METRO PLANNING COMMITTEE
OF THE TOWN PLANNING BOARD

MPC Paper No. 5/17
For Consideration by the
Metro Planning Committee on 25.8.2017

PROPOSED AMENDMENTS TO
THE APPROVED POK FU LAM
OUTLINE ZONING PLAN No. S/H10/15

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1. Introduction

This paper is to seek Members' agreement that :

(a) the proposed amendments to the approved Pok Fu Lam (PFL) Outline Zoning Plan (OZP) No. S/H10/15 as shown on the draft OZP No. S/H10/15A (**Attachment II**) and the Notes of the draft OZP (**Attachment III**) are suitable for exhibition for public inspection under section 5 of the Town Planning Ordinance (the Ordinance); and

(b) the revised Explanatory Statement (ES) of the OZP (**Attachment IV**) should be adopted as an expression of the planning intentions and objectives of the Town Planning Board (the Board) for various land use zonings of the OZP and is suitable for exhibition together with the draft OZP.

2. Status of the Current OZP

2.1 On 1.2.2005, the Chief Executive in Council (CE in C) under section 9(1)(a) of the Ordinance approved the draft PFL OZP. On 18.2.2005, the approved PFL OZP No. S/H10/15 (**Attachment I**) was exhibited for public inspection under section 9(5) of the Ordinance.

2.2 On 17.10.2006, the CE in C referred the approved PFL OZP back to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. On 27.10.2006, the reference back of the OZP was notified in the Gazette under section 12(2) of the Ordinance.

3. Background

3.1 The 2014 Policy Address announced the partial lifting of the administrative Pok Fu Lam Moratorium (PFLM)[1] on development in PFL area to release five government sites for public housing development, as well as Wah Fu Estate (WFE) for redevelopment, which are estimated to provide a total of 11,900 additional public housing units, alongside active consideration of taking forward the South Island Line (West) (SIL(W)) to address the transport needs arising from the new

[1] PFLM prohibits any new land sale and lease modification for more intensive development. PFLM is an administrative measure imposed on traffic grounds to prohibit excessive development of the area until there is an overall improvement in the transport network of the area.

public housing developments/redevelopment. The proposed developments in the five sites in the vicinity of WFE will serve as major reception resources for the Wah Fu Estate Redevelopment (WFER) and provide additional public rental housing units and subsidised sale flats to meet the housing need.

3.2 The Civil Engineering and Development Department (CEDD) has undertaken feasibility study for the five government sites. Based on the findings of the CEDD's feasibility study, the Housing Department (HD) decided to revise the original development site boundaries (**Drawing 1**) in order to lessen the impact of the proposed developments on the ecology, natural stream courses, hiking trails and Old Dairy Farm remains within the sites. As compared with the original sites, the total area of the current five government sites proposed for public housing developments (namely Wah Fu North, Wah King Street, Wah Lok Path, Kai Lung Wan North and Kai Lung Wan South sites) has been reduced from about 18ha to about 13ha.

3.3 According to HD's proposed development conceptual plan as well as the preliminary site layout and development parameters for technical assessments (**Drawings 2 & 3** and **Attachment V**), the proposed developments would have 11 residential blocks for accommodating about 8,900 public housing units for about 26,900 persons, retail outlets, government, institution and community (GIC) facilities including those to be reprovisioned from WFE, such as child care centre, elderly facilities, library and post office, and a public vehicle park. The total domestic and non-domestic gross floor areas (GFA) of the proposed developments are estimated to be about 443,000m^2 and 55,800m^2 respectively while the GFA of each site would be subject to the detailed design, taking account of the actual distribution of flat types, number of units, GIC facilities and retail outlets among the sites, as well as the building design and height, as a result of quantitative air ventilation assessment (AVA) and visual improvement measures. A pedestrian network comprising footpaths, pedestrian crossing facilities and footbridges would connect the sites and its surrounding developments. The sites will be developed in phases and the first phase is expected to be completed in 2025 while the last phase in 2027.

3.4 Based on the findings of the CEDD's feasibility study, the proposed developments are technically feasible with no insurmountable technical problem. Further relevant detailed technical assessments will be conducted by HD/CEDD as part of the detailed design of the proposed developments.

4. Proposed Amendments to the OZP

4.1 The five sites are located in a predominantly residential neighbourhood at the southern part of PFL. Four of them, namely Wah King Street, Wah Lok Path, Kai Lung Wan South and Kai Lung Wan North sites, fall within the Residential Density Zone 1 (R1)[2]. The existing residential developments in R1 are zoned "Residential (Group A)" ("R(A)") including WFE, Wah Kwai Estate, Ka Lung Court, Pok Fu Lam Terrace and World Fair Court. The remaining site (Wah Fu

[2] According to Chapter 2 of the Hong Kong Planning Standards and Guidelines, the Main Urban Areas are divided into three Residential Density Zones, i.e. R1, R2 and R3. R1 and R2 are subject to maximum domestic plot ratio of 8, 9 or 10, and 6 respectively.

North site) falls within the Residential Density Zone 2 (R2). The existing residential developments in R2 are zoned "Residential (Group B)".

4.2 In order to achieve the public housing target of additional 11,900 flats as allowed under the partial uplifting of PFLM, it was estimated that a domestic plot ratio (PR) of about 6 would be required for the original five sites. As explained in paragraph 3.2 above, there were changes to the sites resulting in a reduction of the total site area by about 5 ha so as to lessening the impact on the ecology, hiking trails and historic structures. With the same public housing target (i.e. the same domestic GFA of about 443,000m^2) and smaller total site area, the average domestic PR of the sites would have to be increased to about 7. Such development intensity is still considered comparable to that of the surrounding residential developments.

4.3 In terms of building height, a stepped building height concept with height bands of 200 metres above the Principal Datum (mPD) and 230mPD is proposed for the five sites. This has taken into account the existing stepped height profile in the area with building heights increasing progressively from the waterfront at WFE and Wah Kwai Estate to the inland areas at Chi Fu Fa Yuen and Pokfulam Garden, as well as the height of surrounding existing buildings. The stepped building height concept in the area is provided at **Drawings 4 and 5**. Consideration of the building height of individual sites is detailed in paragraphs 4.6 to 4.16 below. However, the exact number of storeys of the proposed developments would be subject to detailed design.

4.4 Currently, there is no restriction on PR, building height and site coverage under the "R(A)" zone of the PFL OZP. However, residential developments within the "R(A)" zone are subject to the restrictions under the Building (Planning) Regulations (B(P)R) as well as PFLM. For those "R(A)" sites designated for public housing development, they are further subject to the control of approved planning briefs. Hence, no PR/building height restrictions on the OZP are proposed for the five sites. The aforesaid development parameters and the planning requirements, including relevant detailed technical assessments such as quantitative AVA, will be incorporated in the planning brief to be prepared by HD and have been stated in the revised ES. HD will work out the planning brief for the proposed developments in consultation with the relevant government departments and the Southern District Council (SDC).

4.5 The site context, the development proposal and the proposed zoning amendments of each of the individual sites are set out in the paragraphs 4.6 to 4.16 below. The relocation proposals of the affected existing uses/facilities and the proposed mitigation measures of the affected ecology are also detailed in paragraph 5 below.

Amendment Item A – Wah Fu North Site (Plans 2 to 5)

4.6 Amendment Item A (about 2.0 ha) is a piece of government land which falls within an area zoned mainly "Open Space" ("O") with small portions zoned "Government, Institution or Community" ("G/IC") and "Green Belt" ("GB"). It is located between Chi Fu Fa Yuen and WFE and bounded by Wah Fu Service Reservoir to the north, Pok Fu Lam Road to the east, St. Paul's College Primary School to the south and Victoria Road to the west. The site is currently partly

occupied by as two temporary open-air car parks under Short Term Tenancies (STT) with the remaining area covered with vegetation.

4.7 According to HD's proposal, it would consist of two residential blocks accommodating about 1,890 housing units and 6,340 persons, and a GIC block for welfare and community facilities. The residential blocks would be about 200mPD in height and maintain a distance of at least 100m away from those at Chi Fu Fa Yuen. An air path/visual corridor of at least 30m would be provided within the site. The site is proposed to be rezoned to "R(A)".

Amendment Item B – Wah King Street Site (Plans 2 to 5)

4.8 Amendment Item B (about 0.68 ha) is a piece of government land which falls within an area zoned mainly "O" with a small portion of an area shown as 'Road'. It is located to the immediate northeast of WFE and bounded by Victoria Road, Wah Hong Street, Wah King Street and Wah Chui Street. Currently, the site is partly occupied by the Wah Chui Street Sitting-out Area and partly by a bus terminus.

4.9 According to HD's proposal, it would consist of two residential blocks accommodating about 1,360 housing units and 4,150 persons with some retail facilities. The proposed building height is about 200mPD. An air path/visual corridor of at least 30m would be provided within the site. The site is proposed to be rezoned to "R(A)".

4.10 As for the affected sitting-out area, the Leisure and Cultural Services Department (LCSD) has confirmed that no replacement site is required as there would be local open space provision in the proposed housing developments to meet the needs of local residents.

Amendment Item C – Wah Lok Path Site (Plans 6 to 8)

4.11 Amendment Item C (about 0.36 ha) is a piece of government land which falls within an area zoned "G/IC" with no designated use. It is bounded by Pok Fu Lam Road to the northeast, a primary school to the southeast, two private residential developments zoned "R(A)" to the southwest and a fire station cum staff quarters to the northwest. Part of the site is currently used as a temporary open-air public car park under STT.

4.12 According to HD's proposal, it would consist of one residential block accommodating about 360 housing units and 1,130 persons with welfare and community facilities on the lower floors. The proposed building height is about 170mPD so as to allow a smooth transition of building height from Amendment Items A and B towards Wah Kwai Estate of about 110mPD to the south. The site is proposed to be rezoned to "R(A)".

Amendment Item D – Kai Lung Wan South Site (Plans 9 to 11)

4.13 Amendment Item D (about 1.72ha) is a piece of government land which falls within an area zoned "GB". It is located to the northeast of Wah Kwai Estate across Shek Pai Wan Road and bounded by vegetated slopes to the north, east and

south. While most of the site is covered with vegetation, there are man-made slopes and retaining wall structures near Shek Pai Wan Road.

4.14 According to HD's proposal, it would consist of two residential blocks accommodating about 1,320 housing units and 3,700 persons. The proposed building height is about 200mPD. An air path/visual corridor of at least 25m would be provided within the site. The site is proposed to be rezoned to "R(A)".

Amendment Item E – Kai Lung Wan North Site (Plans 12 to 15)

4.15 Amendment Item E (about 3.82 ha) is a piece of government land which falls within an area mainly zoned "GB" with a small portion zoned "G/IC". It is bounded by Pok Fu Lam Road to the southwest, the access road to Kai Lung Wan Fresh Water Service Reservoir to the northwest, Kai Lung Wan Fresh Water Service Reservoir to the northeast and natural vegetated slopes to the east and south. While most of the site is covered with dense vegetation, there are formed platforms, man-made slopes and retaining wall structures near Pok Fu Lam Road as well as a LCSD's plant nursery and two other private nurseries under STT.

4.16 According to HD's proposal, it would consist of four residential blocks accommodating about 3,990 housing units and 11,560 persons with some retail facilities, welfare and community facilities in an ancillary facility block. The proposed building height is about 230mPD, which is in line with the maximum height of the existing buildings at Chi Fu Fa Yuen along the green backdrop. A public vehicle park would also be provided within the site to meet the local demand. The residential blocks would maintain at least 100m away from those at Yar Chee Villas at Chi Fu Fa Yuen and four air paths/visual corridors of at least 20m and 30m would be provided within the site. The site is proposed to be rezoned to "R(A)1" to allow provision in the OZP for the proposed public vehicle park.

5. Technical Assessments for the Five Sites

5.1 CEDD has assessed the potential impacts arising from the proposed developments at the five sites on traffic, environment, ecology, heritage, landscape, visual, air ventilation, utility infrastructures and other aspects. According to the findings of the CEDD's feasibility study, there will be no insurmountable technical problem for the proposed developments. All relevant departments, including Transport Department (TD), Environmental Protection Department (EPD), LCSD, Agricultural, Fisheries and Conservation Department (AFCD), Antiquities and Monuments Office (AMO) of LCSD, Geotechnical Engineering Office (GEO) of CEDD and Urban Design & Landscape Section of the Planning Department (PlanD), have agreed with the findings. The requirements for further relevant detailed technical assessments to be conducted by HD/CEDD as part of the detailed design of the proposed developments will be incorporated in the planning brief. A summary of the study findings in supporting the OZP amendment proposals is at **Attachment VI**.

Traffic and Transport (Chapter 3 of Attachment VI)

Traffic Impacts

5.2 According to Railway Development Strategy 2014 (RDS 2014), an indicative implementation window from 2021 to 2026 is recommended for planning SIL(W), subject to the actual programme for the development and redevelopment of public housing in the Wah Fu area as well as the build-up of transport demand. The preliminary conceptual scheme of SIL(W) under RDS 2014 is at **Drawing 6**. In view of the above timing of SIL(W), two scenarios (with SIL(W) or SIL(W) not yet in place) have been assessed under the Traffic Impact Assessment (TIA) for the proposed developments at the five sites.

5.3 In order to separate the road traffic from Chi Fu Road, a new public access road is proposed to connect Kai Lung Wan North site with the junction of Pok Fu Lam Road/Victoria Road direct (**Drawing 7**). According to the TIA, the following road improvement works at the junction of Victoria Road and Pok Fu Lam Road are recommended to relieve the traffic impacts arising from the proposed developments:

(i) widening of Pok Fu Lam Road southbound carriageway at the upstream of the junction from 2 lanes to 4 lanes and widening of the downstream exist section of the junction from 2 lands to 3 lanes; and

(ii) widening of Victoria Road eastbound carriageway from 2 lanes to 3 lanes.

The TIA has confirmed that with the proposed junction improvement works, all assessed junctions and road links will be performing satisfactorily during construction and operation stages in the design years 2027 and 2032, under both scenarios.

Transport and Parking Facilities

5.4 The five sites are served by the existing public transport services at WFE, Pok Fu Lam Road, Shek Pai Wan Road and Wah Fu Road. The existing public transport terminus at Wah King Street (as mentioned in paragraph 4.8 above) is proposed to be re-provisioned as a bus/GMB lay-by in the vicinity. To cater for the future public transport demand generated by the Kai Lung Wan North and South sites, on-street bus/GMB lay-bys along the new access road of the Kai Lung Wan North site and additional on-street bus lay-bys and extension of existing lay-bys on both bounds of Shek Pai Wan Road are proposed (**Drawing 8**).

5.5 The three STT car parks at Wah Fu North and Wah Lok Path (as mentioned respectively in paragraphs 4.6 and 4.10 above), which are currently providing public parking spaces for private car, coach and goods vehicle, will be affected by the proposed developments. As advised by TD, reprovisioning of the affected parking spaces is necessary to meet the local demand. These parking spaces will be reprovisioned at the public vehicle park at Kai Lung Wan North site (as mentioned in paragraph 4.15 above), as well as STT sites within the district to be determined in due course.

Pedestrian Facilities

5.6 The five sites and the surrounding developments would be connected through a pedestrian network comprising footpaths, pedestrian crossing facilities and footbridges. The major improvement measures to the pedestrian connectivity in the area include (**Drawing 8**):

(i) a new pedestrian green deck between the Wah King Street and Wah Fu North sites overpassing Victoria Road;

(ii) a new footbridge with lift towers overpassing Pok Fu Lam Road to connect the Wah Lok Path and Kai Lung Wan North sites;

(iii) a new footbridge with lift towers overpassing Shek Pai Wan Road to connect with the Kai Lung Wan South site;

(iv) the footpath widening along the southbound of Shek Pai Wan Road between the Kai Lung Wan North and South sites; and

(v) signal controlled pedestrian crossing at the slip roads of Shek Pai Wan Road.

5.7 The existing major hiking trail would be retained so that the public could continue to access Hong Kong Trail.

Ecology (Chapter 8.5 of Attachment VI)

5.8 As Wah Fu North, Wah King Street and Wah Lok Path sites are surrounded by urbanised area and the plantation/secondary woodland therein are of low ecological value, significant ecological impacts from the proposed developments on these three sites are not anticipated. As for the Kai Lung Wan North and South sites, two fauna species of conservation importance, namely Lesser Spiny Frog and Emerald Cascader, as well as four flora species of conservation importance, namely *Aquilaria sinensis*, *Gnetum luofuense*, *Lagerstroemia fordii* and *Pavetta hongkongensis*, were identified (**Drawing 9**). Among the natural watercourses which are found to be in conflict with the proposed developments (**Drawing 11**), except the one in Kai Lung Wan North site, all the others are considered to be of very low to low ecological value, for which mitigation measure is not required.

5.9 Mitigation measures to avoid, minimise and compensate for ecological impacts have been adopted as follows:

(i) the locations and boundaries of the five sites have been adjusted to avoid direct impact on the secondary woodlands of higher ecological value, shrubland and natural watercourses in Kai Lung Wan and areas near Chi Fu Fa Yuen as far as possible. The area of secondary woodland and semi-natural watercourse between Kai Lung Wan North an Kai Lung Wan South sites has been avoided to retain the ecological connectivity between lowland areas and upland woodland where the *Hemiphyllodactylus* tree gecko was recorded;

(ii) the loss of about 5ha of secondary woodland of higher ecological value in Kai Lung Wan North and South sites would be compensated by woodland planting at the potential compensation sites of about 6.44ha in size within 500m from the five sites (**Drawing 10**);

(iii) diversion of the natural watercourse in Kai Lung Wan North site (about 214m in length), which is considered to be of low to moderate value, through a newly-created and ecologically-friendly 'green channel' of about 250m in length (**Drawing 11**) and/or enhancement of streams in the same network are proposed; and

(iv) the affected faunal species of conservation importance as mentioned in paragraph 5.8 above will be translocated to suitable receptor sites. Preservation of the affected flora species of conservation importance is set out in the landscape proposal in paragraphs 5.23 to 5.26 below.

5.10 As the rezoning has largely taken into account the findings of the ecological surveys and avoided core habitats where species of conservation importance were recorded, AFCD has no strong view of the proposed rezoning.

Cultural Heritage (Chapter 8.7 of Attachment VI)

5.11 According to AMO, there is no identified sites of archaeological interest or declared monument identified within or close to the five sites. Among the remaining structures of the Old Dairy Farm at PFL area identified by AMO and included in the "list of new items for grading assessment", a proposed Grade 3 historic structure is located within the proposed works area and another four items (one proposed Grade 2, one proposed Grade 3 and two proposed NIL grade) are located within 50m from the proposed works boundaries (**Drawing 12**). As the proposed works will be at a lower elevation level, no direct encroachment of works to these structures is anticipated. Subject to the final grading results, CEDD will follow the requirements in the Development Bureau Technical Circular (Works) No. 6/2009 to conduct necessary assessment on the heritage impact due to the proposed housing developments on the graded structures and adopt appropriate protective and mitigation measures.

Environment (Chapter 8.1 to 8.4 of Attachment VI)

Air

5.12 All the relevant air emission sources that would have air quality impacts on the proposed developments have been identified and assessed. With the provision of sufficient separation distance between the proposed developments and the emission sources (industrial sources, existing and planned roads) as stated in the Hong Kong Planning Standards and Guidelines (HKPSG), adverse air quality impact is not anticipated.

Noise

5.13 Preliminary quantitative operational noise has been conducted taking into account the road traffic noise impacts associated with the proposed developments at the five sites. It is concluded that the predicted road traffic noise impacts on all

existing noise sensitive receivers would be insignificant. A separate environmental assessment study (EAS) for the proposed developments at the five sites will be conducted by HD at the detailed design stage to ensure compliance with the requirements in HKPSG. Mitigation measures will be proposed where necessary to ensure no adverse noise impacts of the proposed developments. Suitable building design would be adopted to avoid direct line of sight to the fixed noise sources.

5.14 Potential noise impacts are expected to arise from the general construction activities during the construction phase. Given the site constraints, St. Paul's College Primary School and Kellett School would be subject to adverse residual impacts exceeding the construction noise criterion during both normal and examination period. However, the residual impacts are considered temporary and reversible. With the implementation of all practicable mitigation measures, the construction noise impact would be minimised.

5.15 The preliminary environmental review also concludes that no insurmountable environmental impacts in terms of water quality and waste management would be antipicated. Having reviewed the relevant technical assessments and noting that HD will carry out EAS for the proposed developments in the later stage, EPD considers that there are no insurmountable environmental issues associated with the proposed developments at the five sites, and hence, has no objection to the proposed rezoning. The requirement for EAS at the detailed design stage has been stated in the revised ES.

Utility Infrastructures (Chapters 4 to 6 of Attachment VI)

5.16 As for the supporting utility infrastructures, it is confirmed that with the proposed upgrading works and mitigation measures in place, including upgrading of the existing drainage system, modification/diversion of the existing watercourses, diversion/upgrading of the existing sewers, expansion of the Kai Lung Wan Fresh Water Service Reservoir and the Telegraph Bay Salt Water Pumping Station as well as provision of new fresh water and salt water mains, the drainage, sewerage and water supply network can accommodate the increase in peak surface runoff, sewage flow and additional water supply demand generated from the proposed developments at the five sites.

Geotechnical Aspect (Chapter 7 of Attachment VI)

5.17 A Natural Terrain Hazard Study has been carried out and notional mitigation strategies which enable full development at the proposed platforms are recommended. It is concluded that with the proposed mitigation measures in place, including provision of flexible rock fall barriers or rigid concrete barriers, the natural terrain hazard that has potential impact on the proposed developments can be adequately alleviated. The hazard mitigation scheme will be further reviewed at the detailed design stage.

Hazard to Life (Chapter 9 of Attachment VI)

5.18 A Quantitative Risk Assessment has been conducted on an existing LPG compound located near the Victoria Road and Wah Chui Street junction to assess the individual risk and the increase in societal risk arising from the proposed

developments. It is concluded that the additional population from the proposed developments will lead to an increase in societal risk but the risk remains in the acceptable region. Hence, no mitigation measure is required.

Visual Impact (Chapter 8.6 of Attachment VI)

5.19 According to the Visual Impact Assessment (VIA), the visual resources of the area are dominated by high-rise residential developments against the green backdrop. A set of photomontages of the proposed public housing developments from the representative public view points is provided in the VIA (**Drawings 13a to 13m**). Taking into account the surrounding context, the preliminary building design of the proposed developments has adopted design measures, including maintaining a stepped building height profile; building gaps/separations to preserve the visual permeability and the visual linkage between the viewing points and the ridgeline to create a more pleasant and harmonious context with the green backdrop. As such, although the proposed developments would inevitably impose adverse visual impacts due to blockage of some ridgelines and loss of openness, they are considered not incompatible with the surroundings which comprise mainly residential and GIC developments. Design measures such as natural colour scheme, terraced podium, tree planting on podium deck will be explored as far as possible to further soften the visual impact of the proposed developments. Variation of the height of individual buildings in the Kai Lung Wan North site will also be considered by HD at the detailed design stage for a more gradual transition. While the visual impact of the five sites for some of the public view points would be slight with mitigation measures, the overall visual impact of the five sites would be moderately adverse. The stepped building height concept for the proposed developments has been stated in the revised ES.

Air Ventilation Aspect (Chapter 10 of Attachment VI)

5.20 According to the AVA (Expert Evaluation), it is anticipated that the proposed developments would impose potential ventilation impacts on the surrounding neighbourhood when compared to the existing scenario under annual and summer wind conditions. These affected areas include World Fair Court, Pok Fu Lam Terrace and existing GIC developments (St. Paul's College Primary School, Pok Fu Lam Fire Station and Officers Married Quarters, TWGHs Hok Shan School, Centennial College, Kellett School, Yu Chun Keung Memorial College No. 2 and SKH Chi Fu Chi Nam Primary School). Limited impact would be found at localised areas of Yar Chee Villas, Chi Fu Fa Yuen, WFE and Wah Kwai Estate.

5.21 The preliminary site layout and building design have already incorporated six local air paths with minimum width of 20m to 30m, suitable block disposition to reduce building frontage towards major prevailing wind directions, and maintained the building height of the podium at the Kai Lung Wan North site to below the ground level of Yar Chee Villas and Chi Fu Fa Yuen to alleviate the potential air ventilation impacts (**Drawing 14**).

5.22 Further mitigation measures include creating additional air path(s), increasing building permeability and greenery will be considered at the detailed design stage. Quantitative AVA will be carried out by HD to demonstrate that the wind performance of the future scheme is no worse off than the preliminary scheme and

for scheme design optimisation. Such requirement has been stated in the revised ES.

Landscaping (Chapter 8.6 of Attachment VI)

5.23 A preliminary broad brush tree group survey was conducted to estimate the quantities and assess the general condition of the existing trees and tree groups within and around the five sites. Among approximately 4,480 trees in the area, 47 of them meet the criteria for Important Trees as listed in the Development Bureau Technical Circular (Works) No. 7/2015 [3]. While most of these Important Trees are *Ficus elastica* and *Ficus microcarpa*, nine of them are rare and precious tree species, including one *Ailanthus fordii* and eight *Lagerstroemia fordii.* The other floral species of conservation importance include *Aquilaria sinensis, Gnetum luofuense, Pavetta hongkongensis.*

5.24 According to the preliminary tree assessment, 2,364 and 59 trees are proposed to be felled and transplanted respectively. As for the Important Trees, 23 trees will be felled and 24 trees will be retained. Apart from the woody climber *Gnetum luofuense*, transplantation or in-situ preservation of the other floral species of conservation importance is considered feasible. Transplantation of *Gnetum luofuense* is regarded as infeasible due to its growth habit, and it is commonly found in Hong Kong. A detailed tree survey and tree preservation and removal proposal will be submitted in accordance with the Development Bureau Technical Circular (Works) No. 7/2015 at detailed design stage.

5.25 The preliminary tree compensation proposal includes approximately 260 trees to be planted within the five sites and in roadside amenity areas (**Drawing 15**); compensatory woodland planting of about 6.44ha to be carried out in the vicinity of the sites at a compensation ratio of 1:1 in area (**Drawing 10**); and trees to be planted on the proposed man-made slopes subject to review at the detailed design stage. New landscape resources include landscape amenity space and slope greening.

5.26 As set out in the Site Coverage of Greenery for Government Building Projects (Development Bureau Technical Circular (Works) No. 3/2012), the Guiding Principles on Green Coverage for Public Housing Development in Hong Kong, and the HKPSG, the proposed developments should achieve an overall target of 30% green coverage. Subject to individual site characteristics and constraints, a lower percentage of green coverage could be considered on a case by case basis. Green coverage of at least 20% should be considered as a minimum unless constrained by special circumstances. According to the Landscape Impact Assessment, it is considered that with the proposed tree compensation and new landscape resources, the overall residual landscape impacts should be acceptable.

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[3] In accordance with DEVB TCW No. 07/2015, an "Important Tree" refers to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

(a) trees of 100 years old or above;

(b) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;

(c) trees of precious or rare species;

(d) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or trees with trunk diameter equal to or exceeding 1.0m (measured at 1.3m above ground level), or with height/canopy spread equal to or exceeding 25m.

6. Provision of GIC Facilities and Open Space

6.1 A table on the provision of major GIC facilities in PFL area is at **Attachment VII**. Based on a planned population of about 103,500 (including the proposed public housing developments at the five sites), there is no shortfall on major GIC facilities in the area. Some GIC facilities, including residential care home for the elderly and child care centre, will be provided in the public housing developments. At the request of the Education Bureau, a primary school site will be reserved in the redevelopment area of WFE. The proposed amendment items will not have adverse impact on major GIC and open space provisions in the area.

6.2 There are about 81.65ha of open space, including about 40.78ha local open space and 40.87ha district open space in the Southern District, which is in compliant with HKPSG. While the existing Wah Chui Street Sitting-out Area and the planned open space at Wah Fu North and Wah King Street sites will be affected by the proposed developments, LCSD has confirmed that in view of the provision of open space in the proposed developments to meet the needs of local residents, no replacement site for the affected open space is required.

7. Consultation with District Council

7.1 On 31.7.2017, PlanD, HD and CEDD jointly consulted the District Development and Housing Committee (DDHC) of SDC on the public housing development proposal, the findings of the feasibility study and the proposed amendments to the OZP. DDHC passed a motion that "This Committee supports the Government's proposal for the redevelopment of Wah Fu Estate, but the Government should also address all different views of the affected residents properly and commence the detailed planning work for South Island Line (West) immediately." The other major concerns raised by DDHC members are the traffic and visual impacts arising from the proposed developments, the lack of Government commitment to implement SIL(W) and the lack of progress and details of WFER.

7.2 HD advised that four issues of Information Leaflets were issued in March and September 2016 as well as in February and May 2017 for distribution to SDC Members, residential developments in the vicinity and other stakeholders to introduce and facilitate understanding on the background, development principles, concepts, major parameters of the proposed public housing developments in PFL South and progress of the refined proposal. During this period, HD had established and maintained various channels of communications, obtained and exchanged views with local communities, residents representatives and stakeholders through meetings with the Legislative Council Members concerned and SDC Members; convening special meetings with the Estate Management Advisory Committee of WFE and attending residents' forums together with other departments concerned in Chi Fu Fa Yuen and WFE, etc. The relevant government departments will continue to engage and keep close communications with all the stakeholders including the affected residents and address their views throughout the planning, detailed design, site formation and construction stages of the developments as far as practicable.

7.3 The Government will take forward SIL(W) subject to the actual programme for the developments and redevelopment of public housing in the Wah Fu area as well as the build-up of transport demand. As the implementation of SIL(W) will be closely hinged on the developments of the five sites and WFER, the Government has to activate the developments of the five sites to provide major reception resources for WFER. This arrangement can also free up space for railway construction at a later stage (including the planned Wah Fu Station in the preliminary conceptual scheme of SIL(W)). In accordance with the established procedures and prior to the finalisation of SIL(W) proposal, the Government will consult the public on the detailed alignment, locations of stations, mode of implementation, cost estimate, mode of financing and actual implementation timetable, etc.

7.4 Regarding other concerns, as mentioned in paragraph 5 above, the technical assessments conducted for the five sites have demonstrated that the public housing development proposal is technically feasible with no insurmountable problem anticipated.

7.5 For WFER, HD advised that the Government has to complete the statutory procedures for the amendments to the OZP to facilitate the proposed developments of the five sites. Upon completion of the relevant statutory procedure and the planning brief of the proposed developments, the flat production, development programme and public housing type at the relevant sites will then be finalized. Afterwards, HD will start studying the redevelopment proposal of WFE and consult the affected residents, shop tenants and social welfare organisations, etc. To ascertain the technical feasibility of WFER, HD will undertake all the necessary technical assessments, including TIA, EAS, VIA and AVA before the commencement of redevelopment. Such requirements have also been incorporated into the revised ES.

8. <u>Application No. Y/H10/5</u> (Plan 16)

On 15.4.2011, the Metro Planning Committee (the Committee) of the Board decided to refuse the section 12A application No. Y/H10/5 to rezone the site of Ebenezer School & Home for the Visually Impaired from "G/IC" to "Residential (Group C)7". During the consideration of the application at that time, Members had grave concerns on the continuous provision of educational and social welfare services for the visually impaired without interruption. In response, the applicant, namely The Ebenezer School and Home for the Visually Impaired Limited, proposed that they would submit another section 12A application for rezoning their selected relocation site for the services, if the Committee agreed to rezone the application site for residential use. In order to ensure that the continuous provision of the concerned educational and social welfare services without interruption and other technical issues are satisfactorily dealt with, the Committee agreed to rezone the application site to "Comprehensive Development Area" ("CDA") and that the proposed OZP amendments would be submitted to the Board for agreement. Since then, however, the applicant has not made any progress on the identification of the relocation site nor confirmed any relocation plan for the concerned services. As there is no imminent need for the relocation of the concerned services, it is appropriate to retain the application site as "G/IC" zone. Should there be any relocation plan, the applicant may submit a fresh planning application for residential use at the

application site. The proposed amendment to the "G/IC" zone of the application site, as previously agreed by the Committee, will not be incorporated into the OZP.

9. Proposed Amendments to Matters shown on the Plan

The proposed amendments as shown on the draft Pok Fu Lam OZP No. S/H10/15A (**Attachment II**) are as follows:

Item A (about 2.0 ha)

(a) Rezoning of a site between Pok Fu Lam Road and Victoria Road, i.e. Wah Fu North site, from "O", "G/IC" and "GB" to "R(A)".

Item B (about 0.68 ha)

(b) Rezoning of a site at Wah King Street, i.e. Wah King Street site, from "O" and 'Road' to "R(A)".

Item C (about 0.36 ha)

(c) Rezoning of a site at Wah Lok Path, i.e. Wah Lok Path site, from "G/IC" to "R(A)".

Item D (about 1.72 ha)

(d) Rezoning of a site to the east of Shek Pai Wan Road, i.e. Kai Lung Wan South site from "GB" to "R(A)" and include an excised area from the western part of the approved Aberdeen & Ap Lei Chau OZP No. S/H15/31 to the OZP.

Item E (about 3.82 ha)

(e) Rezoning of a site to the east of Pok Fu Lam Road, i.e. Kai Lung Wan North site, from "GB" and "G/IC" to "R(A)1".

10. Amendments to the Notes of the OZP

In relation to Amendment Item E, the Notes for the "R(A)" zone is revised to incorporate 'Public Vehicle Park (excluding container vehicle) (on land designated "R(A)1" only' use under Column 1. Opportunity has also been taken to update the covering Notes of the OZP. The proposed amendments to the Notes of the OZP (with additions in ***bold and italics*** and deletions in '~~crossed out~~') are at **Attachment III** for Members' consideration.

11. Revision to the Explanatory Statement of the OZP

The ES of the OZP has been revised to take into account the proposed amendments as mentioned in the above paragraphs. Opportunity has also been taken to update the general information for various land use zones to reflect the latest status and planning circumstances of the OZP. The proposed amendments to the ES of the OZP (with

additions in ***bold and italics*** and deletions in '~~crossed out~~') are at **Attachment IV** for Members' consideration.

12. Plan Number

Upon exhibition for public inspection, the OZP will be renumbered as S/H10/16.

13. Consultation

Departmental Consultation

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

- Secretary for Development
- Secretary for Transport and Housing
- Secretary for Education
- Director of Housing
- Commissioner for Transport
- Director of Civil Engineering Department
- Director of Social Welfare
- Director of Food and Environmental Hygiene
- Director of Environmental Protection
- Director of Agriculture, Fisheries and Conservation
- Director of Leisure and Cultural Services
- Director of Fire Services
- Director of Electrical and Mechanical Services
- Government Property Administrator
- Commissioner of Police
- Chief Building Surveyor/Hong Kong West, Buildings Department
- District Lands Officer/Hong Kong West and South, Lands Department (LandsD)
- Chief Estate Surveyor/Railway Development, LandsD
- Chief Architect/Central Management Division 2, Architectural Services Department;
- Chief Highway Engineer/Hong Kong, HyD;
- Chief Engineer/Railway Development 2-2, HyD
- Chief Engineer/Construction, Water Supplies Department
- Chief Engineer/Hong Kong & Islands, Drainage Services Department
- District Officer (Southern), Home Affairs Department
- Chief Town Planner/Urban Design & Landscape, PlanD

Public Consultation

13.2 As mentioned in paragraph 7.1 above, DDHC of SDC was consulted on 31.7.2017 on the proposed amendments to the PFL OZP among other things. SDC will be consulted during the exhibition period of the draft PFL OZP No. S/H10/16 for public inspection under section 5 of the Ordinance.

14. Decision Sought

Members are invited to:

(a) agree to the proposed amendments to the approved Pok Fu Lam OZP and that the draft Pok Fu Lam OZP No. S/H10/15A at **Attachment II** (to be renumbered to S/H10/16 upon exhibition) and its Notes at **Attachment III** are suitable for exhibition under section 5 of the Ordinance; and

(b) adopt the revised ES at **Attachment IV** for the draft Pok Fu Lam OZP No. S/H10/15A as an expression of the planning intentions and objectives of the Board for the various land use zonings of the OZP and the revised ES will be published together with the OZP.

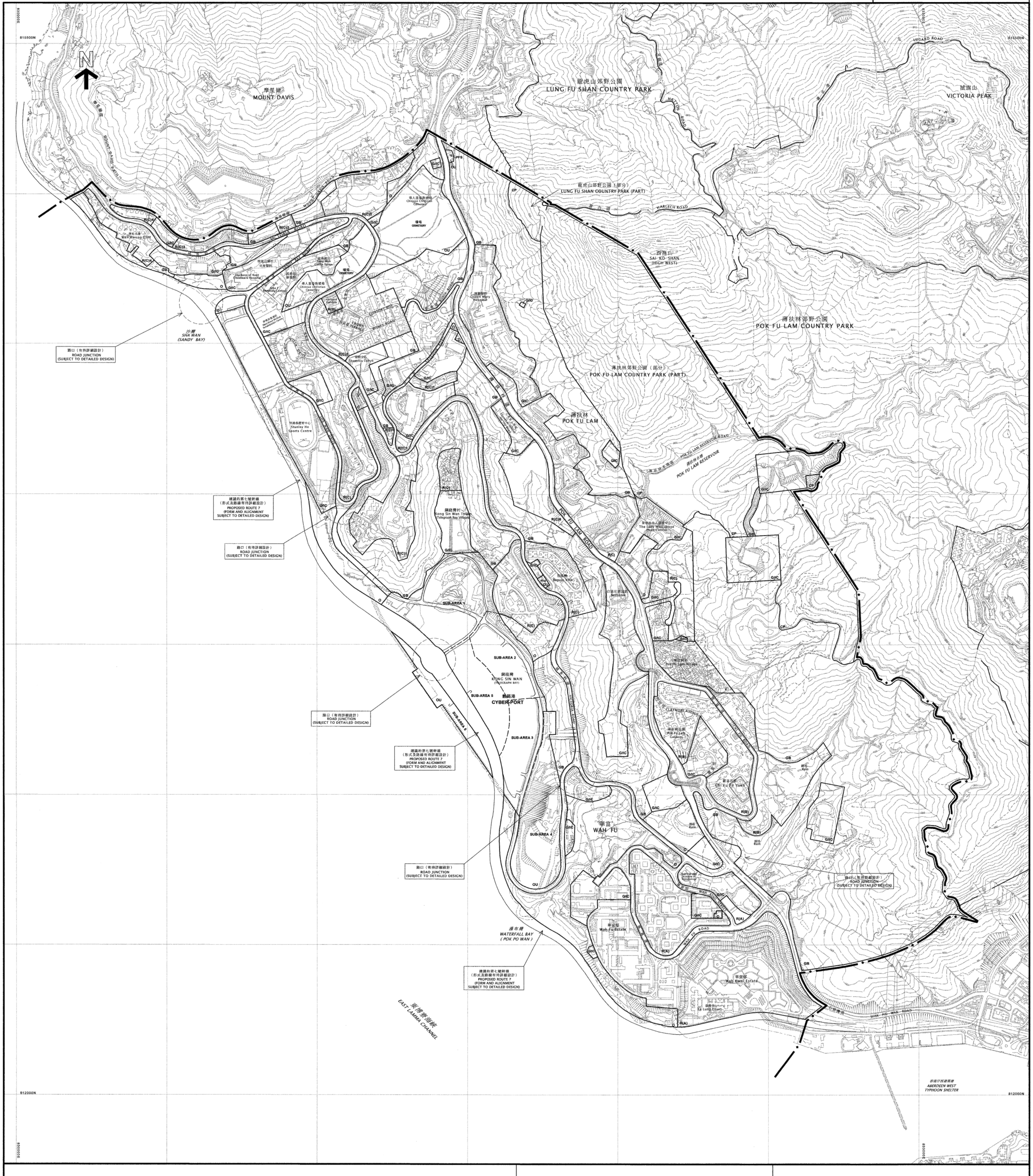
15. Attachments

Attachment I	Approved Pok Fu Lam OZP No. S/H10/15 (reduced size)
Attachment II	Draft Pok Fu Lam OZP No. S/H10/15A
Attachment III	Notes of the draft Pok Fu Lam OZP No. S/H10/15A
Attachment IV	Explanatory Statement of the draft Pok Fu Lam OZP No. S/H10/15A
Attachment V	Major Development Parameters of the Proposed Public Housing Developments
Attachment VI	Report on Technical Assessments to support Rezoning of Five Government Sites for Public Housing Developments at Pok Fu Lam South
Attachment VII	Provision of Major Community Facilities in Pok Fu Lam Area
Drawing 1	Original Five Government Sites Proposed under the 2014 Policy Address
Drawing 2	Preliminary Development Concept Plan of the Proposed Public Housing Developments
Drawing 3	Preliminary Site Layout of the Proposed Public Housing Developments
Drawing 4	Stepped Building Height Concept
Drawing 5	Stepped Building Height Concept (Photomontage)
Drawing 6	Preliminary Conceptual Scheme of the South Island Line (West) under the Railway Development Strategy 2014
Drawing 7	Proposed Road Improvement Works at Pok Fu Lam Road/Victoria Road Junction
Drawing 8	Proposed Pedestrian and Public Transport Facilities
Drawing 9	Records of Species of Conservation Importance
Drawing 10	Locations of the Proposed Woodland Compensation Areas
Drawing 11	Locations of Watercourses and Proposed Green Channel

Drawing 12	Built Heritage Resources near Proposed Public Housing Developments
Drawings 13a-13m	Viewpoints and Photomontages of the Proposed Public Housing Developments
Drawing 14	Local Air Paths Identified within the Proposed Public Housing Developments
Drawing 15	Landscape Concept Plan
Plan 1	Comparison of Existing and Proposed Zonings on the OZP for Proposed Amendment Items A
Plans 2 – 5	Site Plan, Aerial Photo and Site Photos of Amendment Items A and B
Plans 6 – 8	Site Plan, Aerial Photo and Site Photos of Amendment Item C
Plans 9 – 11	Site Plan, Aerial Photo and Site Photos of Amendment Items D
Plans 12 – 15	Site Plan, Aerial Photo and Site Photos of Amendment Item E
Plan 16	Location of the Site of Ebenezer School & Home for the Visually Impaired

PLANNING DEPARTMENT
AUGUST 2017

Attachment I of
MPC Paper No. 5/17



圖例
NOTATION

ZONES		地帶
COMMERCIAL	C	商業
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
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
GREEN BELT	GB	綠化地帶
COUNTRY PARK	CP	郊野公園

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
BOUNDARY OF COUNTRY PARK		郊野公園界線
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 & % 公頃 HECTARES	% 百分率	用途
COMMERCIAL	0.24	0.06	商業
RESIDENTIAL (GROUP A)	23.64	5.61	住宅（甲類）
RESIDENTIAL (GROUP B)	12.40	2.94	住宅（乙類）
RESIDENTIAL (GROUP C)	45.17	10.71	住宅（丙類）
VILLAGE TYPE DEVELOPMENT	2.62	0.62	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	60.62	14.38	政府、機構或社區
OPEN SPACE	21.26	5.04	休憩用地
OTHER SPECIFIED USES	35.61	8.45	其他指定用途
GREEN BELT	128.59	30.50	綠化地帶
COUNTRY PARK	52.48	12.45	郊野公園
MAJOR ROAD ETC.	38.98	9.24	主要道路等
TOTAL PLANNING SCHEME AREA	421.61	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２００５年２月１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 1 FEBRUARY 2005

LAM Chik-ting, Tony 林植廷
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薄扶林（港島規劃區第１０區）分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
HONG KONG PLANNING AREA No. 10 - POK FU LAM - OUTLINE ZONING PLAN

SCALE 1:5000 比例尺

米 METRES 100 0 200 400 600 800 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/H10/15

Attachment II of
MPC Paper No. 5/17

圖例
NOTATION

ZONES		地帶
COMMERCIAL	C	商業
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
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
GREEN BELT	GB	綠化地帶
COUNTRY PARK	CP	郊野公園

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
BOUNDARY OF COUNTRY PARK	— · —	郊野公園界線
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 & % 公頃 HECTARES	% 百分率	用途
COMMERCIAL	0.24	0.06	商業
RESIDENTIAL (GROUP A)	32.27	7.64	住宅（甲類）
RESIDENTIAL (GROUP B)	12.40	2.93	住宅（乙類）
RESIDENTIAL (GROUP C)	45.17	10.69	住宅（丙類）
VILLAGE TYPE DEVELOPMENT	2.62	0.62	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	60.07	14.22	政府、機構或社區
OPEN SPACE	18.82	4.45	休憩用地
OTHER SPECIFIED USES	35.61	8.43	其他指定用途
GREEN BELT	123.93	29.33	綠化地帶
COUNTRY PARK	52.48	12.42	郊野公園
MAJOR ROAD ETC.	38.92	9.21	主要道路等
TOTAL PLANNING SCHEME AREA	422.53	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/H10/15 的修訂
AMENDMENTS TO APPROVED PLAN No. S/H10/15

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 B	▩	修訂項目Ｂ項
AMENDMENT ITEM C	▥	修訂項目Ｃ項
AMENDMENT ITEM D	▦	修訂項目Ｄ項
AMENDMENT ITEM E	▧	修訂項目Ｅ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薄扶林（港島規劃區第１０區）分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
HONG KONG PLANNING AREA No. 10 - POK FU LAM - OUTLINE ZONING PLAN

SCALE 1:5000 比例尺
米 METRES 100 0 200 400 600 800 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/H10/15A

HONG KONG PLANNING AREA NO. 10

~~APPROVED~~*DRAFT* POK FU LAM OUTLINE ZONING PLAN NO. S/H10/15*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 subparagraph (a) above, "existing use of any land or building" ~~includes~~ ***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 ~~under the Buildings Ordinance~~.

(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, Mass Transit Railway station entrance, Mass Transit Railway structure below ground level, taxi rank, nullah, public utility pipeline, electricity mast, lamp pole, telephone booth, telecommunications radio base station, automatic teller machine and shrine;

(b) geotechical 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:

on-street vehicle park and railway track.

(9) 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.

(10) 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~~, and any other Government requirements, as may be applicable~~.

HONG KONG PLANNING AREA NO. 10

~~APPROVED~~*DRAFT* POK FU LAM OUTLINE ZONING PLAN NO. S/H10/15*A*

Schedule of Uses

COMMERCIAL

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Eating Place Government Use (Post Office only) Public Clinic Shop and Services	Government Use (not elsewhere specified) Mass Transit Railway Vent Shaft and/or Other Structure above Ground Level other than Entrances Utility Installation not ancillary to the Specified Use

Planning Intention

This zone is intended primarily for commercial developments, which may include shop, services and eating place, functioning mainly as local shopping centre serving local residents in the immediate neighbourhood.

Remarks

(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 building height of 3 storeys and a maximum plot ratio of 2.25.

(2) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height and plot ratio restrictions stated in paragraph (1) 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) Mass Transit Railway Vent Shaft and/or Other Structure above Ground Level other than Entrances 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

(Please see next page)

RESIDENTIAL (GROUP A) (cont'd)

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

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.

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 Mass Transit Railway Vent Shaft and/or Other Structure above Ground Level other than Entrances 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

(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 the maximum plot ratio and site coverage specified below, or the plot ratio and site coverage of the existing building, whichever is the greater:

Height - No. of Storeys Used for Domestic Purposes	Maximum Plot Ratio	Maximum Site Coverage (%)
3 or below	1.65	55
4	1.80	45
5	2.00	40
6	2.10	35
7	2.10	30
8	2.40	30
9	2.70	30
10	2.75	27.5
11	3.03	27.5
12	3.30	27.5
13	3.25	25
14	3.50	25
15	3.75	25
16	4.00	25
17	4.25	25
18	4.50	25
19	4.75	25
20 or more	5.00	25

(2) In determining the maximum plot ratio and site coverage for the purposes of paragraph (1) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room, caretaker's office and caretaker's quarters, or 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.

(3) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio and site coverage restrictions stated in paragraph (1) 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 Mass Transit Railway Vent Shaft and/or Other Structure above Ground Level other than Entrances 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 to medium-rise and low to 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 C) (cont'd)

Remarks

(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 the maximum building height, plot ratio and site coverage specified below :

(a) the maximum height of any building within each sub-area of the zone shall be limited to that specified below or the height of the existing building, whichever is the greater :

Sub-area	Restrictions
R(C)1	Maximum 3 storeys including carports and maximum building height of 10.67m.
R(C)2	Maximum 3 storeys (including roof-top structures except such structure as is necessary for the provision of a lift machine room, water tank and stairhood) above 1 storey of carports and maximum building height of 17.22m (including roof-top structures) measured from the existing mean formation level of the existing lot(s) or building(s).
R(C)3	Maximum 3 storeys including carports.
R(C)4	Maximum 6 storeys in addition to 1 storey of carports.
R(C)6	Maximum 12 storeys in addition to 1 storey of carports and maximum building height of 137m above Principal Datum.

(Please see next page)

RESIDENTIAL (GROUP C) (cont'd)

Remarks (cont'd)

(b) the maximum plot ratio and site coverage shall be limited to that specified in the following table or the plot ratio and site coverage of the existing building, whichever is the greater :

Height - No. of Storeys Used for Domestic Purposes	Maximum Plot Ratio	Maximum Site Coverage (%)
2 and below	0.60	30
3	0.75	25
4	0.90	22.5
5	1.00	20
6	1.20	20
7	1.40	20
8	1.40	17.5
9	1.58	17.5
10	1.75	17.5
11	1.93	17.5
12	2.10	17.5
13	1.95	15
14	2.10	15
15	2.25	15
16	2.40	15
17	2.55	15
18	2.70	15
19	2.85	15
20 or more	3.00	15

(2) For "R(C)" zone and all sub-areas in "R(C)" zone, except sub-area "R(C)2", in determining the maximum plot ratio and site coverage for the purposes of paragraph (1) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room, caretaker's office and caretaker's quarters, or 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.

(Please see next page)

RESIDENTIAL (GROUP C) (cont'd)

Remarks (cont'd)

(3) For sub-area "R(C)2", in determining the maximum plot ratio and site coverage for the purposes of paragraph (1) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room, caretaker's office and caretaker's quarters, or recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, shall be included for calculations, although they may be excluded upon application to the Town Planning Board under section 16 of the Town Planning Ordinance.

(4) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio, site coverage and building height restrictions stated in paragraph (1) 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 Religious Institution (Ancestral Hall only) Rural Committee/Village Office	Eating Place Flat Government Refuse Collection Point Government Use (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 house:

Eating Place
Library
School
Shop and Services

Planning Intention

The planning intention of this zone is primarily for the provision of land for the retention of existing villages. Selected commercial and community uses serving the needs of the villagers are always permitted on the ground floor of a house. Other commercial, community and recreational uses may be permitted on application to the Town Planning Board.

(Please see next page)

VILLAGE TYPE DEVELOPMENT (cont'd)

Remarks

(1) 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.

(2) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restriction stated in paragraph (1) 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 Cable Car Route and Terminal Building 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 Pier 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 School Service Reservoir Social Welfare Facility Training Centre Wholesale Trade	Animal Boarding Establishment Animal Quarantine Centre (not elsewhere specified) Correctional Institution Driving School Eating Place (not elsewhere specified) Flat Funeral Facility Holiday Camp Hotel House Marine Fuelling Station Mass Transit Railway Vent Shaft and/or Other Structure above Ground Level other than Entrances 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 Bathing Beach Field Study/Education/Visitor Centre Park and Garden Pavilion Pedestrian Area Picnic Area Playground/Playing Field Promenade Public Convenience Sitting Out Area Zoo	Barbecue Spot Cable Car Route and Terminal Building Eating Place Government Refuse Collection Point Government Use (not elsewhere specified) Holiday Camp Mass Transit Railway Vent Shaft and/or Other Structure above Ground Level other than Entrances Pier Place of Entertainment Place of Recreation, Sports or Culture Private Club Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Religious Institution Service Reservoir Shop and Services Tent Camping Ground Utility Installation for Private Project

Planning Intention

This zone is intended primarily for the provision of outdoor open-air 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 "Cemetery" Only	
Columbarium Crematorium Funeral Facility Government Use Grave Public Convenience	Place of Recreation, Sports or Culture Public Transport Terminus or Station Public Utility Installation Religious Institution Shop and Services (Retail Shop only) Utility Installation for Private Project

Planning Intention

This zone is intended primarily to provide land for cemetery and its ancillary facilities.

(Please see next page)

OTHER SPECIFIED USES (cont'd)

For "Cyber-Port" Only

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
	Ambulance Depot Broadcasting, Television and/or Film Studio Eating Place Educational Institution Exhibition or Convention Hall Flat Government Refuse Collection Point Government Use (not elsewhere specified) Hotel House Information Technology and Telecommunications Industries Market Mass Transit Railway Vent Shaft and/or Other Structure above Ground Level other than Entrances Off-course Betting Centre Office Petrol Filling Station Pier Place of Entertainment Place of Recreation, Sports or Culture Printing and Reproduction Services Private Club Promenade Public Clinic 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 Refuse Disposal Installation Recyclable Collection Centre Religious Institution

(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 "Cyber-Port" Only (cont'd) Research, Design and Development Centre School Sewage Treatment/Screening Plant Shop and Services Social Welfare Facility Training Centre Utility Installation for Private Project

Planning Intention

This zone is primarily intended to establish a base for the clustering of creative information service business and related businesses with an extensively landscaped, high-quality living and working environment which blends in well with the surrounding neighbourhood.

Remarks

(1) An applicant for permission for development on land designated "Other Specified Uses" annotated "Cyber-Port" shall include in the application the following information:-

(i) the areas of proposed land uses, the nature, position, dimensions, and heights of all buildings to be erected in the area;

(ii) the proposed total site area and gross floor areas for various uses, total number of flats and flat sizes, where applicable;

(iii) the details and extent of Government, institution or community (GIC) and recreational facilities, public transport and parking facilities, and open space to be provided within the area;

(iv) the alignment, widths and levels of any roads proposed to be constructed within the area;

(v) the landscape and urban design proposals within the area;

(Please see next page)

OTHER SPECIFIED USES (cont'd)

For "Cyber-Port" Only (cont'd)

Remarks (cont'd)

(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.

(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 the maximum building height, maximum number of storeys and maximum gross floor areas specified below:

Sub-area	Restrictions
1	Maximum 85 metres above Principal Datum in height and a maximum gross floor area of 92,500m^2.
2	Maximum 85 metres above Principal Datum in height and a maximum gross floor area of 60,600m^2.
3	Maximum 176 metres above Principal Datum in height and a maximum gross floor area of 160,900m^2.
4	Maximum 189 metres above Principal Datum in height and a maximum gross floor area of 207,800m^2.
5	Maximum 3 storeys (excluding carports and mechanical floor) and a maximum gross floor area of 14,800m^2.
6	Maximum 1 storey.

(Please see next page)

OTHER SPECIFIED USES (cont'd)

For "Cyber-Port" Only (cont'd)

Remarks (cont'd)

(3) In determining the relevant maximum gross floor areas for the purposes of paragraph (2) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room, caretaker's office and caretaker's quarters and utility installation for private project, or 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. Any floor space that is constructed or intended for use solely as public transport interchange and Government, institution or community facilities, as required by the Government, may also be disregarded.

(4) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height, number of storeys and gross floor area restrictions stated in paragraph (2) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

(Please see next page)

OTHER SPECIFIED USES (cont'd)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
For All Other Sites (Not Listed Above)	
As Specified on the Plan	Government Use Utility Installation not ancillary to the Specified Use

Planning Intention

This zone is primarily intended to provide/reserve land for purposes as specified on the plan.

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 Cable Car Route and Terminal Building Field Study/Education/Visitor Centre Flat Government Refuse Collection Point Government Use (not elsewhere specified) Holiday Camp House Mass Transit Railway Vent Shaft and/or Other Structure above Ground Level other than Entrances 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 School Service Reservoir Social Welfare Facility Utility Installation for Private Project Zoo

Planning Intention

The planning intention of this zone is primarily for the conservation of the existing natural environment amid the built-up areas/at the urban fringe, to safeguard it from encroachment by urban type development, and to provide additional outlets for passive recreational activities. There is a general presumption against development within this zone.

COUNTRY PARK

Country Park means a country park or special area as designated under the Country Parks Ordinance (Cap. 208). All uses and developments require consent from the Country and Marine Parks Authority and approval from the Town Planning Board is not required.

HONG KONG PLANNING AREA NO. 10

~~APPROVED~~*DRAFT* POK FU LAM OUTLINE ZONING PLAN NO. S/H10/15*A*

EXPLANATORY STATEMENT

HONG KONG PLANNING AREA NO. 10

~~APPROVED~~*DRAFT* POK FU LAM OUTLINE ZONING PLAN NO. S/H10/15~~A~~

EXPLANATORY STATEMENT

HONG KONG PLANNING AREA NO. 10

~~APPROVED~~*DRAFT* POK FU LAM OUTLINE ZONING PLAN NO. S/H10/15*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*** Pok Fu Lam Outline Zoning Plan (OZP) No. S/H10/15*A*. It reflects the planning intention and objectives of the Town Planning Board (the Board) for the various land use zonings of the Plan.

2. AUTHORITY FOR THE PLAN AND PROCEDURES

2.1 On 28 February 1986, the draft Pok Fu Lam OZP No. S/H10/1, being the first statutory plan covering the Pok Fu Lam area, was gazetted under the Town Planning Ordinance (the Ordinance).

2.2 On 29 November 1988, the then Governor in Council referred the draft Pok Fu Lam OZP No. S/H10/3 to the Board for further consideration and amendment under section 9(1)(c) of the Ordinance. The OZP was subsequently amended twice and exhibited for public inspection under section 5 or 7 of the Ordinance.

2.3 On 10 November 1998, the Chief Executive in Council (CE in C), under section 9(1)(a) of the Ordinance, approved the draft Pok Fu Lam OZP, which was subsequently renumbered as Plan No. S/H10/6. On 23 March 1999, the CE in C referred the approved OZP No. S/H10/6 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 14 April 1999, the Chief Executive under section 3(1)(a) of the Ordinance directed the Board to extend the planning scheme area boundary of the Pok Fu Lam OZP to cover two small portions of the seabed area of the East Lamma Channel.

2.5 On 14 December 1999, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Pok Fu Lam OZP, which was subsequently renumbered as Plan No. S/H10/8. On 10 October 2000, the CE in C referred the approved OZP No. S/H10/8 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. Since then, the OZP had been amended four times and exhibited for public inspection under section 5 or 7 of the Ordinance to reflect the changing circumstances..

2.6 On 11 March 2003, the ~~Chief Executive in Council (~~CE in C~~)~~, under section 9(1)(a) of the Ordinance, approved the draft Pok Fu Lam OZP, which was subsequently renumbered as S/H10/13. On 9 December 2003, the CE in C referred the approved OZP No. S/H10/13 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. ***Since then, the OZP was subsequently amended and exhibited for public inspection under section 5 of the Ordinance.***

~~2.7 On 19 March 2004, the draft Pok Fu Lam OZP No. S/H10/14, incorporating amendments to the Notes of the OZP in accordance with the revised Master Schedule of Notes to Statutory Plans endorsed by the Board, was exhibited for public inspection under section 5 of the Ordinance. During the exhibition period, no objection was received.~~

2.7~~8~~ On 1 February 2005, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Pok Fu Lam OZP, which was subsequently renumbered as S/H10/15. ~~On 18 February 2005, the approved Pok Fu Lam OZP No. S/H10/15 (the Plan) was exhibited for public inspection under section 9(5) of the Ordinance.~~ ***On 17 October 2006, the CE in C referred the approved Pok Fu Lam OZP No. S/H10/15 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 27 October 2006 under section 12(2) of the Ordinance.***

2.8 On XX XX 2017, the draft Pok Fu Lam OZP No. S/H10/16 (the Plan), incorporating amendments mainly to include an area to the east of Shek Pai Wan Road opposite Wah Kwai Estate excised from the approved Aberdeen & Ap Lei Chau OZP No. S/H15/31 and to rezone five government sites near Wah Fu Estate from "Government, Institution or Community", "Open Space", "Green Belt" and area shown as 'Road' to "Residential (Group A)" and "Residential (Group A)1" was exhibited for public inspection under section 5 of the Ordinance.

3. OBJECT OF THE PLAN

3.1 The object of the Plan is to indicate the broad land use zonings and major transport networks so that development and redevelopment within the Planning Scheme Area ***(the Area)*** can be ~~put under~~ ***subject to*** statutory planning control.

3.2 The Plan is to illustrate the broad principles of development within the ~~Planning Scheme~~ Area. It is a small-scale plan and the transport alignments and boundaries between the land use zones may be subject to minor adjustments as detailed planning proceeds.

3.3 Since the Plan is to show broad land use zoning, 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 as non-building area or for garden, slope maintenance and access road purposes, are included in the residential zones. The general principle is that such areas

should not be taken into account in plot ratio and site coverage calculations. Development within residential zones should be restricted to building lots carrying development right in order to maintain the character and amenity of the Pok Fu Lam area and not to overload the road network in the area covered by the Pok Fu Lam Moratorium.

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~~)~~, about 420 hectares in size, is situated on the western coast of Hong Kong Island. It is bounded by Mount Davis Road to the north~~,~~ ***and*** Pok Fu Lam Country Park to the east ~~and Kai Lun Wan to the south~~. To the west ***and south***, it extends to the waterfront.

5.2 The Area is generally hilly, sloping from the east towards the sea in the west. It is punctuated by spurs and valleys with flat land at reclaimed areas ***currently developed as Stanley Ho Sports Centre, Cyberport and Wah Kwai Estate*** ~~at Sandy Bay, Kong Sin Wan and Kai Lun Wan~~. The Area has been developed as a residential area with mainly low-density developments in the north and higher density developments in the south. It is the planning intention to allow developments on the landward side of Pok Fu Lam Road to be high-rise, using the hills as backdrop to reduce the visual effect. On the seaward side along the section of Pok Fu Lam Road to the north of its junction with Chi Fu Road, it is intended to keep developments below the level of Pok Fu Lam Road as far as possible in order to preserve public view and amenity and also the general character of the area.

5.3 Due to topographical constraints, much of the vegetation in the Area have been conserved. The Area, except the southern part with existing high-density residential developments, is an area of high landscape value. It is expected that future developments in the Area would blend in with the environment and be compatible with existing landforms, vegetation cover and character.

6. POPULATION

~~According to the 2001~~ ***Based on the 2011*** Population Census, the population of the Area was ***estimated by the Planning Department as*** about ~~81,900~~ ***79,900***. It is estimated that the planned population of the Area would be about ~~99,760~~ ***103,500***.

7. LAND USE ZONINGS

7.1 Commercial ("C"): Total Area 0.24 ha

7.1.1 This zone is intended primarily for commercial developments, which may include shop, services and eating place, functioning mainly as local shopping centre serving local residents in the immediate neighbourhood.

7.1.2 A site at the junction of Victoria Road and Sha Wan Drive is under this zoning. It is reserved for the development of a low-rise local shopping centre compatible with the character of the area and also the surrounding environment. Apart from a supermarket which would be the main use, some commercial facilities such as bank, retail shop, barber shop and eating place will be permitted under the zoning.

7.2 Residential (Group A) ("R(A)"): Total Area ~~23.64~~ ***32.27*** ha

7.2.1 This zone is intended primarily for high-density residential developments. Commercial uses such as shop and services and eating place are always permitted on the lowest three floors of a building or in the purpose-designed non-residential portion of an existing building. Commercial uses on any floor above the lowest three floors will require permission from the Board.

7.2.2 This zoning covers ~~a private housing site east of Wah Fu Estate, and~~ the ***existing*** public housing developments ***at the southern part of the Area***, namely ~~the~~ Wah Fu Estate, ~~the~~ Wah Kwai Estate and ~~the~~ Ka Lung Court, ***the existing private residential developments to the east of Wah Fu Estate and the five new public housing sites along Pok Fu Lam Road, Shek Pai Wan Road and Wah King Street near Wah Fu Estate*** ~~located to the south of the Area~~.

7.2.3 Within the public housing estates, community facilities, daily shopping facilities and open space are provided in accordance with approved planning standards.

7.2.4 As announced in the 2014 Policy Address, Wah Fu Estate Redevelopment and the five new public housing sites, which will serve as the main reception resources for the redevelopment of Wah Fu Estate, will provide about 11,900 additional public housing units. According to the Housing Department (HD)'s proposal, a total gross floor area (GFA) of not more than 500,000m^2 will be provided for

accommodating about 8,900 public housing units at the five sites. A public vehicle park with GFA of not more than 7,200m^2 is also proposed at the site zoned "R(A)1" to meet the local demand. According to the findings of the engineering feasibility study for the proposed public housing developments at the five sites, no insurmountable technical problem is anticipated. To take forward HD's proposal, planning brief will be prepared to set out the planning parameters and the design requirements of individual sites as well as the detailed technical studies to be undertaken by HD at the detailed design stage.

7.2.5 ***For the developments at the five sites, a stepped building height concept with heights increasing progressively from the waterfront to the inland areas has been adopted. The developments on the five sites will be subject to height bands of 200mPD and 230mPD. The vast expanse of the sites also calls for provision of building gaps to break up the building mass and provision of variations in height and building form within individual sites to reduce the visual scale. The stepped building height concept shall also be taken into account in the redevelopment of Wah Fu Estate.***

7.2.6 ***An Expert Evaluation on Air Ventilation Assessment (AVA EE) has been carried out for the proposed public housing developments. Six local air paths with minimum width of 20 to 30m and suitable block disposition and podium design have been adopted to alleviate the potential air ventilation impacts. A quantitative AVA should be carried out by HD at the detailed design stage for scheme optimisation. The AVA EE also recommends guiding principles, in the form of local air paths, for the future AVA to be conducted for the redevelopment of Wah Fu Estate.***

7.2.7 ***For the redevelopment of Wah Fu Estate, in accordance with the established administrative procedure, it will be guided by a planning brief. Also HD would undertake relevant technical assessments including traffic impact assessment, environmental assessment, visual impact assessment and AVA, etc. to demonstrate its feasibility.***

7.3 Residential (Group B) ("R(B)"): Total Area 12.40 ha

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

7.3.2 Land zoned for this purpose is mainly located in the southern portion of the Area. Examples of some major existing residential developments include the Chi Fu Fa Yuen and Pok Fu Lam Gardens. Future development includes a site east of Chi Fu Fa Yuen.

7.3.3 In order to control the building volume, preserve the present characteristics of the area and avoid over-development, appropriate

residential density schedule (plot ratio and site coverage restrictions) for Residential Zone 2 are included in the Notes of the Plan. To allow greater flexibility, minor relaxation of these restrictions based on individual merits, including design justifications, positive landscape and planning gains, may be considered by the Board on application.

7.4 Residential (Group C) ("R(C)"): Total Area 45.17 ha

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

7.4.2 This zoning covers sites mostly in the northern and central portion of the Area. In view of the limited road capacity, steep topography, the need to preserve public view/amenity and character of the area, as well as the need to control over-development, this zoning is subject to site coverage and plot ratio controls of Residential Zone 3 and different building height controls are also imposed for respective Special Control Areas according to individual site characteristics and surrounding environment. These restrictions are shown in the Notes attached to the Plan.

7.4.3 Minor relaxation of the restrictions stated in the Notes, based on individual merits, may be considered by the Board upon application under section 16 of the Ordinance. The purpose of this provision is to allow the Board to consider proposals for building layout and design which, while not strictly complying with the stated restrictions, meet the planning objectives. It is intended to encourage imaginative designs which are adapted to the characteristics of particular sites, and overcome the need for stilting or allow for conservation of environmentally important natural features or mature vegetation. Each proposal will be considered strictly on its own merits.

7.5 Village Type Development ("V"): Total Area 2.62 ha

7.5.1 The planning intention of this zone is primarily for the provision of land for the retention of existing villages. Selected commercial and community uses serving the needs of the villagers are always permitted on the ground floor of a house. Other commercial, community and recreational uses may be permitted on application to the Board.

7.5.2 The existing Pok Fu Lam Village is under this zoning. The environment of the area is not entirely satisfactory. Improvement works for the area may be undertaken by concerned departments wherever opportunity arises. A maximum building height is also stipulated in the Notes of this zoning to reflect the existing character of the village. However, to provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the building height restriction may be considered by the Board through the

planning permission system. Each proposal will be considered on its individual planning merits.

7.6 Government, Institution or Community ("G/IC"): Total Area ~~60.62~~ ***60.12*** ha

7.6.1 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.

7.6.2 Existing facilities of regional significance include the Queen Mary Hospital~~,~~ ***and*** part of the University of Hong Kong ~~and the Institute of Immunology~~. ~~Except for the University Hall, the historical buildings in the Area (the Bethanie and the adjacent cowshed) are also included in this zoning.~~

7.6.3 In order to meet the needs of the Area, sites have been reserved for ~~a sub-divisional fire station, an ambulance depot, a clinic,~~ a divisional police station~~,~~ ***and*** a pumping station~~, service reservoirs, as well as primary and secondary schools~~.

7.7 Open Space ("O"): Total Area ~~21.26~~ ***18.82*** ha

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

7.7.2 Existing open spaces include the sitting-out area at Sassoon Road opposite to the Queen Mary Hospital, and the Waterfall Bay Park to the south of Wah Fu Estate.

7.7.3 Local open spaces are also provided within the public and private housing estates and at convenient locations throughout the Area to serve the local residents.

7.8 Other Specified Uses ("OU"): Total Area 35.61 ha

7.8.1 This zoning is intended primarily to provide/reserve land for specified purposes and uses. It covers the existing petrol filling stations at Baguio Villa and 100 Pok Fu Lam Road, the Chinese Christian Cemetery at the northern part of the Area and the Cyberport development at and around Kong Sin Wan.

7.8.2 The Cyberport development is intended to establish a base for the clustering of creative information service business including software design, electronic commerce, information and electronic technology and related business. It aims to create an extensively landscaped high-quality living and working environment which blends in well

with the surrounding neighbourhood. The development, ~~will include~~ ***including*** a shopping mall, office, hotel and residential towers/houses, ***was completed in 2008***.

7.8.3 The Cyberport development is divided into 6 sub-areas (including a waterfront promenade). To ensure the compatibility with the existing built and natural environment, development restrictions on the building height and/or gross floor areas are stipulated in the Notes for each sub-area. Any development within the area designated for the Cyberport development requires permission from the Board. Such application should be accompanied by the types of information including a comprehensive layout plan as set out in the Notes of the Plan. In the preparation of the comprehensive layout plan, special attention should be paid to reduce as far as practicable the possible visual impact caused by the Cyberport development on the nearby residential developments. However, to provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the above restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.

~~7.8.4 The Cyberport will be developed by phases. Phase I (commercial portion) of the Cyberport development was completed in 2002. The whole development is expected to be was completed by mid 2007.~~

7.9 Green Belt ("GB"): Total Area ~~128.59~~ ***123.93*** ha

7.9.1 The planning intention of this zone is primarily for the conservation of the existing natural environment amid the built-up areas/at the urban fringe, to safeguard it from encroachment by urban type development, and to provide additional outlets for passive recreational activities. There is a general presumption against development within this zone.

7.9.2 This zoning comprises about ~~30~~***29%*** of land in the Area and consists of mainly steep slopes not suitable for development such as the hillside of Mount Davis, the slopes to the east of Pok Fu Lam Village, the valley sides of Kong Sin Wan, the slopes to the south of Baguio Villa~~,~~ and the naturally vegetated hillslopes adjoining Chi Fu Fa Yuen. The difficult topography and geotechnical conditions render these areas unsuitable for development. Development within this zone is normally not permitted unless otherwise approved by the Board based on very strong planning grounds.

7.9.3 Although there is a general presumption against development in this zoning, passive recreational activities may be possible at suitable locations.

7.11 Country Park ("CP"): Total Area 52.48 ha

Country Park means a country park or special area as designated under the Country Parks Ordinance (Cap. 208). This zoning covers the part of the Pok Fu Lam Country Park and the part of the Lung Fu Shan Country Park which fall within the boundary of the Plan. All uses and developments require consent from the Country and Marine Parks Authority and approval from the Board is not required.

8. COMMUNICATIONS

8.1 Roads

8.1.1 Pok Fu Lam Road is the ~~major district~~ ***primary*** distributor road linking the Area to Aberdeen and the northern part of Hong Kong. Victoria Road, ~~another~~ ***a*** district distributor road, serves the developments along the coast. It also provides an alternative link to Kennedy Town. These ~~district distributor~~ ***two*** roads are supported by a network of subsidiary roads for local access purposes.

8.1.2 Route 7 (currently known as Route 4) ~~is~~ ***was originally proposed as*** a strategic link ***along the western coast*** ~~linking the Cross Harbour Tunnel and the Central & Western District with the development areas in the south west~~ of Hong Kong Island. ***While the Government has decided that its alignment as shown on the Plan will not be implemented, this obsolete alignment will be deleted in due course upon review of the land uses of the concerned areas.*** ~~The possible alignment for the sections in Pok Fu Lam area shown on the Plan is only for indicative purpose. Alternative alignments of Route 7 between Kennedy Town and Aberdeen have been explored and the Government is further reviewing its alignment taking account of the MTR Corporation Limited's (MTRCL) study on the West Hong Kong Island Line (WIL) and the South Hong Kong Island Line (SIL) and no reclamation in the Western District. The planning of Route 7 would be kept under review. The Plan may require further amendments in due course to incorporate the preferred alignment of Route 7.~~

8.2 Public Transport

Apart from bus services, the Area is also served by other modes of public transport including green minibuses, public light buses and taxis. ***A public transport interchange is provided under the elliptic podium at the northern end of the Cyberport development.***

8.3 Railway Development

The South Island Line (West) (SIL(W)) is proposed under the Railway Development Strategy 2014 to serve the western and southern parts of the

Hong Kong Island, extending the railway coverage to Aberdeen, Wah Fu, Cyberport and Pok Fu Lam. The implementation of SIL(W) is subject to the actual development/redevelopment programme of the public housing near Wah Fu area as well as the build-up of transport demand. ~~MTRCL has commissioned a study to develop an optimum railway scheme (on SIL and WIL) to serve the western and southern districts including the Pok Fu Lam area, interchange with the existing railway network on the northern side of Hong Kong Island and help to relieve traffic congestion within the central business areas. A number of alignment options have been developed of integrating SIL and WIL. The Plan may require amendments in due course to incorporate the preferred railway alignment.~~

8.4 Pok Fu Lam Moratorium

8.4.1 At present, the Area is still governed by the Pok Fu Lam Moratorium which prohibits any new land sale and lease modification for more intensive development. The Moratorium is an administrative measure imposed on traffic grounds to prohibit excessive development of the Area until there is an overall improvement in the transport network of the Area.

