

圖例 NOTATION	
ZONES	地帶
COMPREHENSIVE DEVELOPMENT AREA	CDA 綜合發展區
RESIDENTIAL (GROUP A)	RIA(住宅 (甲類)
RESIDENTIAL (GROUP B)	RI(B) 住宅 (乙類)
RESIDENTIAL (GROUP C)	RI(C) 住宅 (丙類)
VILLAGE TYPE DEVELOPMENT	V 鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	GIC 政府、機構或社區
OPEN SPACE	O 休憩用地
RECREATION	REC 康樂
OTHER SPECIFIED USES	OU 其他指定用途
AGRICULTURE	AGR 農業
GREEN BELT	GB 綠化地帶
COMMUNICATIONS	交通
MAJOR ROAD AND JUNCTION	主要道路及路口
MISCELLANEOUS	其他
BOUNDARY OF PLANNING SCHEME	規劃範圍界線
BUILDING HEIGHT CONTROL ZONE BOUNDARY	建築物高度管制區界線
MAXIMUM BUILDING HEIGHT (IN METRES ABOVE PRINCIPAL DATUM)	最高建築物高度 (在主水平基準上若干米)
PETROL FILLING STATION	P F S 加油站

土地用途及面積一覽表 SCHEDULE OF USES AND AREAS			
USES	大約面積及百分比 APPROXIMATE AREA & %		用途
	公頃 HECTARES	% 百分比	
COMPREHENSIVE DEVELOPMENT AREA	0.80	0.21	綜合發展區
RESIDENTIAL (GROUP A)	13.78	3.65	住宅 (甲類)
RESIDENTIAL (GROUP B)	3.97	1.05	住宅 (乙類)
RESIDENTIAL (GROUP C)	10.38	2.75	住宅 (丙類)
VILLAGE TYPE DEVELOPMENT	78.37	21.03	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	12.11	3.21	政府、機構或社區
OPEN SPACE	3.68	0.98	休憩用地
RECREATION	15.35	4.07	康樂
OTHER SPECIFIED USES	3.35	0.89	其他指定用途
AGRICULTURE	144.37	38.25	農業
GREEN BELT	81.79	21.67	綠化地帶
MAJOR ROAD ETC.	8.48	2.24	主要道路等
TOTAL PLANNING SCHEME AREA	377.43	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2016年2月2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
2 FEBRUARY 2016

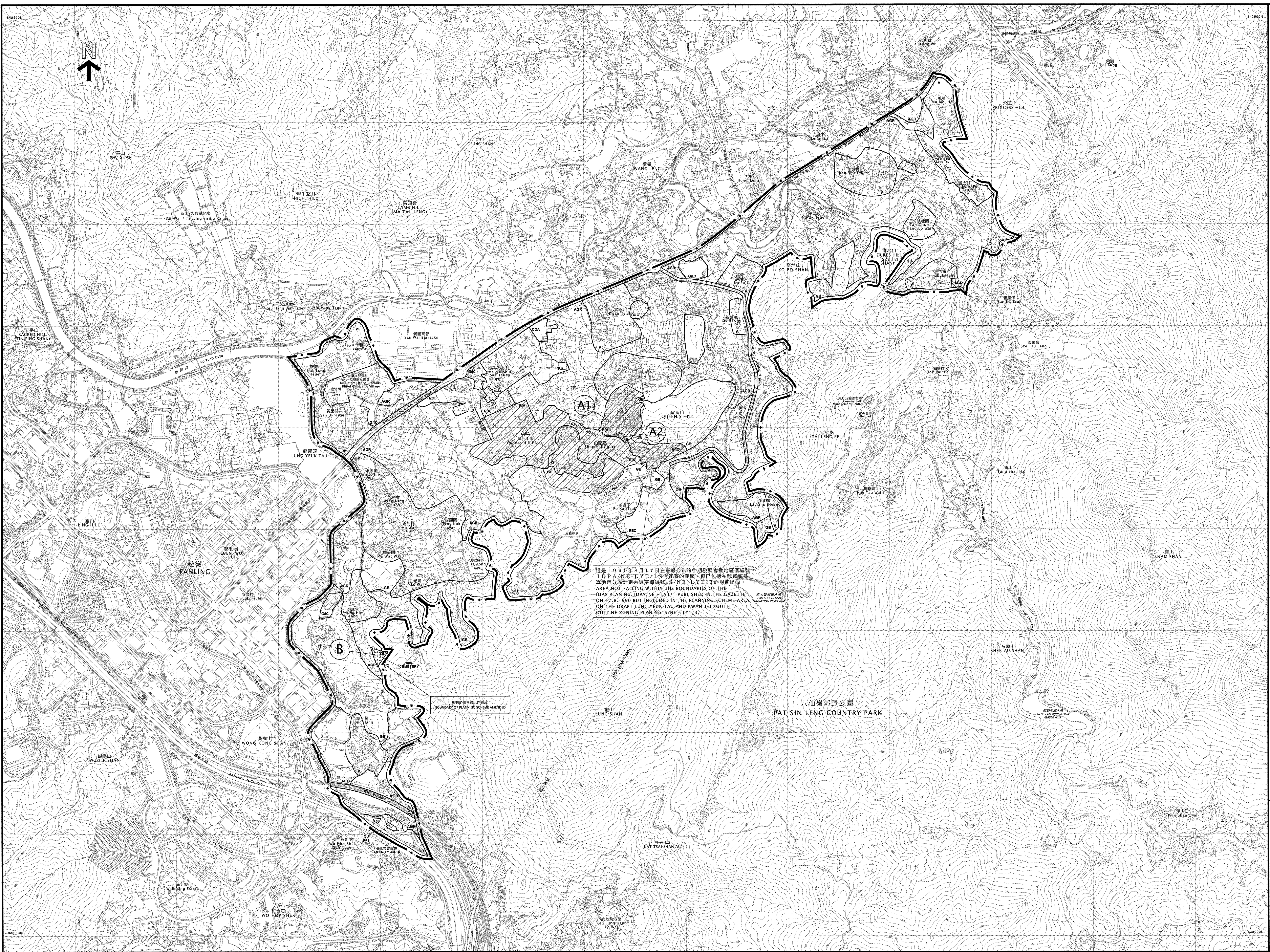
Ms Winnie WONG 黃潔怡女士
CLERK TO THE EXECUTIVE COUNCIL 行政會議秘書

香港城市規劃委員會依據城市規劃條例擬備的龍躍頭及軍地南分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
LUNG YEUK TAU & KWAN TEI SOUTH - OUTLINE ZONING PLAN

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

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/NE-LYT/17



圖例
NOTATION

ZONES		地帶
COMPREHENSIVE DEVELOPMENT AREA	CDA	綜合發展區
RESIDENTIAL (GROUP A)	R(A)	住宅（甲類）
RESIDENTIAL (GROUP C)	R(C)	住宅（丙類）
VILLAGE TYPE DEVELOPMENT	V	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	GIC	政府、機構或社區
OPEN SPACE	O	休憩用地
RECREATION	REC	康樂
OTHER SPECIFIED USES	OU	其他指定用途
AGRICULTURE	AGR	農業
GREEN BELT	GB	綠化地帶
COMMUNICATIONS		交通
MAJOR ROAD AND JUNCTION		主要道路及路口
MISCELLANEOUS		其他
BOUNDARY OF PLANNING SCHEME		規劃範圍界線
BUILDING HEIGHT CONTROL ZONE BOUNDARY		建築物高度管制區界線
MAXIMUM BUILDING HEIGHT (IN METRES ABOVE PRINCIPAL DATUM)		最高建築物高度 (在主水平基準上若干米)
PETROL FILLING STATION	P F S	加油站

土地用途及面積一覽表
SCHEDULE OF USES AND AREAS

USES	大約面積及百分比 APPROXIMATE AREA & %		用途
	公頃 HECTARES	% 百分比	
COMPREHENSIVE DEVELOPMENT AREA	0.80	0.21	綜合發展區
RESIDENTIAL (GROUP A)	17.75	4.70	住宅（甲類）
RESIDENTIAL (GROUP C)	10.38	2.75	住宅（丙類）
VILLAGE TYPE DEVELOPMENT	79.37	21.02	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	12.11	3.21	政府、機構或社區
OPEN SPACE	3.68	0.97	休憩用地
RECREATION	15.35	4.07	康樂
OTHER SPECIFIED USES	3.70	0.98	其他指定用途
AGRICULTURE	144.19	38.19	農業
GREEN BELT	81.79	21.66	綠化地帶
MAJOR ROAD ETC.	8.48	2.24	主要道路等
TOTAL PLANNING SCHEME AREA	377.60	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 / N E - L Y T / 17 的修訂
AMENDMENTS TO APPROVED PLAN No. S/NE-LYT/17

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 A1		修訂項目 A 1 項
AMENDMENT ITEM A2		修訂項目 A 2 項
AMENDMENT ITEM B		修訂項目 B 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龍躍頭及軍地南分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
LUNG YEUK TAU & KWAN TEI SOUTH - OUTLINE ZONING PLAN

SCALE 1:7500 比例尺
* METRES 200 0 200 400 600 800 1000 METRES *

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/NE-LYT/17A

~~APPROVED~~ ***DRAFT*** LUNG YEUK TAU AND KWAN TEI SOUTH
OUTLINE ZONING PLAN NO. S/NE-LYT/17A

(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) No action is required to make the use of any land or building which was in existence immediately before the first publication in the Gazette of the notice of the interim development permission area plan conform to this Plan, provided such use has continued since it came into existence. Any material change of such use or any other development (except minor alteration and/or modification to the development of the land or building in respect of such use which is always permitted) must be always permitted in terms of the Plan or in accordance with a permission granted by the Town Planning Board.
- (4) A use or development of any land or building permitted under an earlier draft or approved plan including interim development permission area plan for the area and effected or undertaken during the effective period of that plan is always permitted under this Plan. Any material change of such use or any other development (except minor alteration and/or modification to the completed development of the land or building which is always permitted) must be always permitted in terms of the Plan or in accordance with a permission granted by the Town Planning Board.
- (5) Except to the extent that paragraph (3) or (4) applies, any use or development falling within the boundaries of the Plan and also within the boundaries of the interim development permission area plan, unless always permitted in terms of the Plan, shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the interim development permission area plan without permission from the Town Planning Board.

- (6) Any use or development of land or building falling within the boundaries of the Plan but not within the boundaries of the interim development permission area plan, unless always permitted in terms of the Plan, shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the draft Outline Zoning Plan No. S/NE-LYT/3 without permission from the Town Planning Board.
- (7) 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.
- (8) Road junctions, alignment of roads and railway tracks, and boundaries between zones may be subject to minor adjustments as detailed planning proceeds.
- (9) 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) maintenance, repair or demolition of a building;
 - (b) provision, maintenance or repair of plant nursery, amenity planting, open space, rain shelter, refreshment kiosk, footpath, bus/public light bus stop or lay-by, cycle track, taxi rank, public utility pipeline, electricity mast, lamp pole, telephone booth, telecommunications radio base station, automatic teller machine and shrine;
 - (c) maintenance or repair of road, railway track, watercourse, nullah, sewer and drain;
 - (d) geotechnical works, local public works, road works, sewerage works, drainage works, environmental improvement works, marine related facilities and waterworks (excluding works on service reservoir) and such other public works co-ordinated or implemented by Government;
 - (e) rebuilding of New Territories Exempted House;
 - (f) replacement of an existing domestic building i.e. a domestic building which was in existence on the date of the first publication in the Gazette of the notice of the interim development permission area plan, by a New Territories Exempted House; and
 - (g) provision, maintenance or repair of a grave of an indigenous New Territories villager or a locally based fisherman and his family members for which permission has been obtained from Government.

- (10) In any area shown as ‘Road’, all uses or developments except those specified in paragraphs (9)(a) to (9)(d) and (9)(g) above and those specified below require permission from the Town Planning Board:

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

- (11) (a) Temporary use or development of any land or building not exceeding a period of two months is always permitted provided that no site formation (filling or excavation) is carried out and that the use or development is a use or development specified below:

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

- (b) Except as otherwise provided in paragraph (11)(a), temporary use or development of any land or building not exceeding a period of three years requires permission from the Town Planning Board. Notwithstanding that the use or development is not provided for in terms of the Plan, the Town Planning Board may grant permission, with or without conditions, for a maximum period of three years, or refuse to grant permission.

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

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

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

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

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

~~APPROVED~~ ***DRAFT*** LUNG YEUK TAU AND KWAN TEI SOUTH
OUTLINE ZONING PLAN NO. S/NE-LYT/17A

Schedule of Uses

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COMPREHENSIVE DEVELOPMENT AREA

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
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Government Refuse Collection Point
Government Use (not elsewhere specified)
Industrial Use (Food Processing
Factory/Workshop only)
Public Utility Installation
Utility Installation for Private Project

Planning Intention

This zone is intended for comprehensive redevelopment of an existing soy sauce factory.

Remarks

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

(Please see next page)

COMPREHENSIVE DEVELOPMENT AREA (Cont'd)

Remarks (Cont'd)

- (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.
- (b) The Master Layout Plan should be supported by an explanatory statement which contains an adequate explanation of the development proposal, including such information as land tenure, relevant lease conditions, existing conditions of the site, the character of the site in relation to the surrounding areas, principles of layout design, major development parameters, design population, types of GIC facilities, and recreational and open space facilities.
- (c) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum non-domestic plot ratio of 0.9, a maximum non-domestic site coverage of 46% and a maximum building height of 12m, or the plot ratio, site coverage and height of the building which was in existence on the date of the first publication in the Gazette of the notice of the interim development permission area plan, whichever is the greater.
- (d) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/site coverage/building height restrictions stated in paragraph (c) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

RESIDENTIAL (GROUP A)

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

Remarks

- (a) ***On land designated “Residential (Group A)” (“R(A)”)*, ~~No~~ no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 6 and a maximum building height in terms of metres above Principal Datum as stipulated on the Plan, or the plot ratio and height of the existing building, ~~which was in existence on the date of the first publication in the Gazette of the notice of the draft Lung Yeuk Tau and Kwan Tei South Outline Zoning Plan No. S/NE-LYT/3, whichever is the greater.~~**
- (b) ***On land designated “Residential (Group A)1” (“R(A)1”)*, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 7 and a maximum building height in terms of metres above Principal Datum as stipulated on the Plan, or the plot ratio and height of the existing building, whichever is the greater.**

(Please see next page)

RESIDENTIAL (GROUP A) (Cont'd)

Remarks (Cont'd)

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

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	Eating Place
Government Use (Police Reporting Centre, —— Post Office only)	Educational Institution
House	Government Refuse Collection Point
Library	Government Use (not elsewhere specified)
Residential Institution	Hospital
School (in free-standing purpose- —— designed building only)	Hotel
Utility Installation for Private Project	Institutional Use (not elsewhere specified)
	Market
	Office
	Petrol Filling Station
	Place of Entertainment
	Place of Recreation, Sports or Culture
	Private Club
	Public Clinic
	Public Convenience
	Public Transport Terminus or Station
	Public Utility Installation
	Public Vehicle Park
	—— (excluding container vehicle)
	Recyclable Collection Centre
	Religious Institution
	School (not elsewhere specified)
	Shop and Services
	Social Welfare Facility
	Training Centre

Planning Intention

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

(Please see next page)

RESIDENTIAL (GROUP B) (Cont'd)

Remarks

- (a) ~~No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 3.6 and a maximum building height in terms of metres above Principal Datum as stipulated on the Plan, or the plot ratio and height of the existing building, which was in existence on the date of the first publication in the Gazette of the notice of the draft Lung Yeuk Tau and Kwan Tei South Outline Zoning Plan No. S/NE-LYT/3, whichever is the greater.~~
- (b) ~~In determining the maximum plot ratio for the purposes of paragraph (a) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, or caretaker's quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.~~
- (c) ~~Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio and/or building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.~~

RESIDENTIAL (GROUP C)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Flat 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)# Institutional Use (not elsewhere specified)# Library Petrol Filling Station Place of Recreation, Sports or Culture Private Club Public Clinic Public Convenience Public Transport Terminus or Station Public Utility Installation# Public Vehicle Park (excluding container vehicle) Recyclable Collection Centre Religious Institution# Residential Institution Rural Committee/Village Office School# Shop and Services Social Welfare Facility# Training Centre

(Please see next page)

RESIDENTIAL (GROUP C) (Cont'd)

Planning Intention

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

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building (except development or redevelopment to those annotated with #) shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 0.2 and a maximum building height of 2 storeys (6m) over 1 storey carport, or the plot ratio, site coverage and height of the building which was in existence on the date of the first publication in the Gazette of the notice of the interim development permission area plan, whichever is the greater.
- (b) In determining the maximum plot ratio for the purposes of paragraph (a) above, any floor space that is constructed or intended for use solely as carport, loading/unloading bay, plant room and caretaker's office, or caretaker's quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

VILLAGE TYPE DEVELOPMENT

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

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

Eating Place
Library
School
Shop and Services

(Please see next page)

VILLAGE TYPE DEVELOPMENT (Cont'd)

Planning Intention

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

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building (except development or redevelopment to those annotated with #) shall result in a total development and/or redevelopment in excess of a maximum building height of 3 storeys (8.23m) or the height of the building which was in existence on the date of the first publication in the Gazette of the notice of the interim development permission area plan, whichever is the greater.
- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restriction stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.
- (c) Any filling of pond, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes (except public works co-ordinated or implemented by Government, and maintenance, repair or rebuilding works), shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the interim development permission area plan without the permission from the Town Planning Board 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 Boarding Establishment
Animal Quarantine Centre (in Government building only)	Animal Quarantine Centre (not elsewhere specified)
Broadcasting, Television and/or Film Studio	Columbarium
Eating Place (Canteen, Cooked Food Centre only)	Correctional Institution
Educational Institution	Crematorium
Exhibition or Convention Hall	Driving School
Field Study/Education/Visitor Centre	Eating Place (not elsewhere specified)
Government Refuse Collection Point	Flat
Government Use (not elsewhere specified)	Funeral Facility
Hospital	Holiday Camp
Institutional Use (not elsewhere specified)	House (other than rebuilding of New Territories Exempted House or replacement of existing domestic building by New Territories Exempted House permitted under the covering Notes)
Library	Off-course Betting Centre
Market	Office
Place of Recreation, Sports or Culture	Petrol Filling Station
Public Clinic	Place of Entertainment
Public Convenience	Private Club
Public Transport Terminus or Station	Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation
Public Utility Installation	Refuse Disposal Installation (Refuse Transfer Station only)
Public Vehicle Park (excluding container vehicle)	Residential Institution
Recyclable Collection Centre	Sewage Treatment/Screening Plant
Religious Institution	Shop and Services (<i>not elsewhere specified</i>)
Research, Design and Development Centre	Utility Installation for Private Project
Rural Committee/Village Office	Zoo
School	
Service Reservoir	
Social Welfare Facility	
Training Centre	
Wholesale Trade	

Planning Intention

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

GOVERNMENT, INSTITUTION OR COMMUNITY (1)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Government Use (not elsewhere specified) Utility Installation for Private Project	Field Study/Education/Visitor Centre Institutional Use (not elsewhere specified) Place of Recreation, Sports or Culture Public Utility Installation Religious Institution Residential Institution Social Welfare Facility

Planning Intention

This zone is intended primarily for the development of a religious institution. Any development on land zoned “Government, Institution or Community (1)” shall be compatible and blend in harmoniously with its surrounding environment.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 0.38, a maximum building height of 2 storeys (excluding basement(s)) and the maximum building heights in terms of metres above Principal Datum as stipulated on the Plan.
- (b) In determining the maximum plot ratio for the purpose of paragraph (a) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay and plant room, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

OPEN SPACE

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

Planning Intention

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

RECREATION

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

(Please see next page)

RECREATION (Cont'd)

Planning Intention

This zone is intended primarily for the improvement of the environmental quality of the designated areas by offering incentives for low-density recreational development in the zone. It encourages the development of active and/or passive recreation and tourism. Uses in support of the recreational developments may be permitted subject to planning permission.

