in Fanling was recommended to be retained as "Industrial" ("I") and consideration would be given to identifying suitable government sites in the area for commercial/office and /or logistics/warehousing developments and to relaxing existing development restrictions on the Outline Zoning Plan (OZP), subject to technical assessment on the feasibility. The Town Planning Board noted its findings and recommendations on 14.8.2015. The recommendations would serve as a broad direction with detailed proposal to be worked out in the context of proposed amendments to the OZP. In this connection, development restrictions of "I" zone in On Lok Tsuen are being reviewed and six government sites have been identified for disposal. To optimize the scarce land resources, consideration is being taken for relaxation on the development restrictions of "I" zone in On Lok Tsuen, i.e. maximum plot ratio of 5 and building height of 25m. It is considered necessary to conduct an expert evaluation to confirm that there would be no adverse impact arising from the development proposals from air ventilation perspective.

1.2 This expert evaluation report is based on the materials given by Planning Department to the Consultant including:

Site Plan of the study area
Height of the existing buildings in mPD (B1000 data from LandsD)
Wind information from Hong Kong Observatory and Planning Department

1.3 The consultant has studied the foregoing materials. During the preparation of the report, the consultant has visited the site and conducted working sessions with Planning Department.

2.0 Background

2.1 Planning Department's study: "Feasibility Study for Establishment of Air Ventilation Assessment System" (Feasibility Study) has recommended that it is important to allow adequate air ventilation through the built environment for pedestrian comfort.

2.2 Given Hong Kong's high density urban development, the Feasibility Study opines that: "more air ventilation, the better" is the useful design guideline.

2.3 The Feasibility Study summarizes 10 qualitative guidelines for planners and designers. For the OZP level of consideration, breezeways/air paths, street grids and

orientations, open spaces, non-building areas, waterfront sites, scales of podium, building heights, building dispositions, and greeneries are all important strategic considerations.

2.4 The Feasibility Study also suggests that Air Ventilation Assessment (AVA) be conducted in three stages: Expert Evaluation, Initial Studies, and Detailed Studies. The suggestion has been adopted and incorporated into Housing Planning and Lands Bureau (HPLB) and Environment, Transport and Works Bureau (ETWB) Technical Circular no. 1/06. The key purposes of Expert Evaluation are to the following:

(a) Identify good design features.
(b) Identify obvious problem areas and propose some mitigation measures.
(c) Define “focuses” and methodologies of the Initial and/or Detailed studies.
(d) Determine if further study should be staged into Initial Study and Detailed Study, or Detailed Study alone.

2.5 To conduct the Expert Evaluation systematically and methodologically, it is necessary to undertake the following information analyses:

(a) Analyse relevant wind data as the input conditions to understand the wind environment of the Area.
(b) Analyse the topographical features of the study area, as well as the surrounding areas.
(c) Analyse the greenery/landscape characteristics of the study area, as well as the surrounding areas.
(d) Analyse the land use and built form of the study area, as well as the surrounding areas.

Based on the analyses of site context and topography:

(e) Estimate the characteristics of the input wind conditions of the study area.
(f) Identify the wind paths and wind flow characteristics of the study area through slopes, open spaces, streets, gaps and non-building areas between buildings, and low rise buildings; also identify stagnant/problem areas, if any.
(g) Estimate the need of wind for pedestrian comfort.

Based on the analyses of the EXISTING urban conditions:

(h) Evaluate the strategic role of the study area in air ventilation term.
(i) Identify problematic areas which warrant attention.
(j) Identify existing “good features” that needs to be kept or strengthened.

Based on an understanding of the EXISTING urban conditions:

(k) Compare the prima facie impact, merits or demerits of the different development restrictions as proposed by Planning Department on air ventilation.
(l) Highlight problem areas, if any. Recommend improvements and mitigation measures if possible.
(m) Identify focus areas or issues that may need further studies. Recommend appropriate technical methodologies for the study if needed.

3.0 The Wind Environment

3.1 Hong Kong Observatory (HKO) stations provide useful and reliable data on the wind environment in Hong Kong (Figure 3.1). There are some 46 stations operated by HKO in Hong Kong. Together, these stations allow for a good general understanding of the wind environment especially near ground level.

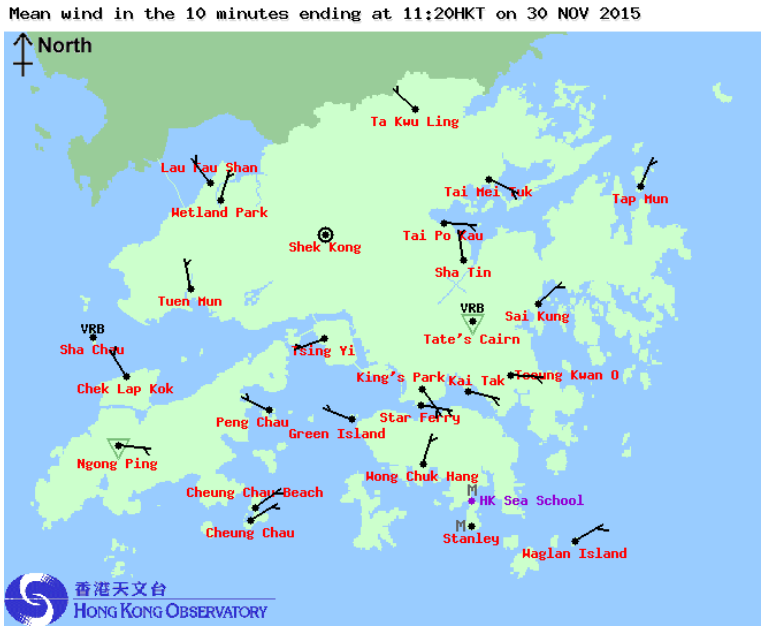


Figure 3.1 Some of the HKO stations in Hong Kong. This is a screen capture at 11:20pm on 30 Nov 2015 from the HKO website. The arrows show the wind directions and speeds at the given time.

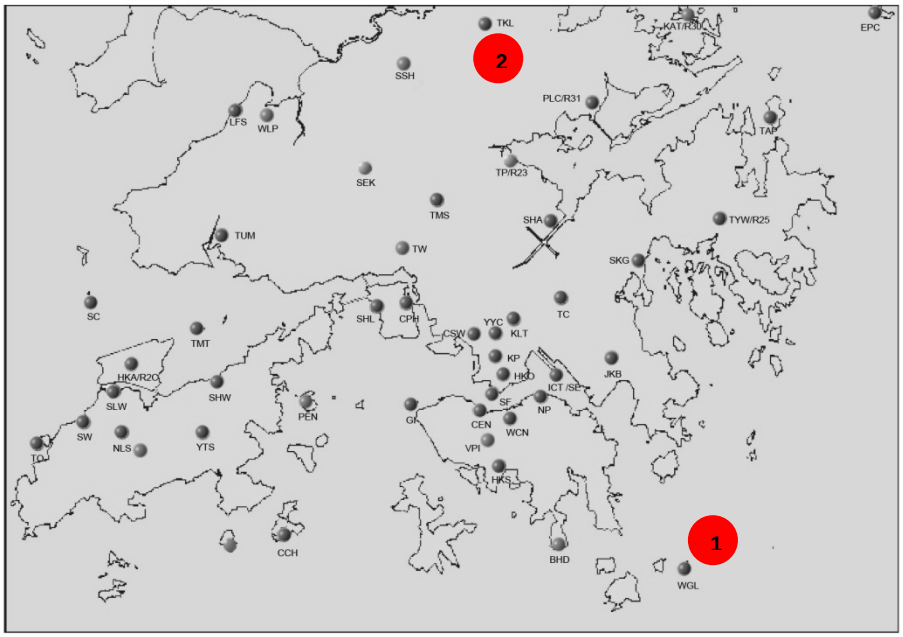


Figure 3.2 The HKO stations at 1: Waglan Island (WGL), 2: Ta Kwu Ling (TKL).

3.2 The HKO station at Waglan Island (WGL) is normally regarded by wind engineers as the reference station for wind related studies (Location 1 in Figure 3.2). The station has a very long measurement record, and is unaffected by Hong Kong's complex topography. However it is known not to be able to capture the thermally induced local wind circulation like sea breezes very well. Based on WGL wind data, AVA studies are typically employed to estimate the site wind availability taking into account the topographical features around the site.

3.3 Based on the annual wind rose of WGL (Figure 3.3), it is apparent that the annual prevailing wind in Hong Kong is from the east. A major component of wind also comes from the northeast; and there is a minor, but nonetheless observable component from the southwest. WGL has weak to moderate wind (0.1m/s to 8.2 m/s) approximately 70% of the time.

3.4 For the AVA study, seasonally or monthly wind environment should be understood (Figures 3.4 and 3.5). During winter, the prevailing wind comes from the northeast, whereas during summer, it comes from the southwest. As far as AVA is concerned, in Hong Kong, the summer wind is very important and beneficial for thermal comfort. Hence, based on WGL data, it is very important to plan our city, on the one hand, to capture the annual wind characteristics, and on the other hand, to maximize the penetration of the summer winds (mainly from the South-West) into the urban fabric.

3.5 Apart from WGL, wind data of Ta Kwu Ling have also been extracted from HKO for reference (Figure 3.6 to Figure 3.8) as the nearest station measuring wind environment in Fanling. It can be observed that the annual prevailing winds are mainly from the east and southeast. The summer prevailing winds are mainly from the east, southeast, south and southwest.

3.6 Noting the limitation of the data of Waglan Island mentioned in para. 3.2, wind characteristic from the web-based database system provided by Planning Department has also been referred [1]. Data from one location (x:074; y:082) representing the study area were simulated at 200m, 300m and 500m above the ground (Figure 3.9). This location, according to the theories of Regional Atmospheric Modeling System (RAMS), was selected to reflect the general wind patterns of the study area induced by topography. Prevailing wind directions are summarised in Table 1. As the HKO station at Ta Kwu Ling is relatively far away from the study area and the surroundings of Ta Kwu Ling are different from those of the study area, the web-based wind data provided by Planning Department is likely to be more representative to reflect the wind availability of the study area. Based on the wind data from PlanD, it can be observed that the annual prevailing winds of the study area are mainly from northeast, east and southeast. The summer wind of this area mainly comes from the east, southeast and southwest. In general, the wind data from PlanD's website is consistent with that of Ta Kwu Ling and Waglan Island.

[1] http://www.pland.gov.hk/pland_en/info_serv/site_wind/site_wind/index.html

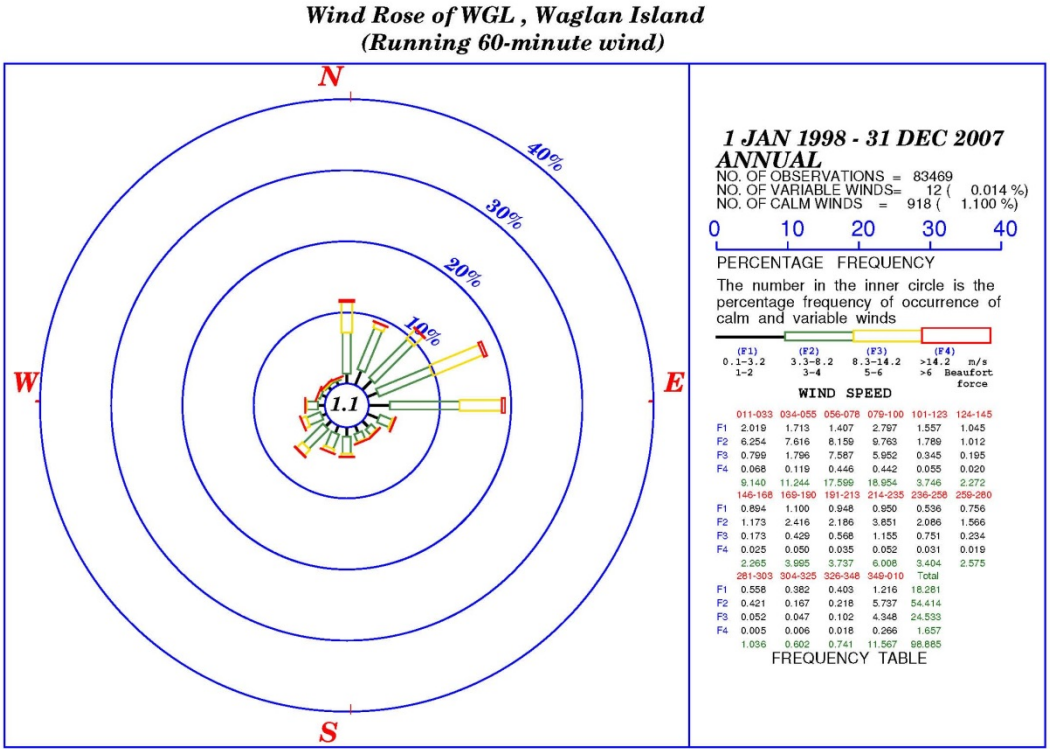


Figure 3.3 Wind rose of WGL from 1998 to 2007[1] (annual).

[1] Wind data from 1998 to 2007 are the latest available 10-year data from HKO to the consultant.

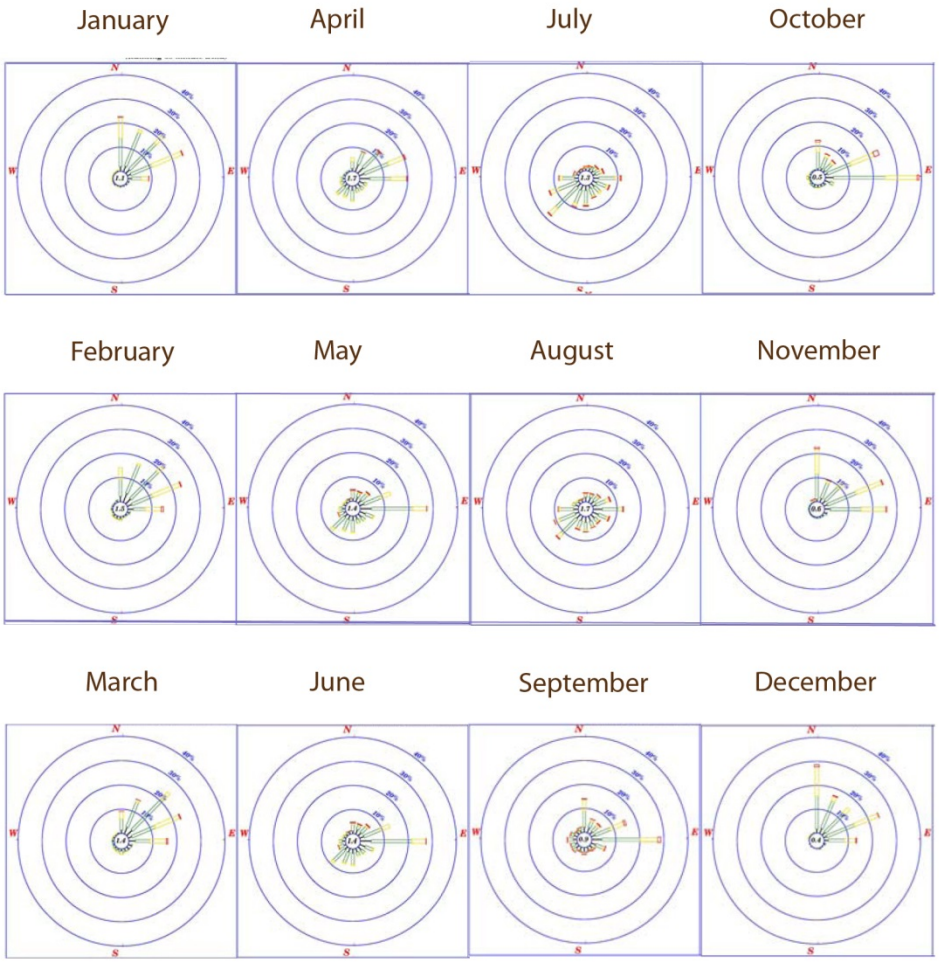


Figure 3.4 Monthly wind roses of WGL from 1998 to 2007.

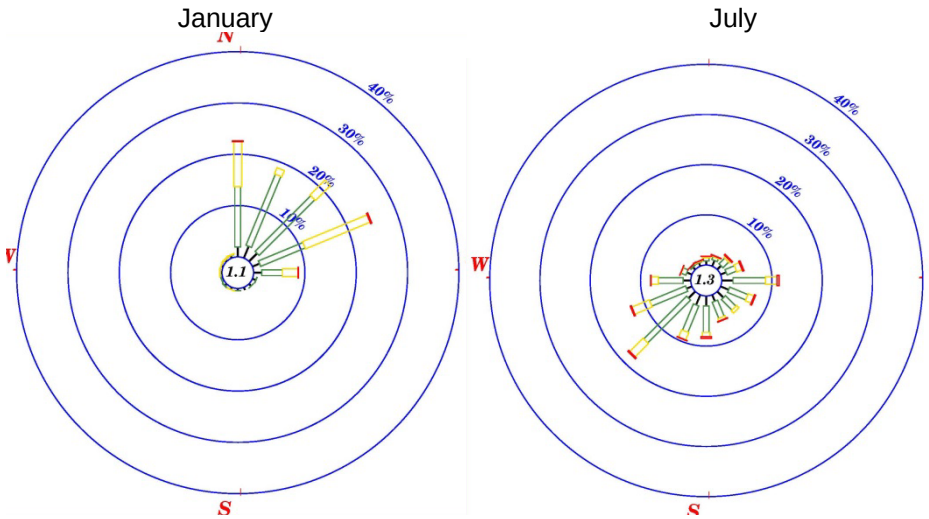


Figure 3.5 Wind roses of WGL from 1998 to 2007 (Jan and July).