8.4.2 Notwithstanding the long-term broad land-use framework shown on the Plan, developments and redevelopments within the Area shall be subject to, in the interim, the restrictions of the Moratorium while it is still in force.

9. UTILITY SERVICES

9.1 The Area is well served with piped fresh ***and salt*** water supply. ***Construction of salt water supply system to the Area was completed in 2013. Conversion of the source of flushing water from temporary mains water to salt water is in progress.*** ~~As there is currently no salt water supply to the Area other than Wah Fu Estate and Wah Kwai Estate, temporary mains water for flushing is being used.~~

9.2 The developed areas are ~~also~~ well-served by existing ~~sewage screening plants~~ ***preliminary treatment works*** located in Wah Fu, Aberdeen, ~~and~~ Sandy Bay ***and Cyberport development***. ~~Another sewage treatment plant in the Cyberport development was also completed in 2002.~~

9.3 The Area has adequate supply of electricity, gas and telephone services. There is scope to expand the supply to meet future demand of the Area. ~~A salt water pumping station is proposed to be incorporated under the podium of the Cyberport development.~~

~~9.4 A public transport interchange is provided under the elliptic podium at the northern end of the Cyberport development.~~

10. CULTURAL HERITAGE

10.1 ~~The~~ ***Declared Monuments in the Area include the*** exterior of the University Hall of the University of Hong Kong, ~~is a declared monument while the management centre, the filter beds, the embankment, the box culvert, air vents~~ ***the Bethanie at No. 139 Pok Fu Lam Road and the six historic structures of Pok Fu Lam Reservoir, namely Former Watchman's Cottage (presently Pok Fu Lam Management Centre), the gauge basin,*** and ***the*** four masonry bridges ~~of Pok Fu Lam Reservoir and the area around Bethanie at 139 Pok Fu Lam Road are graded historical buildings and structures located within the Area~~. ***Grade 1 historic buildings include the Senior Staff Quarters of the Old Dairy Farm at No. 141 Pok Fu Lam Road and the Tung Wah Coffin Home at Sandy Bay Road. Grade 2 historic buildings include the box culvert, the embankment and the old masonry dam of Pok Fu Lam Reservoir, Pok Fu Lam Conduit, the Cowshed of the Old Dairy Farm at No. 139 Pok Fu Lam Road, Main Office Building of the Old Dairy Farm at No. 141 Pok Fu Lam Road, Alberose at Nos. 132A and 132B Pok Fu Lam Road, and the Nurses Quarters of Queen Mary Hospital at No. 102 Pok Fu Lam Road. Grade 3 historic buildings include No. 128 Pok Fu Lam Road, Queen Mary Hospital Main Block (Wing A to E) at No. 102 Pok Fu Lam Road, the air vents at the Service Reservoir of Pok Fu Lam Reservoir, Villa Ellenbud at No. 50 Sassoon Road, and No. 97 Pok Fu Lam Village. Kong Sin Wan Kiln Site of Archaeological Interest is also situated in the Area.***

10.2 ~~A kiln structure dated to the Tang Dynasty, which is of archaeological interest, was discovered in Kong Sin Wan Tsuen. The kiln structure has been preserved in situ and backfilled with protective measures~~. ***On 19 March 2009, the Antiquities Advisory Board (AAB) released the list of 1,444 historic buildings, and accorded grading to some buildings/structures within the Area. There are also a number of new items in addition to the list of 1,444 historic buildings. These items are subject to the grading assessment by AAB. Details of the list of 1,444 historic buildings and new items for grading assessment have been uploaded onto the official website of AAB at http://www.aab.gov.hk. Information of the declared monuments and site of archaeological interest can be obtained from the official website of AMO.***

10.3 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 these monuments, ***graded historic*** ~~and historical~~ buildings/structures, ***new items pending grading assessment, site of archaeological interest and their 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 The 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 as the basis for public works planning and site reservation within Government departments. 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 course of implementation of the Plan, the Southern District Council would ~~also~~ be consulted as appropriate.

11.3 Planning applications to the Board will be assessed on individual merits. In general, the Board's consideration of the planning applications will take into account all relevant planning considerations which may include the departmental outline development plans/layout plans and the 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
~~FEBRUARY 2005~~ ***XXX 2017***

擬議發展參數
Proposed Development Parameters

	華樂徑 Wah Lok Path	華景街 Wah King Street	華富邨以北 Wah Fu North	雞籠灣(北) Kai Lung Wan (North)	雞籠灣(南) Kai Lung Wan (South)	總數 Total
擬議用途 Proposed Use	公營房屋 Public Housing					-
現時主要用途地帶 Current Major Zoning	政府、機構或社區 Government, Institution or Community	休憩用地 Open Space		綠化地帶 Green Belt		-
擬議用途的總地盤面積(公頃) (大約) Gross Site Area of the Proposed Use (hectare) (about)	0.3	0.6	1.9	3.2	1.2	7.2
住宅單位 (大約) Flats (about)	360	1 360	1 890	3 990	1 320	8 900*
居住人口 (大約) Population(about)	1 130	4 150	6 340	11 560	3 700	26 900*
總樓面面積 **(平方米) (大約) Gross Floor Area (sq.m.) (about)	500 000					500 000
最高樓宇高度(米) (大約)(主水平基準上) Maximum Building Height (metre) (about) (Above Principal Datum)	170	200	200	230	200	-

* 單位數目及居住人口計至最近的百位整數。由於進位原因，數字相加結果可能不等於所列總數。
Flat numbers and population are rounded to the nearest hundred and may not add up to the total due to rounding.

** 包括公共停車位。
Including public parking spaces.

上述擬議發展參數為初步建議，須經詳細研究及設計後才能落實。
The above proposed development parameters are preliminary and subject to detailed study and design.

[由房屋署提供]
[Provided by the Housing Department]

Provision of Major Community Facilities in Pok Fu Lam Area

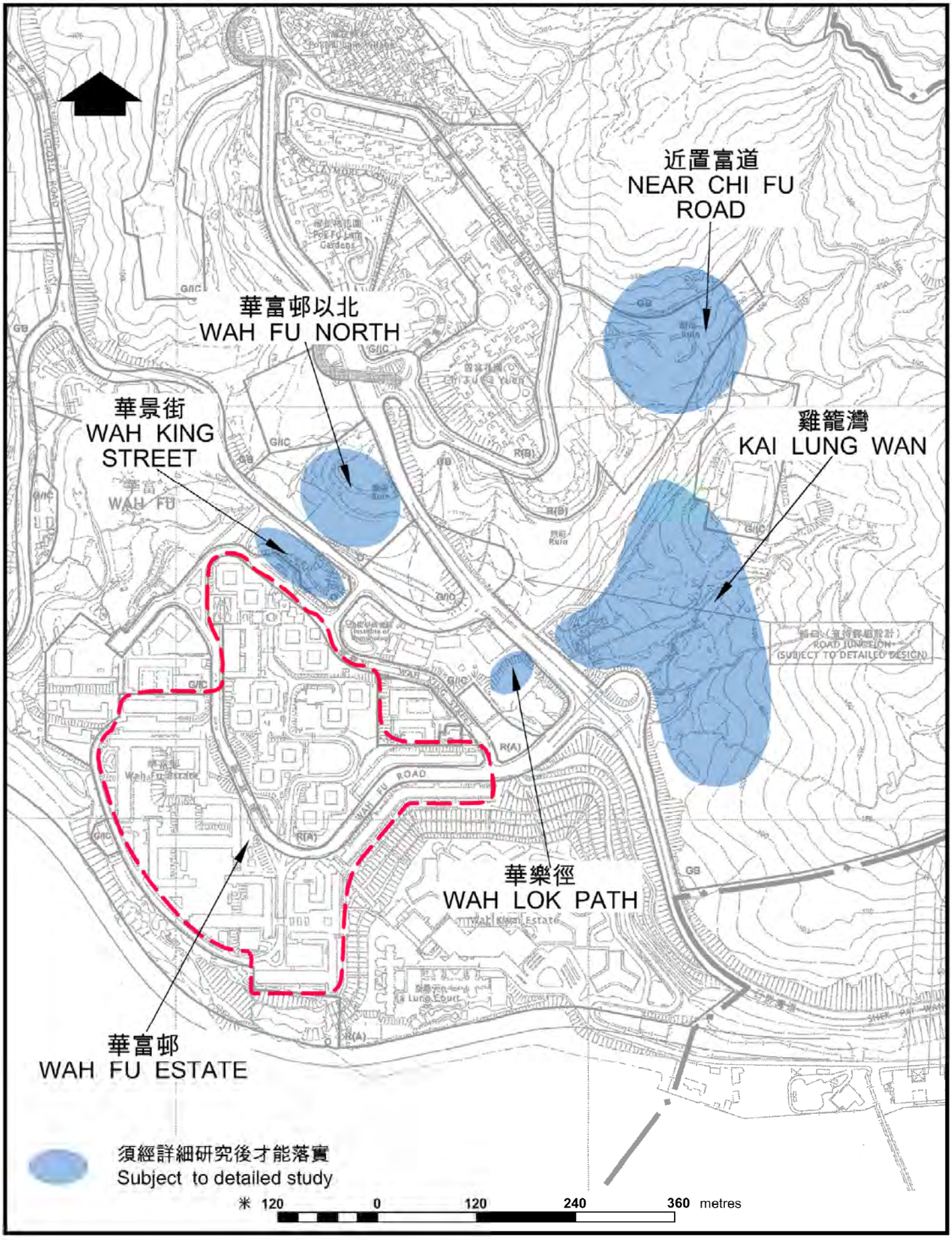
Type of Facilities	Hong Kong Planning Standards and Guidelines (HKPSG)	HKPSG Requirement (based on planned population)	Provision		Surplus/Shortfall (against planned provision)
			Existing Provision	Planned Provision	
Secondary School	1 whole-day classroom for 40 persons aged 12-17	106 classrooms	240 classrooms	240 classrooms	+134 classrooms
Primary School	1 whole-day classroom for 25.5 persons aged 6-11	158 classrooms	203 classrooms	233 classrooms	+75 classrooms
Kindergarten / Nursery	26 classrooms for 1,000 children aged 3 to under 6	54 classrooms	54 classrooms	54 classrooms	0
District Police Station	1 per 200,000 to 500,000 persons	0	0	0	0
Divisional Police Station	1 per 100,000 to 200,000 persons	0	0	0	0
Clinic/Health Centre	1 per 100,000 persons	1	0	0	-1 *
Magistracy (with 8 courtrooms)	1 per 660,000 persons	0	0	0	0
Integrated Children and Youth Services Centre	1 for 12,000 persons aged 6-24	1	1	1	0
Integrated Family Services Centre	1 per 100,000 to 150,000 persons	0	0	0	0
Library	1 district library for every 200,000 persons	0	1	1	+1
Sports Centre	1 per 50,000 to 65,000 persons	1	0	0	-1 #
Sports Ground/Sports Complex	1 per 200,000 to 250,000 persons	0	0	0	0
Swimming Pool Complex – standard	1 complex per 287,000 persons	0	0	0	0

Note:

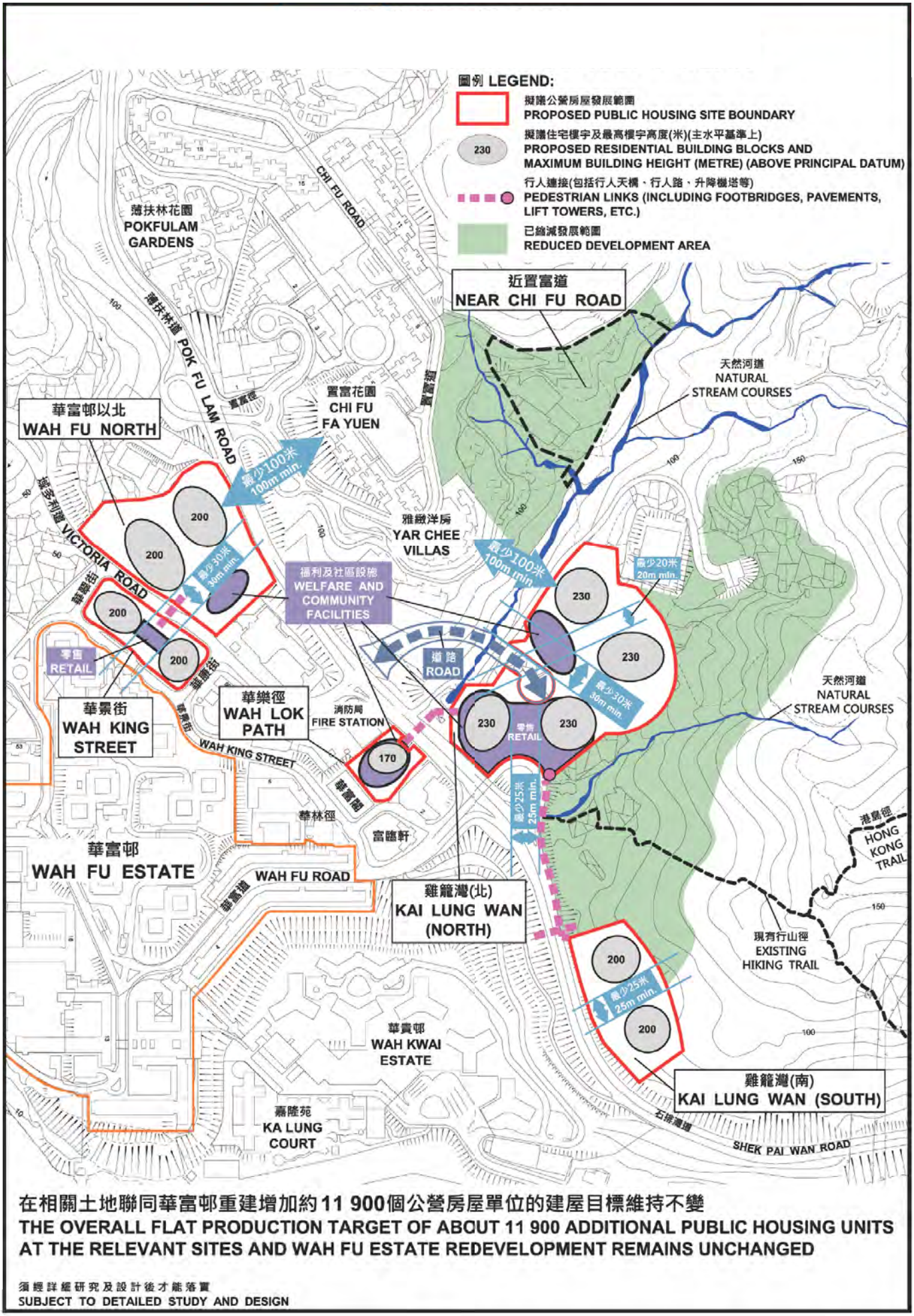
The planned population for the area is 103,500.

* No shortfall of clinic/health centre in the Southern District with 3 existing clinics/health centres.

\# Surplus provision of 1 sports centre in the Southern District with 6 existing sports centres.



薄扶林南五幅政府土地及華富邨位置圖 LOCATION PLAN OF FIVE GOVERNMENT SITES IN POKFULAM SOUTH AND WAH FU ESTATE	參考編號 REFERENCE No. M/H10/17/20	繪圖 DRAWING 1



擬議發展概念圖 PROPOSED DEVELOPMENT CONCEPT PLAN	參考編號 REFERENCE No. M/H10/17/20	繪圖 DRAWING 2

LEGENDS FOR BUILDING HEIGHT BAND

+170mPD MAX

+200mPD MAX

+230mPD MAX

N

CHI FU FA YUEN

YAR CHEE VILLAS

Wah Fu North

Wah King Street

Kai Lung Wan North

BEL - AIR

Wah Fu Estate

Wah Lok Path

Kai Lung Wan South

WAH KWAI ESTATE

POK PO WAN
(WATERFALL BAY)

0m 50m 100m 150m 200m 250m 300m

PRELIMINARY

The design and disposition of building blocks are preliminary and subject to detailed study and design.

REVISIONS

NO	DESCRIPTION AND DATE	INITIAL AND DESIGNATION DWN	CKD	AUTH

	NAME AND DESIGNATION	INITIAL	DATE
AUTHORISED	OSTAUTH OSTAUTHDES	ORIGINAL SIGNED	
CHECKED	OSTPCHECK OSTPCHECKDES	ORIGINAL SIGNED	
	OSTTCHECK OSTTCHECKDES	ORIGINAL SIGNED	
	OSTTCHECK OSTTCHECKDES	ORIGINAL SIGNED	
DRAWN	OSTDRAW OSTDRAWDES	ORIGINAL SIGNED	

PROPOSED PUBLIC HOUSING DEVELOPMENTS IN POK FU LAM SOUTH PRELIMINARY CONCEPTUAL LAYOUT

PLAN No.

DATE : 17 August 2017

SOURCE

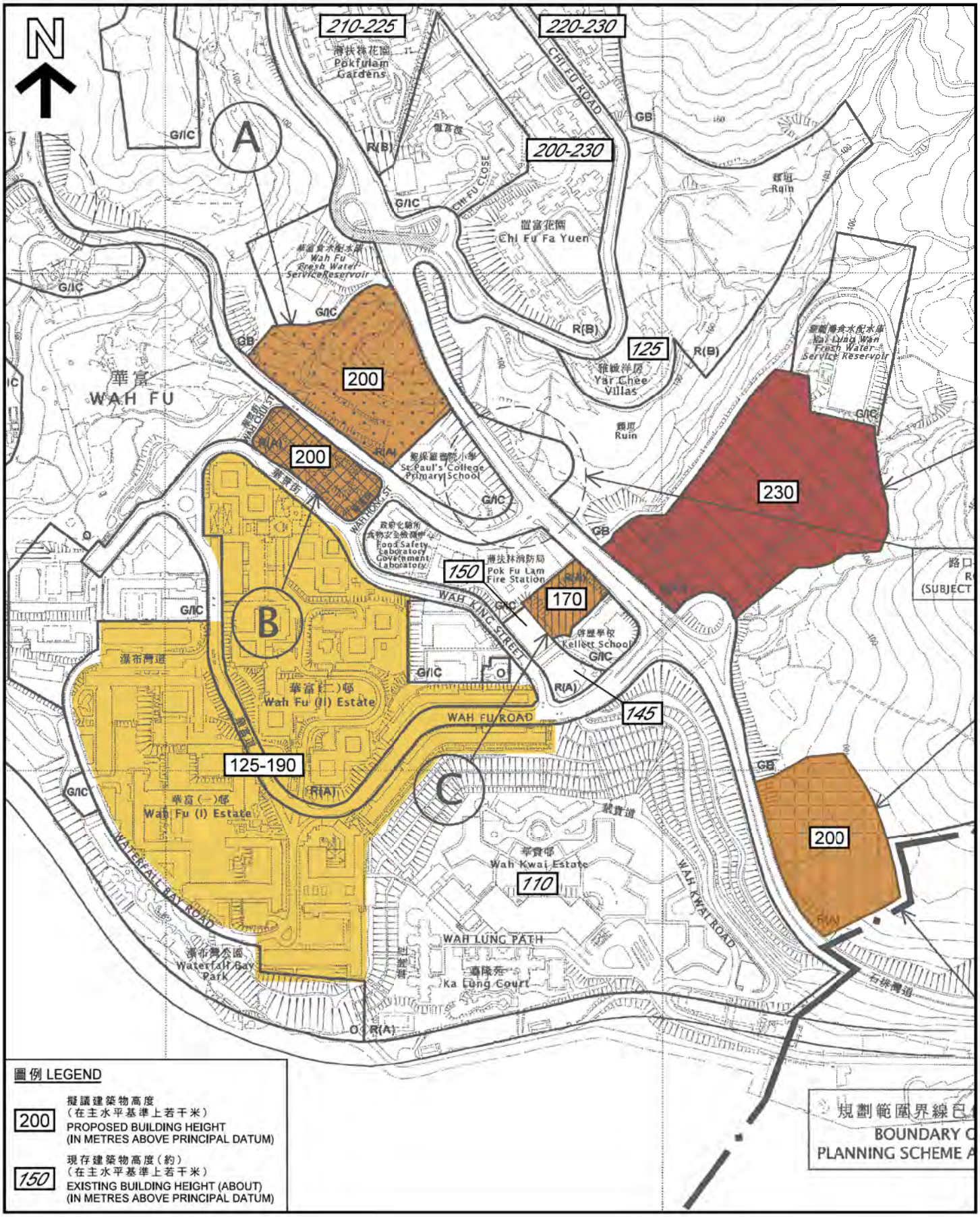
IDU NO.

HOUSING DEPARTMENT

初步地盤佈局圖
PRELIMINARY SITE LAYOUT

參考編號
REFERENCE No.
M/H10/17/20

繪圖
DRAWING
3



梯級式建築物高度概念 STEPPED BUILDING HEIGHT CONCEPT	參考編號 REFERENCE No. M/H10/17/20	繪圖 DRAWING 4

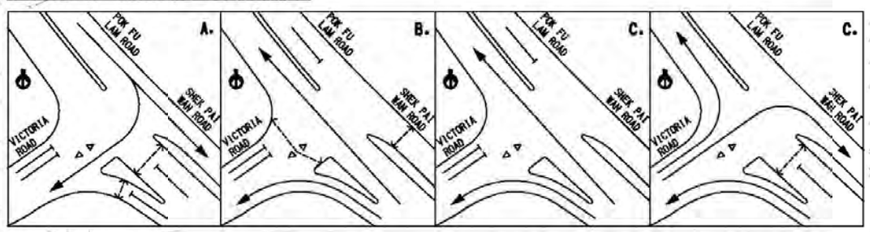
根據附件VI(圖編號250269/LVIA/6.3)
Extracted from Attachment VI (Drawing No. 250269/LVIA/6.3)

梯級式建築物高度概念(合成照片) STEPPED BUILDING HEIGHT CONCEPT (PHOTOMONTAGE)	參考編號 REFERENCE No. M/H10/17/20	繪圖 DRAWING 5

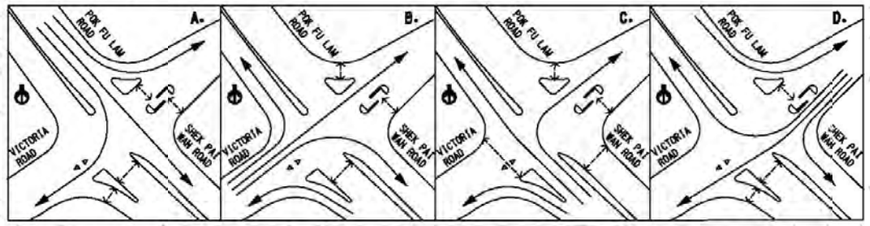
Source: Railway Development Strategy 2014

<鐵路發展策略2014> 中南港島線(西段)的初步概念方案 <RAILWAY DEVELOPMENT STRATEGY 2014> PRELIMINARY CONCEPTUAL SCHEME OF THE SOUTH ISLAND LINE (WEST)	參考編號 REFERENCE No. M/H10/17/20	繪圖 DRAWING 6

METHOD OF CONTROL (EXISTING)



METHOD OF CONTROL (FUTURE)



ADDITIONAL LANE ON POK FU LAM ROAD SOUTHBOUND

ADDITIONAL LANE ON POK FU LAM ROAD SOUTHBOUND FOR DEDICATED LEFT-TURN

POK FU LAM ROAD

ADDITIONAL LANE ON VICTORIA ROAD EB AND CHANGE OF LANE ALLOCATION

VICTORIA ROAD

NEW ACCESS ROAD

3 APPROACH LANES ON NEW ACCESS ROAD

ADDITIONAL LANE AT POK FU LAM ROAD SOUTHBOUND

PROPOSED BUS/MINI-BUS LAY-BY (78m LONG) AT KAI LUNG WAN NORTH

PROPOSED BUS/MINI-BUS LAY-BY (39m LONG) AT KAI LUNG WAN NORTH

PROPOSED MODIFICATION OF TRAFFIC ISLAND FOR FACILITATING SMOOTH MANEUVERING OF RIGHT TURN MOVEMENT

PROPOSED ROAD MARKING MODIFICATION FOR NEW RIGHT TURN MOVEMENT

SHEK PAI WAN ROAD

WAH FU ROAD

78m

39m

St. Paul's College Primary School

Pok Fu Lam Ambulance Depot

Pokfulam Fire Station Officers Married Quarters

Podium

Playground

Wah Fu Transit Nursery

Kwai Fong Garden

Cultivation

Car Park

0 5 10 15 20 25
METRES
1 : 500

Rev	Description	By	Date
C	TIA REVISION	BF	08/17
B	TIA REVISION	BF	07/17
A	TIA REVISION	BF	04/17

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
PROPOSED JUNCTION IMPROVEMENT SCHEME AT J/O POK FU LAM ROAD/VICTORIA ROAD (PERMANENT STAGE)

Drawing no.	Rev.
250269/TIA/409	C

Drawn	Date	Checked	Approved
WKKL	04/17	BF	SYC

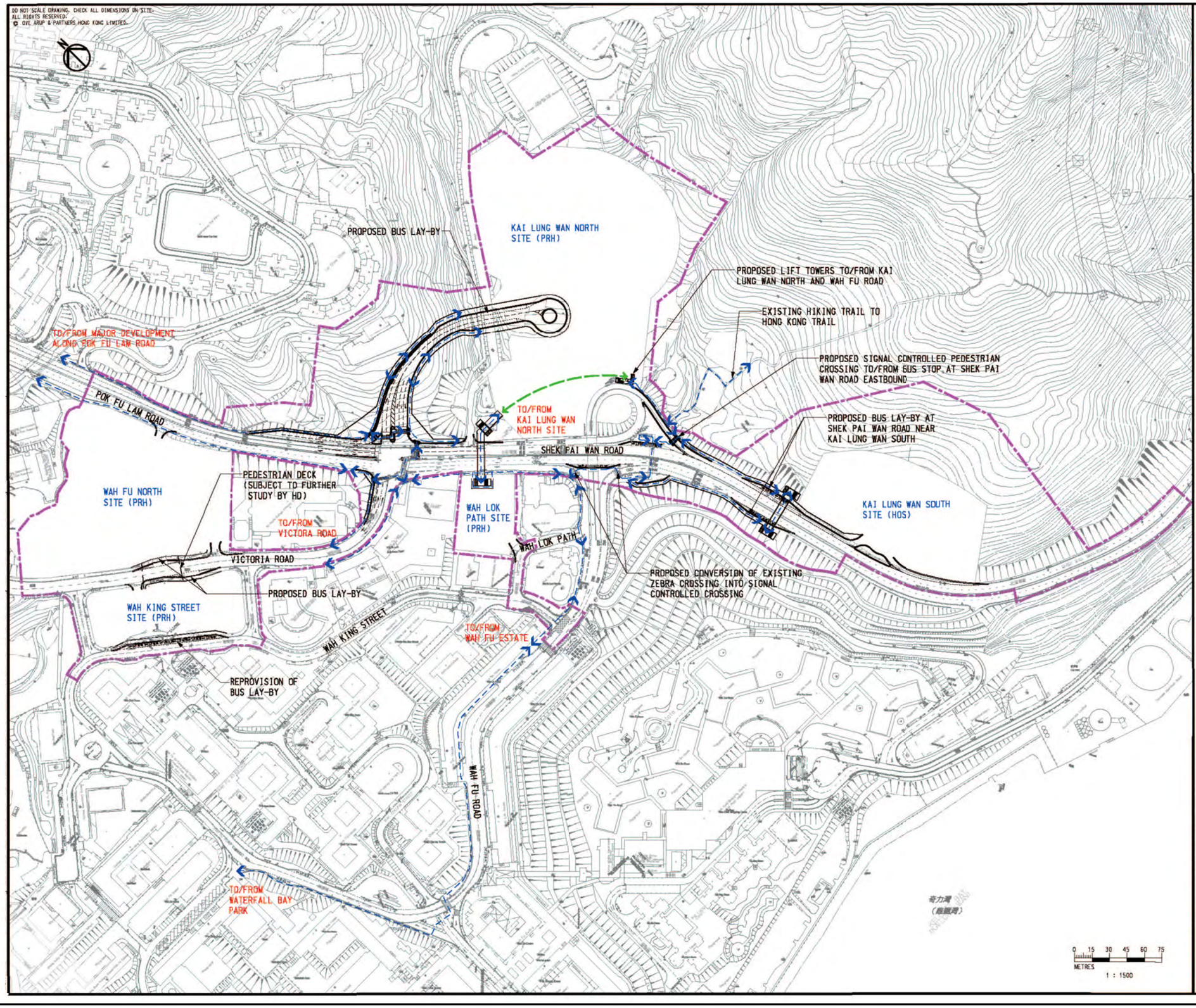
Scale: ~~1:1000 @A1~~ Status: PRELIMINARY

CEDD 土木工程拓展署 Civil Engineering and Development Department

擬議道路改善工程
PROPOSED ROAD IMPROVEMENT WORKS

參考編號 REFERENCE No. M/H10/17/20

繪圖 DRAWING 7



LEGEND

- PROJECT SITE BOUNDARY
- PRELIMINARY PEDESTRIAN ROUTE WITHIN HOUSING SITE (INDICATIVE ONLY)
- PEDESTRIAN ROUTING

Rev	Description	By	Date
C	TIA REVISION	BF	08/17
B	TIA REVISION	BF	07/17
A	TIA REVISION	BF	04/17

Consultant

ARUP

Contract No. and Title

Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

MAJOR PEDESTRIAN ROUTING TO/FROM KAI LUNG WAN NORTH/ SOUTH SITE AND WAH FU AREA AND PUBLIC TRANSPORT FACILITIES

Drawing no.	Rev.
250269/TIA/502	C

Drawn	Date	Checked	Approved
WKKL	04/17	BF	SYC

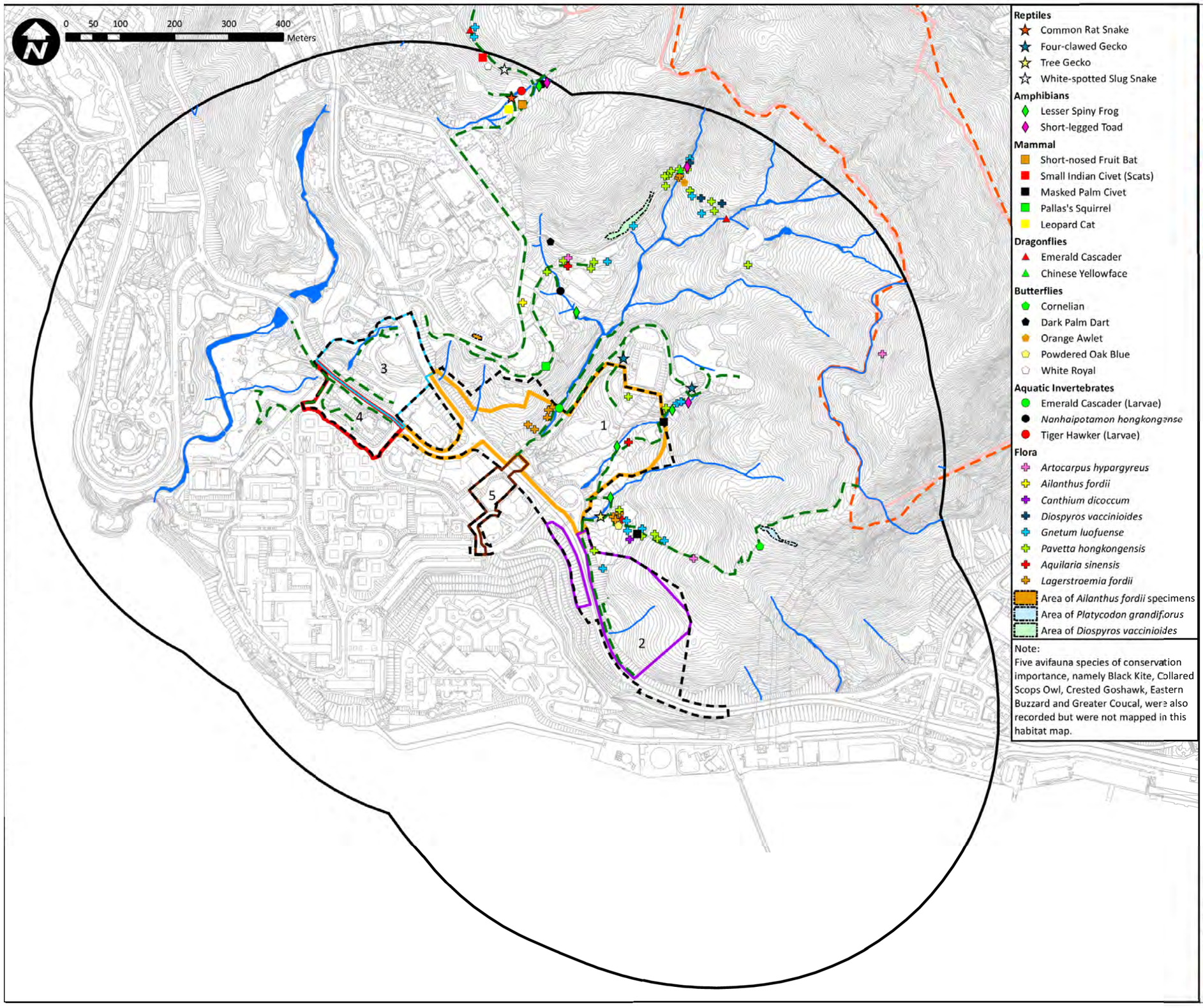
Scale: 1:1500 @A1 — Status: PRELIMINARY

CEDD 土木工程拓展署 Civil Engineering and Development Department

擬議行人及公共運輸設置
PROPOSED PEDESTRIAN AND PUBLIC TRANSPORT FACILITIES

參考編號 REFERENCE No. M/H10/17/20

繪圖 DRAWING 8



Reptiles
- Common Rat Snake
- Four-clawed Gecko
- Tree Gecko
- White-spotted Slug Snake

Amphibians
- Lesser Spiny Frog
- Short-legged Toad

Mammal
- Short-nosed Fruit Bat
- Small Indian Civet (Scats)
- Masked Palm Civet
- Pallas's Squirrel
- Leopard Cat

Dragonflies
- Emerald Cascader
- Chinese Yellowface

Butterflies
- Cornelian
- Dark Palm Dart
- Orange Awlet
- Powdered Oak Blue
- White Royal

Aquatic Invertebrates
- Emerald Cascader (Larvae)
- *Nanhaipotamon hongkongense*
- Tiger Hawker (Larvae)

Flora
- *Artocarpus hypargyreus*
- *Ailanthus fordii*
- *Canthium dicoccum*
- *Diospyros vaccinioides*
- *Gnetum luofuense*
- *Pavetta hongkongensis*
- *Aquilaria sinensis*
- *Lagerstroemia fordii*
- Area of *Ailanthus fordii* specimens
- Area of *Platycodon grandiflorus*
- Area of *Diospyros vaccinioides*

Note:
Five avifauna species of conservation importance, namely Black Kite, Collared Scops Owl, Crested Goshawk, Eastern Buzzard and Greater Coucal, were also recorded but were not mapped in this habitat map.

- 500m Assessment Area
- Watercourse
- Transect
- Pok Fu Lam Reservoir Catchment Area SSSI
- Country Park
- Proposed Project Site Boundary
- Actual Works Area in Kai Lung Wan North Site (Area 1)
- Actual Works Area in Kai Lung Wan South Site (Area 2)
- Actual Works Area Wah Fu North Site (Area 3)
- Actual Works Area Wah King Street Site (Area 4)
- Actual Works Area Wah Lok Path Site (Area 5)

Rev	Description	By	Date

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE) Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing Title
Locations of Streams and Records of Species of Conservation Importance Recorded During the Study

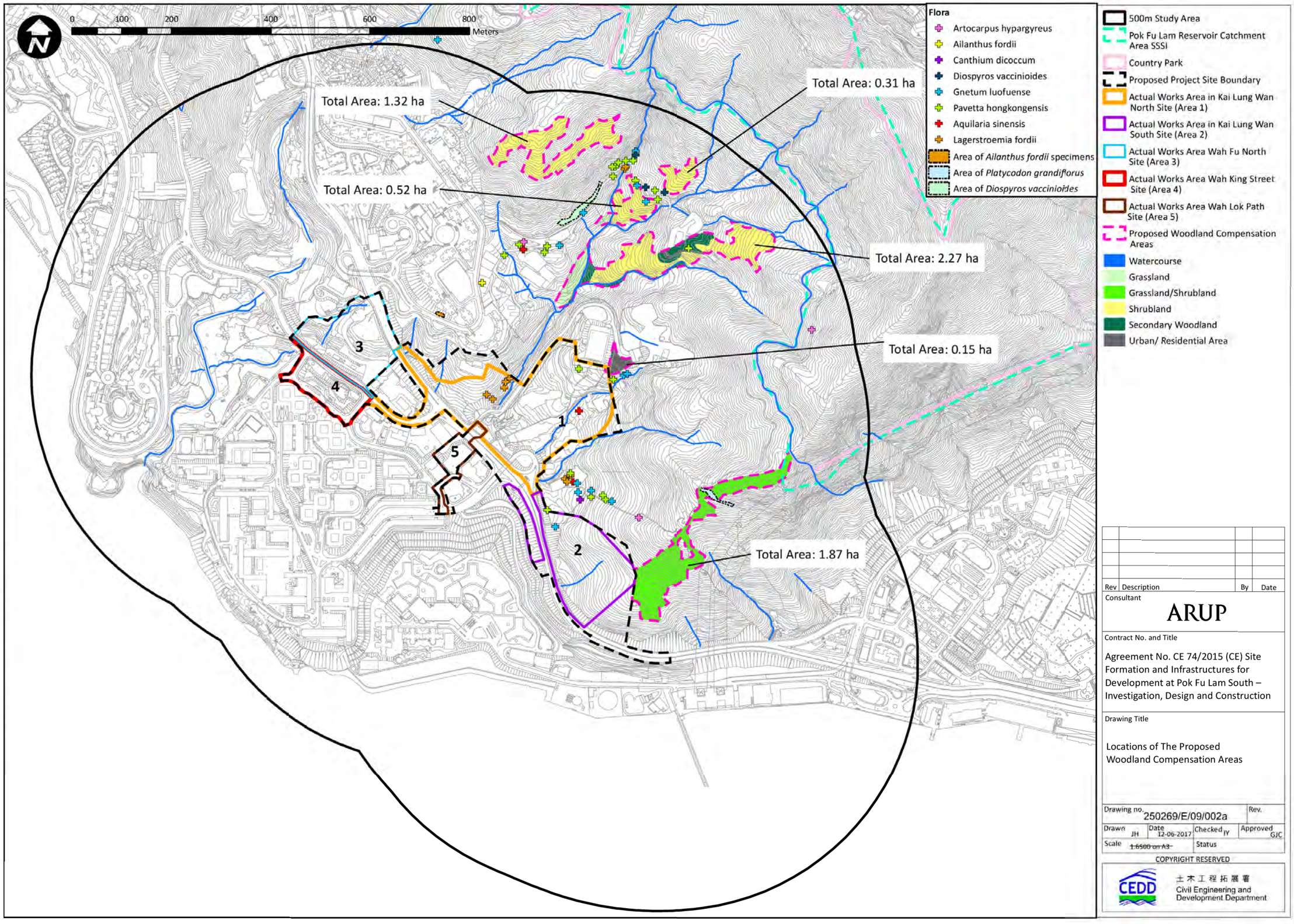
Drawing no. 250269/E/09/002 Rev.
Drawn TH Date 17-08-2017 Checked GJC Approved GJC
Scale ~~1:6500 on A3~~ Status

土木工程拓展署
Civil Engineering and Development Department

具存護重要性物種
SPECIES OF CONSERVATION IMPORTANCE

參考編號 REFERENCE No. M/H10/17/20

繪圖 DRAWING 9



Rev	Description	By	Date

Consultant

ARUP

Contract No. and Title

Agreement No. CE 74/2015 (CE) Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing Title

Locations of The Proposed Woodland Compensation Areas

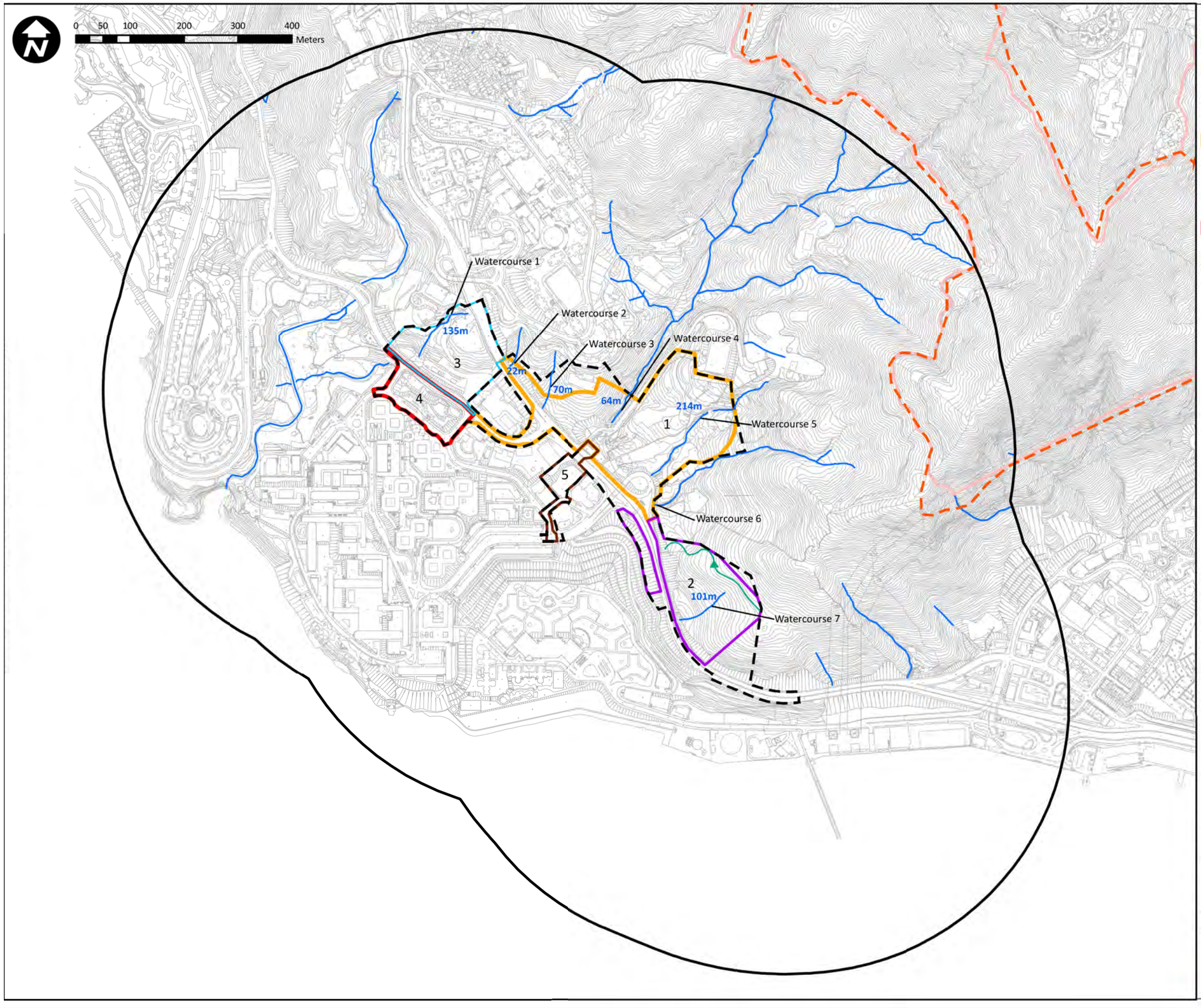
Drawing no. 250269/E/09/002a			Rev.
Drawn JH	Date 12-06-2017	Checked JY	Approved GJC
Scale ~~1:6500 on A3~~		Status	

CEDD 土木工程拓展署 Civil Engineering and Development Department

擬議補償林地
PROPOSED WOODLAND COMPENSATION AREA

參考編號
REFERENCE No.
M/H10/17/20

繪圖
DRAWING
10



500m Assessment Area
Pok Fu Lam Reservoir Catchment Area SSSI
Country Park
Watercourse
Proposed Green Channel
Proposed Project Site Boundary
Actual Works Area in Kai Lung Wan North Site (Area 1)
Actual Works Area in Kai Lung Wan South Site (Area 2)
Actual Works Area Wah Fu North Site (Area 3)
Actual Works Area Wah King Street Site (Area 4)
Actual Works Area Wah Lok Path Site (Area 5)

Rev	Description	By	Date

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE) Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing Title
Locations of Watercourses, Lengths of Stream Sections in the Proposed Project Site Boundaries and Proposed Green Channel Location

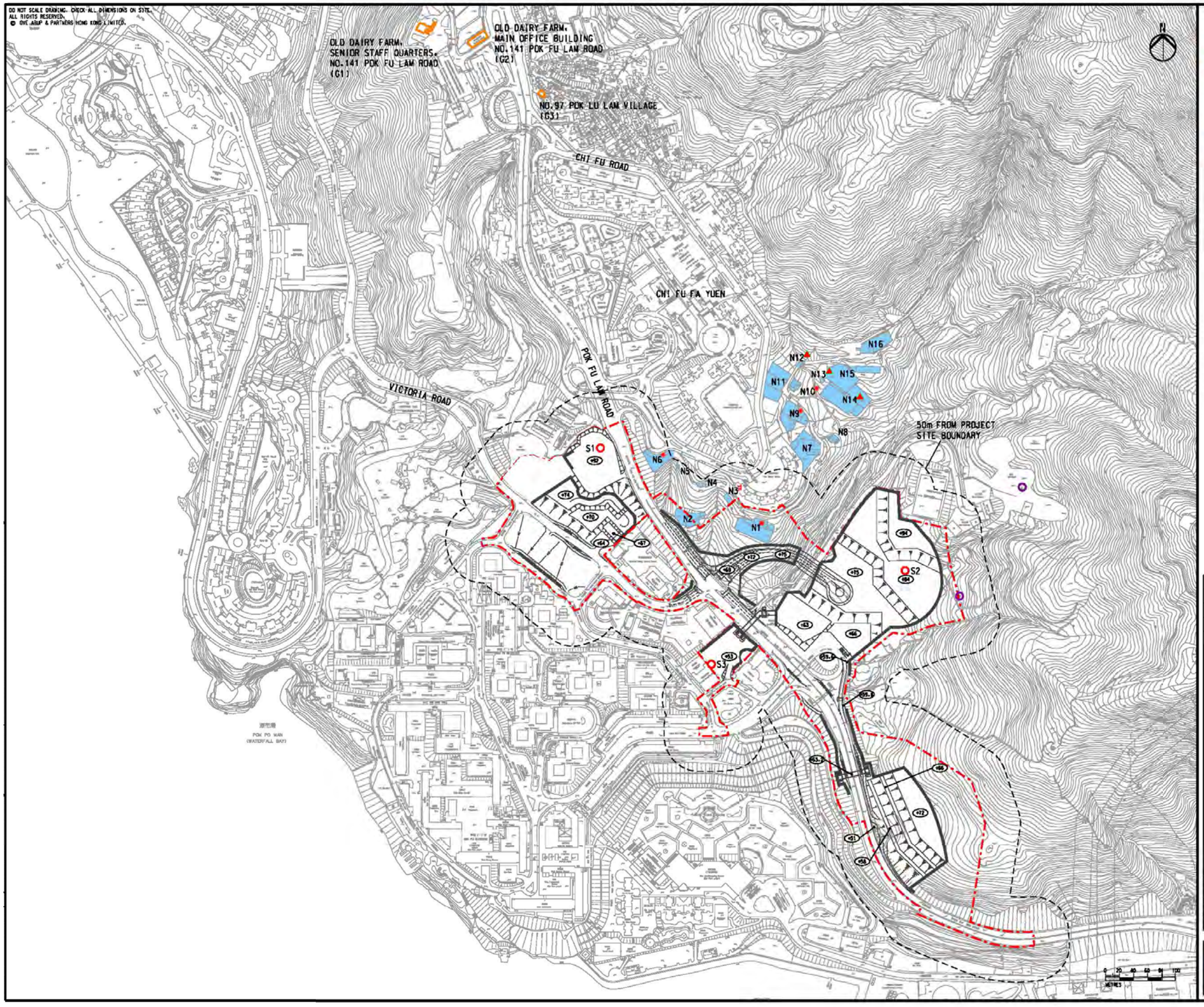
Drawing no.			Rev.
Drawn TH	Date 12-06-2017	Checked GJC	Approved GJC
Scale ~~1:6500 on A3~~		Status	

CEDD 土木工程拓展署 Civil Engineering and Development Department

河道及擬議綠色河道
WATERCOURSES AND PROPOSED GREEN CHANNEL

參考編號 REFERENCE No. M/H10/17/20

繪圖 DRAWING 11



LEGEND

- PROJECT SITE BOUNDARY
- GRADED HISTORIC BUILDING
- GRAVE
- SHRINE
- INDICATIVE LOCATIONS OF REMAINING STRUCTURES OF THE OLD DAIRY FARM IN POK FU LAM CLOSE TO / WITHIN THE PROJECT SITES (NEW ITEMS PENDING GRADING ASSESSMENT BY AAB)
- # PROPOSED GRADE 3
- # PROPOSED GRADE 3 (SUBJECT TO AAB'S DISCUSSION)
- # PROPOSED GRADE 2 (SUBJECT TO AAB'S DISCUSSION)

Rev	Description	By	Date
C	THIRD ISSUE	GL	08/17
B	SECOND ISSUE	GL	07/17
A	FIRST ISSUE	GL	06/17

Consultant

ARUP

Contract No. and Title

Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

LOCATION OF BUILT HERITAGE RESOURCES NEAR PROJECT SITE

Drawing no.	Rev.
250269/E/10/001	C

Drawn	Date	Checked	Approved
GL	08/17	KL	ST

Scale: ~~1:5000 @A3~~ | Status: PRELIMINARY

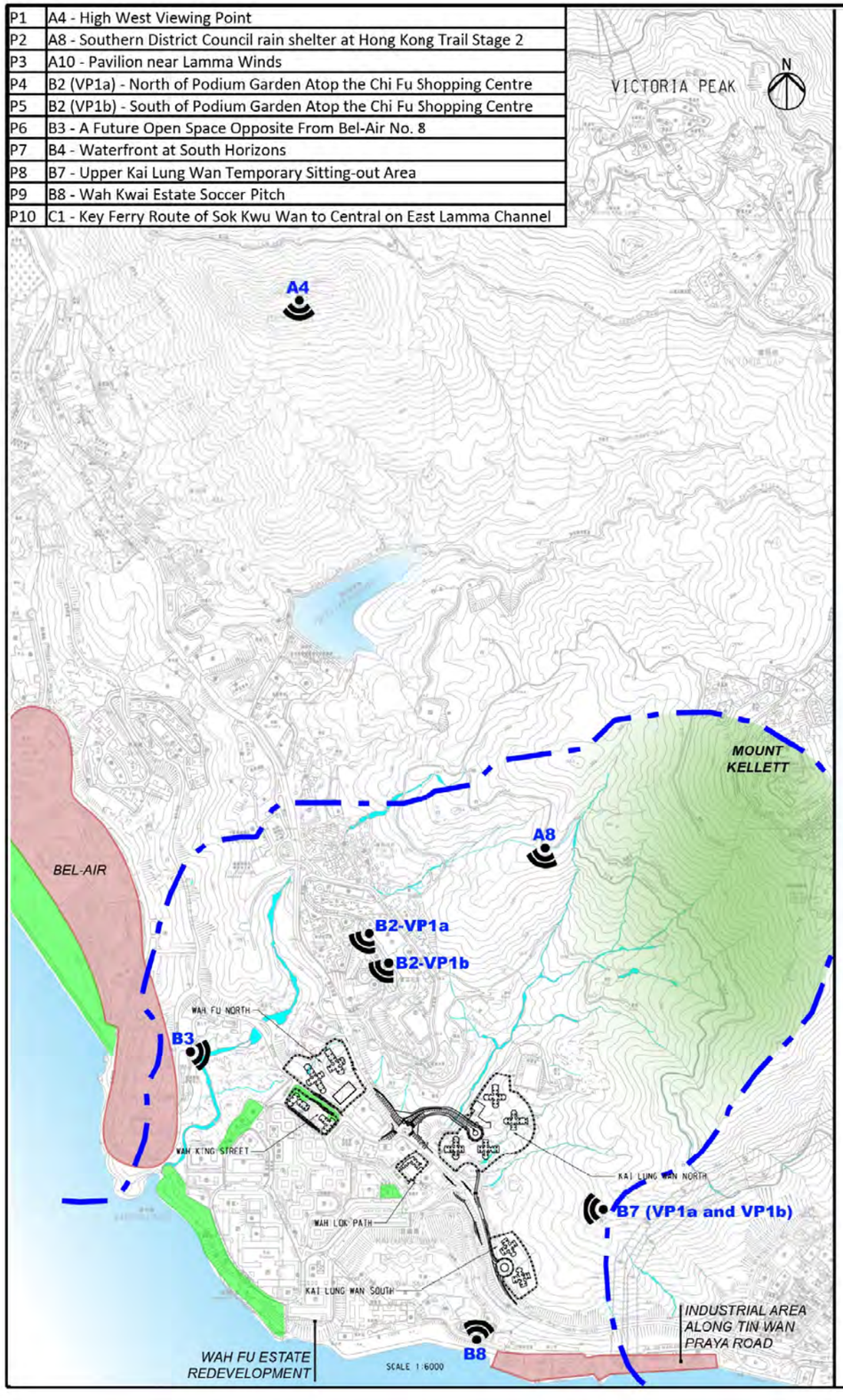
CEDD 土木工程拓展署 Civil Engineering and Development Department

建築文物資源
BUILT HERITAGE RESOURCES

參考編號
REFERENCE No.
M/H10/17/20

繪圖
DRAWING
12

P1	A4 - High West Viewing Point
P2	A8 - Southern District Council rain shelter at Hong Kong Trail Stage 2
P3	A10 - Pavilion near Lamma Winds
P4	B2 (VP1a) - North of Podium Garden Atop the Chi Fu Shopping Centre
P5	B2 (VP1b) - South of Podium Garden Atop the Chi Fu Shopping Centre
P6	B3 - A Future Open Space Opposite From Bel-Air No. 8
P7	B4 - Waterfront at South Horizons
P8	B7 - Upper Kai Lung Wan Temporary Sitting-out Area
P9	B8 - Wah Kwai Estate Soccer Pitch
P10	C1 - Key Ferry Route of Sok Kwu Wan to Central on East Lamma Channel



LEGEND:

- PRIMARY ZONE OF VISUAL ENVELOPE
- PROPOSED PUBLIC HOUSING SITE BOUNDARY
- SECONDARY ZONE OF VISUAL ENVELOPE
- A1 — PROPOSED PHOTOMONTAGE VANTAGE POINTS
- 240 — HEIGHT IN mPD
- MAJOR VISUAL ELEMENTS
- MAJOR VISUAL ASSET
- VISUAL DETRACTORS

Note:
1. Visual Envelope and the selection of VPs for VIA refers to the Town Planning Board ('TPB') Guideline No. 41 on *'Submission of VIA for Planning Applications to the TPB'* ('TPB-PG NO. 41')
2. All photomontages on Wah Fu Estate redevelopment is preliminary in nature and would be subject to revision in next stage of the study.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant: ARUP

Contract No. and Title: Agreement No. CE 74/2015 (CE) Site Formation and Infrastructures for Development at Pok Fu Lam South Investigation, Design and Construction

Drawing title: PHOTOMONTAGE VIEWPOINT LOCATIONS

Drawing no.	Rev.
250269/LVIA/6.0	A

Drawn	Date	Checked	Approved
AC	03/17	KC	SYC

Scale: | Status: PRELIMINARY

CEDD 土木工程拓展署 Civil Engineering and Development Department

觀景點
VIEWPOINTS

參考編號
REFERENCE No.
M/H10/17/20

繪圖
DRAWING
13a

Design Measures	
DM1	Control of building heights to preserve the views to the ridgelines
DM3	Preservation of high landscape value and enhancement on Pokfulam Area
DM4	Provision of building gaps to enhance visual permeability
DM6	Sensitive building form, height and disposition to minimize impact on perceived bulk and views to visual resources, namely, • truncated building wing (refer to Figure 250269/LVIA/5.1 for details), • provision of 25m building gap separation / visual corridors(refer to Figure 250269/LVIA/5.1 for details), • provision of building setback (refer to Figure 250269/LVIA/5.1 for details), • implementation of stepped building height profile, and • terraced podium (refer to Appendix 8.5 for the terraced podium for reference). • Provision of edge planters and / or aesthetic treatment of the Spiral ramp in the Kai Lung Wan South Site (refer to Appendix 8.4F for reference).
DM7	Sensitive design of road layout and streetscape, open space network in adjacent areas (refer to Appendix 8.4 B for reference)
DM8	Tree Preservation and Removal Proposal (TPRP) should be obtained prior to implementation at early design stage in accordance with DEVB TCW No. 6/2015, 7/2015 and LAO PN No. 7/2007
DM9	Greening Provision in the early project planning stage in accordance with DEVB TCW No. 2/2012 and PNAP APP-152
DM10	ACABAS submission upon completion of conceptual design should be accordance with ETWB TCW No. 36/2004

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant
ARUP

Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
LANDSCAPE AND VISUAL MITIGATION MEASURES

Drawing no. 250269/LVIA/5.0 Rev A

Drawn KC | Date 07/17 | Checked KC | Approved SYC

Status PRELIMINARY

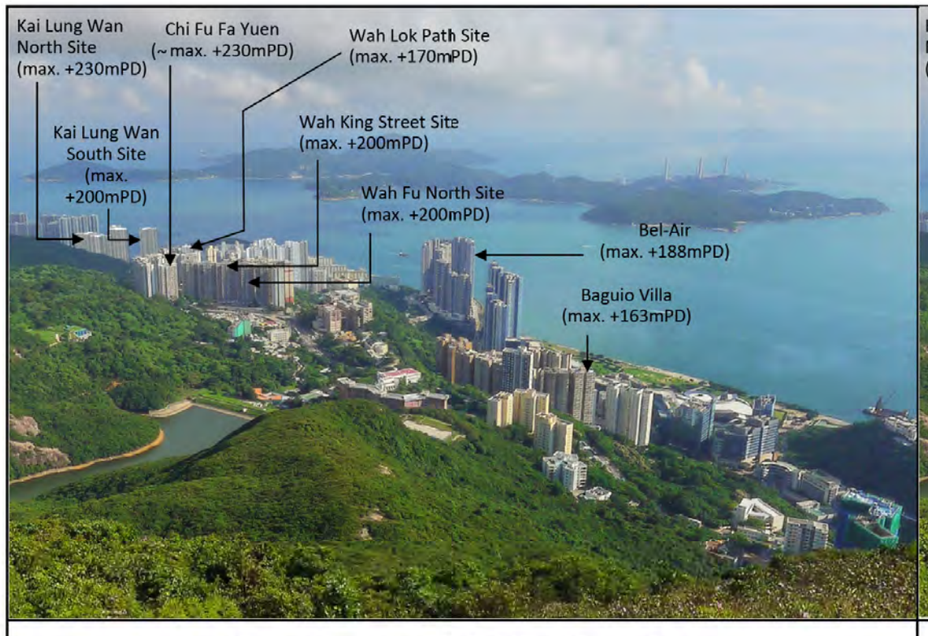
CEDD 土木工程拓展署 Civil Engineering and Development Department

設計方法
DESIGN MEASURES

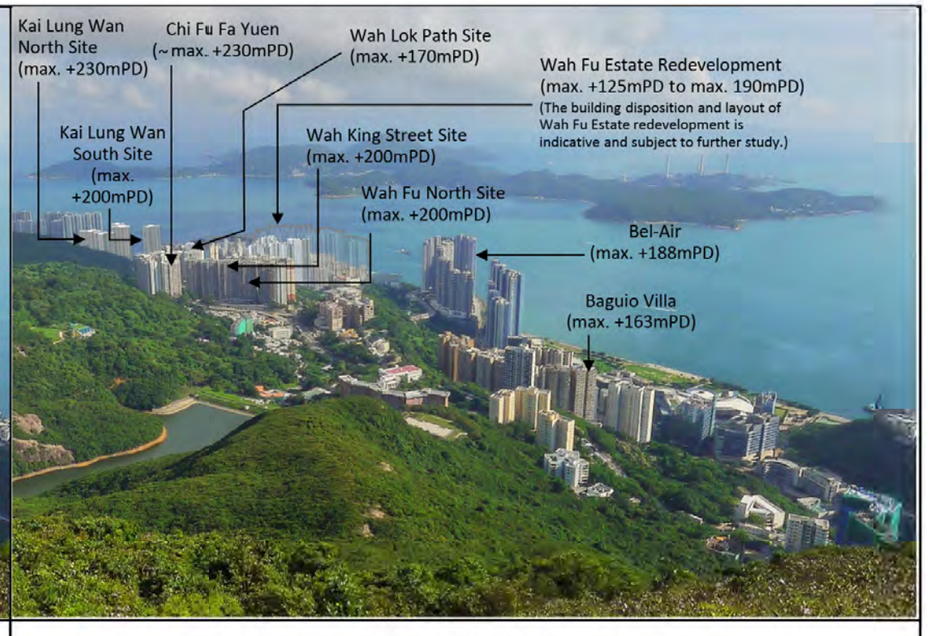
參考編號
REFERENCE No.
M/H10/17/20

繪圖
DRAWING
13b

Existing View from A4 - High West Viewing Point



Photomontage from A4 - High West Viewing Point
(with Housing Sites)



Photomontage from A4 - High West Viewing Point
(with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
P1 PHOTOMONTAGE FROM A4

Drawing no.	Rev.
250269/LVIA/6.1	A

Drawn	Date	Checked	Approved
AC	03/17	AC	SYC

Scale
Status: PRELIMINARY

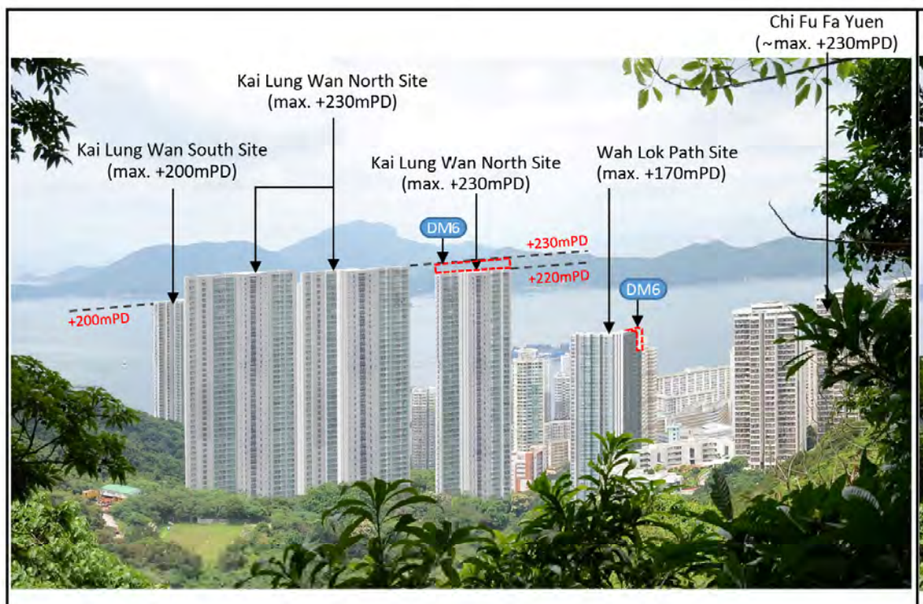
CEDD 土木工程拓展署 Civil Engineering and Development Department

合成照片
PHOTOMONTAGE

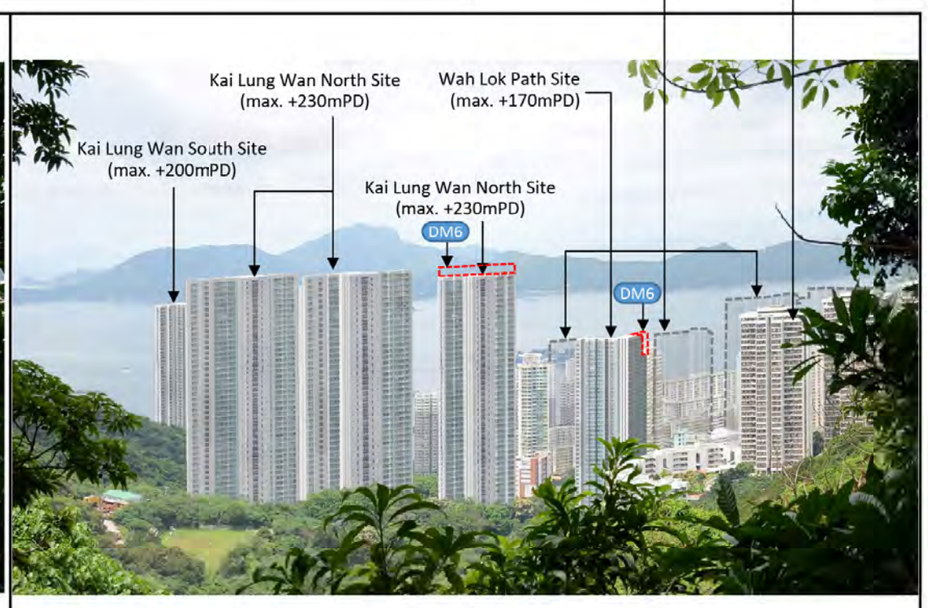
參考編號
REFERENCE No.
M/H10/17/20

繪圖
DRAWING
13c

Existing View from A8 Southern District Council Rain Shelter at
Hong Kong Trail Stage 2



Photomontage from A8 Southern District Council Rain Shelter at
Hong Kong Trail Stage 2 (with Housing Sites)



Photomontage from A8 Southern District Council Rain Shelter at
Hong Kong Trail Stage 2 (with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
P2 PHOTOMONTAGE FROM A8

Drawing no. 250269/LVIA/6.2 Rev. A

Drawn	Date	Checked	Approved
AC	03/17	KC	SYC

Scale
Status PRELIMINARY

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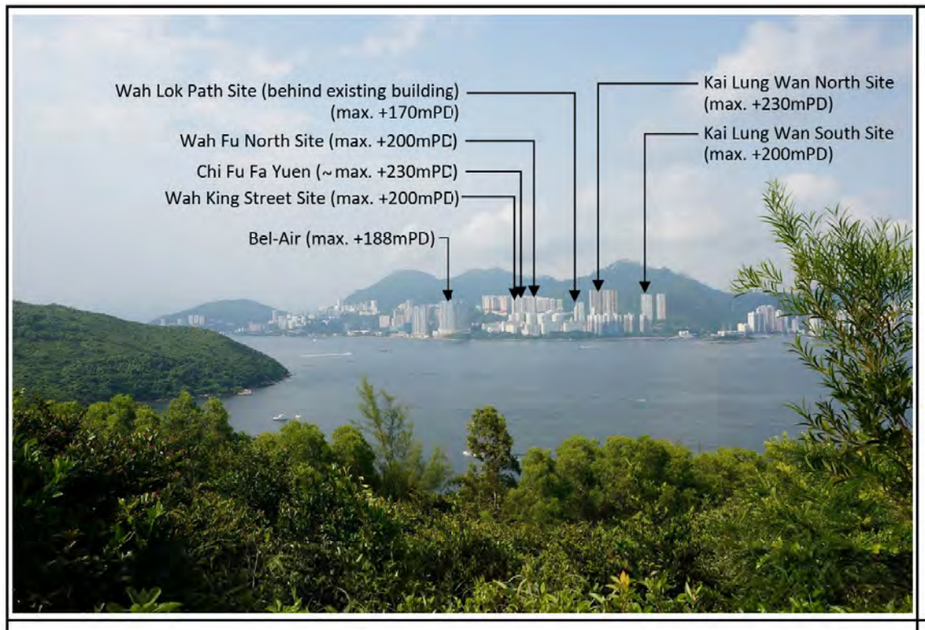
合成照片
PHOTOMONTAGE

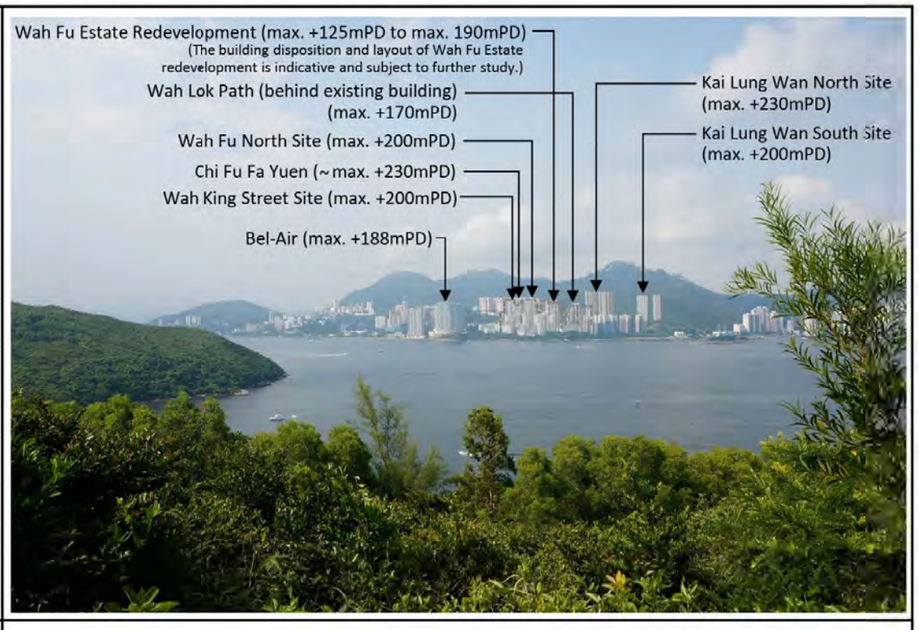
參考編號
REFERENCE No.
M/H10/17/20

繪圖
DRAWING
13d

Existing View from A10 - Pavilion near Lamma Winds



Photomontage from A10 - Pavilion near Lamma Winds
(with Housing Sites)



Photomontage from A10 - Pavilion near Lamma Winds
(with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
P3 PHOTOMONTAGE FROM A10

Drawing no.	Rev.
250269/LVIA/6.3	A

Drawn	Date	Checked	Approved
AC	03/17	AC	SYC

Scale
Status: PRELIMINARY

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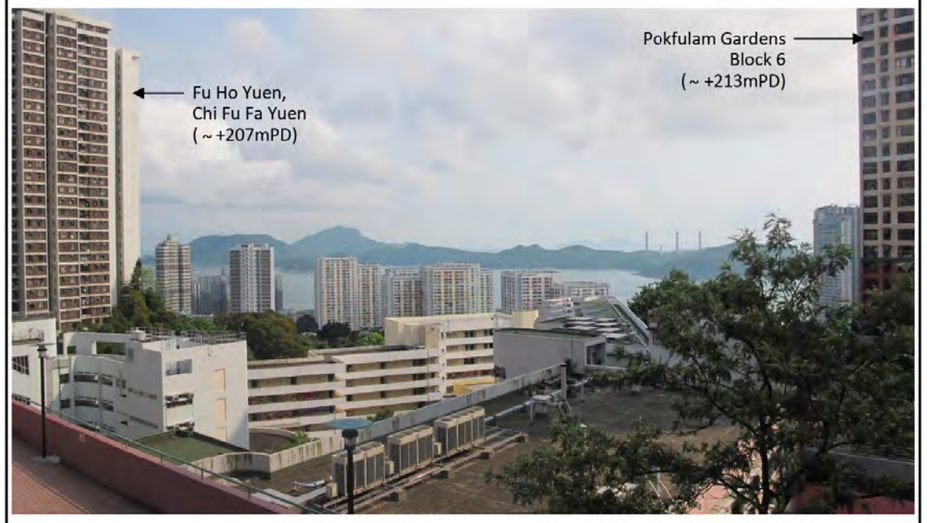
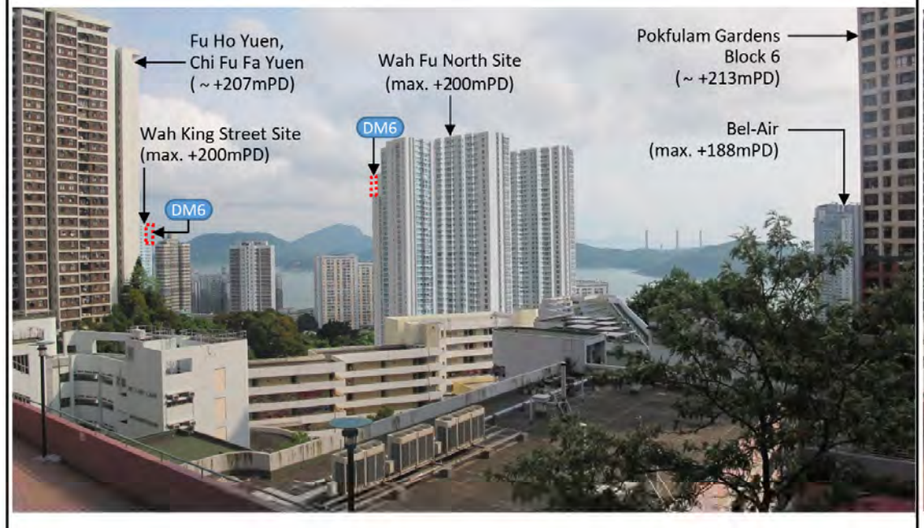
合成照片
PHOTOMONTAGE