Remarks

- (a) No residential development (except 'New Territories Exempted House') shall result in a total development in excess of a maximum plot ratio of 0.2 and a maximum building height of 2 storeys (6m).
- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio and building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.
- (c) Any filling of pond, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes (except public works co-ordinated or implemented by Government, and maintenance, repair or rebuilding works), shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the interim development permission area plan without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance.

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
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For “Railway” Only

Railway Track	Government Use Public Utility Installation
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Planning Intention

The planning intention of this zone is to reflect the land occupied by the railway tracks of Mass Transit Railway.

For “Petrol Filling Station” Only

Petrol Filling Station	Government Use Public Utility Installation
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Planning Intention

The planning intention of this zone is to allocate land for petrol filling station use.

For “Amenity Area” Only

Amenity Area	Government Use Public Utility Installation Utility Installation for Private Project
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Planning Intention

The planning intention of this zone is to designate land for the development of nursery garden, landscape and amenity area.

(Please see next page)

OTHER SPECIFIED USES (Cont'd)

<i>Column 1</i> <i>Uses always permitted</i>	<i>Column 2</i> <i>Uses that may be permitted with or without conditions on application to the Town Planning Board</i>
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For "Cemetery" Only

Columbarium
Grave

Public Utility Installation
Utility Installation for Private Project

Planning Intention

This zone is intended primarily for the provision of land for cemetery and related uses.

Remarks

- (a) The total number of columbarium niches shall not exceed 574.*
- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of number of niches as stipulated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.*

AGRICULTURE

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Agricultural Use	Animal Boarding Establishment
Government Use (Police Reporting Centre only)	Barbecue Spot
On-Farm Domestic Structure	Burial Ground
Public Convenience	Field Study/Education/Visitor Centre
Religious Institution (Ancestral Hall only)	Government Refuse Collection Point
Rural Committee/Village Office	Government Use (not elsewhere specified)
	House (New Territories Exempted House only, other than rebuilding of New Territories Exempted House or replacement of existing domestic building by New Territories Exempted House permitted under the covering Notes)
	Picnic Area
	Place of Recreation, Sports or Culture (Horse Riding School, Hobby Farm, Fishing Ground only)
	Public Utility Installation
	Religious Institution (not elsewhere specified)
	School
	Utility Installation for Private Project

Planning Intention

This zone is intended primarily to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. It is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes.

Remarks

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

(Please see next page)

AGRICULTURE (Cont'd)

Remarks (Cont'd)

- (b) Any filling of land, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes (except public works co-ordinated or implemented by Government, and maintenance, repair or rebuilding works), shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the draft Lung Yeuk Tau and Kwan Tei South Outline Zoning Plan No. S/NE-LYT/10 without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance. This restriction does not apply to filling of land specifically required under prior written instructions of Government department(s) or for the purposes specified below:
- (i) laying of soil not exceeding 1.2m in thickness for cultivation; or
 - (ii) construction of any agricultural structure with prior written approval issued by the Lands Department.

GREEN BELT

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

(Please see next page)

GREEN BELT (Cont'd)

Planning Intention

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

Remarks

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

~~APPROVED~~DRAFT LUNG YEUK TAU AND KWAN TEI SOUTH
OUTLINE ZONING PLAN NO. S/NE-LYT/17A

EXPLANATORY STATEMENT

**APPROVED DRAFT LUNG YEUK TAU AND KWAN TEI SOUTH
OUTLINE ZONING PLAN NO. S/NE-LYT/174**

EXPLANATORY STATEMENT

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**APPROVED ~~DRAFT~~ LUNG YEUK TAU AND KWAN TEI SOUTH
OUTLINE ZONING PLAN NO. S/NE-LYT/17A**

(Being an ~~Approved~~ ***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*** Lung Yeuk Tau and Kwan Tei South Outline Zoning Plan (OZP) No. S/NE-LYT/17A. It reflects the planning intention and objectives of the Town Planning Board (the Board) for various land use zonings of the Plan.

2. **AUTHORITY FOR THE PLAN AND PROCEDURE**

- 2.1 The land within the Lung Yeuk Tau and Kwan Tei South OZP, except the ex-Burma Lines Military site, was previously included in the Lung Yeuk Tau and Kwan Tei South Interim Development Permission Area (IDPA) Plan No. IDPA/NE-LYT/1 which was prepared by the Director of Planning and notified in the Gazette on 17 August 1990. The land within the IDPA Plan was subsequently included in the draft Lung Yeuk Tau and Kwan Tei South Development Permission Area (DPA) Plan No. DPA/NE-LYT/1, which was prepared by the Board and exhibited for public inspection under section 5 of the Town Planning Ordinance (the Ordinance) on 12 July 1991.
- 2.2 On 17 May 1993, under the power delegated by the then Governor, the then Secretary for Planning, Environment and Lands directed the Board, under section 3(1)(a) of the Ordinance, to prepare an OZP for the area of Lung Yeuk Tau and Kwan Tei South.
- 2.3 On 8 March 1994, the then Governor in Council, under section 9(1)(a) of the Ordinance, approved the draft Lung Yeuk Tau and Kwan Tei South DPA Plan, which was subsequently renumbered as DPA/NE-LYT/2.
- 2.4 On 1 July 1994, the draft Lung Yeuk Tau and Kwan Tei South OZP No. S/NE-LYT/1 was exhibited for public inspection under section 5 of the Ordinance. On 9 February 1999, the Chief Executive in Council (CE in C), under section 9(1)(a) of the Ordinance, approved the draft OZP, which was subsequently renumbered as S/NE-LYT/2. On 20 April 1999, the CE in C referred the approved OZP to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The OZP was subsequently amended twice and exhibited for public inspection under the Ordinance.

- 2.5 On 27 June 2000, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Lung Yeuk Tau and Kwan Tei South OZP, which was subsequently renumbered as S/NE-LYT/5. On 18 December 2001, the CE in C referred the approved OZP to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The OZP was subsequently amended and exhibited for public inspection under section 5 of the Ordinance.
- 2.6 On 1 April 2003, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Lung Yeuk Tau and Kwan Tei South OZP, which was subsequently renumbered as S/NE-LYT/7. On 9 December 2003, the CE in C referred the approved OZP to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. ~~The OZP was subsequently amended to incorporate amendments to the Notes of the OZP to reflect the revised Master Schedule of Notes to Statutory Plans endorsed by the Board and exhibited for public inspection under section 5 of the Ordinance.~~ *The OZP was subsequently amended to incorporate amendments to the Notes of the OZP and exhibited for public inspection under section 5 of the Ordinance.*
- 2.7 On 1 February 2005, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Lung Yeuk Tau and Kwan Tei South OZP, which was subsequently renumbered as S/NE-LYT/9. On 12 April 2005, the CE in C referred the approved OZP to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. *The OZP was subsequently amended twice to incorporate amendments to the Notes of the OZP and exhibited for public inspection under section 5 or 7 of the Ordinance.*
- ~~2.8 On 29 April 2005, the draft Lung Yeuk Tau and Kwan Tei South OZP No. S/NE-LYT/10, incorporating mainly amendments to the Notes for the “Agriculture” (“AGR”) zone to include control on filling of land in the Remarks, was exhibited for public inspection under section 5 of the Ordinance. During the exhibition period, two objections were received. On 21 April 2006, the Board gave further consideration to the objections and decided to propose an amendment to partially meet the objections by amending the Remarks in the Notes for the “AGR” zone to exempt filling of land specifically required under the written instructions of Government departments from the planning control. On 19 May 2006, the proposed amendment to the OZP was notified in the Gazette under section 6(7) of the Ordinance. No valid further objection was received during the notification period. On 14 July 2006, the Board agreed that the proposed amendment was a decision under section 6(9) of the Ordinance and the amendment should form part of the OZP.~~
- ~~2.9 On 24 February 2006, the draft Lung Yeuk Tau and Kwan Tei South OZP No. S/NE-LYT/11, incorporating amendment to the definition of “existing building” in the covering Notes, was exhibited for public inspection under section 7 of the Ordinance. No objection was received during the plan exhibition period.~~
- 2.108 On 17 October 2006, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Lung Yeuk Tau and Kwan Tei South OZP, which was subsequently renumbered as S/NE-LYT/12. On 19 February 2008, the CE in C referred the approved OZP to the Board for amendment under section 12(1)(b)(ii) of the Ordinance.

- 2.419 On 28 August 2009, the draft Lung Yeuk Tau and Kwan Tei South OZP No. S/NE-LYT/13, ~~incorporating amendments mainly to rezone a site at Ma Liu Shui San Tsuen from “Residential (Group C)” (“R(C)”) and “Village Type Development” (“V”) to “Government, Institution or Community (1)” (“G/IC(1)”), to rezone another area in Ma Liu Shui San Tsuen near Lung Ma Road from “AGR” to “R(C)” and “V” and to add a set of Notes for the “G/IC(1)” zone,~~ was exhibited for public inspection under section 5 of the Ordinance. ~~During the two-month exhibition period, a total of three representations were received. On 6 November 2009, the Board published the representations for three weeks for public comments and one comment was received. After giving consideration to the representations and comment on 5 February 2010, the Board decided not to propose any amendment to the draft OZP to meet the representations. On 1 June 2010, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Lung Yeuk Tau and Kwan Tei South OZP, which was subsequently renumbered as S/NE-LYT/14.~~
- ~~2.12 On 1 June 2010, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Lung Yeuk Tau and Kwan Tei South OZP, which was subsequently renumbered as S/NE-LYT/14. On 11 June 2010, the approved Lung Yeuk Tau and Kwan Tei South OZP No. S/NE-LYT/14 was exhibited for public inspection under section 9(5) of the Ordinance.~~
- ~~2.13 On 7 February 2012, the CE in C referred the approved Lung Yeuk Tau and Kwan Tei South OZP No. S/NE-LYT/14 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 17 February 2012 under section 12(2) of the Ordinance.~~
- 2.410 On 16 March 2012, the draft Lung Yeuk Tau and Kwan Tei South OZP No. S/NE-LYT/15, incorporating amendments mainly to rezone the ex-Burma Lines Military site from “Comprehensive Development Area” (“CDA”) and “Government, Institution or Community” (“G/IC”) to “Government, Institution or Community (2)” (“G/IC(2)”) and “Green Belt” (“GB”) and to add a set of Notes for the “G/IC(2)” zone, was exhibited for public inspection under section 5 of the Ordinance. During the two-month exhibition period, one representation was received. On 8 June 2012, the Board decided that the representation was invalid. The draft Lung Yeuk Tau and Kwan Tei South OZP was submitted to the CE in C for approval in accordance with section 8 of the Ordinance. On 12 March 2013, the CE in C decided that the decision on the draft OZP should be deferred. On 14 April 2015, the CE in C ordered that the draft Lung Yeuk Tau and Kwan Tei South OZP be referred to the Board for further consideration and amendment under section 9(1)(c) of the Ordinance.
- 2.411 On 29 May 2015, the draft Lung Yeuk Tau and Kwan Tei South OZP No. S/NE-LYT/16, mainly incorporating amendments including the rezoning of the major portion of the ex-Burma Lines Military site (now known as Queen’s Hill site) from “G/IC(2)” to “Residential (Group A)” (“R(A)”), “Residential (Group B)” (“R(B)”), “G/IC” and “Open Space” (“O”) to facilitate housing, international school and public open space developments, and the rezoning of a site at the junction of Sha Tau Kok Road and Lung Ma Road from “R(C)” to “G/IC” for providing Government, institution or community facilities to serve the Queen’s Hill development, and the addition of a set of Notes for the “R(A)”, “R(B)” and “O” zones, was exhibited for

public inspection under section 7 of the Ordinance. ~~During the two-month exhibition period, two representations were received. On 14 August 2015, the Board published the representations for three weeks for public comment and no comment was received. On 13 November 2015, the Board considered the representations and decided not to propose any amendment to the OZP to meet the representations under section 6B(8) of the Ordinance.~~ ***On 2 February 2016, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Lung Yeuk Tau and Kwan Tei South OZP, which was subsequently renumbered as S/NE-LYT/17.***

~~2.16 On 2 February 2016, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Lung Yeuk Tau and Kwan Tei South OZP, which was subsequently renumbered as S/NE-LYT/17. On 19 February 2016, the approved Lung Yeuk Tau and Kwan Tei South OZP No. S/NE-LYT/17 (the Plan) was exhibited for public inspection under section 9(5) of the Ordinance.~~

2.12 On 29 September 2020, the CE in C, under section 12(1)(b)(ii) of the Ordinance, referred the approved Lung Yeuk Tau and Kwan Tei South OZP to the Board for amendment. The reference back of the OZP was notified in the Gazette on 9 October 2020 under section 12(2) of the Ordinance.

2.13 On XX XX 2021, the draft Lung Yeuk Tau and Kwan Tei South OZP No. S/NE-LYT/17A (to be re-numbered as S/NE-LYT/18 upon gazetting) (the Plan) was exhibited for public inspection under section 5 of the Ordinance. The amendments of the Plan include the rezoning of an area to the north of Shan Lai Court from “Residential (Group B)” and “Residential (Group A)” to “Residential (Group A)1” (“R(A)1”); and the incorporation of a piece of land to the south-east of Shung Him Tong Village from the Hok Tau OZP into the planning scheme area and the rezoning of that piece of land together with its adjoining land to the west from “Green Belt” and “Agriculture” to “Other Specified Uses” annotated “Cemetery”.

3. OBJECT OF THE PLAN

- 3.1 The object of the Plan is to indicate the broad land use zonings for the area of Lung Yeuk Tau and Kwan Tei South so that development and redevelopment within the area can be put under statutory planning control. It also provides the planning framework for preparing more detailed non-statutory plans which form the basis for public works planning and site reservation for various uses.
- 3.2 The Plan is to illustrate the broad principles of development and planning control only. It is a small-scale plan and the road alignments and boundaries between the land use zones may be subject to minor adjustments as detailed planning proceeds.
- 3.3 Since the Plan is to show broad land use zonings, there would be situations in which small strips of land not intended for building development purposes and carry no development right under the lease, such as the areas restricted 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 calculation. Development within residential zones should be restricted to building lots carrying development right in order to

maintain the character and amenity of the area and not to overload the road network in this area.

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 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

The Planning Scheme Area (the Area) covered by the Plan is about 377 ha. It is bounded by Sha Tau Kok Road in the north, Princess Hill in the north-east, Lung Shan in the south and Fanling/Sheung Shui New Town in the west. The boundary of the Area is shown by a heavy broken line on the Plan.

6. POPULATION

According to the ~~2011 Census~~ **2016 Population By-census**, the population of the Area was ***estimated by the Planning Department as*** about ~~40,550-10,000~~ persons. It is estimated that the total planned population of the Area would be about ~~52,200~~ **63,400** persons.

7. OPPORTUNITIES AND CONSTRAINTS

7.1 Opportunities

7.1.1 Improved Accessibility

The accessibility of the Area has been enhanced by the dualling of Sha Tau Kok Road (Lung Yeuk Tau to Ping Che Road Section). Widening of Sha Tau Kok Road commenced in November 1995 and was completed in February 1999.

Heung Yuen Wai Highway was completed in 2019 including tunnel section (Lung Shan Tunnel and Cheung Shan Tunnel). There are four interchanges linking up with the Fanling Highway, Sha Tau Kok Road, local road at Ping Yeung and Lin Ma Hang Road respectively. The opening of Heung Yuen Wai Highway would improve the road network in the North

District, including Sha Tau Kok and Ta Kwu Ling.

Fanling Bypass (Eastern Section) is a dual two-lane carriageway connecting the Fanling North New Development Area (NDA) to Fanling Highway, local roads and footpaths, and cycle tracks within the NDA. It can help divert traffic from Fanling/Sheung Shui New Town and alleviate traffic condition in the North District. The project, commenced in 2019, is scheduled for completion in 2025.