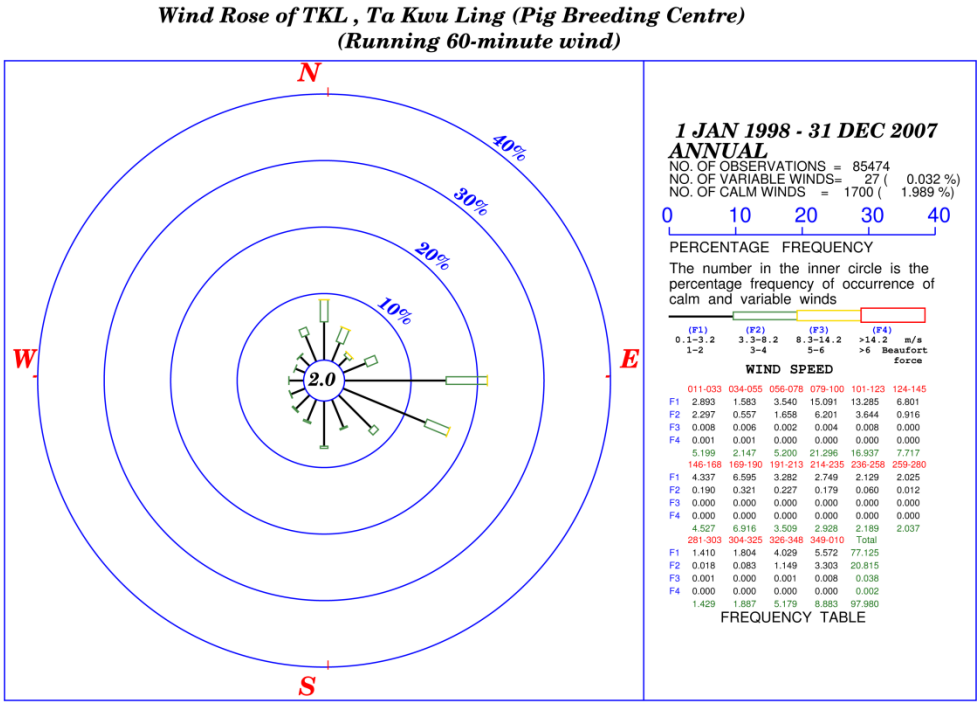


Figure 3.6 Wind rose of Ta Kwu Ling 1998-2007 (annual)
(Elevation of station: 15m above mean sea level)

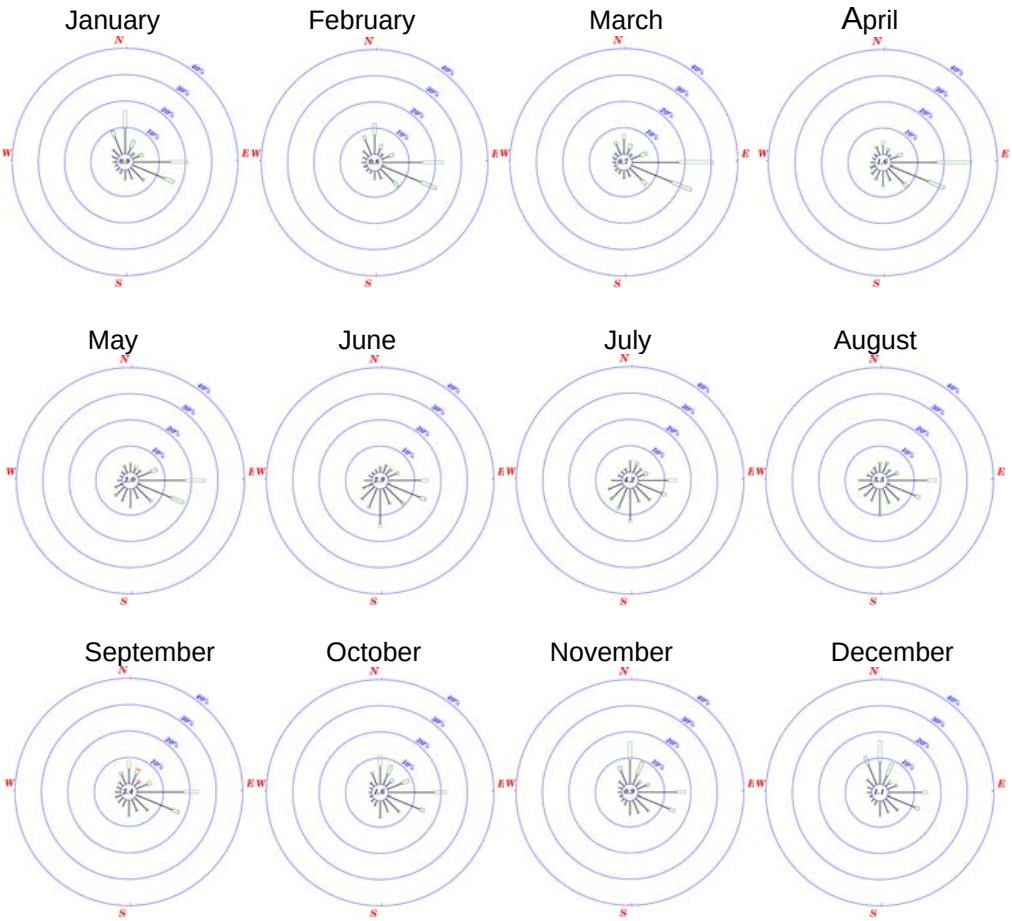


Figure 3.7 Monthly wind roses of Ta Kwu Ling 1998 – 2007

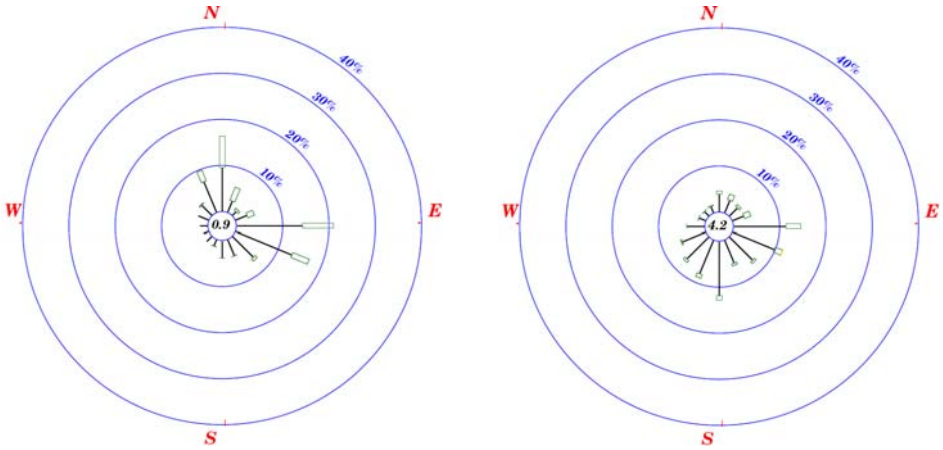


Figure 3.8 Wind roses of Ta Kwu Ling 1998 – 2007 (Jan and July)

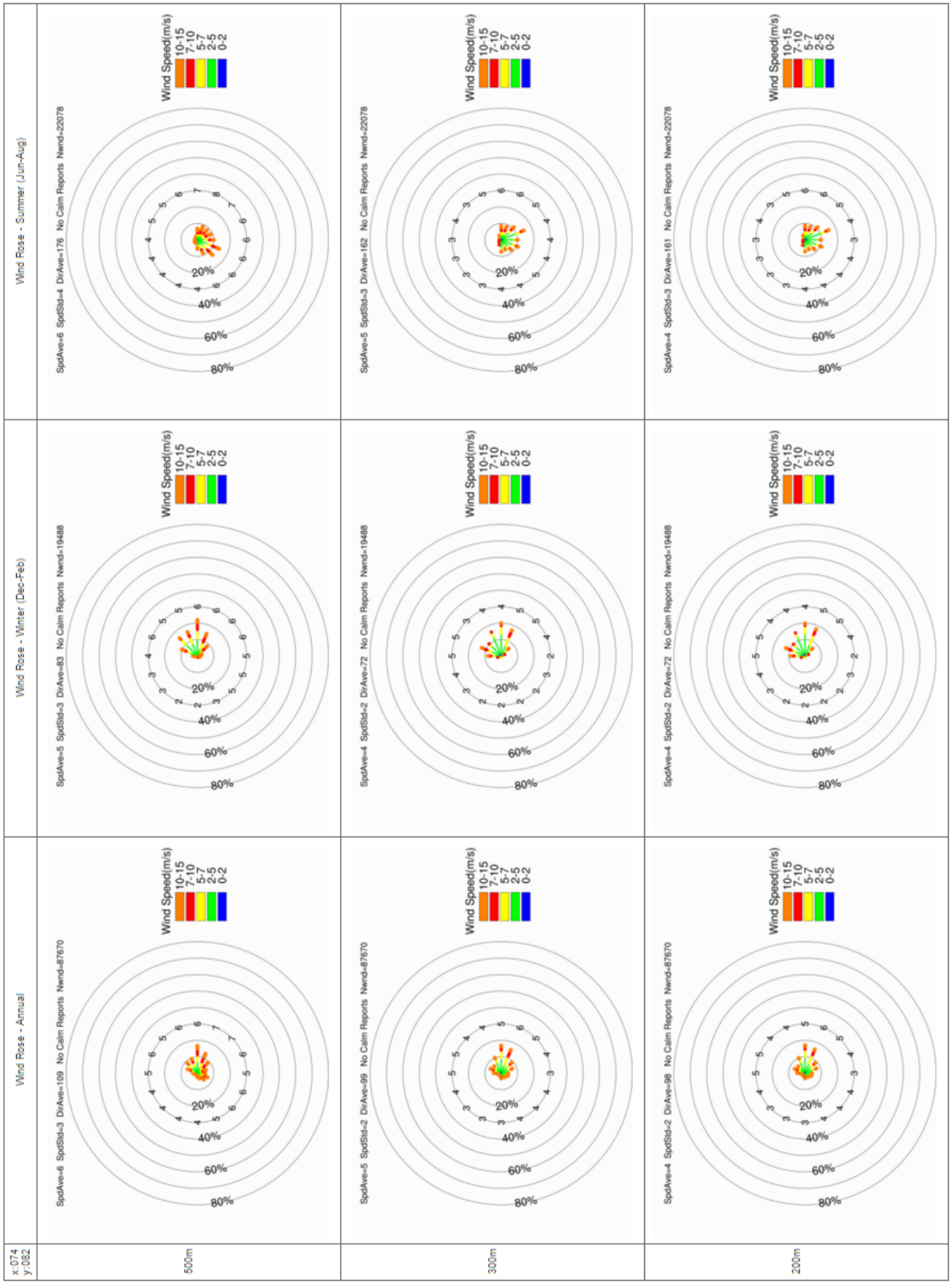


Figure 3.9 The wind data provided by Planning Department (x:074; y:082).

3.7 In summary, based on the available wind data (Table 1) by considering that wind data provided by Planning Department is likely to be more representative to reflect the wind availability of the study area elaborated in Para. 3.6, it can be concluded that the annual wind of the study area mainly comes from the northeast (NE), east (E) and southeast (SE). The summer wind of this area mainly comes from the east (E) southeast (SE) and southwest (SW) (Figure 3.10).

Table 1 Summary of Prevailing Wind Directions

			Period	
			Annual	Summer
HKO station	Ta Kwu Ling (TKL)		E, SE	E, SE, S, SW
Wind data provided by Planning Department	x:074; y:082	200m	NE, E, SE	E, SE, SW
		300m	NE, E, SE	E, SE, SW
		500m	NE, E, SE	E, SE, SW

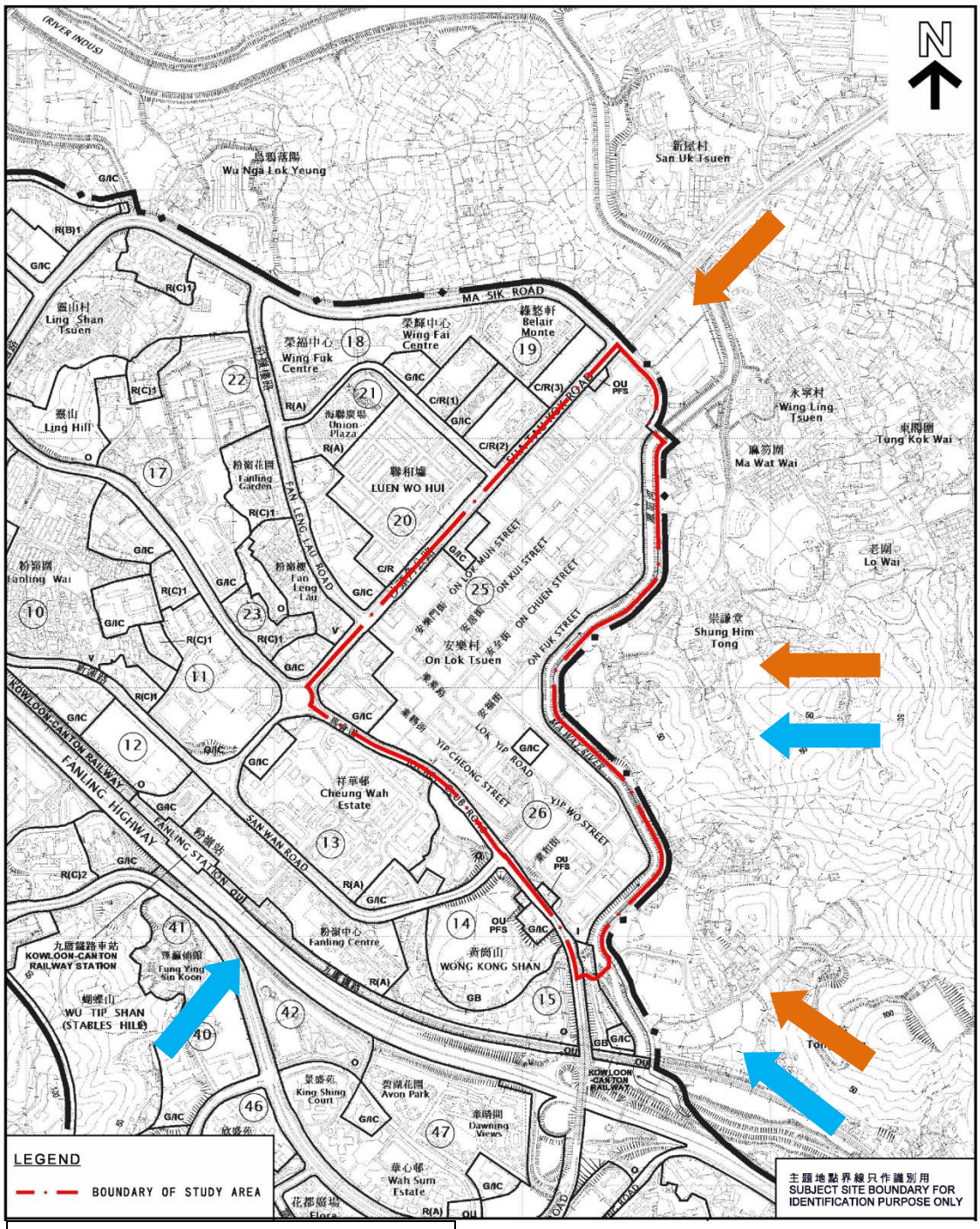


Figure 3.10 A summary of the prevailing winds of the study area.

4.0 Topography and the Wind Environment

4.1 The study area is rather flat (Figure 4.1). Some small hills are located at its western sides and northern sides, which will not affect the prevailing winds of the study area. Higher hills lie to the east and south of the study area. The prevailing easterly and south-westerly winds will be affected moderately by the hills, while the prevailing north-easterly and south-easterly winds can flow into the study area easily from the valleys between the hills. Downhill air movement from the nearby vegetated hill slope will not be significant as the study area is not along the major valleys of nearby hills.

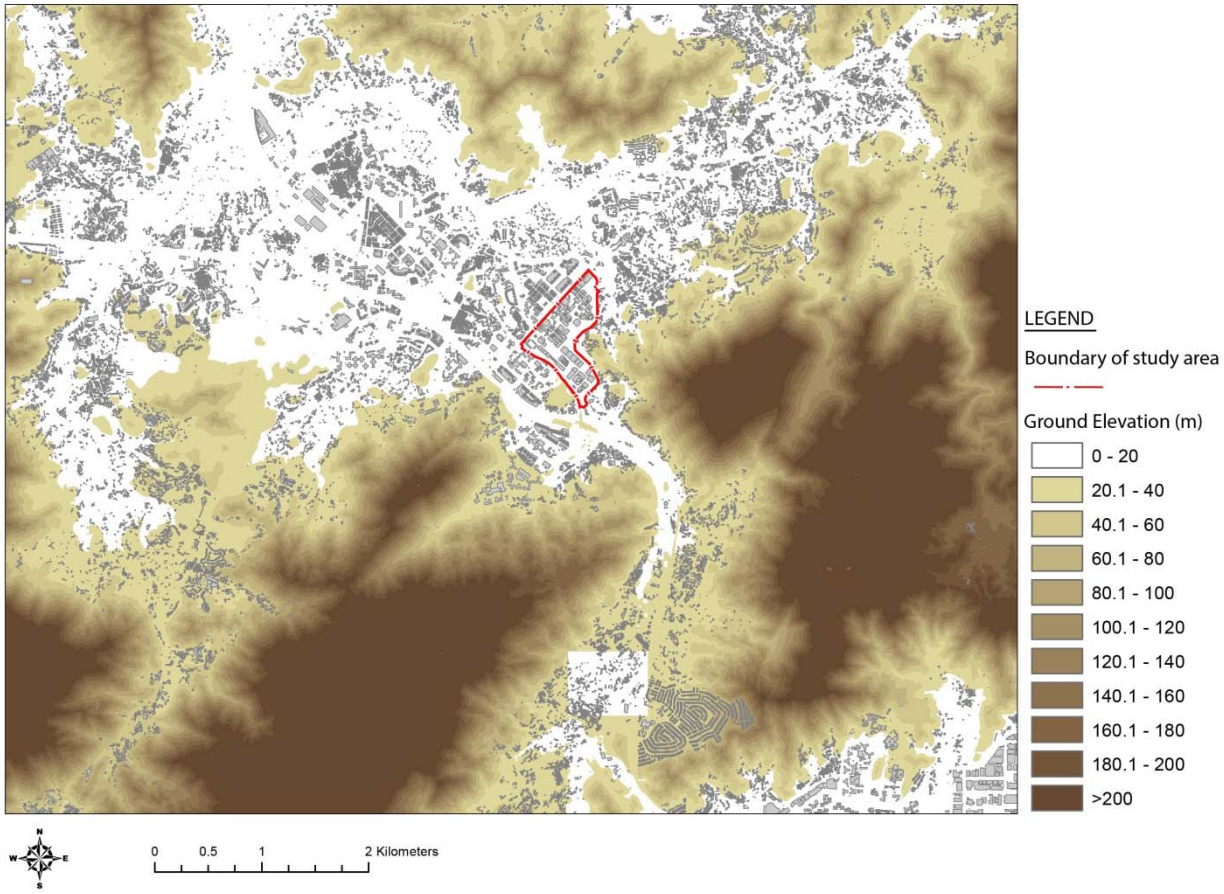


Figure 4.1 Topography and wind environment surrounding the study area.

5.0 Existing Conditions

5.1 The study area is located in On Lok Tsuen, Fanling. It is bounded by Sha Tau Kok Road-Lung Yeuk Tau, Jockey Club Road and Ma Wat River. Currently, the buildings in the study area are low-rise developments with building heights lower than 40mPD. The existing building heights are shown in Figure 5.1.