參考編號
REFERENCE No.
M/H10/17/20

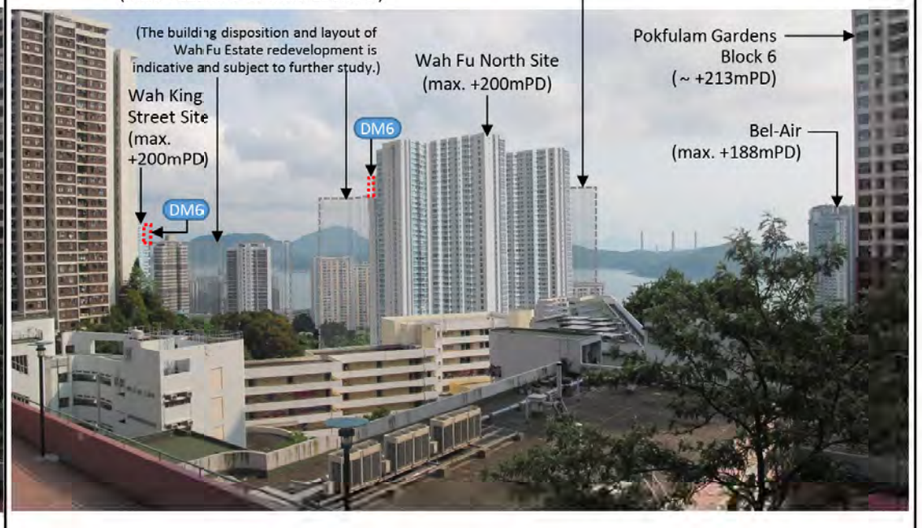
繪圖
DRAWING
13e



Existing View from B2 (VP1a) - North of Podium Garden Atop the Chi Fu Shopping Centre



Photomontage from B2 (VP1a) - North of Podium Garden
Atop the Chi Fu Shopping Centre (with Housing Sites)



Photomontage from B2 (VP1a) - North of Podium Garden
Atop the Chi Fu Shopping Centre (with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
P4 PHOTOMONTAGE FROM B2 (VP1a)

Drawing no.	Rev.
250269/LVIA/6.4	A

Drawn	Date	Checked	Approved
AC	03/17	KC	SYC

Scale
Status: PRELIMINARY

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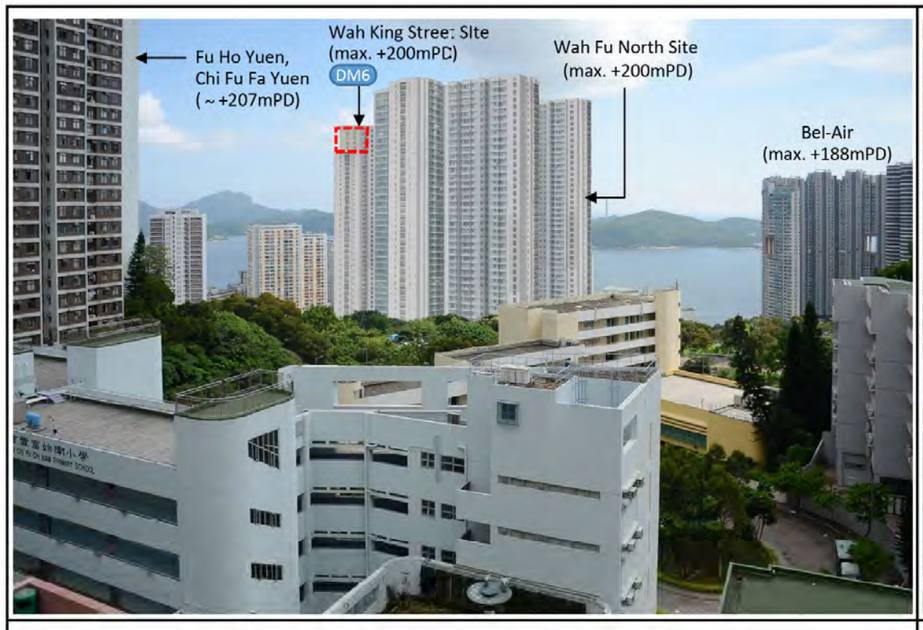
合成照片
PHOTOMONTAGE

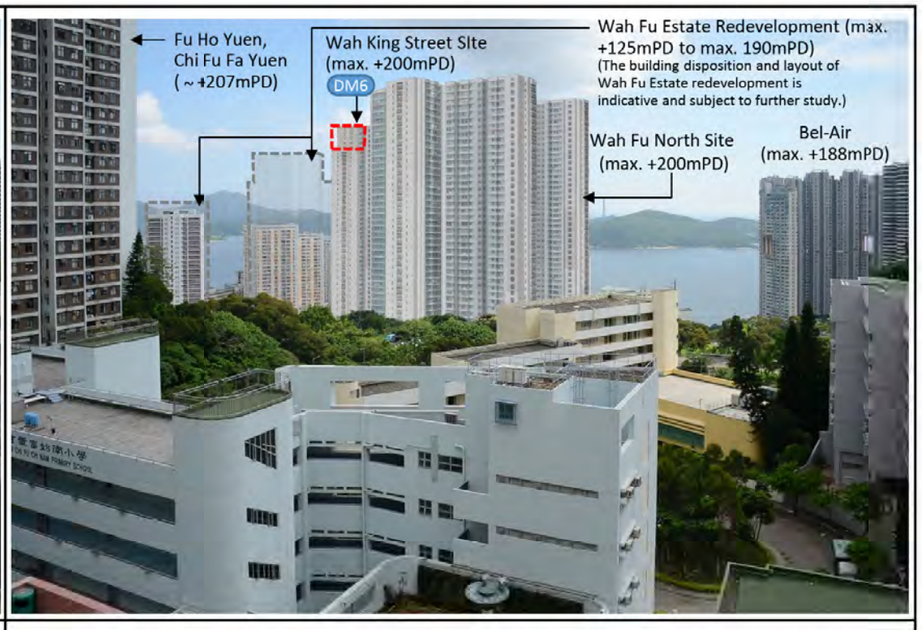
參考編號
REFERENCE No.
M/H10/17/20

繪圖
DRAWING
13f

Existing View from B2 (VP1b) - South of Podium Garden atop the Chi Fu Shopping Centre



Photomontage from B2 (VP1b) - South of Podium Garden Atop the Chi Fu Shopping Centre (with Housing Sites)



Photomontage from B2 (VP1b) - South of Podium Garden Atop the Chi Fu Shopping Centre (with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant
ARUP

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Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
P5 PHOTOMONTAGE FROM B2 (VP1b)

Drawing no.	Rev.
250269/LVIA/6.5	A

Drawn	Date	Checked	Approved
AC	03/17	KC	SYC

Scale
Status: PRELIMINARY

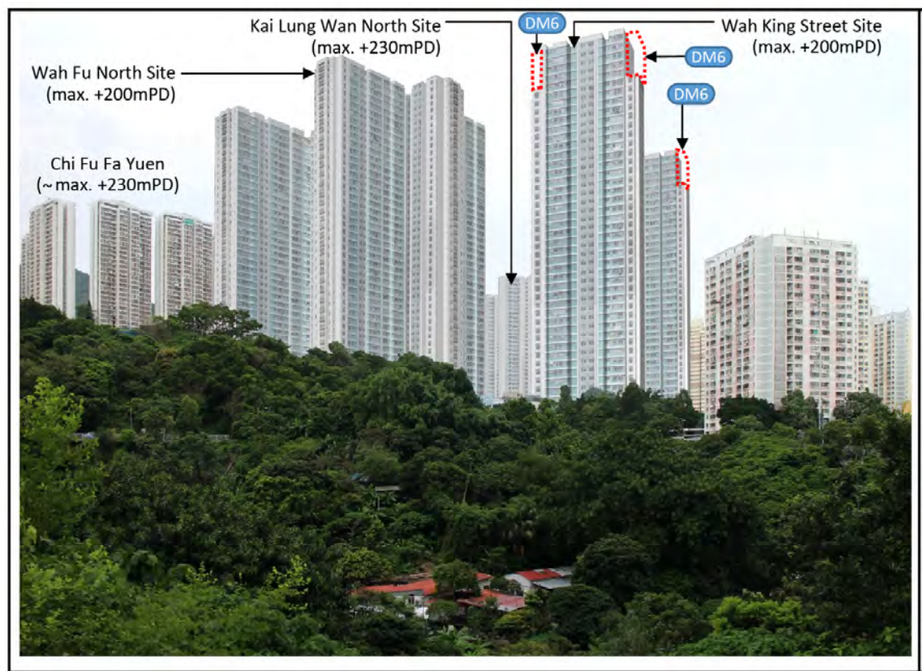
CEDD 土木工程拓展署 Civil Engineering and Development Department

合成照片
PHOTOMONTAGE

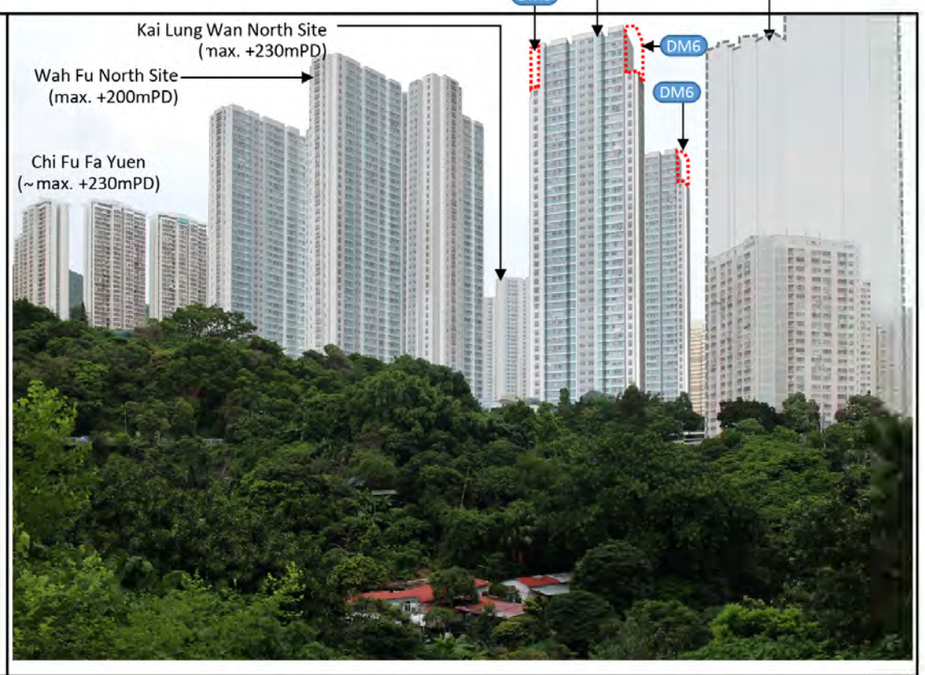
參考編號
REFERENCE No.
M/H10/17/20

繪圖
DRAWING
13g

Existing View from B3 - A Future Open Space Opposite From Bel-Air No. 8



Photomontage from B3 - A Future Open Space Opposite From Bel-Air No. 8
(with Housing Sites)



Photomontage from B3 - A Future Open Space Opposite From Bel-Air No. 8
(with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
P6 PHOTOMONTAGE FROM B3

Drawing no.: 250269/LVIA/6.6 Rev.: A

Drawn	Date	Checked	Approved
AC	03/17	KC	SYC

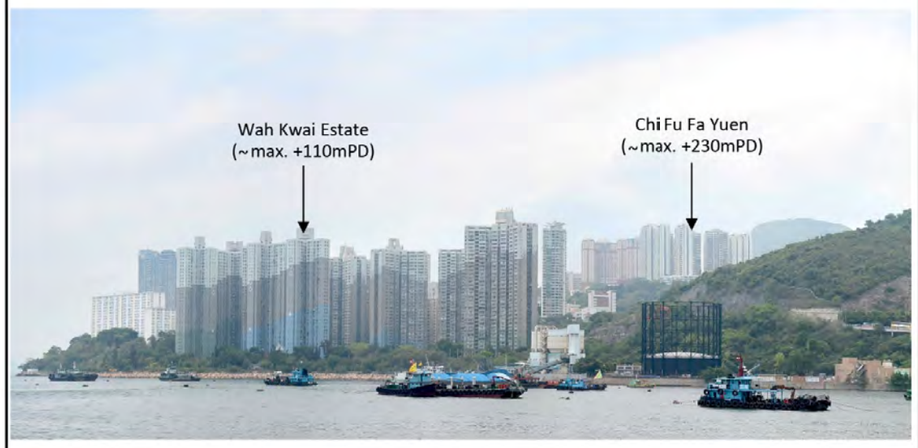
Scale: Status: PRELIMINARY

CEDD 土木工程拓展署 Civil Engineering and Development Department

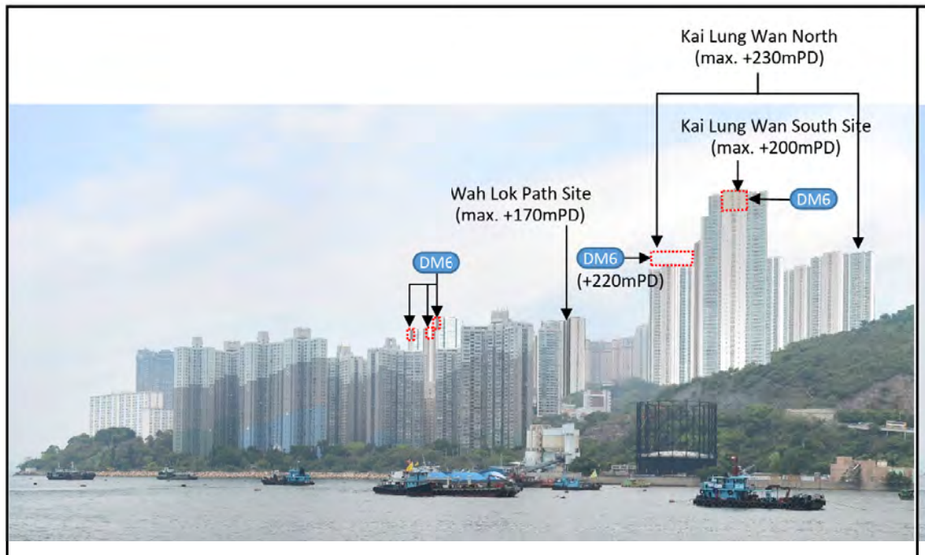
合成照片
PHOTOMONTAGE

參考編號
REFERENCE No.
M/H10/17/20

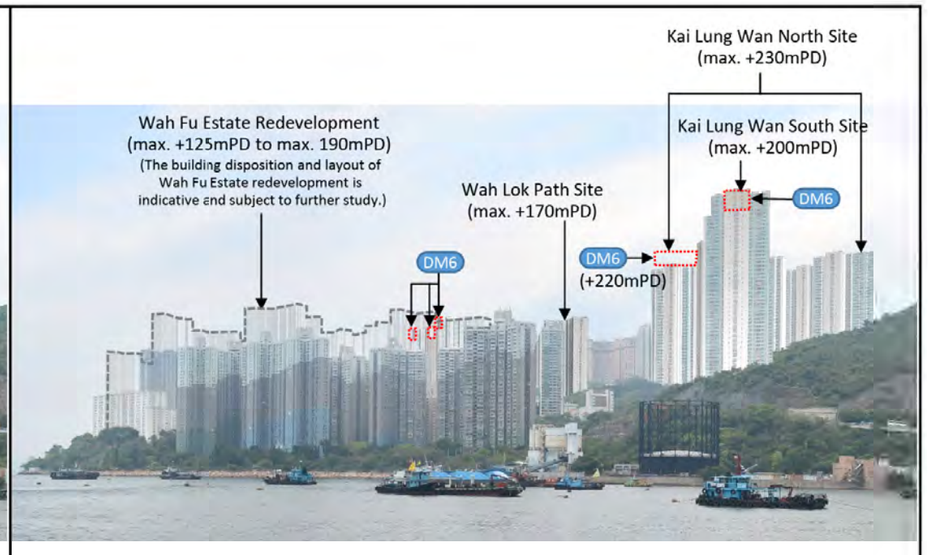
繪圖
DRAWING
13h



Existing View from B4 - Waterfront at South Horizons



Photomontage from B4 - Waterfront at South Horizons
(with Housing Sites)



Photomontage from B4 - Waterfront at South Horizons
(with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
P7 PHOTOMONTAGE FROM B4

Drawing no. 250269/LVIA/6.7 Rev A

Drawn	Date	Checked	Approved
AC	03/17	KC	SYC

Scale
Status PRELIMINARY

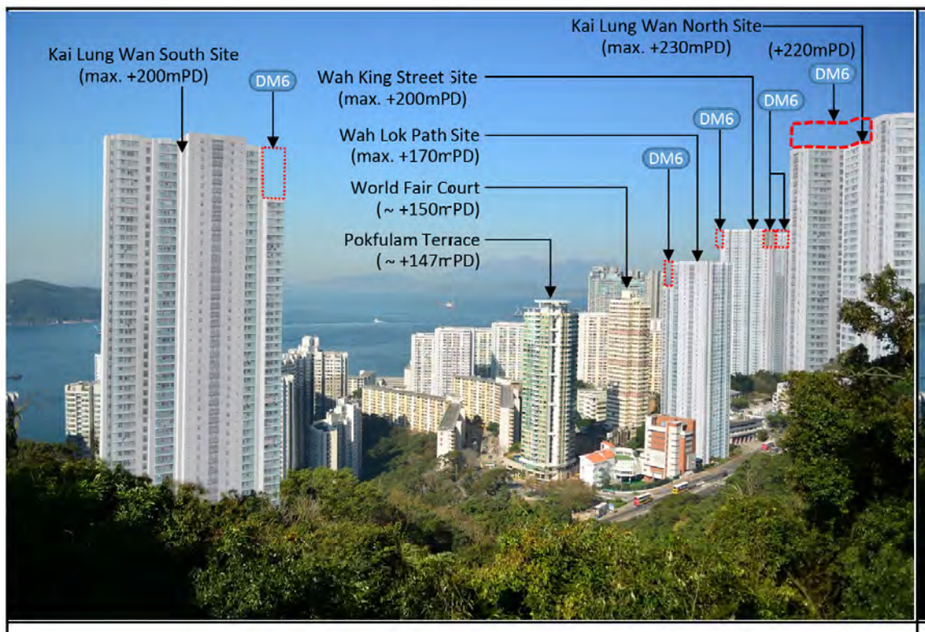
CEDD 土木工程拓展署 Civil Engineering and Development Department

合成照片
PHOTOMONTAGE

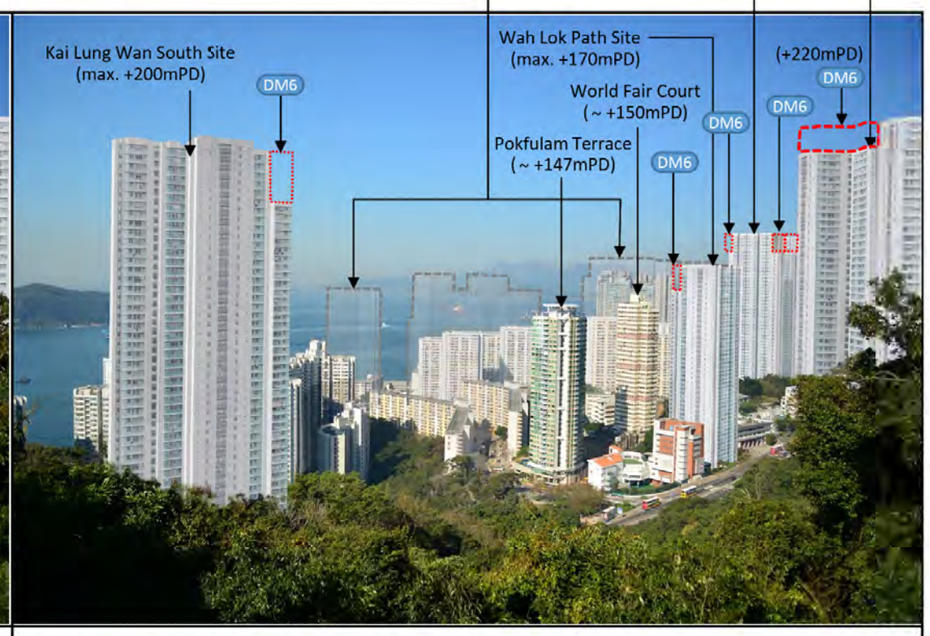
參考編號
REFERENCE No.
M/H10/17/20

繪圖
DRAWING
13i

Existing View from B7-1a - Upper Kai Lung Wan Temporary Sitting-out Area (Facing NW)



Photomontage from B7-1a - Upper Kai Lung Wan Temporary Sitting-out Area (Facing NW)
(with Housing Sites)



Photomontage from B7-1a - Upper Kai Lung Wan Temporary Sitting-out Area (Facing NW)
(with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant
ARUP

Contract No. and Title
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Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
P8 PHOTOMONTAGE FROM B7-1a

Drawing no. 250269/LVIA/6.8 Rev. A

Drawn	Date	Checked	Approved
AC	03/17	AC	SYC

Scale
Status PRELIMINARY

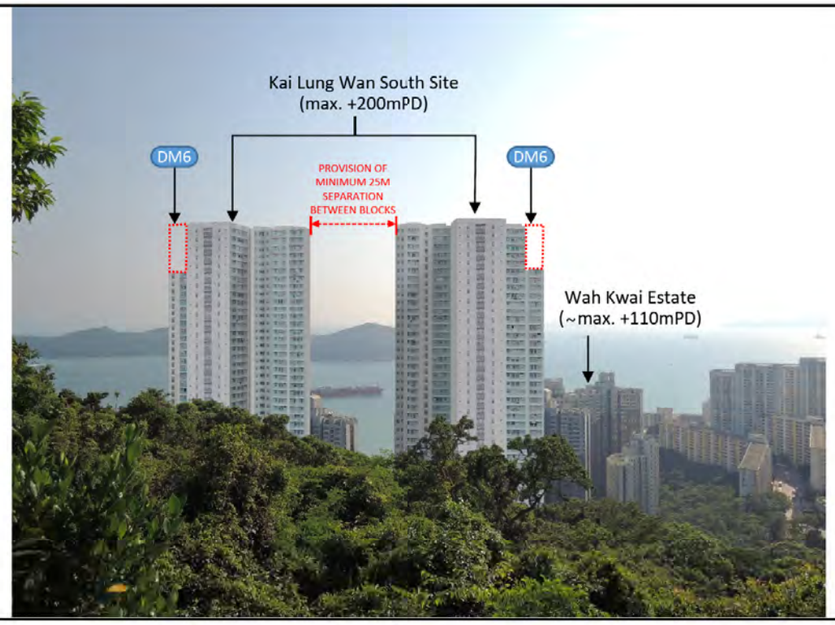
CEDD 土木工程拓展署 Civil Engineering and Development Department

合成照片
PHOTOMONTAGE

參考編號
REFERENCE No.
M/H10/17/20

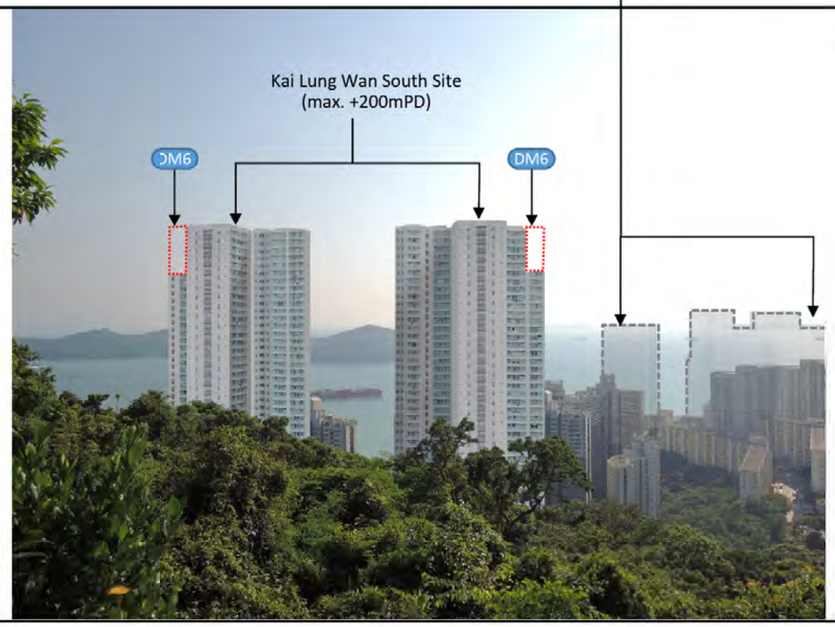
繪圖
DRAWING
13j

Existing View from B7-1b - Upper Kai Lung Wan Temporary Sitting-out Area (facing SW)



Photomontage from B7-1b - Upper Kai Lung Wan Temporary Sitting-out Area (facing SW)
(with Housing Sites)

Wah Fu Estate Redevelopment
(max. +125mPD to max. 190mPD)
(The building disposition and layout of Wah Fu Estate redevelopment is indicative and subject to further study.)



Photomontage from B7-1b - Upper Kai Lung Wan Temporary Sitting-out Area (facing SW)
(with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South Investigation, Design and Construction

Drawing title
P8 PHOTOMONTAGE FROM B7-1b

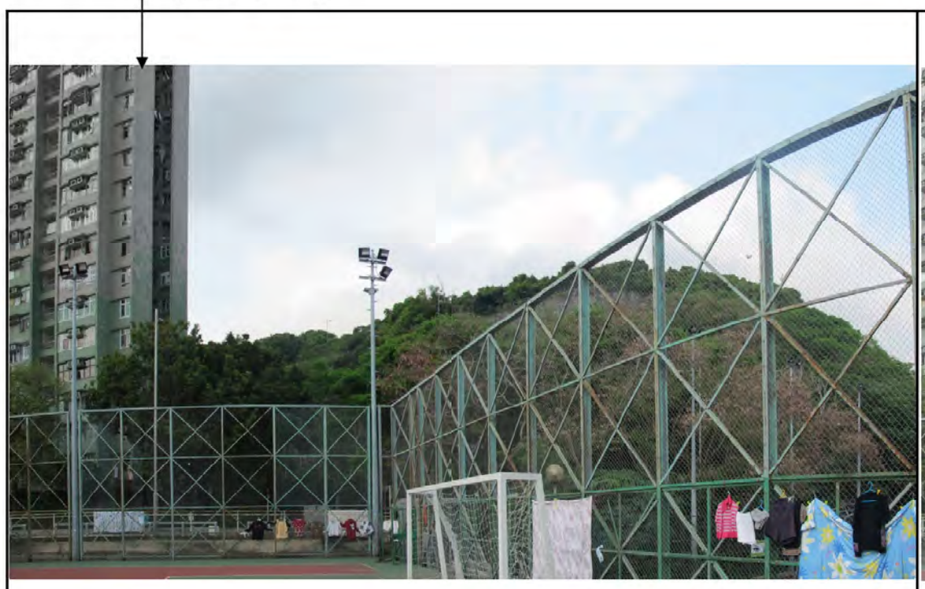
Drawing no. 250269/LVIA/6.8a Rev A

Drawn	Date	Checked	Approved
AC	03/17	KC	SYC

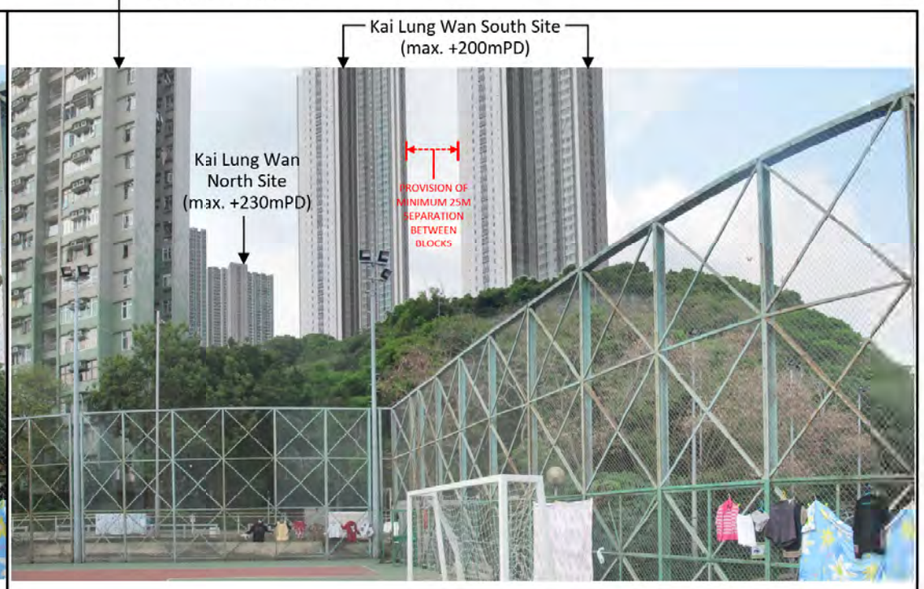
Scale
Status PRELIMINARY

CEDD 土木工程拓展署 Civil Engineering and Development Department

合成照片 PHOTOMONTAGE	參考編號 REFERENCE No. M/H10/17/20	繪圖 DRAWING 13k



Existing View from B8 - Wah Kwai Estate Soccer Pitch



Photomontage from B8 - Wah Kwai Estate Soccer Pitch (with Housing Sites)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
P9 PHOTOMONTAGE FROM B8

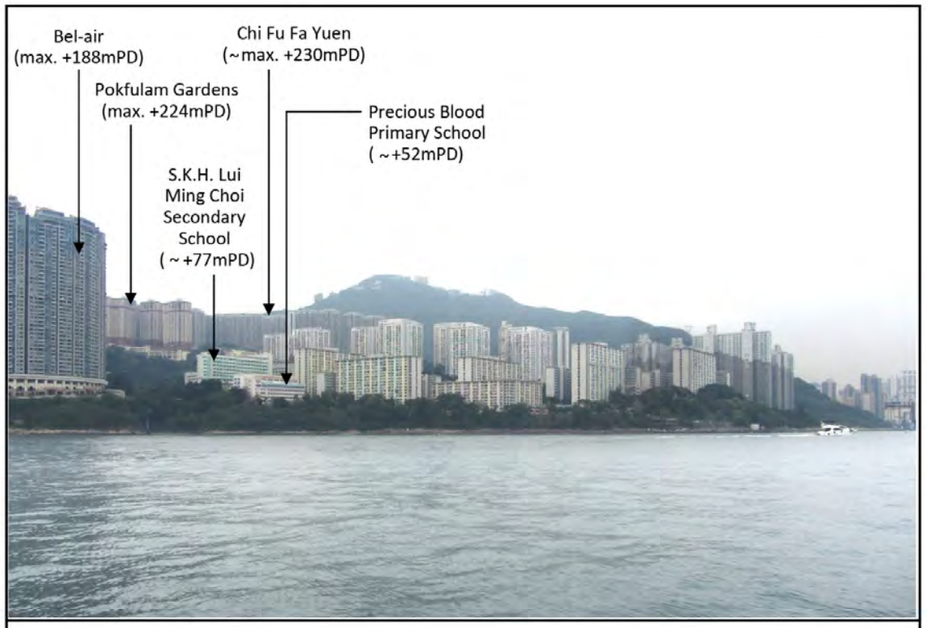
Drawing no.: 250269/LVIA/6.9 Rev: A

Drawn	Date	Checked	Approved
AC	03/17	KC	SYC

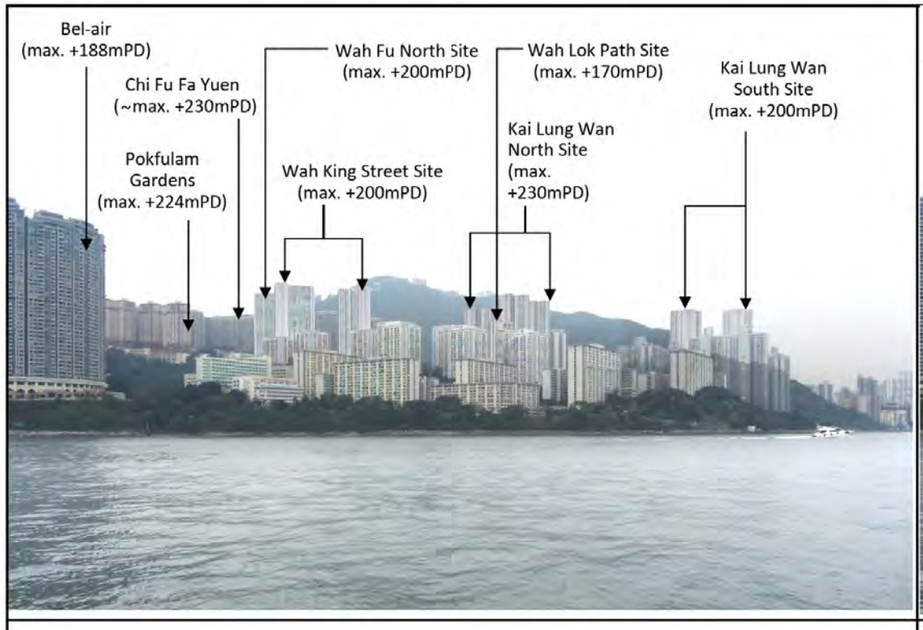
Scale: Status: PRELIMINARY

CEDD 土木工程拓展署 Civil Engineering and Development Department

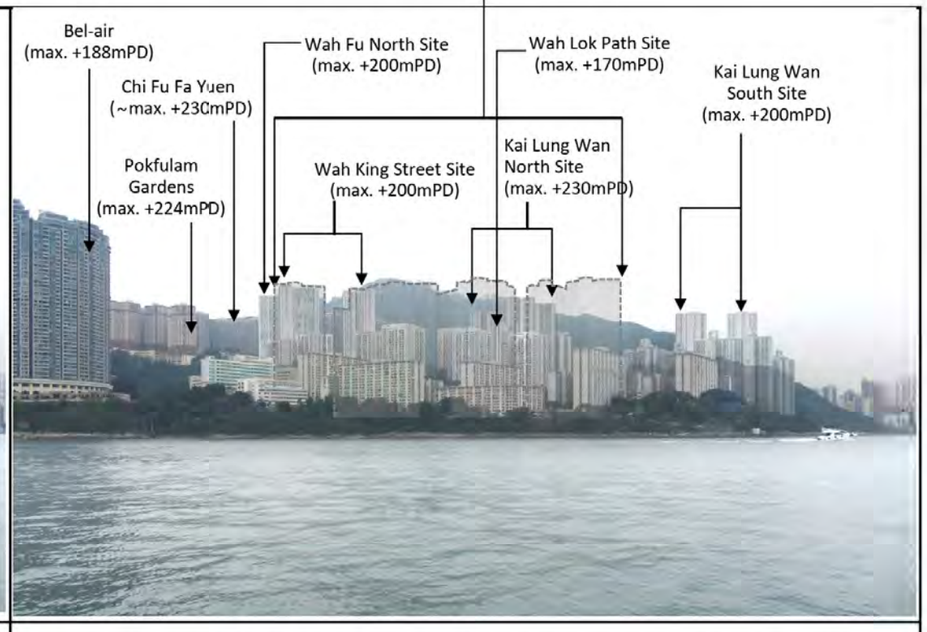
合成照片 PHOTOMONTAGE	參考編號 REFERENCE No. M/H10/17/20	繪圖 DRAWING 13I



Existing View from C1 - Key Ferry Route of Sok Kwu Wan to Central on East Lamma Channel



Photomontage from C1 - Key Ferry Route of Sok Kwu Wan to Central on East Lamma Channel
(with Housing Sites)



Photomontage from C1 - Key Ferry Route of Sok Kwu Wan to Central on East Lamma Channel
(with Housing Sites & Wah Fu Redevelopment)

Wah Fu Estate Redevelopment
(max. +125mPD to max. 190mPD)
(The building disposition and layout of Wah Fu Estate redevelopment is indicative and subject to further study.)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
P10 PHOTOMONTAGE FROM C1

Drawing no.	Rev
250269/LVIA/6.10	A

Drawn	Date	Checked	Approved
AC	03/17	KC	SYC

Scale
Status: PRELIMINARY

CEDD 土木工程拓展署 Civil Engineering and Development Department

合成照片
PHOTOMONTAGE

參考編號
REFERENCE No.
M/H10/17/20

繪圖
DRAWING
13m

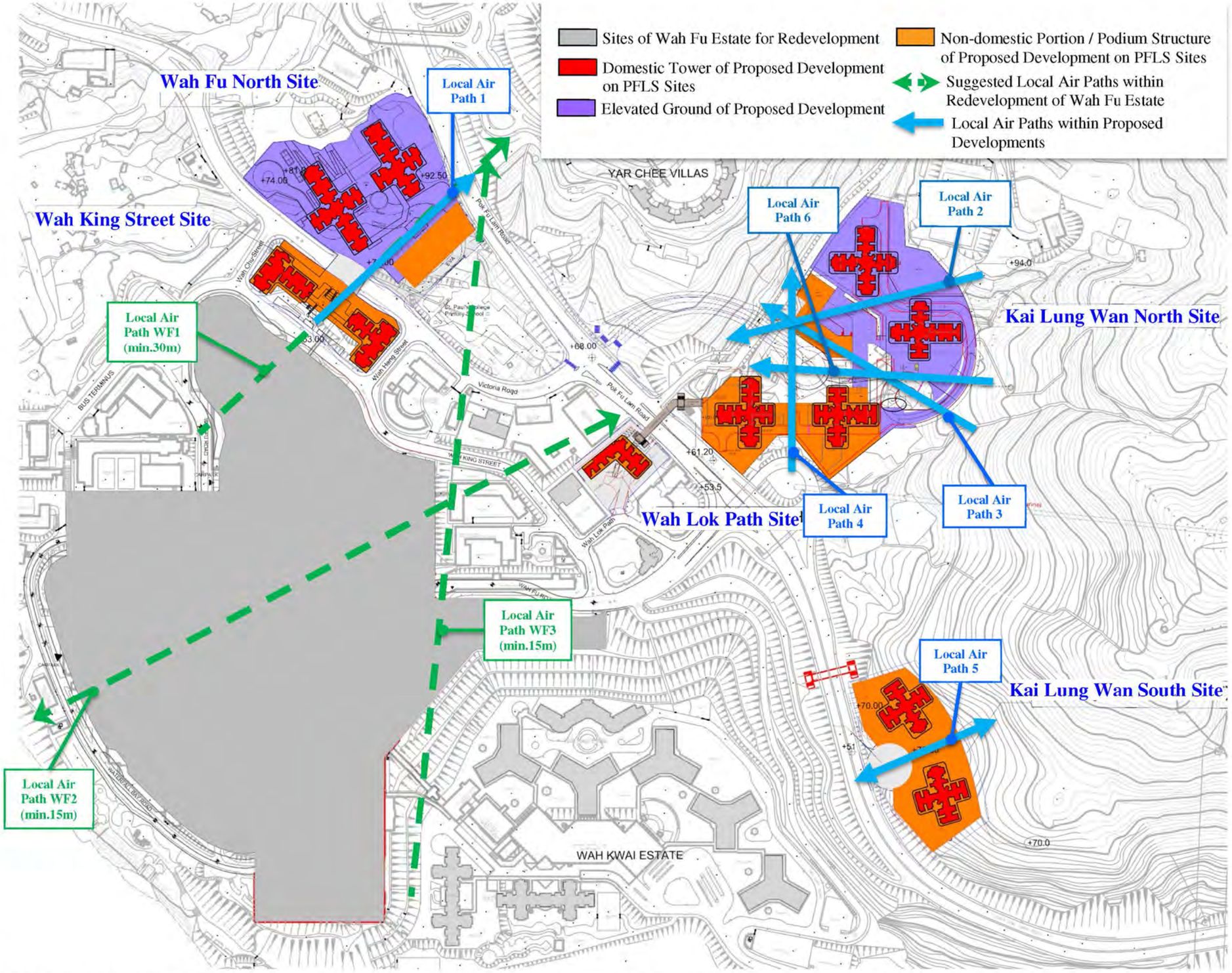
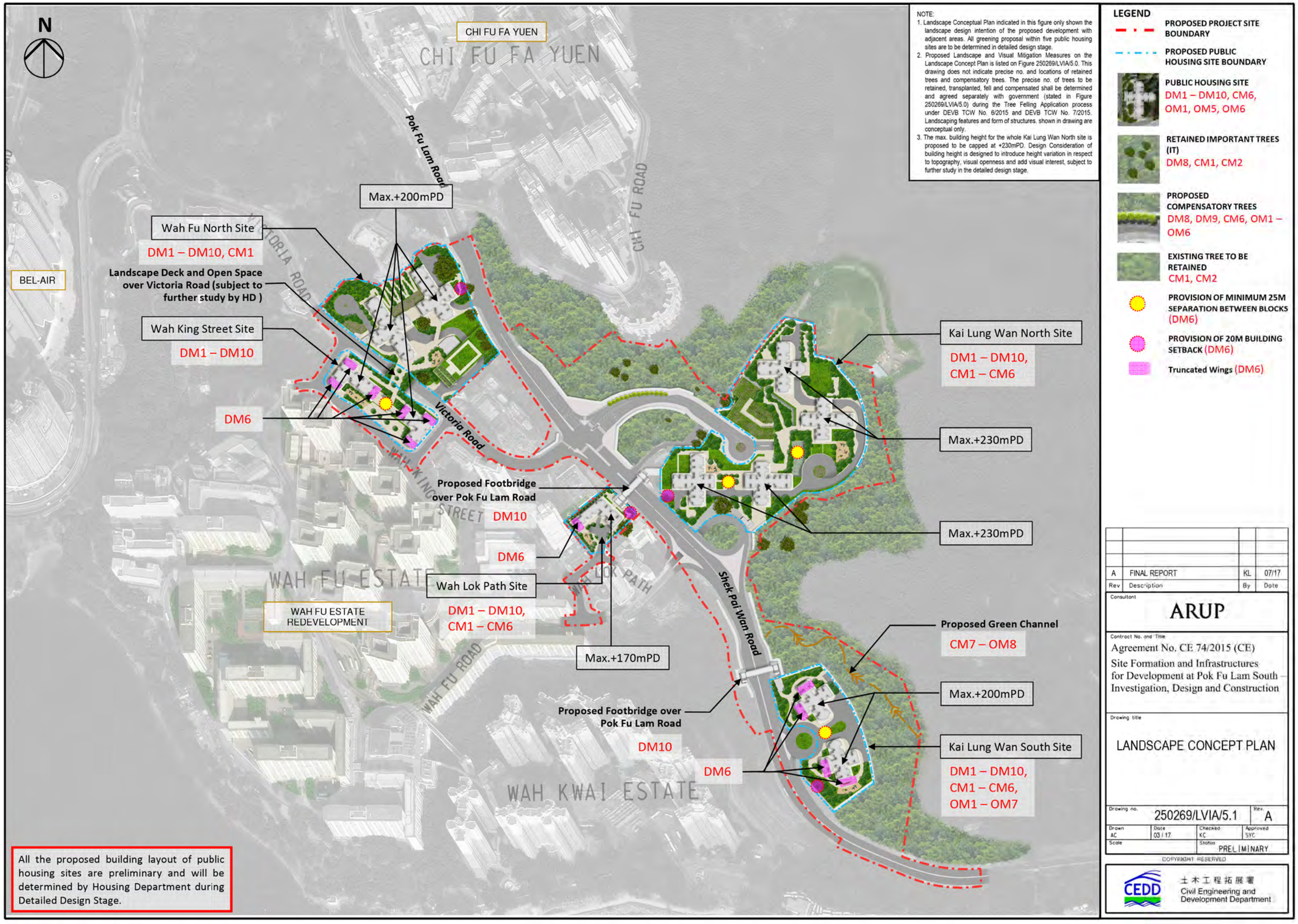


Figure 2 Local Air Paths Identified within the Proposed Developments and Indicative Alignments of Local Air Paths Suggested for WFER in consideration of Pok Fu Lam South Public Housing Developments

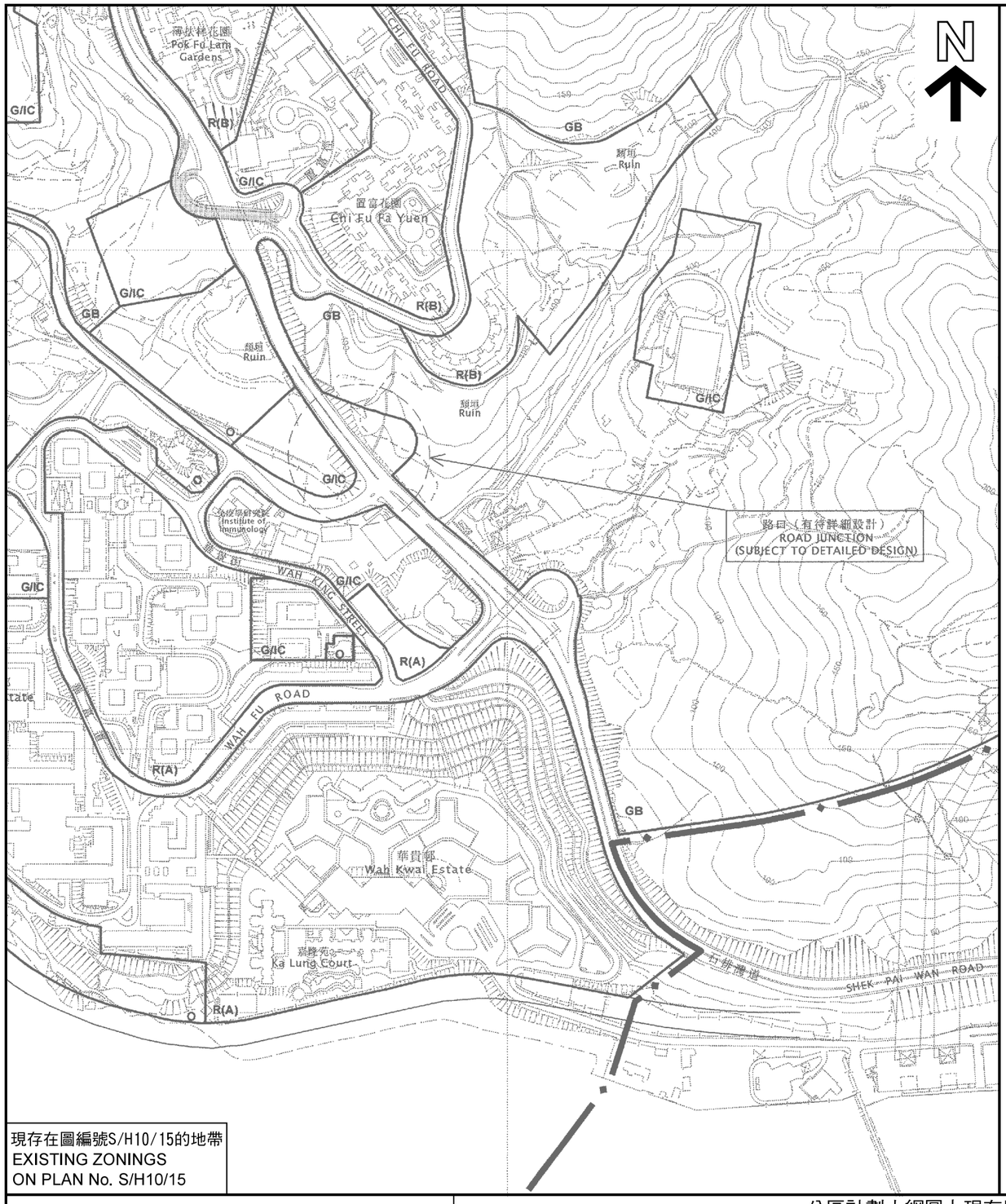
通風廊 LOCAL AIR PATH	參考編號 REFERENCE No. M/H10/17/20	繪圖 DRAWING 14



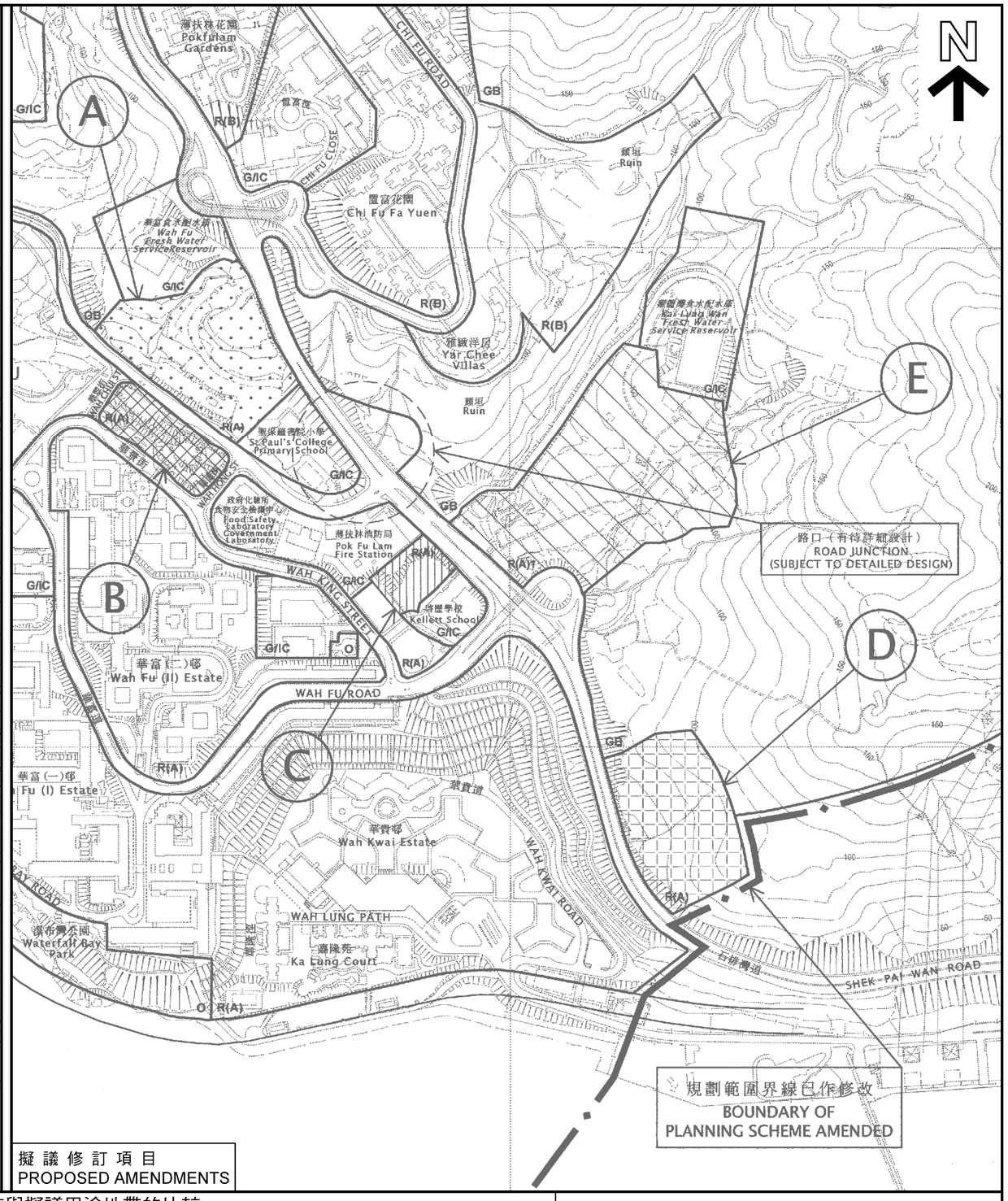
園境概念圖
LANDSCAPE CONCEPT PLAN

參考編號
REFERENCE No.
M/H10/17/20

繪圖
DRAWING
15



現存圖編號S/H10/15的地帶
EXISTING ZONINGS
ON PLAN No. S/H10/15



擬議修訂項目
PROPOSED AMENDMENTS

本摘要圖於2017年8月17日擬備，
所根據的資料為於2005年2月1日
核准的分區計劃大綱圖編號S/H10/15

EXTRACT PLAN PREPARED ON 17.8.2017
BASED ON OUTLINE ZONING PLAN No. S/H10/15
APPROVED ON 1.2.2005

分區計劃大綱圖上現有與擬議用途地帶的比較
COMPARISON OF EXISTING AND PROPOSED ZONINGS ON THE OZP

薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO APPROVED POK FU LAM OZP No. S/H10/15

修訂項目A、B、C、D 和 E
AMENDMENT ITEMS A, B, C, D & E

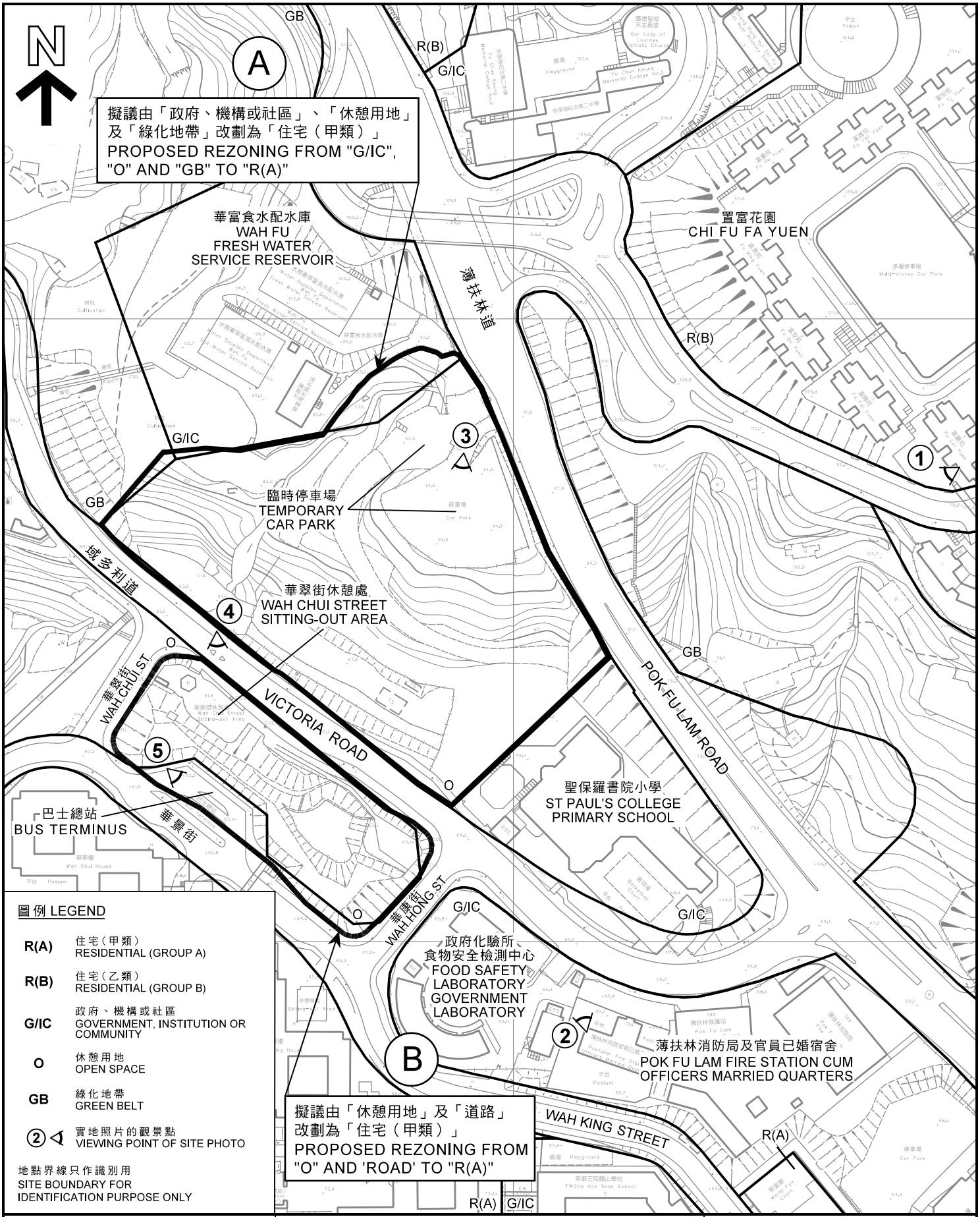
SCALE 1 : 5 000 比例尺

米 METRES 100 0 100 200 300 400 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
1



圖例 LEGEND

R(A)	住宅（甲類） RESIDENTIAL (GROUP A)
R(B)	住宅（乙類） RESIDENTIAL (GROUP B)
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
②	實地照片的觀景點 VIEWING POINT OF SITE PHOTO

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

本摘要圖於2017年8月16日擬備，所根據的資料為測量圖編號 11-SW-22A及B

EXTRACT PLAN PREPARED ON 16.8.2017 BASED ON SURVEY SHEETS No. 11-SW-22A & B

平面圖 SITE PLAN

薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO APPROVED POK FU LAM OZP No. S/H10/15

修訂項目A和B
AMENDMENT ITEMS A & B

SCALE 1 : 2 000 比例尺

米 METRES 40 0 40 80 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
2

航攝照片 AERIAL PHOTO

本摘要圖於2017年8月18日擬備，所根據的資料為地政總署於2017年1月6日拍得的航攝照片編號E011989C

EXTRACT PLAN PREPARED ON 18.8.2017 BASED ON AERIAL PHOTO No.E011989C TAKEN ON 6.1.2017 BY LANDS DEPARTMENT

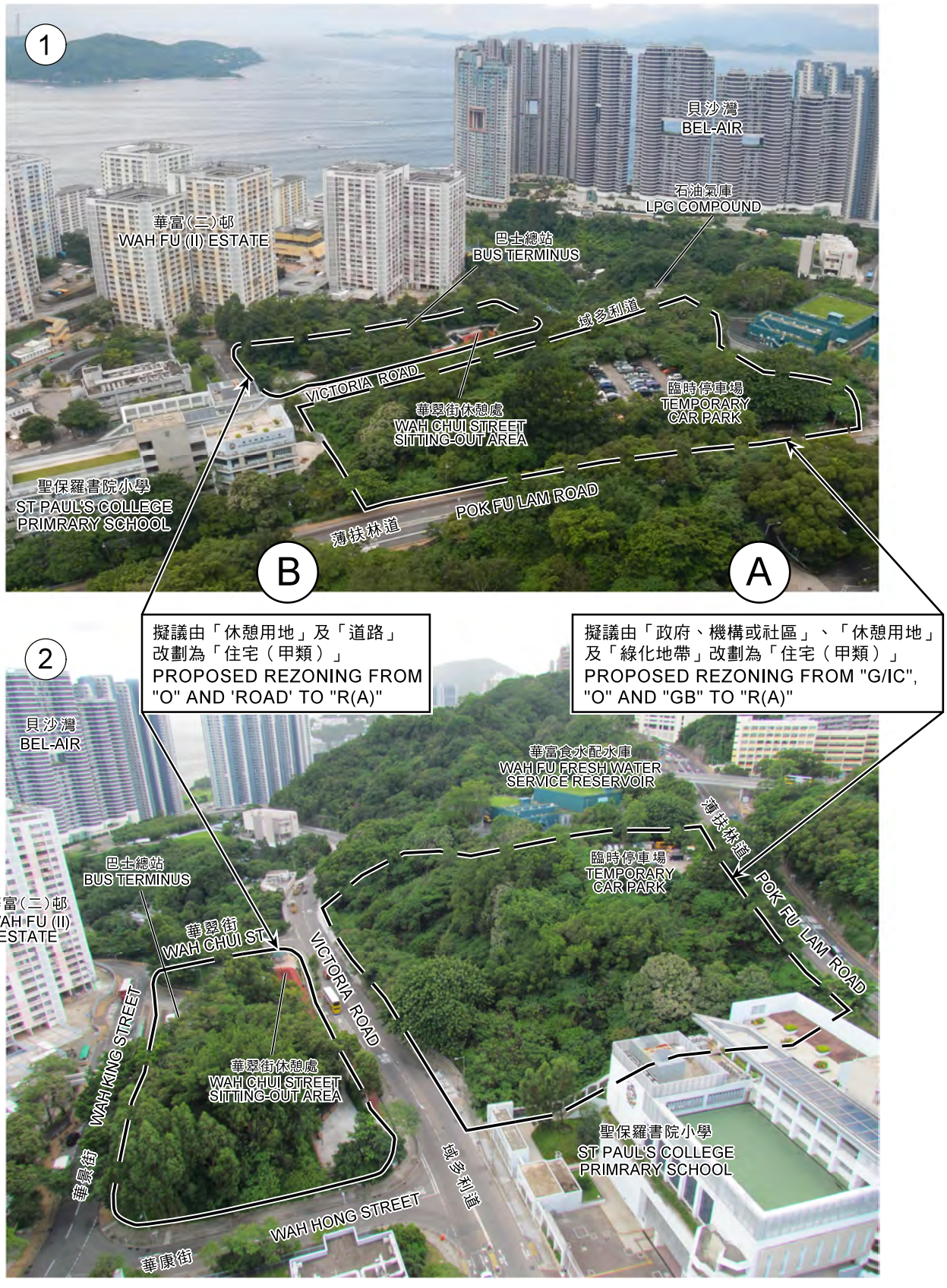
薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO APPROVED POK FU LAM OZP No. S/H10/15

修訂項目A和B
AMENDMENT ITEMS A & B

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
3



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

本圖於2017年8月18日擬備，所根據的資料為攝於2017年7月12日的實地照片
EXTRACT PLAN PREPARED ON 18.8.2017 BASED ON SITE PHOTOS TAKEN ON 12.7.2017

實地照片 SITE PHOTOS

薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO APPROVED POK FU LAM OZP No. S/H10/15

修訂項目A和B
AMENDMENT ITEMS A & B

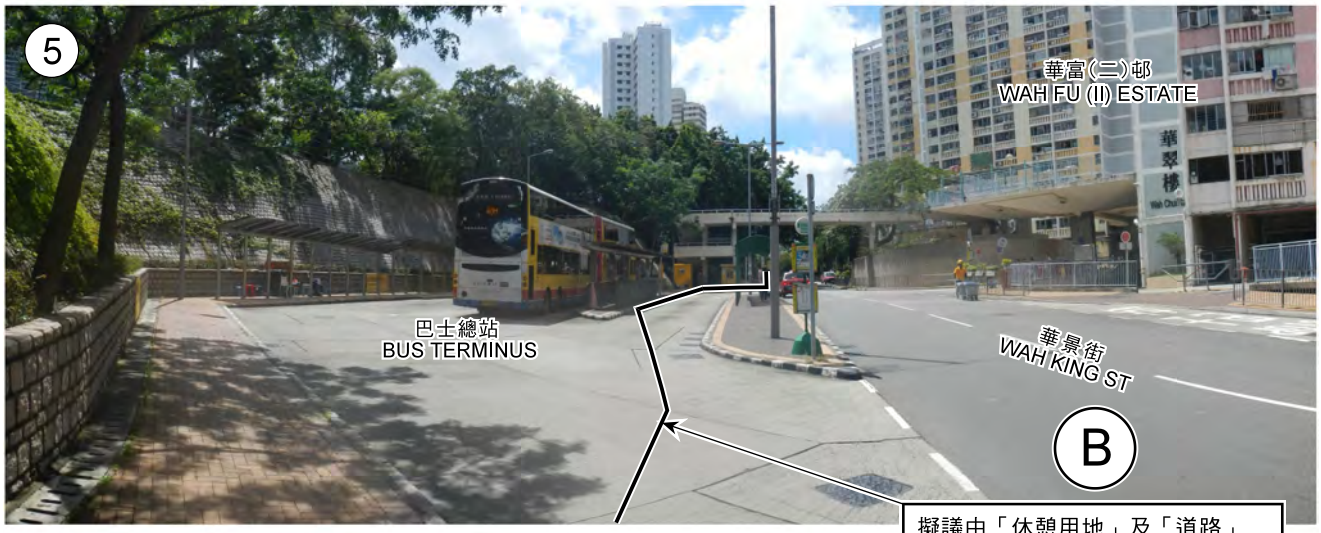
規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
4

A

擬議由「休憩用地」及「道路」改劃為「住宅（甲類）」
PROPOSED REZONING FROM "O" AND 'ROAD' TO "R(A)"



擬議由「休憩用地」及「道路」改劃為「住宅（甲類）」
PROPOSED REZONING FROM "O" AND 'ROAD' TO "R(A)"

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

本圖於2017年8月18日擬備，所根據的資料為攝於2017年7月21日的實地照片
EXTRACT PLAN PREPARED ON 18.8.2017 BASED ON SITE PHOTOS TAKEN ON 21.7.2017

實地照片 SITE PHOTOS

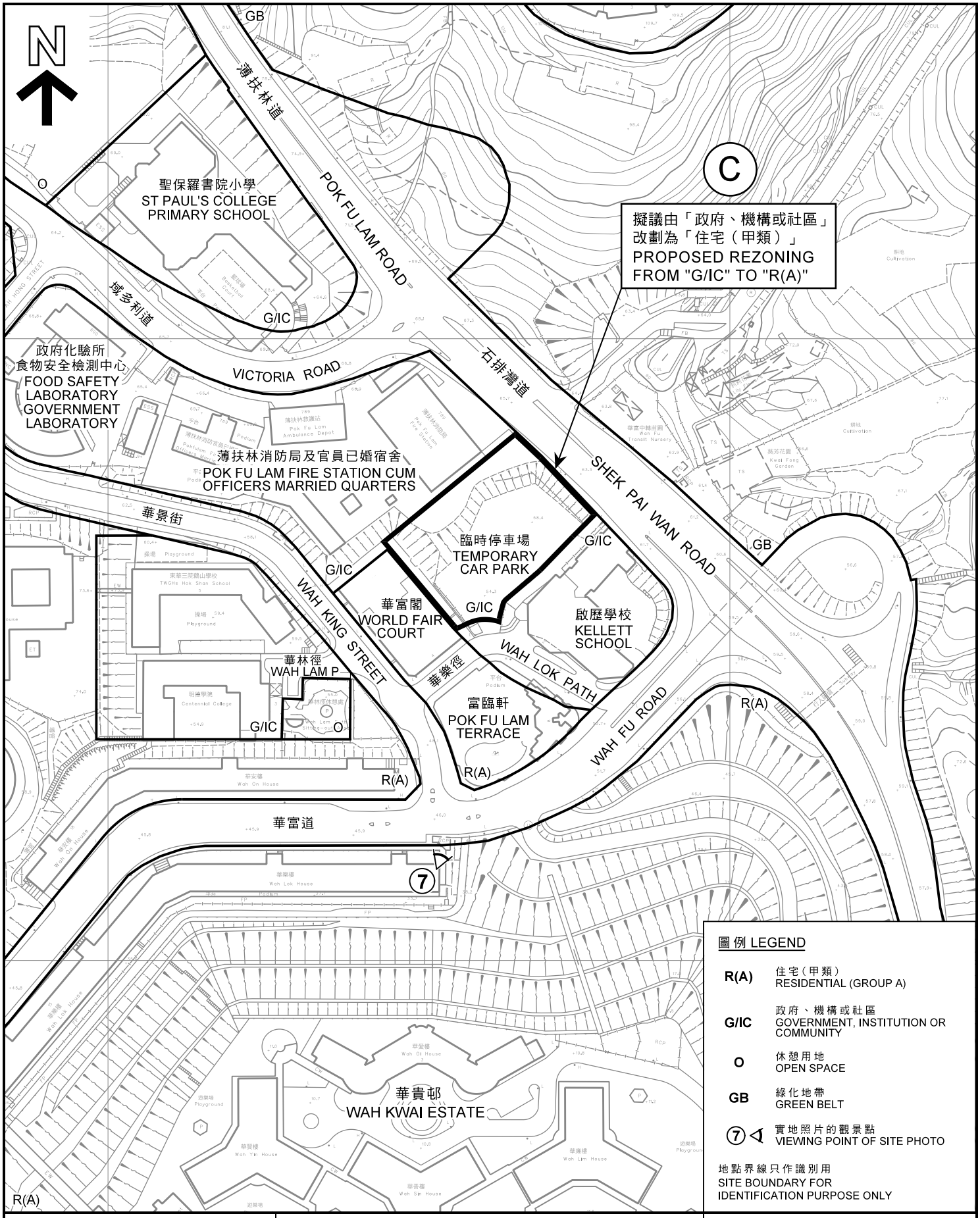
薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO APPROVED POK FU LAM OZP No. S/H10/15

修訂項目A和B
AMENDMENT ITEMS A & B

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
5



圖例 LEGEND

R(A)	住宅（甲類） RESIDENTIAL (GROUP A)
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
⑦	實地照片的觀景點 VIEWING POINT OF SITE PHOTO

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

本摘要圖於2017年8月16日擬備，
所根據的資料為測量圖編號
11-SW-22A, B, C&D

EXTRACT PLAN PREPARED ON 16.8.2017
BASED ON SURVEY SHEETS No.
11-SW-22A, B, C & D

平面圖 SITE PLAN

薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO
APPROVED POK FU LAM OZP No. S/H10/15

修訂項目C
AMENDMENT ITEM C

SCALE 1 : 2 000 比例尺

米 METRES 40 0 40 80 米 METRES

規劃署
PLANNING
DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
6

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

本摘要圖於2017年8月16日擬備，所根據的資料為地政總署於2017年1月6日拍得的航攝照片編號E011989C

EXTRACT PLAN PREPARED ON 16.8.2017 BASED ON AERIAL PHOTO No.E011989C TAKEN ON 6.1.2017 BY LANDS DEPARTMENT

航攝照片 AERIAL PHOTO

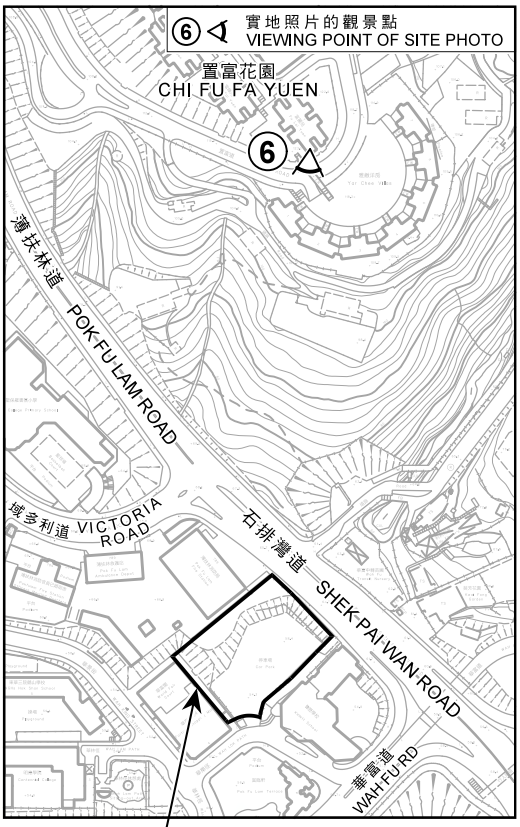
薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO APPROVED POK FU LAM OZP No. S/H10/15