7.1.2 Good-Quality Agricultural Land

~~All the actively cultivated agricultural lots are worthy of preservation, particularly those located at the Kwan Tei and Ma Mei Ha areas. Moreover, Agriculture, Fisheries and Conservation Department (AFCD) has extended the Agricultural Land Rehabilitation Scheme to some parts of the Area and implemented programmes to improve the irrigation facilities.~~ *Agricultural lots, especially those under active cultivation in Kwan Tei and Ma Mei Ha areas, are worthy of preservation for agricultural purposes. Arable land with good potential for agricultural rehabilitation should be preserved. The Agriculture, Fisheries and Conservation Department (AFCD) has provided maintenance services on the irrigation channels and weirs on regular basis, and financial assistance to farmers for promotion of agricultural activities in the Area.*

7.2 Constraints

7.2.1 Traffic Aspect

The Area, in close proximity to the Fanling/Sheung Shui New Town, is located between the two boundary crossing points at Man Kam To and Sha Tau Kok. Various industrial and open storage uses have been established in the Area capitalising on locational advantage for being close to the boundary crossing. Traffic volume arising from both heavy goods vehicles and container trucks has increased noticeably along Sha Tau Kok Road.

7.2.2 Drainage Aspect

Parcels of land in the Area fall within the floodplain of the Tan Shan River and Kwan Tei River and are liable to flooding during rainstorm. The presence of extensive flood fringe areas at the north-eastern part of the Area have posed serious constraints on possible development within the Area.

7.2.3 Environmental Aspect

- (a) Extensive site formation works for operation of the unauthorised open storage and industrial uses have led to environmental degradation of the Area, which renders the land difficult to be reinstated to its original conditions. The situation is more apparent for areas along Sha Tau Kok Road and Lau Shui Heung Road.

- (b) Due to the increase in open storage/workshops in the Area, a lot of heavy vehicles are using Sha Tau Kok Road and this induces severe noise and air pollution to the areas along the road.
- (c) Due to booming regional development, the Shek Wu Hui Sewage Treatment Works is approaching its design capacity and has only very limited spare capacity to accommodate additional flow. ~~Further expansion is under planning. Before the treatment plant can actually be upgraded,~~ ***The Shek Wu Hui Sewage Treatment Works is undergoing upgrade in stages. Before the treatment plant completes its full upgrade,*** the use of on-site sewage treatment and disposal facilities particularly for large-scale development would have to be considered as interim measure in the Deep Bay area. ~~The no-net increase in pollution loading to Deep Bay policy by the Environmental Protection Department should be observed.~~ The on-site sewage treatment and disposal facilities should preferably be connected back to public ~~sewage~~ ***sewerage network*** once ***completion of the full upgrade of Shek Wu Hui Sewage Treatment Works and with sufficient capacity to accommodate the additional flow*** ~~plant upgrading can be implemented.~~

7.2.4 Fragmented Land Ownership

Almost 90% of land suitable for development in the Area is privately owned. The fragmented ownership of the land renders acquisition of land for comprehensive development very difficult.

8. GENERAL PLANNING INTENTION

- 8.1 The North East New Territories Development Strategy Review (NENT DSR) has formed the land use planning framework for the NENT. The NENT DSR indicates that the NENT could accommodate a share of the population growth and contribute to the economic development of the territory. Apart from urbanisation, the NENT DSR also recognises the potential recreational opportunities of the NENT in view of the high quality of natural environment and landscape amenity. A balance should therefore be maintained between facilitating development and conservation with the aim of promoting landscape protection.
- 8.2 High priority should be accorded to continue development and intensification of residential uses in the New Town areas. In rural areas, development should concentrate on identified residential nodes and village settlements. In order to minimise potential adverse impacts on existing settlements, it would be appropriate to consider limiting development to identified area.
- 8.3 The primary planning intention of the Area is to conserve the natural environment and ~~to protect the active~~ ***retain both*** agricultural land ***under active cultivation and those fallow land with potential for rehabilitation for agricultural purposes,*** ~~especially those located at the Kwan Tei and Ma Mei Ha areas.~~ Besides, with

improved accessibility of the Area, some areas will be designated for low-density recreational uses.

- 8.4 In the designation of various land use zones in the Area, considerations have been given to the natural environment, physical landform, existing settlements, availability of infrastructure and local development pressures. Other than the above, buildings and places of historical interest should be preserved in the Area as far as possible.

9. LAND USE ZONINGS

9.1 Comprehensive Development Area (“CDA”) : Total Area 0.80 ha

- 9.1.1 One site abutting Sha Tau Kok Road and adjoining Ma Liu Shui San Tsuen is designated as “CDA” in the Area. The planning intention of the “CDA” zone is to facilitate the comprehensive redevelopment of an existing soy sauce factory (mainly for the relocation of another soy sauce factory at Kwai Chung). In view of the surrounding areas which are predominantly rural and agricultural in character, a more stringent control on the layout, disposition of buildings and building height of the proposed soy sauce factory is required. The Notes stipulate that total development or redevelopment for this “CDA” site is subject to a maximum non-domestic plot ratio of 0.9, a maximum non-domestic site coverage of 46% and a maximum building height of 12m, or the plot ratio, site coverage and height of the building which was in existence on the date of the first publication in the Gazette of the notice of the IDPA plan, whichever is the greater.
- 9.1.2 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio, site coverage and building height restrictions stated in paragraph 9.1.1 above may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.
- 9.1.3 Under section 4A(2) of the Ordinance, the developer of this “CDA” zone is required to submit planning application in the form of a Master Layout Plan (MLP) together with relevant studies on traffic, environment, sewerage and drainage impacts for consideration of the Board. The requirement for submission of MLP would ensure that any proposed development would be implemented in a co-ordinated and comprehensive manner, and potential adverse impacts on the environment, traffic and drainage conditions would be properly considered and mitigated.
- 9.1.4 Upon approval of the Board, a copy of the approved MLP shall be made available for public inspection in the Land Registry pursuant to section 4A(3) of the Ordinance.

9.2 Residential (Group A) ("R(A)") : Total Area 13.78 ~~17.75~~ ha

9.2.1 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 portions of an existing building. The lowest three floors of a building include basements but exclude any floor used wholly or mainly for ancillary car parking, loading/unloading bay and/or plant room. Commercial uses on any floor above the lowest three floors will require planning permission from the Board.

9.2.2 A site at the Queen's Hill site (*now developed as Shan Lai Court and Queens Hill Estate*) is zoned "R(A)" for this purpose intended for public housing development. Local open spaces, kindergartens, primary schools, recreational facilities, community hall, social welfare/community facilities, public transport terminus and neighbourhood shopping facilities will be provided to serve the needs of the residents and/or the wider district. *Developments or redevelopments within the "R(A)" zone are subject to a maximum plot ratio of 6 and a maximum building height of 145mPD. A planning brief setting out the planning parameters and the design requirements of public housing development for the "R(A)" zone has been provided to guide its future development.*

~~9.2.3 Developments or redevelopments within this zone are subject to a maximum plot ratio of 6 and a maximum building height of 145mPD, or the plot ratio and height of the building which was in existence on the date of the first publication in the Gazette of the notice of the draft OZP No. S/NE-LYT/3 (i.e. 20 August 1999), whichever is the greater.~~

~~9.2.4 An Expert Evaluation on Air Ventilation Assessment (AVA-EE) was conducted for the public housing development. To facilitate wind penetration through the public housing development, design features and mitigation measures including the creation of a wind corridor of at least 100m, building separation and air paths of sufficient width aligning with prevailing winds, empty bays at ground and first levels, and stepped height profile should be adopted. The development is proposed to apply additional improvement measures including the use of permeable structures at ground level and widening of the air path to facilitate penetration of summer prevailing winds. Details of these measures should be referred to the AVA-EE report dated 2015.~~

~~9.2.5 At detailed design stage, quantitative air ventilation studies will need to be conducted for the public housing development to further refine the development layout and the relevant mitigation measures from the air ventilation perspectives.~~

~~9.2.6 As the site may be affected by potential natural terrain hazards and subject to flooding in the low-lying area, provision of appropriate hazard mitigation measures and upgrading of infrastructure may be required for future development on the site.~~

~~9.2.7 Minor relaxation of the plot ratio and/or building height restrictions for this zone may be considered by the Board on application under section 16 of the Ordinance. Each application for minor relaxation of plot ratio and/or building height restrictions will be considered on its own merits.~~

~~9.2.8 A planning brief setting out the planning parameters and the design requirements of public housing development at this zone will be provided to guide its future development.~~

9.2.3 *A site located to the north of Shan Lai Court is zoned “R(A)1” intended for housing development. The area is subject to a maximum plot ratio of 7.0 and a maximum building height of 175mPD. GIC facilities, kindergarten(s) as well as retail facility will be provided within the site. The provision or use of premises for GIC facilities would be subject to change to cope with the prevailing demand as requested by relevant Government departments. In determining the maximum plot ratio of the development and/or redevelopments within the “R(A)1” zone, any floor space that is constructed or intended for use solely as GIC facilities, as required by the Government, may be disregarded to facilitate the provision of these facilities. A planning brief setting out the development parameters and the design requirement of the site will be provided to guide the future development of the site. The plot ratio control under this zone is regarded as being stipulated in a “new or amended statutory plan” according to the Joint Practice Note No. 4 “Development Control Parameters Plot Ratio/Gross Floor Area”, and shall be subject to the streamlining arrangements stated therein.*

9.2.4 *Minor relaxation of the plot ratio and/or building height restrictions for the “R(A)” and “R(A)1” zones may be considered by the Board on application under section 16 of the Ordinance. Each application for minor relaxation of plot ratio and/or building height restrictions will be considered on its own merits.*

~~9.3 Residential (Group B) (“R(B)”) : Total Area 3.97 ha~~

~~9.3.1 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.~~

~~9.3.2 A site to the northeast of the Queen’s Hill public housing development and to the south of village settlement of Fu Tei Pai is zoned for this purpose intended for private housing development. The building height should respect the ridgeline of Queen’s Hill at about 85mPD. In order not to jeopardize the infrastructure capacity, the population intake of this site should tie in with the completion of the proposed Fanling Bypass (Eastern Section) which is tentatively scheduled for 2023.~~

~~9.3.3 Developments or redevelopments within this zone are subject to a maximum plot ratio of 3.6 and a maximum building height of 85mPD, or the plot ratio and height of the building which was in existence on the date of the first publication in the Gazette of the notice of the draft OZP No. S/NE-LYT/3 (i.e.~~

~~20 August 1999), whichever is the greater.~~

~~9.3.4 As the site may be affected by potential natural terrain hazards, provision of appropriate hazard mitigation measures and upgrading of infrastructure may be required for future development on the site.~~

~~9.3.5 Minor relaxation of the plot ratio and/or building height restrictions for this zone may be considered by the Board on application under section 16 of the Ordinance. Each application for minor relaxation of plot ratio and/or building height restrictions will be considered on its own merits.~~

9.43 Residential (Group C) ("R(C)") : Total Area 10.38 ha

9.43.1 This zone is intended primarily for low-rise, low-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Board. The site of Ma Liu Shui San Tsuen in the Area consists of a number of low-density houses. This area is zoned "R(C)" with a view to reflecting the existing use. At the same time, private initiatives are encouraged to promote comprehensive low-rise and low-density residential developments mainly through land exchange or lease modification. The development parameters of the zone are restricted to a low level to control the growth in population in the area arising from redevelopment of residential units, so that the infrastructure in the Area will not be overloaded. In order to retain the rural character of the area and its surrounding areas, no new development or redevelopment (except those annotated with #) shall exceed a maximum plot ratio of 0.2 and a maximum building height of 2 storeys (6m) over 1 storey carport, or the plot ratio, site coverage and height of the building which was in existence on the date of the first publication in the Gazette of the notice of the IDPA plan, whichever is the greater. Footpaths of 1.6m wide should be provided on both sides of the existing access roads within the zone to cater for future population growth and to improve pedestrian safety in the area.

9.43.2 However, there are a number of industrial/open storage uses within this zone. The long-term planning intention is to upgrade the environment of this area by generally removing the non-compatible uses and to encourage low-density residential development with ancillary facilities.

9.43.3 It is envisaged that areas along Sha Tau Kok Road would be exposed to severe traffic noise impact. Self-protective design concept (i.e. proper layout plan design and implementation programme for such measures or erection of noise screening structures by individual lot owners) should be imposed on new developments and redevelopments in the zone.

9.43.4 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio and building height restrictions stated in paragraph 9.4.1 above may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.

9.54 Village Type Development (“V”) : Total Area 79.37 ha

- 9.54.1 The planning intention of this zone is to designate both existing recognized villages and areas of land considered suitable for village expansion. Land within this zone is primarily intended for development of Small Houses by indigenous villagers. It is also intended to concentrate village type development within this zone for a more orderly development pattern, efficient use of land and provision of infrastructures and services. Selected commercial and community uses serving the needs of the villagers and in support of the village development are always permitted on the ground floor of a New Territories Exempted House. Other commercial, community and recreational uses may be permitted on application to the Board.
- 9.54.2 The boundaries of the “V” zones are drawn up having regard to the village ‘environs’ of the recognized villages, the local topography, the existing land use pattern, the provision of infrastructural facilities, the approved applications for Small House development, the outstanding Small House applications, as well as the Small House demand forecast. Areas of difficult terrain, dense vegetation, burial grounds and streamcourses have been avoided. Village expansion areas and other infrastructural improvements will be guided by detailed layout plans whenever applicable.
- 9.54.3 The “V” zone covers the recognized villages in the Area, namely Ma Mei Ha Village, Ma Mei Ha Leng Tsui Village, Leng Pei Tsuen, Kan Tau Tsuen, Tan Chuk Hang Lo Wai, Tan Chuk Hang Village, Ko Po Village, San Tong Po Village, Lau Shui Heung Village, Kwan Tei Village, Fu Tei Pai Village, Ma Liu Shui San Tsuen, San Wai, Kan Lung Tsuen, San Uk Tsuen, Wing Ning Wai, Wing Ning Tsuen, Tung Kok Wai, Tsz Tong Tsuen, Ma Wat Tsuen, Ma Wat Wai, Lo Wai, Shung Him Tong Village and Tong Hang Village.
- 9.54.4 Those “V” zones adjoining Sha Tau Kok Road, viz. San Uk Tsuen and Kwan Tei Village, would be exposed to severe traffic noise impact. In view of this, self-protective design concept should be incorporated into new and affected Small House developments. Proper layout plan design and firm implementation programme for noise mitigation measures or erection of noise screening structures by individual house owner should be required.
- 9.54.5 The “V” zones at Ma Mei Ha Village, Leng Pei Tsuen, Ko Po Village and Lau Shui Heung Village are located below steep natural terrain. Development at these areas may be affected by potential natural terrain landslide hazards. Therefore, natural terrain hazard study and/or mitigation works may be required for any proposed development.
- 9.54.6 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the building height restriction stated in the Notes may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.

9.-65 Government, Institution or Community (“G/IC”) : Total Area 12.11 ha

- 9.65.1 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. As detailed planning proceeds, land may be designated from other uses to this zoning to meet the envisaged demands of the growing population of this Area.
- 9.65.2 A site to the east of the public housing development at the Queen’s Hill site is reserved for development of international school use. In order not to jeopardize the infrastructure capacity, the development of this site should tie in with the completion of the proposed Fanling Bypass (Eastern Section) which is tentatively scheduled for ~~2023~~ **2025**. As the site may be affected by potential natural terrain hazards, provision of appropriate hazard mitigation measures and upgrading of infrastructure may be required for future development on the site.
- 9.65.3 A site at the junction of Sha Tau Kok Road and Lung Ma Road is reserved mainly for provision of a divisional fire station cum ambulance depot, a sewage pumping station and an electricity substation to serve the Queen’s Hill development and the wider district.
- 9.65.4 The Precious Blood Children’s Village and its proposed extension and Suen Doh Camp are designated “G/IC” on the Plan. Four vacant school premises and the ex-Ko Po Agricultural Extension Office are retained “G/IC” to meet the long-term needs.
- 9.65.5 A site in Ma Liu Shui San Tsuen is zoned “G/IC(1)” with ‘Religious Institution’ use under Column 2 in the Notes to retain control on the religious use through planning permission. This is intended primarily for the development of a religious institution (chapel) and its proposed extension. Any development on land zoned “G/IC(1)” shall be compatible and blend in harmoniously with its surrounding environment. No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 0.38, and a maximum building height of 2 storeys (excluding basement(s)) as well as not exceeding 19 metres above Principal Datum and 22 metres above Principal Datum respectively for the north-western and south-eastern part of the site, as demarcated by the pecked line on the Plan. Minor relaxation of the plot ratio/building height restrictions would be considered on application to the Board through the planning permission system. Each proposal will be considered on the individual planning merits.

9.76 Open Space (“O”) : Total Area 3.68 ha

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

9.76.2 A site located to the south of the Queen’s Hill public housing development is reserved for district open space use. The site is characterized with extensive woodland and undulating terrain with pleasant greenery setting. A Hindu Temple, which is a Grade 3 historic building, is located in the east of the site. The design of the open space should pay due regard to preserving the existing woodlands and graded historic building, enhancing natural landscape, minimizing tree felling and reducing site formation work.

9.87 Recreation (“REC”) : Total Area 15.35 ha

9.87.1 This zone is intended primarily for the improvement of the environmental quality of the designated areas by offering incentives for low-density recreational development in the zone. It encourages the development of active and/or passive recreation and tourism. Uses in support of the recreational developments may be permitted subject to planning permission.

9.87.2 Two sites are designated as “REC” zone on the Plan, viz. an area near Tong Hang Village at the southern part of the Area and a stretch of land along Lau Shui Heung Road leading to Po Kat Tsai. The two areas are at present occupied by some open storage and car-park uses. However, due to the close proximity of the former site to Tong Hang Village and the tranquil environment of the two “REC” sites, it is not the long-term intention to tolerate these non-conforming uses. With the “REC” zoning, it is intended to phase out the existing open storage uses and improve the environmental quality of the areas.