5.2 There are some low-rise, low-density village type development lower than 40mPD to the north, east and southeast of the study area. They would not affect the prevailing north-easterly, easterly and south-easterly winds flowing into the study area. There are some mid-rise and high-rise developments over 80mPD in Cheung Wah Estate southwest of the study area (Figure 5.1). They will not significantly affect the south-westerly wind penetrating into the study area as there are some gaps between the buildings in Cheung Wah Estate as air paths. The northwest wind is not the prevailing wind of the study area. Thus the high-rise developments over 80mPD northwest of the study area would not affect any prevailing winds penetrating into the study area.

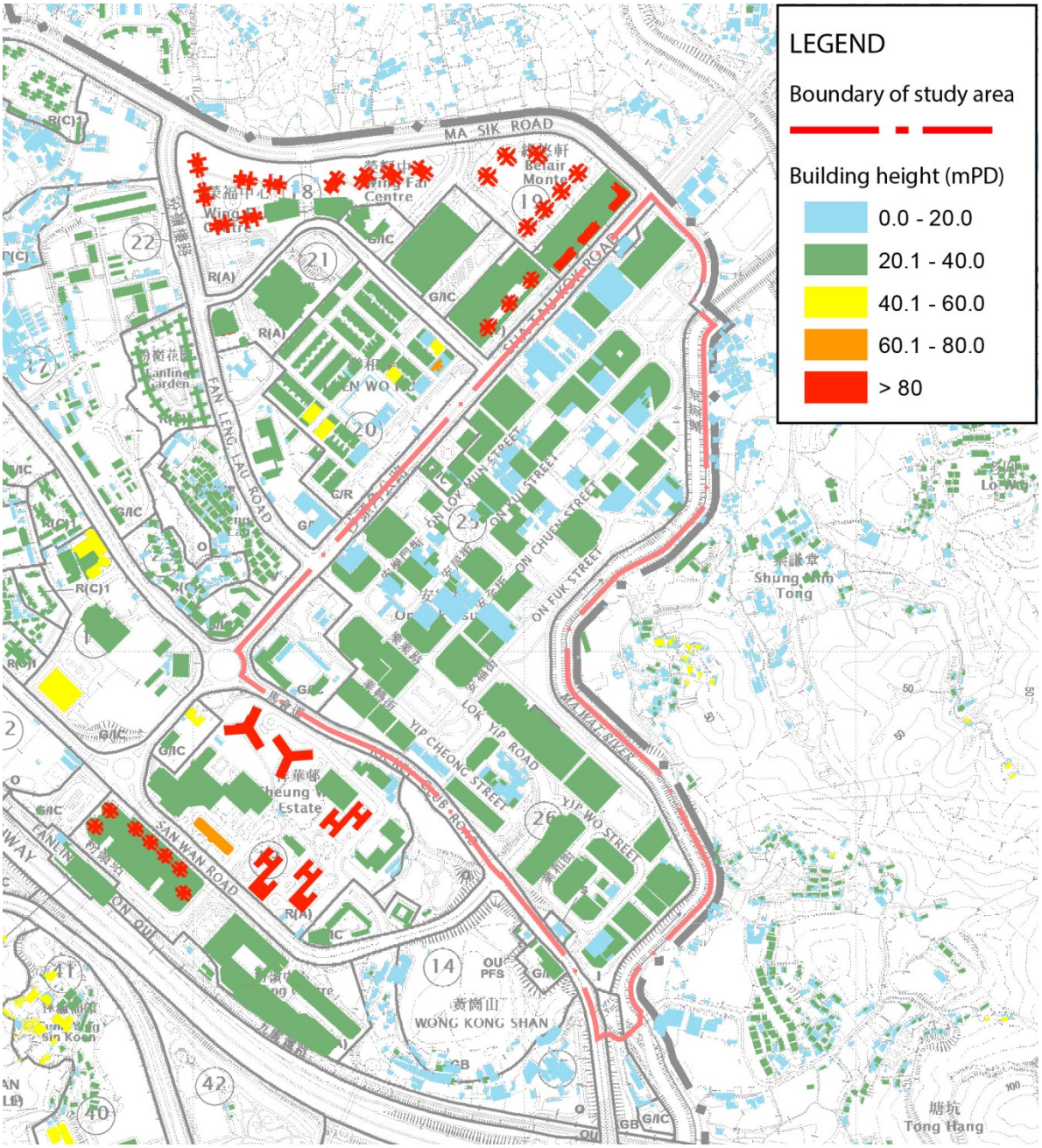


Figure 5.1 Height of the existing buildings in mPD.

6.0 Air Paths

6.1 Based on the analysis of the prevailing winds and the existing conditions, the air paths of the study area can be summarized (Figures 6.1 to 6.3). Major roads/streets in parallel with or less than 30 degrees to the prevailing wind directions together with open spaces and low-rise buildings can form as air paths.

6.2 Under prevailing winds from the east and southeast, some major roads and streets such as Jockey Club Road, Lok Yip Road, Yip Fung Street and Lok Ming Street, together with some Open Spaces/Amenity and gaps between buildings can function as air paths to facilitate the penetration of the easterly and south-easterly winds into the study area and surrounding areas (Figure 6.1). However, due to lack of major roads/streets and open spaces, air paths in some proposed developments in the dotted circles in Figure 6.1 can hardly be identified for the study area and surrounding areas.

6.3 Under prevailing winds from the northeast and southwest, some major roads and streets such as Sha Tau Kok Road-Lung Yeuk Tau, On Lok Mun Street, On Chuen Street, On Kui Street, On Fuk Street and Yip Wo Street, together with some Open Spaces/Amenity and gaps between buildings can function as air paths to facilitate the penetration of the north-easterly and south-westerly winds into the study area and surrounding areas (Figure 6.2 and Figure 6.3). However, some proposed developments in the dotted circles in Figures 6.2 and 6.3 will block the current air paths/prevailing winds for the study area and surrounding areas.

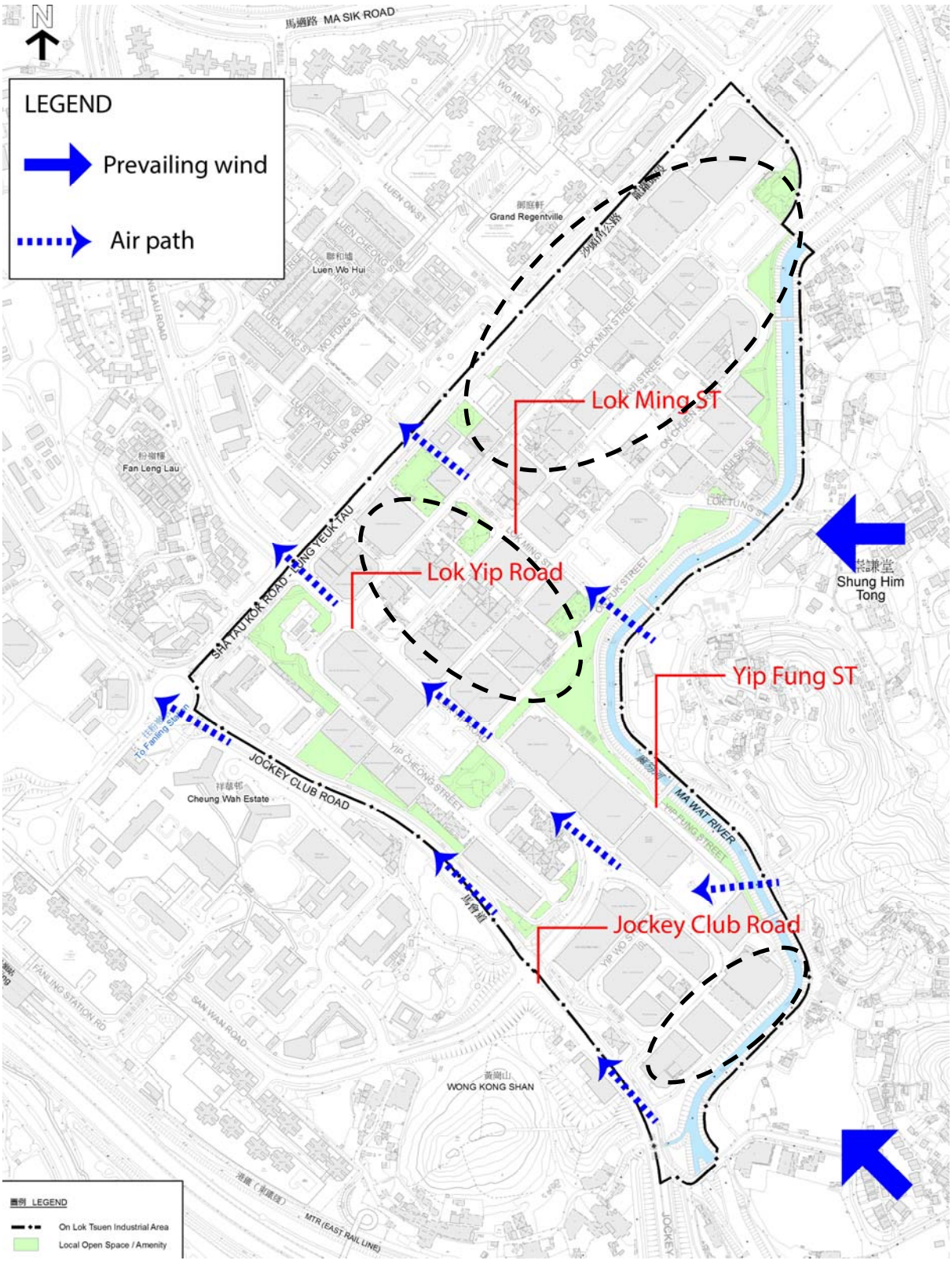


Figure 6.1 Major air paths of the study area and surrounding areas under prevailing wind from the east and southeast.

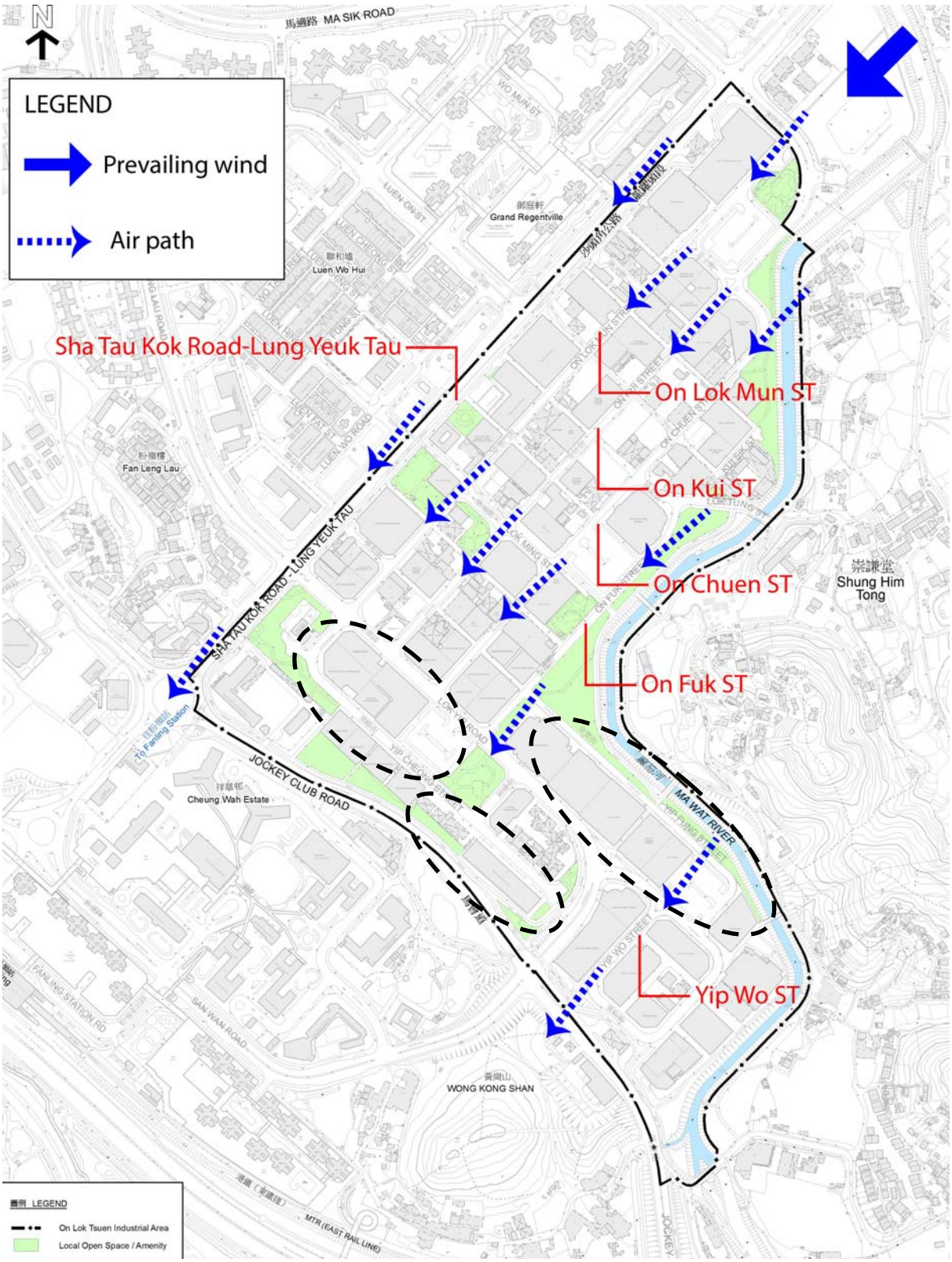


Figure 6.2 Major air paths of the study area and surrounding areas under prevailing wind from the northeast.

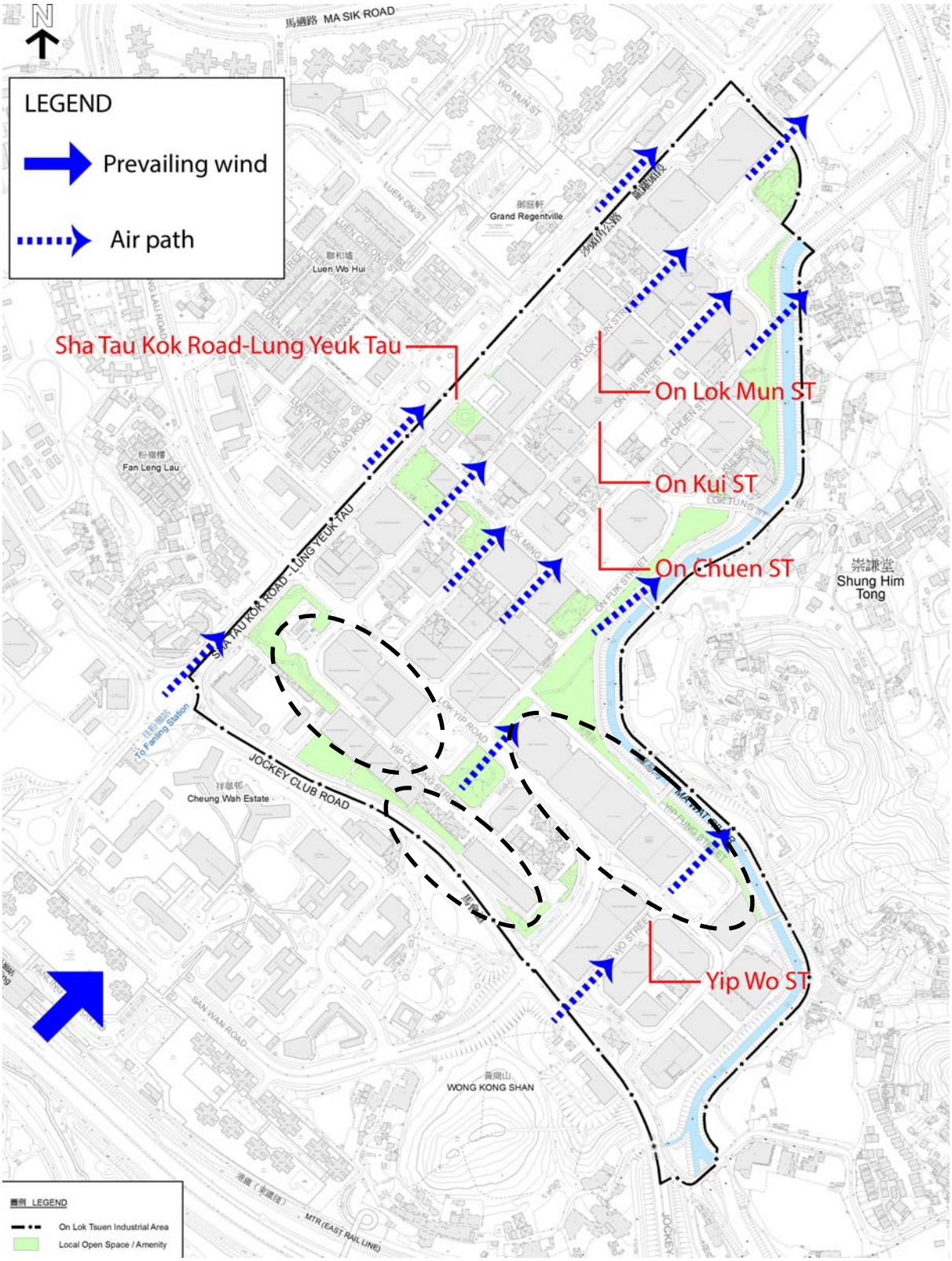


Figure 6.3 Major air paths of the study area and surrounding areas under prevailing wind from the southwest.

7.0 Expert Evaluation of the Study Area

7.1 The AVA Study has assessed the wind performance for On Lok Tsuen and its surrounding for the proposed relaxation on building height restriction from 25m to 65m (excluding basement) (Figure 7.1). Under the AVA Study, the worst case scenario has been assumed and the implications of exemption of public vehicle park for plot ratio calculation under the OZP have also been taken into account.

7.2 In general, air ventilation can achieve better performance if measures, such as breezeways, air paths, open spaces, gaps between buildings and building permeability especially near ground level, are applied. Considering the current air paths discussed in section 5, imposing non-building area in the study area would be effective to enhance the air ventilation performance for the study area and surrounding areas.