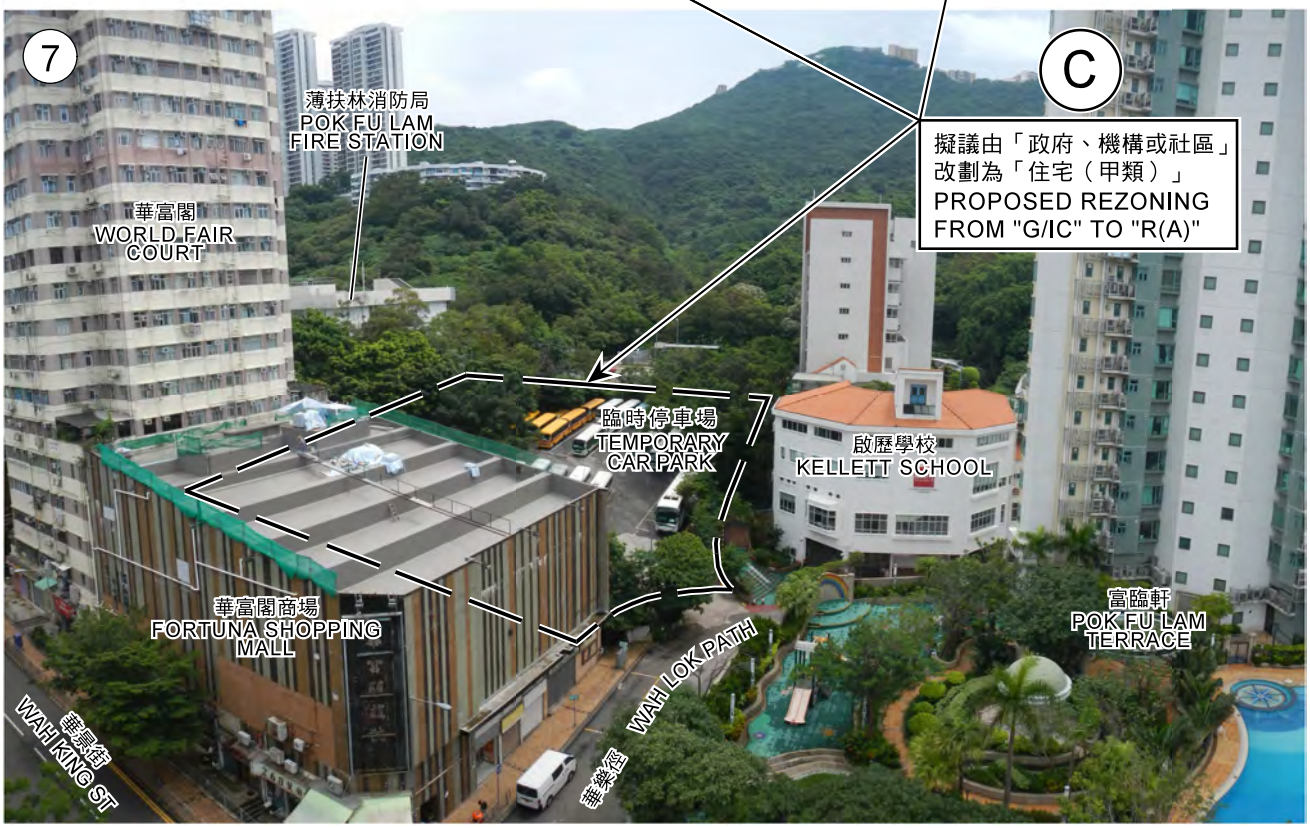
修訂項目C
AMENDMENT ITEM C

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
7





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

本圖於2017年8月16日擬備，所根據的資料為攝於2017年7月12日的實地照片

EXTRACT PLAN PREPARED ON 16.8.2017 BASED ON SITE PHOTOS TAKEN ON 12.7.2017

實地照片 SITE PHOTOS

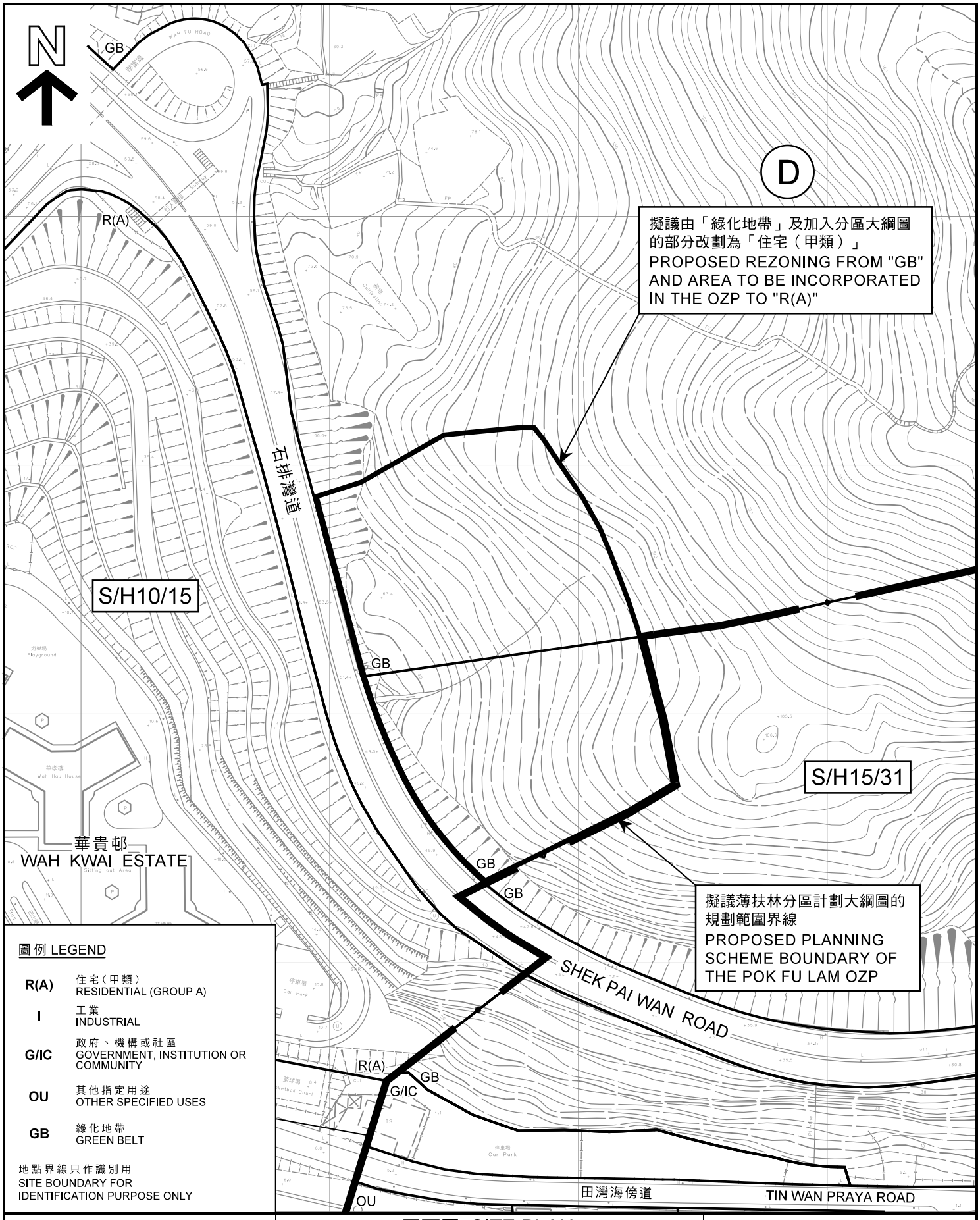
薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO APPROVED POK FU LAM OZP No. S/H10/15

修訂項目C
AMENDMENT ITEM C

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
8



圖例 LEGEND

R(A)	住宅（甲類） RESIDENTIAL (GROUP A)
I	工業 INDUSTRIAL
G/IC	政府、機構或社區 GOVERNMENT, INSTITUTION OR COMMUNITY
OU	其他指定用途 OTHER SPECIFIED USES
GB	綠化地帶 GREEN BELT

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

本摘要圖於2017年8月17日擬備，所根據的資料為測量圖編號 11-SW-22D

EXTRACT PLAN PREPARED ON 17.8.2017 BASED ON SURVEY SHEET No. 11-SW-22D

平面圖 SITE PLAN

薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO APPROVED POK FU LAM OZP No. S/H10/15

修訂項目C
AMENDMENT ITEM C

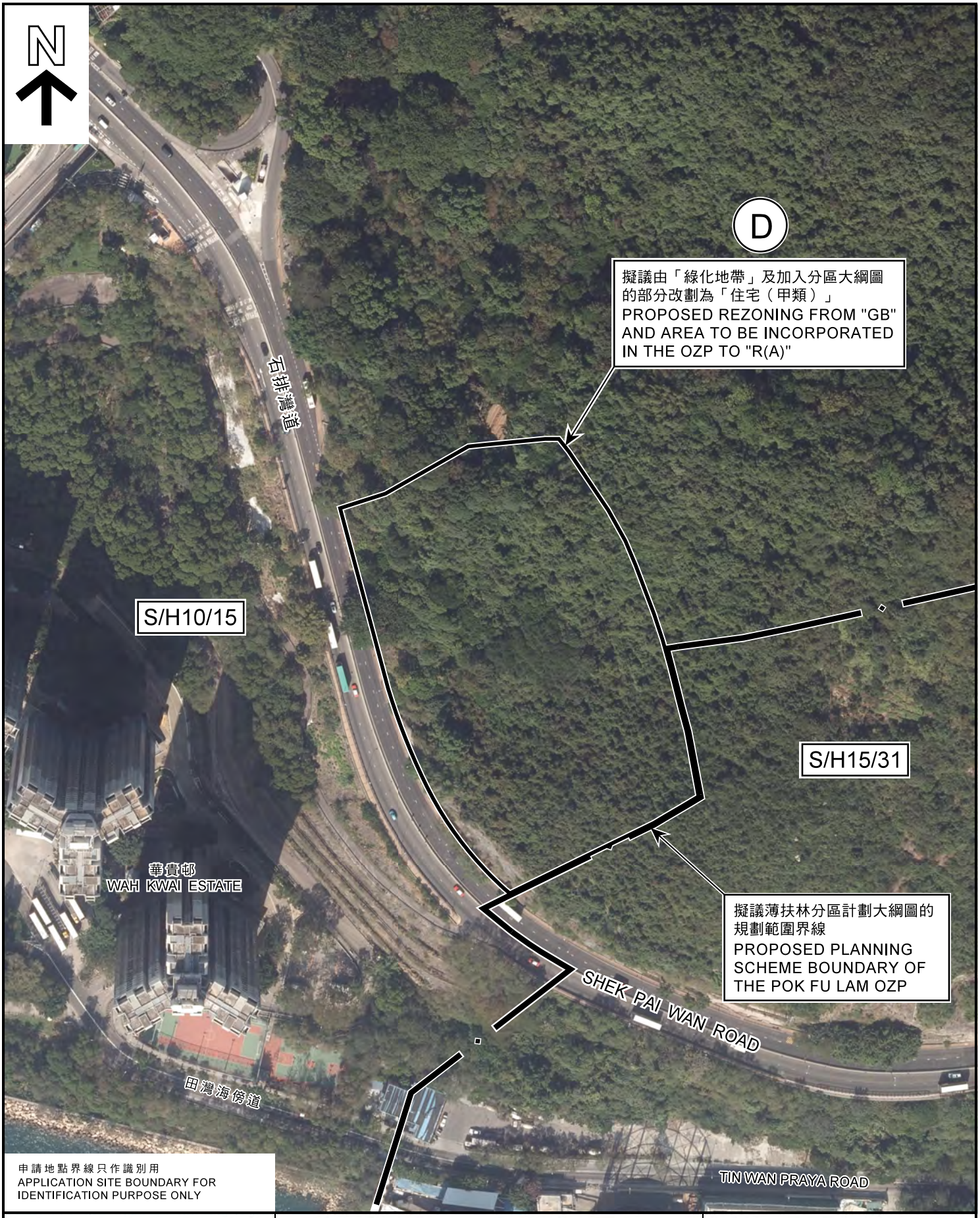
SCALE 1 : 2 000 比例尺

米 METRES 40 0 40 80 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號 REFERENCE No.
M/H10/17/20

圖 PLAN
9



申請地點界線只作識別用
APPLICATION SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

本摘要圖於2017年8月17日擬備，所根據的資料為地政總署於2017年1月6日拍得的航攝照片編號E011989C

EXTRACT PLAN PREPARED ON 17.8.2017 BASED ON AERIAL PHOTO No.E011989C TAKEN ON 6.1.2017 BY LANDS DEPARTMENT

航攝照片 AERIAL PHOTO

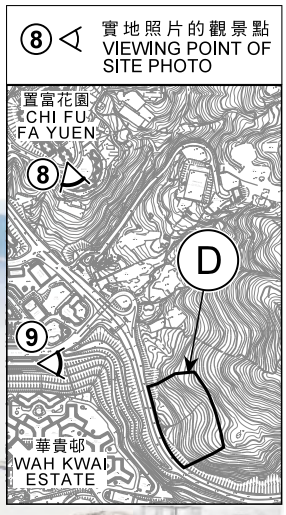
薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO APPROVED POK FU LAM OZP No. S/H10/15

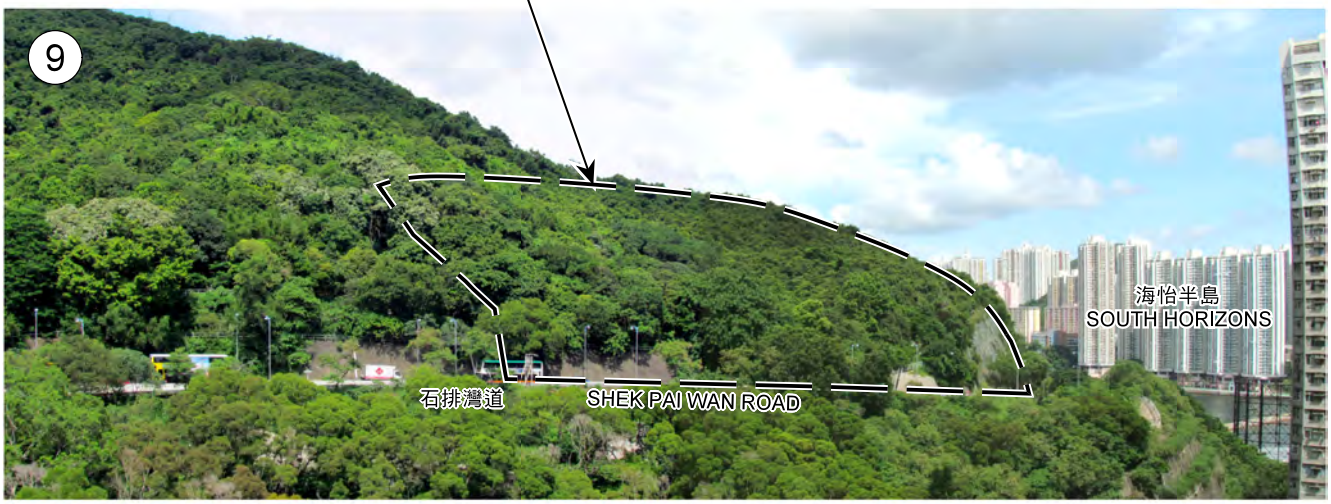
修訂項目D
AMENDMENT ITEM D

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
10





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

本圖於2017年8月18日擬備，所根據的資料為攝於2017年7月12日（上）及2017年7月14日（下）的實地照片

EXTRACT PLAN PREPARED ON 18.8.2017 BASED ON SITE PHOTOS TAKEN ON 12.7.2017 (UPPER) & 14.7.2017 (LOWER)

實地照片 SITE PHOTOS

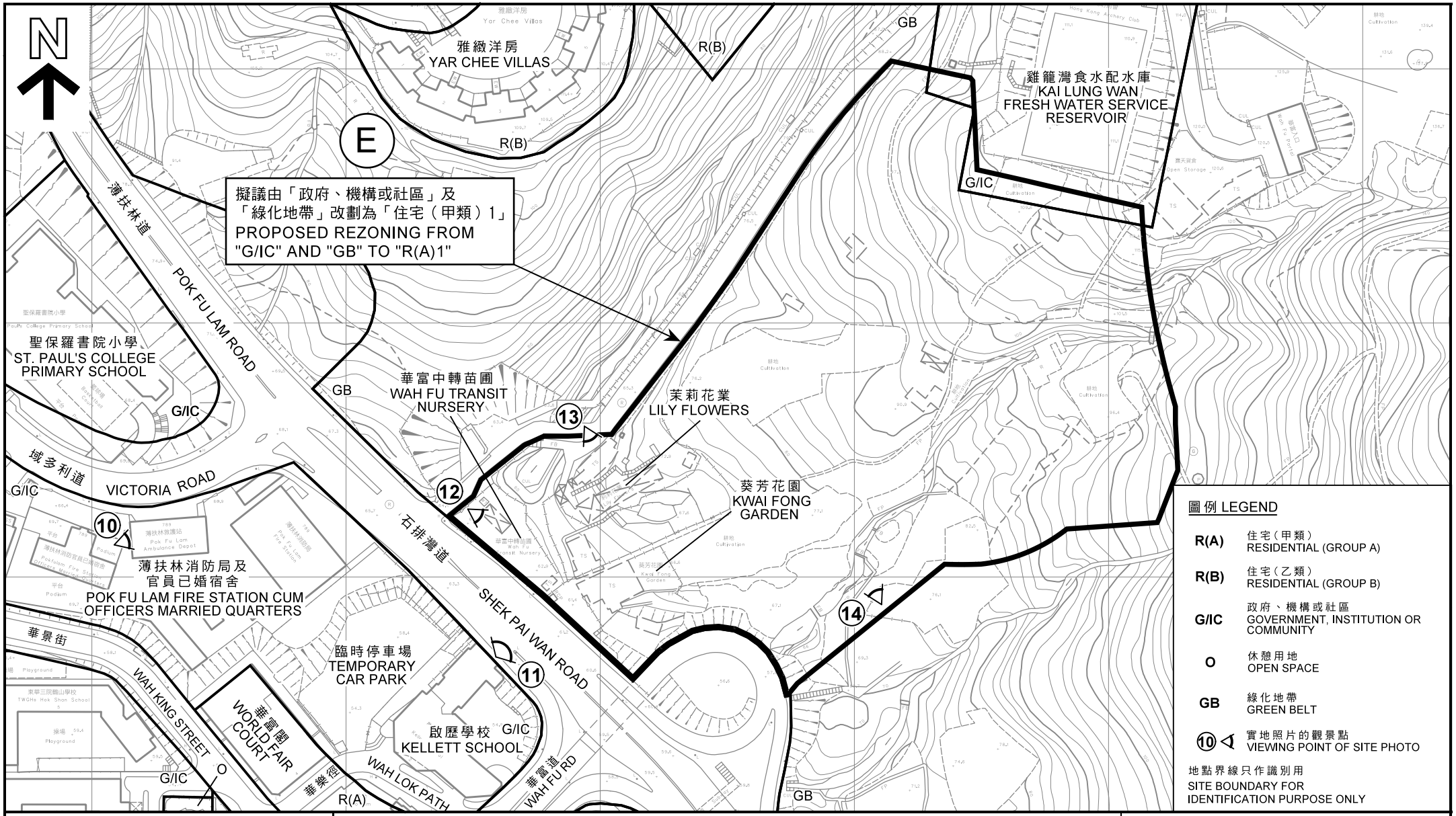
薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO APPROVED POK FU LAM OZP No. S/H10/15

修訂項目D
AMENDMENT ITEM D

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
11



本摘要圖於2017年8月16日擬備，
所根據的資料為測量圖編號
11-SW-22B和D

EXTRACT PLAN PREPARED ON 16.8.2017
BASED ON SURVEY SHEETS No. 11-SW-22B & D

平面圖 SITE PLAN

薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO
APPROVED POK FU LAM OZP No. S/H10/15

修訂項目E
AMENDMENT ITEM E

SCALE 1 : 2 000 比例尺

米 METRES 40 0 40 80 米 METRES

規劃署
PLANNING
DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
12

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

本摘要圖於2017年8月16日擬備，所根據的資料為地政總署於2017年1月6日拍得的航攝照片編號E011989C

EXTRACT PLAN PREPARED ON 16.8.2017
BASED ON AERIAL PHOTO No.E011989C
TAKEN ON 6.1.2017 BY
LANDS DEPARTMENT

航攝照片 AERIAL PHOTO

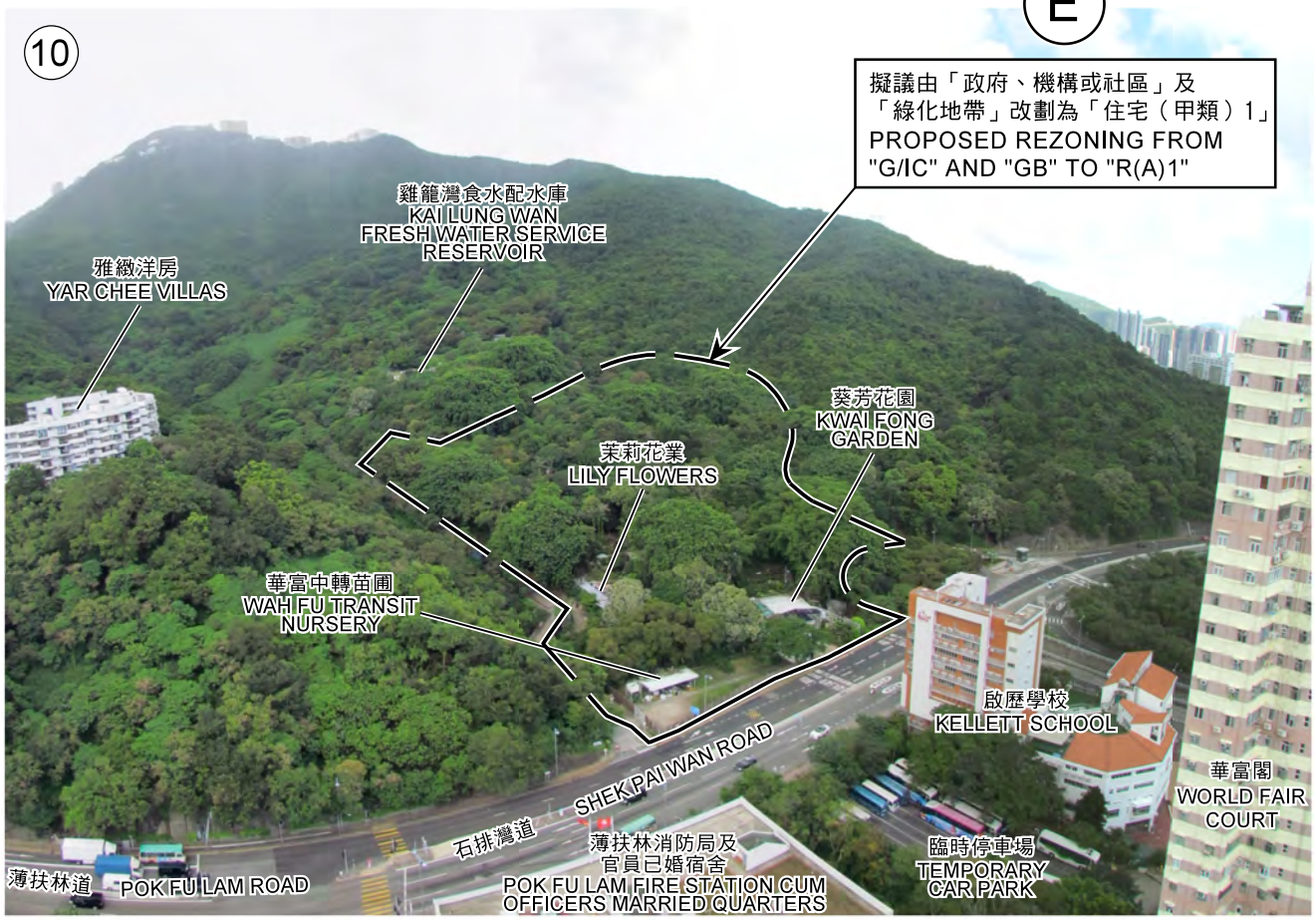
薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO
APPROVED POK FU LAM OZP No. S/H10/15

修訂項目E
AMENDMENT ITEM E

規劃署
PLANNING
DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
13



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

本圖於2017年8月18擬備，所根據的
資料為攝於2017年7月21日的實地照片
EXTRACT PLAN PREPARED ON 18.8.2017
BASED ON SITE PHOTOS TAKEN ON
21.7.2017

實地照片 SITE PHOTOS

薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO
APPROVED POK FU LAM OZP No. S/H10/15

修訂項目E
AMENDMENT ITEM E

規劃署
PLANNING
DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
14

本圖於2017年8月16日擬備，所根據的資料為攝於2017年7月12日(上)、2017年7月14日(中)及2017年7月21日(下)的實地照片

EXTRACT PLAN PREPARED ON 16.8.2017 BASED ON SITE PHOTOS TAKEN ON 12.7.2017 (UPPER), 14.7.2017 (MIDDLE) & 21.7.2017 (LOWER)

實地照片 SITE PHOTOS

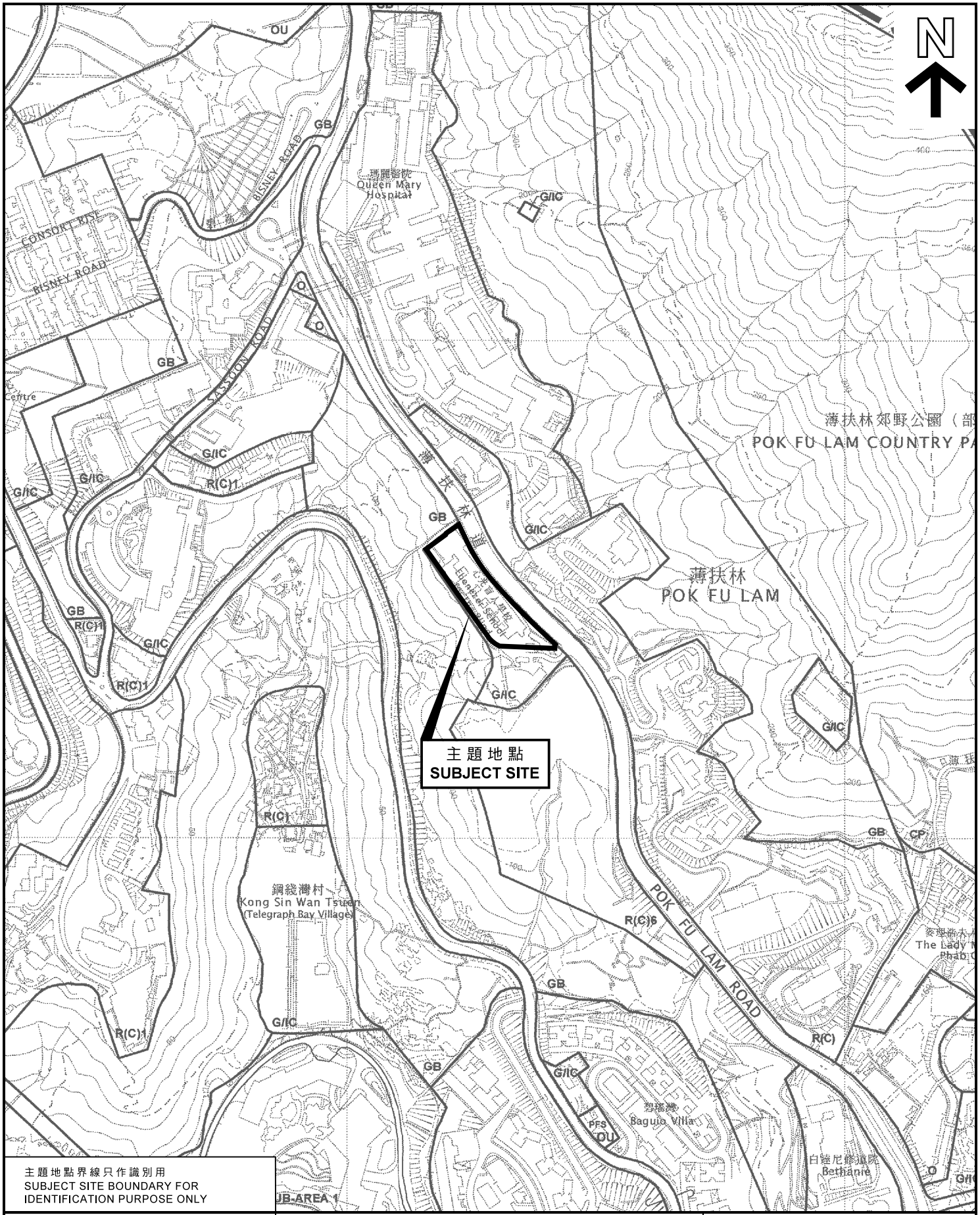
薄扶林分區計劃大綱核准圖編號 S/H10/15 的擬議修訂項目
PROPOSED AMENDMENTS TO
APPROVED POK FU LAM OZP No. S/H10/15

修訂項目E
AMENDMENT ITEM E

規劃署
PLANNING
DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
15



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

本摘要圖於2017年8月16日擬備，
所根據的資料為於2005年2月1日
核准的分區計劃大綱圖編號S/H10/15

EXTRACT PLAN PREPARED ON 16.8.2017
BASED ON OUTLINE ZONING PLAN
No. S/H10/15 APPROVED ON 1.2.2005

位置圖 LOCATION PLAN

心光盲人院暨學校
香港薄扶林薄扶林道131號

THE EBENEZER SCHOOL AND
HOME FOR THE VISUALLY IMPAIRED
131 POK FU LAM ROAD, POK FU LAM, HONG KONG

SCALE 1 : 5 000 比例尺

米 METRES 100 0 100 200 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
M/H10/17/20

圖 PLAN
16

土木工程拓展署
Civil Engineering and Development Department

土木工程處
Civil Engineering Office

Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Report on Technical Assessments to support Rezoning of Five Government Sites for Public Housing Developments at Pok Fu Lam South
(Rpt Ref. 250269-REP-030-02)

August 2017

ARUP

Civil Engineering and Development Department

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2nd Issue | August 2017

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CONTENTS

1 INTRODUCTION

1.1 Background

1.1.1 To increase and expedite the supply of subsidized housing in short to medium term, timely provision of formed land and essential infrastructures is required to support the housing development.

1.1.2 The 2014 Policy Address announced the partial lifting of the administrative Pok Fu Lam Moratorium (PFLM) on development in Pok Fu Lam area to release five government sites for public housing development, as well as the Wah Fu Estate Redevelopment (WFER), which are estimated to provide a total of 11,900 additional public housing units, alongside active consideration of constructing the South Island Line (West) (SIL(W)) to address the transport needs arising from the new public housing developments/redevelopment. The proposed developments in the five sites will serve as major reception resources for WFER and provide additional public rental housing units and subsidised sale flats. After initial technical study, the Housing Department (HD) has decided to develop five government sites near Wah Fu Estate, namely Wah Fu North, Wah King Street, Wah Lok Path, Kai Lung Wan North and Kai Lung Wan South sites[1].

1.1.3 CEDD is tasked with the provision of essential infrastructures and the formation of the Sites to the agreed initial spatial layout (including residential blocks and other facilities) and development parameters supporting the proposed public housing developments there by the Hong Kong Housing Authority (HA) at a later stage. The Housing Department (HD) plans to make use of this new development mainly for re-housing the tenants of existing Wah Fu Estate facilitating their WFER project.

1.1.4 CEDD commissioned Arup on 5 February 2015 under Agreement No. CE 62/2014 (CE) 'Site Formation and Infrastructural Works for Proposed Public Housing Development at Pokfulam South – Feasibility Study' to determine the scope of site formation and infrastructural works to make available the formed land for housing development, to assess the various impacts due to the provision of these infrastructures and housing developments and to recommend the mitigation measures to keep the potential impacts due to the development within the acceptable level of the current standard/regulation.

1.1.5 CEDD commissioned Arup on 20 June 2016 under Agreement No. CE 74/2015 (CE) 'Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction' (this Assignment) to undertake the Investigation, Design, Tender and Construction phases for the proposed works of the Project.

1.2 The Assignment

1.2.1 The objectives of the Assignment comprises the followings:

(1) To review the existing available information, findings and recommendations of the previous studies to work out the details of the Project and to enable the Project

[1] The original five government sites proposed under the 2014 Policy Address were Wah Fu North, Wah King Street, Wah Lok Path, Near Chi Fu Road and Kai Lung Wan sites. The initial study indicated that there were important trees, faunal species of conservation importance, natural stream courses, hiking trails and the Old Dairy Farm Remains at the Near Chi Fu Road site and part of the Kai Lung Wan site.

to be satisfactorily designed, constructed, commissioned in a cost-effective manner, on time and within budget;

(2) To provide services to implement and deliver the Project by way of investigations, surveys, impact assessments, public consultation, preliminary design, detailed design, tendering, project administration, construction supervision and commissioning of the proposed works for meeting the population intake targets, and to the satisfaction of the DR; and

(3) To explore and proposed alternative implementation programme for advancing the completion of Works, e.g. in phases, under this Project in order to avoid/minimize interface between works under this Project and the housing development by HD.

1.3 Scope and Structure of this Deliverable

1.3.1 The objective of the deliverable is to present essential information for the purpose of supporting rezoning of the Sites, by making reference to various assessments and studies of this Assignment. The essential information include the assessment methodologies, summary of findings and the proposed mitigation measures / recommended works for demonstration that there would be no insurmountable impact for the proposed developments in undertaking the rezoning process. This assessment report is considered to be sufficient and suitable to support the rezoning of the Sites.

1.3.2 The Report is structured as follows:

(1) Chapter 1 is this chapter and it gives an introduction of the Project background and the contents of this report.

(2) Chapter 2 summarises the proposed site formation scheme.

(3) Chapter 3 summarises the traffic impact assessment.

(4) Chapter 4 summarises the drainage impact assessment.

(5) Chapter 5 summarises the sewerage impact assessment.

(6) Chapter 6 summarises the water supply study.

(7) Chapter 7 summarises the natural terrain hazard study.

(8) Chapter 8 summarises the preliminary environmental study.

(9) Chapter 9 summarises the hazard to life assessment.

(10) Chapter 10 summarises the air ventilation assessment.

2 PROPOSED SITE FORMATION SCHEME

2.1 Development of Site Formation Scheme

2.1.1 The 2014 Policy Address announced the partial lifting of the administrative Pok Fu Lam Moratorium (PFLM) on development in Pok Fu Lam area to release five government sites for public housing development, as well as the WFER, which are estimated to provide a total of 11,900 additional public housing units, alongside active consideration of constructing the SIL(W) to address the transport needs arising from the new public housing developments/redevelopment. The proposed developments in the five sites will serve as major reception resources for WFER and provide additional public rental housing units and subsidised sale flats. After initial technical study, the Housing Department (HD) has decided to develop five government sites near Wah Fu Estate, namely Wah Fu North, Wah King Street, Wah Lok Path, Kai Lung Wan North and Kai Lung Wan South sites[2] as shown in **Plan No. 250269/E/02/001**.

2.1.2 Subsequent to the feasibility study (FS) under the agreement CE 62/2014, the proposed development boundaries and layout have been adjusted to address the concerns raised in the FS.

Ecological Consideration

2.1.3 Wah Fu North Site, Wah King Street Site and Wah Lok Path Site pose no significant ecological constraint as the habitats are, broadly speaking, urbanized and disturbed, supporting neither habitats nor species of ecological significance. However, habitats (secondary woodland, hillside shrubland and natural watercourses) and flora and fauna of higher ecological value and conservation significance have been identified at Near Chi Fu Road Site and Kai Lung Wan Site in the course of the FS. Though signs of previous human settlement (e.g. abandoned houses and orchard trees) were noted under the mosaic of secondary woodland, shrubland and plantation in Near Chi Fu Road Site, these habitats, together with the natural watercourse running from Pok Fu Lam Country Park at a distance, have provided higher habitat quality and diversity to the local flora and fauna species than the sites to the west of Pok Fu Lam Road.

2.1.4 Ecological assessment has also identified the presence of comparatively higher number and density of flora and fauna species of conservation importance in a semi-mature secondary woodland at the central portion of Kai Lung Wan Site. This central portion is covered by a woodland patch with a comparatively less disturbed, more mature closed-canopy overstorey, and ecologically linked with the extensive woodland area. This woodland patch provided closed canopy of riparian vegetation along a natural watercourse running from the hillside upstream. The association of the woodland patch and natural watercourse has provided a dynamic ecosystem for local fauna utilization. In comparison to the terrestrial habitats (mainly secondary woodland and shrubland) in the remaining parts of Kai Lung Wan Site (i.e. later known as Kai Lung Wan North and South Sites), however, these latter habitats show more signs of human disturbance (such as existing structures or ruins and plant nurseries, scattered patches of fruit tree cultivation with management, and domestic waste close to the seasonal watercourse) throughout

[2] The original five government sites proposed under the 2014 Policy Address were Wah Fu North, Wah King Street, Wah Lok Path, Near Chi Fu Road and Kai Lung Wan sites. The initial study indicated that there were important trees, faunal species of conservation importance, natural stream courses, hiking trails and the Old Dairy Farm Remains at the Near Chi Fu Road site and part of the Kai Lung Wan site.

years. Ecological values of these terrestrial habitats are comparatively lower than the central part of the secondary woodland and its associated natural watercourse in Kai Lung Wan Site.

2.1.5 In order to avoid direct impact on the secondary woodlands, shrubland and natural watercourses of higher ecological values as far as possible, the proposed development layout has been revised to avoid the woodland area within Near Chi Fu Road Site and the central portion of Kai Lung Wan Site. Under the revised development layout, the affected area of secondary woodland has been largely reduced and the watercourse running within the central portion of Kai Lung Wan Site with its closed canopy of riparian vegetation has been largely avoided. Avoidance of the secondary woodland and the semi-natural watercourse retains the ecological connectivity between lowland areas and upland woodland, hence, preserving most of the local ecological characteristics and biodiversity as far as feasible. Section 8.5 of this report summarizes the ecological assessment of the latest development layout.

Cultural Heritage Consideration

2.1.6 Apart from the ecological constraints, preservation of potential cultural heritage resources is also considered in formulating the revised layout. There are no sites of archaeological interest, declared monuments or historic buildings with confirmed grading within or close to the Project Site boundary. However, the FS identified a number of remaining structures of the Old Dairy Farm in Pok Fu Lam in which some are located within and around the Near Chi Fu Road Site and Kai Lung Wan North Site. Subsequent a total of 62 remaining structures were identified by AMO and later included into the list of new items for grading assessment by the Antiquities Advisory Board (AAB). Amongst the 62 items, the proposed grading of 21 items related to cowsheds, bull pen and paddocks has been endorsed by AAB at its meeting on 8 June 2017. As per the prevailing practice, the proposed grading of these 21 items together with their heritage appraisals have been uploaded to the website of AAB for a one-month consultation. Efforts would be made to avoid causing disturbance to the items pending grading assessment and further advice from AMO should be sought upon completion of the grading exercise. Section 8.7 of this report summarizes the cultural heritage assessment of the latest development layout.

Revised Development Layout

2.1.7 In conclusion of the above, Near Chi Fu Road Site has been avoided whereas Kai Lung Wan Site has been revised to Kai Lung Wan North Site and Kai Lung Wan South Site to minimize ecological impacts; to avoid potential cultural heritage resources resulting from the proposed development as well as to avoid any potential delay to the implementation programme of the Project due to the implementation of more extensive ecological mitigation measures arising from the portions with higher ecological values. Another benefit, though unrelated to environmental, is that an existing hiking trail originally affected by the proposed development layout, is now unaffected due to the omission of the central portion of Kai Lung Wan Site from the revised development layout. Throughout the refinement of development proposal in the course of the study, the Project area has been reduced from 18ha at the beginning to 15ha at the interim stage, and now further reduced to 13ha at the current stage with due consideration in minimising any potential impact to the environment and addressing the concerns of the local communities.

2.1.8 The current study now cover the five proposed development sites namely Wah Lok Path Site, Wah Fu North Site, Wah King Street Site, Kai Lung Wan North Site and Kai Lung Wan South Site as shown in **Plan No. 250269/C/002**.

2.2 Wah Lok Path Site

2.2.1 Site Description and Constraints

(1) The relatively small site is bounded by Shek Pai Wan Road, Pok Fu Lam Fire Station, private lot no. IL 8273 NNG (World Fair Court), Wah Lok Path and private lot no. IL 8542 NNG (Kellett School).

(2) The main portion of the site is a temporary open air car park with ingress/egress at Wah Lok Path, and the remaining portion near the north-east and north-west boundaries comprises existing slopes of about 6 metres tall. The topography is mainly gentle except at the existing slopes and the site levels vary from about +52mPD to about +66mPD. An existing shrine is observed at the service lane abutting Fortuna Shopping Mall and World Fair Court. Moreover, Important Trees are identified from individual tree survey within the site boundary. The criteria for "Important Trees" is as stipulated in ETWB TC(W) No. 29/2004 and DEVB TC(W) No. 7/2015.

2.2.2 Proposed Site Formation Layout

(1) A platform is proposed to be formed at a level +53 mPD. The existing slope at the north-western side of the site will be excavated. Bored pile wall with retaining height up to approx. 14m will be adopted at the north-western and north-eastern boundaries. RC retaining walls with retaining height of 2 to 9m are proposed at remaining portion of site boundaries. The existing shrine at the service lane abutting Fortuna Shopping Mall and World Fair Court and is proposed to be retained at its original location.

2.3 Wah Fu North Site

2.3.1 Site Description and Constraints

(1) This site is bounded by Pok Fu Lam Road, Victoria Road and lies between the junction of Pok Fu Lam Road / Victoria Road and the junction of Pok Fu Lam Road / Chi Fu Road. The site abuts St. Paul's College Primary School and WSD Wah Fu Fresh Water Service Reservoir at its south-east and north-west sides respectively.

(2) The topography is hilly with levels ranging between +61mPD and +95mPD, and is densely covered with vegetation. The site generally comprises several existing cut platforms at varying levels, separated by a narrow band of quasi-natural hillside with gradients ranging between 20 to 30 degrees. Moreover, certain Important Trees are identified from individual tree survey within the site boundary. Existing temporary open air parking areas and an existing shrine are observed in the northern portion of the site.

(3) A natural watercourse runs along the north-western portion of the site, with its upstream connecting to a drainage pipe underneath Pok Fu Lam Road and its downstream connecting to another drainage pipe underneath Victoria Road.

(4) Two HEC 275kV cables run along north-western portion of the site between Pok Fu Lam Road and Victoria Road.

(5) A LPG compound is sited near the junction of Victoria Road / Wah Chui Street and is just at the opposite side of Victoria Road to the western corner of the site.

2.3.2 Proposed Site Formation Layout

(1) Several platforms are proposed to be formed at the site with the uppermost platform at level +92mPD to +93mPD (subject to detailed survey of the level of the existing HEC cables) abutting Pok Fu Lam Road and the lowest platform at level +64 mPD abutting Victoria Road. RC Retaining walls with retaining height up to 10 m, bored-pile wall with retaining height up to 15m and a series of 30° man-made slopes with aggregate height up to 13 m are proposed to form building platforms.

(2) The existing HEC 275kV cables, which run along north-western portion of the site between Pok Fu Lam Road and Victoria Road, will be retained at their original locations. Bored pile wall, instead of L-shaped retaining wall, may be required adjacent to the existing HEC 275kV cables to avoid conflict with the cables and the foundation of building block on platform at level +92mPD should be designed to provide sufficient clearance from the cables. The existing shrine in the northern portion of the site is proposed to be cleared to facilitate the housing development.

2.4 Wah King Street Site

2.4.1 Site Description and Constraints

(1) This site is bounded by Victoria Road, Wah Chui Street, Wah King Street and Wah Hong Street. The main portion of the site is presently Wah Chui Street Sitting-out Area with some plantation, and the remaining portion comprises a public transport terminus, an elevated walkway across Wah King Street and hilly mounts adjacent to the sitting-out area and the bus terminus where a number of man-made slope and retaining features are situated.

(2) The topography is hilly with levels ranging from +61mPD to +77mPD, except at the public transport terminus where the levels match with the adjacent Wah King Street. The site generally comprises a series of existing cut platforms bounded by a number of registered man-made features. Moreover, Important Trees are identified from individual tree survey within the site boundary.

2.4.2 Proposed Site Formation Layout

(1) A platform with slight crossfall of approx. 3%, from +65 mPD near Wah Hong Street to +61mPD near Wah Chui Street, is proposed such that the platform level will be flushed with the adjoining footpath level along the whole site boundary. Neither man-made slope nor retaining wall is proposed and the existing geotechnical features within the site will be demolished to the site formation level.

2.5 Kai Lung Wan North Site

2.5.1 Site Description and Constraints

(1) The site lies adjacent to Shek Pai Wan Road and an access road linking Kai Lung Wan Fresh Water Service Reservoir (KLW FWSR) to Shek Pai Wan Road, and lies to the west of Pok Fu Lam Country Park. The distance between the country park boundary and the site boundary is more than 300m.

(2) The site topography is hilly with levels ranging from +113mPD at its north-east boundary to +58mPD at its south-west boundary, the main portion of the site is covered with dense vegetation and the remaining portion comprises Wah Fu Transit Nursery and other privately owned nurseries. Also, there are a number of existing

man-made slope and retaining wall features along or in the immediate vicinity of the proposed housing sites.

(3) A predominant length of an existing natural watercourse, which leads from the upper mountain ridge close to the Wah Fu Portal of Wah Fu-Bowen cable tunnel, lies within the site. There is another watercourse, which discharges to the underground drain pipe at Shek Pai Wan Road, lies outside the southern boundary of the site.

(4) Existing unmaintained / impassable footpaths are identified within the site.

(5) Existing HKE Wah Fu-Bowen cable tunnel lies outside the north-east boundary of the site, existing HKE Tin Wan-Wah Fu cable tunnel lies near the southern end of the site, while existing HKE Cyberport-Wah Fu cable tunnel lies to the west of the site.

(6) Existing KLW FWSR is located outside the northern boundary of the site.

(7) There may be potential interfaces with the future MTR SIL(W).

(8) Moreover, certain number of Important Trees are identified from individual tree survey within the site boundary and an existing shrine is observed within the site.

2.5.2 Proposed Site Formation Layout

(1) Platforms are proposed to be formed at the site with level ranging from +94mPD, to +63mPD. The uppermost platform is proposed to be formed at the northern portion of the site near KLW FWSR while the lowest platform is proposed to be formed at the southern portion of the site abutting Shek Pai Wan Road and Wah Fu Road. In addition, some of the Important Trees as identified from individual tree survey can be retained.

(2) There are a number of existing man-made slope and retaining wall features along or in the immediate vicinity of the proposed housing sites that may affect or be affected by the works during the construction and operation of the proposed development. The associated potential impacts will be assessed at later stage of the Project.

(3) A new public access road is proposed to connect the platform at level +75mPD with J/O Pok Fu Lam Road / Victoria Road. The access road comprises of a new bridge which overpasses both the existing watercourse and the adjacent existing access road of KLW FWSR, and a cul-de-sac is proposed at the end of the access road. The following improvement works is proposed at the new junction such that the all turning movements will be allowed at the new junction:

(a) Widening of Victoria Road to provide an additional short eastbound lane.

(b) Widening of Pok Fu Lam Road to provide an additional southbound straight ahead lane and an additional southbound left-turn lane to the new access road.

(4) The soffit of the aforementioned new bridge will have minimum 5.1m clearance above the existing access road. All new access roads will be designed with maximum gradient at 8% and with geometry complying with TPDM standards for public local road.

(5) RC retaining walls with retaining height up to 11m, bored-pile wall with retaining height up to 23m and 30° man-made slopes with height up to 13m are proposed to form the platforms and associated access road.

(6) The proposed works will be designed such that the associated effect on the existing HKE Wah Fu-Bowen, Tin Wan-Wah Fu and Cyberport-Wah Fu cable tunnels will be within the allowable limits. The existing Wah Fu Transit Nursery will be required to be re-provisioned and the exact location of re-provisioned nursery will be identified by LandsD at later stage of the Project. The existing shrine within the site is proposed to be cleared to facilitate the housing development.

2.6 Kai Lung Wan South Site

2.6.1 Site Description and Constraints

(1) The site lies adjacent to Shek Pai Wan Road and lies to the west of Pok Fu Lam Country Park. The distance between the country park boundary and the site boundary is more than 300m.

(2) The topography is hilly with levels ranging from +94mPD at is western boundary to +44mPD at its southern tip, and is covered with vegetation. Also, there are a number of existing man-made slope and retaining wall features along or in the immediate vicinity of the proposed housing sites.

(3) Existing HKE Tin Wan-Wah Fu cable tunnel lies outside the northern boundary of the site.

(4) Moreover, Important Trees are identified from individual tree survey within the site boundary.

2.6.2 Proposed Site Formation Layout

(1) One major platform, in the eastern portion of the site, is proposed to be formed at level +70mPD. A new junction will be formed with Shek Pai Wan Road which can only provide left-in and left-out movement from/to the southbound lane of Shek Pai Wan Road. A spiral ramp structure will be constructed by HD to provide EVA and vehicular access from Shek Pai Wan Road to the platform at level +70mPD.

(2) There are a number of existing man-made slope and retaining wall features along or in the immediate vicinity of the proposed housing sites that may affect or be affected by the works during the construction and operation of the proposed development. The associated potential impacts will be assessed at later stage of the Project.

(3) RC retaining walls with retaining height up to 11 m, bored-pile wall with retaining height up to 23m and 30° man-made slopes with height up to 13m are proposed to form the platforms and associated access road.

3 TRAFFIC IMPACT ASSESSMENT

3.1 Area of Influence

3.1.1 The Area of Influence (AOI) covers the area within 2km of the site. Major existing traffic corridors covered by the AOI include Pok Fu Lam Road, Shek Pai Wan Road, Victoria Road, Chi Fu Road, Chi Fu Close, Wah Fu Road, Wah Lam Path, Wah Lok Path, Wah King Street, Wah Hong Street, Wah Chui Street and Cyberport Road.

3.2 Technical Approach of Traffic Impact Assessment

3.2.1 The key objective of the Traffic Impact Assessment (TIA) Study is to assess the likely traffic and transport impact due to the Project on the adjacent road network and years 2027 and 2032 were adopted as design years. With reference to the Railway Development Strategy (RDS) 2014 issued by Transport and Housing Bureau in 2014, it is planned to develop a new line linking the South Island Line (East) (SIL(E)) to the West Island Line, namely SIL(W), extending the railway coverage to new catchment areas in Aberdeen, Wah Fu, Cyberport and Pok Fu Lam. SIL(E) has started its operation in year 2016. For the conservative assessment purpose, scenarios for both SIL(W) not yet in place and with SIL(W) in design year 2032 will be assessed. For the design year 2027, the scenario SIL(W) not yet in place will be assessed. The 2014-based Territorial Population and Employment Data Matrix (TPEDM), as the latest available planning assumption in the vicinity of the development sites, is obtained from Planning Department (PlanD) for the development of traffic forecast. Demands for public transport facilities and services have also been identified and suitable public transport facilities to cope with the demand from the Project are recommended.

3.2.2 The territory-wide Transport Model (TM) was used to produce transport demand on a strategic basis. The TM has been updated with the latest public available data for planned and committed new infrastructures and major developments in the AOI. The output from the base year TM was compared against observed traffic flows as published in the Annual Traffic Census for both the AM and PM peak hours.

3.2.3 The cordoned matrices from the TM would then be input into Local Area Traffic Model (LATM), which was validated to year 2017 traffic conditions. The model validation results indicated that the model can replicate the existing traffic conditions, and is suitable for predicting future year's traffic flow.

3.3 Traffic Impact Assessment

3.3.1 The results of TIA revealed that all assessed junctions and road links are operating with spare capacity in base year 2017. All the assessed junctions and road links will still be preforming at satisfactory level in design years 2027 and 2032, during both construction and operation stages, under both scenarios of SIL(W) not yet in place and with SIL(W), except for J/O Pok Fu Lam Road and Victoria Road. Improvement schemes have been proposed at the concerned junction to mitigate the traffic impact arising from the proposed development. Details of the proposed junction improvement scheme are as described in **Section 3.4.5**. The performances of the key junctions and road links in years 2027 and 2032 (with SIL(W) and SIL(W) not yet in place) are shown in are shown in the following tables:

Table A Performance of Key Junctions

Junction		Junction Type	2027				2032 [SIL(W) not yet in place]				2032 [With SIL(W)]			
			Reference Case #		Design Case #		Reference Case #		Design Case #		Reference Case #		Design Case #	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
J1	Pok Fu Lam Road / Chi Fu Road	Priority	0.19	0.14	0.22	0.17	0.18	0.14	0.21	0.16	0.18	0.14	0.21	0.16
J2	Victoria Road / Cyberport Road	Signalised	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%
J3	Pok Fu Lam Road / Chi Fu Close	Priority	0.13	0.07	0.13	0.07	0.13	0.07	0.13	0.07	0.13	0.07	0.13	0.07
J4	Wah Chui Street / Victoria Road	Priority	0.38	0.33	0.51	0.50	0.40	0.30	0.50	0.41	0.39	0.30	0.49	0.51
J5	Victoria Road / Wah Hong Street	Priority	0.31	0.31	0.35	0.23	0.30	0.28	0.34	0.25	0.30	0.28	0.35	0.18
J6	Pok Fu Lam Road / Victoria Road	Signalised	16%	27%	-7% (19%)	7% (44%)	19%	31%	-5% (21%)	6% (42%)	21%	34%	-5% (21%)	14% (>50%)
J7	Wah Fu Road / Wah Lam Path	Priority	0.40	0.24	0.39	0.65	0.44	0.23	0.39	0.56	0.44	0.21	0.39	0.65
J8	Pok Fu Lam Road near Dor Fook Mansion	Signalised	>50%	>50%	36%	>50%	>50%	>50%	39%	>50%	>50%	>50%	40%	>50%
J9	Pok Fu Lam Road near Woodbury Court	Signalised	>50%	>50%	34%	>50%	>50%	>50%	37%	>50%	>50%	>50%	38%	>50%
J10A	Pok Fu Lam Road near Shine Skills Centre	Signalised	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%
J10B	Access Road of Pok Fu Lam Road near Shine Skills Centre	Signalised	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%
J11	Victoria Road near Baguio Villa Block 19	Priority	0.24	0.21	0.24	0.21	0.24	0.21	0.24	0.21	0.24	0.21	0.24	0.19
J12	Cyberport Road / Information Crescent	Signalised	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%

Note:

1. (#) Figures shown represent "Reserve Capacity" (RC) for the signal controlled junctions and "Design Flow to Capacity" (DFC) ratio for the priority junctions. A signal-controlled junction with a reserve capacity (RC) of 0% implies that it is operating at capacity while a negative RC% suggests that it is overloaded. DFC of 1.00 indicate that capacity has been reached; DFC over 1.00 indicate overloaded conditions.
2. Number in bracket denotes the performance of junction after completion of proposed improvement works.

Table B Performance of Key Road Links

Road Link			V/C Ratio (1)											
			2027				2032 [SIL(W) not yet in place]				2032 [With SIL(W)]			
			Reference Case		Design Case		Reference Case		Design Case		Reference Case		Design Case	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
L1	Pok Fu Lam Road (Section besides Royalton and Royalton II)	NB	0.54	0.44	0.61	0.48	0.52	0.43	0.60	0.48	0.52	0.42	0.60	0.48
		SB	0.40	0.36	0.47	0.44	0.38	0.36	0.46	0.43	0.38	0.35	0.46	0.42
L2	Victoria Road (Section besides Caritas Wu Cheng Chung Secondary School)	NB	0.63	0.40	0.65	0.40	0.63	0.40	0.65	0.40	0.63	0.40	0.64	0.40
		SB	0.38	0.34	0.35	0.34	0.38	0.35	0.35	0.34	0.38	0.35	0.35	0.34
L3	Cyberport Road (Section between Sha Wan Dr and Information Cres)	NB	0.47	0.41	0.44	0.42	0.43	0.41	0.41	0.41	0.42	0.39	0.40	0.40
		SB	0.32	0.28	0.33	0.26	0.31	0.27	0.33	0.26	0.31	0.27	0.32	0.26
L4	Chi Fu Road (Section between Chi Fu Fa Yuen Fu Chun Yuen and Chi Fu Landmark)	NB	0.33	0.24	0.35	0.25	0.33	0.24	0.33	0.24	0.33	0.24	0.33	0.24
		SB	0.23	0.18	0.23	0.19	0.23	0.18	0.22	0.18	0.23	0.18	0.22	0.18
L5	Wah Fu Road (Section across Pokfulam Road and Shek Pai Wan Road)	NB	0.42	0.25	0.32	0.38	0.41	0.24	0.33	0.33	0.39	0.23	0.30	0.42
		SB	0.13	0.11	0.13	0.12	0.13	0.11	0.13	0.12	0.13	0.11	0.13	0.12
L6	Shek Pai Wan Road (Section between Pok Fu Lam Road and Aberdeen Praya Road)	EB	0.53	0.45	0.56	0.48	0.53	0.44	0.56	0.48	0.52	0.43	0.56	0.47
		WB	0.60	0.51	0.67	0.63	0.59	0.50	0.65	0.63	0.58	0.50	0.65	0.62
L7	Aberdeen Praya Road (Section between Shek Pai Wan Road and Aberdeen Main Road)	EB	0.22	0.18	0.23	0.20	0.22	0.18	0.23	0.19	0.21	0.17	0.23	0.19
		WB	0.36	0.30	0.39	0.37	0.35	0.30	0.38	0.37	0.34	0.29	0.38	0.37

Note:

(1) For links, the performance indicators is V/C (Volume to Capacity) ratios. V/C ratio of 1.00 indicate that capacity has been reached; V/C ratio over 1.00 indicates overloaded conditions.

3.4 Proposed Traffic Arrangement and Public Transport Facilities

3.4.1 The traffic and transport proposals have taken due cognizance of the constraints on the external road network. Suitable locations for connection of the development with external road network has been selected and suitable traffic and transport arrangements have also been planned to promote the use of public transport facilities.

3.4.2 Traffic Arrangement – Wah Lok Path Site

(1) An ingress/egress point of the site will be provided at Wah Lok Path.

(2) A lift and staircase tower for a proposed footbridge connecting with the public footpath adjacent to Kai Lung Wan North Site on the opposite side of Shek Pai Wan Road will be erected adjacent to Shek Pai Wan Road. The tower will connect with the footpath of Shek Pai Wan Road as well as platform of Wah Lok Path Site.

3.4.3 Traffic Arrangement – Wah Fu North Site

(1) The main ingress/egress point of the site is proposed at Victoria Road, while another access is proposed at Pok Fu Lam Road as an Emergency Vehicular Access. As the

proposed main access will be in conflict with an existing bus lay-by at Victoria Road eastbound, re-location of the bus lay-by to the north-western side of the access will be required.

(2) A podium deck overpassing Victoria Road for connection with Wah King Street Site will be constructed in the future to improve the pedestrian connectivity of the two sites.

3.4.4 Traffic Arrangement – Wah King Street Site

(1) An ingress/egress point is proposed at Victoria Road at sufficient separation from the proposed ingress/egress point of Wah Fu North Site. As the proposed access will be in conflict with an existing bus lay-by at Victoria Road westbound, re-location of the bus lay-by to the south-eastern side of the access will be required. The existing public transport terminus at Wah King Street is proposed to be re-provisioned as bus / GMB lay-by with length of at least 76m at Wah King Street.

(2) To facilitate site formation work and re-provisioning work of the permanent lay-by, temporary lay-by is proposed to be provided at southern kerbside of Victoria Road between Wah Chui Street and Wah Hong Street, while the existing bus lay-by along southern kerbside of Victoria Road will be shifted to the west, as shown in **Plan No. 250269/TIA/704**. Since temporary provision is in close proximity to the existing terminus, minimal impact to the public transport service and passengers is expected. With the temporary lay-by, the existing bus service pick-up/drop-off at the existing bus terminus will be diverted to travel via Wah King Street eastbound, Wah Hong Street northbound and Victoria Road westbound to access the temporary lay-by as shown in **Plan No. 250269/TIA/705**. In addition, another temporary lay-by could be re-provided on Wah King Street eastbound for maintaining the existing en-route bus / GMB services at Wah King Street eastbound, as shown in **Plan No. 250269/TIA/704**.

(3) The existing elevated walkway across Wah King Street and the associated staircase tower is proposed to be retained at its original location. Temporary diversion of footpath around the staircase tower may be required to maintain pedestrian passage. A podium deck overpassing Victoria Road for connection with Wah Fu North Site will be constructed in the future to improve the connectivity of the two sites.

3.4.5 Traffic Arrangement – Kai Lung Wan North Site

(1) A new public access road is proposed to connect the platform at level +75mPD with J/O Pok Fu Lam Road / Victoria Road. The access road comprises of a new bridge which overpasses both the existing watercourse and the adjacent existing access road of KLW FWSR, and a cul-de-sac is proposed at the end of the access road. The following improvement works is proposed at the new junction such that the all turning movements will be allowed at the new junction:

(a) Widening of Victoria Road to provide an additional short eastbound lane.

(b) Widening of Pok Fu Lam Road to provide an additional southbound straight ahead lane and an additional southbound left-turn lane to the new access road.

(2) The soffit of the aforementioned new bridge will have minimum 5.1m clearance above the existing access road. The proposed new access road comprises mainly of single two-lane carriageway, public transport lay-bys, footpaths and Roadside Verge Greening Zone, where appropriate, on both sides of carriageway. The proposed configuration will be adequate to accommodate the traffic demand of the future development. All new access roads will be designed with geometry

complying with TPDM standards for public local road and will be able to accommodate buses with length of 12.8m.

(3) A lift and staircase tower for the proposed footbridge connecting the public footpaths on both sides of Shek Pai Wan Road is proposed at the western corner of Kai Lung Wan North Site. The tower will connect with the footpath of Shek Pai Wan Road at approx. +64mPD and may allow for future connection with the podium level at +75mPD. The area adjacent to the proposed footbridge tower can be reserved for potential additional lift tower to cater for future pedestrian movement.

3.4.6 Traffic Arrangement – Kai Lung Wan South Site

(1) The ingress/egress point of the site will be provided at Shek Pai Wan Road and the new junction with Shek Pai Wan Road can only provide left-in and left-out movement from/to the southbound lane of Shek Pai Wan Road. A spiral ramp structure will be constructed by HD to provide EVA and vehicular access from Shek Pai Wan Road to the platform at level +70mPD.

(2) New public transport lay-bys are proposed on both bounds of Shek Pai Wan Road and the existing public transport lay-bys at both bounds of Shek Pai Wan Road are proposed to be extended. A footbridge overpassing Shek Pai Wan Road, with lift and staircase towers, is proposed to enhance connectivity of the lay-bys. Widening of the existing footpaths on both bounds of Shek Pai Wan Road will be required to cater for pedestrian movement amongst Kai Lung Wan South and Kai Lung Wan North Sites as well as the extended and proposed public transport lay-bys at Shek Pai Wan Road.

3.4.7 Public Transport Facilities

(1) Comprehensive public transport services are currently serving the existing Wah Fu Estate adjacent to the proposed Wah King Street, Wah Fu North and Wah Lok Path Sites. It is expected that the residents of these sites will utilize the existing service to access different destinations. Besides, residents of Kai Lung Wan South Site will utilize the existing service at Pok Fu Lam Road / Shek Pai Wan Road / Wah Fu Road to access different destinations.

(2) The existing public transport terminus at Wah King Street is proposed to be re-provisioned as bus / GMB lay-by with length of at least 76m at Wah King Street. In addition, the existing bus lay-bys at Victoria Road are proposed to be relocated to avoid conflict with the proposed accesses of Wah King Street and Wah Fu North Sites.

(3) To cater for the future public transport demand generated by Kai Lung Wan North and Kai Lung Wan South Sites, on-street bus / GMB lay-bys are proposed along the new access road of the Kai Lung Wan North Site to accommodate two external bus route services and two GMB short-shuttle routes, besides, additional on-street bus lay-bys and extension of existing laybys are proposed on both bounds of Shek Pai Wan Road.

3.5 Pedestrian Impact Assessment

3.5.1 The existing and proposed footpaths will provide major pedestrian connection between the proposed sites and the existing / proposed public transport facilities. In addition, two proposed footbridges overpassing Shek Pai Wan Road will enhance pedestrian

connectivity amongst Wah Lok Path, Kai Lung Wan North and Kai Lung Wan South Sites and public transport facilities on Shek Pai Wan Road. Justifications for the proposed footbridges have been established and reviewed with reference to the factors listed in TPDM, including safety, capacity, desired pedestrian path and connectivity of the facility with nearby developments and walkway systems. The review indicated that the criteria can be largely fulfilled.

3.5.2 A Level of Service (LOS) assessment for major existing / proposed pedestrian footpaths in vicinity of the development sites has been conducted taking into account the existing pedestrian flows and pedestrian trips generated from the proposed development. The results indicate that all assessed pedestrian footpaths will be operating with LOS C or above in design years 2027 and 2032. It is anticipated that the impact arising from the proposed development on existing pedestrian network would be minimal.

3.5.3 An existing hiking trail located between Kai Lung Wan North Site and Kai Lung Wan South Site will be retained such that hikers can continue using the hiking trail to access the Hong Kong Trail.

3.6 Parking and Servicing Facilities Provisions of the Proposed Developments

3.6.1 The proposed parking and servicing requirements have been estimated in accordance with the Hong Kong Planning Standards and Guidelines (HKPSG), Interim Parking Standards for the New Home Ownership Scheme (HOS) Projects (IPS) and the relevant government departments' comments. Due to proximity to the future Wah Fu MTR station, low-end provision for the ancillary car parking spaces and nil provision for private car parking spaces for visitors is proposed. The surplus parking spaces in the existing Wah Fu Estate could be used as interim private car parking spaces before commissioning of SIL(W).

3.6.2 There are two existing STT car parks originally located at Wah Fu North Site and Wah Lok Path Site. As per the request by Transport Department for the re-provision of parking spaces in these existing STT car parks, additional car parking spaces are planned to be re-provided at proposed Kai Lung Wan North Site, under the latest planning. Additional car parking spaces for the re-provision of parking spaces in the STT site used by Hong Kong Society for Rehabilitation are also planned to be provided at Kai Lung Wan North Site. Besides, additional ancillary parking spaces are also planned to be provided at Kai Lung Wan North Site, to maintain the total parking spaces provision of existing Wah Fu Estate.

3.6.3 The number of additional car parking spaces provided at Kai Lung Wan North Site, which are agreed with HD and TD in July 2017, are summarized in the table below.

Table C Planned Additional Car Parking Spaces at Kai Lung Wan North Site

Item	Additional Car Parking Spaces at Kai Lung Wan North Site	Medium Goods Vehicle / Heavy Goods Vehicle	Coach	Light Goods Vehicle (Non-Van Type) / Light Bus	Private Car / Light Goods Vehicle (Van Type)	Motorcycle
1	Additional Ancillary Parking Spaces Provided at Kai Lung Wan North Site	-	-	53	35	42
2	Additional Car Parking Spaces to be Re-provided at Kai Lung Wan North Site as per TD's Request	-	8	45	47	-

Item	Additional Car Parking Spaces at Kai Lung Wan North Site	Medium Goods Vehicle / Heavy Goods Vehicle	Coach	Light Goods Vehicle (Non-Van Type) / Light Bus	Private Car / Light Goods Vehicle (Van Type)	Motorcycle
Total		-	8	98	82	42

3.6.4 During construction stage, it is identified that two possible STT sites at Tin Wan Praya Road and Sandy Bay Road are suitable for temporary re-provision of the parking spaces, which would be subject to the further review by relevant government departments.

3.7 Conclusion

3.7.1 The TIA has demonstrated that all assessed junctions and road links will be performing satisfactorily in the design years 2027 and 2032, during both construction and operation stages, under both scenarios SIL(W) not yet in place and with SIL(W), with the proposed junction improvement scheme at J/O Pok Fu Lam Road and Victoria Road in place. In other words, the proposed junction improvement scheme can adequately alleviate the traffic impact arising from the proposed development.

3.7.2 In conclusion, the TIA has confirmed that with the proposed improvement scheme, the highway and transport systems can accommodate the traffic demand from the proposed development and no insurmountable traffic impact on the nearby road links, junctions and transport facilities is anticipated. The proposed development is therefore technically feasible from the traffic and transport point of view.

3.7.3 The proposed traffic and transport improvement measures and new facilities are summarized as follows:

(1) A new public access road to connect the Kai Lung Wan North Site with J/O Pok Fu Lam Road / Victoria Road;

(2) Improvement works at J/O Pok Fu Lam Road / Victoria Road such that the all turning movements will be allowed at the junction;

(3) Two footbridges across Shek Pai Wan Road and widening of existing footpaths on both bounds of Shek Pai Wan Road;

(4) On-street bus / GMB lay-bys along the new access road of the Kai Lung Wan North Site. Additional on-street bus lay-bys and extension of existing laybys on both bounds of Shek Pai Wan Road; and

(5) Re-provisioning of the existing public transport terminus at Wah King Street as bus / GMB lay-by at Wah King Street. Relocation of the existing bus lay-bys at Victoria Road to avoid conflict with the proposed accesses of Wah King Street and Wah Fu North Sites.

4 DRAINAGE IMPACT ASSESSMENT

4.1 Existing Drainage System

4.1.1 With reference to the existing drainage records obtained from Drainage Services Department (DSD) and Housing Department (HD), existing drainage systems identified within and in the vicinity of the development sites are detailed as follows:

(1) **Wah Lok Path Site** – Runoff from the site is currently intercepted and conveyed by existing drainage pipes at Wah Lok Path and Wah Lam Path, via drainage channels and box culvert at Wah Kwai Estate for discharge at drainage outfall near Wah Kwai Estate Bus Terminus.

(2) **Wah Fu North Site** – An existing natural watercourse runs along the north-western portion of the site. The watercourse collects runoff from existing drainage pipes underneath Pok Fu Lam Road at its upstream for discharge to existing drainage pipes underneath Victoria Road and Wah Chui Street at its downstream. Runoff from the site is currently intercepted and conveyed by existing drainage pipes at Victoria Road and Wah Chui Street, via existing streams for discharge at the Wah Fu Waterfall near Waterfall Bay Park.

(3) **Wah King Street Site** – Runoff from the site is currently intercepted by existing drainage pipes along Wah King Street. The runoff intercepted is either conveyed by existing drainage pipes at Wah Chui Street via existing streams for discharge at the Wah Fu Waterfall near Waterfall Bay Park, or conveyed by existing drainage network within Wah Fu Estate for discharge at 900mm dia. drainage outfall near Waterfall Bay Park.

(4) **Kai Lung Wan North Site** – Runoff from the site is currently collected and conveyed by an existing natural watercourse which run across the site in the north-eastern to south-western direction from the upper mountain ridge close to the Wah Fu Portal of Wah Fu-Bowen cable tunnel. A predominant length of the watercourse lies within the site boundary. The watercourse is intercepted and conveyed by existing drainage pipes at Wah Fu Road and Shek Pai Wan Road, via drainage channels and box culvert at Wah Kwai Estate for discharge at drainage outfall near Wah Kwai Estate Bus Terminus.

(5) **Kai Lung Wan South Site** – Runoff from the site is currently collected and conveyed by an existing natural watercourse which run across the site in the north-eastern to south-western direction. A predominant length of the watercourse lies within the site boundary. The watercourse is intercepted and conveyed by existing channel at Shek Pai Wan Road, via drainage channels and box culvert at Wah Kwai Estate for discharge at drainage outfall near Wah Kwai Estate Bus Terminus.

4.1.2 Based on the HydroWorks model obtained from DSD, the existing drainage systems, including the 750mm dia. and 900mm dia. drainage pipes at Wah Chui Street, the box culverts at Shek Pai Wan Road and near Wah Kwai Estate, and the 900 channel at Shek Pai Wan Road, are found to be able to achieve 200-year and 50-year flood protection standard respectively.

4.1.3 There is no flooding blackspot in the vicinity of the proposed development sites and the existing ground levels at the sites are much higher than the extreme sea levels, hence, the flooding susceptibility of the sites in existing condition is considered low.

4.2 Proposed Drainage System

4.2.1 The proposed development will lead to an increase in area of impermeable surfaces and hence the peak surface runoff rates. An InfoWorks ICM model (version ICM 5.5) was built to evaluate the hydraulic performance of the existing and proposed drainage networks before and after the proposed development.

4.2.2 A designated drainage system is proposed at each development site to collect and discharge surface runoff to the existing / upgraded drainage systems. The design of these drainage connections aims to resemble the existing drainage delineation as far as possible.

4.2.3 The adequacy of the existing drainage system to accommodate the increase in peak surface runoff due to the proposed development has been assessed. The existing drainage system which is required to be upgraded to accommodate the additional peak surface runoff include:

(1) **Wah Fu North Site** – Existing 2x450mm and 900mm dia. drainage pipe at Wah Chui Street and Victoria Road are proposed to be upgraded to 1200mm dia. drainage pipes. Existing 900mm dia. drainage outfall at Wah Chui Street is proposed to be upgraded to 1200mm dia. drainage outfall.

4.2.4 Existing natural watercourses and engineering drainage systems, which will be in conflict with the proposed site formation and infrastructure works, and may require to be modified and/or diverted include:

(1) **Wah Fu North Site** – The existing natural watercourse running along the north-western portion of the site is proposed to be replaced by pipeline / cascade and diverted along the north-western perimeter of the site. Existing 375 to 525 mm dia. drainage pipes encroach upon the southern corner of the development site and are proposed to be diverted along Victoria Road.

(2) **Kai Lung Wan North Site** – There is an existing natural watercourse running across the site in the north-eastern to south-western direction and discharges to existing drainage pipes at Wah Fu Road and Shek Pai Wan Road. A predominant length of the watercourse lies within the site boundary and is proposed to be replaced by cascade and diverted along the south-eastern perimeter of the site.

(3) **Kai Lung Wan South Site** – An existing natural watercourse running across the site in the north-eastern to south-western direction is proposed to be abandoned.

4.2.5 In addition, a green channel with length of approx. 250m is proposed along the north-eastern boundary of Kai Lung Wan South Site to compensate for the loss in natural watercourses.

4.2.6 Details of the proposed works is as shown in **Drawings Nos. 250269/C/401 to 404**.

4.3 Conclusion

4.3.1 The proposed development will lead to an increase in area of impermeable surfaces and hence additional peak surface runoff. The adequacy of the existing drainage system to accommodate the increase in peak surface runoff have been assessed and it is identified that 2x450mm and 900mm dia. drainage pipes at Wah Chui Street and Victoria Road, is required to be upgraded to handle the additional peak surface runoff due to the proposed development.