9.87.3 Recreational uses like holiday camp with sporting facilities, e.g. tennis courts and swimming pools, etc. are always permitted within this zone. However, the recreational development in this area should be restricted to low-density development so as not to overload the infrastructure of the area and create nuisance to the villagers. No residential development shall result in a total development in excess of a maximum plot ratio of 0.2 and a maximum building height of 2 storeys (6m). However, as part of the “REC” site in Tong Hang falls within a village ‘environ’, provision has been made in the Remarks of the Notes to allow for exemption for development of New Territories Exempted House from these restrictions.

9.87.4 Consideration may be given to upgrade the existing Lau Shui Heung Road and the road branching off Po Kat Tsai to 7.3m wide with 1.6m wide footpath on both sides of the road should there be a need to cater for any increased traffic demand and improve the accessibility of the “REC” site at Lau Shui Heung Road.

9.87.5 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio and building height restrictions stated in paragraph 9.8.3 above may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.

9.98 Other Specified Uses (“OU”) : Total Area ~~3.35~~ **3.7** ha

9.98.1 The planning intention of this zone is to allocate land for specified uses.

9.98.2 A strip of land at the southern part of the Area is zoned “OU (Railway)”. The land is occupied by the railway tracks of Mass Transit Railway Corporation.

9.98.3 Two parcels of land near Tong Hang are zoned “OU (Petrol Filling Station)” for an existing petrol filling station and a proposed petrol and liquefied petroleum gas filling station. The area to the south of Tong Hang zoned “OU (Amenity Area)” is intended for development of nursery garden, landscape and amenity area.

9.8.4 *Sung Him Tong Sung Chan Wui Kei Tuk Kau Fan Cheung including the cemetery and columbarium uses to the south-east of Shung Him Tong Village is zoned “OU” annotated “Cemetery” with a view to reflecting the existing cemetery use. Based on the individual merits of a development or redevelopment proposal, minor relaxation of the restriction on maximum number of niches may be considered by the Board under section 16 of the Ordinance.*

9.409 Agriculture (“AGR”) : Total Area ~~144.37~~ **144.19** ha

9.409.1 This zone is intended primarily to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. ***It is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes.*** Extensive ~~active~~ agricultural land is found in the Area. From agricultural point of view, all the ~~active~~ agricultural lots are worthy of preservation, particularly those located at the Kwan Tei and Ma Mei Ha areas which are good quality agricultural land. The zoned areas are well served by ~~irrigation~~ **infrastructure** and marketing facilities for ~~intensive~~ farming. Agricultural Land Rehabilitation Scheme has been extended to these areas. Moreover, AFCD has been maintaining the irrigation weirs and channels at Ma Mei Ha. Improvement works to infrastructure, such as farm access, are also implemented under the Rural Public Works to promote agricultural activities in the Area.

~~9.10.2 This zone is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes, and to encourage the re-cultivation of good arable land by providing improvement to irrigation, drainage and access.~~

~~9.10.3~~ 9.2 As filling of land/pond may cause adverse drainage and environmental impacts on the adjacent areas, permission from the Board is required for such

activities. However, filling of land specifically required under prior written instructions of Government department(s), or for the purposes of genuine agricultural practice including laying of soil not exceeding 1.2m for cultivation, and construction of agricultural structure with prior written approval from the Lands Department is exempted from the control.

9.104 Green Belt (“GB”) : Total Area 81.79 ha

9.140.1 The planning intention of this zone is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets. The zoned areas include foothills, lower hill slopes, spurs, isolated knolls, woodland, and permitted burial grounds for indigenous villagers.

9.140.2 The “GB” zone in the Area mainly consists of the mountainous areas at Po Kat Tsai which are covered by dense vegetation and woodland worthy of preservation, the Queen’s Hill near Lau Shui Heung and the dense, vegetated area to the north of Tong Hang. Moreover, some isolated knolls and burial grounds, etc. are also zoned “GB”.

9.140.3 The Area is separated by mountain ranges from the Pat Sin Leng Country Park. Some of the mountainous areas bordering the foothills of Tai Leng Pei and Lung Shan are zoned “GB” and served as a buffer in between. There is a general presumption against development within this zone. However, limited developments may be permitted if they are justified on strong planning grounds. Developments requiring planning permission from the Board will be assessed on their individual merits taking into account the relevant Town Planning Board Guidelines.

9.140.4 As filling of land/pond and excavation of land may cause adverse drainage impacts on the adjacent areas and adverse impacts on the natural environment, permission from the Board is required for such activities.

10. CULTURAL HERITAGE

10.1 A site of archaeological interest, namely the Queen’s Hill Site of Archaeological Interest, falls within the Plan boundary. A number of declared monuments and graded historic buildings are also located within the Area. Kun Lung Gate Tower, Enclosing Walls and Corner Watch Towers of Kun Lung Wai, Entrance Tower of Ma Wat Wai, Entrance Tower and Enclosing Walls of Lo Wai, Tang Chung Ling Ancestral Hall and Tin Hau Temple are declared monuments, whereas Shin Shut Study Hall (Grade 1), Entrance Tower and Enclosing Wall of Tung Kok Wai (Grade 1), the Main Building and Annex Block of Shek Lo (Grade 1), the Main Building and Entrance Gate of Kin Tak Lau (both Grade 1), Hung Leng Station (Grade 3), Yi Kung Lok Mansion (Grade 3), Tsung Kyam Church (Grade 3), Entrance Gate of Wing Ning Wai (Grade 3), Hindu Temple of Queen’s Hill (Grade 3), Nos. 1 and 2 Ko Po Tsuen (Grade 3), No. 3 Ko Po Tsuen (Grade 3) and Entrance Hall of Nos. 4 to 7 Ko Po Tsuen (Grade 3) are graded historic buildings. All the above site of archaeological interest, declared monuments and graded historic buildings / structures are worthy of

preservation.

- 10.2 The Antiquities Advisory Board (AAB) also released a list of new items in addition to the list of 1,444 historic buildings. These items are subject to grading assessment by the AAB. Details of the list of 1,444 historic buildings and the new items have been uploaded onto the website of the AAB at <http://www.aab.gov.hk>.
- 10.3 Prior consultation with the Antiquities and Monuments Office of the ~~Leisure and Cultural Services Department~~ **Development Bureau** should be made if any development, redevelopment or rezoning proposal might affect the above site of archaeological interest declared monuments, graded historic buildings / structures, new items pending grading assessment, and their immediate environs.

11. COMMUNICATIONS

11.1 Road Network

The Area is closely linked to Fanling/Sheung Shui New Town, Ping Che and Sha Tau Kok via the main road network of Sha Tau Kok Road and Ping Che Road. The Area is easily accessible. Within the Area, Lau Shui Heung Road runs along the central part of the Area in a north-south direction. The villages in the Area are accessible via roads and village tracks branching off Sha Tau Kok Road.

11.2 Transport Provision

The Area is served by public transport facilities, including green mini-buses, buses and taxis running between the Fanling/Sheung Shui New Town and the Ma Mei Ha area via Sha Tau Kok Road.

11.3 Road Improvement

Dualling of Sha Tau Kok Road from Lung Yeuk Tau to Ping Che Road (under Public Works Programme (PWP) Item No. 6528 TH) commenced in November 1995 and was completed in February 1999. A section of Sha Tau Kok Road from Lung Yeuk Tau to the junction at Ping Che Road has been widened to a dual 2-lane carriageway and additional pedestrian crossing facilities have been provided.

12. UTILITY SERVICES

12.1 Sewerage and Drainage Systems

12.1.1 The use of on-site treatment and disposal facilities, meeting effluent discharge standards prescribed by the Technical Memorandum as stipulated under the Water Pollution Control Ordinance, to support new development is acceptable as an interim measure prior to the availability of additional treatment capacity at the Shek Wu Hui Sewage Treatment Works. These on-site sewage treatment and disposal facilities should preferably be connected back into the public sewerage system once upgrading of the

treatment plant and local sewerage is completed. ~~The no net increase in pollution loading to Deep Bay policy pursued by the Environmental Protection Department should be observed.~~

- 12.1.2 Areas along Ng Tung River and its tributaries are susceptible to flooding. In view of this, there are river training projects, namely “PWP Item No. 4125CD – Drainage Improvement from Tung Kok Wai to San Wai, Fanling” and “PWP Item No. 4151CD – Drainage improvement works in Lung Yeuk Tau, Kwan Tei South and Leng Tsai, Fanling”, to improve the local drainage system and reduce the risk of flooding in the areas of Lung Yeuk Tau.

12.2 Other Public Utility Services

- 12.2.1 Basic utilities like water, electricity and telephone services are provided by respective Government departments and utility companies to the Area.

- 12.2.2 The Hong Kong and China Gas Co. Ltd. has laid a medium gas main along Sha Tau Kok Road from Lung Yeuk Tau to Ping Che Road in conjunction with dualling of Sha Tau Kok Road by Highways Department.

13. IMPLEMENTATION

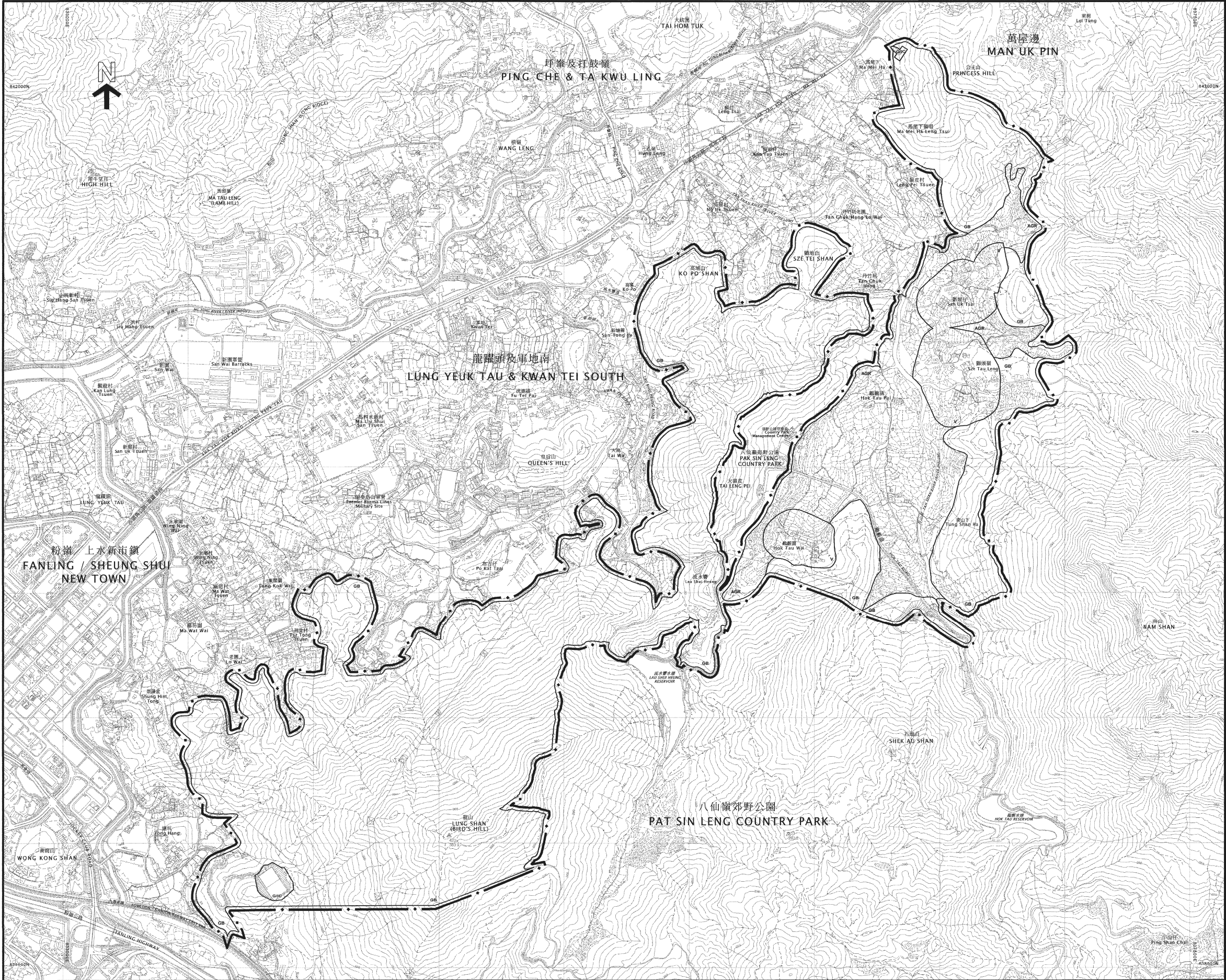
- 13.1 The Plan provides a broad land use framework for development control and implementation of planning proposals for the Area. More detailed plans will be prepared as a basis for public works planning and private developments.
- 13.2 At present, there is no overall programme for the provision of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

14. PLANNING CONTROL

- 14.1 The types of permitted developments and uses within the Area are listed in the Notes to the Plan. Unless otherwise specified, all building, engineering and other operations incidental to and all uses directly related and ancillary to the permitted developments and uses within the same zone are always permitted and no separate permission is required.
- 14.2 Uses of land or building which were in existence immediately before the first publication in the Gazette of the notice of the IDPA plan and which are not in

compliance with the terms of the Plan may have adverse impact on the environment, drainage and traffic of the area. Although no action is required to make such use conform to this Plan, any material change of such use or any other development (except minor alteration and/or modification to the development of the land or building in respect of such use which is always permitted) must be always permitted in terms of the Plan or, if permission is required, in accordance with a permission granted by the Board. The Board will consider these applications on their individual merits. Those alteration and/or modification works which may lead to an environmental improvement or upgrading to the Area may be considered favourably by the Board.

- 14.3 Planning applications to the Board will be assessed on individual merits. In general, the Board, in considering the planning applications, will take into account all relevant planning considerations which may include the departmental outline development plans and layout plans, and 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 application can be downloaded from the Board's website and are available from the Secretariat of the Board, and the Technical Services Division and relevant District Planning Office of the Planning Department. Applications should be supported by such materials as the Board thinks appropriate to enable it to consider the applications.
- 14.4 Any development, other than those referred to in paragraph 14.1 above or in conformity with this Plan or with the permission of the Board, undertaken or continued on or after 17 August 1990 on land included in a plan of the Lung Yeuk Tau and Kwan Tei South IDPA may be subject to enforcement proceedings under the Ordinance. Any filling of land/pond and excavation of land in the relevant zones on or after the exhibition of the specific plan referred to in the Notes of the relevant zones without the permission from the Board may also be subject to enforcement proceedings.



圖例
NOTATION

ZONES	地帶
VILLAGE TYPE DEVELOPMENT	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	政府、機構或社區
AGRICULTURE	農業
GREEN BELT	綠化地帶
MISCELLANEOUS	其他
BOUNDARY OF PLANNING SCHEME	規劃範圍界線

土地用途及面積一覽表
SCHEDULE OF USES AND AREAS

USES	大約面積及百分比 APPROXIMATE AREA & %		用途
	公頃 HECTARES	% 百分率	
VILLAGE TYPE DEVELOPMENT	24.19	6.88	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	1.89	0.54	政府、機構或社區
AGRICULTURE	56.32	16.03	農業
GREEN BELT	268.96	76.55	綠化地帶
TOTAL PLANNING SCHEME AREA	351.36	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

香港城市規劃委員會依據城市規劃條例擬備的鶴藪分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
HOK TAU - OUTLINE ZONING PLAN

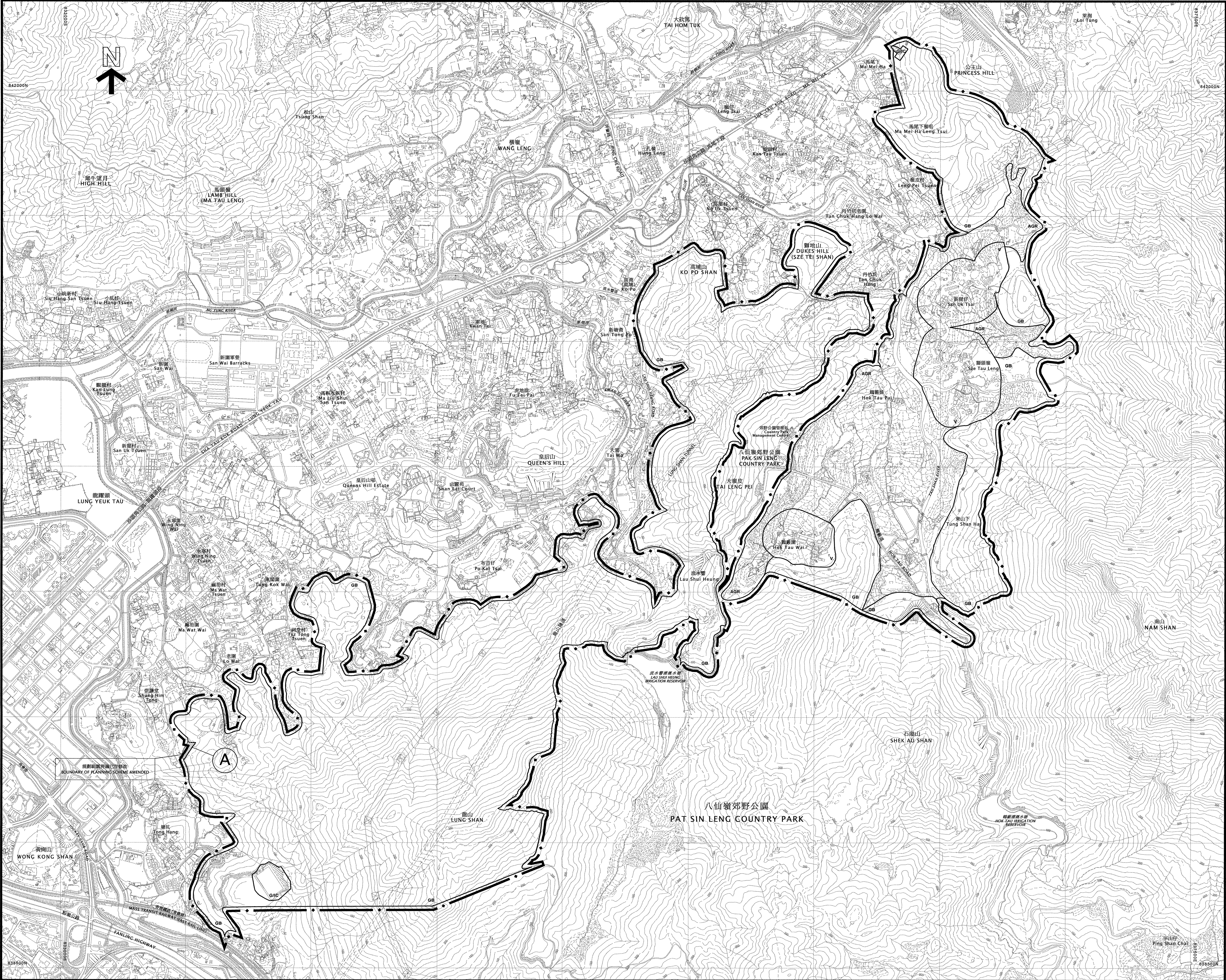
行政長官會同行政會議於2006年10月17日根據城市
規劃條例第9(1)(a)條核准的圖則
APPROVED BY THE CHIEF EXECUTIVE IN COUNCIL UNDER
SECTION 9(1)(a) OF THE TOWN PLANNING ORDINANCE ON
17 OCTOBER 2006