7.3 Under the prevailing wind from the northeast, east, southeast and southwest, the future developments in this study area will create some wake areas on the leeward side of the future developments (Figures 6.2 to 6.5). The depth of possible wake areas is at least the maximum absolute building height (around 65m) or the width of the building (refer to Figure A-1 in the Appendix). The wake areas under north-easterly wind will extend to some NW-SE orientated streets, some open spaces in the study area and some surrounding areas southwest of the study area including Jockey Club Road and Fanling Government Primary School (Figure7.2). The wake areas under easterly and south-easterly winds will extend to some NE-SW orientated and NW-SE orientated streets, some open spaces in the study area and some surrounding areas west of the study area including Jockey Club Road, Fanling Government Primary School, Sha Tau Kok Road-Lung Yeuk Tau, some open-spaces in Luen Wo Hui, Grand Regentville and Green Code (Figures 7.3 and 7.4). The wake areas under south-westerly wind will extend to some NW-SE orientated streets, some open spaces in the study area (Figure 7.5).

7.4 With the building height increasing up to 65m, it is possible that the study area will form some deep and long canyons[1] with an H/W (Height / Width) ratio above 4:1 and an L/W (Length / Width) ratio above 20:1 perpendicular to the prevailing winds. Refer to Figure A-2 in the Appendix; for a deep canyon beyond a H/W ratio of 2:1, the ground level of canyons, even with the so call downwash effects, will have very weak eddies and air ventilation. Furthermore, for longer street canyons, corner vortices (Figure A-3) fade with increasing street length[2]. It is recommended that the Length of the street sections (L) should be less than 100m long[2].

7.5 To mitigate the impacts mentioned in Para. 7.3 and 7.4, and consider insufficient air paths in the study area discussed in section 6, it is recommended to incorporate some 15-20m wide Non-Building Areas (NBAs) in the study area (Figure

[1] Refer to Sustainable Building Design Guidelines (APP-152); it will be regarded as continuous façade if a building or a group of buildings has separation less than 15m.
[2] Theurer, W. (1999). Typical building arrangements for urban air pollution modelling. Atmospheric Environment, 33(24), 4057-4066.

7.6). These NBAs can break down the long street canyon to aid the lateral flow induced by corner eddies entering into the street canyon. Moreover, with the existing grid pattern of streets aligning with the prevailing wind directions, these NBAs can function as air paths for the study area and surrounding areas. NBAs 1-5 can be the air paths for the south-easterly winds flowing through the study area and further into the surrounding areas including Sha Tau Kok Road-Lung Yeuk Tau and Luen Wo Hui. NBAs 6-8 can be the air paths for the north-easterly and south-westerly wind flowing through the study area and also let north-easterly wind penetrating into Jockey Club Road and Fanling Government Primary School. NBA 9 can function as an air path channelling the north-easterly and south-westerly wind through the study area and surrounding areas. Finally, NBA 10 can be the entrance for south-easterly wind flowing into Yip Wo ST, Lok Yip RD and further into Luen Wo Hui. Given that designated NBAs would be fulfilled as recommended, the study area with 65m building height restriction would have no significant impacts on the surrounding areas.

7.6 However, even with the proposed NBAs, some NE-SW orientated narrow streets in the central part of On Lok Tsuen (in red dotted circle in Figure 7.7) with possible high H/W ratio (>4:1) will hinder the lateral and vertical air flow into the middle parts of street canyons under south-easterly wind perpendicular to those streets. In addition, some developments in the southeastern corner of the study area (in two light blue dotted circles in Figure 7.7) will possibly have large frontal areas (frontal width over 120m) under norther-easterly and south-easterly winds respectively. These narrow streets and developments with possible large frontal areas will cause some local air ventilation issues. To enhance the air ventilation performance in the study area, it is recommended, at building design stage, that project proponents in these areas causing local air ventilation issues should refer to the design guidelines of Building Setback, Building Disposition and Building Permeability in "Hong Kong Planning Standard and Guidelines" (HKPSG) and follow the building separation requirement (20-33.3%) in the "Sustainable Building Design Guidelines"[1].

[1] Hong Kong Buildings Department. Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers: Sustainable Building Design Guidelines (APP-152). 2011.

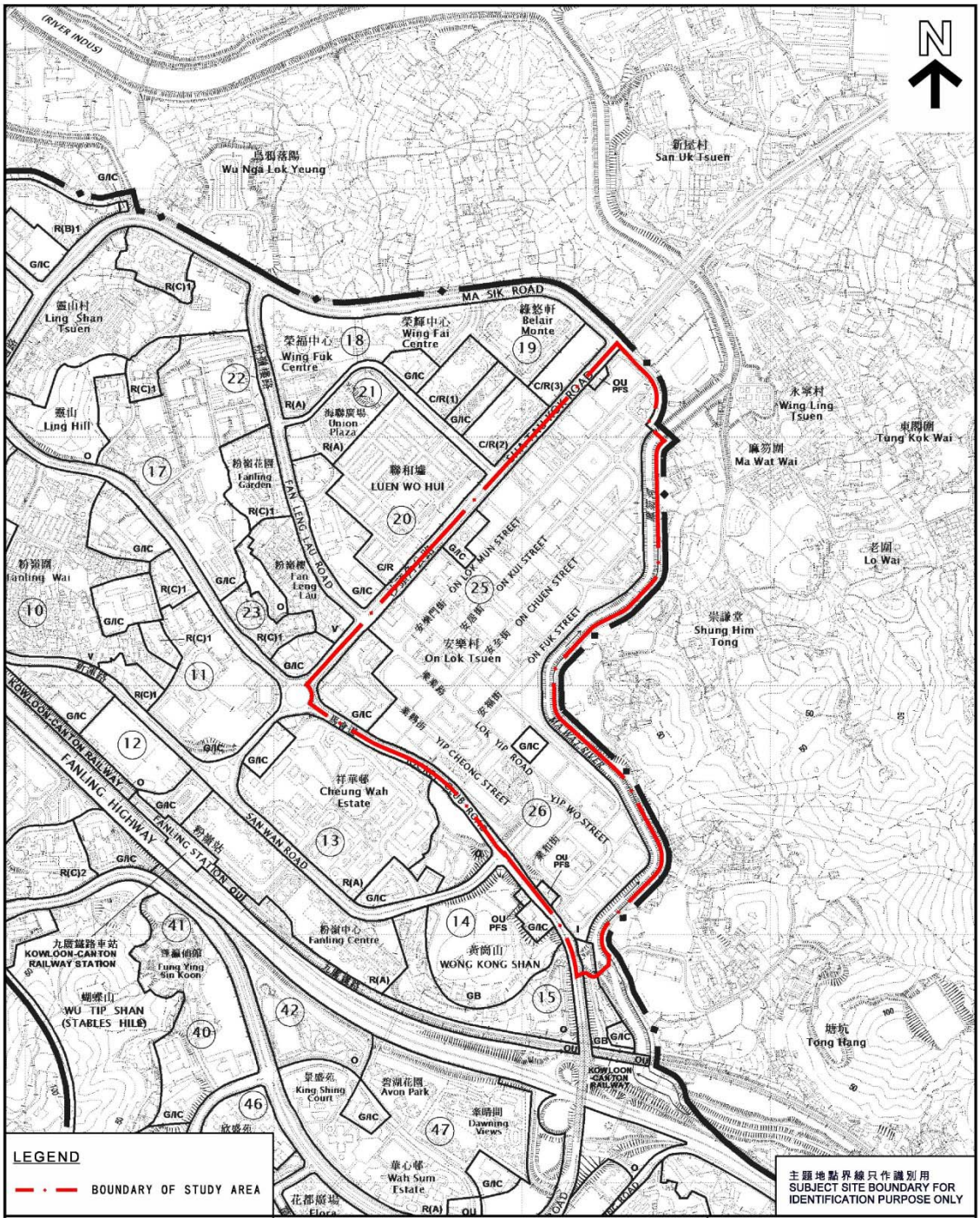


Figure 7.1 Site plan of the study area.

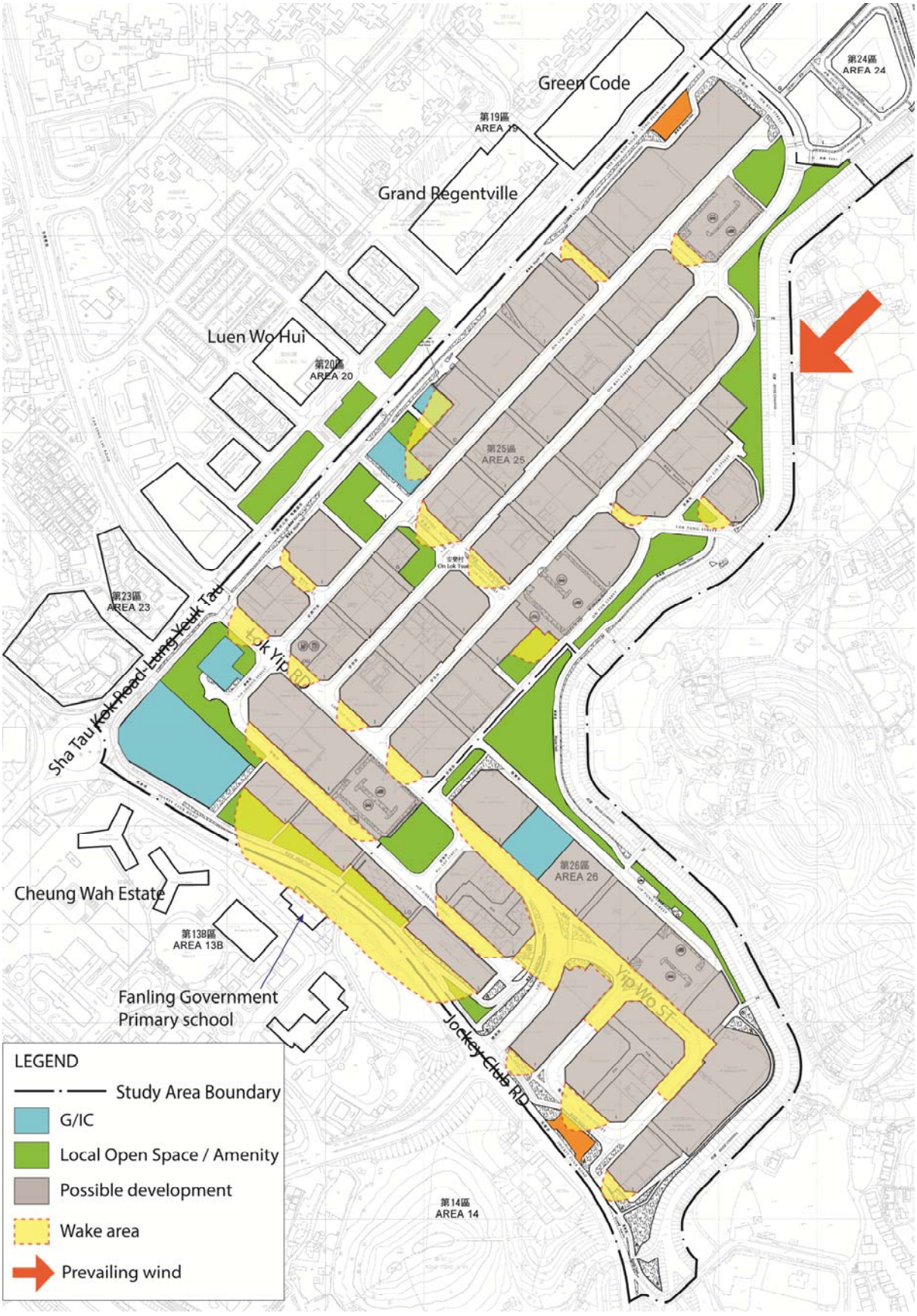


Figure 7.2 Possible wake areas under prevailing wind from the northeast.

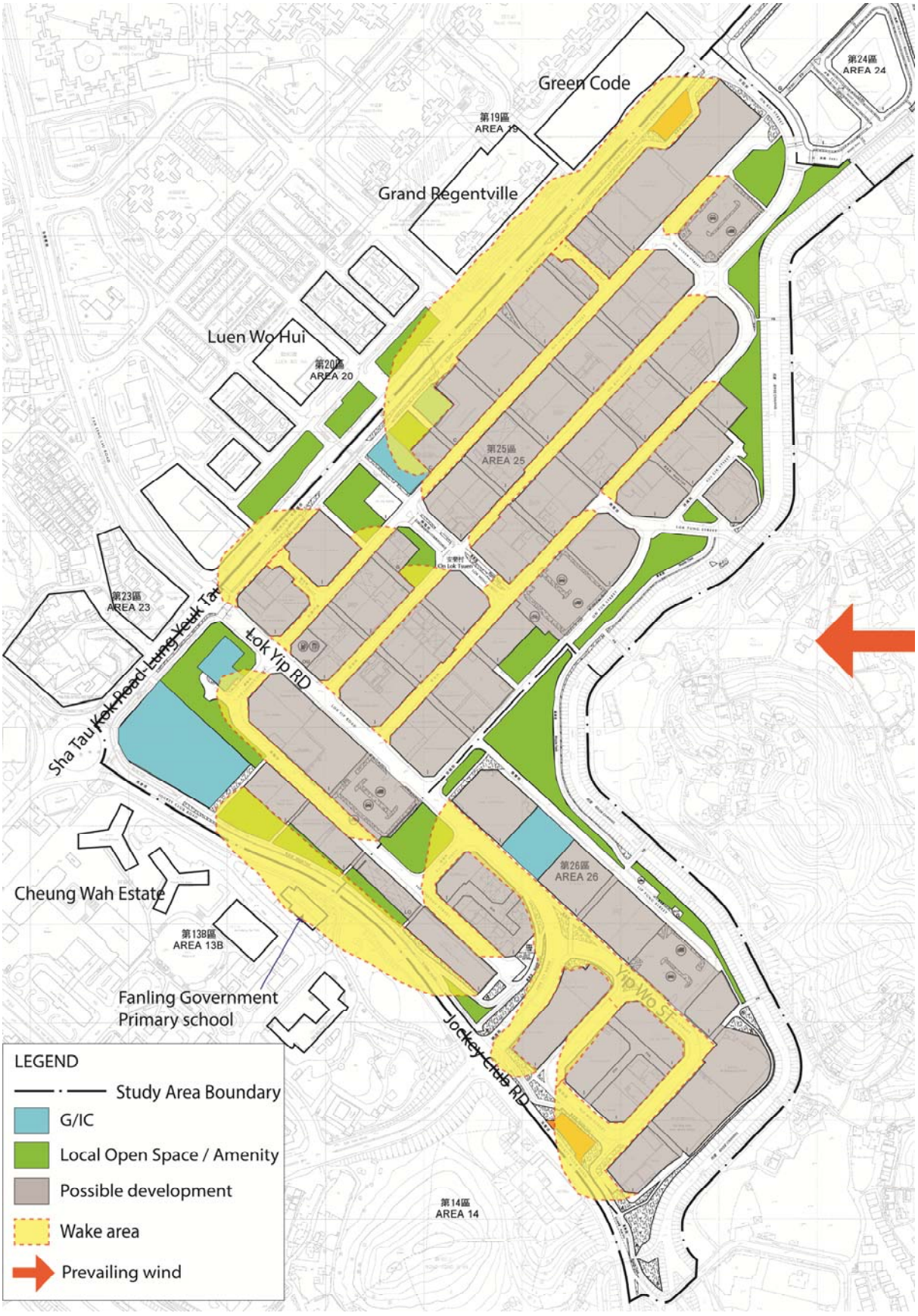


Figure 7.3 Possible wake areas under prevailing wind from the east.

Figure 7.4 Possible wake areas under prevailing wind from the southeast.

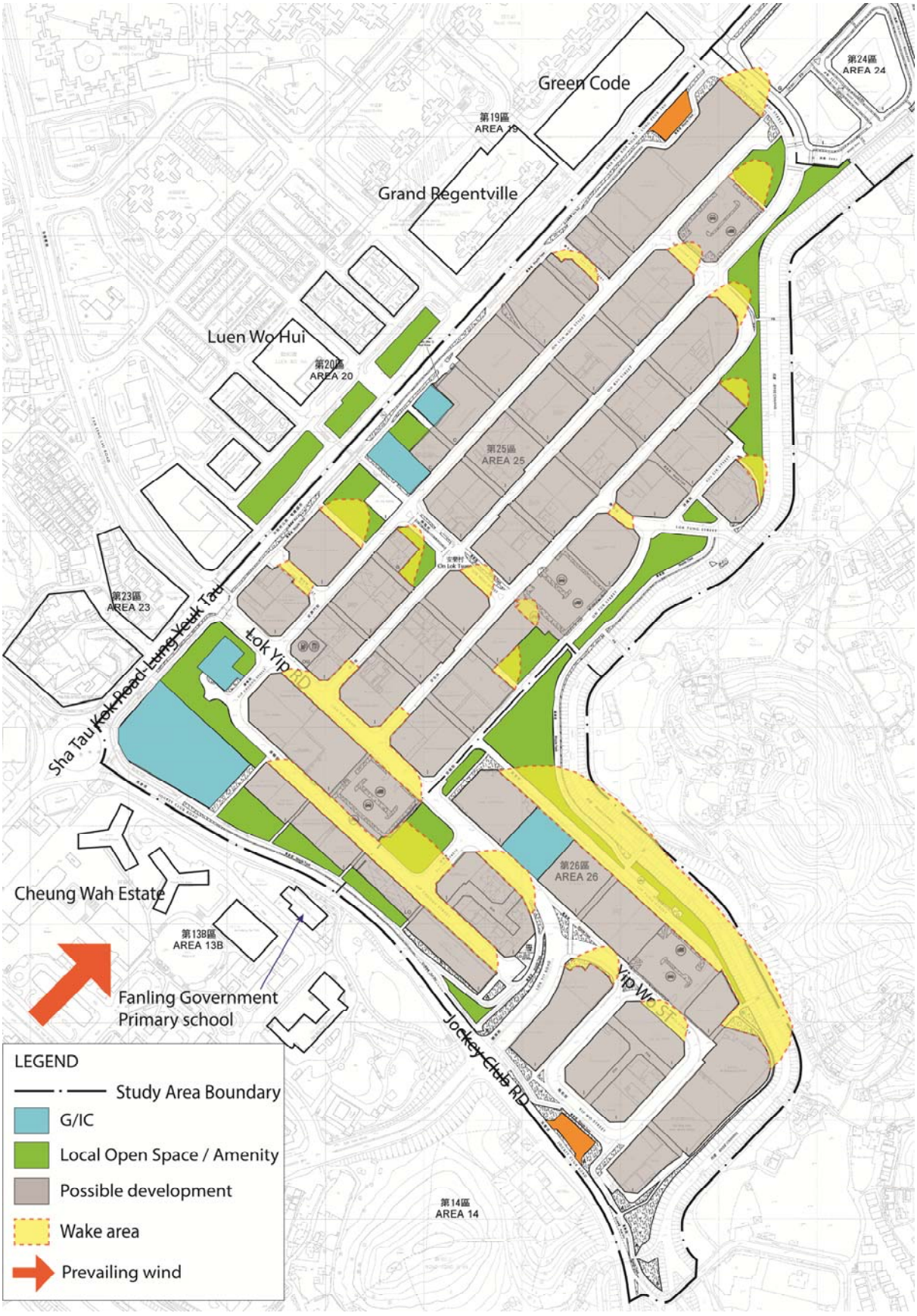


Figure 7.5 Possible wake areas under prevailing wind from the southwest.