4.3.2 Three nos. of existing natural watercourses located in Wah Fu North, Kai Lung Wan North and Kai Lung Wan South Sites are found to be in conflict with the proposed

development. Abandonment or diversion of these watercourses by pipeline / cascade will be required subject to the detailed hydraulic and ecological assessment. A green channel is proposed along the north-eastern boundary of Kai Lung Wan South Site to compensate for the loss in natural watercourses.

4.3.3 In conclusion, the Drainage Impact Assessment (DIA) has confirmed that with the proposed upgrading works and mitigation measures in place, the drainage network can accommodate the increase in peak surface runoff due to the proposed development and no insurmountable drainage impact arising from the proposed development is anticipated. The proposed development is therefore technically feasible from the drainage point of view.

5 SEWERAGE IMPACT ASSESSMENT

5.1 Existing and Planned Sewerage System

5.1.1 The assessment area falls within the sewerage catchment of two existing preliminary treatment works (PTW) namely: Wah Fu PTW and Aberdeen PTW.

5.1.2 With reference to the existing sewerage records obtained from DSD and HD, existing sewerage systems identified within and in the vicinity of the development sites are detailed as follows:

(1) **Wah Lok Path Site** – The nearest existing sewerage network comprises of existing sewers at Wah Lam Path, Wah Fu Road and Waterfall Bay Road which convey sewage flow to Wah Fu PTW for further treatment and disposal.

(2) **Wah Fu North Site** – Two separate sewerage networks are identified in the vicinity of the site. The first one comprises of existing cross road sewer at Victoria Road, existing sewers at Wah Chui Street, Wah Fu Road and Waterfall Bay Road, which convey sewage flow to Wah Fu PTW for further treatment and disposal. The second sewerage network comprises of existing sewers along the Pok Fu Lam Road and Shek Pai Wan Road, which convey sewage flow to Aberdeen PTW for further treatment and disposal.

(3) **Wah King Street Site** – Sewage flow generated from the site is currently discharged to the existing public sewers at Wah Chui Street and conveyed via existing sewers at Wah Fu Road and Waterfall Bay Road to Wah Fu PTW for further treatment and disposal.

(4) **Kai Lung Wan North Site** – A section of existing 250mm dia. sewers is identified running across the site. The section of sewer is currently conveying sewage flow generated from Mount Kellett to Wah Fu PTW for further treatment and disposal via the existing sewers at Wah Fu Road and Waterfall Bay Road. Another existing public sewerage network in vicinity of the site comprises of existing sewers along Shek Pai Wan Road, which convey sewage flow to Aberdeen PTW for further treatment and disposal.

(5) **Kai Lung Wan South Site** – The nearest existing sewerage network comprises of existing sewers along Shek Pai Wan Road which convey sewage flow to Aberdeen PTW for further treatment and disposal.

5.1.3 To further improve the water quality of the Victoria Harbour, DSD is implementing the Habour Area Treatment Scheme (HATS) Stage 2A project, under which eight existing PTWs on the Hong Kong Island including the Wah Fu PTW and Aberdeen PTW, which are connected to the sewage conveyance system for discharge to the Stonecutters Island Sewage Treatment Works, are required to be upgraded.

5.2 Proposed Sewerage System

5.2.1 The sewage flow generated from the proposed development has been estimated using the development parameters provided by HD together with the relevant sewage unit flow factors from Environmental Protection Department (EPD)'s "Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning". Assessment has been carried out for both "before completion of WFER" and "after completion of WFER" scenarios.

5.2.2 A new sewerage system is proposed at each development site to collect and convey the generated sewage flows to the existing / upgraded sewerage system.

(1) **Wah Lok Path Site** – New sewer is proposed along Wah Lok Path to intercept and convey the sewage flows generated from the site to the upgraded sewer at Wah Lam Path, and subsequently via existing sewers at Wah Fu Road and Waterfall Bay Road for discharge to the upgraded Wah Fu PTW for further treatment and disposal.

(2) **Wah Fu North and Wah King Street Sites** – Sewage generated from both sites is proposed to be discharged to existing / upgraded public sewers at Wah Chui Street and conveyed via existing sewers at Wah Fu Road and Waterfall Bay Road to the upgraded Wah Fu PTW for further treatment and disposal.

(3) **Kai Lung Wan North Site** – New sewers are proposed to be laid across Shek Pai Wan Road and along Victoria Road to intercept and convey the sewage flow generated from the site to the existing / upgraded public sewers at Wah Chui Street, and subsequently via existing sewers at Wah Fu Road and Waterfall Bay Road for discharge to the upgraded Wah Fu PTW for further treatment and disposal. A section of existing 250mm dia. sewers, which is currently conveying sewage flow generated from Mount Kellett to Wah Fu PTW, will be in conflict with the proposed development and is proposed to be diverted along the south-eastern perimeter of the site.

(4) **Kai Lung Wan South Site** – Sewage generated from the site is proposed to be discharged to existing public sewers along Shek Pai Wan Road for discharge to the upgraded Aberdeen PTW for further treatment and disposal.

5.2.3 The capacity of Wah Fu PTW, upon completion of upgrading works under DSD's Habour Area Treatment Scheme (HATS) Stage 2A project, is considered adequate to cope with the sewage flow generated from the Wah Lok Path, Wah Fu North, Wah King Street and Kai Lung Wan North Sites under "before completion of WFER" scenario. Further upgrading of Wah Fu PTW is required to cope with additional sewage flow generated from the additional population under the "after completion of WFER" scenario.

5.2.4 The capacity of Aberdeen PTW, upon completion of upgrading works under DSD's HATS Stage 2A project, is considered adequate to cope with the sewage flow generated from Kai Lung Wan South Site under both "before completion of WFER" and "after completion of WFER" scenarios.

5.2.5 The adequacy of the existing sewers to accommodate the sewage flow generated from the proposed development has been assessed. The existing sewers which is required to be upgraded include:

(1) Existing 150mm dia. sewer at Wah Lam Path is proposed to be upgraded to 250mm dia. sewer.

(2) Existing 300mm dia. sewers at Wah Chui Street near its junction with Victoria Road and at Wah Fu Road near its junction with Waterfall Bay Road is proposed to be upgraded to 375mm dia. sewer.

5.2.6 Details of the proposed works are as shown in **Drawings Nos. 250269/C/201 to 204**.

5.3 Conclusion

5.3.1 The proposed development will generate additional sewage flow. Sewage flows generated from Wah Lok Path, Wah King Street, Wah Fu North and Kai Lung Wan North

Sites is proposed to be conveyed to Wah Fu PTW while sewage flows generated from Kai Lung Wan South Site is proposed to be conveyed to Aberdeen PTW for further treatment and disposal. A section of existing sewers, which is currently conveying sewage flow generated from Mount Kellett to Wah Fu PTW, will be in conflict with the proposed development at Kai Lung Wan North Site and is proposed to be diverted along the south-eastern perimeter of the site.

5.3.2 The adequacy of Wah Fu PTW and Aberdeen PTW to accommodate the sewage flows generated from the proposed development have been assessed under both "before and after completion of WFER" scenarios. It is identified that after completion of upgrading works under DSD's HATS Stage 2A project, the capacity of both PTWs are adequate to cope with the sewage flow generated from the proposed development under the "before completion of WFER" scenario, whereas further upgrading of Wah Fu PTW is required to cope with additional sewage flow generated from the additional population under the "after completion of WFER" scenario.

5.3.3 The adequacy of the existing sewers to accommodate the sewage flows generated from the proposed development have also been assessed and it is identified that a section of existing sewer at Wah Lam Path is required to be upgraded and an additional section of sewer is required to be laid along Wah Lok Path for conveying the sewage flows generated from Wah Lok Path Site to the upgraded sewer at Wah Lam Path. Existing sewers at Wah Chui Street and Wah Fu Road is required to be upgraded and an additional section of sewer is required to be laid across Shek Pai Wan Road and along Victoria Road for conveying the sewage flows generated from Kai Lung Wan North Site to the existing / upgraded sewer at Wah Chui Street.

5.3.4 In conclusion, the SIA has confirmed that with the proposed upgrading works and mitigation measures in place, the sewerage network can accommodate the sewage flow generated from the proposed development and the adverse sewerage impact arising from the proposed development can be adequately alleviated. The proposed development is therefore technically feasible from the sewerage point of view.

6 WATER SUPPLY STUDY

6.1 Existing Fresh and Salt Water Supply System

6.1.1 The assessment area falls within both the Pok Fu Lam Fresh Water Service Reservoirs (FWSRs) Supply Zone and the KLW FWSR Supply Zone. The two supply zones are currently served by Pok Fu Lam FWSR, Pok Fu Lam No.2 FWSR, Pok Fu Lam No.3 FWSR (the three FWSRs are referred as Pok Fu Lam FWSR Group) and KLW FWSR.

6.1.2 The assessment area falls within both the Pok Fu Lam Salt Water Service Reservoir Supply Zone and Wah Fu Salt Water Service Reservoir Supply Zone. Salt water is currently taken from the seafront at Telegraph Bay and is elevated by Telegraph Bay SWPS to Wah Fu SWSR which serves the Wah Fu Salt Water Service Reservoir Supply Zone. The salt water is further elevated by Wah Fu SWPS to Pok Fu Lam SWSR which serves the Pok Fu Lam Salt Water Service Reservoir Supply Zone.

6.1.3 Existing fresh and salt water supply systems identified within and in the vicinity of the development sites are detailed as follows:

(1) **Wah Lok Path Site** – The nearest existing fresh and salt water supply networks comprise of fresh and salt water mains at Wah Fu Road, Wah Lok Path and Wah Lam Path.

(2) **Wah Fu North Site** – The nearest existing fresh and salt water supply networks comprise of fresh and salt water mains at Pok Fu Lam Road.

(3) **Wah King Street Site** – The nearest existing fresh and salt water supply networks comprise of existing fresh and salt water mains at Wah Chui Street, Wah King Street and Victoria Road.

(4) **Kai Lung Wan North and Kai Lung Wan South Sites** – The nearest fresh and salt water supply networks comprise of fresh and salt water mains along Shek Pai Wan Road, Pok Fu Lam Road.

6.2 Proposed Fresh Water Supply System

6.2.1 The fresh water demand arising from the proposed development has been estimated using the development parameters provided by HD together with the relevant Unit Flow Factor from WSD's Departmental Instruction No. 1309.

6.2.2 New fresh water mains with connection points to be provided up to the boundary of every platforms of each development site, are proposed for connection with the existing fresh water supply network to meet their fresh water demand.

(1) **Wah Lok Path Site** – Fresh water demand of the site is proposed to be met by existing KLW FWSR, by making connection with the existing fresh water mains at Wah Fu Road.

(2) **Wah Fu North Site** – Fresh water demand of the site is proposed to be met by existing Pok Fu Lam FWSR Group, by making connection with the existing fresh water mains at Pok Fu Lam Road.

(3) **Wah King Street Site** – Fresh water demand of the site is proposed to be met by existing KLW FWSR, by making connection with the existing fresh water mains at Victoria Road.

(4) **Kai Lung Wan North Site** – Fresh water demand of the site is proposed to be met by existing Pok Fu Lam FWSR Group, by laying a section of new fresh water mains along Shek Pai Wan Road and Pok Fu Lam Road for making connection with the existing fresh water mains at Pok Fu Lam Road.

(5) **Kai Lung Wan South Site** – Fresh water demand of the site is proposed to be met by existing KLW FWSR, by laying a section of new fresh water mains along Shek Pai Wan Road for making connection with the existing fresh water mains at Shek Pai Wan Road.

6.2.3 The capacity of KLW FWSR and Pok Fu Lam FWSR Group is considered adequate to cope with the fresh water demand from the proposed development. Whereas, expansion of KLW FWSR to provide additional storage volume is required to cope with fresh water demand under the "after completion of WFER" scenario.

6.2.4 The proposed vehicular bridge at Kai Lung Wan North Site as shown on **Plan No. 250269/C/002** has no apparent conflict with the existing WSD's maintenance access of the KLW FWSR and the existing fresh water mains that run along the maintenance access. The maintenance access should be maintained during the construction stage. The proposed link bridge would be designed to minimize any potential impact to the access road and existing mains. Detailed proposal of the link bridge will be submitted to WSD for comment in later stage of the Project.

6.2.5 Details of the proposed works are as shown in **Drawings Nos. 250269/C/301 to 303**.

6.3 Proposed Salt Water Supply System

6.3.1 The salt water demand arising from the proposed development has been estimated using the development parameters provided by HD together with the relevant Unit Flow Factor from WSD's Departmental Instruction No. 1309.

6.3.2 New salt water mains with connection points to be provided up to the boundary of every platforms of each development site, are proposed for connection with the existing salt water supply network to meet their salt water demand.

(1) **Wah Lok Path Site** – Salt water demand of the site is proposed to be met by existing Wah Fu SWSR, by making connection with the existing salt water mains at Wah Lam Path.

(2) **Wah Fu North Site** – Salt water demand of the site is proposed to be met by existing Pok Fu Lam SWSR, by making connection with the existing salt water mains at Pok Fu Lam Road.

(3) **Wah King Street Site** – Salt water demand of the site is proposed to be met by existing Wah Fu SWSR, by making connection with the existing salt water mains at Victoria Road.

(4) **Kai Lung Wan North and Kai Lung Wan South Sites** – Salt water demand of the two sites is proposed to be met by existing Wah Fu SWSR, by laying a section of new salt water mains along Shek Pai Wan Road for making connection with the existing salt water mains at junction of Shek Pai Wan Road and Victoria Road.

6.3.3 The capacity of Pok Fu Lam SWSR and Wah Fu SWSR is considered adequate to cope with the salt water demand under both "before completion of WFER" and "after completion of WFER" scenarios.

6.3.4 Installation of additional pump at the spare pump bay of Telegraph Bay SWPS is required to handle the salt water demand of the proposed developments.

6.3.5 No additional salt water booster pumping station is required.

6.3.6 No major conflict is identified between the proposed site formation and infrastructure works with the existing salt water supply systems and diversion of existing salt water mains is not anticipated.

6.3.7 Details of the proposed works are as shown in **Drawings Nos. 250269/C/305 to 307** and will be subject to further review in later stages of the Project.

6.4 Conclusion

6.4.1 New fresh water mains are proposed to connect the development sites with the existing fresh water supply network. Fresh water demand of Wah Lok Path, Wah King Street and Kai Lung Wan South Sites is proposed to be supplied by existing KLW FWSR, while fresh water demand of Wah Fu North and Kai Lung Wan North Sites is proposed to be supplied by existing Pok Fu Lam FWSR Group. The adequacy of the existing fresh water supply system to accommodate the additional demand arising from the proposed development have been assessed and it is identified that expansion of KLW FWSR is required to handle the fresh water demand of the proposed development after completion of WFER.

6.4.2 New salt water mains are proposed to connect the development sites with the existing salt water supply network. Salt water demand of Wah Lok Path, Wah King Street, Kai Lung Wan North and Kai Lung Wan South Sites, is proposed to be supplied by Wah Fu SWSR, while salt water demand of Wah Fu North Site is proposed to be supplied by Pok Fu Lam SWSR. The adequacy of the existing salt water supply system to accommodate the additional demand arising from the proposed development have been assessed and it is identified that capacity of Wah Fu SWSR and Pok Fu Lam SWSR is adequate to cope with the salt water demand of the proposed developments, while installation of additional pump at the spare pump bay of Telegraph Bay SWPS is required to handle the salt water demand of the proposed development.

6.4.3 In conclusion, the Water Supply Study has confirmed that with the proposed upgrading works and mitigation measures in place, the water supply network can accommodate the additional demand of the proposed development and the adverse impact to the existing water supply system arising from the proposed development can be adequately alleviated. The proposed development is therefore technically feasible from the waterworks point of view.

7 NATURAL TERRAIN HAZARD STUDY

7.1 Natural Terrain Hazard Review

7.1.1 The extent of the natural terrain hillside overlooking the proposed development that requires a Natural Terrain Hazard Study (NTHS) has been determined based on the identification of the areas that satisfy the Inclusion Guidelines defined within Section 2.3 of GEO Report No. 138. Out of the five development sites, only Kai Lung Wan North and Kai Lung Wan South Sites have Natural Terrain Catchments (referred to as "Study Catchments") directly abutting them. The Study Catchments, which satisfy the Inclusion Criteria and thus require a NTHS, are further sub-divided into 6 nos. of sub-catchments based on the topographic conditions, namely Catchment Nos. PFL01 to PFL06 (ref. **Appendix A**).

7.1.2 A Natural Terrain Hazard Review has been conducted for the Study Catchments, which includes an identification of the hazard types and catchment affecting the proposed development areas based on the findings of desk study reviews, aerial photograph interpretation (API) and site inspections.

7.1.3 In accordance with the assessment criteria stipulated in GEO Report No. 138, it is considered that Catchment Nos. PFL01 and PFL04 comprise Open Hillslope (OH) Catchments, Catchment Nos. PFL02 and PFL03 comprise Channelised (CD) Catchments with areas of either Open Hillslope (OH) Catchments or Topographic Depression (TD) Catchments present, and Catchment Nos. PFL05 and PFL06 comprise Topographic Depression (TD) Catchments.

7.2 Natural Terrain Hazard Assessment

7.2.1 The qualifying criteria for Level 1 and Level 2 hazard mitigation works have been identified. A 'Design Event' volume should be established for Catchments requiring Level 2 (Enhanced Protection) Mitigation Works based on analytical designs. The Catchments satisfying the criteria for provision of Level 1 (Primary Protection) Hazard Mitigation measures do not specifically require the determination of a design event as an empirical design approach can be adopted instead. The level of hazard mitigation works required for each Catchment has are summarized in the table below:

Table 1 Summary of Level of Hazard Mitigation Works required for each Catchment

Catchment No.	Hazard Type	Protection Level	Justification
PFL01	OH	1	Empirical design based on the use of prescribed barriers.
PFL02	CD	2	Analytical design required based on debris run-out modelling.
	OH	1	Empirical design based on the use of prescribed barriers.
PFL03	CD	2	Analytical design required based on debris run-out modelling.
	TD		
	OH	1	Empirical design based on the use of prescribed barriers.
PFL04	OH	1	Empirical design based on the use of prescribed barriers.
PFL05	TD	2	Analytical design required based on debris run-out modelling.
PFL06	TD	2	Analytical design required based on debris run-out modelling.

7.2.2 Debris mobility modelling has been conducted to assess the potential impact of all hazards on the proposed residential development at the toe of the study catchments. Observation Points were placed at the site boundary for each of the models analysed in order to collect data on the volume, thickness and velocity of any landslide debris entering the proposed development area. The mobility modellings have indicated that landslide debris within portions of Catchment Nos. PFL01, PFL03 and PFL04 will be sufficiently mobile to affect the proposed development platforms to varying degrees.

7.2.3 In addition to the landslide hazards, rock fall mobility modelling has been carried out to assess the potential impact of rock and boulder hazards on the facilities along the toe of the study catchments. One rock/boulder fall model has been adopted for Catchment No. PFL02. A predictive model was analysed within Catchment No. PFL02 comprising a line seeder with boulder volume determined based on the largest observed boulders within the drainage line in the lower portion of the catchment during field mapping. The analysis indicates that these boulders would not reach the proposed residential facilities downslope. As such no specific mitigation measures are required for rock or boulder fall hazards.

7.3 Hazard Mitigation Strategy

7.3.1 Based on the findings of the natural terrain hazard assessment and debris mobility modelling, mitigation of hazards is required for portions of Catchment Nos. PFL01, PFL03 and PFL04, in which the mobility modelling has indicated that landslide debris will be sufficiently mobile to affect the proposed development platforms to varying degrees.

Table 2 Mitigation Strategy Recommended under Option 1

Catchment	Hazard Type	Recommended Mitigation Measures
PFL01	Open Hillslope	a) Primary protection in accordance with TGN37, namely Type R1 3,000 kJ flexible rock fall barrier with minimum height of 4 m along the portions of the catchment toe affecting the development platform; or
		b) Provision of prescriptive rigid concrete barriers within the same areas, in accordance with GEO Report No. 174.
PFL02	Channelised Debris Flow	Nil. The debris mobility modelling indicates that landslide debris would not reach the catchment toe and mitigation is not thus required.
	Open Hillslope	
PFL03	Open Hillslope	a) Primary protection in accordance with TGN37, namely Type R1 3,000 kJ flexible rock fall barrier with minimum height of 4 m along the toe of the OH portion of the catchment; or.
		b) Provision of prescriptive rigid concrete barriers within the same areas, in accordance with GEO Report No. 174, with consideration on provision of vehicular access
	Debris Flow in Topographic Depression	Analytically designed rigid barrier within the drainage line with a retention capacity of at least 50 m^3, with consideration on provision of vehicular access
	Channelised Debris Flow	Nil. The debris mobility modelling indicates that landslide debris would not reach the catchment toe and mitigation is not thus required.

Catchment	Hazard Type	Recommended Mitigation Measures
PFL04	Open Hillslope (hillside facing southeast)	a) Primary protection in accordance with TGN37, namely Type R1 3,000 kJ flexible rock fall barrier with minimum height of 4 m along the toe of the OH portion of the catchment; or.
		b) Provision of prescriptive rigid concrete barriers within the same areas, in accordance with GEO Report No. 174, with consideration on provision of vehicular access
	Open Hillslope (hillside facing southwest)	Nil. The debris mobility modelling indicates that landslide debris would not reach the catchment toe and mitigation is not thus required.
PFL05	Debris Flow in Topographic Depression	Nil. The debris mobility modelling indicates that landslide debris would not reach the catchment toe and mitigation is not thus required.
PFL06	Debris Flow in Topographic Depression	Nil. The debris mobility modelling indicates that landslide debris would not reach the catchment toe and mitigation is not thus required

7.3.2 Two potential hazard mitigation works types are included for the Level 1 catchments (or catchment portions) under this option, with option a) comprising the standard prescriptive measures in accordance with GEO Technical Guidance Note No. 37. In the event that a more robust approach to hazard mitigation is considered desirable, these flexible barriers could be replaced with option b) prescriptive rigid concrete barriers designed in accordance with GEO Report No. 174. Consideration shall also be given to preservation of Important Trees and secondary woodland in the selection of different options.

7.3.3 This approach is similar to those commonly adopted for the Landslip Prevention and Mitigation Programme (LPMitP) undertaken by CEDD, in which mitigation works for natural hillside catchments do not typically include provision of vehicular access in order to limit environmental disturbance and impacts as well as construction costs. In addition, it should be noted that provision of flexible barrier is generally considered to be less visually intrusive and is a common mitigation measures to deal with open hillslope landslide hazard under the LPMitP. However, given that HD, as the end user of the site, has requested the consideration of vehicular access provision for rigid barriers, the necessity and details of the access will be further reviewed with due consideration on the degree of impact to the development area as well as the surrounding environment.

7.3.4 The proposed natural terrain hazard mitigation measures will be confined within the area delineated for natural terrain hazard mitigation measures (area in pink colour) as shown in **Plan No. 250269/C/002**. The locations of the catchments are shown in **Plan No. 250269/NTHS/002**.

7.4 Conclusion

7.4.1 The natural terrain hazard review identified the presence of Natural Terrain Catchments overlooking Kai Lung Wan North and Kai Lung Wan South Sites whilst no potential for natural terrain hazards to affect the sites at Wah Fu North, Wah King Street and Wah Lok Path is considered to exist, assuming that any natural terrain areas within the site footprints themselves will be removed as part of the development works.

7.4.2 A natural terrain hazard assessment has been carried out and the notional mitigation strategies which enable full development at the proposed platforms have been recommended.

7.4.3 The hazard mitigation scheme should be further reviewed in later stage of the Project. In conclusion, the NTHS has confirmed that with the proposed mitigation measures in place, the natural terrain hazard potentially impact the proposed development can be adequately alleviated. The proposed development is therefore technically feasible from the natural terrain hazard point of view.

8 PRELIMINARY ENVIRONMENTAL STUDY

8.1 Air Quality

8.1.1 The potential air quality impacts arising from the construction and operation of the proposed developments have been assessed.

8.1.2 The principal legislation for controlling air pollutants is the Air Pollution Control Ordinance (APCO) (Cap 311) which provides a statutory framework for establishing the Hong Kong Air Quality Objectives (AQOs) and stipulating the anti-pollution requirements for air pollution sources. The AQOs stipulate limits on concentrations for 7 pollutants including Sulphur Dioxide (SO_2), Respirable Suspended Particulates (RSP), Fine Suspended Particulate (FSP), Nitrogen Dioxide (NO_2), Carbon Monoxide (CO), Photochemical Oxidants (as Ozone (O_3)), and Lead (Pb).

8.1.3 The existing ambient air quality has been reviewed with reference to the air quality monitoring data at EPD's existing air quality monitoring station (AQMS) at Central/Western. Concentrations of criteria pollutants have been compared with their respective limits stipulated in AQOs. Although the existing ambient air quality exceeds certain requirements stipulated in AQOs, it should be noted that continues improvement is anticipated in foreseeable future. During the 12th Hong Kong-Guangdong Joint Working Group Meeting on Sustainable Development and Environmental Protection (Nov 2012), the Hong Kong and Guangdong Governments jointly endorsed a Major Air Pollutant Emission Reduction Plan for the Pearl River Delta (PRD) Region up to year 2020. Moreover, the AQMS figures from HEC at Queen Mary Hospital/Pok Fu Lam in recent 5 years show that all monitored records comply with the relevant AQOs in Pok Fu Lam area.

8.1.4 Review has been carried out on the future background air quality predicted by PATH (Pollutants in the Atmosphere and their Transport over Hong Kong), which is a regional air quality model developed by EPD to simulate air quality over Hong Kong against the PRD as background, taking into account the measures to improve air quality. With the implementation of the emission reduction measures by both the Hong Kong and Guangdong Governments, future PATH background air quality will be further improved, to below the relevant AQO at the proposed development areas.

8.1.5 Potential air sensitive uses include domestic premises, hotel, hospital, clinic, temporary housing accommodation, school, educational institution, office, factory, shop etc. Representative Air Sensitive Receivers (ASRs) including Chi Fu Fa Yuen, Pokfulam Gardens, Residence Bel-Air, Wah Fu Estate, Wah Kwai Estate, Pokfulam Fire Station, St. Paul's College Primary School etc. within the 500m assessment area has been identified.

8.1.6 During the construction phase, major air pollution sources are fugitive dust generated from general construction activities, including site preparation, ground excavation, foundation works, stockpiling of materials, loading and unloading dusty materials, wind erosion of open sites, and construction of structures within the site area.

(1) With the implementation of relevant mitigation measures recommended in the Air Pollution Control (Construction Dust) Regulation e.g. water spraying on any dusty materials, adoption of side enclosure and covering of any aggregate or dusty material storage piles, use of effective dust screens, provision of vehicle washing facilities at all site exits etc., adverse construction dust impacts on the ASRs are not anticipated.

8.1.7 During the operation phase, major air pollution sources are vehicular emissions from neighbouring roads e.g. Pok Fu Lam Road, Victoria Road etc. as well as emissions from industrial chimneys. The nearest potential odour sources are Aberdeen Preliminary Treatment Works and Wah Fu Preliminary Treatment Works, located 180m and 350m from the proposed development respectively.

(1) The proposed developments at all five development sites will be designed to fulfil the requirements of minimum setback distances between ASRs and different categories of roads as specified in Chapter 9 of the Hong Kong Planning Standards and Guidelines (HKPSG). Hence, adverse air quality impact due to vehicular emissions is not anticipated.

(2) The chimney at Government Laboratory is not in use while the distance between chimney at Ka Ho Restaurant and the development sites as well as the distance between Excel Concrete (a concrete batching plant) and the development sites are able to fulfil the respective minimum setback distance as specified in HKPSG. Thus adverse air quality impact due to emissions from industrial chimneys and dusty uses is not anticipated.

(3) With reference to Figure 3.44 in the approved EIA report for Harbour Area Treatment Scheme (HATS) Stage 2A (AEIAR-121/2008), the odour concentration at the proposed development meets the odour criterion. Hence, adverse odour impact is not anticipated.

8.1.8 With implementation of mitigation measures as specified above, adverse air quality impacts on the ASRs is not anticipated during both the construction and operational phases of the Project.

8.2 Noise

8.2.1 Potential noise sensitive uses include residential uses (all domestic premises including temporary housing), institutional uses (e.g. educational institutions, hospitals, medical clinics, homes for the aged and library etc.) and other uses (e.g. hostels). The first layer of Noise Sensitive Receivers (NSRs) including Yar Chee Villas Blocks 1 to 5, Chi Fu Fa Yuen Fu On Yuen, Wah Fu Estate Wah Chui House, World Fair Court, St. Paul's College Primary School, Kellett School etc. within 300m from the Project boundary have been identified.

8.2.2 During construction phase, potential noise impacts are expected to arise from general construction activities including site clearance, site formation and infrastructure works.

(1) For construction activities other than percussive piling, there is no statutory limit on daytime construction noise under the Noise Control Ordinance (NCO) and relevant Technical Memorandum (TM). Nevertheless, the Environmental Protection Department's Practice Note For Professional Persons: Noise from Construction Activities - Non-statutory Controls (Practice Note PN 2/93) stipulates noise standards of 65 - 75dB(A) for daytime construction activities.

(2) PME is required to be adopted for construction activities of the proposed works. These PME including breakers, rock drills, excavators, bulldozers, cranes, rollers, concrete pumps, concrete lorry mixers, grinders, air compressor, generators, grout mixers etc. which will inevitably generate certain level of construction noise that may affect the NSR(s) identified. The construction noise impacts at selected representative NSRs under unmitigated scenario have been assessed based on the utilization rates of PME, construction methodology, locations of workfronts, plant

inventory and implementation programme, which have been confirmed to be realistic, practical and practicable by the Project Civil Engineer and the CEDD. Exceedances of construction noise standards are predicted at some NSRs under unmitigated scenario and mitigation measures are therefore required.

(3) The mitigation measures considered include good site practices to limit noise emissions at the source, use of quality powered mechanical equipment (QPME), use of temporary noise barriers, noise enclosures, acoustic mat and scheduling of noisy construction works outside school examination periods in critical area. 'The recommended pollution control clauses for construction contracts' issued by the EPD shall be adopted in the construction contract(s) of the Project. With the implementation of the noise mitigation measures, the construction noise impacts have been assessed and results indicate that noise impact on all selected representative residential NSRs have been mitigated to within the criterion. However, educational institutions, including St. Paul's College Primary School and Kellett School, will be subject to residual construction noise impact during both normal and examination periods. Acoustic insulated window (i.e, double glazing window) and mechanical ventilation have already been implemented in both St. Paul College Primary School and Kellett School. The Contractor should liaise closely with the educational institutions to avoid noisy construction works during examination periods and school hours as far as possible. With the implementation of all practicable mitigation measures, the construction noise impact would be minimized.

8.2.3 During operation phase, the major noise source will be the road traffic noise from neighbouring roads e.g. Pok Fu Lam Road, Shek Pai Wan Road, Victoria Road, Wah King Street, Chi Fu Road and proposed new roads.

(1) Calculations of future road traffic noise are based on the peak hourly flow for the maximum traffic projected from the first operation to 15 years period after full operation of the proposed development. The traffic projection has taken into account the induced traffic due to the operation of other planned roads and committed projects. Since the ultimate operation year of the Project will be in Year 2027, the assessment year for road traffic noise is taken as Year 2042 (which is the maximum traffic projection from the first operation to 15 years after full operation of the proposed development).

(2) The potential concurrent projects, which may have cumulative environmental impacts during the operational phase, have been identified based on the latest available information. The induced traffic from the concurrent committed projects have been taken into account in the traffic forecast and hence in the road traffic noise model.

(3) The predicted road traffic noise levels at each representative existing NSRs has been assessed and it is concluded that as compared with the "Without Project" scenario, the increase in traffic noise levels at the existing NSRs in the design year (i.e. 2042) under the "With Project" scenario would be less than 1.0 dB and therefore the traffic noise impact due to the Project would be insignificant; or else the predicted traffic noise levels under the "With Project" scenario at the nearby existing NSRs would comply with the relevant noise criteria. Besides, the proposed new road is an at-grade cul-de-sac which does not involve turning into a link road, and the scale of the proposed new road is comparable to the works described in Appendix A (Annex E) of Technical Circular (Works) No. 13/2003. It is considered that the proposed

new road would have limited potential of causing environmental impacts with the implementation of standard pollution control measures.

(4) Potential fixed noise sources within the assessment area of the Proposed Development e.g. chiller/condensers on rooftop, alarm siren and public address (PA) system of Pok Fu Lam Fire Station and Ambulance Depot (PFLFS), exhaust/louver and transformer have been identified from desktop study and site surveys. The Housing Department (HD) has confirmed that separate Environmental Assessment Studies (EAS) will be conducted to further address the potential operational noise impacts arising from/on the planned housing developments with respect to the HKPSG and mitigation measures will be proposed where necessary to ensure no adverse noise impacts on the developments. In general, suitable building design (e.g. self-protected building design and noise tolerant building) would be considered to avoid direct line of sight to these fixed noise sources. Mitigation measures such as structural fin, noise screening balcony and fixed glazing will be proposed, if necessary, to ensure compliance with the respective noise criteria stipulated in the NCO. If found necessary, HD is also recommended to work with the operators of the noise sources for the provision of at-source mitigation measures including noise barriers, enclosures and acoustic treatment to mitigate the fixed source noise impacts. Technically insurmountable noise impact from the fixed noise sources on the proposed developments is not anticipated.

(5) An additional booster pump is proposed to be installed by WSD at the spare pump bay of existing Telegraph Bay Salt Water Pumping Station (SWPS). The major noise sources include pump and ventilation system. The pump will be installed underground and enclosed within a building structure and the opening of the exhaust of the ventilation system are also located away from the nearby NSRs. The SWPS is more than 300m away from the proposed development. Insurmountable noise impact on the NSRs arising from the operation of the SWPS is therefore not anticipated.

8.3 Water Quality

8.3.1 The Project falls within the Western Buffer Water Control Zone according to the Water Pollution Control Ordinance. 7 nos. of existing natural watercourses fall within the 500m assessment area from the boundary of the Site.

8.3.2 The baseline water quality conditions have been reviewed with reference to the monitoring results of marine water quality monitoring station as presented in annual reports of Marine Water Quality in Hong Kong published by EPD.

8.3.3 Key water quality sensitive receivers (WSRs), which may potentially be affected by the site formation and infrastructural works of the proposed development, are shown in **Plan No. 250269/E/05/001**.

8.3.4 During construction phase, potential water quality impacts are expected to arise from construction site runoff, sewage from workforce and modification of existing watercourses.

(1) Construction site runoff may be polluted by runoff and erosion from earth works and stockpiles, wash water from dust suppression sprays and wheel washing facilities, chemicals spillage from maintenance of construction machinery and equipment etc. Construction runoff may cause potential blockage of drainage channels and increase in suspended solid levels in the receiving water bodies.

Runoff containing significant amounts of concrete and cement-derived material may cause primary chemical effects such as increase in turbidity and discoloration, elevation in pH, and accretion of solids. With the implementation of standard mitigation measures as recommended in *Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 1994 (ProPECC PN 1/94)* and *ETWB TCW No. 5/2005 (Protection of natural streams/rivers from adverse impacts arising from construction works),* e.g. adequately designed sand/silt removal facilities, proper on-site drainage system for conveying runoff to such silt removal facilities prior to discharging at existing drainage system, regular inspection and maintenance to ensure proper functioning of all drainage facilities, proper covering of temporary exposed slope surfaces and open stockpiles of construction materials etc., it is anticipated that the water quality impacts associated with construction site runoff can be adequately mitigated. In any circumstances, design of temporary on-site drainage shall take into account the requirement of WPCO TM9.1 that no new effluent will be allowed in any typhoon shelter and marina (i.e. Aberdeen Typhoon Shelter).

(2) Sludge and sewage effluents generated from the construction workforce should be handled by proper sanitary facilities e.g. portable chemical toilets, sewage holding tanks etc. and be collected and disposed of properly by a licensed contractor on regular basis, hence, no adverse water quality impact associated with sewage generation during the construction phase is anticipated.

(3) Existing natural watercourses which will be in conflict with the proposed site formation and infrastructure works are proposed to be modified and/or diverted or abandoned. The proposed modification/diversion works is at least 300m from the existing site of special scientific interest (SSSI), which do not fall within the Water Gathering Grounds (WGGs) and hence no adverse impact will be anticipated. A new green channel is proposed along the north-eastern boundary of Kai Lung Wan South Site, potential impacts associated with the proposed modifications/diversions of watercourses are expected to be mitigated by specific construction methods. Non-point source pollution would be controlled by mitigation measures as stated in EIAO-TM Annex 6 and 14 such as prevention of illegal dumping of wastes, erosion control, prevention and containment of spills etc.

8.3.5 During operation phase, potential water quality impacts are expected to arise from surface runoff and sewage generated form the proposed development.

(1) Runoff from development sites and roads may be polluted by dust, tyre scrap and lubricant oil deposited and accumulated on road surfaces. The associated potential water quality impacts are expected to be mitigated by implementation of good management practices e.g. cleaning of road/open area prior to occurrence of storm and use of proper drainage systems comprising of gullies, silt traps, oil interceptors and manholes. Moreover, the design of drainage system shall take into account the requirement of WPCO TM9.1 that no new effluent will be allowed in any typhoon shelter and marina (i.e. Aberdeen Typhoon Shelter). Non-point source pollution would be controlled by mitigation measures as stated in EIAO-TM Annex 6 and 14 such as prevention of illegal dumping of wastes, erosion control, prevention and containment of spills etc.

(2) Sewage flows generated from the proposed development are proposed to be conveyed to Wah Fu PTW and Aberdeen PTW for further treatment and disposal. The adequacy of the existing sewers and PTWs to accommodate the sewage flow generated from the proposed development has been assessed, it is identified that the

capacity of both PTWs are adequate to cope with the sewage flow generated from the proposed development and no PTW upgrading works is proposed under this Project. In addition, no effluent from the proposed developments will be discharged into the Aberdeen typhoon shelter.

8.3.6 With full implementation of the mitigation measures, no adverse residual and cumulative water quality impacts are anticipated during both the construction and operational phases of the Project.

8.4 Waste Management

8.4.1 During construction phase, different types of waste material are expected to be generated as detailed below.

(1) Inert and non-inert C&D material is expected to be generated from site clearance, site formation works and construction of new infrastructure works. The environmental impacts associated with the waste generation are expected to be mitigated by implementation of good construction site practices and waste reduction measures e.g. on-site sorting to recover inert C&D materials and reusable and recyclable materials, reuse non-inert portion of C&D material as far as possible with off-site disposal considered only as a last resort.

(2) Chemical waste, e.g. lubrication oil and solvent, may be generated from maintenance of plant and equipment. The quantity of chemical waste will be highly dependent on the contractor's on-site maintenance practice but is expected to be small. With the implementation of standard practices for storage, handling, transport and disposal of chemical waste as recommended in EPD's *Code of Practice on the Packaging, Labelling and Storage of Chemical Waste*, e.g. reuse and recycling of chemical waste as far as possible, collection and disposal of chemical waste at a licensed chemical waste treatment and disposal facility by a licensed contractor etc. it is anticipated that the environmental impacts associated with chemical waste can be adequately mitigated.

(3) General refuse comprising food wastes, waste paper, aluminium cans and plastic bottles generated from the construction workforce has been estimated based on the generation rate of 0.65 kg/person/day and the estimated number of workforce. With proper implementation of mitigation measures, which include avoiding, reducing, reusing and recycling of general waste, and proper handling and disposal of general refuse at an appropriate facility on regular basis, no adverse environmental impact associated with general refuse is anticipated.

8.4.2 During operation phase, only a small amount of general refuse will be generated from the proposed infrastructural works.

(1) The small amount of general refuse generated from users of the proposed infrastructural works should be properly handled and disposed of at an appropriate facility on regular basis, hence, no adverse environmental impact associated with general refuse is anticipated.

8.4.3 The estimated quantities of waste generated during construction phase and recommendation of outlets for the wastes are summarized in **Table 3**.

Table 3 Summary of waste generation and recommendation for outlets during construction phases

Materials type		Total amount generated (m^3)	Total amount to be reused on-site (m^3) [8]	Total amount disposed (m^3) [8]	Recommended outlets
Inert C&D materials	Inert soft C&D materials [1]	191,320	30,105	383,205 [6]	Reuse within the site as much as possible. The surplus is proposed to be delivered to public fill reception facilities [5].
	Rock [2]	215,130	[5]		
	AHM [3]	6,860	[5]		
Non-inert C&D materials	Top soil	21,460	[7]	68,704	Dispose to landfill
	Vegetation	4,728			
	Non-inert C&D material [4]	42,516			
General refuse		< 550 kg/day	-	< 550 kg/day	Disposal to landfill. Recycling bins will be provided to facilitate recycling of general refuse.
Chemical waste		A few hundred litres per month	-	A few hundred litres per month	Chemical waste is unlikely to be reused on-site. It will be recycled by licensed facility as far as possible, the remaining will be disposed of at Chemical Waste Treatment Centre (CWTC) in Tsing Yi

Notes:

[1] "Inert soft C&D material" includes, but not limited to excavated soil, etc.

[2] "Rock" includes all grade rock.

[3] "Artificial hard material" includes, but not limited to, broken concrete, asphalt, bitumen and granular materials, etc.

[4] "Non-inert C&D material" includes, but not limited to, bamboo, timber, paper and plastic, etc.

[5] C&D materials will be reused as far as practicable. The actual amount of materials to be reused is subjected to the actual site condition.

[6] The amount indicates the worst-case scenario assuming no reuse of rock and AHM on-site. The actual amount to be disposed will be subject to the actual amount to be reused.

[7] Non-inert materials are not suitable for reuse in site formation and infrastructural works.

[8] C&DMMP will be derived in later stages of the Project with due consideration to minimizing off-site disposal of fill materials.

8.4.4 With full implementation of the mitigation measures, no adverse residual and cumulative waste management implications from the generation of waste are anticipated during both the construction and operational phases of the Project.

8.4.5 Land contamination assessment has been carried out for the five development sites in accordance with the relevant guidelines. The historical and present land uses within five development sites and Lot GLA-THK1759 (potential woodland compensation area) have been studied by desktop review, including aerial photographs, topographic maps, and information on chemical waste producer and dangerous goods license, and site reconnaissance. No contaminating activities were identified within the five development sites, hence, potential land contamination is not anticipated. However, potential contamination may have occurred within the workshop area and piling area of Lot GLA-THK1759 as it was previously occupied by WSD as works area, site investigation

including soil sampling and testing has been proposed to investigate any land contamination occurred within the workshop area and piling area of Lot GLA-THK1759.

8.4.6 Since any potential land contamination would be assessed and adequately remediated prior to commencement of construction works, and that Lot GLA-THK1759 would be adopted as woodland compensation area with no access by general public, no potential impact to future site users is anticipated.

8.5 Ecology

8.5.1 Ecology of the five development sites and their vicinity has been reviewed based on literature review and field surveys carried out during the Feasibility Study stage from March to July 2015. In addition, two wet season surveys were carried out from late July to August 2016 for the Kai Lung Wan areas covering the proposed Kai Lung Wan North and Kai Lung Wan South Sites. In addition, a total of 16 additional surveys for Tree Gecko have been carried out from September to October 2016 as well.

8.5.2 Survey methodologies generally followed the guidelines provided in EIAO Guidance Notes 7/2010 and 10/2010, and in Annex 8 of the TM-EIAO in regard to defining species of conservation importance. Surveys were focused on the proposed sites, but nearby areas of secondary woodland and natural stream were also surveyed, where accessible, in order to provide a more complete profile.

8.5.3 The habitats of each development site and their vicinity have been evaluated. Significance of direct ecological impacts in the absence of mitigation are evaluated and summarized in the following table:

Table 4 Significance of direct ecological impacts in the absence of mitigation

Habitat	Significance
Secondary woodland in Kai Lung Wan North Site	MODERATE
Secondary woodland in Kai Lung Wan South Site	MODERATE
Secondary woodland in Wah Fu North Site	LOW
Natural watercourse in Kai Lung Wan North Site	LOW TO MODERATE on 278m, LOW on 92m
Natural watercourse in Kai Lung Wan South Site	LOW
Natural watercourse in Wah Fu North Site	LOW
Plantation in Kai Lung Wan North Site	LOW
Plantation in Kai Lung Wan South Site	LOW
Plantation in Wah King Street Site	LOW
Faunal species of conservation importance - *Lesser Spiny Frog*	LOW TO MODERATE
Faunal species of conservation importance - *Emerald Cascader*	LOW TO MODERATE
Floral species of conservation importance- *Aquilaria sinensis*	LOW TO MODERATE
Floral species of conservation importance- *Gnetum luofuense*	LOW
Floral species of conservation importance- *Lagerstroemia fordii*	MODERATE
Floral species of conservation importance- *Pavetta hongkongensis*	LOW TO MODERATE

8.5.4 Indirect ecological impacts on urban / residential area both within and outside the proposed sites are considered negligible. As Wah Fu North, Wah King Street and Wah

Lok Path Sites are surrounded by urban / residential area, plantation or secondary woodland of low ecological value, significant indirect ecological impacts from development within these sites are not predicted. Similarly, indirect impacts from development on areas of the same habitats adjacent to Kai Lung Wan North and Kai Lung Wan South Sites are not predicted. However, both Kai Lung Wan North and Kai Lung Wan South Sites have, to varying degrees, natural habitats adjacent to part of their boundary. In Kai Lung Wan North Site, the only habitat type of conservation importance potentially impacted is secondary woodland, while Kai Lung Wan South Site is surrounded by secondary woodland and shrubland/grassland. In addition, stream courses are identified in both sites.

8.5.5 In general, indirect construction and operational phase impacts on terrestrial habitats arising from disturbance by human activity, noise and dust are relatively minor, as the species involved are relatively disturbance-tolerant and no disturbance-sensitive species of conservation importance have been identified or are predicted to occur. However, particular care is required to be taken in the area where the *Hemiphyllodactylus* tree gecko was recorded, which is in close proximity to the development site. Moreover, natural stream may be affected by potential run-off or pollution from construction sites.

8.5.6 The strategy of mitigation measures to avoid, minimise and compensate for ecological impacts and the potential issues that might be encountered in its implementation are outlined below:

(1) Avoidance – The site boundary has been revised from the original one to avoid direct impact on the secondary woodlands of higher ecological value, shrubland and natural watercourse in Kai Lung Wan and areas near Chi Fu Fa Yuen as far as possible. In particular, the area of secondary woodland and semi-natural watercourse between Kai Lung Wan North and Kai Lung Wan South Sites has been avoided to retain the ecological connectivity between lowland areas and upland woodland, hence, preserving most of the local ecological characteristics and biodiversity as far as feasible.

(2) Mitigation for loss of secondary woodland – Approx. 5.0ha of natural secondary woodland with higher ecological value in Kai Lung Wan North and Kai Lung Wan South Sites will be lost due to the proposed development. With regard to size, naturalness, and flora and fauna diversity identified within the woodland habitat to be lost, mitigation in the form of woodland compensation is required. Compensation of woodland loss, either as a stand-alone measure or in conjunction with minimisation of habitat loss, is technically feasible assuming a site that is not heavily impacted by human disturbance, poor soils or fire is utilised, though there would be a temporary impact due to the time required to attain the level of maturity the existing woodland has reached today. A draft Woodland Compensation Proposal which include a preliminary evaluation of potential woodland compensation sites (a total of approx. 6.44ha areas within 500m Assessment Area of the proposed development are identified as potential woodland compensation areas, from which more suitable compensation areas will be selected to achieve 1:1 compensation ratio), preliminary planting lists and a broad direction for the implementation of woodland planting for mitigating the woodland loss has been derived.

(3) Mitigation for loss of natural watercourse – With regard to sections of stream for which avoidance is considered not technically infeasible (214m long natural watercourse at Kai Lung Wan North Site), options including construction of a newly-created and ecologically-friendly 'green channel' and/or enhancement of

streams in the same network might be considered. A draft Stream Mitigation Plan which include preliminary proposal of a compensatory green channel with length of approx. 250m along the north-eastern boundary of Kai Lung Wan South Site has been derived.

(4) Mitigation for loss of faunal species of conservation importance – The faunal species of conservation importance, Lesser Spiny Frog, is anticipated to suffer direct loss. Translocation of the species could be achieved by identification of receptor site(s) that comprise suitable habitats to accommodate the translocated fauna species of conservation importance. A primary aim of the stream diversion described above should be to create habitats in the new channel in such a way as to support the wildlife in the surrounding environment.

(5) Mitigation for loss of floral species of conservation importance – Four floral species of conservation importance, including *Aquilaria sinensis*, *Gnetum luofuense*, *Lagerstroemia fordii* and *Pavetta hongkongensis* are anticipated to be affected by the proposed development. Except woody climber *Gnetum luofuense*, *in-situ* preservation or transplantation of the remaining three floral species to compensation woodland or undisturbed woodland patches within the proposed sites is considered feasible. The *Lagerstroemia fordii* recorded on a slope adjacent to access road linking KLW FWSR should be preserved *in-situ* with appropriate on-site protection measures. Otherwise, transplantation of these specimens should be considered. If any of these floral species are determined to be unsuitable for transplantation or preservation *in-situ*, the planting of whip tree of this species will be proposed as a compensation measure.

8.5.7 With implementation of the abovementioned mitigation measures, there will be no insurmountable ecological impact arising from the proposed developments.

8.6 Landscape and Visual

8.6.1 The landscape baseline study which comprises the identification and evaluation of the sensitivity of all potential impacts on existing and planned Landscape Resources (LRs) and Landscape Character Areas (LCAs) within the study boundary of 500m from the site boundary of the Project has been carried out.

8.6.2 A preliminary broad brush tree group survey has been conducted to estimate the quantities and assess the general condition of existing trees / tree groups within the site area. There is a total of approx. 4,483 nos. of trees within the site area, out of which approx. 47 nos. meet the criteria for Important Trees (ITs) as listed in *DEVB TCW No. 7/2015*. Individual tree survey has been conducted for these trees and the assessment results of the tree surveys are summarized in the **Table 5**. The quantity of trees affected by Natural Terrain Hazard Mitigation (NTHM) measures depends on the type of barriers adopted. Flexible barriers will in general affect fewer number of trees than rigid barriers. The type and arrangement of NTHM measures and hence the nos. of trees to be affected by NTHM measures will be determined in later stage of the Project. Detailed tree felling application and compensatory planting proposals will be submitted in accordance with *ETWB TCW No. 29/2004* and *DEVB TCW No. 6/2015* and *7/2015* in later stage of the Project.

Table 5 Summary of Preliminary Tree Assessment Results

Site	Tree Group Survey				Individual Tree Survey for Important Tree			
	Retain	Transplant	Fell	Total	Retain	Transplant	Fell	Total
Kai Lung Wan North	1729	47	1042	**2818**	16	0	14	**30**
Kai Lung Wan South	276	0	370	**646**	0	0	2	**2**
Wah Fu North	48	0	584	**632**	7	0	4	**11**
Wah King Street	3	12	314	**329**	0	0	2	**2**
Wah Lok Path	4	0	54	**58**	1	0	1	**2**
TOTAL (%)	**2060 (46%)**	**59 (1%)**	**2364 (53%)**	**4483**	**24 (51%)**	**0 (0%)**	**23 (49%)**	**47**

8.6.3 With the implementation of proposed mitigation measures which include evaluation of various design options to minimize impact on existing ITs, transplanting of affected trees as far as practicable, compensatory planting including roadside planting and provision of green coverage within the proposed development, the overall residual landscape impact on existing trees and greenery can be adequately mitigated. In addition, a draft Woodland Compensation Proposal which include a preliminary evaluation of potential sites (areas within 500m Assessment Area of the Proposed Development) for woodland compensation and broad direction for the implementation of woodland planting for mitigating the woodland loss has been derived. Approximately 14 and 246 nos. of new trees will be planted for roadside amenity and at the public housing sites respectively, and approximately 6.44ha of compensatory woodland will be planted for the loss of existing trees. Recommendations on mitigation measures are summarized in **Table 7** and the landscape impacts before and after mitigation during the construction and operation phases are summarized in **Table 8**.

8.6.4 The visual envelope and popular local vantage points within the viewshed is generally formed by ridgelines of Mount Davis, The Peak, Mount Kellett and High West to the north; residential development of South Horizons to the east, Mount Stenhouse on the south west across East Lamma Channel; to the west, it is bounded by the high-rise residential development of Bel-Air. In many cases, all these housing sites can be seen by viewpoints from secondary zone of visual envelope.

8.6.5 The five development sites are bounded by hillside and coastal landscape characters of Pokfulam South, including Mount Kellett, High West, The Peak, Mount Davis and East Lamma Channel. However within beautiful scenic view, there are several existing and planned visual detractors and eyesores identified within the visual envelope.

8.6.6 Representative viewpoints from key pubic viewers have been selected in consultation with PlanD for making photomontages to illustrate the visual impact of the Project. Recommended photomontage viewpoints are summarized below:

(1) **A4** - High West Viewing Point

This VP is located at High West Viewing Point adjacent Pokfulam Country Park. Viewers of A4 has visual and physical connection to Hong Kong Trail Stage 1 and has a panoramic view over East Lamma Channel. It's a popular hiking route and

quite frequently visited by public; especially hikers of Victoria Peak and Hong Kong Island South areas. This view point represents the views of the visitor toward the proposed development. The key visual element of A4 is an elevated open view, overlooking the entire Pokulam area, East Lamma Channel and Lamma Island. It is considered that the distance is very far from the Project (~1.9km). The proposed building bulk and building height from public housings of the wider context will not create any blockage of view from this VP. Furthermore, loss of greenery due to proposed housing site platforms could not be viewed from this VP. The stepping height profile (+170mPD max. - +230mPD max.) of the proposed housing blocks are visually compatible with and in harmony with the general building profile in Pokfulam. It is visually coalesce with the existing Pokfulam cityscape when viewed from the viewing point at A4. No sky view are blocked by the building masses of the proposed development. Visual harmony is seen in this visual context. The building mass of the proposed public housing development is acceptable when viewing from this vantage point. However, it would result in reduction of the perceived width of the East Lamma Channel. Therefore magnitude of change would be **small**. This small magnitude of change when combined with the medium sensitivity of the public viewers will result in a **slightly adverse visual impact**. (Refer to **Figure 250269/LVIA/6.1**).

(2) **A8** - Southern District Council rain shelter at Hong Kong Trail Stage 2

This VP is at the Southern District Council rain shelter at Hong Kong Trail Stage 2 which is about 600m from the site. This view point represents the views of hikers towards the proposed development. When viewed from this VP, existing buildings in Chi Fu Fa Yuen (max. +229mPD), Pokfulam Terrace (max. +147mPD) and Wah Kwai Estate (approximate +110mPD) form a tapering height profile. The proposed 4 nos. building blocks (+230mPD max.) of the future housing developments at the KLWN Site and 2 nos. blocks (max. +200mPD) at KLWS Site do not respect such tapering building height profile and the unique relationship between man-made environment. Due to the close proximity of the view point to the subject sites, the future residential development are visually prominent and would partially block the sea view of East Lamma Channel. Residential blocks of Kai Lung Wan North Site have occupied most of the foreground of the photomontage. By introduction of varying height profile of building height (max. +230mPD) at Kai Lung Wan North Site and (max. +200mPD) at Kai Lung Wan South Site **(DM6)**, and provision of 25m building separation between blocks **(DM6)** (Refer to **Figure LVIA/5.1**), it will only provide slight visual relief towards ridgeline of Mount Stenhouse and sea view at Lamma Island. Furthermore, provision of 25m building separation (**DM6**) will only allow a bit of visual permeability. When viewed from this VP, visual connections of the mountains and the East Lamma Channel are disturbed. No visual resources of the ridgeline of Lamma Island will be disturbed by the 4 nos. building blocks (max. +230mPD) at Kai Lung Wan North Site. Part of the view of the Lamma Island at the backdrop are blocked by the building masses of Kai Lung Wan North Site. The proposed development will inevitably have visual changes in loss of openness and sea views to the East Lamma Channel in this vicinity. Having said that, no sky view are affected by the proposed housing sites. Overall, magnitude of change would be **intermediate**. This intermediate magnitude of change when combined with the medium sensitivity of the public viewers will result in a **moderate adverse visual impact**. (Refer to **Figure 250269/LVIA/5.1** and **6.2**).

(3) **A10** - Pavilion near Lamma Winds

All public housing development sites at Pokfulam south could be seen when viewed from this VP. This viewing point at pavilion near Lamma winds is about 3.75km southwest from the site. It is popular to the public for hiking and has a panoramic view to the Sites. The future housing developments (Kai Lung Wan North Site, Kai Lung Wan South Site, Wah Fu North Site, Wah King Street Site and Wah Lok Path Site) are seen as comparable to that of the adjacent townscape of Pokfulam area with this long distance view. The proposed building height and mass are visually harmonious with the surrounding urbanized context of Pokfulam when viewed from A10. There is no blockage of views. No visual resources, namely sky view and ridgelines, are affected by the proposed development. There would be loss of greenery backdrop. Overall, magnitude of change would be **small.** This small magnitude of change when combined with the low sensitivity of the public viewers will result in a **slightly adverse visual impact**. (Refer to **Figure 250269/LVIA/6.3**).

(4) **B2 (VP1a & VP1b)** – Podium garden atop the Chi Fu Shopping Centre

These two VPs are located at the North and South edges of Podium garden atop the Chi Fu Shopping Centre adjacent to Chi Fu Fa Yuen. Due to its close proximity to the subject site, the building mass of the proposed public housing (Wah King Street Site & Wah Fu North Site) can be experienced. Viewers of B2 has visual connection to open sea view towards East Lamma Channel. It's a typical urban open space and quite frequently visited by public, especially by residents of Chi Fu Fa Yuen. The key visual element of B2 are Mount Stenhouse at Lamma Isaland and the sea view to East Lamma Channel at the background. The proposed 2 nos. building blocks (+200mPD max.) of the future housing developments at Wah Fu North Site would partially block the open sea view and ridgeline of Mount Stenhouse at Lamma Island. The proposed 2 nos. building height (max. +200mPD) from potential housing site at WFN Site seen as comparable to that of Fu Ho Yuen, Chi Fu Fa Yuen (approx. +207mPD) when viewed from this VP. The view corridor of the proposed public housing development allows slight visual permeability and slight visual connections with the visual resources as mentioned before. The continuity of ridgeline (Lamma Island) is an essential visual resources, which will be partially disturbed by the WFN Site (max. +200mPD), when viewed from this VP. However, part of the sea view and ridgeline are still unavoidable disturbed. Overall, magnitude of change would be **intermediate**. This intermediate magnitude of change when combined with the medium sensitivity of the public viewers will result in a **moderately adverse visual impact**. (Refer to **Figure 2502691/LVIA/6.4-6.5**).

(5) **B3** - A future open space opposite from Bel-Air No. 8 Stage 2

The proposed building height and mass of these future residential development (WFN Site and WKT Site) are visually prominent and have occupied most of the foreground of the photomontage. These residential blocks seen as an extension of existing developments (from Chi Fu Fa Yuen) and the visual openness of this VP is degraded. It will create blockage of sky view when seen from this view point. Visual obstruction to the sky openness has been made. Further, visual relief and visual connection from the green vista to this VP will be broadly reduced. Overall, magnitude of change would be **large**. This large magnitude of change when combined with the medium sensitivity of the public viewers will result in a **moderately adverse visual impact**. (Refer to **Figure 250269/LVIA/6.6**).

(6) **B4** - Waterfront at South Horizons

This view point is at waterfront at South Horizons which is easily accessible and popular to the residents in South Horizons, which is approximate 1km southeast of the proposed development. Due to its close proximity to the subject site, the building mass of the proposed public housing development can be experienced. The scale and mass of these proposed housing developments (+200mPD max., +230mPD max.) (Kai Lung Wan North Site and Kai Lung Wan South Site) are visually prominent, when compared to nearby the WLP Site. KLWN Site and KLWS Site are seen as an extension of the existing developments (Wah Kwai Estate). Wah Kwai Estate (+108mPD), Chi Fu Fa Yuen (~+229mPD) and the Kai Lung Wan sites are at significantly higher elevations than the existing buildings at Chi Fu Fa Yuen and Wah Kwai Estate; and part of the sky view are blocked by the building masses of Kai Lung Wan North Site. It will intrude with open sky view and create some loss of openness and visual amenity would be moderately degraded. Overall, magnitude of change would be **intermediate**. This intermediate magnitude of change when combined with the medium sensitivity of the public viewers will result in a **moderately adverse visual impact**. (Refer to **Figure 250269/LVIA/6.7**).

(7) **B7 (VP1a & VP1b)** - Upper Kai Lung Wan Temporary Sitting-out Area

This viewing points are at Upper Kai Lung Wan Temporary Sitting-out Area which is about 220m facing NW and facing SW from the site. The proposed 2 nos. building blocks (+200mPD max.) of the future housing developments at Kai Lung Wan South Site is the key visual changes when viewed from this B7-1a. These VPs are located slightly away from Upper Kai Lung Wan Temporary Sitting-out Area, similar to typical urban open space, and mostly visited by locals. The key visual element is overlooking towards townscape of Pokfulam South area with open sky and sea view at the background. However, the building masses of KLWS Site (+200mPD max.), KLWN site (+230mPD max.), WKT site (+200mPD max.) and WLP site (+170mPD max.), will occupy most of the foreground of the photomontage due to the close viewing distance. The building masses of KLWS (+200mPD max.) will block substantial part of the open sky view, the ridgeline of Lamma Island and sea view, when seen from B7-1b. The housing blocks of KLWS Site, KLWN site, WKT site and WLP site, are perceived to be visually prominent with existing urbanized cityscape profile, when viewed from both B7-1a and B7-1b. The building blocks of both KLWN sites and KLWS sites will dominate the vista and visual openness is inevitable lost. The provision of 25m building gap separation / visual corridor, which as a design measures, in KLWS sites provides visual relief when viewed from B7-1b. The Overall, magnitude of change would be **intermediate**. This intermediate magnitude of change when combined with the medium sensitivity of the public viewers will result in a **moderately adverse visual impact**. (Refer to **Figure 250269/LVIA/6.8 and 6.8a**).

(8) **B8** - Wah Kwai Estate Soccer Pitch

The proposed building blocks (+200mPD max.) of the future housing developments at Kai Lung Wan South Site is the key visual change when viewed from this B8. The scale and mass of these proposed housing developments will stick out from existing knoll behind the soccer pitch. Moreover, the proposed building height (+200mPD max.) are perceived as incompatible to the adjacent setting when viewed from this VP. Visual obstruction to the sky view is caused by the proposed building blocks (+200mPD max.) in Kai Lung Wan South Site. The provision of building gap separation, which is a design measures, in KLWS site provides visual relief when viewed from B8. There would be moderate loss of openness and open sky.

Overall, magnitude of change would be **intermediate**. This intermediate magnitude of change when combined with the medium sensitivity of the public viewers will result in a **moderately adverse visual impact**. (Refer to **Figure 250269/LVIA/6.9**).

(9) **C1** - Key Ferry Route of Sok Kwu Wan to Central on East Lamma Channel

This VP is from C1, which is a key ferry route of Sok Kwu Wan to Central on East Lamma Channel. This VP represents the views of travellers towards the Pokfulam and the 5 nos. potential housing sites, which are seen as several clusters of building masses over the dense urbanized Pokfulam. When seen from this VP, the proposed housing blocks are seen as comparable similar height and bulk to the adjacent residential developments, namely, Wah Kwai Estate and Chi Fu Fa Yuen. No visual obstruction to the open sky view has been made. The ridgeline of Mount Kellett cannot be preserved as a result of the proposed public housing developments at Wah King Street Site (+200mPD max), Wah Fu North Site (+200mPD max.) and Kai Lung Wan North Site (+230mPD max.). Ridgeline of Mount Kellett is slightly disturbed. However, the variations in height building profile (+230mPD max., +200mPD max., +170mPD max.), which is a design measures **(DM6)**, would create less visual impact viewed this viewpoint. Overall, magnitude of change of the rest of the public housing development would be **intermediate**. This intermediate magnitude of change when combined with the low sensitivity of the public viewers will result in a **slightly adverse visual impact**. (Refer to **Figure 250269/LVIA/6.10**).

The main visual impact will be the site clearance, site formation works, removal of existing vegetation, slope works and related infrastructure and building works and its potential visual impact from proposed housing sites. The building masses and structures will unavoidably create loss of hillside woodland, greenery, open sky, ridgelines and sea view; which are significant visual resources of the Pokfulam area. The building blocks at the housing development sites are visually prominent and will impose slight to significant visual changes such as loss of openness, greenery, ridgelines, sky and sea views from these view points. The visual impact of A8, B1, B2 (VP1a & VP1b), B3, B4, B6, B7 and B8 are considered moderately adverse. For viewers A1, A2, A3, A4, A5, A6, A7, A9, A10, A11, B5-A, B5-B, and C1 are considered to have insubstantial visual impact.

8.6.7 The basic parameters adopted for the visual impact assessment are as follows:

Table 6 Basic parameters

Site	Max. Height of Building +mPD	No. of Building Blocks	Max. Height of Podium Structure +mPD
Kai Lung Wan North	~230	4	~86.5
Kai Lung Wan South	~200	2	~70
Wah Fu North	~200	2	~94
Wah King Street	~200	2	~74
Wah Lok Path	~170	1	~75

8.6.8 The magnitude of impacts during construction and operation phases are assessed based on the viewing distance, compatibility of the Project with the surrounding setting, duration of impacts, scale of development, reversibility of changes and potential blockage of view. Recommendations on mitigation measures are summarized in **Table 7** and the

potential significance of the visual impacts before and after mitigation during the construction and operation phases is summarized in **Table 9**.

8.6.9 Proposed Kai Lung Wan North Site (+230mPD max.) and Kai Lung Wan South Site (+200mPD max.) sites are situated on steep slopes and encountering difficult site constraints. While Wah Fu North Site (+200mPD max.), Wah King Street Site (+200mPD max.) and Wah Lok Path Site (+170mPD max.) are situated at the core of Pokfulam urban development area. The potential scheme of building layouts and building heights, which have taken into account all aspects of information available in hand, the existing site context and site formation levels, are considered optimal. To minimize visual impacts, several design measures have been proposed, namely, building separations have been introduced as far as practicable to enhance visual permeability. Implementation of stepped building height profile have been proposed to minimize the visual impacts for Kai Lung Wan South Site. Due to the irregular configuration of sites and flat production target to be achieved, high rise housing blocks are inevitably necessary to be adopted to optimise their development potential of the sites. To strive balance of the social need for the public housing supply, it is anticipated that the building masses and form would inevitably impose some adverse visual impacts to the existing townscape including blockage of views to ridgelines and open sky view given these are high density development proposed in urban fringe area. The public housing sites are basically in keeping with the prevailing building height in the area. However, the character of the area and the viewing experience of most recreational viewers are maintained. The proposed master plan will vitalise the entire Pokfulam area with new visual attractions and liveable cityscape. Visual impact for A8, B1, B2, B3, B4, B6, B7 and B8 will be moderately adverse. The residual impact for A1, A2, A3, A4, A5, A6, A7, A9, A10, B5-B and C1 will be slight with mitigation measures. The overall visual impact of the proposed 5 housing sites development would be moderately adverse.

8.6.10 Overall, it is considered that the residual impacts of the proposed developments are considered acceptable, and with the implementation of mitigation measures, there is no insurmountable impact caused from the proposed developments during construction and operation phases for landscape. There is no detrimental impact to adjacent visual resources; however overall visual impact for the proposed 5 nos. housing sites are moderately adverse due to extensive site formation works, loss of openness in open sky or sea view and greenery of existing visual resources.

Table 7 Proposed Mitigation Measures

Mitigation Measures During Design Phase	
DM1	Control of building heights to preserve the views to the ridgelines
DM3	Preservation of high landscape value and enhancement on Pokfulam Area
DM4	Provision of building gaps to enhance visual permeability
DM6	Sensitive building form, height and disposition to minimize impact on perceived bulk and views to visual resources, namely, ▪ truncated building wing (refer to **Figure 250269/LVIA/5.1** for details), ▪ provision of minimum 25m building gap separation / visual corridors(refer to **Figure 250269/LVIA/5.1** for details), ▪ provision of building setback (refer to **Figure 250269/LVIA/5.1** for details), ▪ implementation of stepped building height profile, and ▪ terraced podium ▪ Provision of edge planters and / or aesthetic treatment of the Spiral ramp in the Kai Lung Wan South Site

Mitigation Measures During Design Phase	
DM7	Sensitive design of road layout and streetscape, open space network in adjacent areas
DM8	Tree Preservation and Removal Proposal (TPRP) should be obtained prior to implementation at early design stage in accordance with DEVB TCW No. 6/2015, 7/2015 and LAO GN No. 7/2007
DM9	Greening Provision in the early project planning stage in accordance with DEVB TCW No. 2/2012 and PNAP APP-152
DM10	ACABAS submission upon completion of conceptual design should be accordance with ETWB TCW No. 36/2004
Mitigation Measures During Construction Phase	
CM1	The Construction area and Contractor's temporary works areas shall be minimised to avoid impacts on adjacent landscape. All temporary works shall be carefully designed to minimise impacts on existing retained trees.
CM2	Incorporating requirements for preservation and protection of existing trees in construction contracts. The performance of the retained trees shall be monitored throughout the Construction period on a monthly basis by a qualified Arborist. The Contractor shall submit monthly record photo throughout the construction period for all retained trees, to demonstrate the trees' health condition. All monthly record photos shall be prepared by a tree specialist or a qualified arborist, and endorsed by a registered Landscape Architect (RLA).
CM3	Should removal of trees be unavoidable due to construction impacts, trees should be transplanted to other permanent locations, if practicable.[3] Detailed transplanting proposal will be submitted to relevant government departments for approval. Final locations of transplanted trees shall be agreed prior to commencement of the work. The performance of the transplanted trees shall be monitored throughout the construction period by a Qualified Arborist. All monthly record photos shall be prepared by a tree specialist or a qualified arborist, and all endorsed by a registered Landscape Architect (RLA).
CM4	Control of night-time lighting and Construction traffic (land and sea) reduced to practical minimum
CM5	Erection of decorative mash screen or construction hoardings
CM6	Minimize disturbance and limitation of run-off – temporary structures and construction works should be planned with care to minimize disturbance to adjacent landscape, vegetation, natural stream habitats.
CM7	Existing watercourses of good quality and condition that are unavoidably affected by the works shall be replaced and diverted to proposed trapezoidal green channel.
Mitigation Measures During Operation Phase	
OM1	Sensitive design and greenery treatment on all retaining structure, which shall be compatible with surrounding context.
OM2	Compensatory tree planting/ woodland and green channel should be incorporated into the proposed projects as far as practicable.
OM2a	Post-planting monitoring of the woodland compensation area shall be undertaken (namely, duration of the post-planting monitoring and monitoring methodology). The monitoring will be aimed to assess the success of the created woodland, monitor the growth performance of the planted seedlings, and identify any need of vegetation and site maintenance work.

[3] refer to DEVB TCW No. 7/2015, clause 2, for detail explanation regarding the order of priority for tree preservation.

Mitigation Measures During Design Phase	
OM3	Implementation of greening measures e.g. roadside planting and provision of green coverage within the proposed development
OM4	Sensitive streetscape design, which should be compatible with surrounding context and incorporated along all new roads and landscape deck to be matched with district master plan in the vicinity for the new urban development of Pokfulam south
OM5	Landscape treatments on natural terrain hazard mitigation barriers to enhance the landscape and visual amenity value of proposed man made slope
OM6	Design of directional lighting units and minimization of unnecessary light spill and glare
OM7	Reinstatement of disturbed area and vegetation to match adjacent area or to condition to suit future land use and adjacent habitats
OM8	Proper maintenance of green channel to facilitate the natural colonization along channel.

Table 8 Significance of Landscape Impacts in the Construction and Operation Phases

LRs/ LCA ID	Description	Sensitivity to change	Magnitude of change	Impact Significance Threshold BEFORE Mitigation during Construction & Operation (Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Residual Impact Significance Threshold After Mitigation during Construction & Operation (Insubstantial, Slight, Moderate, Substantial)		
				Construction	Operation		Construction	Day 1	Operation Phase
LR2	Watercourse	High	Small	Moderate	Moderate	DM3, CM1 to CM3, CM6; CM7; OM2 to OM5, OM7	Slight	Slight	Insubstantial
LR4a	Grassland and shrubland	Medium	Small	Moderate	Moderate	DM3, DM7, DM8, DM9; CM1 to CM3, CM6; OM2 to OM5, OM7	Slight	Slight	Insubstantial
LR5	Roadside amenity	Medium	Large	Moderate	Moderate	DM2, DM3, DM7, DM8, DM9; CM1 to CM3, CM6; OM2 to OM5, OM7	Slight	Slight	Insubstantial
LR6	Woodland	High	Large	Substantial	Substantial	DM3, DM6, DM7, DM8, DM9; CM1 to CM3, CM6; OM2 to OM5, OM7	Substantial	Substantial	Moderate
LR8b	Wah Chui Street Sitting-out Area	Medium	Large	Moderate	Moderate	DM2, DM5, DM6, DM7, DM8, DM9; CM1 to CM3, CM6; OM2 to OM5, OM7	Slight	Slight	Insubstantial
LR12	Development Area	Low	Small	Slight	Slight	DM2, DM5, DM6, DM7, DM8, DM9; CM1 to CM3, CM6; OM2 to OM5, OM7	Insubstantial	Insubstantial	Insubstantial
LCA2	Landscape Valley LCA	High	Intermediate	Substantial	Substantial	DM3, DM6, DM7, DM8, DM9; CM1 to CM3, CM6; OM2 to OM5, OM7	Moderate	Moderate	Slight
LCA3	Urban LCA	Low	Small	Slight	Slight	DM3, DM6, DM7, DM8, DM9; CM1 to CM3, CM6; OM2 to OM5, OM7	Insubstantial	Insubstantial	Insubstantial

Note: The above Table only shown the LRs/ LCAs are impacted, for those LRs/LCAs with "negligible" magnitude of impacts are not listed.