LAM Chik-ting, Tony 林植廷
CLERK TO THE EXECUTIVE COUNCIL 行政會議秘書

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

圖則編號
PLAN No. S/NE-HT/5

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



圖例
NOTATION

ZONES

- VILLAGE TYPE DEVELOPMENT
- GOVERNMENT, INSTITUTION OR COMMUNITY
- AGRICULTURE
- GREEN BELT

地帶

- 鄉村式發展
- 政府、機構或社區
- 農業
- 綠化地帶

MISCELLANEOUS

BOUNDARY OF PLANNING SCHEME

其他

規劃範圍界線

土地用途及面積一覽表
SCHEDULE OF USES AND AREAS

USES	大約面積及百分率 APPROXIMATE AREA & %		用途
	公頃 HECTARES	% 百分率	
VILLAGE TYPE DEVELOPMENT	24.19	6.89	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	1.89	0.54	政府、機構或社區
AGRICULTURE	56.32	16.04	農業
GREEN BELT	268.79	76.53	綠化地帶
TOTAL PLANNING SCHEME AREA	351.19	100.00	規劃範圍總面積

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

核准圖編號 S / N E - H T / 5 的修訂
AMENDMENT TO APPROVED PLAN No. S/NE-HT/5

AMENDMENT EXHIBITED UNDER SECTION 5
OF THE TOWN PLANNING ORDINANCE

按照城市規劃條例第 5 條
展示的修訂

AMENDMENT ITEM A



修訂項目 A 項

(參看附表)
(SEE ATTACHED SCHEDULE)

香港城市規劃委員會依據城市規劃條例擬備的鶴藪分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
HOK TAU - OUTLINE ZONING PLAN

SCALE 1:7500 比例尺
米 METRES 200 0 200 400 600 800 1 000 METRES 米

圖則編號
PLAN No. S/NE-HT/5A

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



APPROVED DRAFT HOK TAU OUTLINE ZONING PLAN NO. S/NE-HT/54

(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) No action is required to make the use of any land or building which was in existence immediately before the first publication in the Gazette of the notice of the draft development permission area plan conform to this Plan, provided such use has continued since it came into existence. Any material change of such use or any other development (except minor alteration and/or modification to the development of the land or building in respect of such use which is always permitted) must be always permitted in terms of the Plan or in accordance with a permission granted by the Town Planning Board.
- (4) A use or development of any land or building permitted under an earlier draft or approved plan including development permission area plan for the area and effected or undertaken during the effective period of that plan is always permitted under this Plan. Any material change of such use or any other development (except minor alteration and/or modification to the completed development of the land or building which is always permitted) must be always permitted in terms of the Plan or in accordance with a permission granted by the Town Planning Board.
- (5) Except to the extent that paragraph (3) or (4) applies, any use or development falling within the boundaries of the Plan and also within the boundaries of the draft development permission area plan, unless always permitted in terms of the Plan, shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the draft development permission area plan without permission from the Town Planning Board.

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

- (10) (a) Temporary use or development of any land or building not exceeding a period of two months is always permitted provided that no site formation (filling or excavation) is carried out and that the use or development is a use or development specified below:
- structures for carnivals, fairs, film shooting on locations, festival celebrations, religious functions or sports events.
- (b) Except as otherwise provided in paragraph (10)(a), temporary use or development of any land or building not exceeding a period of three years requires permission from the Town Planning Board. Notwithstanding that the use or development is not provided for in terms of the Plan, the Town Planning Board may grant permission, with or without conditions, for a maximum period of three years, or refuse to grant permission.
- (c) Temporary uses or development of land or building exceeding three years requires permission from the Town Planning Board in accordance with the terms of the Plan.
- (11) 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.
- (12) In these Notes, unless the context otherwise requires or unless as expressly provided below, terms used in the Notes shall have the meanings as assigned under section 1A of the Town Planning Ordinance.

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

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

APPROVED DRAFT HOK TAU OUTLINE ZONING PLAN NO. S/NE-HT/5A

Schedule of Uses

	<u>Page</u>
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GOVERNMENT, INSTITUTION OR COMMUNITY	3
AGRICULTURE	4
GREEN BELT	6

VILLAGE TYPE DEVELOPMENT

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

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

Eating Place
Library
School
Shop and Services

(Please see next page)

VILLAGE TYPE DEVELOPMENT (Cont'd)

Planning Intention

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

Remarks

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

GOVERNMENT, INSTITUTION OR COMMUNITY

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

Planning Intention

This zone is intended primarily for the provision of Government, institution or community facilities serving the needs of the local residents and/or a wider district, region or 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.

AGRICULTURE

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Agricultural Use	Animal Boarding Establishment
Government Use (Police Reporting Centre only)	Barbecue Spot
On-Farm Domestic Structure	Burial Ground
Public Convenience	Field Study/Education/Visitor Centre
Religious Institution (Ancestral Hall only)	Government Refuse Collection Point
Rural Committee/Village Office	Government Use (not elsewhere specified)
	House (New Territories Exempted House only, other than rebuilding of New Territories Exempted House or replacement of existing domestic building by New Territories Exempted House permitted under the covering Notes)
	Picnic Area
	Place of Recreation, Sports or Culture (Horse Riding School, Hobby Farm, Fishing Ground only)
	Public Utility Installation
	Religious Institution (not elsewhere specified)
	School
	Utility Installation for Private Project

Planning Intention

This zone is intended primarily to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes. It is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes.

Remarks

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

(Please see next page)

AGRICULTURE (Cont'd)

Remarks (Cont'd)

- (b) Any filling of land, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes (except public works co-ordinated or implemented by Government, and maintenance, repair or rebuilding works), shall not be undertaken or continued on or after the date of the first publication in the Gazette of the notice of the draft Hok Tau Outline Zoning Plan No. S/NE-HT/3 without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance. This restriction does not apply to filling of land specifically required under prior written instructions of Government department(s) or for the purposes specified below:
- (i) laying of soil not exceeding 1.2m in thickness for cultivation; or
 - (ii) construction of any agricultural structure with prior written approval issued by the Lands Department.

GREEN BELT

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

* 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.

(Please see next page)

GREEN BELT (Cont'd)

Planning Intention

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

Remarks

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

APPROVED *DRAFT* HOK TAU OUTLINE ZONING PLAN NO.
S/NE-HT/54

EXPLANATORY STATEMENT

APPROVED DRAFT HOK TAU OUTLINE ZONING PLAN NO. S/NE-HT/5A

EXPLANATORY STATEMENT

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APPROVED DRAFT HOK TAU OUTLINE ZONING PLAN NO. S/NE-HT/5A

(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** Hok Tau Outline Zoning Plan (OZP) No. S/NE-HT/5A. It reflects the planning intention and objectives of the Town Planning Board (the Board) for various land use zonings of the Plan.

2. **AUTHORITY FOR THE PLAN AND PROCEDURE**

2.1 The land within the draft Hok Tau OZP was previously included in the draft Hok Tau Development Permission Area (DPA) Plan No. DPA/NE-HT/1 which was prepared by the Board and exhibited for public inspection under section 5 of the Town Planning Ordinance (the Ordinance) on 13 October 2000.

~~2.2 During the exhibition period of the draft DPA Plan, two objections were received. After giving preliminary and further considerations to the two objections, the Board decided not to propose any amendment to the draft DPA Plan to meet the objections~~

2.32 On 10 July 2001, the Chief Executive in Council, under section 9(1)(a) of the Ordinance, approved the draft Hok Tau DPA Plan, which was subsequently renumbered as DPA/NE-HT/2.

2.43 On 15 May 2003, under the power delegated by the Chief Executive, the Secretary for Housing, Planning and Lands directed the Board, under section 3(1)(a) of the Ordinance, to prepare an OZP for the Hok Tau area.

2.54 On 26 September 2003, the draft Hok Tau OZP No. S/NE-HT/1 was exhibited for public inspection under section 5 of the Ordinance. ~~During the exhibition period, no objection was received.~~ **On 14 September 2004, the Chief Executive in Council, under section 9(1)(a) of the Ordinance, approved the draft Hok Tau OZP, which was subsequently renumbered as S/NE-HT/2. On 12 April 2005, the CE in C referred the approved OZP to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The OZP was subsequently amended twice to incorporate amendments to the Notes of the OZP.**

~~2.6 On 14 September 2004, the Chief Executive in Council, under section 9(1)(a) of the Ordinance, approved the draft Hok Tau OZP, which was subsequently renumbered as S/NE-HT/2. On 24 September 2004, the approved Hok Tau~~

~~OZP No. S/NE-HT/2 was exhibited for public inspection under section 9(5) of the Ordinance.~~

~~2.7 On 12 April 2005, the CE in C referred the approved Hok Tau OZP No. S/NE-HT/2 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The reference of the OZP for amendment was notified in the Gazette on 22 April 2005 under section 12(2) of the Ordinance.~~

~~2.8 On 29 April 2005, the draft Hok Tau OZP No. S/NE-HT/3, incorporating mainly amendments to the Notes for the "Agriculture" zone to include control on filling of land in the covering Notes, was exhibited for public inspection under section 5 of the Ordinance. During the exhibition period, two objections were received. On 21 April 2006, the Board gave further consideration to the objections and decided to propose an amendment to partially meet the objections by amending the Remarks in the Notes for the "Agriculture" zone to exempt filling of land specifically required under the written instructions of Government departments from the planning control. On 19 May 2006, the proposed amendment to the OZP was notified in the Gazette under section 6(7) of the Ordinance. No valid further objection was received during the notification period. On 14 July 2006, the Board agreed that the proposed amendment was a decision under section 6(9) of the Ordinance and the amendment should form part of the OZP.~~

~~2.9 On 24 February 2006, the draft Hok Tau OZP No. S/NE-HT/4, incorporating amendment to the definition of "existing building" in the covering Notes, was exhibited for public inspection under section 7 of the Ordinance. No objection was received during the plan exhibition period.~~

~~2.105 On 17 October 2006, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Hok Tau OZP, which was subsequently renumbered as S/NE-HT/5. On 27 October 2006, the approved Hok Tau OZP No. S/NE-HT/5 (the Plan) was exhibited for public inspection under section 9(5) of the Ordinance. On 29 September 2020, the CE in C, under section 12(1)(b)(ii) of the Ordinance, referred the approved OZP to the Board for amendment. The reference back of the OZP was notified in the Gazette on 9 October 2020 under section 12(2) of the Ordinance.~~

2.6 On XX XX 2021, the draft Hok Tau OZP No. S/NE-HT/5A (to be re-numbered as S/NE-HT/6 upon gazetting) (the Plan) was exhibited for public inspection under section 5 of the Ordinance. The amendment involves the excision of a piece of land to the south-east of Shung Him Tong Village from the planning scheme area for incorporation into the draft Lung Yeuk Tau and Kwan Tei South OZP No. S/NE-LYT/17A (to be re-numbered as S/NE-LYT/18 upon gazetting).

3. OBJECT OF THE PLAN

3.1 The object of the Plan is to indicate the broad land use zonings for the area of Hok Tau so that development and redevelopment within the area can be put under statutory planning control. It also provides the planning framework for

preparing more detailed non-statutory plans which form the basis for public works planning and site reservation for various uses.

- 3.2 The Plan is to illustrate the broad principles of development and planning control only. It is a small-scale plan and the road alignments and boundaries between the land use zones may be subject to minor alterations as detailed planning proceeds.

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

The Planning Scheme Area (the Area) covered by the Plan has an area of about 350 hectares. It is located about 3 kilometres to the east of the Fanling/Sheung Shui New Town and bounded by Princess Hill in the north, Queen's Hill and a number of villages in Lung Yeuk Tau and Kwan Tei South in the north-west and Pat Sin Leng Country Park in the south-east. The eastern side of Tai Leng Pei mountain range (including the Country Park Management Centre), which forms part of Pat Sin Leng Country Park, is not included in the Area. The boundary of the Area is shown by a heavy broken line on the Plan.

6. POPULATION

According to the ~~2001~~ **2016 Population by-Census**, the population within the Area ***estimated by the Planning Department as*** was about ~~530~~ **700** persons. It is expected that the total planned population ~~of the Area would be about 2,452~~ **1,900** persons.

7. OPPORTUNITIES AND CONSTRAINTS

7.1 Opportunities

7.1.1 Conservation Potential

The Hok Tau area comprises large tracts of dense and undisturbed woodland, unpolluted lowland river and areas of high scenic value. The natural habitats contain an abundance of wildlife species. The

natural landscape and habitats should be conserved for scientific research opportunities and natural heritage of the Area. The active and fallow agricultural use of land along Tan Shan Valley contributes greatly to the relatively unpolluted condition in Tan Shan River. According to the Agriculture, Fisheries and Conservation Department (AFCD), Lung Shan is dominated by pioneer and fire tolerant shrubby and grassy species and generally supports moderate biodiversity and hence ecological value.

7.1.2 Natural Buffer for Country Park

The Area is adjacent to the north-western fringe of Pat Sin Leng Country Park. The Area has a long ridgeline separating the Country Park from the settlements and human establishments in the Lung Yeuk Tau and Kwan Tei South area. The Area mainly consists of undisturbed woodland, vegetated slopes and agricultural land. The rural and undisturbed setting of the Area offers a natural buffer for Pat Sin Leng Country Park.

7.1.3 Agricultural Potential

Extensive agricultural land is found in the eastern part of the Hok Tau area. ~~The agricultural land has been classified as good quality by the AFCD. The Area is well-served by agricultural infrastructure, such as footpath and irrigation system, and has a good potential to accommodate different kinds of farming activities. As the agricultural development is declining in the territory, a considerable amount of agricultural land of the Area has been left fallow and overgrown with grass and scrubs. However, the fallow arable land can easily be rehabilitated for agricultural purpose. The AFCD has implemented the Agricultural Land Rehabilitation Scheme in the Area since 1988.~~ *Agricultural lots, especially those under cultivation, are worthy of preservation for agricultural purposes. Arable land with good potential for agricultural rehabilitation should be preserved. The AFCD has provided maintenance services on the irrigation channels and weirs on regular basis, and financial assistance to farmers for promotion of agricultural activities.*

7.2 Constraints

7.2.1 Topography

Majority of the Hok Tau area, especially the western part of the Area, is characterised by mountains and natural hill slopes. These hilly areas have been classified as having high to extreme geotechnical limitation and are unsuitable for development. Any proposed development would require intensive to very intensive site investigation to ascertain geotechnical stability.

7.2.2 Traffic Aspect

The Area is mainly accessible by Hok Tau Road leading from Lau Shui Heung Road, as well as the sub-standard local van tracks leading from Sha Tau Kok Road. The local van tracks leading from Sha Tau Kok Road are narrow, substandard and without footpath. Any additional developments in the Area may have adverse impacts on the traffic conditions and the lack of transportation infrastructure has imposed constraints on further development in the Area.

7.2.3 Drainage Aspect

The areas near San Uk Tsai Village and Sze Tau Leng Village fall within the floodway and flood fringe of Tan Shan River which are subject to overland flow and inundation during heavy rainfall. Any additional developments must demonstrate that there would not be any increase in the flooding susceptibility of the adjoining areas.

7.2.4 Sewerage Aspect

The Area is not yet served by public sewerage infrastructure. Existing village type development mainly relies on on-site sewerage treatment facilities, such as septic tanks and soakaway pits. New developments should therefore include proper on-site sewage treatment facilities. The lack of public sewer has imposed severe constraints for large-scale development in the Area.

7.2.5 Land Status

It is estimated that about 90% of the low-lying areas concentrated in the eastern part of the Area are under private and fragmented ownership. The fragmented land ownership has rendered the acquisition of land for comprehensive development difficult.

7.2.6 The development in the Area is also limited by the following constraints:

- (a) 132kV and 400kV overhead line circuits pass through the Area from the north-east to south-west. Development below or near the circuits are subject to the clearance requirements;
- (b) the seven permitted burial grounds for indigenous villagers, which are concentrated at the slopes and foothills of Princess Hill, Sze Tei Shan, Ko Po Shan, Tai Leng Pei, Lau Shui Heung, Lung Shan and Tung Shan Ha, are not suitable for development;
- (c) the 300-foot village 'environs' of the recognized villages of San Uk Tsai Village, Sze Tau Leng Village and Hok Tau Wai; and
- (d) a number of historical buildings and structures (recorded items) are located within the Hok Tau area. They include the watch tower together with its ancillary buildings and the Tang

Ancestral Hall in Hok Tau Wai, the Wong Ancestral Hall and the Wan Ancestral Hall in Sze Tau Leng Village, and old houses in Hok Tau Pai and Tung Shan Ha.