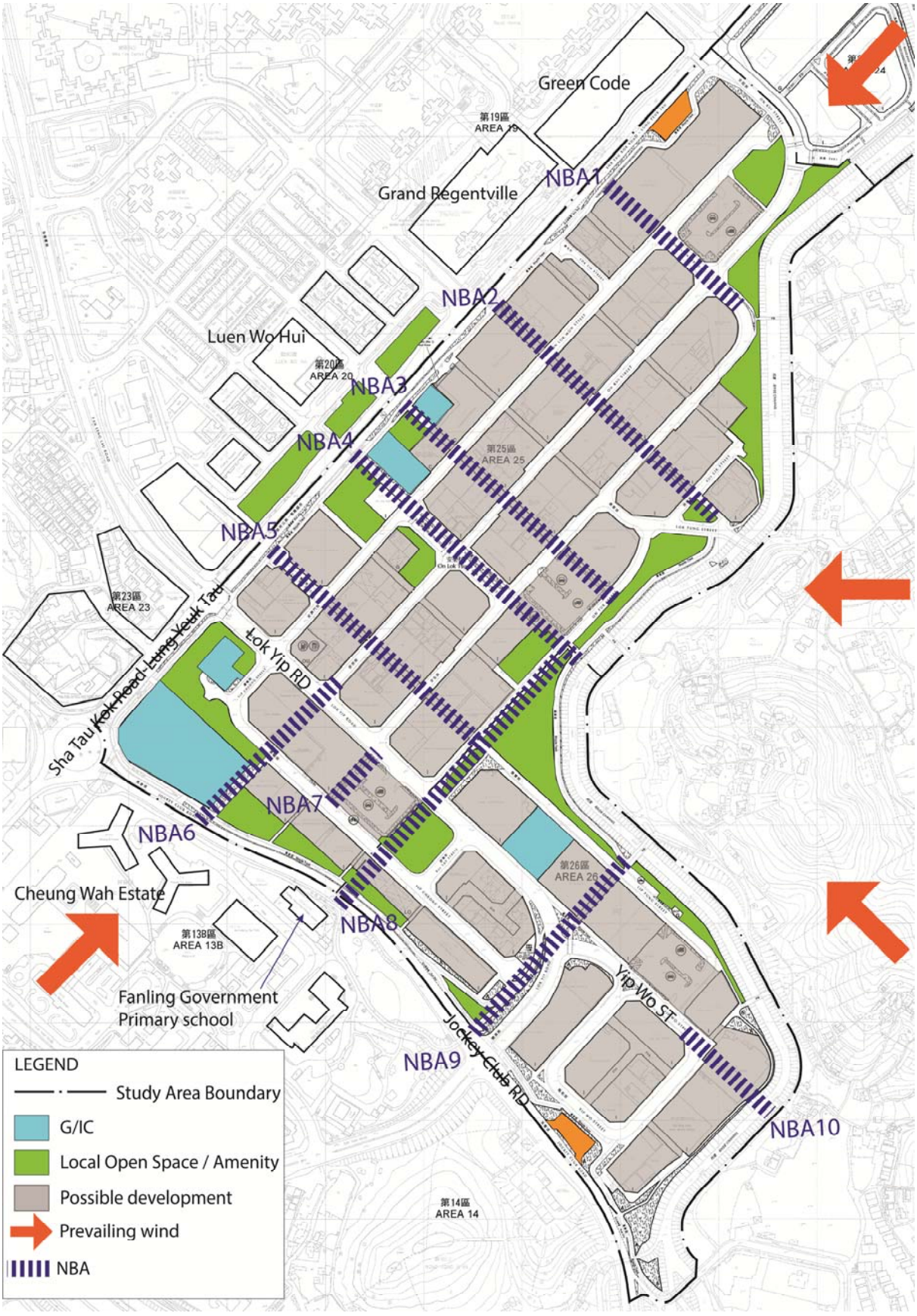


Figure 7.6 Proposed NBAs under prevailing winds.

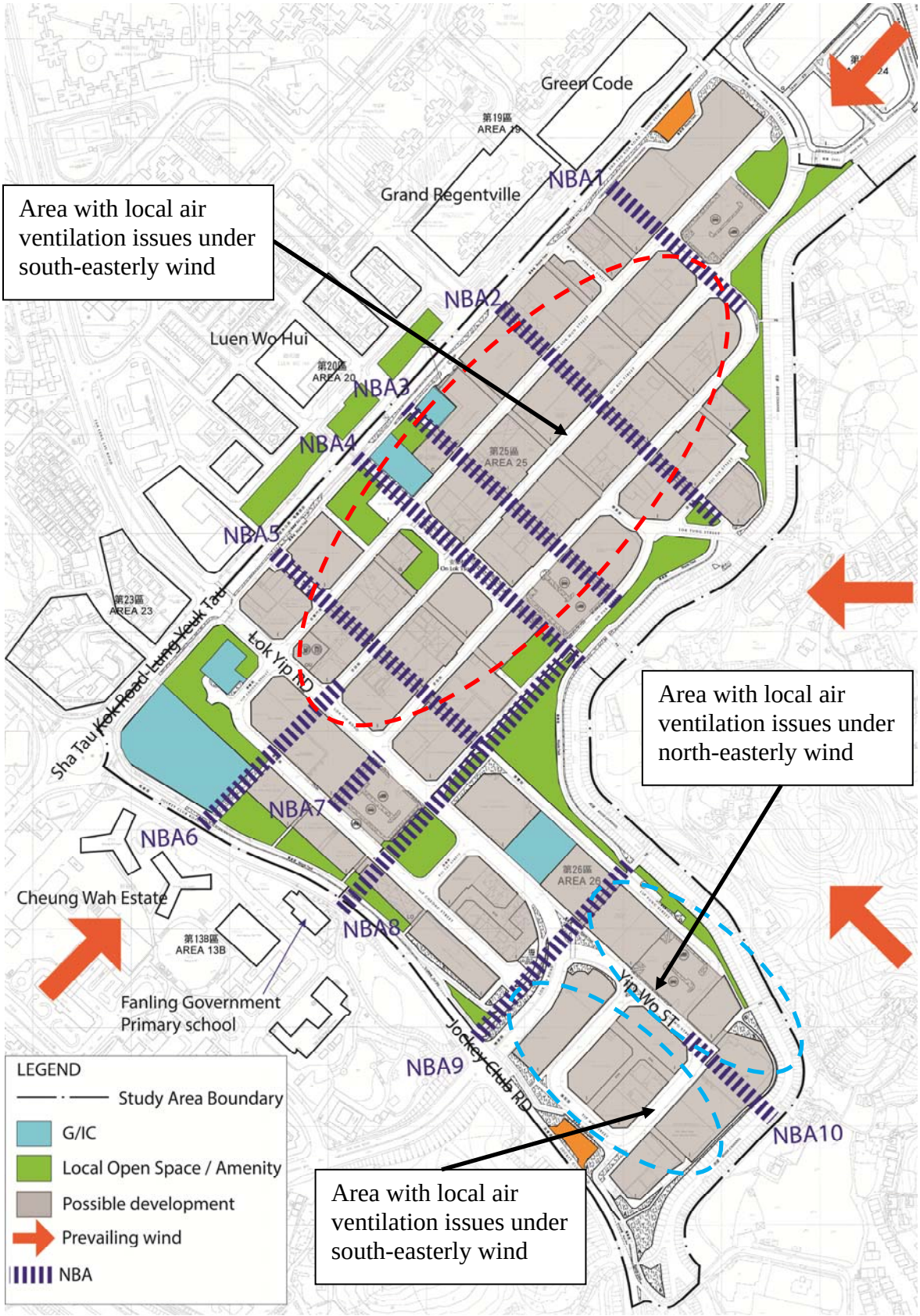


Figure 7.7 Locations of some narrow streets or developments with large frontal areas causing local air ventilation issues under prevailing winds.

8.0 Further Work

8.1 Given that both designated NBAs and requirement of building separation requirements would be fulfilled as recommended, the study area would have no major air ventilation issues. If these requirements cannot be met, further quantitative AVA studies should be conducted to assess their air ventilation performance.

Appendix

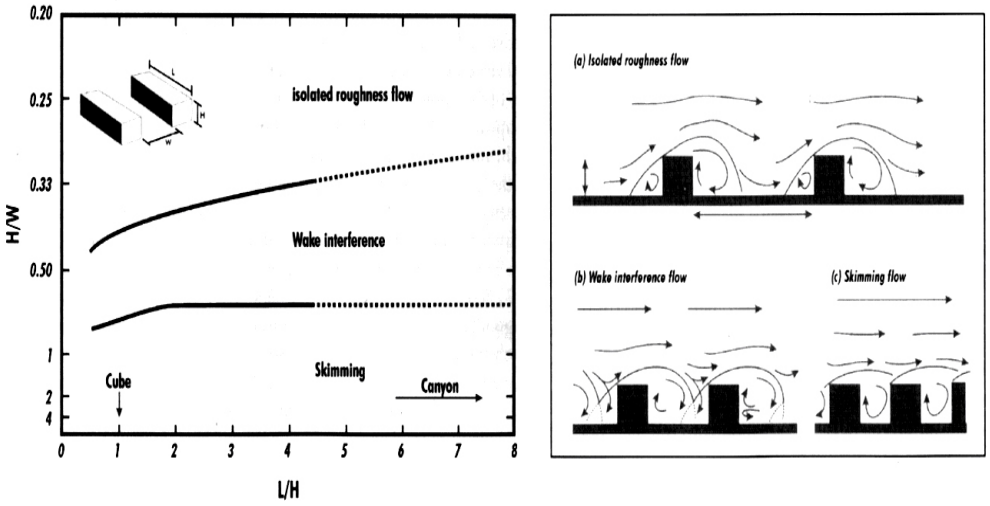


Figure A-1 The relationship between building height and street width ratio and the possible flow regimes.

[Reference: Oke, T. R. (1987). *Boundary layer climates*. Routledge.]

With wind from directions perpendicular to the canyons, downwashes due to the differentials in building heights is occasionally likely when building heights are very different. Otherwise, with smaller building height differences, this is unlikely. It is known that for long and deep canyons with an H/W ratio of 2 and above, a double vortex phenomenon will be observed (see Figure A-2). However, beyond a H/W ratio of 2:1, the ground level of canyons, even with the so call downwash effects, will have very weak eddies and air ventilation.

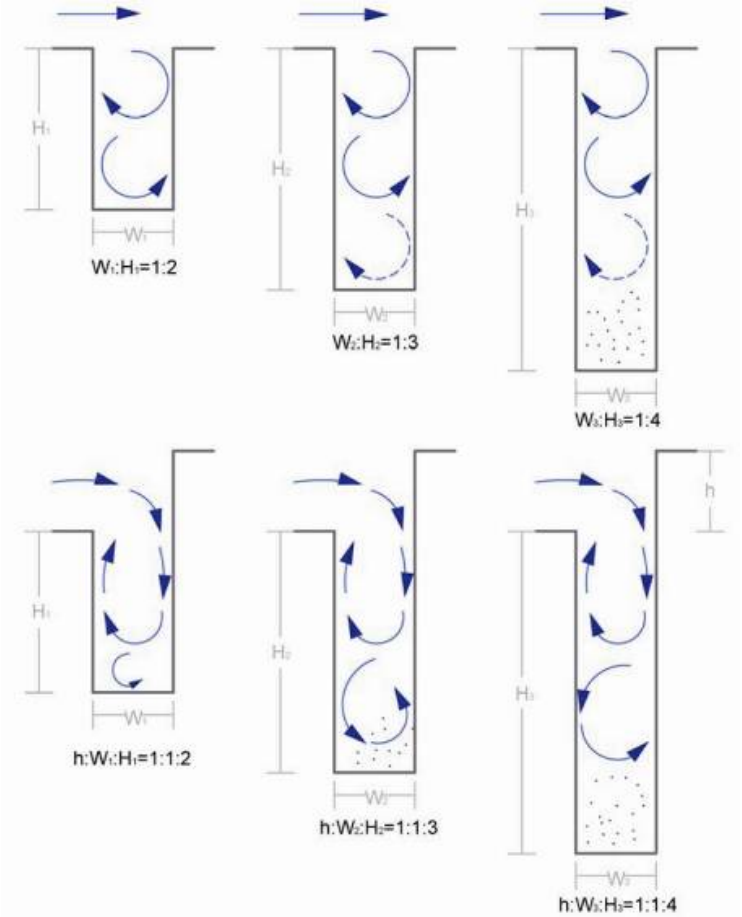


Figure A-2 The figure shows a generic understanding of the wind regimes in canyons, and canyons with downwashes.

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[Reference: A. KOVAR-PANSKUS, P. LOUKA, J.-F. SINI, E. SAVORY, M. CZECH, A. ABDELQARI, P. G. MESTAYER and N. TOY, INFLUENCE OF GEOMETRY ON THE MEAN FLOWWITHIN URBAN STREET CANYONS – A COMPARISON OF WIND TUNNEL EXPERIMENTS AND NUMERICAL SIMULATIONS, Water, Air, and Soil Pollution: Focus 2: 365–380, 2002, Kluwer Academic Publishers.]

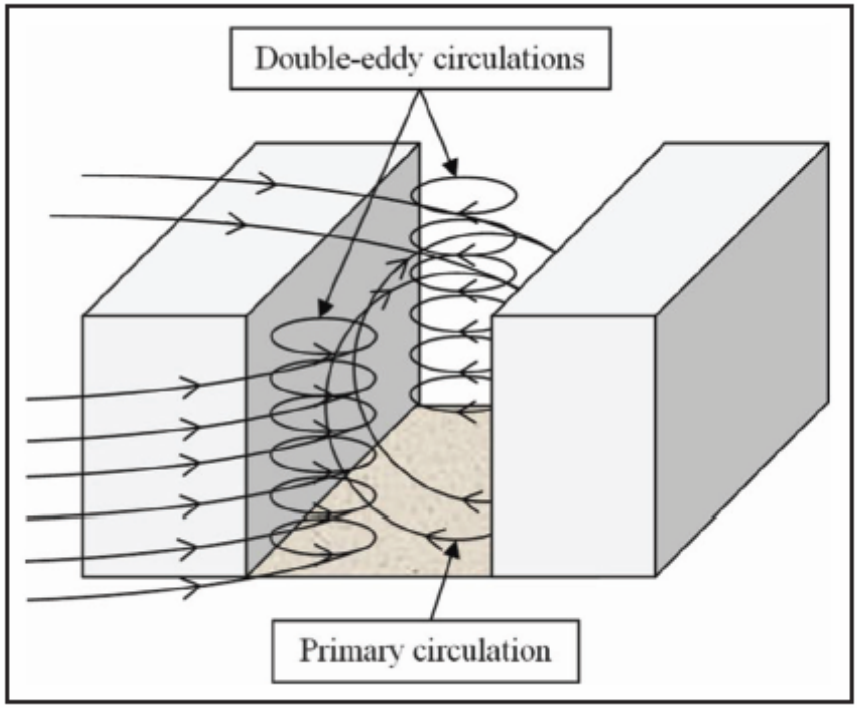

Figure A-3 Flow structures in an isolated street canyon with perpendicular air flow.

[Reference: Yazid, A. W. M., Sidik, N. A. C., Salim, S. M., & Saqr, K. M. (2014). A review on the flow structure and pollutant dispersion in urban street canyons for urban planning strategies. *Simulation*, 0037549714528046.]

Prepared by 

_____ Date: 29 December 2015

Dr. Justin Ho

Endorsed by 

_____ Date: 29 December 2015

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Annex IV

VISUAL APPRAISAL FOR THE PROPOSED BUILDING HEIGHT RESTRICTION FOR ON LOK TSUEN INDUSTRIAL AREA, FANLING

PLANNING DEPARTMENT

DECEMBER 2015

Visual Appraisal for the Proposed Building Height Restriction for On Lok Tsuen Industrial Area, Fanling

1 Background

1.1 Since 1987, the On Lok Tsuen Industrial Area (Planning Areas 25 and 26) (the Area) has been zoned "Industrial" ("I") on the Fanling/Sheung Shui Outline Zoning Plan (OZP) and is subject to development restrictions of maximum plot ratio (PR) 5 and building height (BH) of 25m.

1.2 On 24.8.2015, the Town Planning Board (the Board) noted the findings/key 2014 Area Assessments of the Industrial Land in the Territory (2014 Area Assessments) and recommended, amongst others, for the Area:

- Retain the Area as "Industrial" ("I") zone to cater for the strong demand for general logistics/warehousing arising from the significant growth of the trade and logistics sector;

- Enhance the Area to better utilise the land resources, increasing employment opportunities and job variety and help achieve a more balanced distribution of homes and jobs in the district; and

- Subject to technical assessment on its feasibility, consideration may also be given to relaxing the existing development restrictions on the OZP to help optimise the utilisation of sites and also encourage private redevelopment.

1.3 To follow up on the recommendations of the 2014 Area Assessments, Planning Department (PlanD) has undertaken a review on development intensities of the industrial area. The key findings of the review include the relaxation of development parameters with revision to BH restriction from 25m to 65m (excluding basements) for the Area. With the implementation of the Sustainable Building Design Guidelines (SBD Guidelines) and local aspirations of more at-grade greening and building setback to enhance the visual/air permeability and street environment, it is considered that the BH restriction in the Area could be relaxed to cater for new development or redevelopment with reduced site coverage.

2 Purpose

2.1 One of the proposed amendments to the approved Fanling/Sheung Shui OZP No. S/FSS/20 is to revise the BH restriction from 25m to 65m (excluding basements) in the Area with incorporation of minor relaxation clause for PR/BH restrictions for the "I" zone. In order to facilitate the provision of sufficient industrial floorspace and ensure adequate supply of vehicle parking spaces for the area, it is also proposed that in determining the maximum PR for the Area (Planning Areas 25 and 26), any floor space that is constructed or intended for use solely as public vehicle parks, as required by the Government, may be disregarded.