Table 9 Significance of Visual Impacts in the Construction and Operation Phases

VSR ID	Description	Sensitivity to change	Magnitude of change	Impact Significance Threshold BEFORE Mitigation during Construction & Operation (Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Residual Impact Significance Threshold After Mitigation during Operation (Insubstantial, Slight, Moderate, Substantial)		
				Construction	Operation		Operation		With Housing Sites & WFER
							Day 1	With Housing Sites	
A1	The Peak Galleria rooftop viewing deck	Medium	Small	Slight	Slight	DM1 to DM10; CM1 to CM6; OM1 to OM7	Slight	Slight	Insubstantial
A2	The viewing point at Peak Trail	Medium	Small	Slight	Slight	DM1 to DM10; CM1 to CM6; OM1 to OM7	Slight	Slight	Insubstantial
A3	The pavilion at Victoria Peak Garden	Medium	Small	Slight	Slight	DM1 to DM10; CM1 to CM6; OM1 to OM7	Slight	Slight	Insubstantial
A4	High West Viewing Point	Medium	Small	Slight	Slight	DM1 to DM10; CM1 to CM6; OM1 to OM7	Slight	Slight	Insubstantial
A5	Lung Fu Shan Viewing Point	Medium	Small	Slight	Slight	DM1 to DM10; CM1 to CM6; OM1 to OM7	Slight	Slight	Insubstantial
A6	Pok Fu Lam View Compass	Medium	Small	Slight	Slight	DM1 to DM10; CM1 to CM6; OM1 to OM7	Slight	Slight	Insubstantial
A7	Pok Fu Lam Family Walk	Medium	Small	Slight	Slight	DM1 to DM10; CM1 to CM6; OM1 to OM7	Slight	Slight	Insubstantial
A8	Southern District Council Rain Shelter at Hong Kong Trail Stage 2	Medium	Intermediate	Moderate	Moderate	DM1 to DM10; CM1 to CM6; OM1 to OM7	Moderate	Moderate	Moderate
A9	The viewing point at Mount Stenhouse	Low	Small	Slight	Slight	DM1 to DM10; CM1 to CM6; OM1 to OM7	Slight	Slight	Insubstantial

VSR ID	Description	Sensitivity to change	Magnitude of change	Impact Significance Threshold BEFORE Mitigation during Construction & Operation (Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Residual Impact Significance Threshold After Mitigation during Operation (Insubstantial, Slight, Moderate, Substantial)		
							Operation		With Housing Sites & WFER
				Construction	Operation		Day 1	With Housing Sites	
A10	Pavilion near Lamma Winds	Low	Small	Slight	Slight	DM1 to DM10; CM1 to CM6; OM1 to OM7	Slight	Slight	Insubstantial
A11	Second World War barracks at Mount Davis	Medium	Small	Slight	Slight	DM1 to DM10; CM1 to CM6; OM1 to OM7	Insubstantial	Insubstantial	Insubstantial
B1	Chi Fu Fa Yuen Podium Garden	Medium	Intermediate	Moderate	Moderate	DM1 to DM10; CM1 to CM6; OM1 to OM7	Moderate	Moderate	Moderate
B2 (VP1a)	North of Podium garden atop the Chi Fu Shopping Centre	Medium	Intermediate	Moderate	Moderate	DM1 to DM10; CM1 to CM6; OM1 to OM7	Moderate	Moderate	Moderate
B2 (VP1b)	South of Podium garden atop the Chi Fu Shopping Centre	Medium	Intermediate	Moderate	Moderate	DM1 to DM10; CM1 to CM6; OM1 to OM7	Moderate	Moderate	Moderate
B3	A future open space opposite from Bel-Air No. 8	Medium	Intermediate	Moderate	Moderate	DM1 to DM10; CM1 to CM6; OM1 to OM7	Moderate	Moderate	Moderate
B4	Waterfront at South Horizons	Medium	Intermediate	Moderate	Moderate	DM1 to DM10; CM1 to CM6; OM1 to OM7	Moderate	Moderate	Moderate
B5-A	Pedestrian node at Shek Pai Wan Interchange Area (viewing east)	Low	Small	Slight	Slight	DM1 to DM10; CM1 to CM6; OM1 to OM7	Insubstantial	Insubstantial	Insubstantial
B5-B	Pedestrian node at Shek Pai Wan Interchange Area (viewing west)	Low	Intermediate	Slight	Slight	DM1 to DM10; CM1 to CM6; OM1 to OM7	Slight	Slight	Insubstantial
B6	Hong Fu Playground	Medium	Intermediate	Moderate	Moderate	DM1 to DM10; CM1 to CM6; OM1 to OM7	Moderate	Moderate	Moderate

VSR ID	Description	Sensitivity to change	Magnitude of change	Impact Significance Threshold BEFORE Mitigation during Construction & Operation (Insubstantial, Slight, Moderate, Substantial)		Recommended Mitigation Measures	Residual Impact Significance Threshold After Mitigation during Operation (Insubstantial, Slight, Moderate, Substantial)		
				Construction	Operation		Operation		With Housing Sites & WFER
							Day 1	With Housing Sites	
B7	Upper Kai Lung Wan Temporary Sitting-out Area	Medium	Intermediate	Moderate	Moderate	DM1 to DM10; CM1 to CM6; OM1 to OM7	Moderate	Moderate	Moderate
B8	Wah Kwai Estate Soccer Pitch	Medium	Intermediate	Moderate	Moderate	DM1 to DM10; CM1 to CM6; OM1 to OM7	Moderate	Moderate	Moderate
C1	Key ferry route of Sok Kwu Wan to Central on East Lamma Channel	Low	Intermediate	Slight	Slight	DM1 to DM10; CM1 to CM6; OM1 to OM7	Slight	Slight	Insubstantial

8.7 Cultural Heritage

8.7.1 According to the information publicized by AMO, recognised sites of archaeological interest are at least 1.2km from the development sites. The sites of archaeological interest in vicinity of the five development sites are summarized in **Table 10**. No direct or indirect heritage impact are anticipated from the proposed developments during the construction and operational phases and no mitigation measures will be required.

Table 10 Summary of nearest sites of archaeological interest

No.	Sites of Archaeological Interest	Approximate Distance from Site (km)	Potential Adverse Impacts
1	Former Mountain Lodge Site (前總督山頂別墅遺址)	1.9	Nil
2	Kong Sin Wan Kiln (鋼綫灣窰)	1.2	Nil
3	Mount Cameron Japanese War Memorial Foundation (金馬倫山「忠靈塔」台基)	3.0	Nil

8.7.2 The declared monuments, graded historic buildings and new items pending assessment by the Antiquities Advisory Board (AAB) within or in the vicinity of the five development sites are summarized in **Table 11, Table 12 and Table 13** respectively. Two remaining structures of the Old Dairy Farm pending grading assessment by AAB, i.e. N1 and N2, are within the project site boundary of Kai Lung Wan North Site, impacts during the construction and operational phases are anticipated. Vibration impacts on the built heritage are expected because of the proximity of the cultural heritage resources to the potential development sites. Efforts would be made to avoid causing disturbance to these two items pending confirmation of their grading status by AAB and further advice from AMO should be sought upon completion of the grading exercise.

8.7.3 The remaining structures of Old Dairy Farm within and in the vicinity of Kai Lung Wan North Site have been included by AMO into the list of new items pending grading assessment by the AAB, and it is understood that the grading assessment will be completed in phases, subject to the progress of AAB's deliberation. Subject to the final grading results, an heritage impact assessment (HIA) is likely to be required in accordance with the Development Bureau Technical Circular (Works) No.6/2009 "Heritage Impact Assessment Mechanism for Capital Works Projects" to assess the potential impacts of the proposed development on the graded structures; appropriate protective and mitigation measures such as watching brief, vibration monitoring, condition survey would be devised and implemented during the construction and operational phases of the development project. The impacts of the proposed development on the cultural heritage have to be fully addressed by HIA to the satisfaction of AAB.

Table 11 Summary of nearest declared monuments

No.	Declared Monument	Approximate Distance from Site (m)	Potential Adverse Impacts
1	The Bethanie (伯大尼修院)	720	Nil
2	The Exterior of University Hall, the University of Hong Kong (香港大學大學堂外部)	870	Nil
3	6 Historic Structures of Pok Fu Lam Reservoir (薄扶林水塘 6 項歷史構築物)	930	Nil

Table 12 Summary of nearest graded historic buildings

No.	Historic Building	Grading	Approximate Distance from Site (m)	Potential Adverse Impacts
1	No. 97 Pok Fu Lam Village, Pok Fu Lam, H.K. (香港薄扶林薄扶林村 97 號)	Grade 3	470	Nil
2	Old Dairy Farm, Main Office Building No. 141 Pok Fu Lam Road, Pok Fu Lam, H.K. (香港薄扶林薄扶林道 141 號舊牛奶公司辦公室主樓)	Grade 2	570	Nil
3	Old Dairy Farm, Senior Staff Quarters, No. 141 Pok Fu Lam Road, Pok Fu Lam, H.K (香港薄扶林薄扶林道 141 號舊牛奶公司高級職員宿舍)	Grade 1	620	Nil

Table 13 Summary of nearest new items pending assessment by the Antiquities Advisory Board

No.	Historic Building	Proposed Grading	Approximate Distance from Site (m)	Potential Adverse Impacts
N1	Old Dairy Farm, Paddock C18, Pok Fu Lam, HK (near Chi Fu Fa Yuen)	Grade 3	Within Project Site Boundary, but no direct encroachment /interface by works	Indirect impact, such as vibration
N2	Old Dairy Farm, Paddock C32, Pok Fu Lam, HK (near Chi Fu Fa Yuen)	Nil Grade	Within Project Site Boundary, but no direct encroachment /interface by works	Indirect impact, such as vibration
N3	Old Dairy Farm, Manure Pit, Pok Fu Lam, HK (near Chi Fu Fa Yuen)	Grade 2 [2]	0m from Project Site Boundary, 65m from nearest works	Nil
N4	Old Dairy Farm, Dairy, Pok Fu Lam, HK (near Chi Fu Fa Yuen)	Nil Grade [2]	40m from Project Site Boundary, 65m from nearest works	Nil
N5	Old Dairy Farm, Silo, Pok Fu Lam, HK (near Chi Fu Fa Yuen)	Nil Grade [2]	40m from Project Site Boundary, 65m from nearest works	Nil
N6	Old Dairy Farm, Paddock C17, Pok Fu Lam, HK (near Chi Fu Fa Yuen)	Grade 3	30m from Project Site Boundary, 50m from nearest works	Nil
N7	Old Dairy Farm, Paddock C15, Pok Fu Lam, H.K. (near Chi Fu Fa Yuen)	Nil Grade	50m from Project Site Boundary	Nil
N8	Old Dairy Farm, Cowboys' Quarters, Pok Fu Lam, H.K.	Nil Grade [2]	100m from Project Site Boundary	Nil
N9	Old Dairy Farm, Paddock C20, Pok Fu Lam, H.K. (near Chi Fu Fa Yuen)	Grade 3	110m from Project Site Boundary	Nil
N10	Old Dairy Farm, Bull Pen with Paddock, Pok Fu Lam, H.K. (near Chi Fu Fa Yuen)	Grade 3	160m from Project Site Boundary	Nil
N11	Old Dairy Farm, Piggeries, Pok Fu Lam, H.K. (near Chi Fu Fa Yuen)	Nil Grade [2]	145m from Project Site Boundary	Nil

No.	Historic Building	Proposed Grading	Approximate Distance from Site (m)	Potential Adverse Impacts
N12	Old Dairy Farm, Stream Crossing, Pok Fu Lam, H.K. (near Chi Fu Fa Yuen)	Grade 3 [2]	195m from Project Site Boundary	Nil
N13	Old Dairy Farm, Silo, Pok Fu Lam, H.K. (near Chi Fu Fa Yuen)	Grade 3 [2]	180m from Project Site Boundary	Nil
N14	Old Dairy Farm, Piggeries, Pok Fu Lam, H.K. (near Chi Fu Fa Yuen)	Grade 3 [2]	165m from Project Site Boundary	Nil
N15	Old Dairy Farm, Paddock C38, Pok Fu Lam, H.K. (near Chi Fu Fa Yuen)	Nil Grade	180m from Project Site Boundary	Nil
N16	Old Dairy Farm, Paddock C31, Pok Fu Lam, H.K. (near Chi Fu Fa Yuen)	Nil Grade	190m from Project Site Boundary	Nil

Note:
[1] Only nearest items within Project Site or 50m from the Project Site boundary are included in this table.
[2] Items with proposed grading are subject to AAB's discussion and endorsement.

8.7.4 There is no recorded fung shui areas or traditional burial grounds identified in the vicinity. Two graves are identified at approx. 15m to 130m outside the eastern and north-eastern boundary of proposed works at Kai Lung Wan North Site respectively. Three shrines are identified within Wah Fu North, Kai Lung Wan North and Wah Lok Path Sites, the former two shrines are proposed to be removed while the one on Wah Lok Path Site will be retained. Mitigation measures such as record and relocation shall be considered at later detail design stage.

8.7.5 With implementation of the appropriate mitigation measures, there will be no insurmountable cultural heritage impact arising from the proposed developments.

8.8 Conclusion

8.8.1 An assessment and evaluation of the environmental impacts associated with site formation and infrastructural works of the five development sites, including Air Quality, Noise, Water Quality, Waste Management, Ecology, Landscape and Visual, and Cultural Heritage have been carried out.

8.8.2 The potential environmental impact arises from the proposed site formation and infrastructural works has been reviewed, and recommendations to mitigate the impacts have been suggested. With proper design and implementation of mitigation measures, no insurmountable environmental impacts is anticipated from the proposed development. A separate EAS for the noise impact at the planned housing developments will be conducted by HD to address the potential environmental impacts.

9 HAZARD TO LIFE ASSESSMENT

9.1 Overview

9.1.1 The assessment on hazard to life arising from the proposed developments has been assessed.

9.1.2 A Shell LPG compound is located near the J/O of Victoria Road and Wah Chui Street and has been operated since year 2001. According to Shell Hong Kong Ltd., the LPG compound supplies LPG to Wah Fu (II) Estate. The site of the LPG compound comprises of Emergency Genset Room, Water Spray System Tank, Transformer Room and Switch Room. LPG is stored in two LPG underground tanks and is vaporised in 3 vaporizers. According to Shell Hong Kong Ltd., deliveries are made by the LPG road tanker every 4 or 5 days.

9.1.3 Meteorological conditions will affect the dispersion of LPG release. Weather data from HKO Wong Chuk Hang weather station are adopted and rationalized into 5 categories to represent the range of weather conditions anticipated at the site. The probability of occurrence for each combination of wind speed (WS), wind direction (WD) and stability class (PS) has been assessed accordingly.

9.2 Hazard Identification

9.2.1 LPG is a mixture of butane and propane. For a release of LPG, the nature of the combustion will depend on the timing of ignition and the amount of release. If large amount of LPG is released and ignited immediately, fireball will be produced. If not ignited immediately, the LPG will disperse and dilute. A flame will propagate to produce a flash fire if the gas concentration is between lower Flammability Limit (LFL) and Upper Flammability Limit (UFL) when ignited. For small releases, immediate ignition will produce a long jet flame and flash fire will be produced when delayed ignition happens.

9.2.2 The three major categories of hazard events leading to LPG release from LPG compound include:

(1) Spontaneous failure resulting from failure of storage vessel, LPG Road Tanker, pipework, vaporizer, flexible hose etc.;

(2) Loading from LPG Road Tanker to vessel which may lead to hose failure, hose connection/disconnection error, LPG Road Tanker collision during unloading etc.;

(3) External event e.g. earthquake, aircraft/vehicle crash, subsidence, external fire, landslides etc.

9.2.3 Hazard scenarios for LPG releases are summarized in the following table:

Table 14 Summary of the hazard scenarios of LPG releases

Scenario	Failure Equipment	Event Description	Potential Hazardous Event Outcomes
1	Storage vessel	Catastrophic failure	Fireball, VCE, flash fire
2		Partial failure	Jet fire, VCE, flash fire
3	LPG road tanker	Catastrophic failure	Fireball, VCE, flash fire
4		Partial failure	Jet fire, VCE, flash fire, BLEVE
5	Filling line to storage vessel	Guillotine failure	Jet fire, VCE, flash fire
6		Partial failure	Jet fire, VCE, flash fire
7	Line from storage vessel to vaporizers	Guillotine failure	Jet fire, VCE, flash fire
8		Partial failure	Jet fire, VCE, flash fire
9	Send-out piping	Guillotine failure	Jet fire, VCE, flash fire
10		Partial failure	Jet fire, VCE, flash fire
11	Flexible hose	Guillotine failure	Jet fire, VCE, flash fire, BLEVE of tanker
12		Partial failure	Jet fire, VCE, flash fire
13	Vaporizer	Guillotine failure	Jet fire, VCE, flash fire

9.2.4 Fault Tree Analysis is adopted for estimating the base event frequencies for significant LPG releases. Event tree analysis is used to model the evolution of an event from the initial through to the final outcome.

9.2.5 Consequence analysis has been conducted, hazard scenarios including fireballs, BLEVE, jet fire, pool fire, vapour cloud explosions (VCE) and gas dispersion and flash fire have been modelled under a range of meteorological conditions. Population in the vicinity of the LPG compound can be potentially affected by hazardous outcomes. There is no existing or planned population in the hazardous zone of fireballs except the transit population on Victoria Road. For the VCE, only the units overlooking the LPG depot is assumed to be affected. For the flash fires and jet fires, only the lowest 12 floors of population in the same MPD level with LPG compound were considered in the modelling.

9.3 Hazard to Life Assessment

9.3.1 A Quantitative Risk Assessment (QRA) is conducted on the LPG compound to assess the individual risk and the increase in societal risk arising from the operation of proposed development. The risk results have been generated using the in-house ArcGIS based software Aruprisk by incorporating input data including the frequency of each hazardous scenario, the release location, consequence dimension, weather frequencies and population distribution.

9.3.2 Individual risk contour of the LPG compound has been formulated. The 1×10^{-5} /year individual risk contour of the LPG compound is contained within the site boundary of LPG compound and thus the individual risk level of the LPG compound is considered in compliance with Hong Kong Risk Guidelines.

9.3.3 The societal risk represents the frequency of having an accident with N or more people being killed simultaneously and is presented as an FN curve and Potential Loss of Life (PLL). The societal risk plots have been derived for three cases including (1) Base case with background population but without proposed development, (2) Maximum population in the proposed sites and (3) Overall risk case (including Base Case and maximum population in the proposed sites) during operational phase. All three cases lie within the acceptable region of the FN curves. The additional population from the

proposed development will lead to an increase the societal risk but the risk remains in the acceptable region. Hence no mitigation measure is proposed.

10 AIR VENTILATION ASSESSMENT

10.1 Evaluation of Air Ventilation under Existing Condition

10.1.1 The wind performance of the proposed development has been evaluated using the methodology of Air Ventilation Assessment (AVA), based on the "Technical Circular No. 1/06 issued by Housing, Planning and Lands Bureau (HPLB) and Environment, Transport and Works Bureau (ETWB)" and "Technical Guide for Air Ventilation Assessment for Development in Hong Kong – Annex A". AVA – Expert Evaluation (AVA(EE)) has been conducted through qualitative analysis.

10.1.2 In identifying the annual and summer prevailing wind directions suitable for the evaluation, four major sources of wind data have been considered, including measured data from the nearest Hong Kong Observatory (HKO) weather stations, simulated RAMS data for Pokfulam South & MM5 data from AVA(EE) for Aberdeen & Ap Lei Chau Area and Wind Tunnel Data for Wong Chuk Hang. As assessed from all available wind data and with consideration of the surrounding topography, **E, ENE and ESE** wind directions are identified as the regional annual prevailing wind directions, whereas **S, SSW and SW** wind directions are identified as the summer prevailing wind directions.

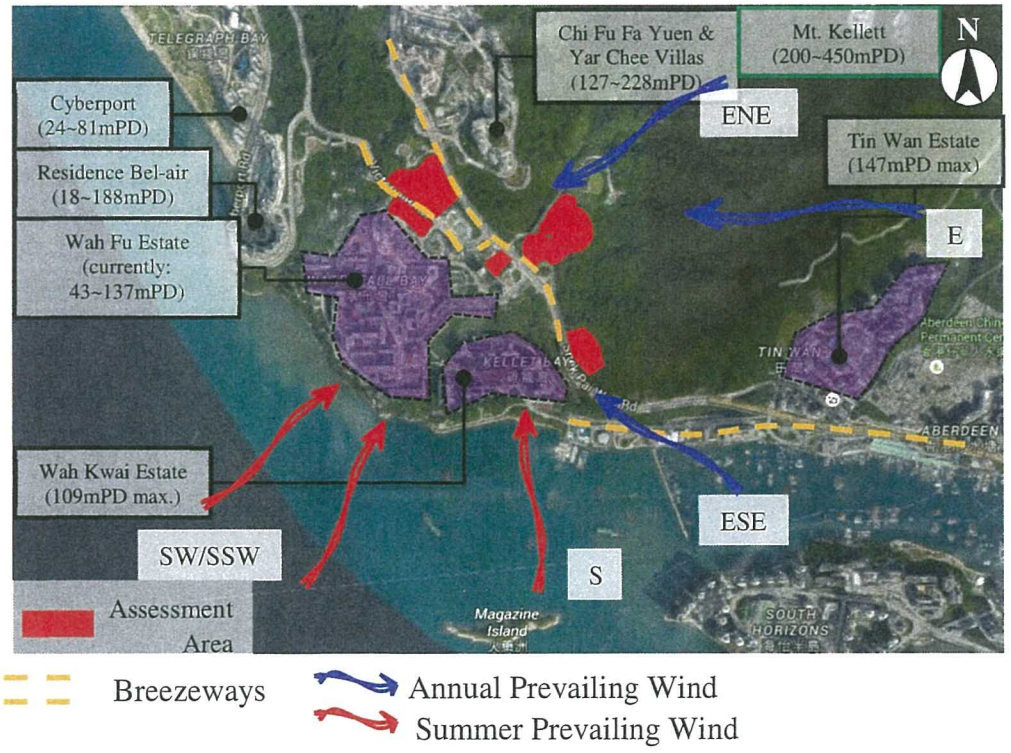

Figure 1 Annual and Summer prevailing wind directions in Pok Fu Lam South

10.1.3 A portion of medium-to-high-altitude east-northeast (**ENE**) annual prevailing wind becomes available at the pedestrian level of Pokfulam South when coming down the slopes and valleys of Mt. Kellett across the existing assessment area to the downwind neighbours including Wah Fu Estate, part of Wah Fu Road, Wah Kwai Estate, Kellett School, St. Paul's College Primary School, Pokfulam Fire Station etc. The prevailing wind may be further captured as downdraught by the residential buildings of Wah Fu and Wah Kwai Estates. Another major stream of **ENE** wind blows downhill, mainly cutting

across the existing green belt and open space of Wah Fu region and leaving the shore between Cyberport and Residence Bel-air.

10.1.4 The east (**E**) prevailing wind primarily blows along the seashores of Aberdeen and Wong Chuk Hang via major roads, e.g. Shek Pai Wan Road, Tin Wan Praya Road and Aberdeen Praya Road. A majority of regional, low-altitude **E** wind is diverted to these coastal roads by the southwest mountain range of Mt. Kellett situated between Tin Wan and Wah Fu / Pokfulam South. Medium-to-high-altitude **E** wind is likely to blow over the region at a height of around 200 to 400mPD after passing Mount Kellett. Low-altitude wind could be possible when there is a downdraught captured by high-rise buildings of existing neighbourhoods, such as Chi Fu Fa Yuen and Wah Fu Estate to the pedestrian level of surrounding downwind regions including Chi Fu Fa Yuen, Wah Fu Road and Wah Fu Estate.

10.1.5 The east-southeast (**ESE**) annual prevailing wind comes from the sea channel of Shek Pai Wan, utilises Shek Pai Wan Road, Pok Fu Lam Road and Victoria Road as its breezeways to blow further uphill. Sandwiched by the building clusters of Wah Kwai Estate and Wah Fu Estate and the southwest mountain range of Mt. Kellett, Pokfulam Road acts as a breezeway for **ESE** wind to blow uphill towards Chi Fu Fa Yuen. A second stream of airflow may branch off from Shek Pai Wan Road and blows along Victoria Road towards Cyberport / Residence Bel-air. The presence of Mount Kellett in the immediate east of the region only allows medium-to-high-altitude **ESE** wind to blow over the east part of Kai Lung Wan North Site to reach the downwind region such as Chi Fu Fa Yuen.

10.1.6 There are four airstreams for south (**S**) summer prevailing wind, which blow across Pokfulam South from the seashore. There is an airstream penetrates between Residence Bel-air and Wah Fu Estate and eventually blows further north and uphill along Cyberport Road and Victoria Road. Another airstream penetrates between Wah Fu Estate and Wah Kwai Estate and blows further inward to the low-rise G/IC building clusters along Wah Fu Road. The third stream utilises the eastern portion of Waterfall Bay Road to get into Wah Fu Estate and continues further northward along Wah Fu Road. The fourth airstream blows from the shore and subsequently northward across a Kai Lung Wan North and Kai Lung Wan South Sites and reaches Chi Fu Fa Yuen or continues along Pok Fu Lam Road. A portion of medium-to-high-altitude **S** wind may blow over Mt. Kellett, crossing the eastern portion of the assessment area and heading further inward to the hills.

10.1.7 There are two airstreams for the south-southwest (**SSW**) and southwest (**SW**) summer prevailing wind. One of the airstreams enters the shore of Residence Bel-air, while the other one enters the shore of Wah Fu Estate and Wah Kwai Estate. The first airstream flows via the open area of Wah Fu Estate and Wah Kwai Estate and the green belt areas between Victoria Road and Pokfulam Road, towards Chi Fu Fa Yuen. The second airstream flows via Kai Lung Wan North Site and further uphill towards Mt. Kellett. Two other streams enter Wah Fu Estate, one via the western portion of Waterfall Bay Road and ending there locally, and the other one channelled by the building separations at Wah Fu Estate to the existing G/IC clusters, Pok Fu Lam Terrace and World Fair Court, and further upward to Mt. Kellett.

10.2 Evaluation of Air Ventilation with Proposed Development

10.2.1 Notwithstanding the hilly topography of the whole region of Pokfulam South which would limit the wind availability at the pedestrian level, the proposed development would adopt the following design features for the consideration of onsite permeability to wind and attenuating its influence to the existing / planned surrounding developments:

(1) Wide separation between adjacent building blocks to create local air paths with minimum width of 20m to 30m to allow design flexibility and maintain the effectiveness of wind permeability;

(2) Disposition of building blocks to reduce the building frontage; and

(3) Building heights of Shopping Mall and Ancillary Facility Building at Kai Lung Wan North Site limited below the existing ground level of Yar Chee Villas and Chi Fu Fa Yuen.

10.2.2 These design features create local air paths or enhance local ventilation within the proposed development to cater for the annual and summer prevailing winds. These features are designed in attempt to reduce the impact on the surrounding ventilation by allowing wind penetration into the adjacent neighbours potentially on the lee-sides of the proposed development, including Yar Chee Villas, Chi Fu Fa Yuen, Wah Fu Estate, Wah Kwai Estate, existing GIC buildings and private residential buildings.

10.2.3 Under the **ENE** prevailing wind condition, the wind comes down the slopes of Mt. Kellett and is then channelled by two local air paths to reach Pok Fu Lam Fire Station and Wah Kwai Estate respectively. With the two local air paths and the separations and dispositions of building blocks at Wah Lok Path, Kai Lung Wan North and Kai Lung Wan South Sites, the potential impact of the proposed development with its wind shadow on the ventilation of the downwind neighbours will be alleviated.

10.2.4 Medium to high-altitude **E** prevailing wind comes down the slopes of Mt. Kellett and utilises two local air paths as well as the open area between Kai Lung Wan North and Kai Lung Wan South Sites to ventilate the downwind areas, including the existing GIC blocks and even Wah Fu Estate. The wind will be channelled by the two local air paths to St. Paul's College Primary School and parts of Wah Kwai Estate respectively. The wind-shadowing effect would be relieved by wide separation between Kai Lung Wan North and Kai Lung Wan South Sites and favourable disposition of the building block at Wan Lok Path Site. In addition, **E** wind could blow down the slopes of Mt. Kellett towards Yar Chee Villas and Chi Fu Fa Yuen without significant obstructions.

10.2.5 The **ESE** annual prevailing wind comes from the seashore of Aberdeen / Ap Lei Chau and flows upward along Shek Pai Wan Road, Victoria Road and Pok Fu Lam Road. Some high-altitude wind comes down the slopes of Mt. Kellett and blows towards Chi Fu Fa Yuen. The **ESE** wind coming down the slopes of Mt. Kellett utilises two local air paths to reach Yar Chee Villas / Chi Fu Fa Yuen and Wah Kwai Estate respectively. As the ground level of Kai Lung Wan North Site is much lower than Chi Fu Fa Yuen and Yar Chee Villas, impact on the ventilation in the downwind region is not significant. In addition, the ventilation impact would be minimized by the wide separation between Kai Lung Wan North Site and Yar Chee Villas. The **ESE** wind could blow down the slopes of Mt. Kellett towards east of Yar Chee Villas and Chi Fu Fa Yuen without obstructions by the proposed development.

10.2.6 The **S** summer prevailing wind primarily blows along Shek Pai Wan Road and Pok Fu Lam Road and through the separation between Wah Fu Estate and Wah Kwai Estate to blow towards the hinterland. Despite the presence of proposed shopping mall at Kai Lung Wan North Site, the **S** wind is still able to utilise a local air path created by building separation to cross the site and continue uphill towards Yar Chee Villas. The roof level of the podium structure is far below the ground levels of Yar Chee Villas and Chi Fu Fa Yuen, therefore, the wind-shadowing effect of the shopping mall on the downwind neighbours would be insignificant.

10.2.7 Both **SSW** and **SW** summer prevailing wind utilises 4 local air paths of the proposed development for ventilation in the downwind regions. One of the air paths is created by building separation at Wah King Street and Wah Fu North Sites, along which the incoming airflow eventually climbs up the slope towards Chi Fu Fa Yuen. The building blocks at the future WFER should be designed to provide air path which aligns with the local air path of the proposed development so that the wind-shadowing effect would not be exacerbated and the impact of the proposed development on Chi Fu Fa Yuen would be reduced. The prevailing **SW** wind would also utilize the local air paths at Kai Lung Wan North Site to reach Mt. Kellett. At Kai Lung Wan South Site, local air path is not vastly available for channelling **SSW / SW** wind to the downstream area at Mt. Kellett as the presence of Wah Kwai Estate in the upwind region casts wind shadows due to limited building permeability. However, medium to high-altitude prevailing wind may still be able to reach Kai Lung Wan South Site and flow through the local air path.

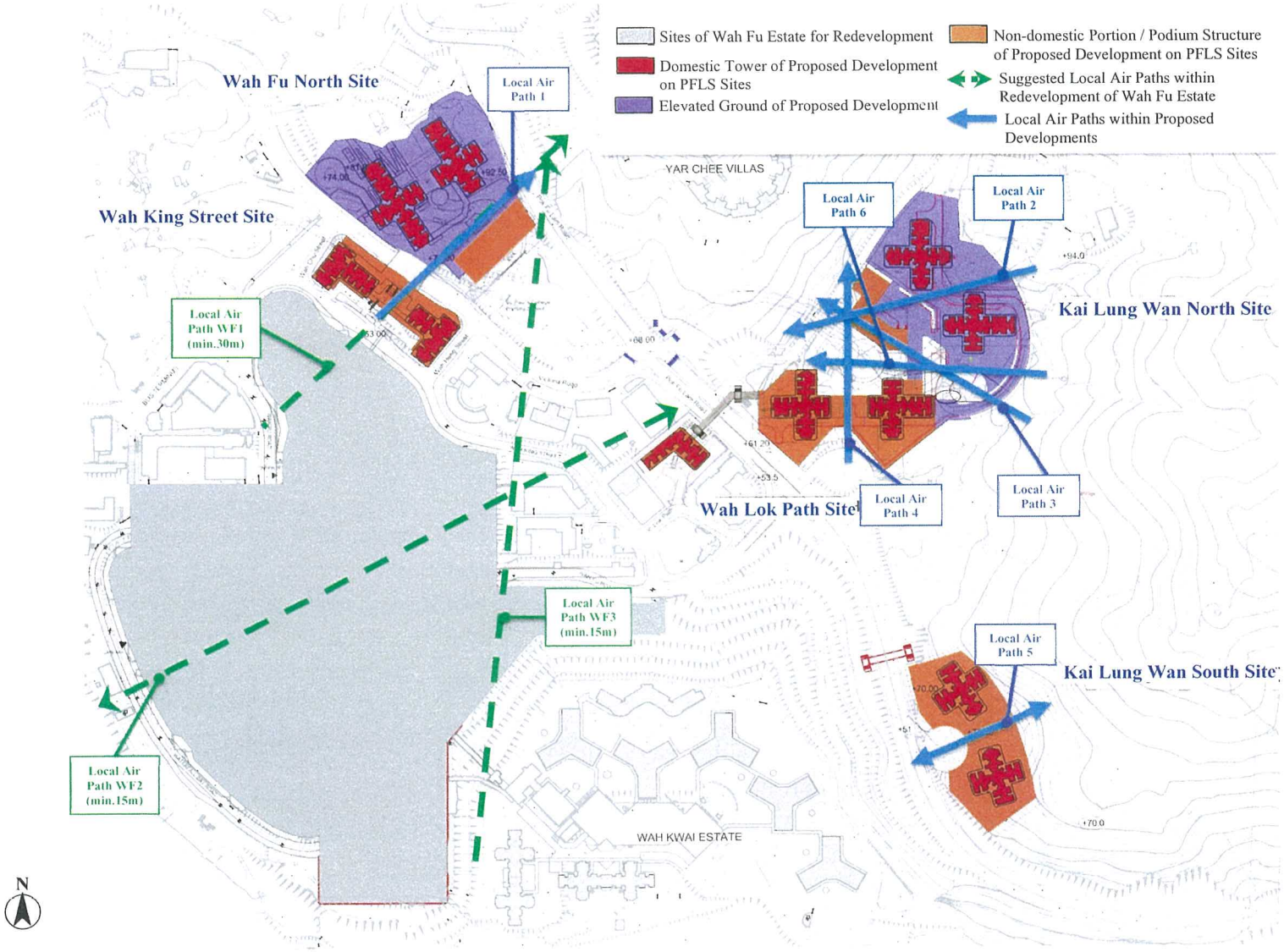

Figure 2 Local Air Paths Identified within the Proposed Developments and Indicative Alignments of Local Air Paths Suggested for WFER in consideration of Pok Fu Lam South Public Housing Developments

10.3 Conclusion

10.3.1 Building permeability of domestic towers and podia (enhanced by providing empty bays), height limit of the shopping mall and the Ancillary Facilities Block at Kai Lung Wan North Site, and other features in HKPSG Chapter 11 – Urban Design Guidelines and PNAP APP-152 Sustainable Building Design Guidelines should be considered at the later detailed design stage to further enhance the ventilation as far as practicable.

10.3.2 Some guiding principles are also recommended for design consideration in the future Redevelopment of Wah Fu Estate, which is scheduled after the proposed development. The design shall cohere with some of the wind-enhancing features of the proposed development of Pok Fu Lam South so that the wind performance of the proposed development and its leeward areas, especially under summer wind conditions, would not be significantly affected.

10.3.3 Quantitative AVA-Initial Study, by means of Computational Fluid Dynamics (CFD) technique, should be carried out at the detailed design stage to demonstrate that the future scheme in general is no worse off than the current conceptual scheme and for scheme design optimization.

Drawings

CHI FU FA YUEN
POK FU LAM ROAD
VICTORIA ROAD
NEAR CHI FU ROAD SITE
WAH FU NORTH SITE
KAI LUNG WAN NORTH SITE
KAI LUNG WAN SITE
WAH KING STREET SITE
WAH KING STREET
WAH LOK PATH SITE
WAH FU ESTATE
WAH FU ROAD
WAH KWAI ESTATE
KAI LUNG WAN SOUTH SITE
SHEK PAI WAN ROAD
KAI LUNG WAN
(KELLETT BAY)
(KAILONG WAN)

N

0 20 40 60 80 100
METRES

LEGEND

- LATEST PROJECT SITE BOUNDARY
- WOODLAND
- REPRESENTATIVE WATERCOURSE
- INDICATIVE LOCATIONS OF REMAINING STRUCTURES OF THE OLD DAIRY FARM IN POK FU LAM CLOSE TO / WITHIN THE PROJECT SITES (NEW ITEMS PENDING GRADING ASSESSMENT BY AAB)
- ACTUAL WORKS AREA FOR ORIGINAL SCHEME WITH AREA OF 18ha
- ACTUAL WORKS AREA FOR LATEST REVISED SCHEME WITH AREA OF 13ha

Rev	Description	By	Date
D	FOURTH ISSUE	GL	08/17
C	THIRD ISSUE	GL	07/17
B	SECOND ISSUE	GL	06/17
A	FIRST ISSUE	GL	06/17

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Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
MODIFICATION OF PROPOSED PROJECT SITE BOUNDARY

Drawing no.			Rev.
250269/E/02/001			D
Drawn	Date	Checked	Approved
GL	08/17	KL	ST
Scale		Status	
1:4000 @A3		PRELIMINARY	

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Plotted : 17/...
Filename : \\HKGNTS22\acoustic\env\project\250269\13 Drawing Deliverables\Report\04 PER\Revised Final\250269_E_02_001.dgn

POK FU LAM ROAD

VICTORIA ROAD

EXISTING CYBERPORT-WAH FU CABLE TUNNEL

EXISTING WAH FU-BOWEN CABLE TUNNEL

EXISTING TIN WAN-WAH FU CABLE TUNNEL

EXISTING STREAM TO BE REPLACED BY PIPELINE / BOX CULVERT / CHANNEL

EXISTING HEC 275kV CABLE

EXISTING HEC 275kV CABLE

BRIDGE APP. 30m

FOOTBRIDGE

2m WIDTH MAINTENANCE ACCESS TO FACILITATE MAINTENACE OPERATION BY HYD

WAH KING STREET

SHEK PAI WAN ROAD

WAH FU ROAD

ABERDEEN PRAYA ROAD

3% GRADIENT

6% GRADIENT

PROPOSED GREEN CHANNEL

+92 +74 +70 +64 +67 +69 +72 +75 +94 +84 +63 +66 +53 +59.6 +59.6 +63.2 +66 +72 +51 +58

832200 E 832000 E 832400 E 832600 E 832800 E 833000 E 833200 E

813000 N 812800 N 812600 N 812400 N 812200 N

0 20 40 60 80 100
METRES
1 : 2000

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)
- EXISTING LAND ALLOCATION / LEASE
- PROPOSED BORED PILE WALL (MAX. RETAINING HEIGHT OF 20m)
- PROPOSED L-SHAPED RC RETAINING WALL (MAX. RETAINING HEIGHT OF 10m)
- PROPOSED SLOPE (GRADIENT OF 30°)
- +92 PROPOSED PLATFORM LEVEL IN mPD.
- EXISTING DRAINAGE RESERVE
- AREA FOR NTHS MEASURES
- PROPOSED GREEN CHANNEL

Rev	Description	By	Date
-	SKETCH	KL	10/16

Consultant

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Contract No. and Title

Agreement No. CE 74/2015 (CE)

Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

PRELIMINARY SITE FORMATION AND ROAD LAYOUT

Drawing no.			Rev.
250269/C/002			-
Drawn	Date	Checked	Approved
AC	08/15	KC	SYC
Scale		Status	
1:2000 @A1		PRELIMINARY	

CEDD 土木工程拓展署 Civil Engineering and Development Department

Printed by : 17/8/2017
Filename : J:\250269\Arup\CIVIL\250269_C_002.dgn

831800 E
832000 E
832200 E
813000 N
812800 N

EXISTING 300DIA. SEWER BETWEEN FMH7045544 AND FMH7045542 TO BE UPGRADED TO 375DIA.

EXISTING 375DIA. SEWER BETWEEN FMH7045542 AND FMH7045541 TO BE MODIFIED.

PROPOSED CONNECTION AT EXISTING MANHOLE KLWN19 FOR NEAR CHI FU ROAD SITE AND WAH KING STREET SITE

EXISTING 375DIA. SEWER BETWEEN FMH7024642 AND FMH7024643 TO BE

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/203

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/202

EAST LAMMA CHANNEL

01 02 03 04

KEY PLAN

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- EXISTING SEWER (DSD)
- EXISTING SEWER (HD)
- PROPOSED SEWER
- EXISTING SEWER TO BE ABANDONED
- EXISTING SEWER TO BE UPGRADED
- +86 PROPOSED LEVEL

Rev	Description	By	Date
A	SECOND ISSUE	HC	04/17
-	FIRST ISSUE	HC	08/16

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Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
EXISTING AND PROPOSED SEWERAGE LAYOUT PLAN

(SHEET 1 OF 4)

Drawing no.			Rev.
250269/C/201			A
Drawn	Date	Checked	Approved
HHW	09/15	KC	SYC
Scale	1:1000 @A1	Status	PRELIMINARY

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Civil Engineering and Development Department

Plotted by : 8/2/
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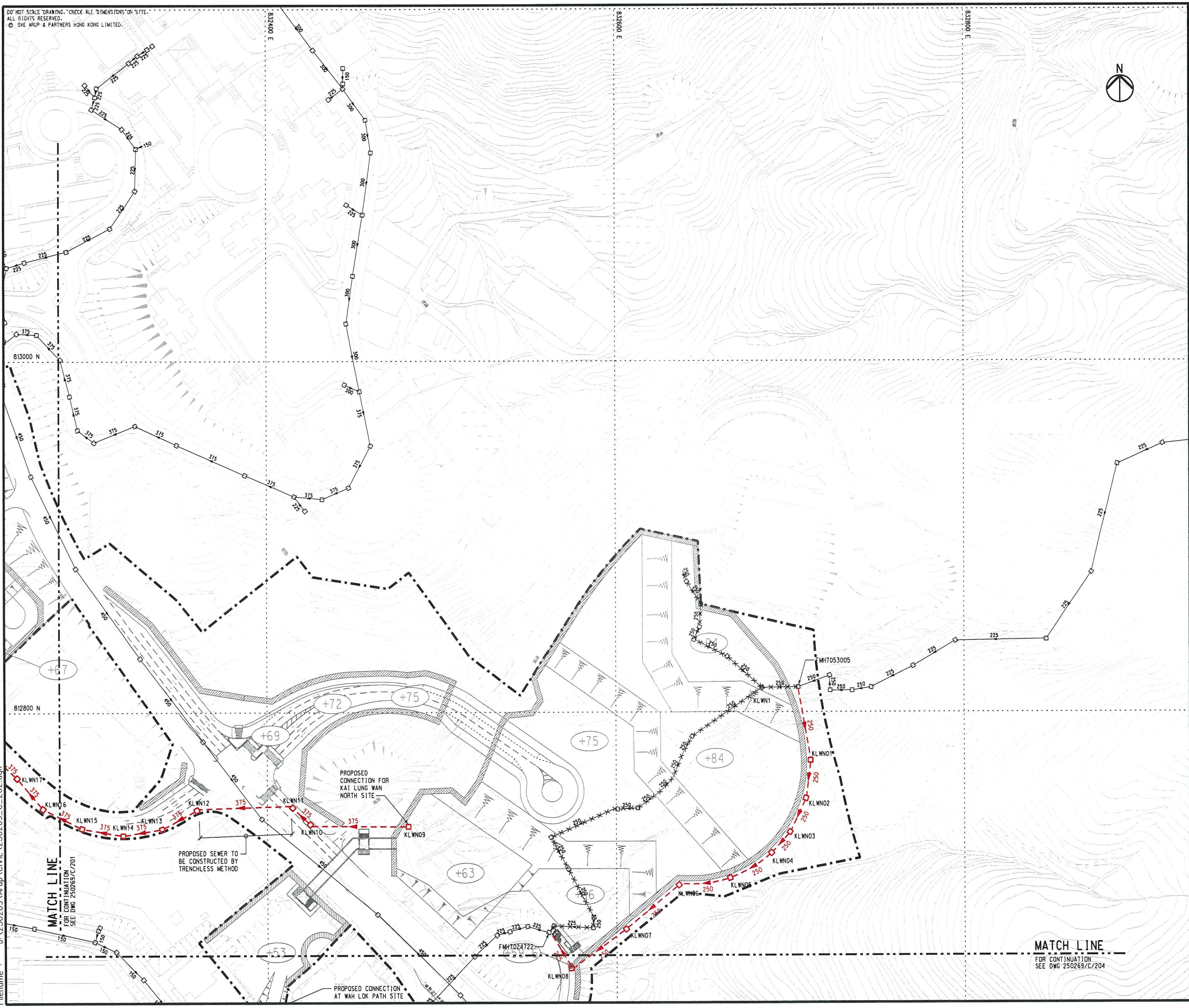

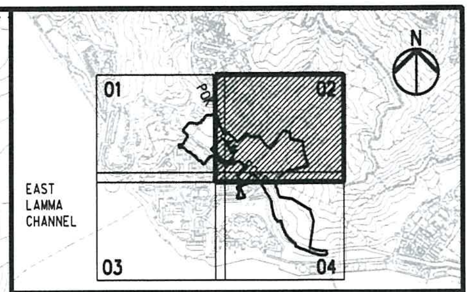

KEY PLAN

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- EXISTING SEWER (DSD)
- EXISTING SEWER (HD)
- PROPOSED SEWER
- EXISTING SEWER TO BE ABANDONED
- EXISTING SEWER TO BE UPGRADED
- +86 PROPOSED LEVEL

Rev	Description	By	Date
A	SECOND ISSUE	HC	04/17
-	FIRST ISSUE	HC	08/16

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Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

EXISTING AND PROPOSED SEWERAGE LAYOUT PLAN

(SHEET 2 OF 4)

Drawing no.			Rev.
250269/C/202			A
Drawn HHW	Date 09/15	Checked KC	Approved SYC
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MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/201

831800 E
832000 E
832200 E
812600 N
812400 N
812200 N

POK FU WAN
(WATERFALL BAY)

EXISTING 375DIA. SEWER BETWEEN FMH7024642 AND FMH7024643 TO BE MODIFIED.

EXISTING 300DIA. SEWER BETWEEN FMH7024643 AND FMH7024644 TO BE UPGRADED TO 375DIA.

WAH FU PRELIMINARY TREATMENT WORKS

525 SUBMARINE OUTFALL

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/204

EAST LAMMA CHANNEL

01 02 03 04

KEY PLAN

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- EXISTING SEWER (DSD)
- EXISTING SEWER (HD)
- PROPOSED SEWER
- EXISTING SEWER TO BE ABANDONED
- EXISTING SEWER TO BE UPGRADED
- +86 PROPOSED LEVEL

Rev	Description	By	Date
-	FIRST ISSUE	HC	08/16

Consultant
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Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
EXISTING AND PROPOSED SEWERAGE LAYOUT PLAN

(SHEET 3 OF 4)

Drawing no.			Rev.
250269/C/203			-
Drawn: HHW	Date: 09/15	Checked: KC	Approved: SYC
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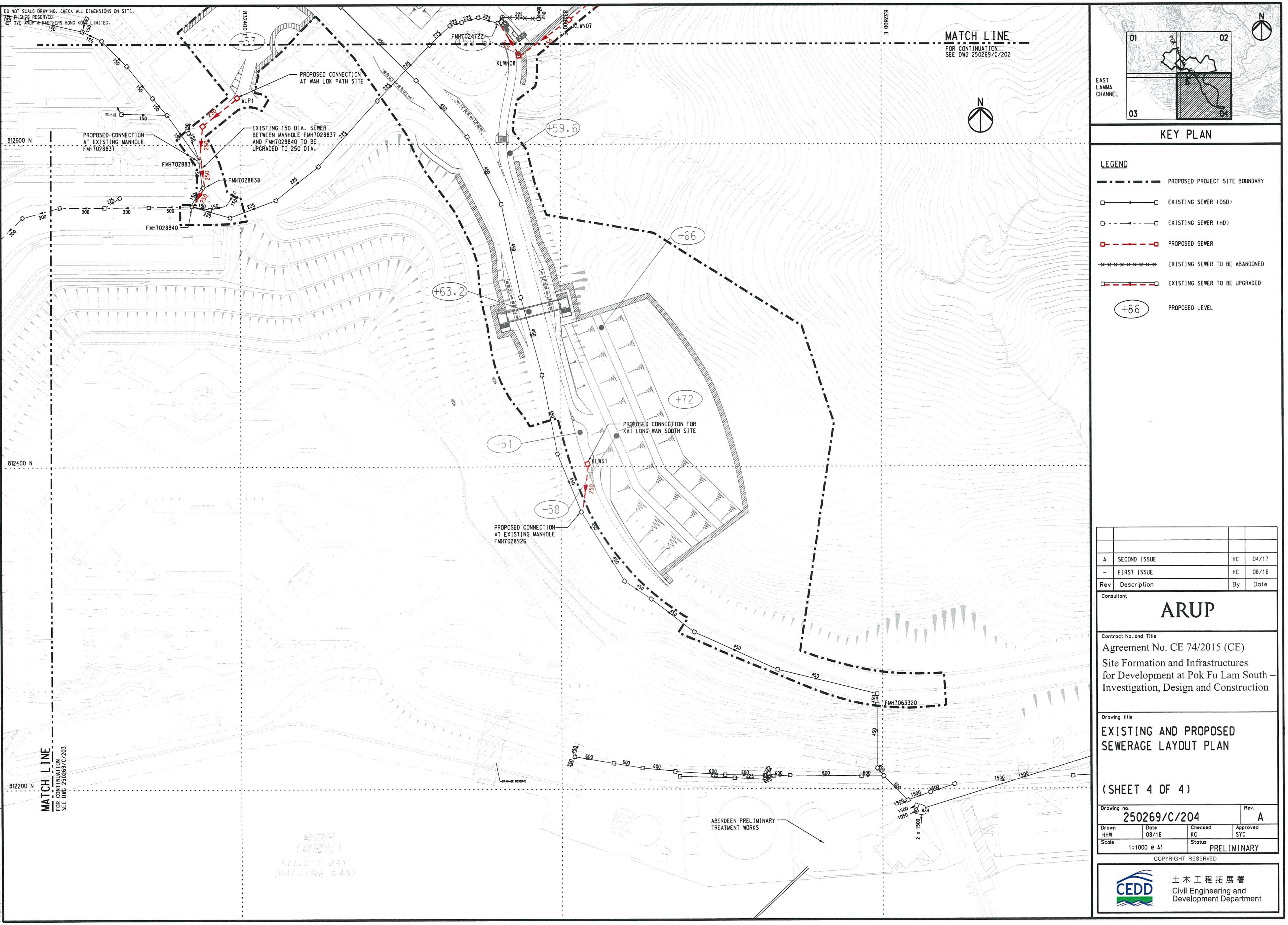
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FOR CONTINUATION SEE DWG 250269/C/202
MATCH LINE
FOR CONTINUATION SEE DWG 250269/C/203
832400 E
832800 E
812600 N
812400 N
812200 N
PROPOSED CONNECTION AT WAH LOK PATH SITE
WLP1
EXISTING 150 DIA. SEWER BETWEEN MANHOLE FMH7028837 AND FMH7028840 TO BE UPGRADED TO 250 DIA.
PROPOSED CONNECTION AT EXISTING MANHOLE FMH7028837
FMH7028837
FMH7028838
FMH7028840
FMH7024722
KLWN07
KLWN08
+53
+59.6
+66
+63.2
+72
+51
+58
PROPOSED CONNECTION FOR KAI LUNG WAN SOUTH SITE
KLWS1
PROPOSED CONNECTION AT EXISTING MANHOLE FMH7028926
FMH7063320
ABERDEEN PRELIMINARY TREATMENT WORKS
N
KEY PLAN
01
02
03
04
EAST LAMMA CHANNEL
LEGEND
PROPOSED PROJECT SITE BOUNDARY
EXISTING SEWER (DSD)
EXISTING SEWER (HD)
PROPOSED SEWER
EXISTING SEWER TO BE ABANDONED
EXISTING SEWER TO BE UPGRADED
+86
PROPOSED LEVEL

Rev	Description	By	Date
A	SECOND ISSUE	HC	04/17
-	FIRST ISSUE	HC	08/16

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Drawing title
EXISTING AND PROPOSED SEWERAGE LAYOUT PLAN

(SHEET 4 OF 4)

Drawing no.			Rev.
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832000 E
832100 E
832200 E
832300 E
832400 E
832500 E
832600 E
813000 E
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812800 E
812700 E
812600 E

PROPOSED CONNECTION TO EXISTING DN375 FRESH WATER MAIN
PROPOSED CONNECTION TO EXISTING DN300 FRESH WATER MAIN
PROPOSED CONNECTION FOR WAH FU NORTH SITE
PROPOSED DN300 FRESH WATER MAIN
PROPOSED CONNECTION TO EXISTING DN300 FRESH WATER MAIN
PROPOSED DN300 FRESH WATER MAIN
PROPOSED DN150 FRESH WATER MAIN
PROPOSED CONNECTION FOR WAH KING STREET SITE
PROPOSED DN300 FRESH WATER MAIN
PROPOSED CONNECTION FOR KAI LUNG WAN NORTH SITE
PROPOSED CONNECTION TO EXISTING DN300 FRESH WATER MAIN
PROPOSED CONNECTION FOR WAH LOK PATH SITE
PROPOSED DN300 FRESH WATER MAIN
PROPOSED DN80 FRESH WATER MAIN
PROPOSED CONNECTION TO EXISTING 18" FRESH WATER MAIN

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/302 & 303

0 10 20 30 40 50
METRES
1 : 1000

EAST LAMMA CHANNEL

KEY PLAN

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- EXISTING FRESH WATER MAIN
- PROPOSED FRESH WATER MAIN

Rev	Description	By	Date
-	FIRST ISSUE	KC	08/16

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Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
POKFULAM SOUTH
EXISTING AND PROPOSED
FRESH WATER SUPPLY SYSTEM

(SHEET 1 OF 3)

Drawing no.			Rev.
250269/C/301			-
Drawn: AC	Date: 08/16	Checked: KC	Approved: SYC
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832600 E
832700 E
832800 E
832900 E
833000 E
813300 E
813200 E
813100 E
813000 E
812900 E
812800 E

EXISTING KAI LUNG WAN
FRESH WATER SERVICE RESERVOIR

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/301

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/303

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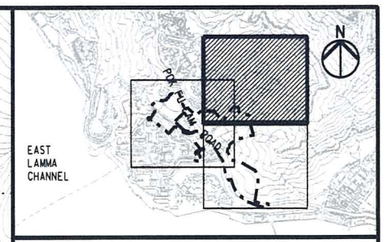
METRES
1 : 1000



KEY PLAN

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- EXISTING FRESH WATER MAIN
- PROPOSED FRESH WATER MAIN

Rev	Description	By	Date
-	FIRST ISSUE	KC	08/16

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Contract No. and Title

Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

POKFULAM SOUTH
EXISTING AND PROPOSED
FRESH WATER SUPPLY SYSTEM

(SHEET 2 OF 3)

Drawing no.			Rev.
250269/C/302			-
Drawn: AC	Date: 08/16	Checked: KC	Approved: SYC
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MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/302

832500 E
832700 E
832900 E
833100 E
833300 E

812700 E
812600 E
812500 E
812400 E
812300 E

PROPOSED DN300
FRESH WATER MAIN

PROPOSED DN300
FRESH WATER MAIN

PROPOSED CONNECTION
FOR KAI LUNG WAN NORTH SITE

PROPOSED CONNECTION
TO EXISTING 18"
FRESH WATER MAIN

PROPOSED DN300
FRESH WATER MAIN

PROPOSED DN250
FRESH WATER MAIN

PROPOSED CONNECTION
EXISTING 18"
FRESH WATER MAIN

PROPOSED CONNECTION
FOR KAI LUNG WAN SOUTH SITE

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/301

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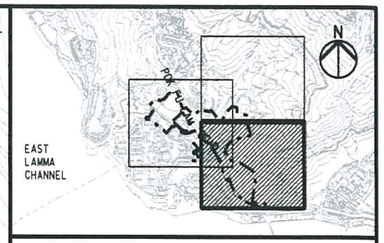
METRES
1 : 1000



KEY PLAN

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- EXISTING FRESH WATER MAIN
- PROPOSED FRESH WATER MAIN

Rev	Description	By	Date
-	FIRST ISSUE	KC	08/16

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Drawing title
POKFULAM SOUTH
EXISTING AND PROPOSED
FRESH WATER SUPPLY SYSTEM

(SHEET 3 OF 3)

Drawing no.	Rev.
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Filename : J:\250269\Arup\CIVIL\250269_c_303.dgn

832100 E
832200 E
832300 E
832400 E
832500 E
832600 E
813000 N
812900 N
812800 N
812700 N
812600 N

PROPOSED CONNECTION TO EXISTING DN400 SALT WATER MAIN
PROPOSED DN100 SALT WATER MAIN
PROPOSED CONNECTION FOR WAH FU NORTH SITE
PROPOSED CONNECTION TO EXISTING DN400 SALT WATER MAIN
PROPOSED DN50 SALT WATER MAIN
PROPOSED CONNECTION FOR WAH KING STREET SITE
PROPOSED DN200 SALT WATER MAIN BY TRENCHLESS METHOD
PROPOSED CONNECTION TO EXISTING DN400 SALT WATERMAIN
PROPOSED CONNECTION FOR WAH LOK PATH SITE
PROPOSED CONNECTION TO EXISTING DN400 SALT WATER MAIN
PROPOSED DN50 SALT WATER MAIN
PROPOSED DN150 SALT WATER MAIN
PROPOSED DN200 SALT WATER MAIN
PROPOSED CONNECTION FOR KAI LUNG WAN NORTH SITE
PROPOSED DN100 SALT WATER MAIN

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/306 & 307

0 10 20 30 40 50
METRES
1 : 1000

EAST LAMMA CHANNEL

KEY PLAN

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- EXISTING SALT WATER MAIN
- PROPOSED SALT WATER MAIN

Rev	Description	By	Date
-	FIRST ISSUE	KC	08/16

Consultant
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Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
POKFULAM SOUTH
EXISTING AND PROPOSED
SALT WATER SUPPLY SYSTEM

(SHEET 1 OF 3)

Drawing no.			Rev.
250269/C/305			-
Drawn	Date	Checked	Approved
AC	08/16	KC	SYC
Scale		Status	
1:1000 @A1		PRELIMINARY	

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Civil Engineering and Development Department

Printed by : 8/8/2017
Filename : J:\250269\Arup\CIVIL\250269_C_305.dgn

832500 E
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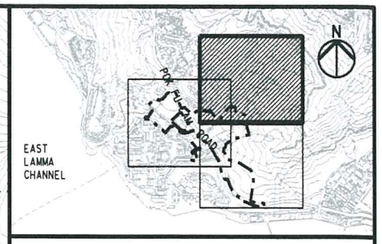
832700 E
832800 E
832900 E
833000 E
813300 N
813200 N
813100 N
813000 N
812900 N
812800 N

EXISTING KAI LUNG WAN
FRESH WATER SERVICE RESERVOIR

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/305

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/307

0 10 20 30 40 50
METRES
1 : 1000



KEY PLAN

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- EXISTING SALT WATER MAIN
- PROPOSED SALT WATER MAIN

Rev	Description	By	Date
-	FIRST ISSUE	KC	08/16

Consultant

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Contract No. and Title

Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

POKFULAM SOUTH
EXISTING AND PROPOSED
SALT WATER SUPPLY SYSTEM

(SHEET 2 OF 3)

Drawing no.			Rev.
250269/C/306			-
Drawn: AC	Date: 08/16	Checked: KC	Approved: SYC
Scale: 1:1000 @A1		Status: PRELIMINARY	

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Plotted by : 8/2
Filename : J:\250269\Arup\CIVIL\250269_C_306.dgn

832500 E
832600 E
832700 E
832800 E
832900 E
833000 E
812700 N
812600 N
812500 N
812400 N
812300 N

PROPOSED DN200 SALT WATER MAIN

PROPOSED CONNECTION FOR KAI LUNG WAN - NORTHERN SITE

PROPOSED DN150 SALT WATER MAIN

PROPOSED DN100 SALT WATER MAIN

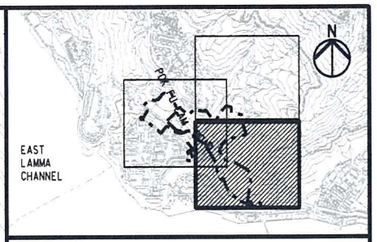
PROPOSED CONNECTION FOR KAI LUNG WAN SOUTH SITE

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/305

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/306

N

0 10 20 30 40 50
METRES
1 : 1000



KEY PLAN

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- EXISTING SALT WATER MAIN
- PROPOSED SALT WATER MAIN

Rev	Description	By	Date
-	FIRST ISSUE	KC	08/16

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Drawing title
POKFULAM SOUTH
EXISTING AND PROPOSED
SALT WATER SUPPLY SYSTEM

(SHEET 3 OF 3)

Drawing no.	Rev.
250269/C/307	-

Drawn	Date	Checked	Approved
AC	08/16	KC	SYC

Scale: 1:1000 @A1
Status: PRELIMINARY

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Civil Engineering and Development Department

Printed by : 8/8/2017
Filename : J:\250269\Arup\CIVIL\250269_C_307.dgn

831800 E
832000 E
832200 E
813000 N
812800 N

PROPOSED CASCADE / DRAINAGE PIPES

PROPOSED CONNECTION FOR WAH FU NORTH SITE

SMH7063163
SMH7026351
SMH7063164
SMH7063165
SMH7070802
SMH7070801

PROPOSED 1200mm DIA. DRAINAGE PIPE TO REPLACE THE EXISTING 900mm DIA. DRAINAGE PIPES

PROPOSED CONNECTION FOR WAH KING STREET SITE

PROPOSED DRAINAGE PIPE TO BE DIVERTED

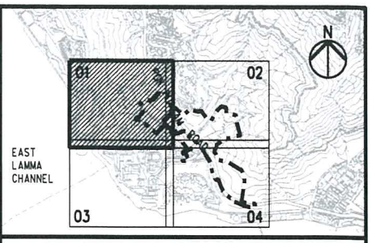
+92
+74
+70
+64
+67

MATCH LINE
FOR CONTINUATION SEE DWG 250269/C/403

MATCH LINE
FOR CONTINUATION SEE DWG 250269/C/402

WAH FU WATERFLL

EAST LAMMA CHANNEL



KEY PLAN

NOTE

1. TOTAL LENGTH OF PROPOSED GREEN CHANNELS IS APPROXIMATELY EQUAL TO THE TOTAL LENGTH OF STREAMS TO BE ABANDONED AT NEAR CHI FU ROAD SITE AND KAI LUNG WAN SITE.

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- EXISTING STORMWATER DRAIN
- PROPOSED STORMWATER DRAIN
- PROPOSED CASCADE
- EXISTING STORMWATER DRAIN TO BE ABANDONED
- EXISTING STREAM TO BE DIVERTED / ABANDONED
- EXISTING STORMWATE DRAIN TO BE UPGRADED
- PROPOSED GREEN CHANNEL
- +86 PROPOSED LEVEL +86mPD
- PROPOSED DRAINAGE RESERVE ZONE

Rev	Description	By	Date
A	SECOND ISSUE	HC	04/17
-	FIRST ISSUE	KC	08/16

Consultant

ARUP

Contract No. and Title

Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

EXISTING AND PROPOSED STROM DRAIN LAYOUT PLAN

(SHEET 1 OF 4)

Drawing no.			Rev.
250269/C/401			A
Drawn	Date	Checked	Approved
HHW	08/16	KC	SYC
Scale		Status	
1:1000 @A1		PRELIMINARY	

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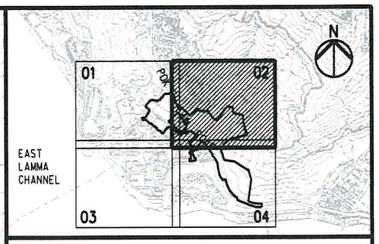
Civil Engineering and Development Department

Plotted by : 7/8/2017
Filename : J:\250269\Arup\CIVIL\250269_C_401.dgn

E 832400
E 832600
E 832800
N 813000
N 812800



KEY PLAN

NOTE

1. TOTAL LENGTH OF PROPOSED GREEN CHANNELS IS APPROXIMATELY EQUAL TO THE TOTAL LENGTH OF STREAMS TO BE ABANDONED AT NEAR CHI FU ROAD SITE AND KAI LUNG WAN SITE.

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- EXISTING STORMWATER DRAIN
- PROPOSED STORMWATER DRAIN
- PROPOSED CASCADE
- EXISTING STORMWATER DRAIN TO BE ABANDONED
- EXISTING STREAM TO BE DIVERTED / ABANDONED
- EXISTING STORMWATE DRAIN TO BE UPGRADED
- PROPOSED GREEN CHANNEL
- +86 PROPOSED LEVEL +86mPD

+67 +72 +75 +69 +75 +84 +94 +63 +66 +53 +59.6

DRAINAGE RESERVE
SMH7026546
PROPOSED CONNECTION FOR KAI LUNG WAN NORTH SITE
PROPOSED APPROX. 600(W)x600(H) CASCADE FOR STREAM DIVERSION

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/403

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/404

Rev	Description	By	Date
A	SECOND ISSUE	HC	04/17
-	FIRST ISSUE	KC	08/16

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
EXISTING AND PROPOSED STORM DRAIN LAYOUT PLAN

(SHEET 2 OF 4)

Drawing no.			Rev.
250269/C/402			A
Drawn	Date	Checked	Approved
HHW	08/16	KC	SYC
Scale		Status	
1:1000 @A1		PRELIMINARY	

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Filename : J:\250269\Arup\CIVIL\250269_C_402.dgn

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/401

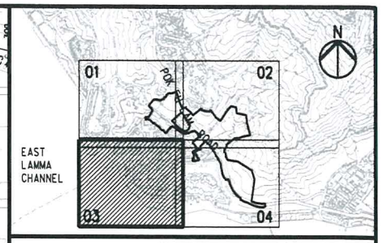
831800 E
832000 E
832200 E
812600 N
812400 N
812200 N

WAH FU
WATERFLL

POK PO WAN
(WATERFALL BAY)

(SK. NO. RCH 512)

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/404



KEY PLAN

NOTE

1. TOTAL LENGTH OF PROPOSED GREEN CHANNELS IS APPROXIMATELY EQUAL TO THE TOTAL LENGTH OF STREAMS TO BE ABANDONED AT NEAR CHI FU ROAD SITE AND KAI LUNG WAN SITE.

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- EXISTING STORMWATER DRAIN
- PROPOSED STORMWATER DRAIN
- PROPOSED CASCADE
- EXISTING STORMWATER DRAIN TO BE ABANDONED
- EXISTING STREAM TO BE DIVERTED / ABANDONED
- EXISTING STORMWATE DRAIN TO BE UPGRADED
- PROPOSED GREEN CHANNEL
- +86 PROPOSED LEVEL +86mPD

Rev	Description	By	Date
A	SECOND ISSUE	HC	04/17
-	FIRST ISSUE	KC	08/16

Consultant
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Drawing title
EXISTING AND PROPOSED STORM DRAIN LAYOUT PLAN

(SHEET 3 OF 4)

Drawing no.			Rev.
250269/C/403			A
Drawn	Date	Checked	Approved
HHW	08/16	KC	SYC
Scale		Status	
1:1000 @A1		PRELIMINARY	

CEDD
土木工程拓展署
Civil Engineering and Development Department

Printed by : 8/2/...
Filename : J:\250269\Arup\CIVIL\250269_C_403.dgn

832400 E

832800 E

812600 N

812400 N

812200 N

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/402

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/403

+53

+59.6

+59.6

+63.2

+66

+72

+51

+58

PROPOSED CONNECTION FOR WAH LOK PATH SITE

SMH7026559

SCH7002759

1500 CHANNEL (REF SGJ7006041)

1:4 FALL

PROPOSED APPROX. 700(W)x700(H) GREEN CHANNEL

1:25 FALL

1:25 FALL

PROPOSED CONNECTION FOR KAI LUNG WAN SOUTH SITE

900 CHANNEL (REF SWD7038474)

SIH7000420

CONNECT TO EXISTING 1 CELL 7700(W) BOX CULVERT

1 CELLS 3200x00 B.C.

1 CELLS 7700x00 B.C.

1 CELLS 7100x00 B.C.

ABERDEEN PRELIMINARY TREATMENT WORKS

CHANNEL WIDTH

TOP WATER LEVEL

GEOTEXTILE FABRIC

GRAVEL BACKFILL

GABION WALL EMBANKMENT

STONES AND PEBBELS

TYPICAL CROSS SECTION OF GREEN CHANNEL
N.T.S

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/C/402

EAST LAMMA CHANNEL

01 02 03 04 POK FU LAM ROAD

KEY PLAN

NOTE

1. TOTAL LENGTH OF PROPOSED GREEN CHANNELS IS APPROXIMATELY EQUAL TO THE TOTAL LENGTH OF STREAMS TO BE ABANDONED AT NEAR CHI FU ROAD SITE AND KAI LUNG WAN SITE.

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- EXISTING STORMWATER DRAIN
- PROPOSED STORMWATER DRAIN
- PROPOSED CASCADE
- EXISTING STORMWATER DRAIN TO BE ABANDONED
- EXISTING STREAM TO BE DIVERTED / ABANDONED
- EXISTING STORMWATE DRAIN TO BE UPGRADED
- PROPOSED GREEN CHANNEL
- +86 PROPOSED LEVEL +86mPD

Rev	Description	By	Date
A	SECOND ISSUE	HC	04/17
-	FIRST ISSUE	KC	08/16

Consultant
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Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
EXISTING AND PROPOSED STORM DRAIN LAYOUT PLAN

(SHEET 4 OF 4)

Drawing no.			Rev.
250269/C/404			A
Drawn	Date	Checked	Approved
HHW	08/16	KC	SYC
Scale		Status	
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Civil Engineering and Development Department

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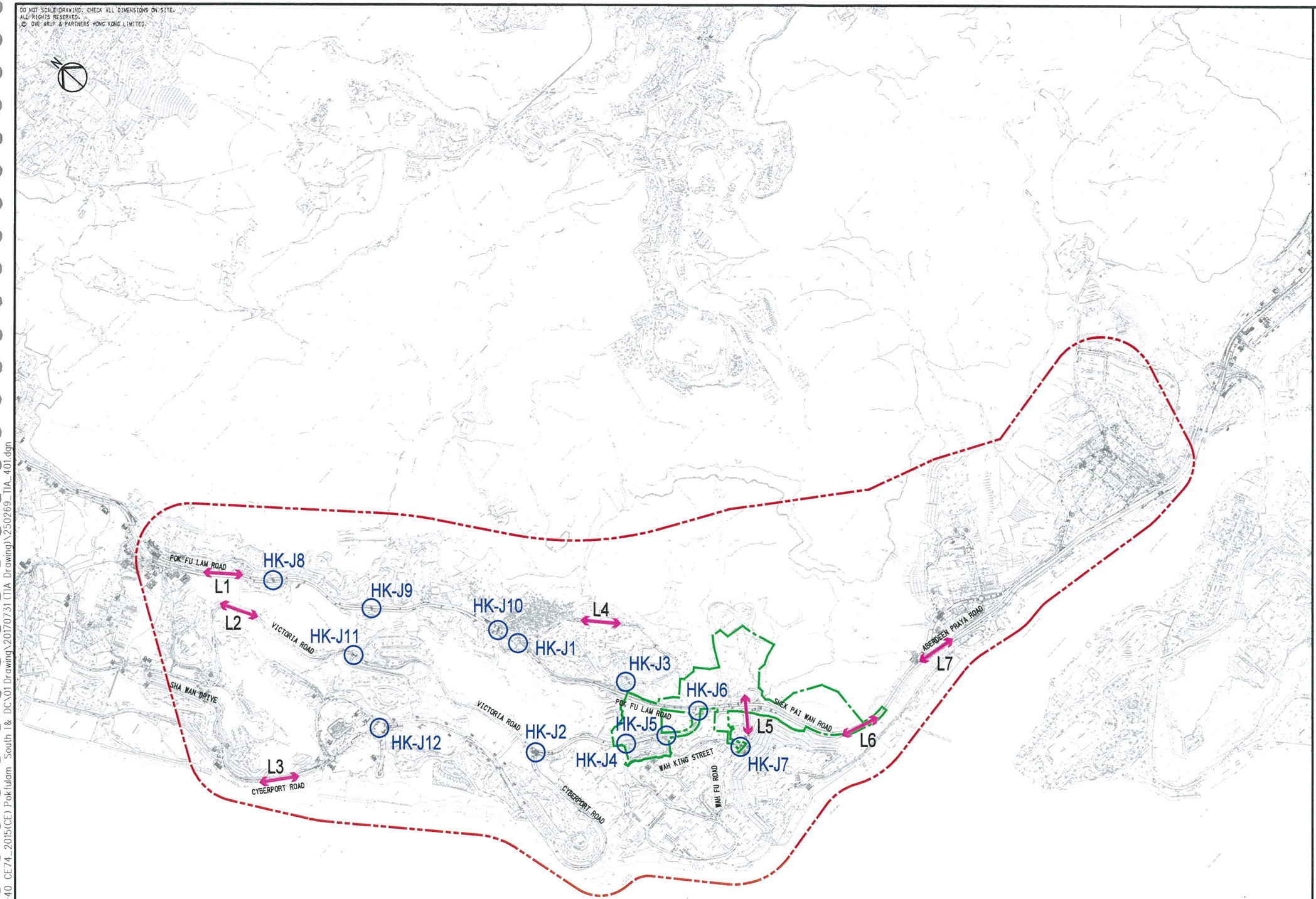

LEGEND

- AREA OF INFLUENCE
- PROJECT SITE BOUNDARY
- HK-J1 — ASSESSED JUNCTION AND NO.
- L1 — ASSESSED ROAD LINK AND NO.