8. GENERAL PLANNING INTENTION

- 8.1 Development within the Area is guided by the Territorial Development Strategy Review (TDSR) and the North East New Territories Development Strategy Review (NENT DSR). According to the TDSR and NENT DSR, the Area is not identified for strategic growth development. The Broad Conservation Strategy of the TDSR identifies the countryside areas in the north-eastern side of the sub-region, including the Hok Tau Area, as an “Unique Area” for the protection of its natural attributes. According to the NENT DSR, the Area mainly falls within the “Countryside Conservation Area” which is considered as not suitable for development. However, recognised village expansion and small-scale recreational developments are not precluded in this designation. ~~The southern slope of Lung Shan falls within the “Potential Country Park/Special Area” under the NENT DSR.~~
- 8.2 The general planning intention for the Area is to promote conservation, to preserve the rural character and natural landscape, and to safeguard and retain ***both agricultural land under active cultivation and those fallow land with potential for rehabilitation for agricultural purpose*** ~~within the Area for agricultural purposes~~. It is also intended to designate land for village development and expansion to meet the Small House demand of the indigenous villagers.

9. LAND USE ZONINGS

9.1 Village Type Development (“V”) : Total Area 24.19 ha

- 9.1.1 The planning intention of this zone is to designate both existing recognized villages and areas of land considered suitable for village expansion. Land within this zone is primarily intended for development of Small Houses by indigenous villagers. It is also intended to concentrate village type development within this zone for a more orderly development pattern, efficient use of land and provision of infrastructures and services. Selected commercial and community uses serving the needs of the villagers and in support of the village development are always permitted on the ground floor of a New Territories Exempted House. Other commercial, community and recreational uses may be permitted on application to the Board.
- 9.1.2 There are three recognized villages within the Area, i.e. San Uk Tsai Village, Sze Tau Leng Village and Hok Tau Wai. The boundaries of the “V” zones for these three villages are generally in line with the boundaries of the respective village ‘environs’.

9.1.3 There are four historical buildings and structures (recorded items) in Hok Tau Wai and Sze Tau Leng Village. Prior consultation with the Antiquities and Monuments Office (AMO) of the ~~Leisure and Cultural Services Department (LCSD)~~ **Development Bureau (DEVB)** should be conducted in advance for any development which may affect the structures or integrity of these buildings.

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

9.2 Government, Institution or Community ("G/IC") : Total Area 1.89 ha

9.2.1 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 territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institutional establishments.

9.2.2 It reflects the existing Tong Hang Fresh Water Service Reservoir to the west of Lung Shan and the portal to the water works tunnel near Ma Mei Ha. As detailed planning proceeds, land may be designated for other "G/IC" uses to meet the anticipated demands of the growing population of the Area.

9.3 Agriculture ("AGR") : Total Area 56.32 ha

9.3.1 ~~This zone is intended primarily to retain and safeguard good quality agricultural land/farm/fish ponds for agricultural purposes.~~ ***The planning intention of this zone is primarily to retain and safeguard good quality agricultural land, farms and fish ponds for agricultural purposes.*** It is also intended to retain fallow arable land with good potential for rehabilitation for cultivation and other agricultural purposes. The agricultural land is concentrated ~~at the low-lying areas between the foothills of Tai Leng Pei and Tung Shan Ha, and at those areas near San Uk Tsai Village, Sze Tau Leng Village and Hok Tau Wai~~ ***in the eastern part of Hok Tau area.***

9.3.2 The agricultural land in the Area is ~~classified as good quality agricultural land according to the grading exercise undertaken by the AFCD. The grading has taken into account the soil conditions, the existence, availability and quality of~~ ***well-served by*** infrastructure and marketing facilities. The AFCD has implemented Agricultural Land Rehabilitation Scheme in the Area and about 10 ha of agricultural land have been rehabilitated for cultivation since ~~1988~~ **2003**.

9.3.3 ~~Extensive good quality agricultural land within the Area and the availability of irrigation channels branching off from Tan Shan River~~

~~have attracted diverse farming activities. Apart from traditional farming, such as vegetable growing, there are other kinds of commercial and non-commercial farming activities. Horticulture and plant nurseries are concentrated along Hok Tau Road. Organic/green farming establishments are located in areas to the west of Hok Tau Wai and to the west of Sze Tau Leng Village. Although hobby farming activities are found in areas within this zone, any new establishments or extension/intensification of existing establishments require permission from the Board.~~

- 9.3.43 As filling of land/pond may cause adverse drainage and environmental impacts on the adjacent areas, permission from the Board is required for such activities. However, filling of land specifically required under prior written instructions of Government department(s), or for the purposes of genuine agricultural practice including laying of soil not exceeding 1.2m for cultivation, and construction of agricultural structure with prior written approval from the Lands Department is exempted from the control.

9.4 Green Belt ("GB") : Total Area ~~268.96~~ **268.79** ha

- 9.4.1 The planning intention of this zone is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets. There is a general presumption against development within this zone. However, limited developments may be permitted if they are justified on strong planning grounds. Developments requiring planning permission from the Board will be assessed on their individual merits taking into account the relevant Town Planning Board Guidelines.
- 9.4.2 The zoned areas include foothills, lower hill slopes, spurs, isolated knolls, woodland and permitted burial grounds for indigenous villagers. The "GB" zone mainly consists of the mountainous areas of Sze Tei Shan, Ko Po Shan, Lung Shan, Tai Leng Pei, Princess Hill and Tung Shan Ha.
- 9.4.3 As filling of land/pond and excavation of land may cause adverse drainage impacts on the adjacent areas and adverse impacts on the natural environment, permission from the Board is required for such activities.

10. CULTURAL HERITAGE

~~A number of historical buildings and structures (recorded items) are located within the Hok Tau area. They include the watch tower together with its ancillary buildings and the Tang Ancestral Hall in Hok Tau Wai, the Wong Ancestral Hall and the Wan Ancestral Hall in Sze Tau Leng Village, and old houses in Hok Tau Pai and Tung Shan Ha. The AMO of the LCSD should be consulted on any development or redevelopment proposals which might affect these buildings/structures or jeopardise the integrity of these buildings/structures and their immediate environs.~~

- 10.1** *There are two Grade 2 historic buildings/structures in the Area, namely Old Villages Houses at Nos. 15, 16 and 17 Hok Tau Tsuen and Watchtower attached to No. 15 Hok Tau Tsuen.*
- 10.2** *On 19 March 2009, the Antiquities Advisory Board (AAB) released a list of 1,444 historic buildings. AAB also released a number of new items in addition to the list of 1,444 historic buildings. These items are subject to grading assessment by AAB. Details of the list of 1,444 historic buildings and the new items pending for grading assessment have been uploaded onto the website of AAB on <http://www.aab.gov.hk>.*
- 10.3** *Prior consultation with the AMO should be made if any development, redevelopment or rezoning proposals might affected the above sites/historic buildings, new items and their immediate environs, as well as any other historic buildings/structures identified.*

11. COMMUNICATIONS

The Area is mainly served by Hok Tau Road via Lau Shui Heung Road. Apart from Hok Tau Road, there are local van tracks leading from Sha Tau Kok Road to San Uk Tsai Village and Sze Tau Leng Village. The roads/tracks are generally substandard and without footpath. There are currently no direct public transport serving the Area due to its remoteness and sparse population. There are only green minibus routes connecting two villages, i.e. Hok Tau Wai and Sze Tau Leng Village, with Fanling/Sheung Shui New Town.

12. UTILITY SERVICES

12.1 Water Supply

Metered fresh water supply is generally available in the Area. Channels branching off Tan Shan River provide irrigation water for the farming activities in the Area. However, there is no proposal for salt water flushing system in the Area.

12.2 Sewerage and Drainage

- 12.2.1** *There is at present no public sewerage in the Area. ~~However, under the North District Sewerage Stage 1 Phase 2C Programme, sewers~~ **Under North District Sewerage Master Plan, sewerage** from Sha Tau Kok Road to Tan Chuk Hang Lo Wai is **under planning** ~~expected to commence in 2005 for completion in 2007. In addition, sewerage facilities are also planned to further connect from Tan Chuk Hang Lo Wai to San Uk Tsai Village and Sze Tau Leng Village under the current Review of North District and Tolo Harbour Sewerage Master Plan. The tentative programme is scheduled to start construction in 2008 and for completion in 2010.~~ **The use of on-site sewage treatment and disposal facilities particularly for large-scale development would have to be considered as interim measure in the***

Deep Bay area.

- 12.2.2 The areas near San Uk Tsai Village and Sze Tau Leng Village fall within the floodway and flood fringe of Tan Shan River. Drainage improvement works are planned to be carried out on Tan Shan River.

12.3 Other Public Utility Services

Electricity is supplied to three villages, San Uk Tsai Village, Sze Tau Leng Village and Hok Tau Wai through the network overhead transmission lines. Villages in the Area are also adequately connected to telephone exchanges. However, piped gas supply is currently not available.

13. IMPLEMENTATION

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

14. PLANNING CONTROL

- 14.1 The types of permitted developments and uses within the Area are listed in the Notes to the Plan. Unless otherwise specified, all building, engineering and other operations incidental to and all uses directly related and ancillary to the permitted developments and uses within the same zone are always permitted and no separate permission is required.
- 14.2 Uses of land or building which were in existence immediately before the first publication in the Gazette of the notice of the DPA plan and which are not in compliance with the terms of the Plan may have adverse impact on the environment, drainage and traffic of the area. Although no action is required to make such use conform to this Plan, any material change of such use or any other development (except minor alteration and/or modification to the development of the land or building in respect of such use which is always permitted) must be always permitted in terms of the Plan or, if permission is

required, in accordance with a permission granted by the Board. The Board will consider these applications on their individual merits. Those alteration and/or modification works which may lead to an environmental improvement or upgrading to the Area may be considered favourably by the Board.

- 14.3 Planning applications to the Board will be assessed on individual merits. In general, the Board, in considering the planning applications, will take into account all relevant planning considerations which may include the departmental outline development plans and layout plans, and 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 application can be downloaded from the Board's website and are available from the Secretariat of the Board, and the Technical Services Division and the relevant District Planning Office of the Planning Department. Applications should be supported by such materials as the Board thinks appropriate to enable it to consider the applications.
- 14.4 Any development, other than those referred to in paragraph 14.1 above or in conformity with this Plan or with the permission of the Board, undertaken or continued on or after 13 October 2000 on land included in a plan of the Hok Tau DPA, may be subject to enforcement proceedings under the Ordinance. Any filling of land/pond and excavation of land in the relevant zones on or after the exhibition of the specific plan referred to in the Notes of the relevant zones without the permission from the Board may also be subject to enforcement proceedings.

TOWN PLANNING BOARD
~~OCTOBER 2006~~
NOVEMBER 2021



THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

Agreement No. CE 12/2019 (CE)

Infrastructure Works for Public Housing Development at Queen's Hill Extension, Fanling - Feasibility Study

Planning Report for Rezoning Exercise (Final)





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Planning Report for Rezoning Exercise (Final)
November 2021

Reviewed by:

A handwritten signature in black ink, appearing to be 'Ruby Yew', written over a horizontal line.

Ruby Yew

19 November 2021

Approved for Issue:

A handwritten signature in black ink, appearing to be 'Stanley Chan', written over a horizontal line.

Stanley Chan

19 November 2021

AECOM ASIA CO. LTD.

Disclaimer:

This Report is prepared for CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT (CEDD) and is given for its sole benefit in relation to and pursuant to Agreement No. CE 12/2019 (CE) Infrastructure Works for Public Housing Development at Queen's Hill Extension, Fanling - Feasibility Study and may not be disclosed to, quoted to or relied upon by any person (other than CEDD) without our prior written consent. No person other than CEDD into whose possession a copy of this Report comes may rely on this Report without our express written consent and CEDD may not rely on it for any purpose other than as described above.

Agreement No. CE 12/2019 (CE)
Infrastructure Works for Public Housing Development
at Queen's Hill Extension, Fanling – Feasibility Study

Planning Report for Rezoning Exercise
(Final)

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LIST OF ABBREVIATIONS

Abbreviations used on this report for the Government Bureaux, Department Offices, statutory bodies, and public organization area those used in the Brief and extracted below:

Abbreviation	Description
ADWF	Average Dry Weather Flow
AFCD	Agriculture, Fisheries and Conservation Department
AMO	Antiquities and Monuments Office
AOI	Area of Influence
ArchSD	Architectural Services Department
C&D	Construction and Demolition
CATV	Hong Kong Cable Television Limited
CEDD	Civil Engineering and Development Department
CLP	China Light and Power Company Limited
DEP	Director of Environmental Protection
DEVB	Development Bureau
DC	District Council
DIA	Drainage Impact Assessment
DLO/N	District Lands Office/North of Lands Department
DO	District Office
DSD	Drainage Services Department
DSO	District Survey Office of Lands Department
E&M	Electrical and Mechanical
EFS	Engineering Feasibility Study
EIA	Environmental Impact Assessment
EMSD	Electrical and Mechanical Services Department
EPD	Environmental Protection Department
ETWB TC(W)	Technical circulars (works) issued by the then Environment, Transport and Works Bureau
ExCo	Executive Council
FC	Finance Committee
FTNS	Fixed Telecommunications Network Services
FW	Freshwater
FWSR	Fresh Water Service Reservoirs
GEO	Geotechnical Engineering Office of Civil Engineering and Development Department
GESF	Guidelines for Estimating Sewage Flows
G/IC	Government, Institute and Community
GFA	Gross Floor Area
HAD	Home Affairs Department

HD	Housing Department
HGC	Hutchison Global Communications Limited
HKBN	Hong Kong Broadband Network Limited
HKPF	Hong Kong Police Force
HKPSG	Hong Kong Planning Standards and Guidelines
HyD	Highways Department
LandsD	Lands Department
LCSD	Leisure and Cultural Services Department
LegCo	Legislative Council
MLD	Million Litres per Day
O&M	Operation and maintenance
NDA	New Development Area
NDC	North District Council
NWT	New World Telecommunications Limited
OZP	Outline Zoning Plan
PCCW	Pacific Century Cyber Works Limited
PAH	Project Administration Handbook for Civil Engineering Works
PAVA-EE	Preliminary Air Ventilation Assessment Report in the form of Expert Evaluation
PDWF	Peak Dry Weather Flow
PER	Preliminary Environmental Review
PFC	Public Fill Committee
PlanD	Planning Department
PLVIA	Preliminary Landscape and Visual Impact Assessment
PRH	Public Rental Housing
PSIA	Preliminary Sewerage Impact Assessment
PTIA	Preliminary Drainage Impact Assessment
PTIA	Preliminary Traffic Impact Assessment
PWSIA	Preliminary Water Supply Impact Assessment
PWP	Public Works Programme
PWSC	Public Works Subcommittee
PWWF	Peak Wet Weather Flow
QH	Queen's Hill
QHD	Queen's Hill Development
QHE	Queen's Hill Extension
QH-FS	Agreement No. CE 1/2014(CE) – Infrastructural Works for Proposed Housing Development at Queen's Hill, Fanling – Feasibility Study
QH-IDC	Agreement No. CE 63/2014(CE) – Infrastructural Works for Proposed Housing Development at Queen's Hill, Fanling – Investigation, Design and Construction

QHSPS	Queen's Hill Sewage Pumping Station
RAE	Resources Allocation Exercise
RC	Rural Committee
RHK	Rediffusion (HK) Limited
RMB	Red Mini Bus
SDM	Stormwater Drainage Manual
SI	all ground investigation, field & laboratory testing, monitoring, etc.
SPS	Sewage Pumping Station
SRM	Sewage Rising Mains
SSF	Subsidized Sale Flat
STW	Sewage Treatment Works
SW	Salt Water
SWD	Social Welfare Department
TC	Technical Circular
TD	Transport Department
THB	Transport and Housing Bureau
TPB	Town Planning Board
Towngas	The Hong Kong & China Gas Company Limited
TPEDM	Territorial Population and Employment Data Matrix
WBTC	Technical circulars issued by the then Works Bureau, the then Works Branch, the then Lands & Works Branch or the then Public Works Department
WSD	Water Supplies Department
WTT	Wharf T & T Limited

1. INTRODUCTION

1.1. Background

- 1.1.1.1. It was stated in the 2013 Policy Address that the Government would adopt a multi-pronged approach to increase the land supply to meet the housing and other development needs of Hong Kong. To optimize the use of land, the Government has continued reviewing various land uses and rezoning sites as appropriate and, where the original intended use is no longer required, converting the land for housing development. The Queen's Hill (QH) site, which was readily available and entirely on government land, has potential for housing development, including public housing. Therefore in 2014, the QH Site was subsequently rezoned. The western portion of the QH Site with an area of about 13.3 hectares (known as Site 1) was rezoned to "Residential (Group A)" ("R(A)") for public housing development, while the eastern portion with an area of 3.97 hectares (known as Site 2) and 2.3 hectares (known as Site 3), were rezoned to "Residential (Group B)" ("R(B)") and Government, Institution or Community" ("G/IC") for private housing and international school development respectively.
- 1.1.1.2. To meet the demand for public housing, it has been the government's policy in recent years to rezone sites to increase development intensity upon conducting holistic land use reviews to make optimal use of land for public housing development. The Chief Executive in the 2018 Policy Address has also announced the increase in the ratio of public housing and allocate more land for public housing development.
- 1.1.1.3. In December 2017, QH Site 2 was reallocated from private housing to public housing development by the Government. The site was afterward renamed the Queen's Hill Extension (hereinafter referred to as "the Site"). Subsequently, it was proposed to rezone the Site from "R(B)" and a small portion of area zoned "R(A)" to the south of QHE, which does not form part of the Site 1's development to "R(A)1" with a maximum domestic plot ratio of 6.5 plus an appropriate non-domestic plot ratio to optimize the land use of the site with a view to meeting pressing housing demand.
- 1.1.1.4. CEDD is tasked to conduct the current EFS to examine the technical feasibility of adopting a higher development intensity for the Site. During the EFS, deliverables are required to be produced to support the rezoning of the Site and hence the EFS shall also satisfy the rezoning requirements of the relevant departments, authorities and organizations.