2.2 The proposed amendment may have visual implications on the surrounding areas. The purpose of this visual appraisal (VA) is to examine the possible visual impact of the proposed revision to BH restriction for the Area on the surrounding areas in terms of the development profile and its spatial relationship with the overall townscape and surrounding environment. The respective appraisal area is delineated to cover the area of visual influence within which the developments/redevelopments with the maximum BH proposed could be visible from key sensitive viewers, e.g. pedestrian and motorists. This VA could facilitate the Rural and New Town Planning Committee of the Board to visualise the three-dimensional relationship of the proposed increase in BH with the surrounding context.

3 Methodology

3.1 The visual impact of the proposed BH restriction for the Area is assessed in accord with the methodology set out in the Town Planning Board Guidelines on Submission of Visual Impact Assessment for Planning Applications to the Board (TPB PG-No. 41), which is summarized as follows:

(a) review of the overall visual context and character within the wider contexts of the areas in Fanling where the Area is located;

(b) identification and selection of appropriate vantage points that are easily accessible and popular to the general public for undertaking the assessment on the possible visual impacts of the proposed amendment;

(c) appraisal of the effects of visual changes on the assessment area and sensitive public viewers; and

(d) illustration of the visual impact of the proposed increase in BH of the development/redevelopment in relation to the surrounding context by using computer-generated photomontages. The cumulative effect with all possible developments/redevelopments as permitted by the OZP would be taken into account.

4 The Proposed Amendments to the "I" zone for the Area (Planning Areas 25 and 26)

The proposal is to revise the BH restriction from 25m to 65m (excluding basements) in the Area with incorporation of minor relaxation clause for PR/BH restrictions for the "I" zone.

5 The Area and Its Surroundings

5.1 The Area is located at the eastern fringe of Fanling New Town and further east to the Sheung Shui New Town. In general, Fanling/Sheung Shui New Town is situated on a flat land gradually ranging from 6mPD (in Sheung Shui) to 12mPD (in Fanling), with hilly terrain of Volunteer Slope, Corps Ridge and Wo Hop Shek Cemetery to the south of Fanling, and Lung Shan to the east of Fanling. To the north of the Area is the Fanling North New Development Area (FLN NDA) which is also situated on flat land along the south bank of Ng Tung River (River Indus) (**Plan 1**).

5.2 The Area is located adjacent to Luen Wo Hui, which is mainly a residential neighbourhood falling within the "Commercial/Residential" ("C/R") zones of the OZP. Within "C/R" zone, for site with area 340m^2 or greater, it is subject to a BH of 81m. Several existing private residential developments in Luen Wo Hui (namely Regentville, Grand Regentville and Green Code, which falls within areas zoned "C/R(1)", "C/R(2)" and "C/R(3)" respectively) have BH restrictions of 135mPD, 135mPD and 123mPD respectively (**Plans 2 & 3**). The development profile of the existing/planned developments within Luen Wo Hui is mostly ranging from 81m to 118m (equivalent to about 93mPD to 130mPD) To the south-west of the Area is the "Residential (Group A)" ("R(A)") zone of Cheung Wah Estate, which has a height profile mostly ranging from about 83mPD to 111mPD (equivalent to about 67m to 96m in absolute BH). To the east is the low-rise village settlement of Shung Him Tong (situated at about 20mPD) which is surrounded by knolls to the east and south with the peaks ranging from 55mPD to 71mPD. Shung Him Tong falls within areas zoned "Village Type Development" ("V"), "Government, Institution and Community" ("G/IC"), "Agriculture" ("AGR") and "Green Belt" ("GB") on the draft Lung Yeuk Tai & Kwan Tei South OZP No. S/NE-LYT/15. Just to the north lies areas zoned "G/IC" on the Fanling North OZP with BH restrictions of 3 to 10 storeys. Further north is the area zoned "Residential (Group

B)" ("R(B)") for the planned medium-density residential developments subject to a maximum BH of 60mPD and 75mPD.

5.3 On Lok Tsuen is an industrial area of 32.6 ha. The Area is bounded by the Ma Wat River, Sha Tau Kok Road and Jockey Club Road with existing vegetation along the boundary (**Plan 3**). The Area mainly comprises industrial buildings (IBs) of seven storeys or below in height interspersed with some pocket opens spaces and amenity areas.

6 Visual Appraisal

6.1 A total of 6 local viewing points (VPs) (**Plan 4**) from different directions and distances are selected (where there are major pedestrian or visitor flow) for assessing the visual impact of the proposed increase of BH:

- VP1: Footbridge at Fanling Highway from the south-east;
- VP2: Luen Wo Hui from the north-west;
- VP3: Ma Shi Po, Fanling from the north;
- VP4: Luk Yeuk Tau Heritage Trail from the east;
- VP5: Wu Tip Shan (Stables Hill) from the south-west; and
- VP6: Footbridge at San Wan Road from the west.

Photomontages to illustrate the visual changes and the resultant spatial relationship of the townscape as viewed from the selected viewing points are shown at **Plans 5a** to **5f**.

(a) VP1 – Footbridge at Fanling Highway (from the south-east)

A viewing point at a footbridge on Fanling Highway (about 800m) at the entry of Fanling New Town is selected. The vantage point is easily accessible and frequently used by local residents of Wo Hop Shek Village and Ho Ka Yuen. The photomontage in **Plan 5a** demonstrates the visual impact of the proposed BH restriction of the Area from a wider context. The proposed maximum BH of the Area is 65m and adjoining residential developments in Luen Wo Hui and Cheung Wah Estate mostly ranging from about 83mPD to 130mPD (equivalent to about 67m to 118m in absolute BH). When viewed from the footbridge, part of the proposed development in the Area would be blocked by the landform of Lung Shan (**Plan 1**). The proposed BH is not incompatible with the surroundings.

(b) VP2 – Luen Wo Hui (from the north-west)

The viewing point at the residential neighbourhood of Luen Wo Hui adjacent to the historic Luen Wo Market is selected as it is easily accessible and popular to both visitors

and local residents. When viewed from the vantage point in very close proximity (about 86m) to the Area (**Plan 5b**), it is inevitable that the proposed BH restriction of the Area would reduce the visual openness of the locality. However, the proposed area enhancement measures such as the development of public open piazza in front of the Luen Wo Market and local aspirations of more at-grade greening and building setback would enhance the visual permeability of the Area and alleviate the visual impact of proposed BH to the neighbourhood area.

(c) VP 3 - Ma Shi Po, Fanling (from the north)

Viewing point at Ma Shi Po which would be part of the FLN NDA with the planned population of about 71,400 is selected (**Plan 5c**). The Area is located at the southern part of the FLN NDA with a distance of about 480m. The Area would mostly be screened off by the existing vegetation and high-rise residential development at Luen Wo Hui. The existing visual character and ridgeline would not be affected and no visual incompatibility with the surroundings would be created.

(d) VP 4 – Luk Yeuk Tau Heritage Trail (from the east)

The viewing point at Luk Yeuk Tau Heritage Trail is selected as it is popular to both tourists/visitors and local residents. When viewed from Luk Yeuk Tau Heritage Trail which lies in close proximity of the Area (about 170m), the visual openness and permeability would be reduced by the proposed development (**Plan 5d**), resulting in moderate visual impact. However, the development will be partially screened by existing trees and vegetation and the existing view from the viewing point is dominated by the high-rise residential development at Luen Wo Hui (i.e. the highest development is 130mPD (equivalent to about 118m in absolute BH)), the proposed maximum BH of 65m of the Area is considered not incompatible with the overall townscape.

(e) VP 5 – Wu Tip Shan (Stables Hill) (from the south-west)

Viewing point at Wu Tip Shan is selected as it is easily accessible and popular to the locals and tourists for leisure. From the viewing point of Wu Tip Shan (about 1,620m) (**Plan 5e**), the Area would be substantially blocked by the existing residential developments of Fanling Centre and Cheung Wah Estate. The proposed development will be seen as an extension of the existing development of Fanling with the proposed BH of 65m in keeping with the overall townscape.

(f) VP 6 – Footbridge at San Wan Road (from the west)

The viewing point at the footbridge in San Wan Road (about 380m) is selected. It is easily accessible and frequently visited by the locals and tourists, especially commuters of MTR or mini-buses, as the footbridge is well connected with the nearby residential developments, open space, Government facilities as well as East Rail Fanling Station.

When viewed from the VP (**Plan 5f**), the Area is completed blocked by the existing vegetation and the residential development of Cheung Wah Estate. The visual quality of the view would therefore not be affected.

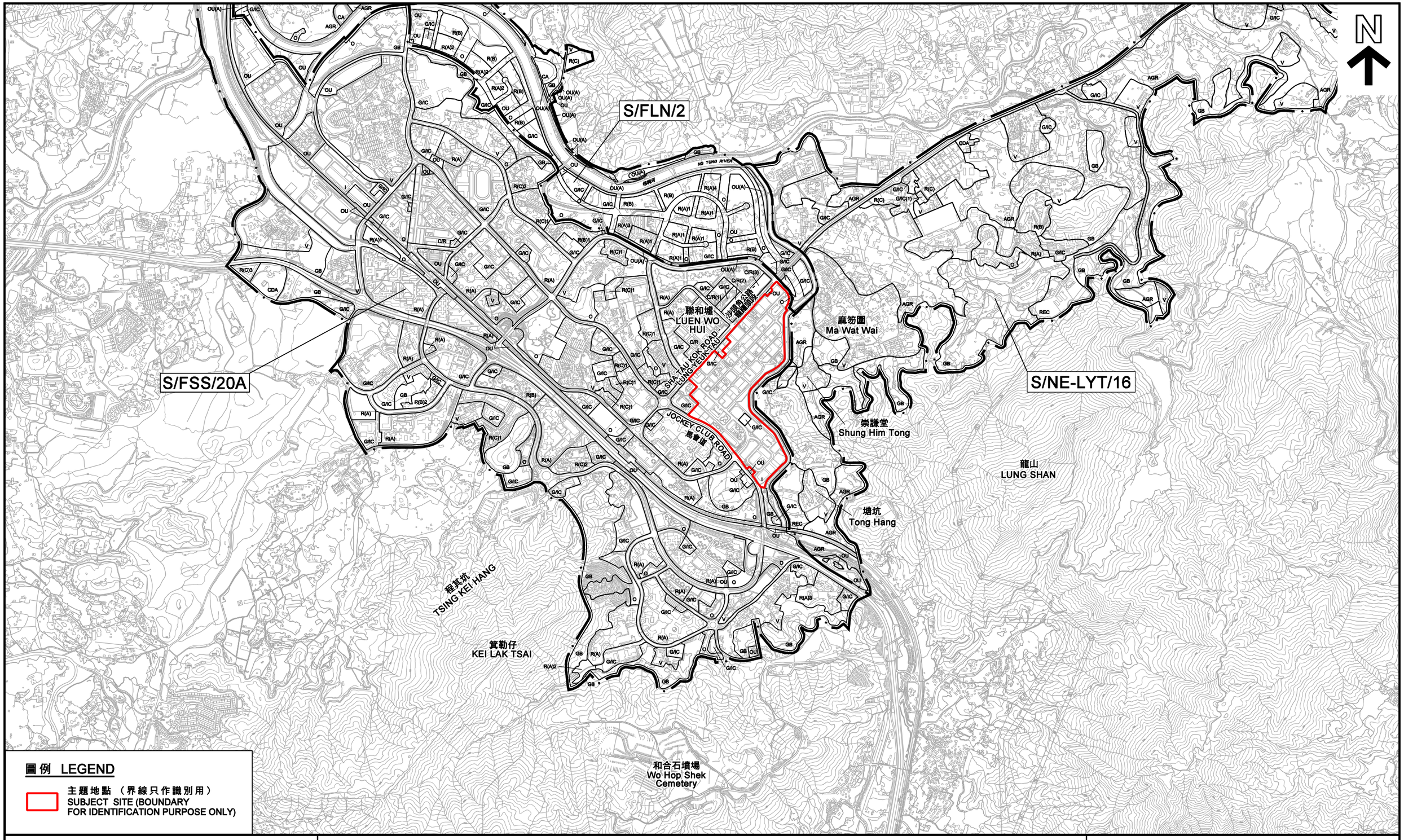
7 Conclusion

While the increase in BH would inevitably detract from the visual openness of the locality especially when viewed at close range, the overall visual impact of the proposed revision to BH restriction in the Area from 25m to 65m (excluding basements) together with the exemption of public vehicle park as required by the Government from PR calculation under the OZP would not be incompatible with the existing developments in the surrounding areas. The proposed area enhancement measures such as the development of public open piazza in front of the Luen Wo Market as well as the provisions of building setback and at-grade greening would enhance the amenity and visual permeability of the Area.

Attachments

Plans 1 and 2	Location Plans of On Lok Tsuen Industrial Area
Plan 3	Site Plan of On Lok Tsuen Industrial Area
Plan 4	Key Plan showing the Viewing Points
Plans 5a to **5f**	Photomontages

PLANNING DEPARTMENT
DECEMBER 2015



圖例 LEGEND

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

本摘要圖於2015年12月15日擬備，所根據的資料為於
2015年5月29日核准的分區計劃大綱圖編號S/NE-LYT/16
及2015年6月16日核准的分區計劃大綱圖編號
S/FLN/2及S/FSS/20
EXTRACT PLAN PREPARED ON 15.12.2015 BASED ON
OUTLINE ZONING PLAN No. S/NE-LYT/16 APPROVED ON 29.5.2015,
OUTLINE ZONING PLAN Nos. S/FLN/2 AND S/FSS/20 APPROVED ON
16.6.2015

位置圖 LOCATION PLAN

安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目
PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

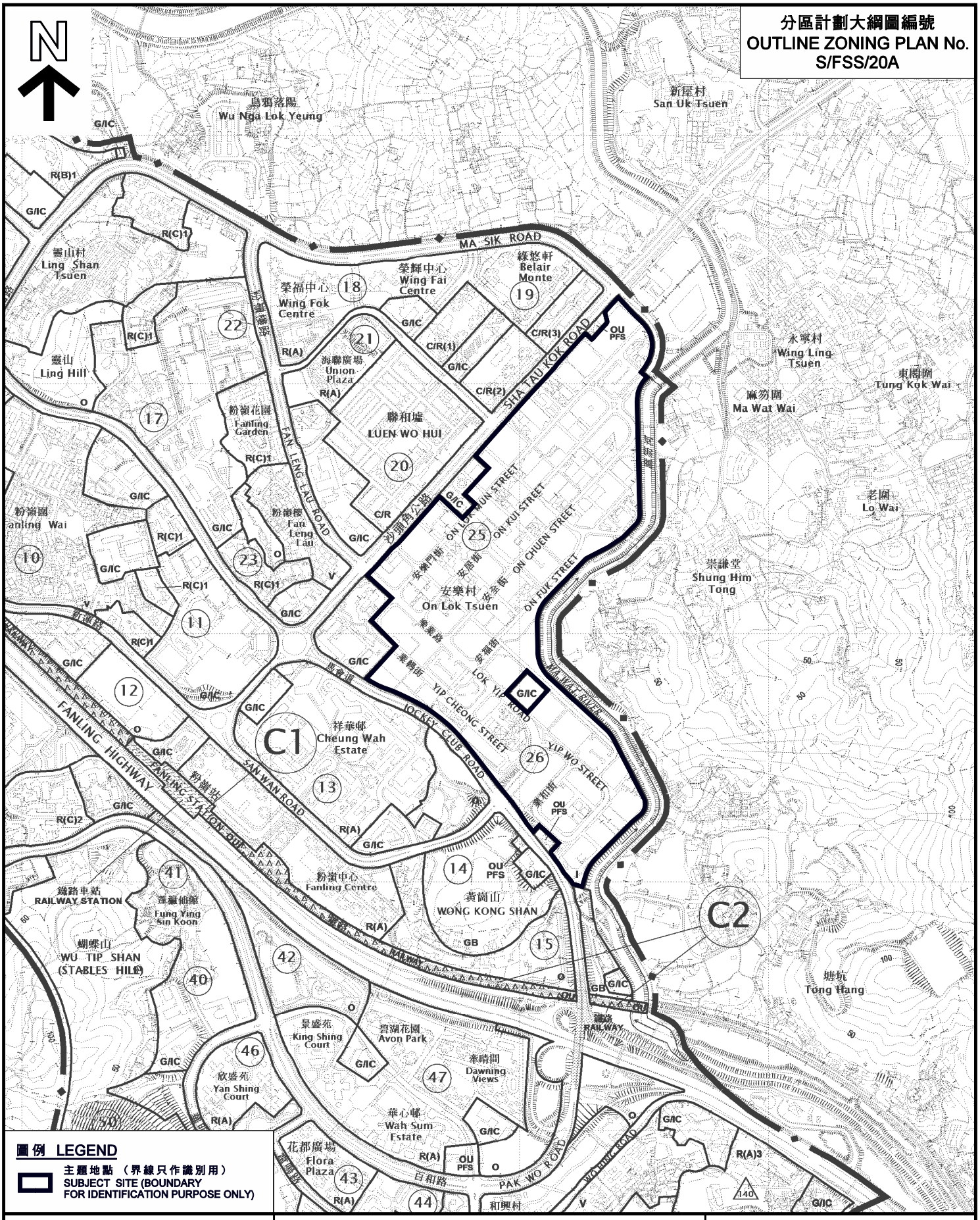
SCALE 1 : 20 000 比例尺

米 METRES 400 0 400 800 1 200 1 600 2 000 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/92