Rev	Description	By	Date
B	TIA REVISION	BF	06/17
A	TIA REVISION	BF	04/17

Consultant

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Contract No. and Title

Agreement No. CE 74/2015 (CE)

Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

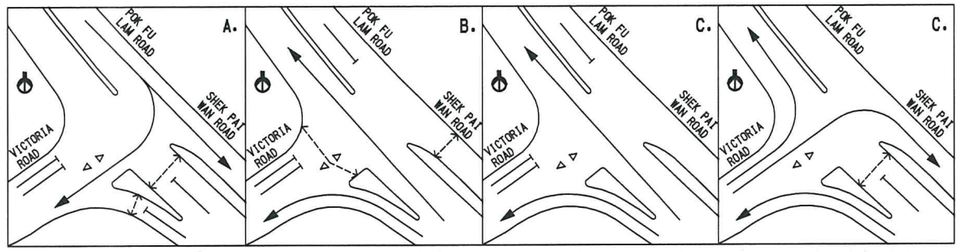
AREA OF INFLUENCE AND LOCATION OF ASSESSED JUNCTIONS AND ROAD LINKS

Drawing no.			Rev.
250269/TIA/401			B
Drawn	Date	Checked	Approved
WKKL	04/17	BF	SYC
Scale		Status	
1:7000 @ A1		PRELIMINARY	

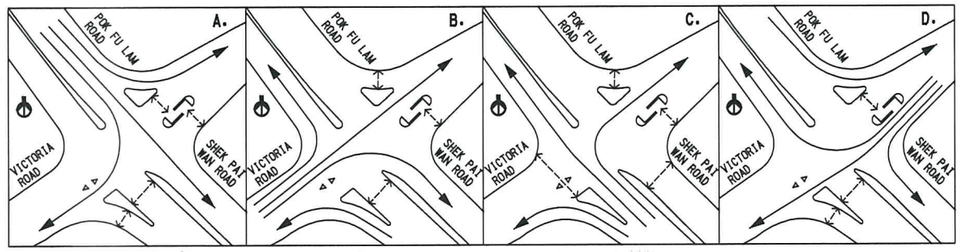
CEDD 土木工程拓展署 Civil Engineering and Development Department

Plotted by: 7/31/2017
Filename: m:\drawing\250000\250269-40 CE74_2015(CE) Pokfulam South I& DC\01 Drawing\20170731 (TIA Drawing)\250269_TIA_401.dgn

METHOD OF CONTROL (EXISTING)



METHOD OF CONTROL (FUTURE)



ADDITIONAL LANE ON
POK FU LAM ROAD SOUTHBOUND

ADDITIONAL LANE ON
POK FU LAM ROAD SOUTHBOUND
FOR DEDICATED LEFT-TURN

POK FU LAM ROAD

ADDITIONAL LANE ON VICTORIA
ROAD EB AND CHANGE OF LANE
ALLOCATION

VICTORIA ROAD

NEW ACCESS ROAD

3 APPROACH LANES ON
NEW ACCESS ROAD

ADDITIONAL LANE AT
POK FU LAM ROAD SOUTHBOUND

PROPOSED MODIFICATION
OF TRAFFIC ISLAND FOR
FACILITATING SMOOTH
MANEUVERING OF RIGHT
TURN MOVEMENT

PROPOSED ROAD MARKING
MODIFICATION FOR NEW
RIGHT TURN MOVEMENT

SHEK PAI WAN ROAD

78m

5m

PROPOSED BUS/MINI-BUS LAY-BY
(78m LONG) AT KAI LUNG WAN
NORTH

39m

PROPOSED BUS/MINI-BUS LAY-BY
(39m LONG) AT KAI LUNG
WAN NORTH

0 5 10 15 20 25
METRES
1 : 500

Rev	Description	By	Date
C	TIA REVISION	BF	08/17
B	TIA REVISION	BF	07/17
A	TIA REVISION	BF	04/17

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
PROPOSED JUNCTION IMPROVEMENT SCHEME AT J/O POK FU LAM ROAD/VICTORIA ROAD (PERMANENT STAGE)

Drawing no.			Rev.
250269/TIA/409			C
Drawn	Date	Checked	Approved
WKKL	04/17	BF	SYC
Scale		Status	
1:500 @A1		PRELIMINARY	

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Civil Engineering and Development Department

Printed by : 8/18/2017
Filename : M:\Drawing\250000\250269-40 CE74_2015(CE) Pokfulam South I& DC\01 Drawing\20170817 (TIA Drawing)\250269_TIA_409C.dgn

PROPOSED BUS LAY-BY

KAI LUNG WAN NORTH SITE (PRH)

PROPOSED LIFT TOWERS TO/FROM KAI LUNG WAN NORTH AND WAH FU ROAD

EXISTING HIKING TRAIL TO HONG KONG TRAIL

PROPOSED SIGNAL CONTROLLED PEDESTRIAN CROSSING TO/FROM BUS STOP AT SHEK PAI WAN ROAD EASTBOUND

TO/FROM MAJOR DEVELOPMENT ALONG POK FU LAM ROAD

POK FU LAM ROAD

TO/FROM KAI LUNG WAN NORTH SITE

PROPOSED BUS LAY-BY AT SHEK PAI WAN ROAD NEAR KAI LUNG WAN SOUTH

SHEK PAI WAN ROAD

PEDESTRIAN DECK (SUBJECT TO FURTHER STUDY BY HD)

WAH FU NORTH SITE (PRH)

WAH LOK PATH SITE (PRH)

KAI LUNG WAN SOUTH SITE (HOS)

TO/FROM VICTORA ROAD

WAH LOK PATH

VICTORIA ROAD

PROPOSED CONVERSION OF EXISTING ZEBRA CROSSING INTO SIGNAL CONTROLLED CROSSING

WAH KING STREET SITE (PRH)

WAH KING STREET

TO/FROM WAH FU ESTATE

REPROVISION OF BUS LAY-BY

WAH FU ROAD

TO/FROM WATERFALL BAY PARK

奇力灣
(陡龍灣)

0 15 30 45 60 75
METRES
1 : 1500

LEGEND

- PROJECT SITE BOUNDARY
- PRELIMINARY PEDESTRIAN ROUTE WITHIN HOUSING SITE (INDICATIVE ONLY)
- PEDESTRIAN ROUTING

Rev	Description	By	Date
C	TIA REVISION	BF	08/17
B	TIA REVISION	BF	07/17
A	TIA REVISION	BF	04/17

Consultant

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Contract No. and Title

Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

MAJOR PEDESTRIAN ROUTING TO/FROM KAI LUNG WAN NORTH/ SOUTH SITE AND WAH FU AREA AND PUBLIC TRANSPORT FACILITIES

Drawing no.			Rev.
250269/TIA/502			C
Drawn	Date	Checked	Approved
WKKL	04/17	BF	SYC
Scale		Status	
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Civil Engineering and Development Department

Printed by : 17/2/2017
Filename : M:\Drawing\250000\250269-40 CE74_2015(CE) Pokfulam South I& DC\01 Drawing\20170817 (TIA Drawing)\250269_TIA_502C.dgn

832000 E

832200 E

812800 N

N

WAH CHUI STREET

POK FU LAM ROAD

TEMPORARY RELOCATION OF EXISTING BUS LAY-BY TO NORTHWEST

18m

13m

10m-LONG SEPARATION

36m

MINIMUM 3.5m FOOTPATH TO BE MAINTAINED ADACENT TO THE LAY-BY

MINIMUM 3.5m FOOTPATH TO BE MAINTAINED ADACENT TO THE LAY-BY

15m

36m

15m

TEMPORARY RELOCATION OF BUS TERMINUS TO VICTORIA ROAD WESTBOUND

18m

TEMPORARY RE-PROVISION OF LAY-BY AT WAH KING STREET FOR MAINTAINING EXISTING EN-ROUTE BUS/GMB SERVICE AT WAH KING STREET EASTBOUND

WAH KING STREET

WAH HONG STREET

VICTORIA ROAD

WAH FU ROAD

限制駛入
限制車輛駛入
及停泊

限制駛入
限制車輛駛入
及停泊

Car Park

Cultivation

Basketball Court

Basketball Court

華富（二）邨

LEGEND

PROJECT SITE BOUNDARY

Rev	Description	By	Date
B	TIA REVISION	BF	06/17
A	TIA REVISION	BF	04/17

Consultant

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Contract No. and Title

Agreement No. CE 74/2015 (CE)

Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

PROPOSED TEMPORARY RE-PROVISIONING OF BUS LAY-BY AT WAH KING STREET

Drawing no.	Rev.
250269/TIA/704	B

Drawn	Date	Checked	Approved
WKKL	04/17	BF	SYC

Scale: 1:500 @A1

Status: PRELIMINARY

CEDD 土木工程拓展署 Civil Engineering and Development Department

Printed by : 7/31/2017
Filename : m:\drawing\250000\250269-40 CE74_2015(CE) Poklulam South I& DC\01 Drawing\20170731 (TIA Drawing)\250269_TIA_704B.dgn

N

WAH CHUI STREET

POK FU LAM ROAD

WAH KING STREET

WAH HONG STREET

VICTORIA ROAD

WAH FU ROAD

LEGEND

- PROJECT SITE BOUNDARY
- EXISTING WAH FU (NORTTH) BUS TERMINUS
- TEMPORARY RE-PROVISIONING OF BUS LAY-BY AT WAH KING STREET
- EXISTING BUS ROUTING
- TEMPORARY BUS ROUTING DIVERSION

Rev	Description	By	Date
B	TIA REVISION	BF	06/17
A	TIA REVISION	BF	04/17

Consultant

ARUP

Contract No. and Title

Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

PROPOSED TEMPORARY BUS ROUTE DIVERSION FOR TEMPORARY RE-PROVISIONING OF BUS LAY-BY AT WAH KING STREET

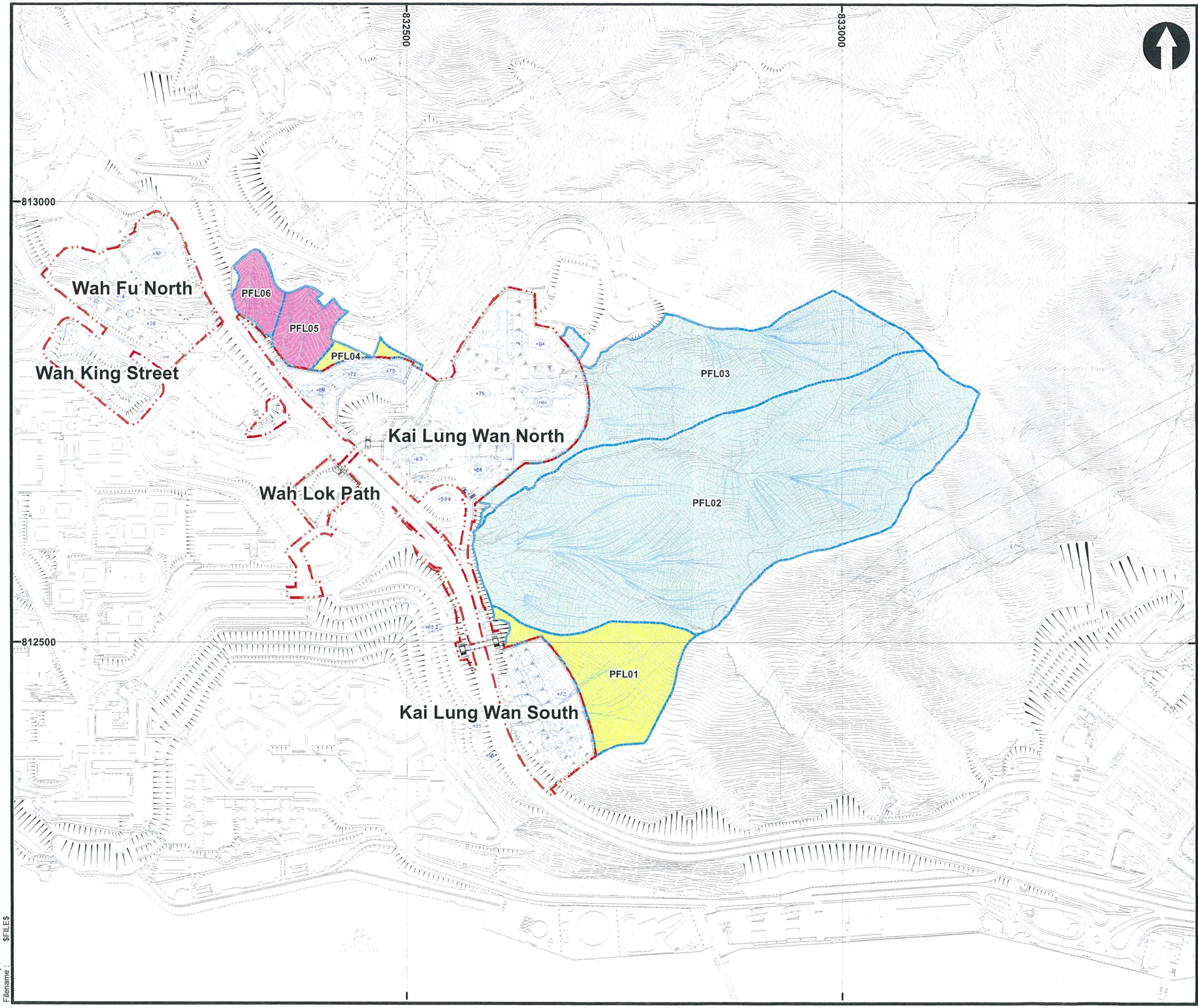
Drawing no.			Rev.
250269/TIA/705			B
Drawn: WKKL	Date: 04/17	Checked: BF	Approved: SYC
Scale: 1:500 @A1		Status: PRELIMINARY	

CEDD 土木工程拓展署 Civil Engineering and Development Department

Plotted by : 31/7/2017 (TIA Drawing)
Filename : m:\drawing\250000\250269-40 CE74_2015(CE) Pokfulam South I & DC\01 Drawing\20170731 (TIA Drawing)\250269_TIA_705B.dgn

Appendix A

Location Plan of Natural Terrain Catchments



Legend

- Flow Path
- Works Area
- Natural Terrain Catchment

Catchment Type

- Open Hillslope Catchment
- Topographic Depression Catchment
- Channelised Catchment

Rev	Description	By	Date

Consultant

ARUP

Contract No. and Title

Agreement No. CE 74/2015 (CE)

Site Formation and Infrastructures for Development at Pok Fu Lam South - Investigation, Design and Construction

Drawing title

Location Plan of the Sub-Catchments

Drawing no.			Rev.
250269/NTHS/002			A
Drawn: KC	Date: Jul 2017	Checked: SWM	Approved: DS
Scale: 1:4,000		Status: Final	

CEDD 土木工程拓展署 Civil Engineering and Development Department

Printed by : $DATE$
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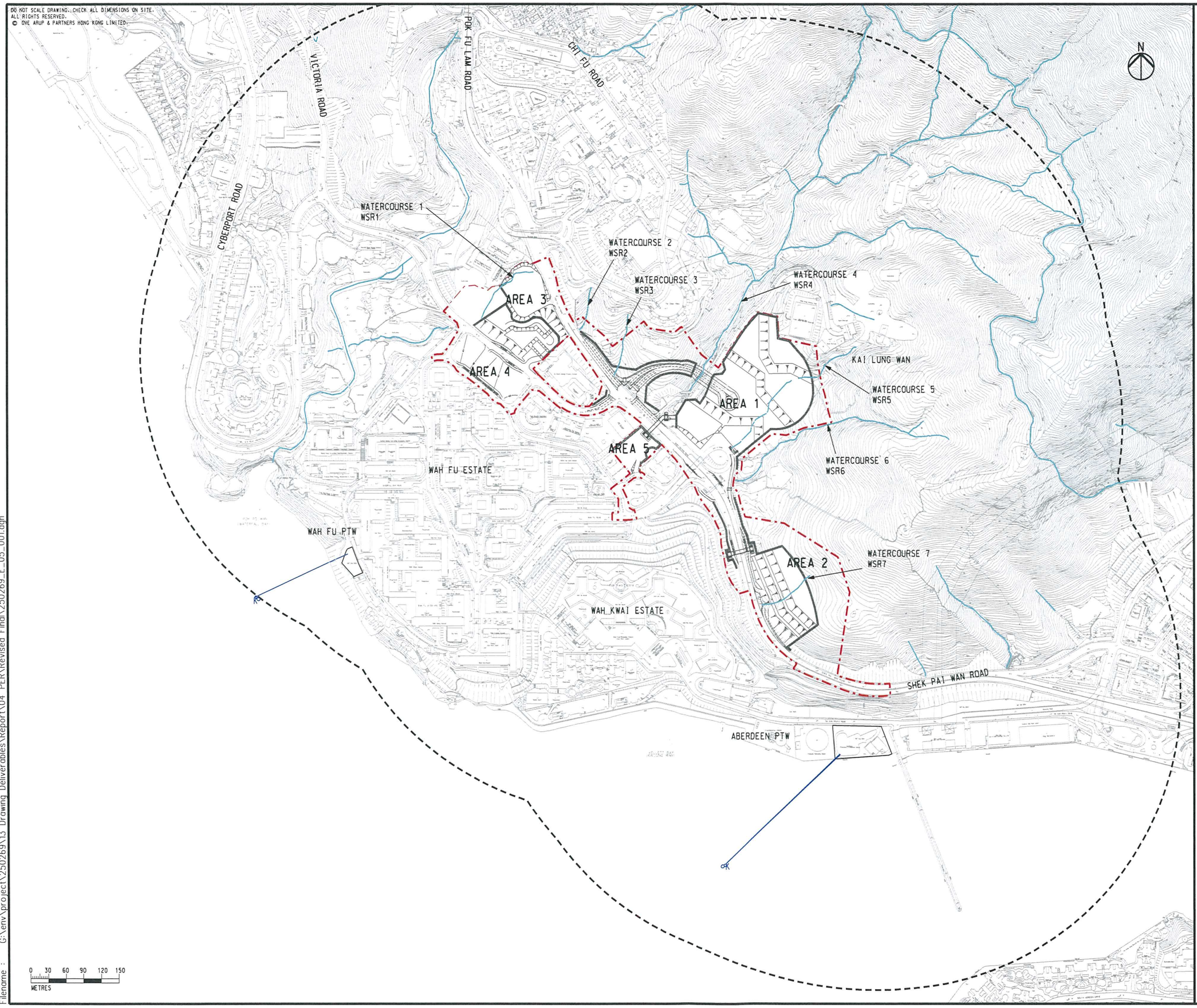
Appendix B

Figures for Preliminary Environmental Study



LEGEND

- PROJECT SITE BOUNDARY
- 500m BOUNDARY
- WATER GATHERING GROUND
- WATERCOURSE
- EMERGENCY OUTFALL FROM PTW

Rev	Description	By	Date
B	SECOND ISSUE	GL	08/17
A	FIRST ISSUE	GL	06/17

Consultant

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Contract No. and Title

Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

LOCATION OF WATER SENSITIVE RECEIVERS

Drawing no.			Rev.
250269/E/05/001			B
Drawn: GL	Date: 08/17	Checked: KL	Approved: ST
Scale: AS SHOWN		Status: PRELIMINARY	

CEDD 土木工程拓展署 Civil Engineering and Development Department

Plotted by: 8/11/2017
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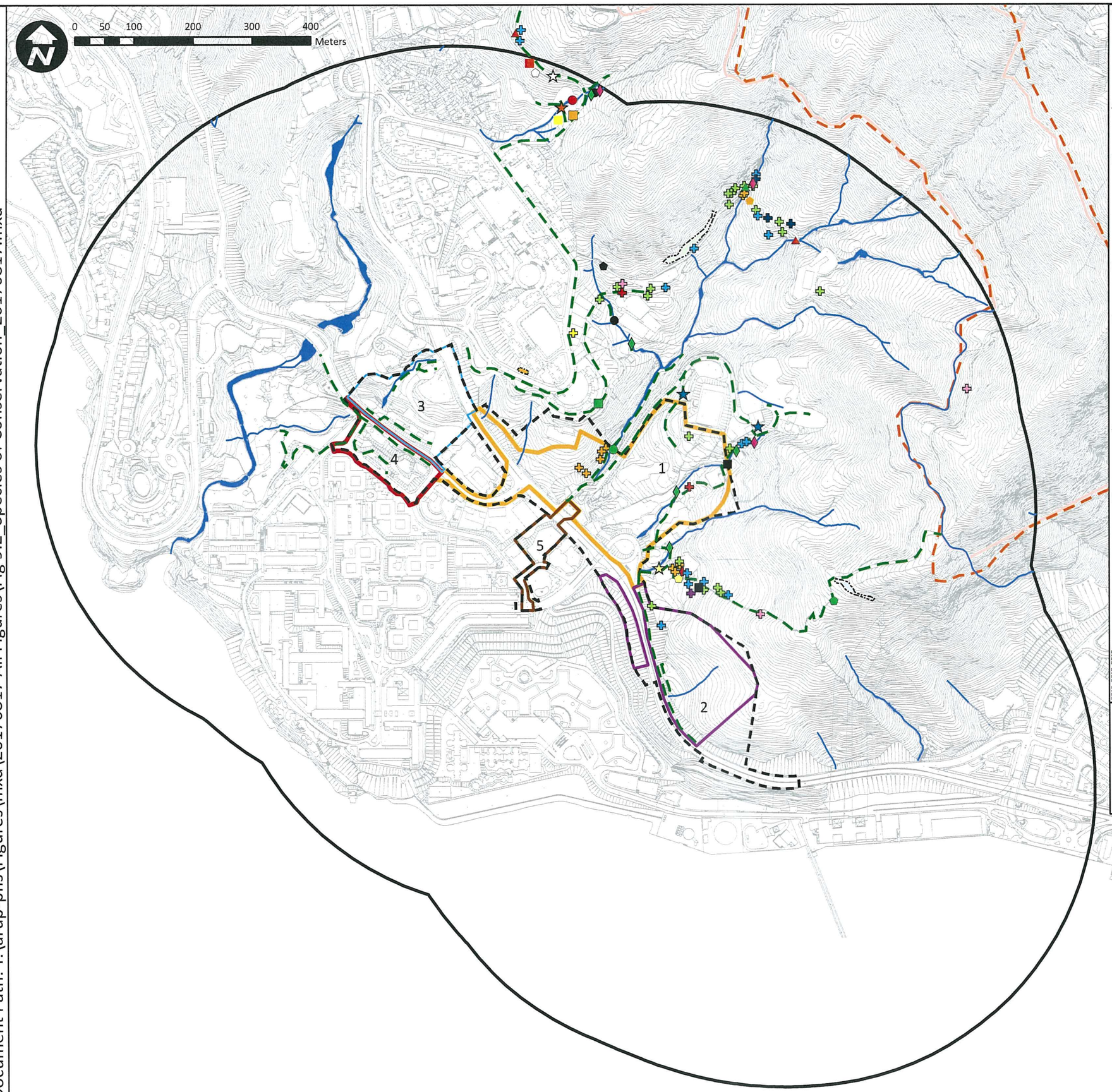

Reptiles
- Common Rat Snake
- Four-clawed Gecko
- Tree Gecko
- White-spotted Slug Snake

Amphibians
- Lesser Spiny Frog
- Short-legged Toad

Mammal
- Short-nosed Fruit Bat
- Small Indian Civet (Scats)
- Masked Palm Civet
- Pallas's Squirrel
- Leopard Cat

Dragonflies
- Emerald Cascader
- Chinese Yellowface

Butterflies
- Cornelian
- Dark Palm Dart
- Orange Awlet
- Powdered Oak Blue
- White Royal

Aquatic Invertebrates
- Emerald Cascader (Larvae)
- *Nanhaipotamon hongkongense*
- Tiger Hawker (Larvae)

Flora
- *Artocarpus hypargyreus*
- *Ailanthus fordii*
- *Canthium dicoccum*
- *Diospyros vaccinioides*
- *Gnetum luofuense*
- *Pavetta hongkongensis*
- *Aquilaria sinensis*
- *Lagerstroemia fordii*
- Area of *Ailanthus fordii* specimens
- Area of *Platycodon grandiflorus*
- Area of *Diospyros vaccinioides*

Note:
Five avifauna species of conservation importance, namely Black Kite, Collared Scops Owl, Crested Goshawk, Eastern Buzzard and Greater Coucal, were also recorded but were not mapped in this habitat map.

- 500m Assessment Area
- Watercourse
- Transect
- Pok Fu Lam Reservoir Catchment Area SSSI
- Country Park
- Proposed Project Site Boundary
- Actual Works Area in Kai Lung Wan North Site (Area 1)
- Actual Works Area in Kai Lung Wan South Site (Area 2)
- Actual Works Area Wah Fu North Site (Area 3)
- Actual Works Area Wah King Street Site (Area 4)
- Actual Works Area Wah Lok Path Site (Area 5)

Rev	Description	By	Date

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE) Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing Title
Locations of Streams and Records of Species of Conservation Importance Recorded During the Study

Drawing no.	250269/E/09/002		Rev.
Drawn TH	Date 17-08-2017	Checked GJC	Approved GJC
Scale 1:6500 on A3		Status	

CEDD 土木工程拓展署 Civil Engineering and Development Department

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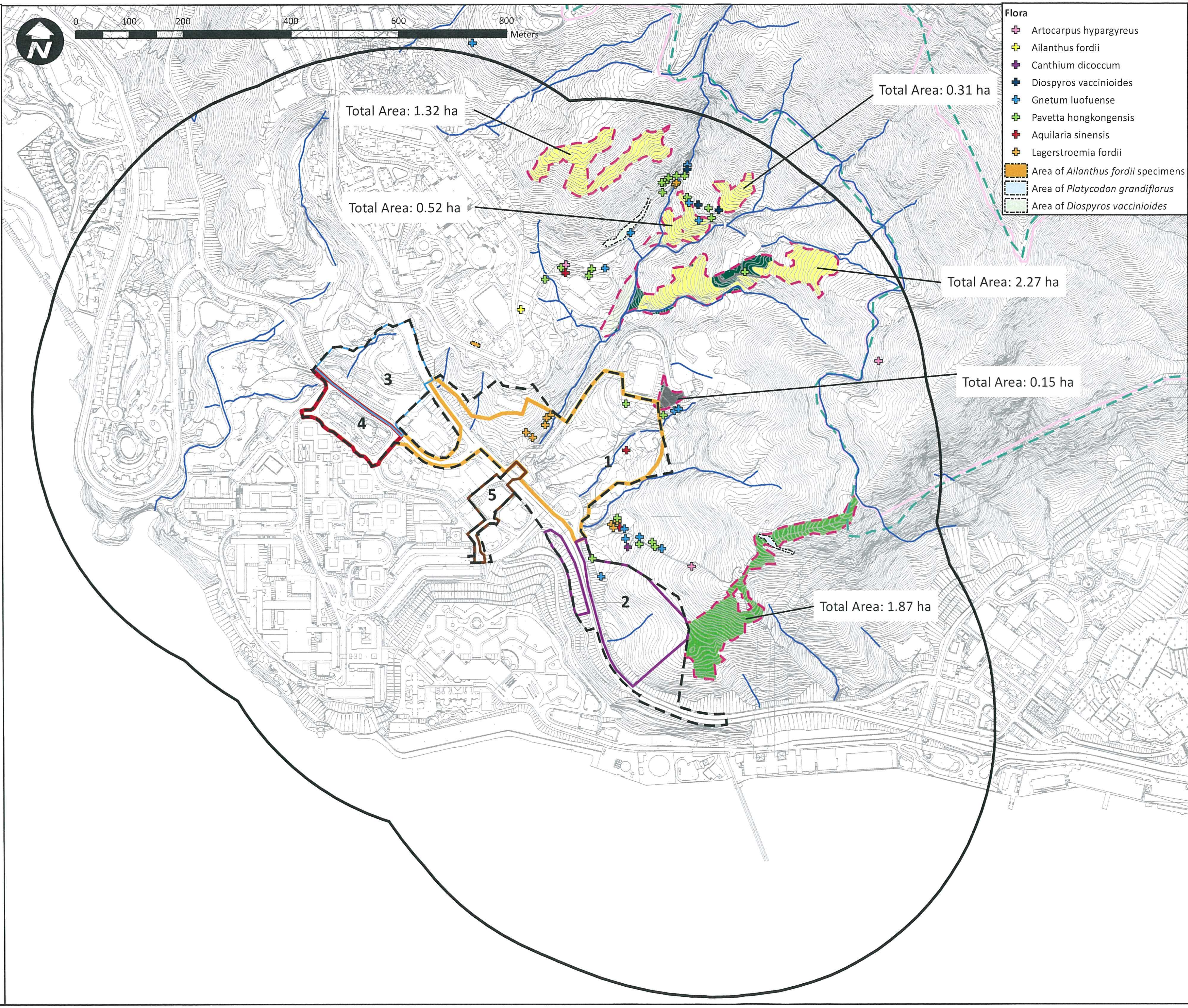

500m Study Area
Pok Fu Lam Reservoir Catchment Area SSSI
Country Park
Proposed Project Site Boundary
Actual Works Area in Kai Lung Wan North Site (Area 1)
Actual Works Area in Kai Lung Wan South Site (Area 2)
Actual Works Area Wah Fu North Site (Area 3)
Actual Works Area Wah King Street Site (Area 4)
Actual Works Area Wah Lok Path Site (Area 5)
Proposed Woodland Compensation Areas
Watercourse
Grassland
Grassland/Shrubland
Shrubland
Secondary Woodland
Urban/ Residential Area

Rev	Description	By	Date

Consultant

ARUP

Contract No. and Title

Agreement No. CE 74/2015 (CE) Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing Title

Locations of The Proposed Woodland Compensation Areas

Drawing no. 250269/E/09/002a		Rev.	
Drawn JH	Date 12-06-2017	Checked IY	Approved GJC
Scale 1:6500 on A3		Status	

CEDD 土木工程拓展署 Civil Engineering and Development Department

832450 E | 832500 E | 832550 E | 832600 E | 832650 E | 832700 E

813150 N | 813100 N | 813050 N | 813000 N | 812950 N | 812900 N

CHI FU ROAD

CFR-TG01 | CFR-TG02 | CFR-TG03 | CFR-TG04 | CFR-TG05 | CFR-TG06 | CFR-TG07 | CFR-TG08 | CFR-TG09 | CFR-TG10 | CFR-TG11 | CFR-TG12 | CFR-TG13 | CFR-TG14 | CFR-TG15 | CFR-TG16 | CFR-TG17

11SW-C/R109 (HYD)
11SW-C/C965 (LANDS D)
11SW-C/C966 (LANDS D)
11SW-C/DT28 (LANDS D)
11SW-C/FR409 (LANDS D)
11SW-C/R628 (LANDS D)
11SW-C/C551 (SHX1012)
11SW-C/F202 (WSD)
11SW-C/F383 (WSD)

T3 RETAIN 125.020mPD (IT)
T4 RETAIN 122.200mPD
T5 RETAIN 120.420mPD (IT)
T7 RETAIN 116.560mPD (IT)
T8 RETAIN 116.280mPD (IT)
T13 RETAIN 109.650mPD (IT)
T14 RETAIN 110.650mPD (W)
T15 RETAIN 102.760mPD (IT)
T19 RETAIN 100.580mPD (W)
T20 RETAIN 100.360mPD (W)
T21 RETAIN 100.140mPD (W)
T22 RETAIN 100.150mPD (W)
T25 RETAIN 100.220mPD
T29 RETAIN 113.520mPD
T30 RETAIN 111.870mPD
T31 RETAIN 109.820mPD
T33 RETAIN 109.110mPD
T34 RETAIN 107.370mPD
T35 RETAIN 107.200mPD
T36 RETAIN 108.610mPD
T39 RETAIN 112.660mPD
T40 RETAIN 99.580mPD
T41 RETAIN 100.600mPD (IT)
T43 RETAIN 99.950mPD (IT)
T45 RETAIN 105.910mPD
T48 RETAIN 108.310mPD
T50 RETAIN 108.940mPD
T51 RETAIN 109.450mPD
T52 RETAIN 115.420mPD
T53 RETAIN 78.940mPD
T67 RETAIN 105.100mPD (IT)
RT1 RETAIN 115.000mPD (RT)

NEAR CHI FU ROAD

KLW-TG07 | KLW-TG08 | KLW-TG21

HONG KONG ISLAND ARCHERY CLUB
KAI LUNG WAN FRESH WATER
Yan Chee Villas

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/TS/SK/003 & 004

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METRES
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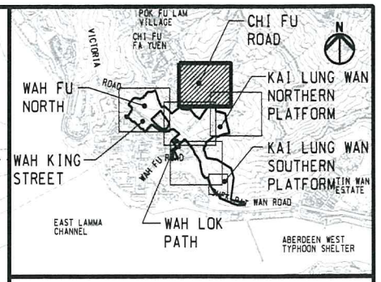

KEY PLAN

NOTES

HD: RECOMMENDATION TO BE CONFIRMED AFTER HD REVIEW TO BLOCK LAYOUT
W: STONEWALL TREE
ITs: IMPORTANT TREES
RT: RARE AND PRECIOUS TREE SPECIES

LEGEND

- IMPORTANT TREE PROPOSED TO BE TRANSPLANTED
- IMPORTANT TREE PROPOSED TO BE FELLED
- IMPORTANT TREE PROPOSED TO BE RETAINED
- KLW-TG01 — GROUP TREE SURVEY NUMBER
- PROPOSED PROJECT SITE BOUNDARY
- PROPOSED SLOPE
- PROPOSED RETAINING WALL
- +100 — PROPOSED PLATFORM LEVEL IN mPD
- EXISTING SLOPE FEATURE AND MAINTENANCE PARTY
- UNAFFECTED AREA (TREES TO RETAIN)
- TREES TO BE RETAINED IF FLEXIBLE BARRIERS ARE ADOPTED

Rev	Description	By	Date
-	REPORT	YPC	05/17

Consultant: ARUP

Contract No. and Title:
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title:
TREE SURVEY

(SHEET 1 OF 5)

Drawing no.	Rev.
250269/TS/SK/001	-

Drawn	Date	Checked	Approved
THW	04/17	YPC	EL

Scale: 1:500 @ A1
Status: TENDER

CEDD 土木工程拓展署 Civil Engineering and Development Department

Printed by : 8/8/2017
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832050 E 832100 E 832150 E 832200 E 832250 E 832300 E

813000 N 812950 N 812900 N 812850 N 812800 N 812750 N

N

WAH FU NORTH

11SW-C/R646 (LANDS D)

11SW-C/C933 (HYD)

11SW-C/C934 (ASD/HYD)

11SW-C/C592 (ASD)

11SW-C/CR935 (ASD/HYD)

11SW-C/C565 (HYD)

11SW-C/C566 (HYD)

11SW-C/C567 (LANDS D)

11SW-C/C559 (LANDS D)

11SW-C/C98 (HYD)

11SW-C/C399 (HYD)

11SW-C/F405 (LANDS D)

11SW-C/C590 (LANDS D)

11SW-C/F407 (LANDS D)

11SW-C/C900 (ASD/HYD)

11SW-C/F196 (HYD)

11SW-C/C127 (HYD)

11SW-C/F200 (ASD)

T78 FELL 70.460mPD (IT)

T80 RETAIN 65.39mPD (IT)

T81 FELL 81.120mPD

T82 FELL 79.120mPD

T83 FELL 80.590mPD

T84 FELL 78.780mPD

T86 RETAIN 93.510mPD (IT)

T87 RETAIN 92.040mPD (IT)

T88 RETAIN 96.140mPD (IT)

T89 RETAIN 84.410mPD

T90 RETAIN 81.760mPD

T91 FELL 83.100mPD (IT)

WFN-TG01 WFN-TG02 WFN-TG03 WFN-TG04 WFN-TG05 WFN-TG06 WFN-TG07 WFN-TG08 WFN-TG09 WFN-TG10 WFN-TG11 WFN-TG12 WFN-TG13 WFN-TG14 WFN-TG15 WFN-TG16 WFN-TG17 WFN-TG18 WFN-TG19 WFN-TG20 WFN-TG21 WFN-TG22 WFN-TG23 WFN-TG24 WFN-TG25 WFN-TG26

WKT-TG01 WKT-TG02 WKT-TG03 WKT-TG04 WKT-TG05 WKT-TG06 WKT-TG07

TREES WILL BE IMPACTED BY PROPOSED LANDSCAPE DECK STRUCTURES TO BE BUILT OVER THE EXISTING SLOPE AND VEGETATION; THE EXTENT OF IMPACT AND THE DEPARTMENT RESPONSILBE FOR TREE FELLING APPLICATION WILL BE FURTHER DETERMINED IN THE LATER STAGES OF THE PROJECT.

POK FU LAM ROAD

WAH KING STREET

WAH HONG STREET

VICTORIA ROAD

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/TS/SK/003

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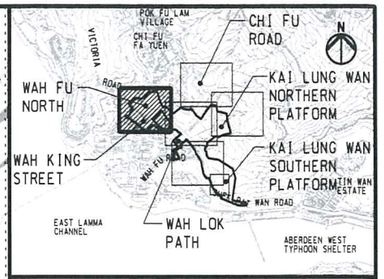
METRES
1 : 500



KEY PLAN

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Rev	Description	By	Date
-	REPORT	YPC	05/17

Consultant

ARUP

Contract No. and Title

Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

TREE SURVEY

(SHEET 2 OF 5)

Drawing no.	Rev.
250269/TS/SK/002	-

Drawn	Date	Checked	Approved
THW	04/17	YPC	EL

Scale: 1:500 @ A1 — Status: TENDER

CEDD 土木工程拓展署 Civil Engineering and Development Department

Plotted By: 8/2017
Filename: J:\250269\Arup\LANDSCAPE\SKETCH\250269_TS_SK002.dgn

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/TS/SK/001

832350 E | 832400 E | 832450 E | 832500 E | 832550 E | 832600 E

812900 N | 812850 N | 812800 N | 812750 N | 812700 N | 812650 N

11SW-C/C127 (HYD)
T91 FELL 83.100mPD (IT)
T92 FELL 80.500mPD (IT)
11SW-C/F200 (ASD)
11SW-C/F73 (ASD)
11SW-C/C128 (HYD)
11SW-C/FR423 (SHX973)
T95 RETAIN 100.900mPD (IT)(W)
11SW-C/R627 (LANDS D)
T98 RETAIN 100.700mPD (IT)
T94 RETAIN 94.300mPD (IT)
11SW-C/DT27 (LANDS D)
T93 RETAIN 94.800mPD (IT)
RT9 RETAIN 70.0mPD (APPROX.) (RT)
RT8 FELL 69.0mPD (APPROX.) (RT)
RT7 FELL 67.0mPD (APPROX.) (RT)
11SW-C/C985 (SHX973)
RT6 RETAIN 73.5mPD (APPROX.) (RT)
11SW-C/C539 (WSD)
RT5 RETAIN 74.5mPD (APPROX.) (RT)
T73 RETAIN 73.020mPD (IT)
T72 RETAIN 71.340mPD (IT)
11SW-C/CFR195 (WSD/ASD)
T71 FELL 76.920mPD (IT)
11SW-C/CC776 (LANDS D/HX6971)
T54 RETAIN 63.680mPD (IT)
11SW-C/CB81 (LANDS D/ STT SHX1151)
T76 FELL 61.540mPD
T77 RETAIN 55.740mPD
11SW-C/CF199 (HYD/LANDS D/ LICENCE SH51)
11SW-C/F197 (HYD)
11SW-C/C41 (ASD/IL8273)
11SW-C/F383 (WSD)
11SW-C/C547 (WSD)
11SW-C/C553 (LANDS D)
T74 RETAIN 75.470mPD (IT)
T68 FELL 98.020mPD (IT)
T66 FELL 88.550mPD (IT)
T64 FELL 76.280mPD
T70 FELL 73.390mPD (IT)
T63 FELL 76.020mPD
T65 FELL 76.500mPD
T97 FELL 67.840mPD
T61 RETAIN 76.130mPD
T60 RETAIN 74.510mPD
T56 FELL 67.860mPD
T59 RETAIN 74.650mPD
11SW-C/C1 (HYD)
11SW-C/C2 (HYD)
T58 RETAIN 67.290mPD

CFR-TG16 | CFR-TG18 | CFR-TG20 | CFR-TG19 | CFR-TG15 | CFR-TG22 | CFR-TG21
KLW-TG05 | KLW-TG21 | KLW-TG04 | KLW-TG02 | KLW-TG03 | KLW-TG01 | KLW-TG06
WLP-TG04 | WLP-TG03 | WLP-TG05 | WLP-TG01
KWAI FONG GARDEN
SHEK KAI WAN RD

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/TS/SK/002

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/TS/SK/004

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/TS/SK/005

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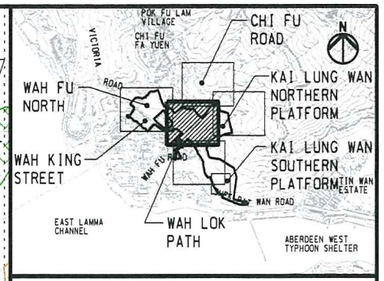

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Rev	Description	By	Date
-	REPORT	YPC	05/17

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
TREE SURVEY

(SHEET 3 OF 5)

Drawing no.	Rev.
250269/TS/SK/003	-

Drawn	Date	Checked	Approved
THW	04/17	YPC	EL
Scale		Status	
1:500 @ A1		TENDER	

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Printed by : 8/8/2017
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11SW-C/C551 (SHX1012)

KLW-TG21 | KLW-TG07 | KLW-TG09 | KLW-TG08 | KLW-TG11 | KLW-TG10 | KLW-TG12 | KLW-TG06 | KLW-TG13 | KLW-TG14 | KLW-TG22 | KLW-TG15 | KLW-TG03

11SW-C/F202 (WSD)

HONG KONG ISLAND ARCHERY CLUB

11SW-C/F383 (WSD)

KAI LUNG WAN FRESH WATER SERVICE RESERVOIR (COVERED)

11SW-C/DT30 (LANDS D)

11SW-C/FR190 (SHX1012)

11SW-C/C540 (IL8913)

11SW-C/DT31 (LANDS D)

11SW-C/C541 (WSD)

T69 FELL 108.000mPD (IT)

11SW-C/C775 (LANDS D)

11SW-C/C552 (LANDS D)

11SW-C/DTY29 (LANDS D)

11SW-C/DT4 (LANDS D)

T64 FELL 76.280mPD

T65 FELL 76.500mPD

T66 FELL 76.870mPD

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/TS/SK/003

N

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METRES
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Plotted by: 8/5/2017
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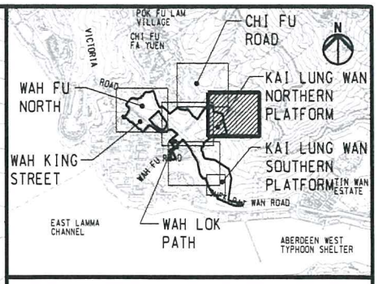

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Rev	Description	By	Date
-	REPORT	YPC	05/17

Consultant
ARUP

Contract No. and Title
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Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
TREE SURVEY

(SHEET 4 OF 5)

Drawing no.	Rev.
250269/TS/SK/004	-

Drawn	Date	Checked	Approved
THW	04/17	YPC	EL

Scale: 1:500 @ A1
Status: TENDER

CEDD 土木工程拓展署
Civil Engineering and Development Department

832400 E | 832450 E | 832500 E | 832550 E | 832600 E

812650 N | 812600 N | 812550 N | 812500 N | 812450 N | 812400 N | 812350 N

MATCH LINE
FOR CONTINUATION
SEE DWG 250269/TS/SK/003

11SW-C/C41
(ASD/IL8273)

WAH LOK PATH

SHEK PAI WAN ROAD

11SW-C/C2
(HYD)

11SW-C/C3
(HYD)

T56
FELL
67.850mPD

T58
RETAIN
67.290mPD

T59
RETAIN
74.650mPD

T55
RETAIN
70.350mPD

KLW-TG17

RT4
RETAIN
73.0mPD (APPROX.)
(RT)

RT3
RETAIN
73.0mPD (APPROX.)
(RT)

RT2
RETAIN
73.0mPD (APPROX.)
(RT)

KLW-TG18

KLW-TG24

KLW-TG25

T99
FELL
59.500mPD

T100
FELL
59.600mPD

MATCH LINE A-A

KLW-TG26

KAI LUNG WAN
SOUTHERN PLATFORM

11SW-C/C4
(HYD)

SHEK PAI WAN

N

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METRES
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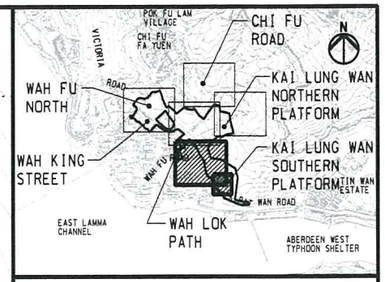

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Rev	Description	By	Date
-	REPORT	YPC	05/17

Consultant
ARUP

Contract No. and Title
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Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
TREE SURVEY

(SHEET 5 OF 5)

Drawing no.	Rev.
250269/TS/SK/005	-

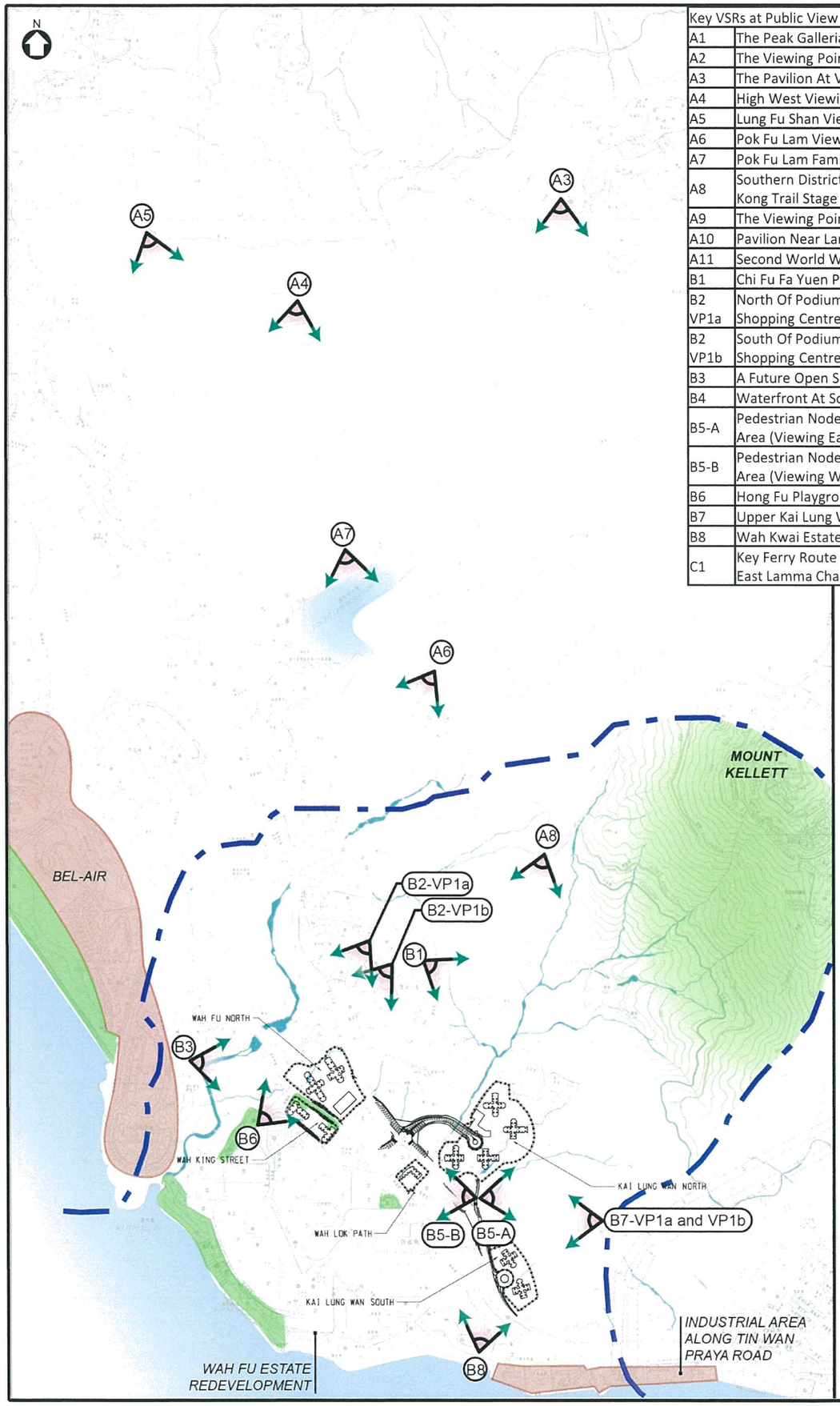
Drawn	Date	Checked	Approved
THW	04/17	YPC	EL

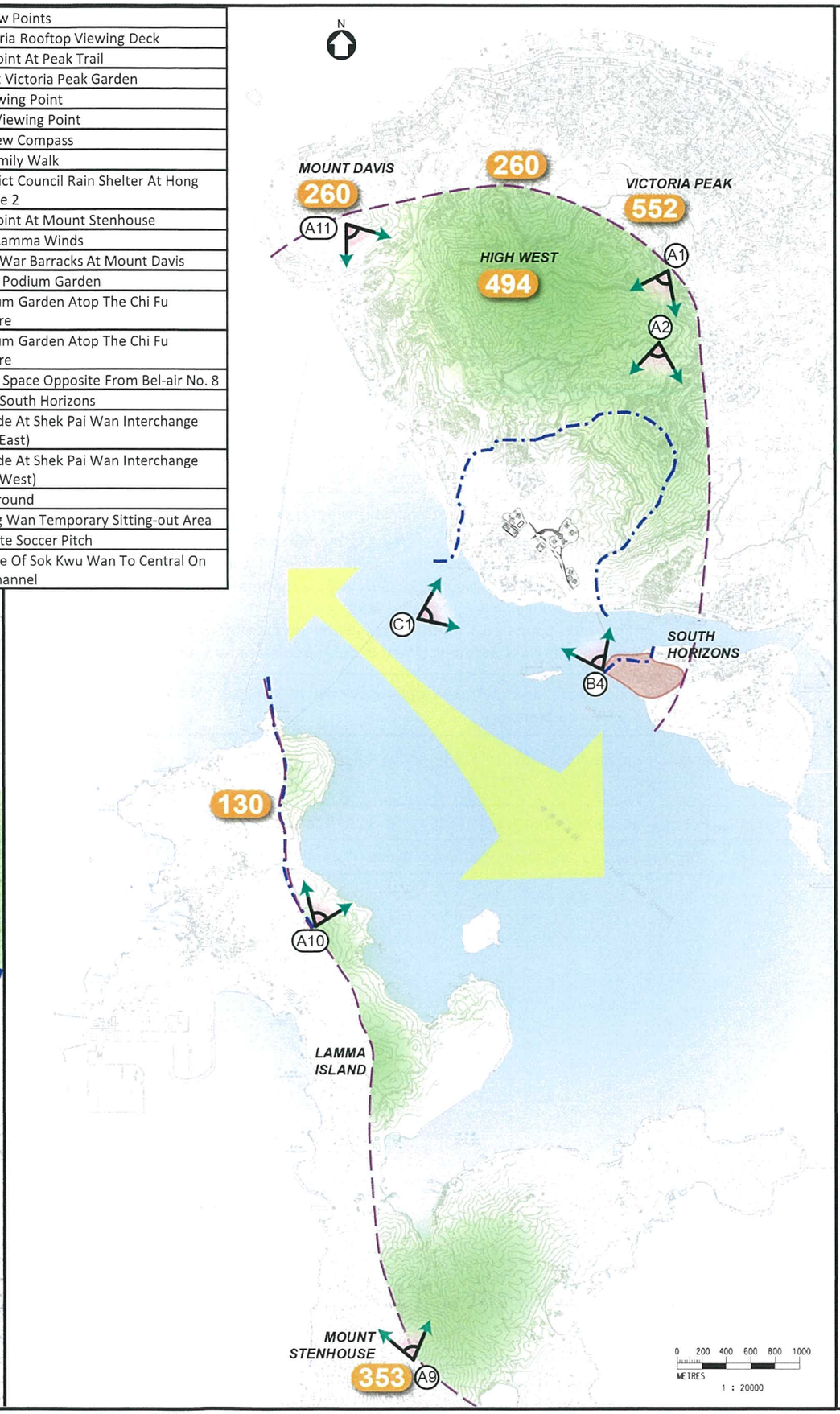
Scale: 1:500 @ A1
Status: TENDER

CEDD 土木工程拓展署 Civil Engineering and Development Department

Printed by : 8/8/2017
Filename : J:\250269\Arup\LANDSCAPE\SKETCH\250269_TS_SK005.dgn

Key VSRs at Public View Points	
A1	The Peak Galleria Rooftop Viewing Deck
A2	The Viewing Point At Peak Trail
A3	The Pavilion At Victoria Peak Garden
A4	High West Viewing Point
A5	Lung Fu Shan Viewing Point
A6	Pok Fu Lam View Compass
A7	Pok Fu Lam Family Walk
A8	Southern District Council Rain Shelter At Hong Kong Trail Stage 2
A9	The Viewing Point At Mount Stenhouse
A10	Pavilion Near Lamma Winds
A11	Second World War Barracks At Mount Davis
B1	Chi Fu Fa Yuen Podium Garden
B2 VP1a	North Of Podium Garden Atop The Chi Fu Shopping Centre
B2 VP1b	South Of Podium Garden Atop The Chi Fu Shopping Centre
B3	A Future Open Space Opposite From Bel-air No. 8
B4	Waterfront At South Horizons
B5-A	Pedestrian Node At Shek Pai Wan Interchange Area (Viewing East)
B5-B	Pedestrian Node At Shek Pai Wan Interchange Area (Viewing West)
B6	Hong Fu Playground
B7	Upper Kai Lung Wan Temporary Sitting-out Area
B8	Wah Kwai Estate Soccer Pitch
C1	Key Ferry Route Of Sok Kwu Wan To Central On East Lamma Channel





LEGEND:

- PRIMARY ZONE OF VISUAL ENVELOPE
- PROPOSED PUBLIC HOUSING SITE BOUNDARY
- SECONDARY ZONE OF VISUAL ENVELOPE
- FIELD OF VIEWS TOWARDS PROPOSED DEVELOPMENT
- A1 KEY PUBLIC VIEWING POINT
- 240 HEIGHT IN mPD
- MAJOR VISUAL ELEMENTS
- MAJOR VISUAL ASSET
- VISUAL DETRACTORS

Note:
1. Visual Envelope and the selection of VPs for VIA refers to the Town Planning Board ('TPB') Guideline No. 41 on '*Submission of VIA for Planning Applications to the TPB*' ('TPB-PG NO. 41')
2. Wah Fu Estate redevelopment is preliminary in nature and would be subject to revision in separate study.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
BASELINE OF KEY VISUAL ELEMENTS FOR VIA

Drawing no.	Rev.
250269/LVIA/4.0	A

Drawn	Date	Checked	Approved
AC	03/17	KC	SYC

Scale
Status: PRELIMINARY

CEDD 土木工程拓展署 Civil Engineering and Development Department

Design Measures	
DM1	Control of building heights to preserve the views to the ridgelines
DM3	Preservation of high landscape value and enhancement on Pokfulam Area
DM4	Provision of building gaps to enhance visual permeability
DM6	Sensitive building form, height and disposition to minimize impact on perceived bulk and views to visual resources, namely, • truncated building wing (refer to Figure 250269/LVIA/5.1 for details), • provision of 25m building gap separation / visual corridors(refer to Figure 250269/LVIA/5.1 for details), • provision of building setback (refer to Figure 250269/LVIA/5.1 for details), • implementation of stepped building height profile, and • terraced podium (refer to Appendix 8.5 for the terraced podium for reference). • Provision of edge planters and / or aesthetic treatment of the Spiral ramp in the Kai Lung Wan South Site (refer to Appendix 8.4F for reference).
DM7	Sensitive design of road layout and streetscape, open space network in adjacent areas (refer to Appendix 8.4 B for reference)
DM8	Tree Preservation and Removal Proposal (TPRP) should be obtained prior to implementation at early design stage in accordance with DEVB TCW No. 6/2015, 7/2015 and LAO PN No. 7/2007
DM9	Greening Provision in the early project planning stage in accordance with DEVB TCW No. 2/2012 and PNAP APP-152
DM10	ACABAS submission upon completion of conceptual design should be accordance with ETWB TCW No. 36/2004

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Contract No. and Title

Agreement No. CE 74/2015 (CE)

Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

LANDSCAPE AND VISUAL MITIGATION MEASURES

Drawing no.		Rev.
250269/LVIA/5.0		A
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Scale:	Status: PRELIMINARY	

CEDD 土木工程拓展署 Civil Engineering and Development Department

Construction Phase		Funding Agency	Implementation /Maintenance Agent
CM1	The Construction area and Contractor's temporary works areas shall be minimised to avoid impacts on adjacent landscape. All temporary works shall be carefully designed to minimise impacts on existing retained trees.	CEDD/HD[1]	in accordance with ETWB TCW No. 29/2004, 7/2015 and LAO PN No. 7/2007
CM2	Incorporating requirements for preservation and protection of existing trees in construction contracts. The performance of the retained trees shall be monitored throughout the Construction period on a monthly basis by a qualified Arborist. The Contractor shall submit monthly record photo throughout the construction period for all retained trees, to demonstrate the trees' health condition. All monthly record photos shall be prepared by a tree specialist or a qualified arborist, and endorsed by a registered Landscape Architect (RLA).	CEDD/HD[1]	in accordance with ETWB TCW No. 29/2004, 7/2015 and LAO PN No. 7/2007
CM3	Should removal of trees be unavoidable due to construction impacts, trees should be transplanted to other permanent locations, if practicable. Detailed transplanting proposal will be submitted to relevant government departments for approval. Final locations of transplanted trees shall be agreed prior to commencement of the work. The performance of the transplanted trees shall be monitored throughout the construction period by a Qualified Arborist. All monthly record photos shall be prepared by a tree specialist or a qualified arborist, and all endorsed by a registered Landscape Architect (RLA). refer to DEVB TCW No. 7/2015, clause 2, for detail explanation regarding the order of priority for tree preservation.	CEDD/HD[1]	Contractors (Until handover to relevant government departments in accordance with LAO PN No. 7/2007, ETWB TCW No. 29/2004 and 7/2015)
CM4	Control of night-time lighting and Construction traffic (land and sea) reduced to practical minimum	CEDD/HD[1]	Contractors (Until handover to relevant government departments)
CM5	Erection of decorative mash screen or construction hoardings	CEDD/HD[1]	Contractors
CM6	Minimise disturbance and limitation of run-off – temporary structures and construction works should be planned with care to minimise disturbance to adjacent landscape, vegetation, natural stream habitats	CEDD/HD[1]	Contractors (Until handover to relevant government departments)
CM7	Existing watercourses of good quality and condition that are unavoidably affected by the works shall be replaced and diverted to proposed trapezoidal green channel	CEDD/HD[1]	Contractors (Until handover to DSD)
Operation Phase			
OM1	Sensitive design and greenery treatment on all retaining structure, which shall be compatible with surrounding context.	CEDD/HD[1]	HyD (for slopes affecting public roads managed by TD) / LandsD / HD (within housing sites)
OM2	Compensatory tree planting/ woodland should be incorporated into the proposed projects as far as practicable	CEDD/HD[1]	Proposed maintenance/management party of the respective facilities: LCSD (landscape softwork at roadsides, footbridges and toe wall planters) HyD (landscape hardworks of public roads managed by TD) HD (within housing sites) LandsD for Ad-hoc maintenance.
OM2a	Post-planting monitoring of the woodland compensation area shall be undertaken (namely, duration of the post-planting monitoring and monitoring methodology). The monitoring will be aimed to assess the success of the created woodland, monitor the growth performance of the planted seedlings, and identify any need of vegetation and site maintenance work.	CEDD/HD[1]	CEDD
OM3	Implementation of greening measures for environmental enhancement e.g. roadside planting and provision of green coverage within the proposed development	CEDD/HD[1]	Proposed maintenance/management party of the respective facilities: LCSD (landscape softwork at roadsides, footbridges and toe wall planters) HyD (landscape hardworks of public roads managed by TD) HD (within housing sites)
OM4	Sensitive streetscape design, which should be compatible with surrounding context and incorporated along all new roads and landscape deck to be matched with district master plan in the vicinity for the new urban development of Pokfulam south	CEDD/HD[1]	Proposed maintenance/management party of the respective facilities: LCSD (landscape softwork at roadsides, footbridges and toe wall planters) HyD (landscape hardworks of public roads managed by TD)
OM5	Landscape treatments on natural terrain hazard mitigation barriers and other ancillary structures to enhance the landscape and visual amenity value of proposed man made slope	CEDD/HD[1]	Proposed maintenance/management party of the respective slopes: HyD (for slopes affecting public roads managed by TD) / LandsD / HD(within housing sites) (responsible parties will be further discussed with government departments in detailed design stage)
OM6	Design of directional lighting units and minimization of unnecessary light spill and glare	CEDD/HD[1]	Proposed maintenance/management party of the respective facilities: HyD (for public roads managed by TD) / HD(within housing sites)
OM7	Reinstatement of disturbed area and vegetation to match adjacent area or condition to suit future land use and adjacent habitats	CEDD/HD[1]	Original maintenance/management parties of the areas concerned
OM8	Proper maintenance of green channel to facilitate the natural colonization along channel.	CEDD/HD[1]	DSD

Notes: These mitigation measures are conceptual only and subject to change in development design and detailed design stage.
1. CEDD is the funding agency for site formation/ infrastructure works; Housing Deportment is the funding agency for all building works within the housing sites.

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Drawing title
LANDSCAPE AND VISUAL MITIGATION MEASURES

Drawing no.		Rev.
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土木工程拓展署
Civil Engineering and Development Department

N

CHI FU FA YUEN

CHI FU FA YUEN

Pok Fu Lam Road

CHI FU ROAD

VICTORIA ROAD

BEL-AIR

Max.+200mPD

Wah Fu North Site

DM1 – DM10, CM1

Landscape Deck and Open Space over Victoria Road (subject to further study by HD)

Wah King Street Site

DM1 – DM10

DM6

Victoria Road

WAH KING STREET

Proposed Footbridge over Pok Fu Lam Road

DM10

DM6

Wah Lok Path Site

DM1 – DM10, CM1 – CM6

WAH LOK PATH

WAH FU ESTATE

WAH FU ESTATE REDEVELOPMENT

Max.+170mPD

WAH FU ROAD

Shek Pai Wan Road

Kai Lung Wan North Site

DM1 – DM10, CM1 – CM6

Max.+230mPD

Max.+230mPD

Proposed Green Channel

CM7 – OM8

Max.+200mPD

Proposed Footbridge over Pok Fu Lam Road

DM10

DM6

Kai Lung Wan South Site

DM1 – DM10, CM1 – CM6, OM1 – OM7

WAH KWAI ESTATE

All the proposed building layout of public housing sites are preliminary and will be determined by Housing Department during Detailed Design Stage.

NOTE:
1. Landscape Conceptual Plan indicated in this figure only shown the landscape design intention of the proposed development with adjacent areas. All greening proposal within five public housing sites are to be determined in detailed design stage.
2. Proposed Landscape and Visual Mitigation Measures on the Landscape Concept Plan is listed on Figure 250269/LVIA/5.0. This drawing does not indicate precise no. and locations of retained trees and compensatory trees. The precise no. of trees to be retained, transplanted, fell and compensated shall be determined and agreed separately with government (stated in Figure 250269/LVIA/5.0) during the Tree Felling Application process under DEVB TCW No. 6/2015 and DEVB TCW No. 7/2015. Landscaping features and form of structures. shown in drawing are conceptual only.
3. The max. building height for the whole Kai Lung Wan North site is proposed to be capped at +230mPD. Design Consideration of building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

LEGEND

- PROPOSED PROJECT SITE BOUNDARY
- PROPOSED PUBLIC HOUSING SITE BOUNDARY
- PUBLIC HOUSING SITE
  DM1 – DM10, CM6, OM1, OM5, OM6
- RETAINED IMPORTANT TREES (IT)
  DM8, CM1, CM2
- PROPOSED COMPENSATORY TREES
  DM8, DM9, CM6, OM1 – OM6
- EXISTING TREE TO BE RETAINED
  CM1, CM2
- PROVISION OF MINIMUM 25M SEPARATION BETWEEN BLOCKS (DM6)
- PROVISION OF 20M BUILDING SETBACK (DM6)
- Truncated Wings (DM6)

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Drawing title

LANDSCAPE CONCEPT PLAN

Drawing no.	Rev.
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Status: PRELIMINARY

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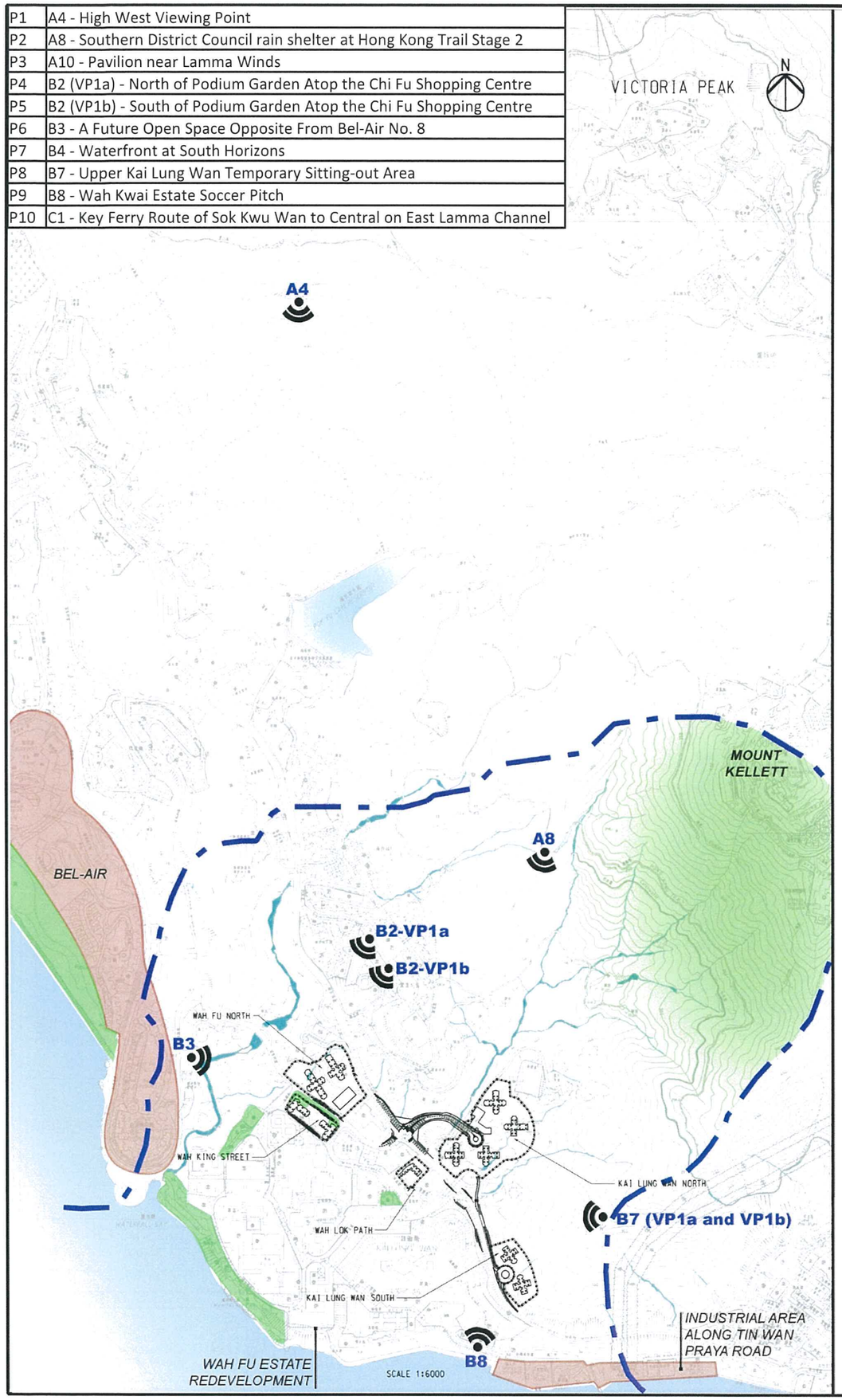
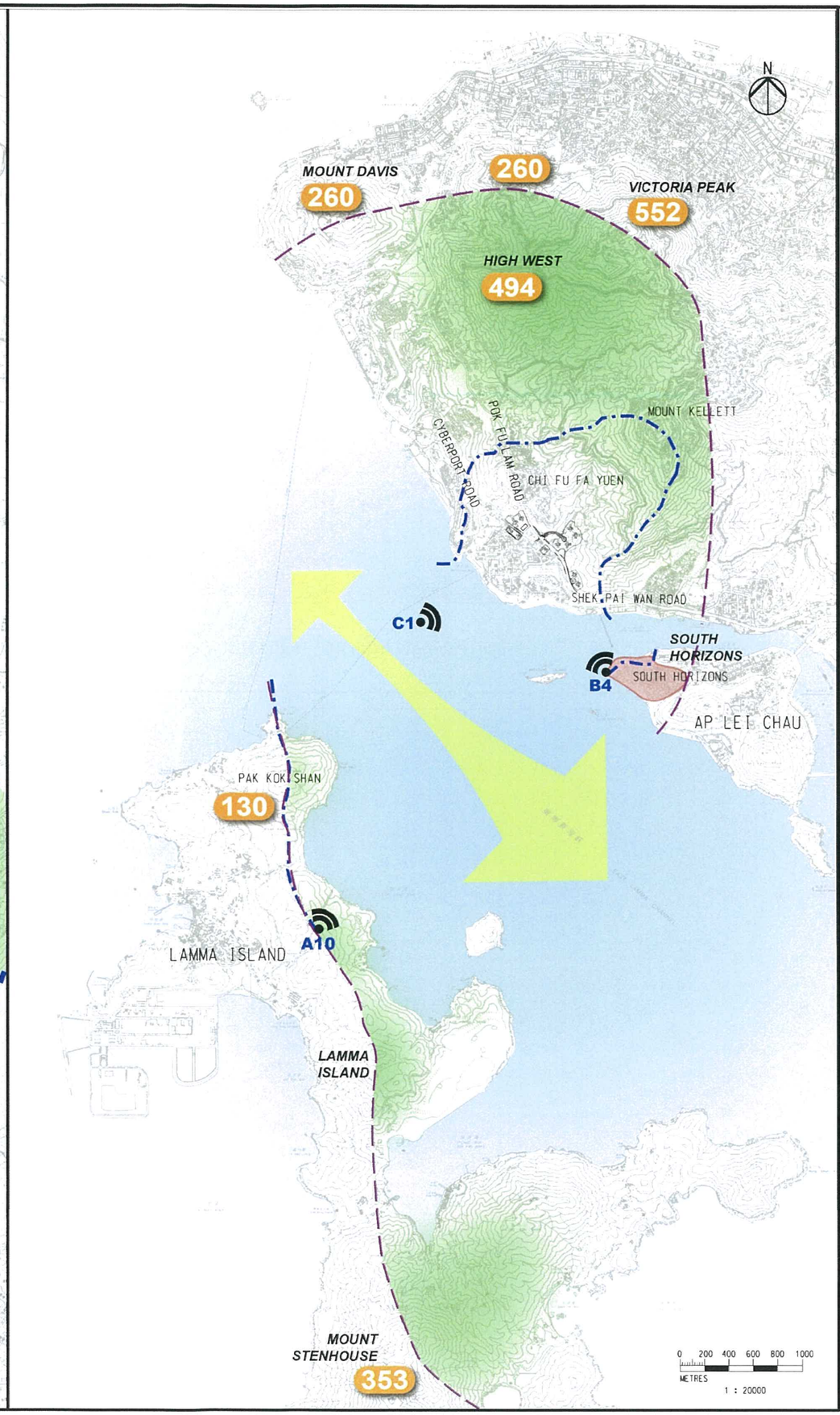
P1	A4 - High West Viewing Point
P2	A8 - Southern District Council rain shelter at Hong Kong Trail Stage 2
P3	A10 - Pavilion near Lamma Winds
P4	B2 (VP1a) - North of Podium Garden Atop the Chi Fu Shopping Centre
P5	B2 (VP1b) - South of Podium Garden Atop the Chi Fu Shopping Centre
P6	B3 - A Future Open Space Opposite From Bel-Air No. 8
P7	B4 - Waterfront at South Horizons
P8	B7 - Upper Kai Lung Wan Temporary Sitting-out Area
P9	B8 - Wah Kwai Estate Soccer Pitch
P10	C1 - Key Ferry Route of Sok Kwu Wan to Central on East Lamma Channel





LEGEND:

- PRIMARY ZONE OF VISUAL ENVELOPE
- PROPOSED PUBLIC HOUSING SITE BOUNDARY
- SECONDARY ZONE OF VISUAL ENVELOPE
- A1 PROPOSED PHOTOMONTAGE VANTAGE POINTS
- 240 HEIGHT IN mPD
- MAJOR VISUAL ELEMENTS
- MAJOR VISUAL ASSET
- VISUAL DETRACTORS

Note:
1. Visual Envelope and the selection of VPs for VIA refers to the Town Planning Board ('TPB') Guideline No. 41 on '*Submission of VIA for Planning Applications to the TPB*' ('TPB-PG NO. 41')
2. All photomontages on Wah Fu Estate redevelopment is preliminary in nature and would be subject to revision in next stage of the study.