1.2. The Project

- 1.2.1.1. AECOM has been commissioned by CEDD to undertake this Feasibility Study on 5 November 2019.
- 1.2.1.2. Location Plan shows the boundaries of the Site and the adjacent QH Site 1 and Site 3 refer to **Figure No. 60617595/PR/FIGURE 1.1**.
- 1.2.1.3. This Project is to carry out all the necessary studies, inquiries and assessments for the required EFS to verify if the existing and planned infrastructure works would be adequate for supporting the proposed higher development intensity of public housing development at QHE (hereinafter referred to as "the Development"), and determine what other provision or upgrading of infrastructure works, including road works, sewerage, drainage, waterworks, landscaping, etc. to support the rezoning of the Site for the timely population intake of the Development.
- 1.2.1.4. Extent of works area required for construction of proposed infrastructure works outside the Site is also determined. Assessment areas shall be determined based on such works area / works boundary and/or the Site in order to assess relevant environmental impacts associated with construction of proposed infrastructure works, and operation of the Development accordingly.

1.3. Scope of the Report

- 1.3.1.1. According to Clauses 6.12 of the Brief, the objective of this Report is to identify potential problems and necessary mitigations measures for the proposed public housing development, summarize the assessment methodologies and findings of the technical assessments conducted for the proposed infrastructure works for supporting the Development.

1.4. Structure of the Report

- 1.4.1.1. There are 10 sections in this Report, including this introductory section:

- Section 2 – Describes the Preliminary Development Layout and Parameters;
- Section 3 – Describes the findings of Preliminary Traffic Impact Assessment;
- Section 4 – Describes the findings of Preliminary Sewerage Impact Assessment;
- Section 5 – Describes the findings of Preliminary Drainage Impact Assessment;
- Section 6 – Describes the findings of Preliminary Water Supply Impact Assessment;
- Section 7 – Describes the findings of Preliminary Environmental Review;
- Section 8 – Describes the findings of Preliminary Landscape and Visual Appraisal Assessment;
- Section 9 – Describes the findings of Preliminary Air Ventilation Assessment for Proposed Housing Development at QHE; and
- Section 10 – Concludes the findings and recommendations

2. PRELIMINARY DEVELOPMENT LAYOUT AND DEVELOPMENT PARAMETERS

2.1. General

- 2.1.1.1. This section describes the proposed layout plan and the development parameters for the Development.

2.2. Subject Site and Its Surrounding Area

2.2.1. Physical Context and Site Topography

- 2.2.1.1. The Site, with an area of about 4 hectares, is largely zoned as “Residential (Group B)” (“R(B)”) subject to a max. PR of 3.6 and BH restriction of +85 mPD with a minor portion at the south zoned “Residential (Group A)” (“R(A)”) (about 0.17ha) on the approved Lung Yeuk Tau & Kwan Tei South OZP No. S/NE-LYT/17. It is located to the south of Fu Tei Pai Village, to the north and north-east of QH Housing Development.
- 2.2.1.2. The Site is currently occupied by some abandoned barracks and tree groups with hilly terrain varying from about +30 mPD at the north adjoining the existing knoll and man-made slope of about +50 mPD in the middle and southern part of the Site respectively. Some abandoned barrack buildings and dense vegetation could be found within the Site. One existing grave is found at the south-western corner of the Site which has been excluded from the development area of the proposed development. (**Figure No. 60617595/PR/FIGURE 2.1**).

2.2.2. Surrounding Land Use

- 2.2.2.1. The surrounding areas have the following characteristic:
- (a) QH Housing Development at immediate south of the Site is a subsidized Home Ownership Scheme (HoS) housing development site (namely Shan Lai Court) under the “R(A)” zone, with 6 residential blocks with maximum (max.) plot ratio (PR) of 6.0 and building height (BH) at about +140 mPD. On the other hand, to the west of the Site are public rental housing sites (namely Queens Hill Estate) under the same “R(A)” zone, with 7 residential blocks with max.BH at about +145 mPD. QH Site 3 at southeast of the Site is reserved for the development of an international school (as shown in **Figure No. 60617595/PR/FIGURE 1.1**).
 - (b) The Site is located in a rural setting with Fu Tei Pai Village located at immediate north of the Site (with level different of 10 m), which is predominantly 2 to 3-story village settlement, and intermixed with private lands for agricultural and open storage uses at west of the Site.
 - (c) The surrounding natural landscapes consist the well-vegetated Queen's Hill (height at +85 mPD) to it immediate east and Lung Shan (height at +360 mPD) to its further south serve as mountain backdrop for the Site.
- 2.2.2.2. A site located to the southwest of the QH Housing Development across the Lung Ma Road is reserved for district open space use. The site is characterized with extensive woodland and undulating terrain with pleasant greenery setting. A Hindu Temple, which is a Grade 3 historic building, is located at the further south-east of the site.
- #### **2.2.3. Site Accessibility**
- 2.2.3.1. In terms of vehicular access, the Site is served by Lung Ma Road, which is connected to Sha Tau Kok Road – Lung Yeuk Tau. Two pedestrian footpaths with min. 1.75 m wide on both sides and one cycle track with 3.5m wide were designated. Upon future development, ingress/egress point of the Site is located at south, which connects to the Lung Ma Road within QH Housing Development (**Figure No. 60617595/PR/FIGURE 3.1**).

- 2.2.3.2. Lung Ma Road is a minimum 7.3 m wide two-lane two-way carriageway that serves as the sole access connecting the Site to other facilities – including a covered public transport terminus, community hall / social welfare complex and 2 primary school sites in Queens Hill Estate.
- 2.2.3.3. The Site is well-served by franchised bus and minibus (GMB) services. Bus stops and minibus stops are located in the vicinity of the Site (**Figure No. 60617595/PR/FIGURE 3.6**), offering connections within the surrounding area as well as the wider area (i.e. Fanling MTR station). The details of each public transport routes are listed in table below.

Route No.	Terminating Points	Frequency (min)
<i>FB Service</i>		
78K	Sheung Shui – Sha Tau Kok	8-20
79K	Sheung Shui – Ta Kwu Leng (Tsung Yuen Ha)	15-30
277A	Sha Tau Kok → Lam Tin Station	7:10 am*
	Lam Tin Station → Sha Tau Kok	5:50 pm*
<i>GMB Service</i>		
52B	Fanling Station – Hok Tau	8-25
52K	Fanling Station – Ping Che	4-10
55K	Sheung Shui Station – Sha Tau Kok	4-10
56B	Fanling Station – Tan Chuk Hang	15-30
56K	Fanling Station – Luk Keng	10-30

Note:

* Departure Time / Departure Period

- 2.2.3.4. Sha Tau Kok Road is currently also served by non-fixed PT route in the form of Red Mini Bus (RMB). Details of the RMB route is listed in table below.

Route Terminating Points	Service Hours
<i>RMB Service</i>	
Sheung Shui (Fu Hing Street) – Ping Che & Ping Yeung	07:00 – 19:00

- 2.2.3.5. In terms of pedestrian connection, cautionary crossings are available adjacent to the Site for accessing the abovementioned bus stops as shown in (**Figure No. 60617595/PR/FIGURE 3.5**). Besides, cyclists could also enjoy the cycle track built along Lung Ma Road which provides connection to the cycle track along Sha Tau Kok Road up to Fanling town (**Figure No. 60617595/PR/FIGURE 3.5**).

2.3. Planning Background of the Site

2.3.1. Current Zoning and History of the Site

- 2.3.1.1. To meet the housing demand, major part of the ex-Burma Lines Military Site was rezoned to “R(A)” for public housing development subject to a PR of 6.0 and BH of +145 mPD for high-density public housing development, and “R(B)” subject to a maximum PR of 3.6 and BH of +85 mPD for medium-density private housing development. CEDD was tasked to conduct the EFS to examine the technical feasibility for such housing development in 2014. Some infrastructure works had been upgraded to cater for various demands arising from these housing developments including various road improvement works and provision of Government, Institution or Community (GIC) facilities accordingly.

- 2.3.1.2. The “R(B)” site was originally reserved for private housing development with a flat production of about 1,900 flats. In December 2017, to meet the pressing housing need, the “R(B)” site was reallocated from private housing to public housing development with a higher development intensity by the Government.
- 2.3.1.3. To further optimize the development potential of the housing site, the “R(B)” site together with a small portion of an area (about 0.17 ha) to the immediate south zoned “R(A)” is proposed for rezoning. Whilst such area is zoned “R(A)”, it does not form part of development area of current Queen's Hill Housing Development. Modification of the slope to facilitate development of the Site is anticipated. The Site is entirely located on government land. CEDD is tasked to conduct the current EFS to examine the technical feasibility of adopting such higher development intensity for the Site.

2.4. Development Scheme and Parameters

2.4.1. Rezoning Proposal

- 2.4.1.1. CEDD is tasked to conduct the current EFS to examine the technical feasibility of adopting a higher development intensity for the Site (i.e. rezoning from the Site to “R(A)1” with a maximum domestic plot ratio of 6.5 and non-domestic of 0.5) for public housing development. A comparison table below presents the change in major development parameter of the current zoning and the proposed housing Site:-

	Current Zoning as “R(B)” at Outline Zoning Plan (OZP) ⁽¹⁾	Proposed Rezoning as “R(A)1” ⁽²⁾
Site Area	Approx. 4 hectares	
Net Site area	N/A	About 3.4 hectares
Proposed Formation Level ⁽³⁾	+30.5 mPD to +32 mPD	
Plot Ratio	3.6	6.5 (domestic) 0.5 (non-domestic)
GFA	114,300 m ²	About 219,000 m ² (domestic) About 16,800 m ² (non-domestic)
Flat Production	1,900 (private housing development)	4,028 (public housing development)
Estimated Population	5,700	11,279
Building Height Restriction	+85 mPD	+175 mPD ⁽⁴⁾

Notes:

- (1) Information extracted from RNTPC Paper No. 7/15 – Proposed Amendments to the Draft Lung Yeuk Tau and Kwan Tei South Outline Zoning Plan No. S/NE-LYT/15.
- (2) Above parameter for proposed planning as R(A) shall be subject to change at the detailed design stage.
- (3) The Site's existing elevations range from +25 mPD to +50 mPD, site formation works include slope cutting to about 55 degree along the eastern portion of the Site and filling slope of about 27 degree along the western portion of the Site.
- (4) Having considered the proposed site formation level and podium, the actual BH of housing building is about 142 m.

2.4.2. Proposed Development Layout

- 2.4.2.1. Given the limited size of the Site, 6 residential blocks (with maximum height +175 mPD) and 1 welfare facilities block (with maximum height +70 mPD) are proposed to be provided within the Site. All the 6 residential blocks are proposed to be sitting on a podium structure with podium floor level at +50 mPD to +55 mPD tentatively. The podium will provide necessary carpark provision, landscape space and other ancillary provisions with adequate green coverage as required under HKPSG.

- 2.4.2.2. Welfare facilities will be provided in the public housing development targeted to meet the latest requirement of setting aside 5% of domestic GFA for “Additional Gross Floor Area for Welfare Purposes in Public Housing” mentioned in the 2020 Policy Address.
- 2.4.2.3. The above configuration of the Development shall be subject to review in the detailed design stage.
- 2.4.3. Information received for Assessment Purpose
- 2.4.3.1. This Planning Report is prepared based on the preliminary proposed layout scheme provided by HD as shown in **Figure No. 60617595/PR/FIGURE 2.1**, which is only an indicative notional scheme for assessment purpose to support the rezoning exercise. The future layout would be subject to change at the detailed design stage.
- 2.4.3.2. Development parameters are also received from relevant departments for the EFS technical assessments purpose and discussed below. These parameters are indicative only and broad-brush in nature which shall be subject to change.
- 2.4.3.3. Nonetheless, significant change to the development parameters and indicative layout as well as significant implications to the technical assessments covered in Sections 3 to 9 of this planning report is not anticipated in future development of the Site.
- 2.4.3.4. Proposed development parameters are shown in below table. Critical scenario with allowance are imposed to these parameters for technical assessments.

	Proposed Public Housing Development
Flat No.	4,028
Average Flat Size	Approx. 50 m ²
Population	11,279
Tentative Completion Year	2031

- 2.4.3.5. Other proposed facilities in the Site are summarized below:-

Welfare and Educational Facilities Provision for the Development

Type of Service	NOFA (sqm)	IFA (sqm)	Estimated GFA (sqm)
8-classroom Kindergarten	740	970	1,600
100-p Day Care Centre for the Elderly (DE)	603	905	1,500
Neighborhood Elderly Centre (NEC)	303	394	655
1 team of Home Care Services (HCS) for Frail Elderly Persons (2-team size non-kitchen based)	142	188.9	315
30-p Supported Hostel for Mentally Handicapped Persons (SHOS(MH))	345	449	745
50-p Hostel for Moderately Mentally Handicapped Persons (HMMH)	617	864	1,430
80-p Integrated Vocational Rehabilitation Services Centre (IVRSC)	447	581	965
50-p Day Activity Centre (DAC)	319	415	690
50-p Hostel for Severely Mentally Handicapped Persons (HSMH)	691	967	1,600
100-p Long Stay Care Home (LSCH)	1,516	2,274	3,755
Total	5,753	8,007.9	About 13,255

Notes:

- Information on the above potential list of welfare facilities provided by SWD and HD in March 2021 is for technical assessment only and is subject to further review by SWD and HD, targeted to achieve a total area equivalent to 5% of domestic GFA of the public housing development which would be achieved.
- The GFA provided in the above list is a rough estimation only. The final GFA of welfare facilities is subject to detailed design by HD and approvals from statutory bodies.
- The final provision of welfare facilities is subject to detailed design by HD and confirmation on the availability of government funding by SWD.

2.4.3.6. It is anticipated that site formation works will be completed in March 2026 for handing over to Housing Department for construction. The tentative completion year will be 2031.

2.4.4. Conceptual Layout and Design Considerations

2.4.4.1. Having considered the site constraints including existing topography and limited space available to accommodate housing units and other ancillary facilities, the proposed layout has achieved the following design merits with an aim to enhance the compatibility of the proposed development with the surroundings (**Figure No. 60617595/PR/FIGURE 2.2**).

(a) Maximize building separation

- Whilst there are slopes at east, north and west portions of the Site which would potentially constrain the developable site area, the separation of buildings is maximized (minimum 13 m) as far as practicable and open voids at podium level are provided for enhancing air ventilation and minimizing potential adverse visual impact.
- The building layout has paid due respect to the surrounding environment to minimize the interference. Adequate building separation and landscape buffer between the Development and the nearby Fu Tei Pai Village and the existing graves at the northeast and southwest are provided with 18 m and 5 m respectively.
- Retail, welfare and educational facilities are accommodated on the low-rise podium block facing the Lung Ma Road within QH Housing Development with extensive landscape on the podium deck for ease of public access and creating a comfortable buffer zone with the housing development (i.e. Shan Lai Court) on the opposite side of the Lung Ma Road. Separation with Shan Lai Court of minimum 35 m, and aesthetical treatment including earthy-tone colours applied to façade and finishes would help to blend in proposed QHE development with surrounding context, hence to mitigate the visual impact to adjacent Shan Lai Court.

(b) Minimize overall visual impact

- The shape of buildings is carefully articulated to minimize the building bulk. Visual corridors are created to break up the massiveness of the build structures and minimize the overall visual impact.
- Whilst the proposed max. building height at +175 mPD might cause obstruction to some of skylight and openness, the nearby ridgeline, e.g. Lung Shan at around +360 mPD; and Tai Leng Pei at around +170 mPD, are taken into account, such that the mountain backdrop is kept habitant's enjoyment.
- The form, textures, finishes and colours of the buildings would be compatible with the existing surroundings. Light earthy tone colours shall be considered to blend in the Development with the existing surroundings and the nearby public housing development.

(c) Enhance air ventilation

- Appropriate design measures such as building gaps between the buildings, and open voids at podium level, setting back of 10m at the norther and eastern boundary of the Site, etc. have been incorporated to improve wind performance to the surroundings.

(d) Greening coverage and open space provision

- Extensive landscape and recreation areas will be provided at podium and ground levels to enhance the amenity of the Development as well as for the enjoyment of the future residents. Greenery coverage will be targeted at 30% of the site area.
- Planting on slopes and vertical greening on retaining walls at the east, north and west sides of the Development will be introduced to soften the structures and to create harmonized relationship with the surrounding environment.

(d) Provision of G/IC facilities

- The educational and social welfare facilities are proposed in consultation with relevant Government departments including Education Bureau and Social Welfare Department. For the parking facilities, high-end ratio has been adopted in accordance with the Hong Kong Planning Standards and Guidelines to provide ancillary parking spaces for the Development at ground floor and below podium level.

(e) Enhance accessibility

- A footpath with 1.5 m width is proposed connecting the Site with the surrounding area, in particular, Fu Tei Pai Village in order to improve accessibility as shown in **Figure No. 60617595/PR/FIGURE 2.1**.

2.4.5. Technical Assessments

- 2.4.5.1. In 2015, an EFS was conducted to ascertain the technical feasibility of rezoning proposals for the proposed public and private housing developments in the "R(A)" and "R(B)" sites respectively. The findings of the EFS indicated that it was technically feasible with no insurmountable problem subject to various proposed mitigation measures/upgrading works as appropriate arising from the proposed housing developments. To further ascertain the potential impacts arising from the proposed rezoning of the Site from "R(B)" for private housing development at PR of 3.6 to "R(A)1" for public housing development at total PR of 7, a separate EFS has been carried out covering various aspects including traffic, environment, air ventilation, landscape and visual, cultural heritage as well as utility service perspectives. The findings of these preliminary assessment have reconfirmed that the development is considered technically feasible and would not cause insurmountable problems on the surrounding areas subject to mitigation measures as identified in the previously completed EFS in 2015. The findings of the technical assessment for the development are detailed in Section 3 to 9 below.

3. **PRELIMINARY TRAFFIC IMPACT ASSESSMENT**

3.1. **Introduction**

3.1.1. General

3.1.1.1. This section provides a summary of the key findings in the Preliminary Traffic Impact Assessment (PTIA). The existing and planned road networks in addition to the traffic impacts due to the Development are presented.