圖 PLAN
1



本摘要圖於2015年12月30日擬備，
所根據的資料為於2015年6月16日
核准的分區計劃大綱圖編號S/FSS/20

EXTRACT PLAN PREPARED ON 30.12.2015
BASED ON OUTLINE ZONING PLAN No.
S/FSS/20 APPROVED ON 16.6.2015

位置圖 LOCATION PLAN

安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目

PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

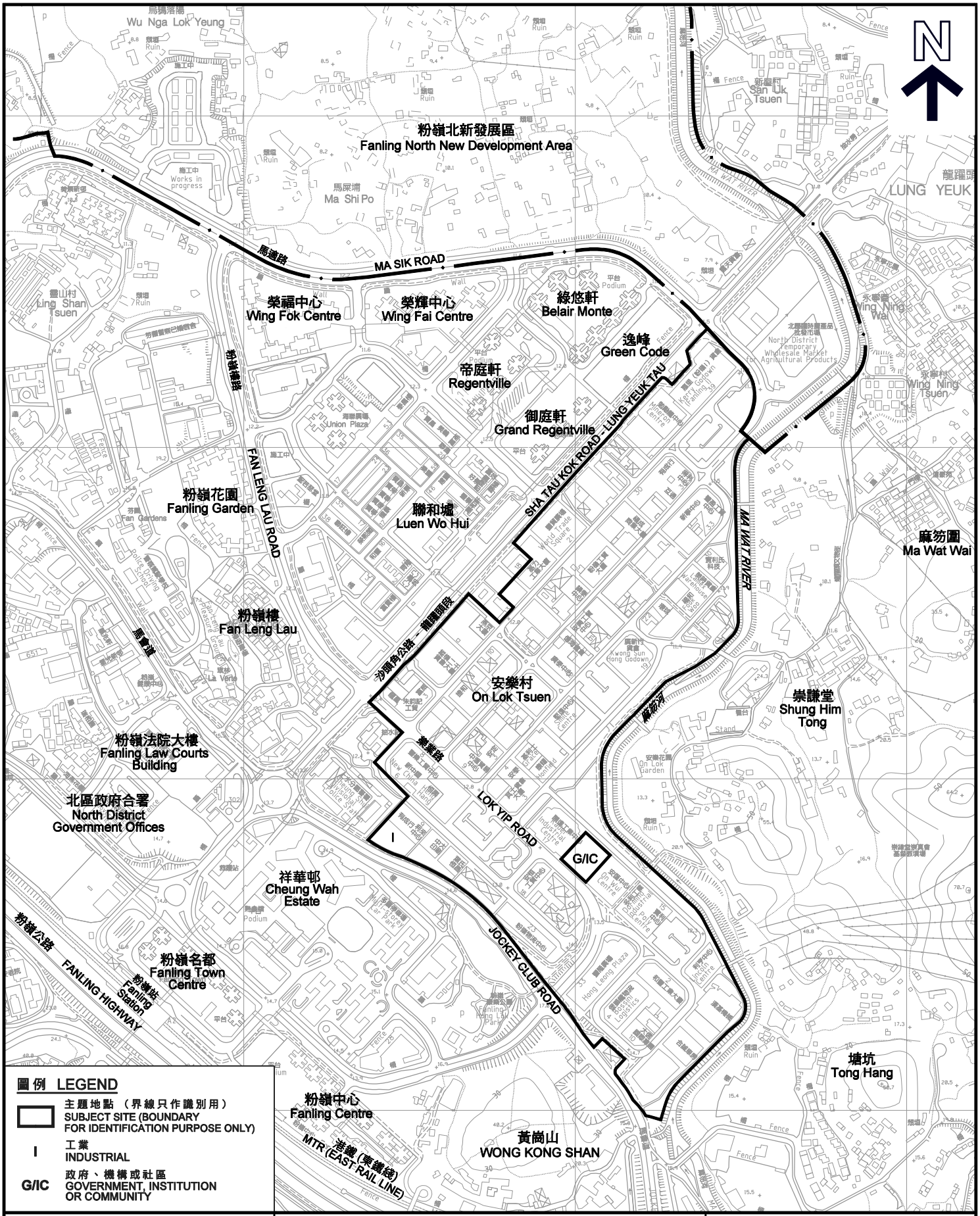
SCALE 1 : 10 000 比例尺

米 METRES 100 0 100 200 300 400 500 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/92

圖 PLAN
2



圖例 LEGEND

- 主題地點（界線只作識別用） SUBJECT SITE (BOUNDARY FOR IDENTIFICATION PURPOSE ONLY)
- I 工業 INDUSTRIAL
- G/IC 政府、機構或社區 GOVERNMENT, INSTITUTION OR COMMUNITY

本摘要圖於2015年12月22日擬備，
所根據的資料為於地形圖編號
3-SW-A及C

EXTRACT PLAN PREPARED ON 22.12.2015
BASED ON TOPOGRAPHIC MAP Nos.
3-SW-A AND C

平面圖 SITE PLAN

安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目

PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

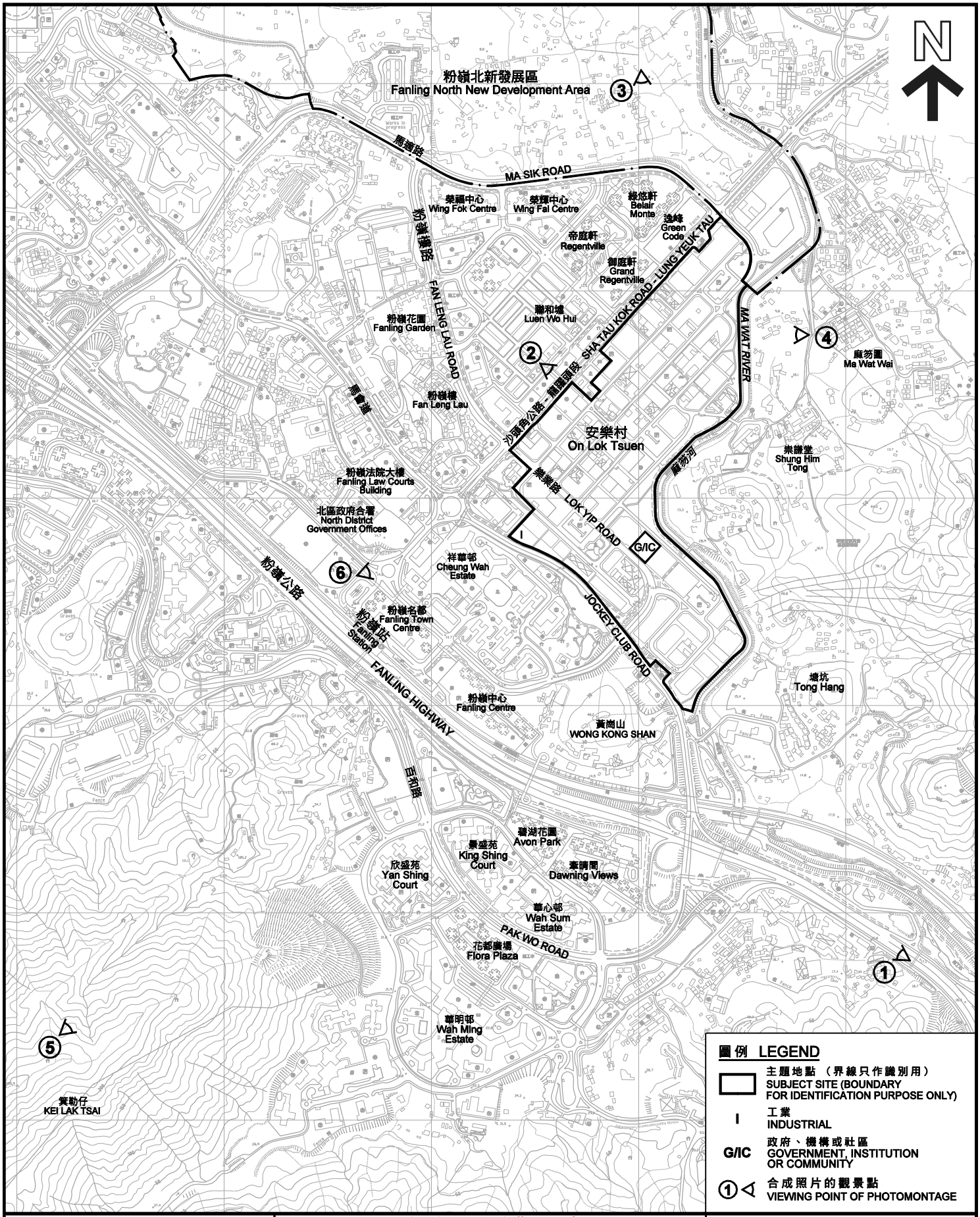
SCALE 1 : 7 500 比例尺

米 METRES 100 0 100 200 300 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/92

圖 PLAN
3



本摘要圖於2015年12月22日擬備，
所根據的資料為於地形圖編號
3-SW-A、3-SW-B、3-SW-C及3-SW-D

EXTRACT PLAN PREPARED ON 22.12.2015
BASED ON TOPOGRAPHIC MAP Nos.
3-SW-A, 3-SW-B, 3-SW-C AND 3-SW-D

合成照片的觀景點
VIEWPOINTS OF PHOTOMONTAGE

安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目

PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

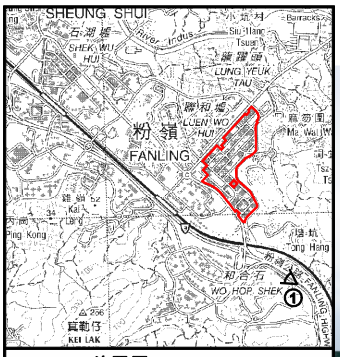
SCALE 1 : 12 000 比例尺

米 METRES 120 0 120 240 360 480 600 米 METRES

規劃署
PLANNING DEPARTMENT

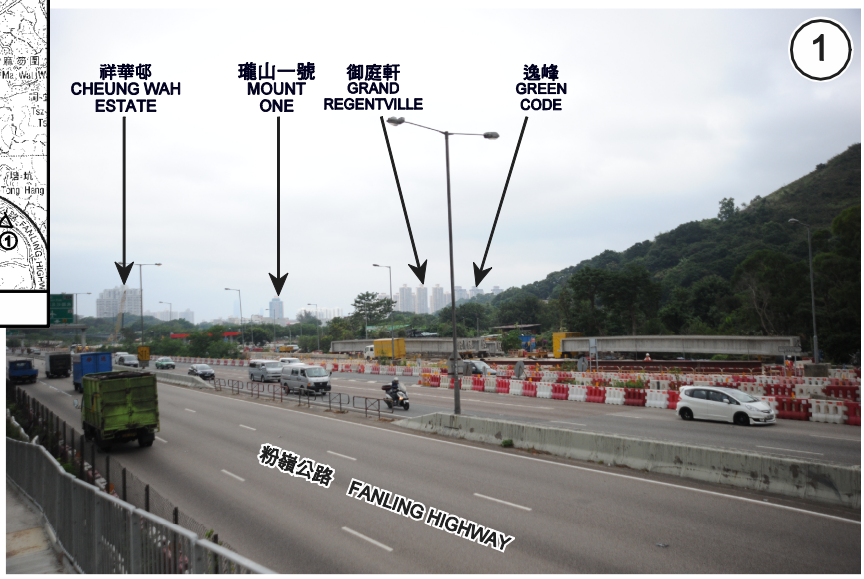
參考編號
REFERENCE No.
M/FS/15/92

圖 PLAN
4

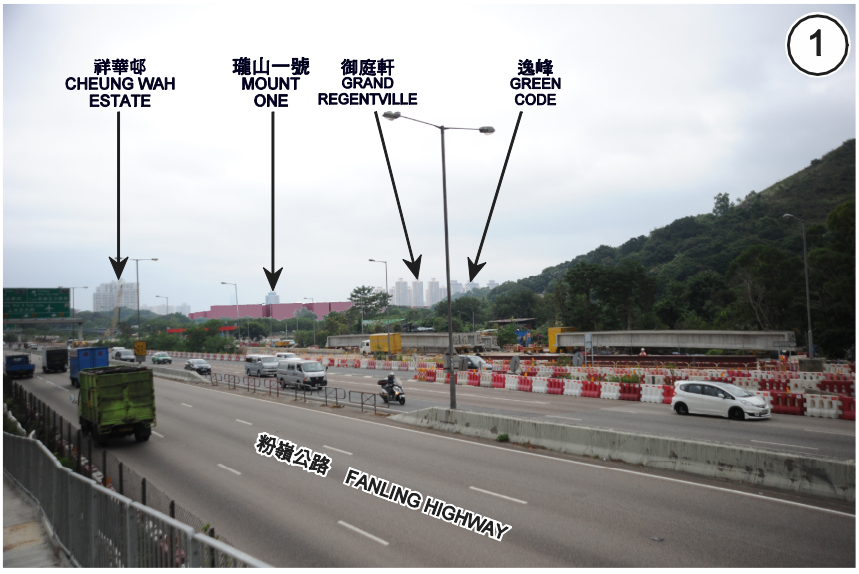


位置圖 KEY PLAN

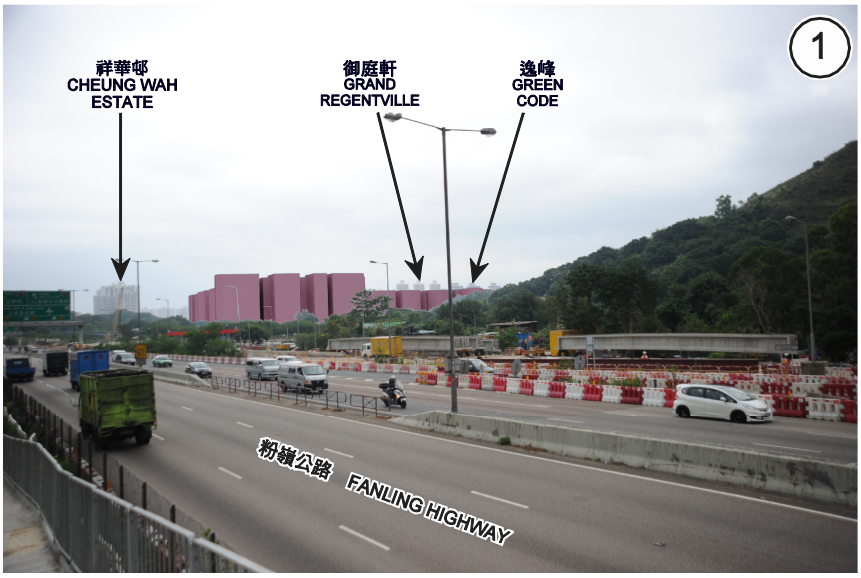
實地照片
SITE PHOTO



合成照片（計劃建築物高度25米）
PHOTOMONTAGE (PLANNED BUILDING HEIGHT OF 25M)



合成照片（擬議建築物高度限制65米）
PHOTOMONTAGE (PROPOSED BUILDING HEIGHT RESTRICTION OF 65M)



圖例 LEGEND

主題地點
SUBJECT SITE

本圖於2015年12月22日擬備，
所根據的資料為攝於
2015年11月12日的實地照片
PLAN PREPARED ON 22.12.2015
BASED ON SITE PHOTO
TAKEN ON 12.11.2015

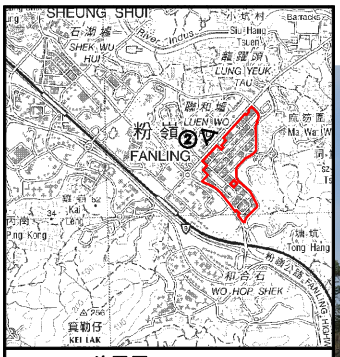
合成照片 PHOTOMONTAGE

在粉錦公路的行人天橋的觀景點
VIEWING POINT AT FOOTBRIDGE AT FANLING HIGHWAY
安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目
PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/92

圖 PLAN
5a



位置圖 KEY PLAN

實地照片
SITE PHOTO

合成照片（計劃建築物高度25米）
PHOTOMONTAGE (PLANNED BUILDING HEIGHT OF 25M)

合成照片（擬議建築物高度限制65米）
PHOTOMONTAGE (PROPOSED BUILDING HEIGHT RESTRICTION OF 65M)

圖例 LEGEND

主題地點
SUBJECT SITE

本圖於2015年12月16日擬備，
所根據的資料為攝於
2015年11月20日的實地照片
PLAN PREPARED ON 16.12.2015
BASED ON SITE PHOTO
TAKEN ON 20.11.2015

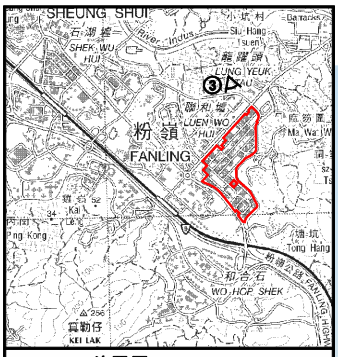
合成照片 PHOTOMONTAGE

在聯和墟的觀景點
VIEWING POINT AT LUEN WO HUI
安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目
PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/92

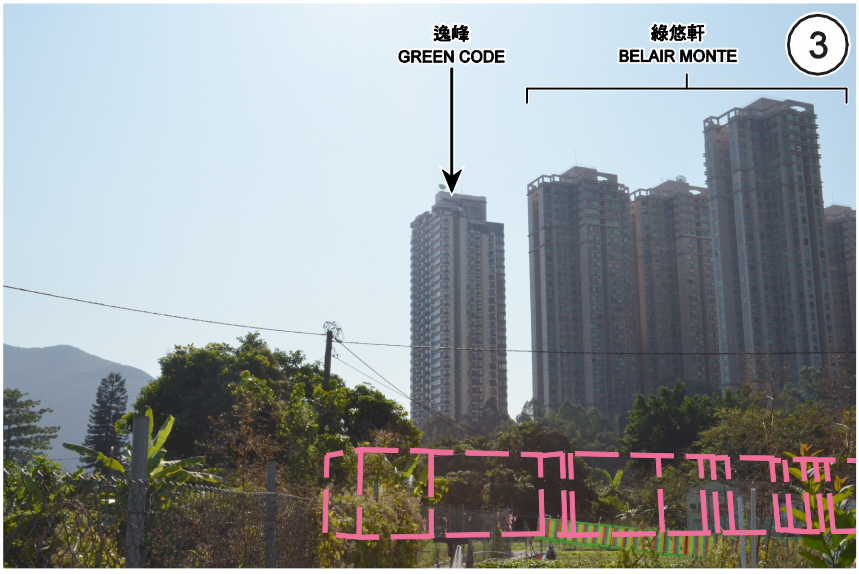
圖 PLAN
5b



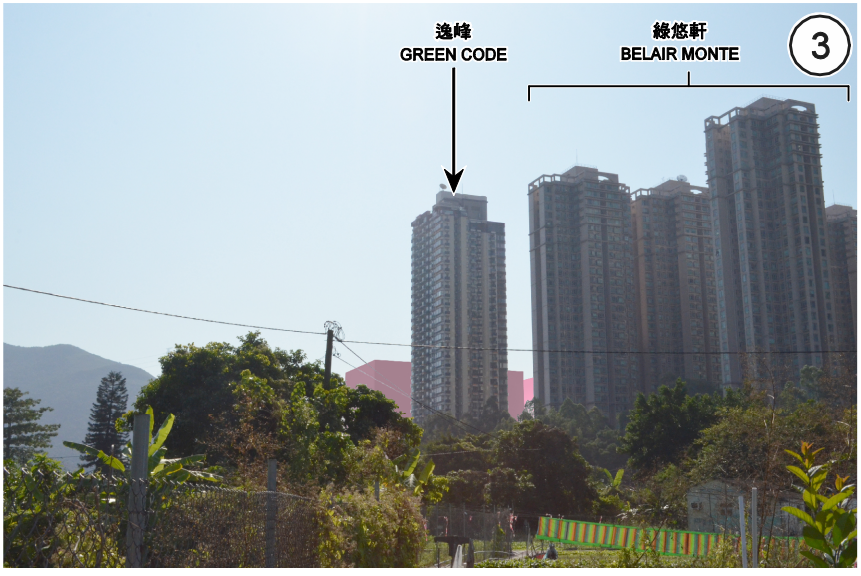
位置圖 KEY PLAN

實地照片
SITE PHOTO

合成照片（計劃建築物高度25米）
PHOTOMONTAGE (PLANNED BUILDING HEIGHT OF 25M)