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Drawing title
PHOTOMONTAGE VIEWPOINT LOCATIONS

Drawing no.			Rev.
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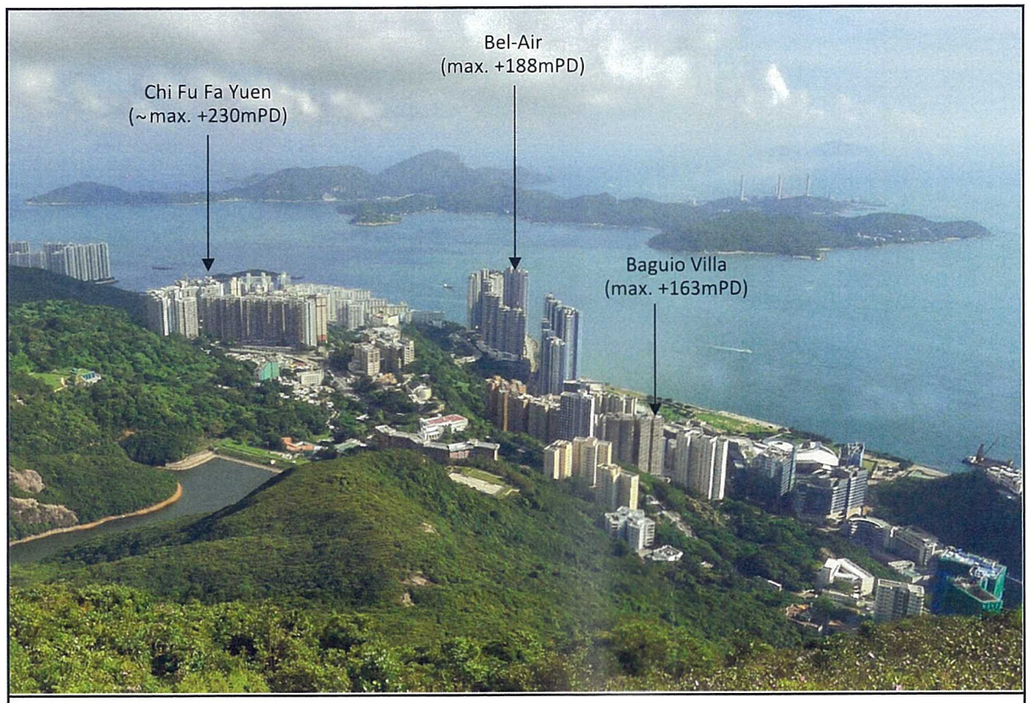
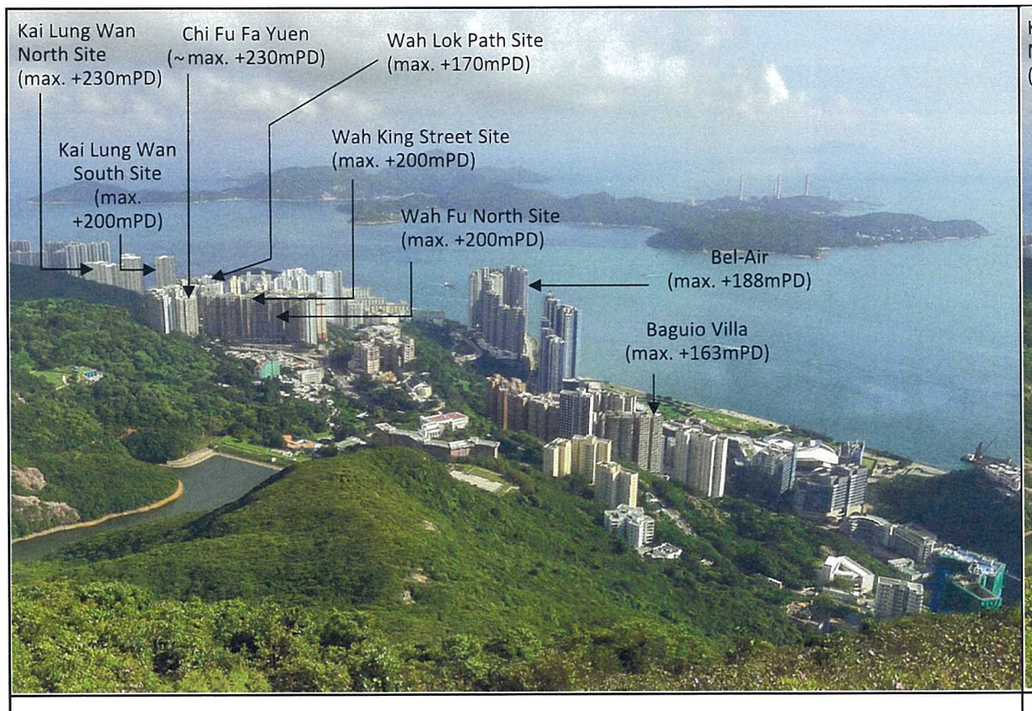
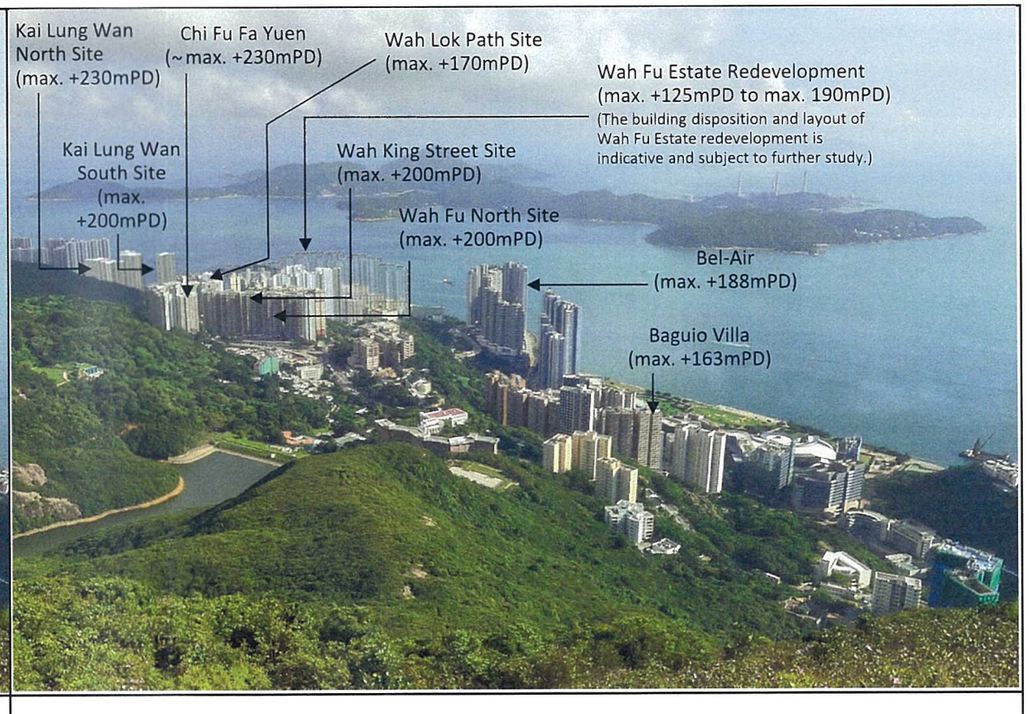


Existing View from A4 - High West Viewing Point



Photomontage from A4 - High West Viewing Point
(with Housing Sites)



Photomontage from A4 - High West Viewing Point
(with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

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Drawing title
P1 PHOTOMONTAGE FROM A4

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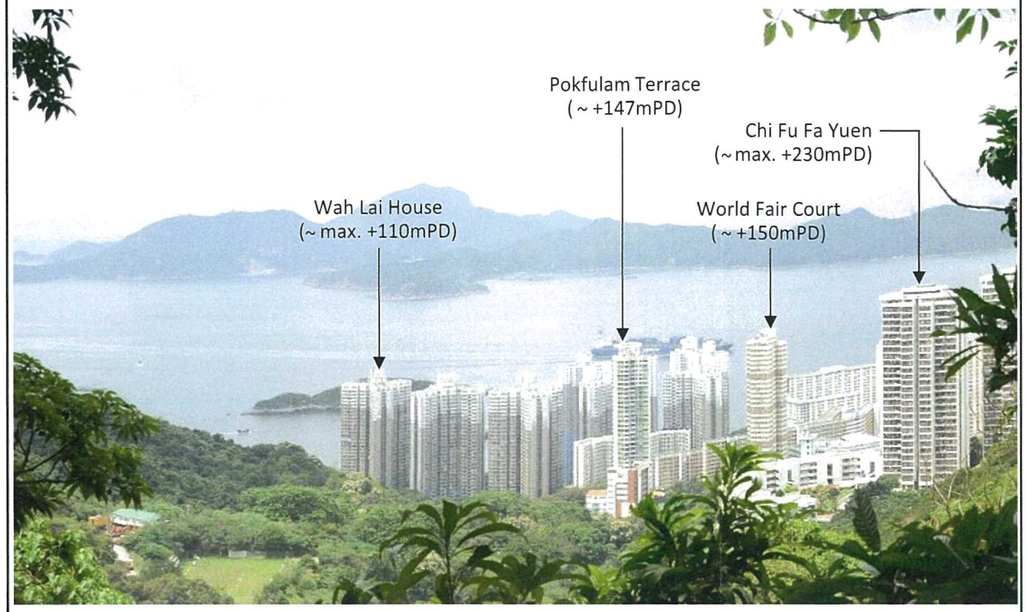
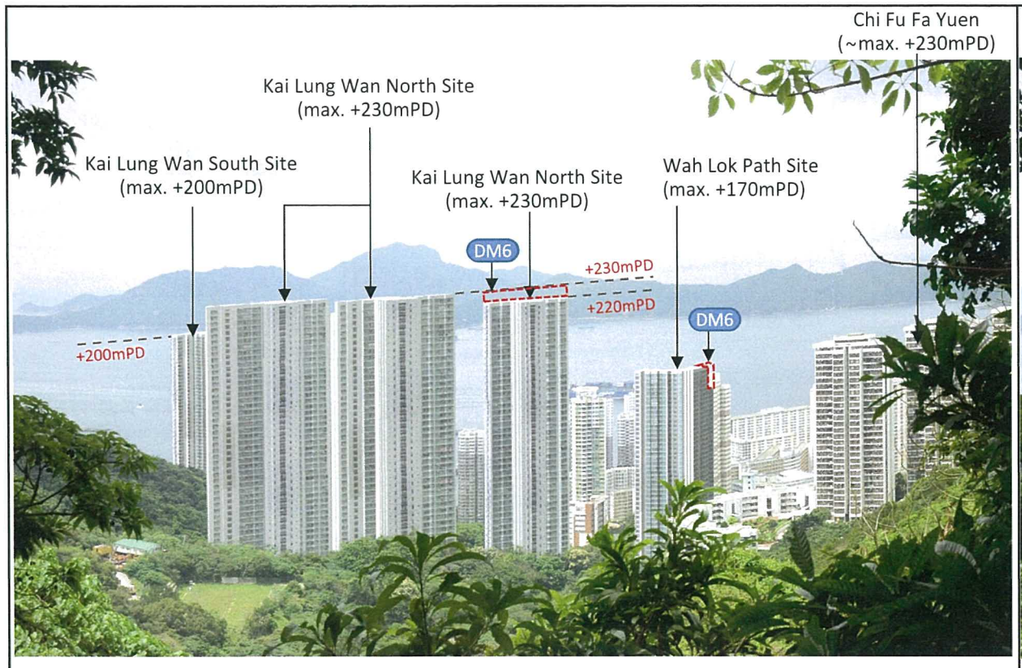
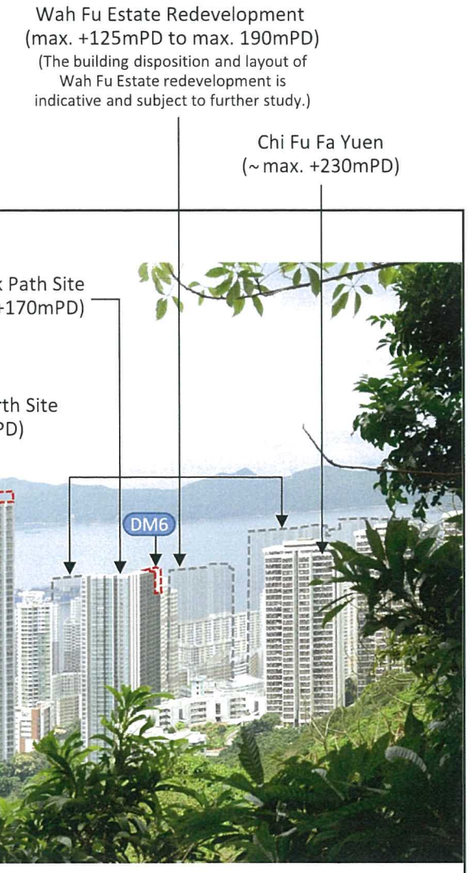


Existing View from A8 Southern District Council Rain Shelter at Hong Kong Trail Stage 2



Photomontage from A8 Southern District Council Rain Shelter at Hong Kong Trail Stage 2 (with Housing Sites)



Photomontage from A8 Southern District Council Rain Shelter at Hong Kong Trail Stage 2 (with Housing Sites & Wah Fu Redevelopment)

Notes:
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Drawing title
P2 PHOTOMONTAGE FROM A8

Drawing no.		Rev.
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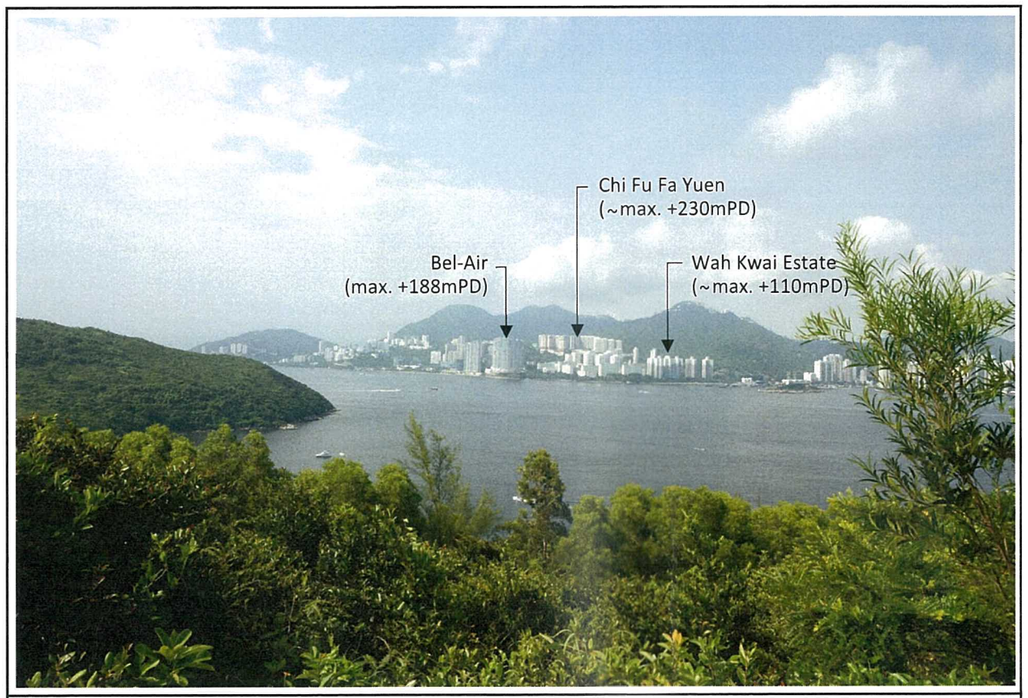
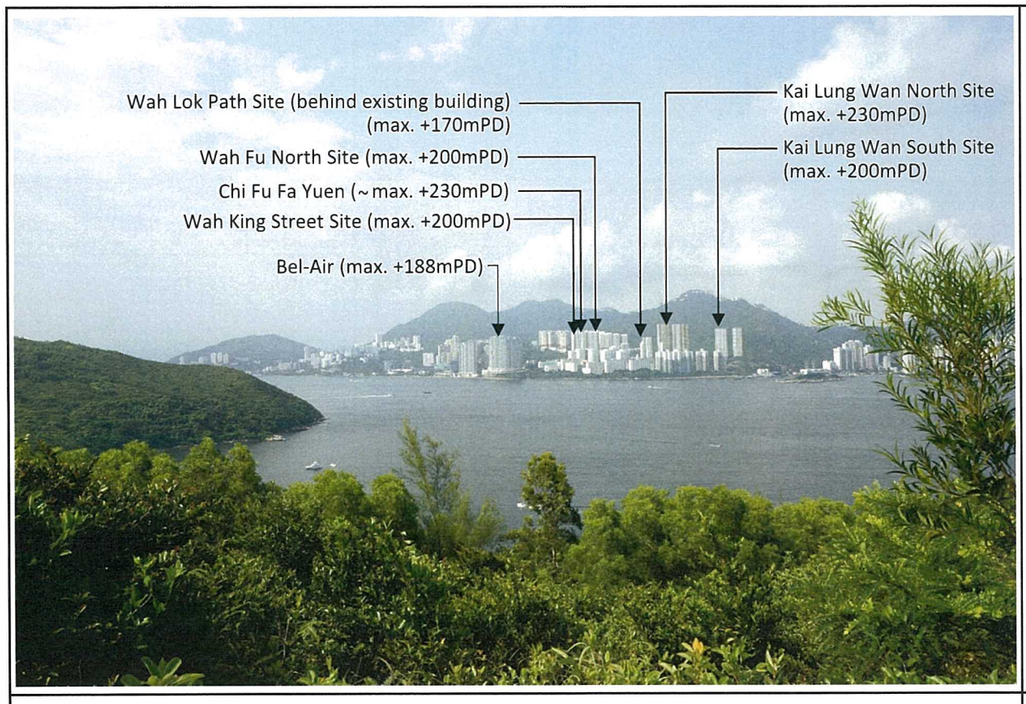
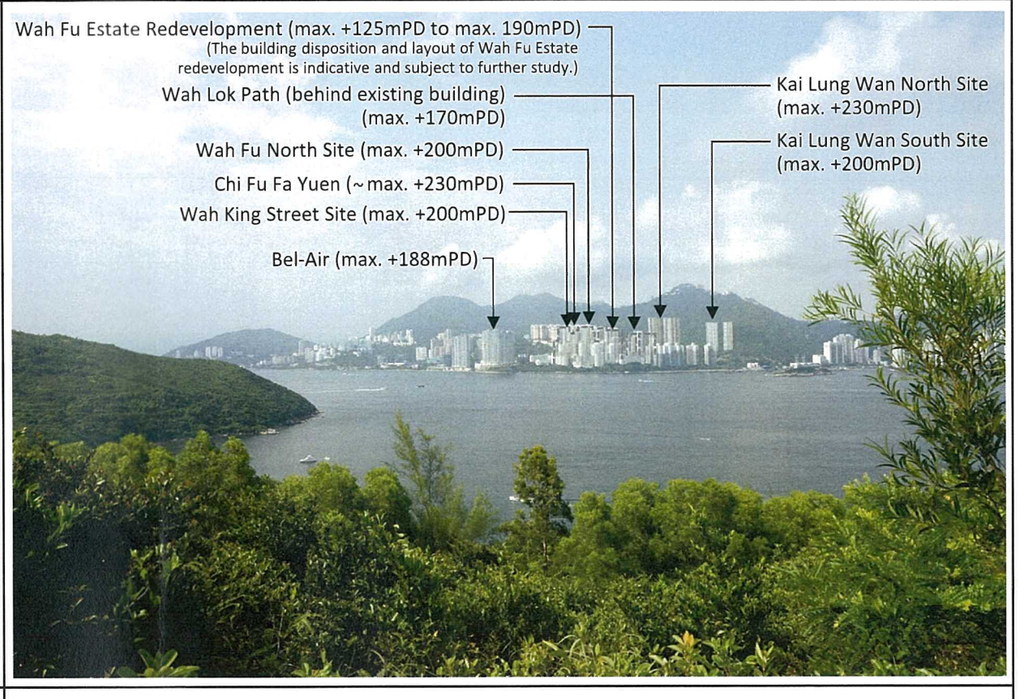


Existing View from A10 - Pavilion near Lamma Winds



Photomontage from A10 - Pavilion near Lamma Winds
(with Housing Sites)



Photomontage from A10 - Pavilion near Lamma Winds
(with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

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Drawing title
P3 PHOTOMONTAGE FROM A10

Drawing no.		Rev.
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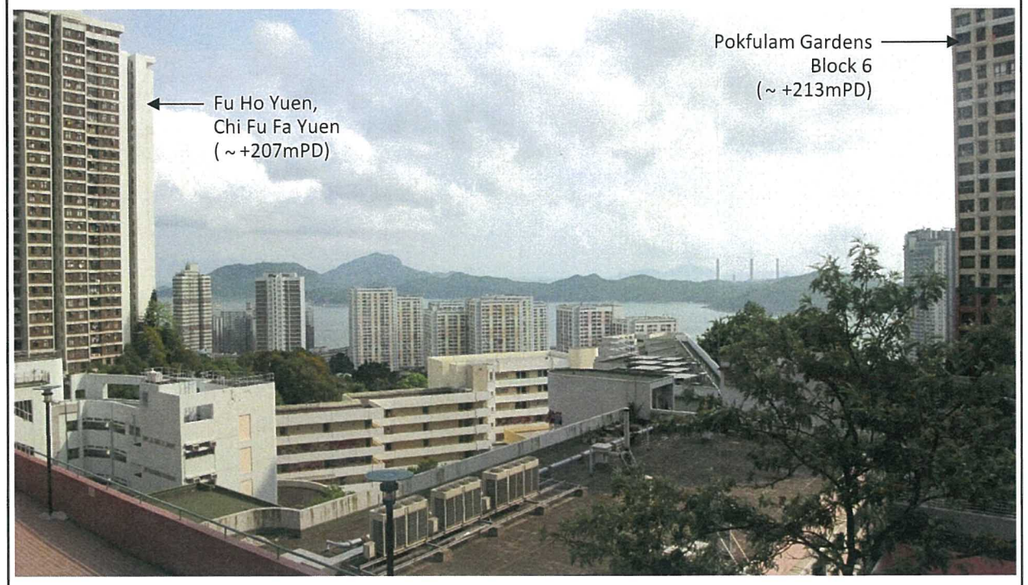
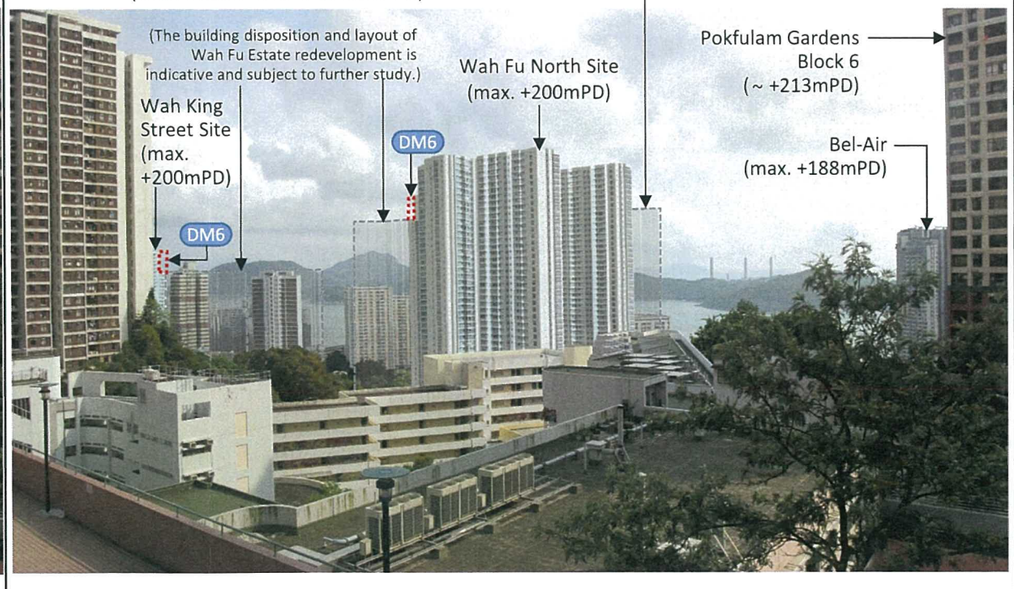


Existing View from B2 (VP1a) - North of Podium Garden Atop the Chi Fu Shopping Centre

Photomontage from B2 (VP1a) - North of Podium Garden
Atop the Chi Fu Shopping Centre (with Housing Sites)



Photomontage from B2 (VP1a) - North of Podium Garden
Atop the Chi Fu Shopping Centre (with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

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Drawing title
P4 PHOTOMONTAGE FROM B2 (VP1a)

Drawing no.		Rev.
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Drawn: AC	Date: 03/17	Checked: KC	Approved: SYC
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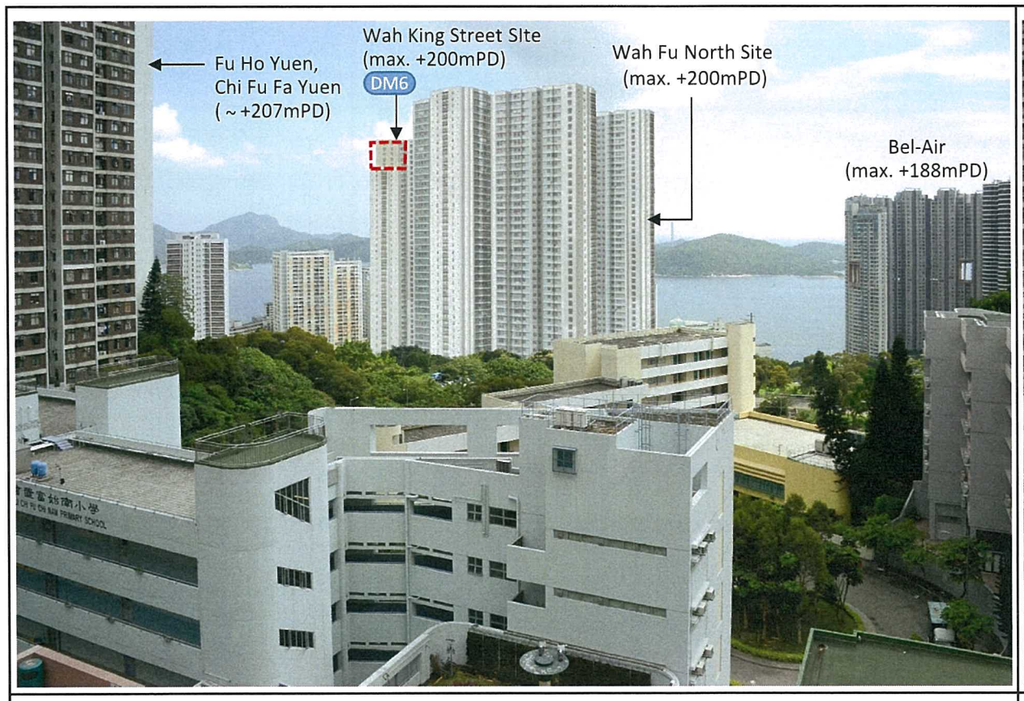
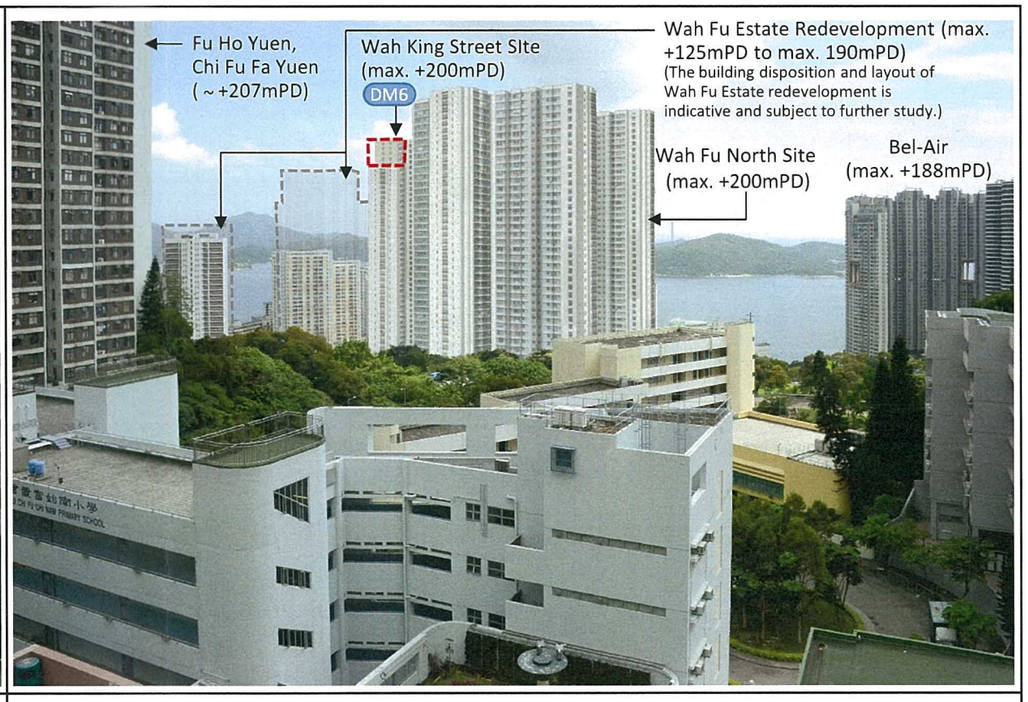
CEDD 土木工程拓展署 Civil Engineering and Development Department

Existing View from B2 (VP1b) - South of Podium Garden atop the Chi Fu Shopping Centre



Photomontage from B2 (VP1b) - South of Podium Garden Atop the Chi Fu Shopping Centre (with Housing Sites)



Photomontage from B2 (VP1b) - South of Podium Garden Atop the Chi Fu Shopping Centre (with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

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Drawing title

P5 PHOTOMONTAGE FROM B2 (VP1b)

Drawing no.		Rev.
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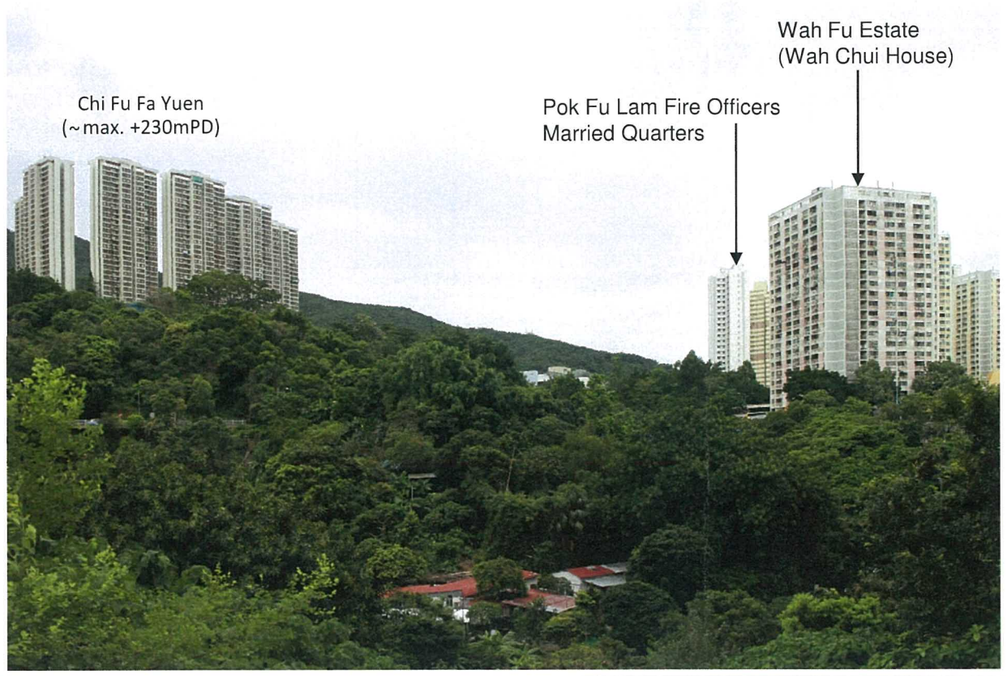
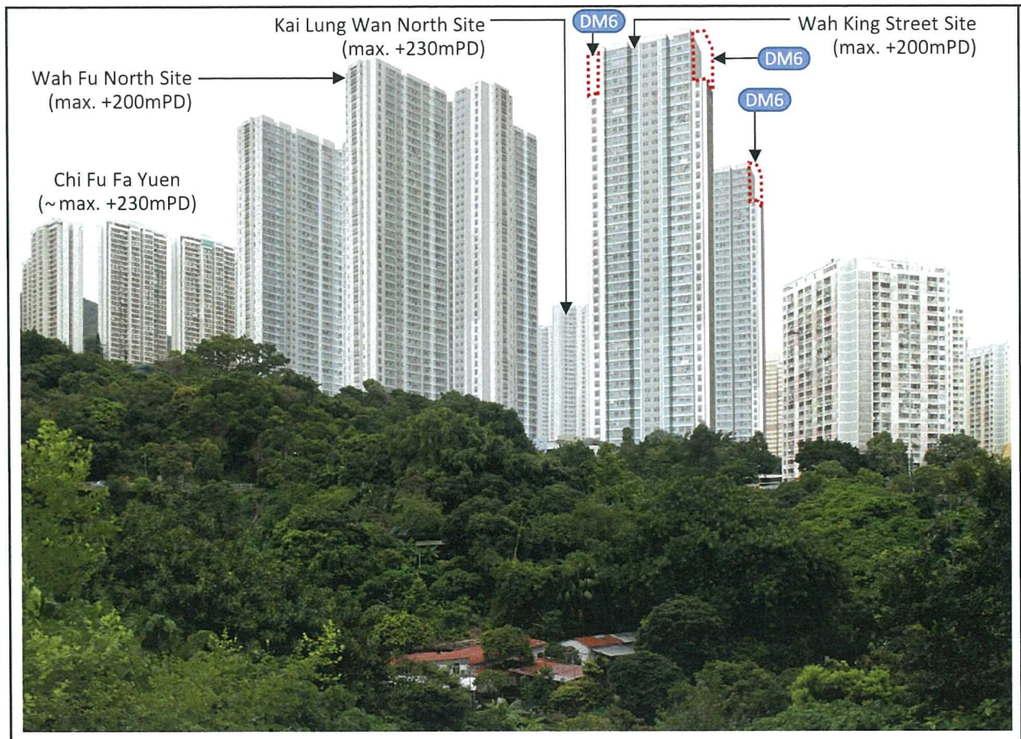
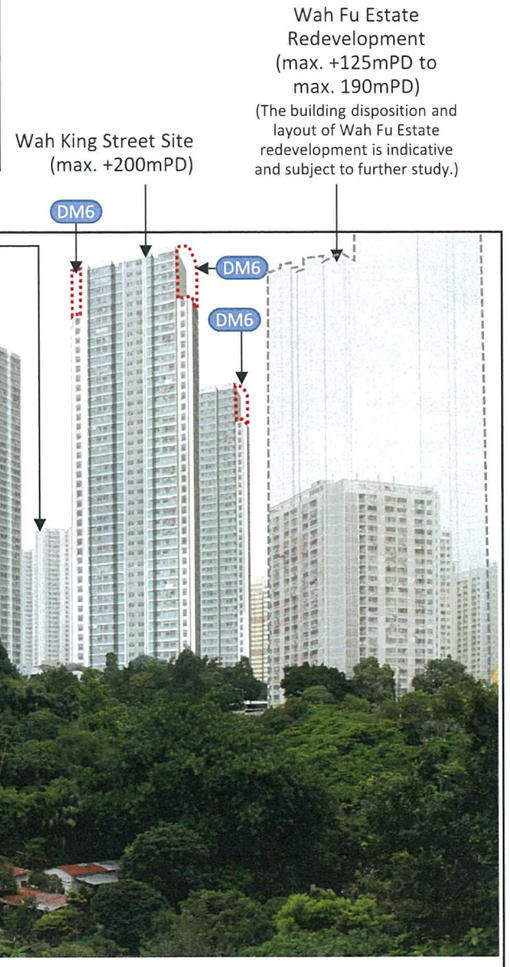


Existing View from B3 - A Future Open Space Opposite From Bel-Air No. 8



Photomontage from B3 - A Future Open Space Opposite From Bel-Air No. 8
(with Housing Sites)



Photomontage from B3 - A Future Open Space Opposite From Bel-Air No. 8
(with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

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Drawing title
P6 PHOTOMONTAGE FROM B3

Drawing no.		Rev
250269/LVIA/6.6		A
Drawn: AC	Date: 03/17	Checked: KC	Approved: SYC
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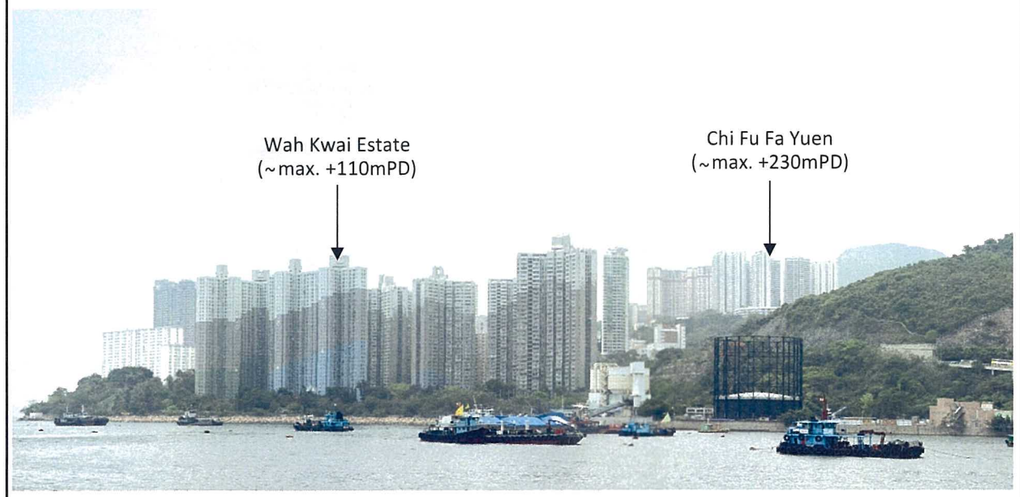
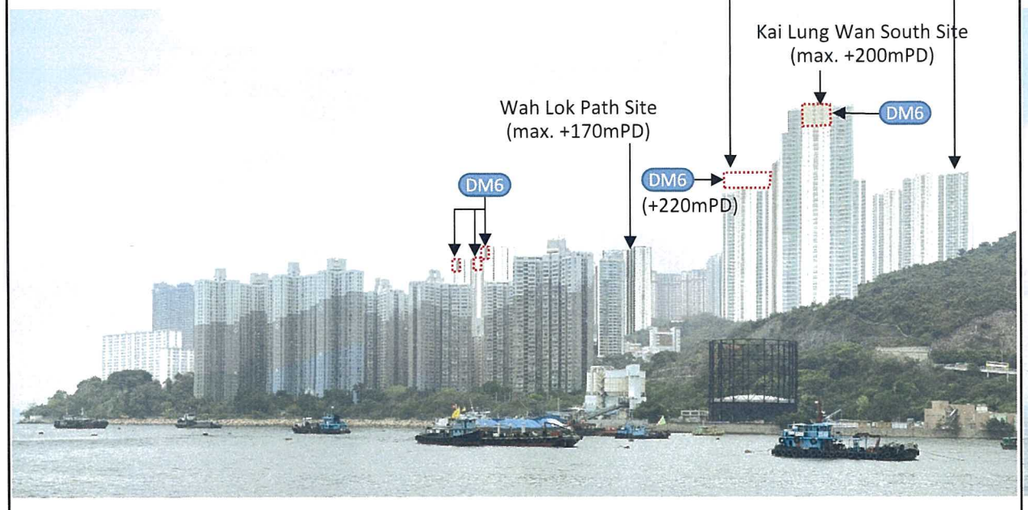
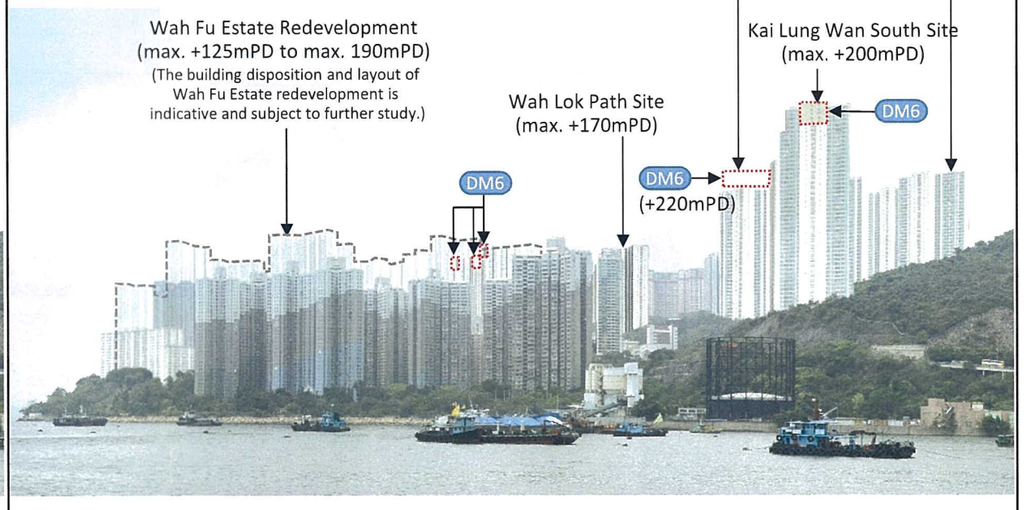
CEDD 土木工程拓展署
Civil Engineering and Development Department



Existing View from B4 - Waterfront at South Horizons



Photomontage from B4 - Waterfront at South Horizons
(with Housing Sites)



Photomontage from B4 - Waterfront at South Horizons
(with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

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Drawing title
P7 PHOTOMONTAGE FROM B4

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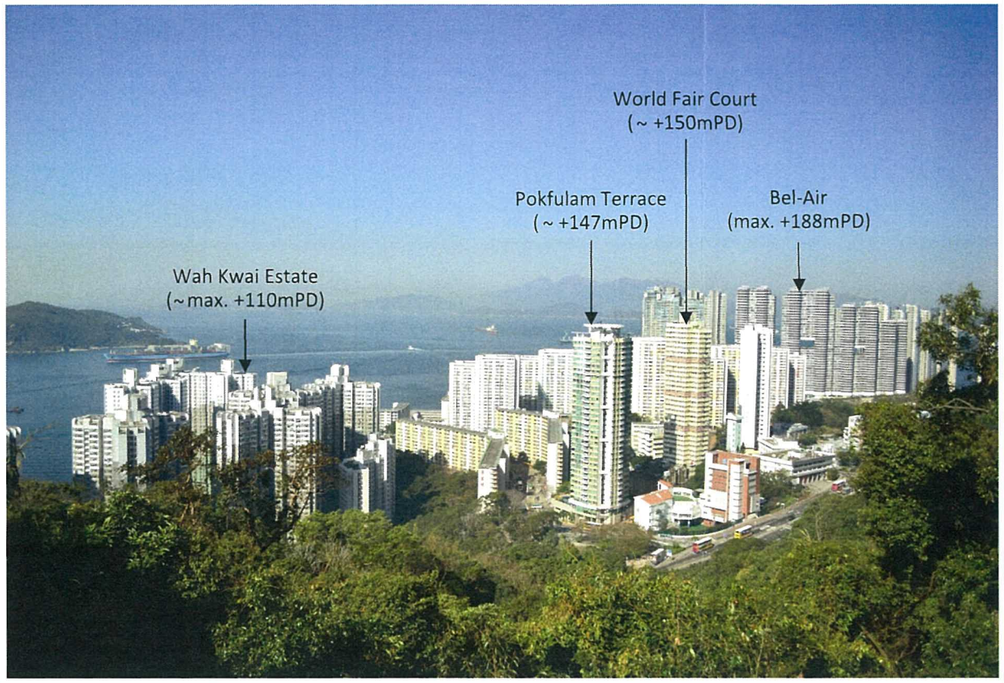
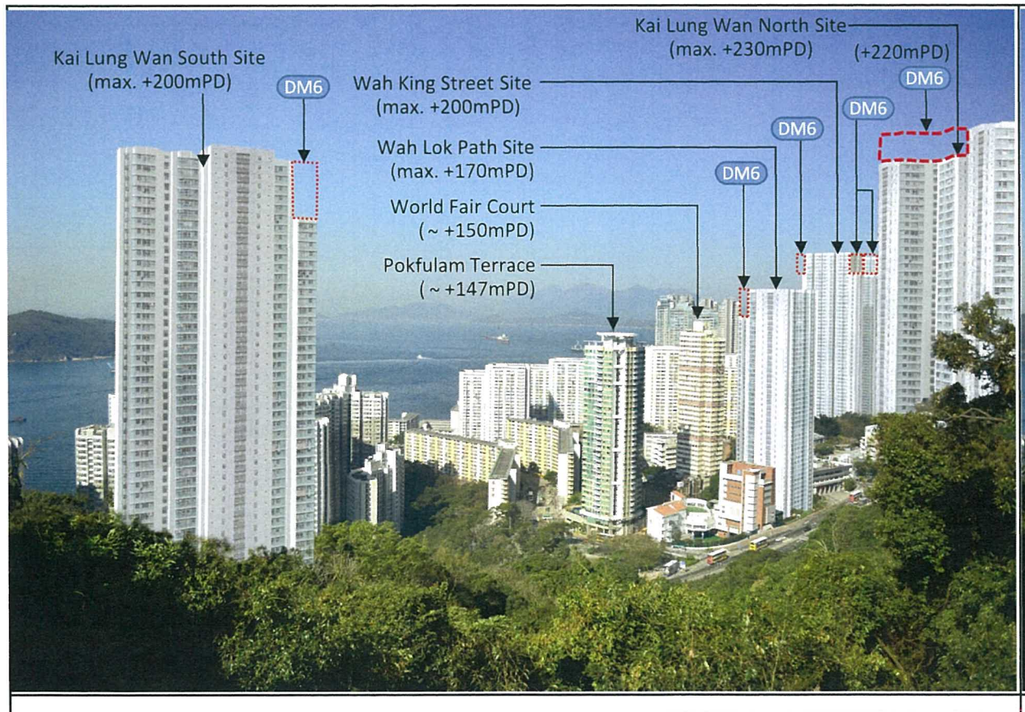
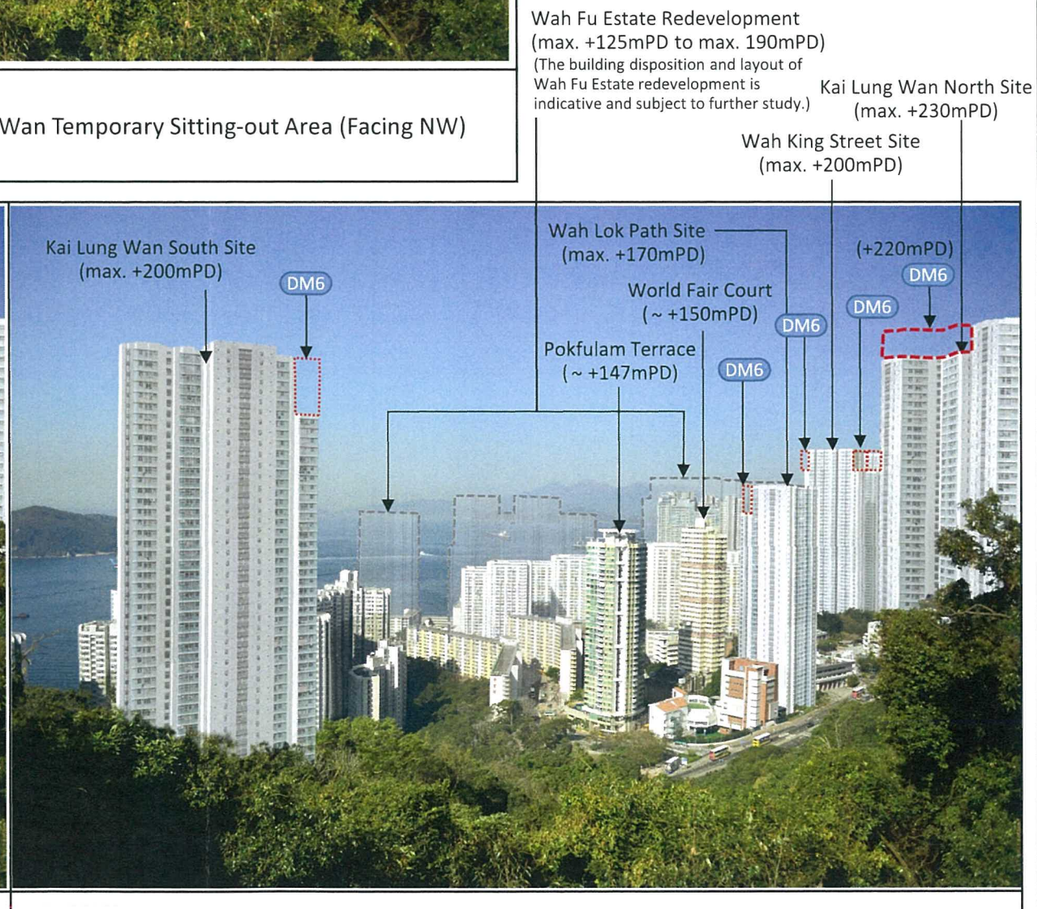


Existing View from B7-1a - Upper Kai Lung Wan Temporary Sitting-out Area (Facing NW)



Photomontage from B7-1a - Upper Kai Lung Wan Temporary Sitting-out Area (Facing NW)
(with Housing Sites)



Photomontage from B7-1a - Upper Kai Lung Wan Temporary Sitting-out Area (Facing NW)
(with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

A	FINAL REPORT	KL	07/17
Rev	Description	By	Date

Consultant
ARUP

Contract No. and Title
Agreement No. CE 74/2015 (CE)
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
P8 PHOTOMONTAGE FROM B7-1a

Drawing no.			Rev.
250269/LVIA/6.8			A
Drawn: AC	Date: 03/17	Checked: KC	Approved: SYC
Scale:		Status: PRELIMINARY	

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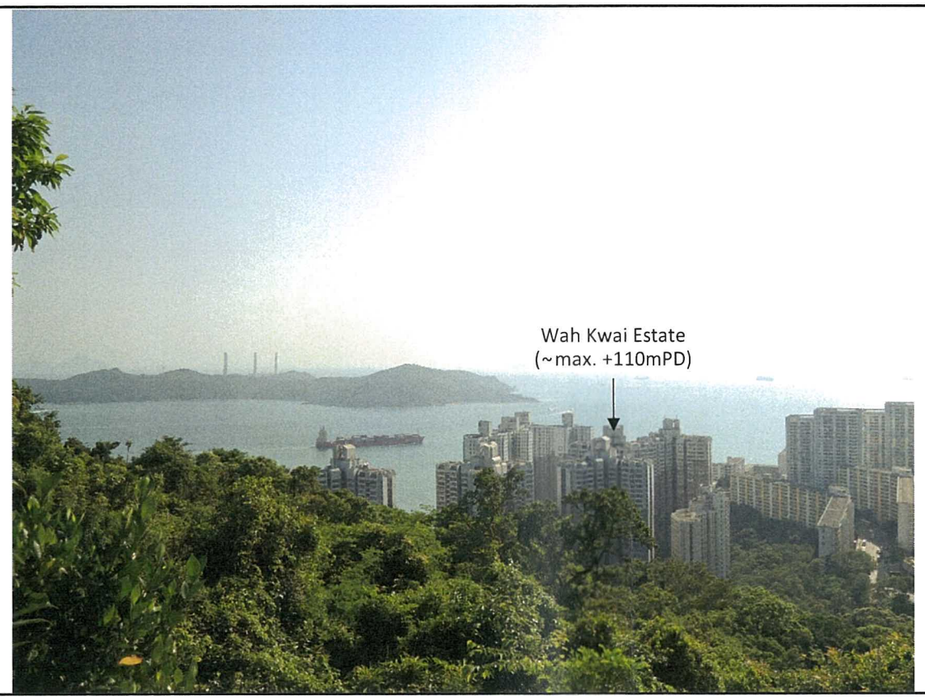
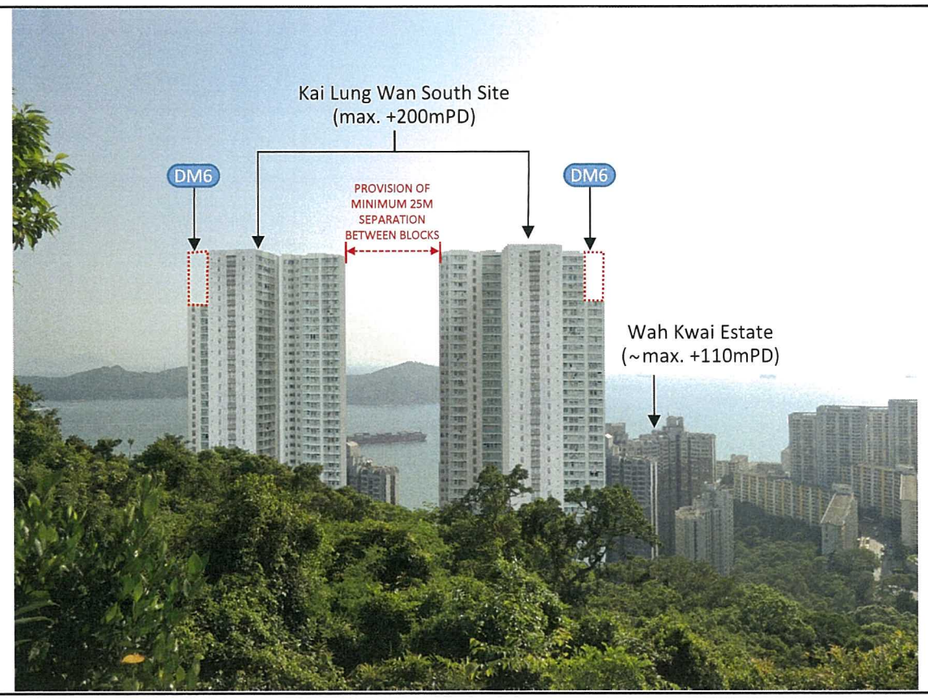
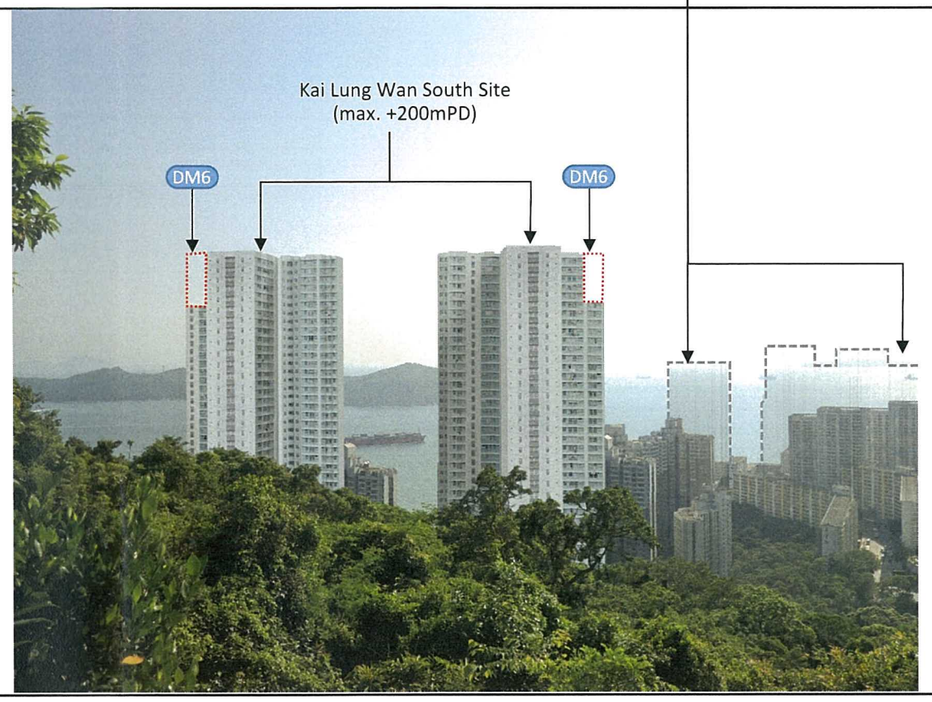


Existing View from B7-1b - Upper Kai Lung Wan Temporary Sitting-out Area (facing SW)



Photomontage from B7-1b - Upper Kai Lung Wan Temporary Sitting-out Area (facing SW)
(with Housing Sites)



Photomontage from B7-1b - Upper Kai Lung Wan Temporary Sitting-out Area (facing SW)
(with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

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A	FINAL REPORT	KL	07/17

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Drawing title
P8 PHOTOMONTAGE FROM B7-1b

Drawing no.	Rev.
250269/LVIA/6.8a	A

Drawn	Date	Checked	Approved
AC	03/17	KC	SYC

Scale
Status: PRELIMINARY

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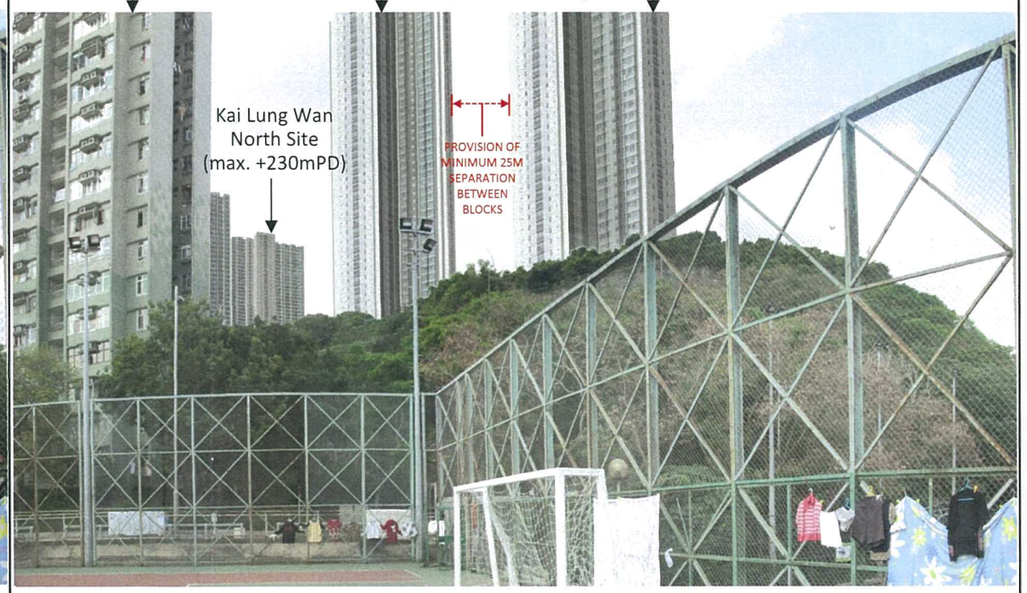
Existing View from B8 - Wah Kwai Estate Soccer Pitch



Photomontage from B8 - Wah Kwai Estate Soccer Pitch (with Housing Sites)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

Rev	Description	By	Date
A	FINAL REPORT	KL	07/17

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Drawing title
P9 PHOTOMONTAGE FROM B8

Drawing no.		Rev.
250269/LVIA/6.9		A
Drawn: AC	Date: 03/17	Checked: KC / Approved: SYC
Scale:	Status: PRELIMINARY	

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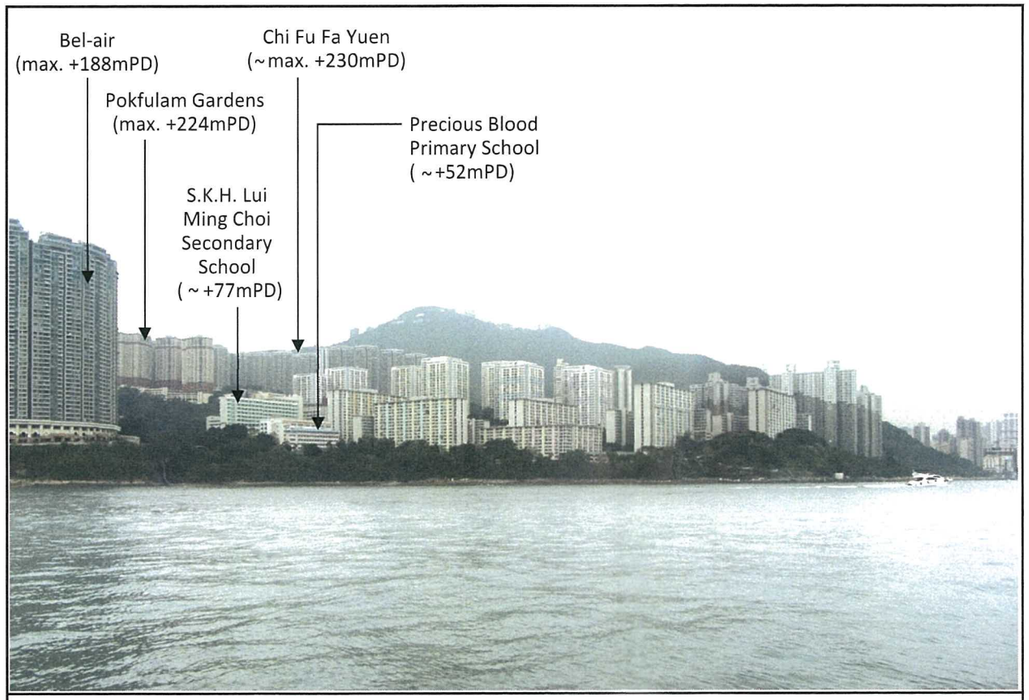
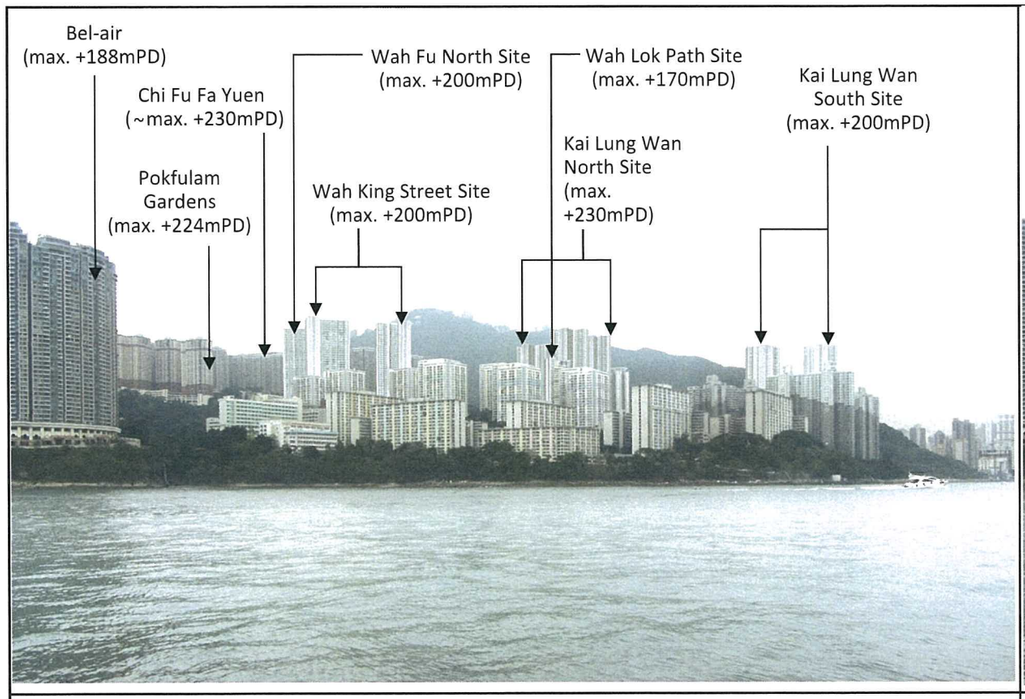
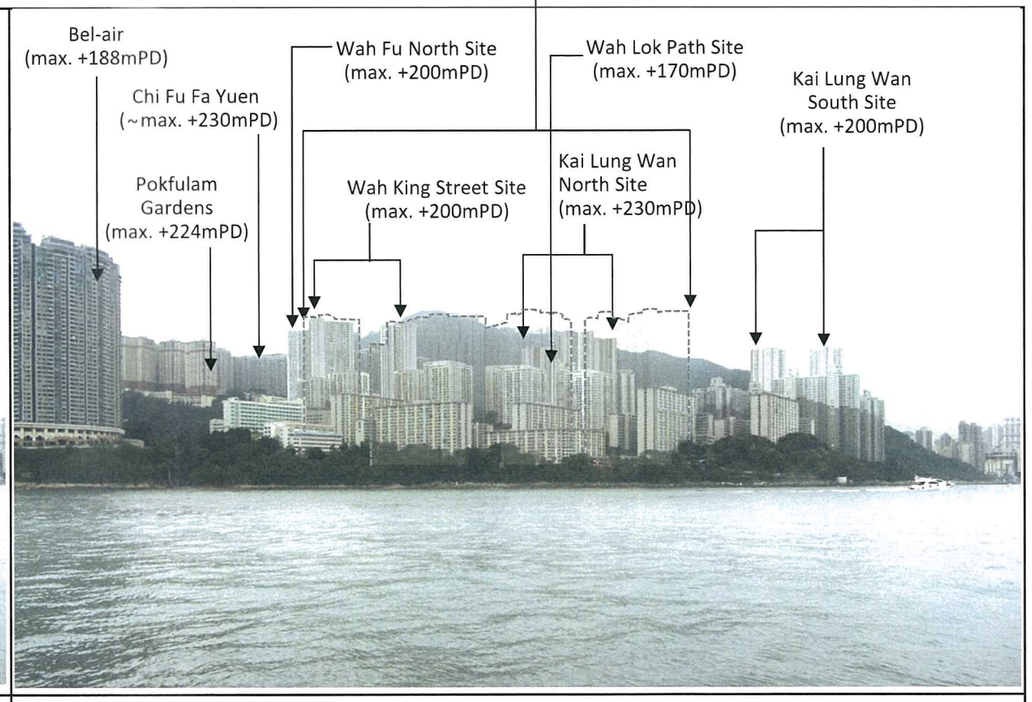


Existing View from C1 - Key Ferry Route of Sok Kwu Wan to Central on East Lamma Channel



Photomontage from C1 - Key Ferry Route of Sok Kwu Wan to Central on East Lamma Channel (with Housing Sites)

Wah Fu Estate Redevelopment
(max. +125mPD to max. 190mPD)
(The building disposition and layout of Wah Fu Estate redevelopment is indicative and subject to further study.)



Photomontage from C1 - Key Ferry Route of Sok Kwu Wan to Central on East Lamma Channel (with Housing Sites & Wah Fu Redevelopment)

Notes:
Design Consideration of max. building height is designed to introduce height variation in respect to topography, visual openness and add visual interest, subject to further study in the detailed design stage.

A	FINAL REPORT	KL	07/17
Rev	Description	By	Date

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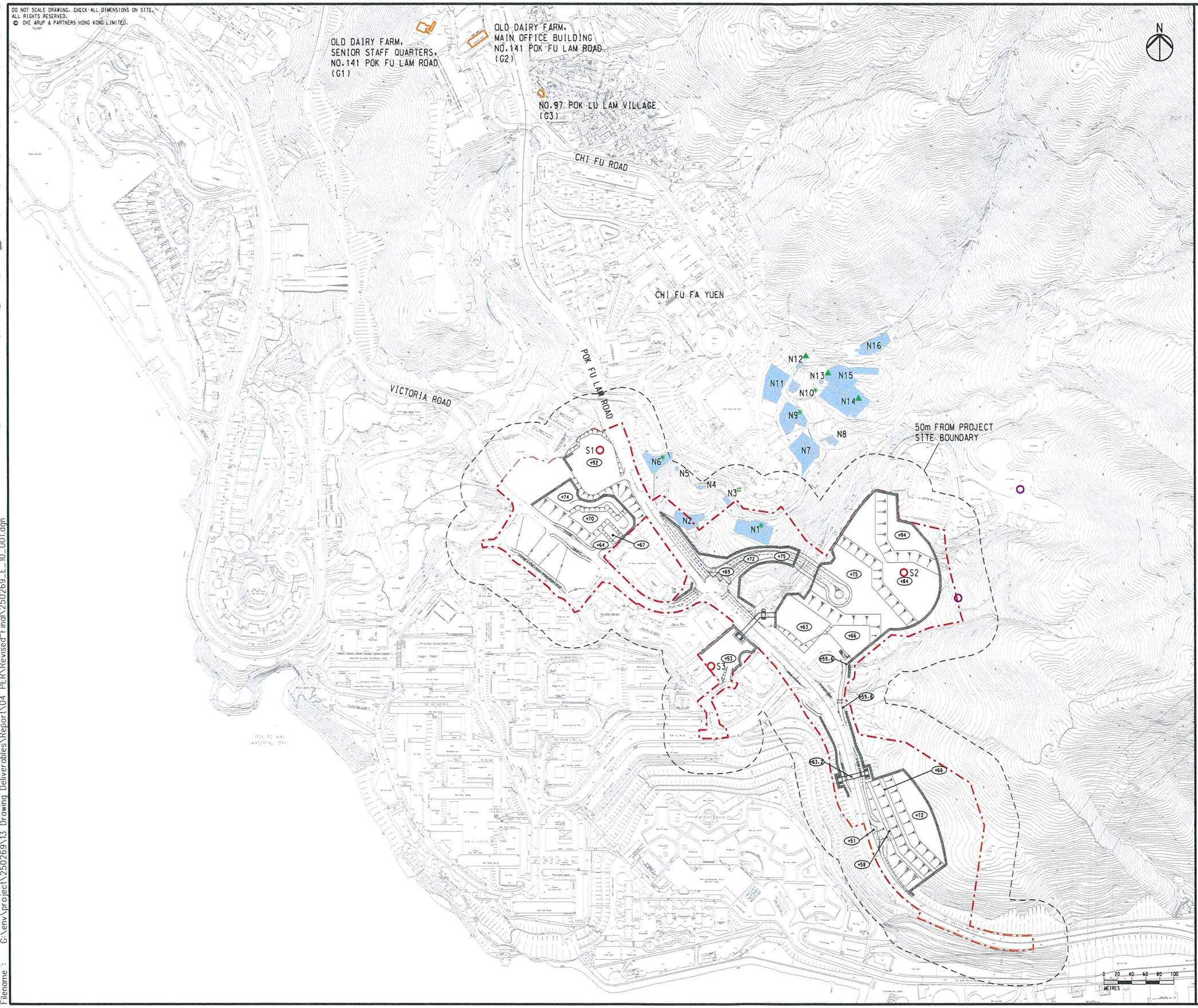
Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title
P10 PHOTOMONTAGE FROM C1

Drawing no.		Rev.
250269/LVIA/6.10		A
Drawn: AC	Date: 03/17	Checked: KC
Approved: SYC		
Scale:	Status: PRELIMINARY	

CEDD 土木工程拓展署
Civil Engineering and Development Department



LEGEND

- PROJECT SITE BOUNDARY
- GRADED HISTORIC BUILDING
- GRAVE
- SHRINE
- INDICATIVE LOCATIONS OF REMAINING STRUCTURES OF THE OLD DAIRY FARM IN POK FU LAM CLOSE TO / WITHIN THE PROJECT SITES (NEW ITEMS PENDING GRADING ASSESSMENT BY AAB)
- * PROPOSED GRADE 3
- ▲ PROPOSED GRADE 3 (SUBJECT TO AAB'S DISCUSSION)
- # PROPOSED GRADE 2 (SUBJECT TO AAB'S DISCUSSION)

Rev	Description	By	Date
C	THIRD ISSUE	GL	08/17
B	SECOND ISSUE	GL	07/17
A	FIRST ISSUE	GL	06/17

Consultant

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Contract No. and Title

Agreement No. CE 74/2015 (CE)

Site Formation and Infrastructures for Development at Pok Fu Lam South – Investigation, Design and Construction

Drawing title

LOCATION OF BUILT HERITAGE RESOURCES NEAR PROJECT SITE

Drawing no.			Rev.
250269/E/10/001			C
Drawn	Date	Checked	Approved
GL	08/17	KL	ST
Scale		Status	
1:5000 @A3		PRELIMINARY	

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Plotted: 8/11/2017
Filename: G:\env\project\250269\13 Drawing Deliverables\Report\04 PER\Revised Final\250269_E_10_001.dgn