合成照片（擬議建築物高度限制65米）
PHOTOMONTAGE (PROPOSED BUILDING HEIGHT RESTRICTION OF 65M)



圖例 LEGEND

主題地點
SUBJECT SITE

本圖於2015年12月22日擬備，
所根據的資料為攝於
2015年12月18日的實地照片
PLAN PREPARED ON 22.12.2015
BASED ON SITE PHOTO
TAKEN ON 18.12.2015

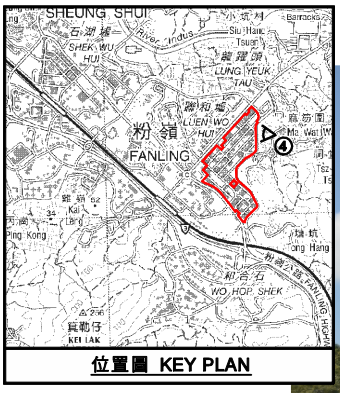
合成照片 PHOTOMONTAGE

在馬屎埔的觀景點
VIEWING POINT AT MA SHI PO
安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目
PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/92

圖 PLAN
5c



位置圖 KEY PLAN

實地照片
SITE PHOTO

合成照片（計劃建築物高度25米）
PHOTOMONTAGE (PLANNED BUILDING HEIGHT OF 25M)

合成照片（擬議建築物高度限制65米）
PHOTOMONTAGE (PROPOSED BUILDING HEIGHT RESTRICTION OF 65M)

圖例 LEGEND

主題地點
SUBJECT SITE

本圖於2015年12月22日擬備，
所根據的資料為攝於
2015年11月18日的實地照片
PLAN PREPARED ON 22.12.2015
BASED ON SITE PHOTO
TAKEN ON 18.11.2015

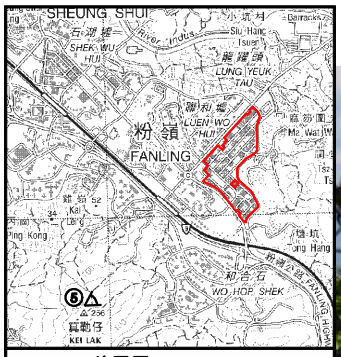
合成照片 PHOTOMONTAGE

在龍躍頭文物徑的觀景點
VIEWING POINT AT LUK YEUK TAU HERITAGE TRAIL
安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目
PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

規劃署
PLANNING DEPARTMENT

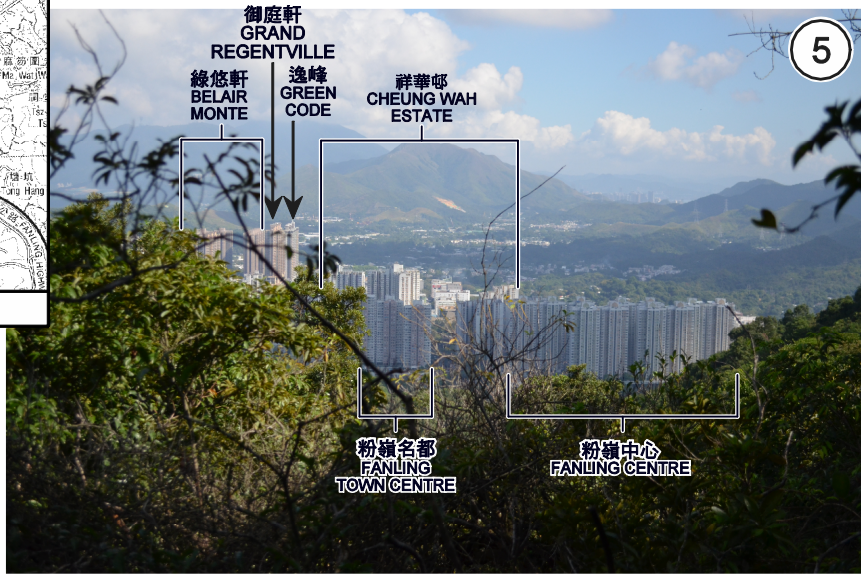
參考編號
REFERENCE No.
M/FS/15/92

圖 PLAN
5d

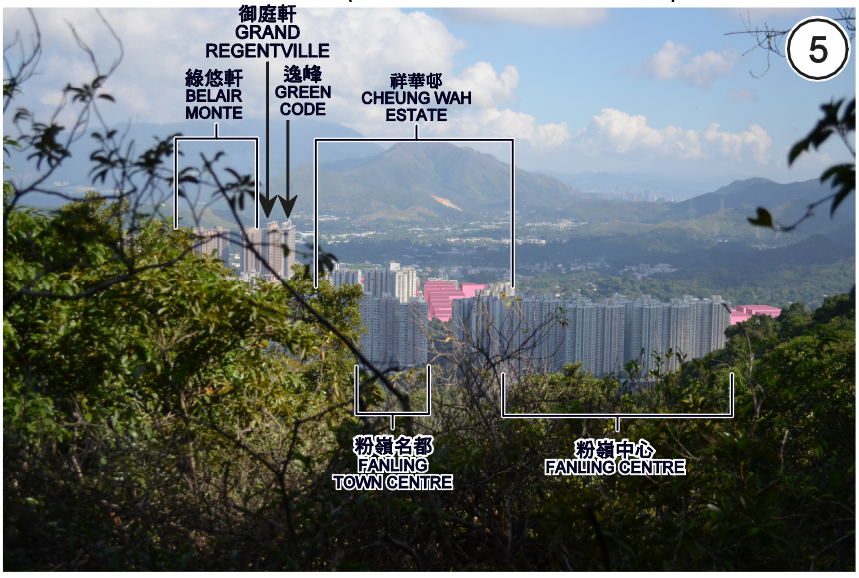


位置圖 KEY PLAN

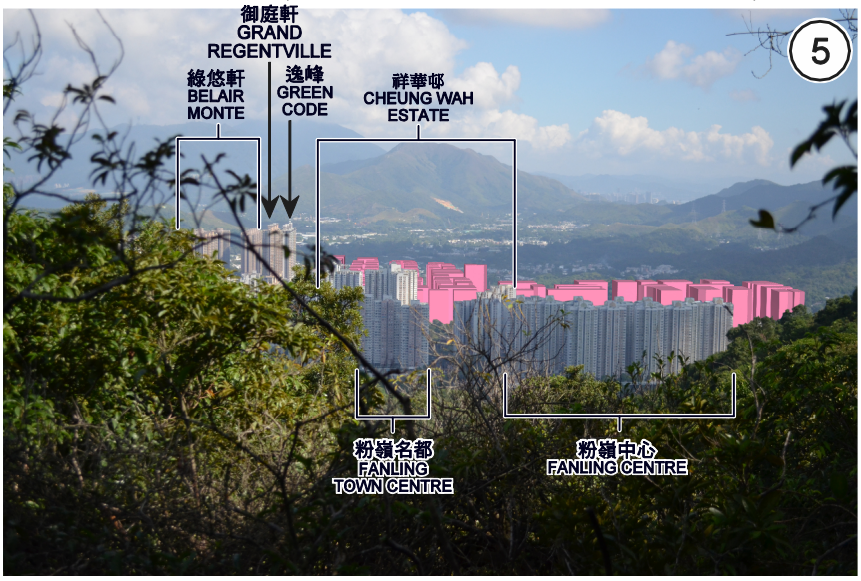
實地照片
SITE PHOTO



合成照片（計劃建築物高度25米）
PHOTOMONTAGE (PLANNED BUILDING HEIGHT OF 25M)



合成照片（擬議建築物高度限制65米）
PHOTOMONTAGE (PROPOSED BUILDING HEIGHT RESTRICTION OF 65M)



圖例 LEGEND

主題地點
SUBJECT SITE

本圖於2015年12月22日擬備，
所根據的資料為攝於
2015年11月18日的實地照片
PLAN PREPARED ON 22.12.2015
BASED ON SITE PHOTO
TAKEN ON 18.11.2015

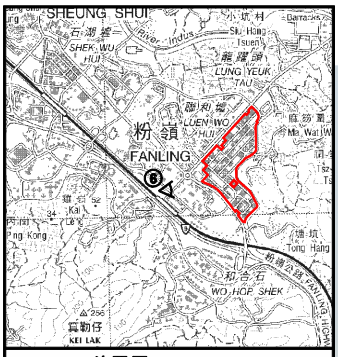
合成照片 PHOTOMONTAGE

在蝴蝶山的觀景點
VIEWING POINT AT WU TIP SHAN (STABLES HILL)
安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目
PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

規劃署
PLANNING
DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/92

圖 PLAN
5e



位置圖 KEY PLAN

實地照片
SITE PHOTO

祥華邨
CHEUNG WAH ESTATE

合成照片（計劃建築物高度25米）
PHOTOMONTAGE (PLANNED BUILDING HEIGHT OF 25M)

祥華邨
CHEUNG WAH ESTATE

合成照片（擬議建築物高度限制65米）
PHOTOMONTAGE (PROPOSED BUILDING HEIGHT RESTRICTION OF 65M)

祥華邨
CHEUNG WAH ESTATE

圖例 LEGEND

主題地點
SUBJECT SITE

本圖於2015年12月22日擬備，
所根據的資料為攝於
2015年11月14日的實地照片
PLAN PREPARED ON 22.12.2015
BASED ON SITE PHOTO
TAKEN ON 14.11.2015

合成照片 PHOTOMONTAGE

在新運路行人天橋的觀景點
VIEWING POINT AT FOOTBRIDGE AT SAN WAN ROAD

安樂村的「工業」地帶
在粉嶺/上水分區計劃大綱核准圖編號S/FSS/20
就圖則《註釋》作出的修訂項目
PROPOSED AMENDMENTS TO THE NOTES OF THE APPROVED
FANLING / SHEUNG SHUI OUTLINE ZONING PLAN No. S/FSS/20
"I" ZONE AT ON LOK TSUEN

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/FS/15/92

圖 PLAN
5f

Landscape Appraisal
On Lok Tsuen Industrial Area

1. Introduction

1.1 With the proposed amendment to the Fanling/Sheung Shui Outline Zoning Plan (OZP) to relax the building height restriction from 25m to 65m (excluding basements) at On Lok Tsuen Industrial Area, there are opportunities to provide more at-grade landscape. This report provides an account on the landscape conditions of On Lok Tsuen Industrial Area ("the Area") and identifies landscape improvement opportunities as appropriate.

2. Overall Landscape Setting in the Surrounding

2.1 The Area is characterized by low and medium-rise industrial buildings in very dense arrangements and in variable conditions with medium landscape value [1]. High-rise residential developments are adjacent to its northwest and southwest. Dense green knolls and rural village type development are found to the east of On Lok Tsuen. Urban type amenity planting is found within On Lok Tsuen and continuous amenity areas along the Sha Tau Kok Road – Lung Yeuk Tau, Jockey Club Road and riverside of Ma Wat River serve as effective green buffers to the surrounding high rise residential and village type development. Two historical feature / trail are found at Luen Wo Hui and Lung Yeuk Tau near to On Lok Tsuen.

3. Existing Landscape Resources

Existing OVTs & Tree Groups

3.1 There are three registered Old and Valuable Trees in the Area: they are Registered No LCSD N/7, *Ficus virens (大葉榕)* and No. LCSD N/6, *Ficus microcarpa (細葉榕),* both located in On Lok

[1] Reference is made to *"Landscape Value Mapping of Hong Kong"*, current aerial photo and on site observation in October 2015.

Tsuen Sitting-Out Area No.2 near Yip Cheong Street and No LCSD N/5, *Eucalyptus citriodora (檸檬桉)* located at On Chuen Street opposite to No.22, which should be properly preserved in-situ.

3.2 Other existing trees within On Lok Tsuen are mature, planted in early age with mixing of both native and exotic tree species such as *Bischofia javanica (秋楓), Eucalyptus spp. (桉屬), Clausena lansium (黃皮), Grevillea robusta (銀樺), Bombax ceiba (木棉), Ficus spp. (榕屬), Bischofia polycarpa (重陽木), Acacia confusa (台灣相思), Cinnamomum camphora (樟樹),* etc, which are commonly found within the planters of the existing car parking lots, roadside amenity areas, riverside areas and public open spaces. Particularly, some trees are in large or mature size with good amenity form and fair to good health condition, such as those within the car parking lots near On Lok Mun Street Playground and On Fuk Street; roadside planters along Jockey Club Road and Lok Ming Street; and feature tree within On Lok Tsuen Sitting-Out Area No.4. They all are considered of high landscape value and are recommended to be preserved as far as feasible.

Local Open Space (Sitting-out Area / Sports Ground / Amenity Area)

3.3 On Lok Tsuen is served by 15 sitting-out areas / sports grounds which provide active and passive recreational grounds for the local working population and neighboring residents. The greenery in these areas and other roadside trees in the amenity areas now serve as small green pockets, but could be strengthened for enhancement to the overall landscape provisions in the area.

Ma Wat River

3.4 Ma Wat River is a unique landscape feature at On Lok Tsuen. This channelized river is in close proximity to the population in the area, yet is separated from the industrial buildings by an amenity area of variable width which serves as good landscape buffer. There is a section of cycle track and pedestrian

walkway along the riverside amenity area of Ma Wat River. Therefore, besides providing a pleasant riverside environment to the Area, existing amenity area along Ma Wat River also supports recreational functions. However, it is observed that there are limited facilities available, such as lookout areas/seating facilities; and some sections of existing pavement and planting areas are found to be lack of maintenance. Moreover, some government land adjoining to the Ma Wat River has been fenced off, which has inhibited the connectivity along and access to the riverside edge.

3.5 Furthermore, it is observed that the riverside amenity area that runs along On Chuen Street could be enhanced and connected with the existing landscaped amenity area south of Yip Fung Street to link with On Lok Tsuen Sitting-Out Area No.4 and beyond. Similarly, improvements of the connections westward along Lok Ming Street is also promising as there are sitting-out area and playground along the street and a number of good quality trees already lined Lok Ming Street. In brief, there is potential to strengthen the connection of the riverside amenity areas of Ma Wat River to the inner part of On Lok Tsuen for enjoyment by local working population and neighboring residents.

4. Proposed Landscape Framework

4.1 With the availability of rich landscape resources in the Area, there is an opportunity to enhance its general landscape conditions by connecting the existing landscape resources to form a comprehensive landscape plan for the area.

4.2 Ma Wat River and the open space alongside is a major landscape resource in the Area and provide a pleasant and green leisure opportunity for the local workers as well as the residents of nearby residential developments. By providing more and better open space facilities (such as picnic table and benches) and enhancement of hard and soft landscape treatments (such as pavement enhancement and thematic plantings) within the

open space along Ma Wat River, it will increase the attractiveness of this green spine in the Area which will further extends to connect to the riverside promenade in Fanling North New Development Area (NDA).

4.3 By providing 2m amenity area/tree planting area along On Fuk Street and Lok Ming Road, including the review / enhancement of adjacent the existing cycle parking area, these two streets will become the green fingers for the area.

4.4 In general, landscape or peripheral planting to individual site should be encouraged upon redevelopment or when opportunities arise to enhance the amenity and streetscape of this Area.

5. Other Proposed Landscape Improvement Measures

5.1 The design of the local open space near to the northern end of Lok Ming Road is currently very enclosed and uninviting. Consideration should be given to redesign it so that it would be more open toward the cycling track along Sha Tau Kok Road.

5.2 The existing mature tree groups and OVTs should be preserved as far as possible.

5.3 New cycling tracks should be provided to connect the existing broken sections of cycling tracks along Lok Ming Street and On Fuk Street so that a continuous cycling track is made available from Sha Tau Kok Road via On Lok Tsuen to Jockey Club Road.

5.4 To facilitate an integrated planning for the area, there is an opportunity to relocate the mini-bus terminal/taxi lay-by fronting the Luen Wo Market to the existing open car park on Luen Fat Street and convert the vacated space into an open piazza, which can act as a focal point for the local community as well as a place for ad-hoc functions.

5.5 The proposed landscape framework and other improvement measures are illustrated on the Conceptual Landscape Enhancement Plan. These proposed landscape improvements

have been included in the the proposed framework on area enhancement measures which would be incorporated into the On Lok Tsuen Layout Plan to guide the detailed district planning works. The scope and implementation details of the proposed enhancement measures would be further developed as necessary subject to further consultation with relevant departments and local community.

PLANNING DEPARTMENT
DECEMBER 2015

Appendix VI

Provision of Major Community Facilities in Fanling/Sheung Shui

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	29.03 ha.	19.48 ha.	30.15 ha.	+ 1.12 ha.
Local Open Space	10 ha. per 100,000 persons	29.03 ha.	49.15 ha.	59.53 ha.	+ 30.50 ha.
Secondary School	1 whole-day classroom for 40 persons aged 12-17	347.80 classrooms	574 classrooms	574 classrooms	+ 226.20 classrooms
Primary School	1 whole-day classroom for 25.5 persons aged 6-11	548.90 classrooms	583 classrooms	667 classrooms	+ 118.1 classrooms
Kindergarten/ Nursery	26 classrooms for 1,000 children aged of 3 to under 6	159.54 classrooms	221 classrooms	234 Classrooms	+ 74.46 classrooms
District Police Station	1 per 200,000-500,000 persons	0.61	0	0	- 0.61
Divisional Police Station	1 per 100,000-200,000 persons	1.51	1	1	- 0.51
Hospital	5.5 beds per 1,000 persons	1,664.18	733	1,233	- 431.18*
Clinic/Health Centre	1 per 100,000 persons	3.03	2	3	- 0.03
Magistracy (with 8 courtrooms)	1 per 660,000 persons	0.46	1	1	+ 0.54
Integrated Children and Youth Services Centre	1 for 12,000 persons aged 6-24	3.89	7	7	+ 3.11

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**	
Integrated Family Services Centre	1 per 100,000 to 150,000 persons	1.94	3	4	+ 2.06
Library	1 district library for every 200,000 persons	1.51	2	2	+ 0.49
Sports Centre	1 per 50,000 to 65,000 persons	4.47	5	5	+ 0.53
Sports Ground/ Sports Complex	1 per 200,000 to 250,000 persons	1.16	1	1	- 0.16
Swimming Pool Complex - standard	1 complex per 287,000 persons	1.01	1	1	- 0.01

* The provision of hospital beds would be monitored and addressed by the Hospital Authority on a regional basis, and there is a planned hospital in Kwu Tung North.