3.1.2. Updated Population

3.1.2.1. To assist HD in determining the maximum allowable development parameters and allow reasonable design flexibility, technical assessment will be carried out based on the Development population with allowance to cater for critical scenario.

3.1.2.2. Apart from the residential development, other uses to be provided within QHE (i.e. welfare facilities and kindergarten proposed by relevant Government Departments and retail facilities) are demonstrated below.

Development Type		Development Parameters ⁽¹⁾
Welfare Facilities (2)(3)	100-p Day Care Centre for the Elderly (DE)	Approx. 11,655 m ² GFA ⁽⁴⁾
	Neighbourhood Elderly Centre (NEC)	
	30-p Supported Hostel for Mentally Handicapped Persons [SHOS(MH)]	
	One team of Home Care Services (HCS) for Frail Elderly Persons (2-teams size non-kitchen based)	
	50-p Hostel for Moderately Mentally Handicapped Persons (HMMH)	
	80-p Integrated Vocational Rehabilitation Services Centre (IVRSC)	
	100-p Long Stay Care Home (LSCH)	
	50-p Day Activity Centre (DAC)	
	50-p Hostel for Severely Mentally Handicapped Persons (HSMH)	
Retail		Approx. 2,200 m ² GFA
Kindergarten		8 Classrooms

Notes:

(1) GFA represents Gross Floor Area.

(2) Information on the above potential list of welfare facilities provided by SWD and HD in March 2021 is for technical assessment only and is subject to further review by SWD and HD, targeted to achieve a total area equivalent to 5% of domestic GFA of the public housing development.

(3) The final provision of welfare facilities is subject to detailed design by HD and confirmation on the availability of government funding by SWD.

(4) The GFA provided in the above list is a rough estimation only. The final GFA of welfare facilities is subject to detailed design by HD and approvals from statutory bodies.

3.1.3. Internal Parking and Servicing Facilities

3.1.3.1. Car parking and servicing provisions for the Development would be provided with reference to the new Hong Kong Planning Standards and Guidelines (HKPSG) parking standards promulgated in July 2021 and the provisions for the welfare facilities based on advice from SWD on respective facilities parking required. The proposed provisions are summarized in below.

Parking and Servicing Facilities for the Development

Type of Parking / Servicing Facilities	Proposed Provision
Residential Development (Subsidised Housing)	
Private Car, Van-Type Lights Goods Vehicle and Taxi	524 ⁽¹⁾⁽²⁾
Private Car, Van-Type Lights Goods Vehicle and Taxi – Visitors	30 ⁽¹⁾⁽³⁾
Motorcycle	37 ⁽⁴⁾⁽⁵⁾
Light Goods Vehicle and Light Bus	16 ⁽²⁾
Shared-Use Loading/Unloading Bay for Overnight Parking of Medium/Heavy Goods Vehicle and Coach	12 ⁽³⁾
Bicycle	135 ⁽⁹⁾
Welfare Facilities (Approx. 11,655 m² GFA) (100-p DE, NEC, 30-p SHOS(MH), 50-p DAC, 50-p HSMH, 100-p LSCH, HCS, 50-p HMMH, 80-p IVRSC) ⁽⁶⁾	
16-seater Private Light Bus with Tail Lift	8
Loading/Unloading Bay or Ambulance Layby	1
Loading/Unloading Bay for Goods Vehicle	1
Retail (Approx. 2,200 m² GFA) ⁽⁴⁾⁽⁷⁾	
Private Car	15 ⁽¹⁾
Loading/Unloading Bay for Goods Vehicle	3
Kindergarten (8 classrooms)⁽⁸⁾	
Nil Provision	

Notes:

- (1) Provision for parking for persons with disabilities should be provided as part of the overall parking provision for residential developments and commercial facilities in accordance with HKPSG.
- (2) "One person/two persons" flats shall be excluded from the calculation of the overall parking provision of both car parking spaces and LGV spaces (Reference to HKPSG Ch. 8 Table 11, 3. General Notes, Item f).
- (3) Based on the notional scheme adopted for assessment, there would be 6 residential blocks for the Development.
- (4) Provision of M/C spaces shall exclude those for 1/2-P flats as well as non-residential elements.
- (5) Based on TD's request, number of motorcycle parking should adopt the upper limit for motorcycle parking provision.
- (6) Based on latest welfare facilities and parking facility requirements provided by SWD on 11 March 2021.
- (7) Provision for retail made reference to the latest parking standards.
- (8) Parking provision for kindergartens within public housing estates should be subjected to the requirements of the Housing Authority.
- (9) Parking requirement for bicycle parking is made reference to HKPSG Ch. 8 Section 6.5.2.

3.1.4. Site Location and Connection to External Road Network

- 3.1.4.1. The Site is located within QH Site and is only served by the Lung Ma Road in Queens Hill Estate and Shan Lai Court which provides further connection to Sha Tau Kok Road.
- 3.1.4.2. The proposed vehicular access arrangement is shown in **Figure No. 60617595/PR/FIGURE 3.1** and the major ingress and egress routings of the Development are shown in **Figure No. 60617595/PR/FIGURE 3.1**.
- 3.1.4.3. Lung Ma Road is a single-2 carriageway; it forms a roundabout junction with Sha Tau Kok Road at its northern end and extends QH Housing Development at its southern end.
- 3.1.4.4. Sha Tau Kok Road is a dual-2 lane rural road running along north-south direction and serves as a major corridor to/from the QH Site including the Site.
- 3.1.4.5. Jockey Club Road is a dual 2-lane primary distributor connecting to Fanling Highway at the junction of Pak Wo Road at its eastern end and Man Kam To Road at its western end.
- 3.1.4.6. Fanling Highway is a dual-3 lane / dual-4 lane expressway as a part of New Territories Circular Road running in east-west direction in the North District. It links to Tolo Highway at its east

and San Tin Highway to its west and provides inter-district connection (i.e. Tai Po and Yuen Long).

- 3.1.4.7. Fanling Bypass is a dual-2 lane highway being constructed under the Advance Phase KTN & FLN NDA Development. The Fanling Bypass Eastern Section, will be commissioned in 2025, provides a direct bypass linkage between FLN NDA and Sha Tau Kok Road via Lung Yeuk Tau I/C with the Fanling Highway Tai Po direction.

3.1.5. Base Year Traffic Condition

- 3.1.5.1. Owing to the outbreak of COVID-19, both commuting and cross boundary traffic volumes (in particular along Sha Tau Kok Road) have reduced significantly. As such, capturing the traffic condition via traffic count survey during this period of time is not representative. Therefore, observed traffic data from 2018 Annual Traffic Census and traffic survey data reported in other relevant studies in the North District covering similar AOI was adopted as the basis of this TIA. The data was also used to validate the in-house traffic model for forecasting future vehicular traffic.
- 3.1.5.2. The Study Area of Influence (AOI) and key plan of the assessed junctions and road links are illustrated in **Figure No. 60617595/PR/FIGURE 3.3**.
- 3.1.5.3. The link and junction performances for the 2018 base year are summarized in below.

Base Year Critical Link Performance

Link No.	Road Link	Direction	Capacity (pcu/hr)	Year 2018 Base Year			
				AM		PM	
				Flow (pcu/hr)	V/C ratio ⁽³⁾	Flow (pcu/hr)	V/C ratio ⁽³⁾
RL1 (1)	Fanling Bypass (Between STK Road & Fanling Highway)	NB	N/A	N/A	N/A	N/A	N/A
		SB	N/A	N/A	N/A	N/A	N/A
RL2 (1)	Lung Shan Tunnel	NB	N/A	N/A	N/A	N/A	N/A
		SB	N/A	N/A	N/A	N/A	N/A
RL3 (1)	Lung Ma Road (Southern Section)	NB	N/A	N/A	N/A	N/A	N/A
		SB	N/A	N/A	N/A	N/A	N/A
RL4	STK Road (Between Lung Ma Road and Sui Wan Road)	NB	3,000	1,850	0.62	1,350	0.45
		SB	3,000	1,460	0.49	1,800	0.60
RL5	Fanling Highway (Between So Kwun Po Road and Pak Wo Road)	NB	6,100	3,285	0.54	3,045	0.50
		SB	6,100	3,320	0.54	3,325	0.55
RL6 (2)	Fanling Highway (South of Lung Shan Tunnel)	NB	6,100	5,095	0.84	5,335	0.87
		SB	6,100	5,425	0.89	4,785	0.78
RL7	Fanling Highway (Between Po Shek Wu Road and So Kwun Po Road)	NB	8,200	4,335	0.53	4,195	0.51
		SB	8,200	4,330	0.53	3,905	0.48
RL8 (2)	Fanling Highway (Between Wo Hop Shek Interchange and Heung Yuen Wai Highway)	NB	6,100	5,095	0.84	5,335	0.87
		SB	6,100	5,425	0.89	4,785	0.78

Link No.	Road Link	Direction	Capacity (pcu/hr)	Year 2018 Base Year			
				AM		PM	
				Flow (pcu/hr)	V/C ratio ⁽³⁾	Flow (pcu/hr)	V/C ratio ⁽³⁾
RL9 ⁽¹⁾	a) Heung Yuen Wai (HYW) Highway Slip Road (From Fanling Highway SB)	NB	N/A	N/A	N/A	N/A	N/A
	b) HYW Highway Slip Road (From Fanling Highway NB)	NB	N/A	N/A	N/A	N/A	N/A
	c) HYW Highway Slip Road (To Fanling Highway SB)	SB	N/A	N/A	N/A	N/A	N/A
	d) HYW Highway Slip Road (To Fanling Highway NB)	SB	N/A	N/A	N/A	N/A	N/A
RL10	STK Road (between Lau Shui Heung Road and Ping Che Road)	NB	3,000	1,435	0.48	1,085	0.36
		SB	3,000	1,180	0.39	1,320	0.44
RL11	STK Road (between Ping Che Road and HYW Highway)	NB	1,350	800	0.59	540	0.40
		SB	1,350	620	0.46	615	0.46
RL12	STK Road (Between Lung Ma Road and Lau Shui Heung Road)	NB	3,000	1,680	0.56	1,390	0.46
		SB	3,000	1,320	0.44	1,700	0.57

Notes:

- (1) RL1 Fanling Bypass (Between STK Road and Fanling Highway), RL2 Lung Shan Tunnel, RL3 Lung Ma Road (Southern Section) and RL9 slip roads of HYW Highway have not yet been opened in Year 2018.
(2) Capacity for RL6 and RL8 represent only the conditions before the completion of the Tolo/Fanling Highway widening.
(3) V/C ratio – Volume to Capacity Ratio

Base Year Critical Junction Performance

Junction No.	Junction Name / Road Link	Junction Type ⁽¹⁾	Year 2018 Base Year			
			RC ⁽²⁾ (in %)		DFC ⁽²⁾	
			AM	PM	AM	PM
J1	Po Shek Wu Road Interchange	R			0.90	0.85
J2	So Kwun Po Road Interchange	R			0.84	0.75
J3	Jockey Club Road / Ma Sik Road / So Kwun Po Road	S	15%	52%		
J4	Ma Sik Road / Fan Leng Lau Road	S	20%	38%		
J5	Ma Sik Road / Luen Chit Street	S	39%	58%		
J6	Ma Sik Road / Wo Tai Street	S	23%	38%		
J7	Sha Tau Kok Road / San Wan Road	R			0.57	0.53
J8	Sha Tau Kok Road / Jockey Club Road	R			0.79	0.76
J9	Sha Tau Kok Road / Lok Yip Road	S	22%	20%		
J10	Sha Tau Kok Road / Luen On Street	S	82%	93%		
J11	Sha Tau Kok Road / Ma Sik Road	S	11%	5%		
J13	Sha Tau Kok Road / Sui Wan Road	S	-2%	-8%		
J14	Sha Tau Kok Road / Lung Ma Road	R			0.86	0.77
J15	Po Shek Wu Road / Choi Yuen Road	S	23%	31%		
J16	Jockey Club Road / Lung Sum Avenue	S	7%	17%		

Note:

- (1) S – Signalised Junction, R – Roundabout
(2) RC – Reserve Capacity, DFC – Design Flow / Capacity Ratio

- 3.1.5.4. From the above tables, it is found that the v/c ratio of all critical link sections are operating with a v/c ratio below 1.0 which is considered acceptable, and most of the junctions are operating within capacity, except junction J13.

3.2. Traffic Impact Assessment

3.2.1. Overall Modelling Approach

- 3.2.1.1. 2-tier transport modelling approach was adopted with the Strategic Transport Model (STM) and Local Area Traffic Model (LATM) as the 1st and 2nd tiers for regional traffic and transport planning. The STM uses planning data for 2018 was derived by interpolation with the 2016-based TPEDM. The STM is then validated to the observed data from 2018 Annual Traffic Census (ATC) traffic count data for AM and PM peak hour traffic. The LATM was developed using cordoned matrix from the 2018 STM. Traffic survey was carried out at key junctions along Fanling Highway and Sha Tau Kok Road for validation of LATM. The 2018 Annual Traffic Census (ATC) was used for the validation for the STM. A traffic screenline covering the whole of North District was defined to form a cordon of the local traffic model for detailed simulation of traffic movement for the traffic review area.

3.2.2. Operational Traffic Assessment at Design Year 2036

- 3.2.2.1. The scope of the study is focused on the impact arose due to the change of development parameters at the Site (previously known as Site 2 of QHD) from private housing to public housing, two scenarios were assessed:

- Year 2036 Reference Scenario (QH Site 2 – Private Housing); and
- Year 2036 Design Scenario (QHE – Public Housing).

- 3.2.2.2. A number of traffic improvement schemes have been carried out to improve the local road network under previous EFS of the Queen's Hill Housing Development. These improvement schemes were designed to enhance the capacity of the concerned junctions so as to meet the traffic demand generated by the Queen's Hill Development at that time. The traffic improvement schemes include: -

Completed/ Planned Junction Improvement Schemes in the Vicinity

Junction	Description of Improvement Schemes	Works Completion / Planned Completion Year	Improvement Benefit
J1 Po Shek Wu Interchange (Tai Tau Leng Roundabout)	• Widening of Po Shek Wu Road southbound into 3 traffic lanes	Completed	• Increase traffic queue storage on the approach to roundabout, hence alleviating blockage of exclusive left-turn lane
	• Local widening of Fanling Highway westbound approach arm	Completed	
	• Exclusive left turn lane at Fan Kam Road approach arm	2032	• Exclusive Left-turn lane alleviate Fanling Highway WB traffic from roundabout
	• Planned Po Shek Wu Road Flyover	2028	• Flyover alleviate Fanling Highway WB traffic from roundabout

Junction	Description of Improvement Schemes	Works Completion / Planned Completion Year	Improvement Benefit
J2 So Kwun Po Interchange (Kai Leng Roundabout)	<ul style="list-style-type: none"> Local widening So Kwun Po Road southbound approach arm 	Completed	<ul style="list-style-type: none"> Enhance manoeuvrability on the approach to roundabout and increase traffic queue storage
	<ul style="list-style-type: none"> North South Link 	2031	<ul style="list-style-type: none"> Alleviate traffic between San Wan Road and Pak Wo Road from roundabout
J3 So Kwun Po Road / Jockey Club Road / Ma Sik Road	<ul style="list-style-type: none"> Local widening of So Kwun Po Road northbound Modification of lane road markings at So Kwun Po Road northbound and Ma Sik Road southbound 	2023	<ul style="list-style-type: none"> Additional traffic lanes at So Kwun Po Road and Ma Sik Road increase junction capacity to enhance straight-ahead movements in both directions
	<ul style="list-style-type: none"> Local widening of Jockey Club Road westbound Modification of MOC 	2031	<ul style="list-style-type: none"> Increase left turn capacities of So Kwun Po Road SB and Jockey Club Road EB and right turn capacity of Ma Sik Road NB
J4 Ma Sik Road / Fan Leng Lau Road	<ul style="list-style-type: none"> Road widening of Fan Leng Lau Road northbound 	Completed	<ul style="list-style-type: none"> Allow traffic on both traffic lanes from Fan Leng Lau Road NB to turn left simultaneously
	<ul style="list-style-type: none"> Conversion into a signalized junction with 4 arms 	2023	<ul style="list-style-type: none"> Serving development site to the north of junction
	<ul style="list-style-type: none"> Road widening of Ma Sik Road eastbound 	2031	<ul style="list-style-type: none"> Increase junction capacity
J6 Ma Sik Road / Wo Tai Street	<ul style="list-style-type: none"> Conversion into a signalized junction with 4 arms Modification of lane road markings 	2023	<ul style="list-style-type: none"> Serving development site to the north of junction
J8 Sha Tau Kok Road / Jockey Club Road	<ul style="list-style-type: none"> Local widening of Sha Tau Kok Road northbound and Jockey Club Road 	Completed	<ul style="list-style-type: none"> Increase entry capacity to roundabout from Sha Tau Kok Road – Lung Yeuk Tau NB
	<ul style="list-style-type: none"> Local widening of Sha Tau Kok Road southbound and Jockey Club Road eastbound and westbound 	2031	<ul style="list-style-type: none"> Increase entry capacity to roundabout from Sha Tau Kok Road and Jockey Club Road

Junction	Description of Improvement Schemes	Works Completion / Planned Completion Year	Improvement Benefit
J9 Sha Tau Kok Road / Lok Yi Road	<ul style="list-style-type: none"> Local widening of Fan Leng Lau Road westbound Widening of Fan Leng Lau Road refuge island Second left turn lane at Sha Tau Kok Road southbound converted to shared straight-ahead and left turn lane and widening of Sha Tau Kok Road south of junction Nearside lane of Lok Yip Road converted to shared straight-ahead and left turn lane Cycle track and footpath reprovision along Sha Tau Kok Road 	Completed	<ul style="list-style-type: none"> Extension of signal green time for each stage Allowing traffic on both traffic lanes for simultaneous straight-ahead movement from Lok Yip Road NB to Fan Leng Lau Road and 3 traffic lanes for simultaneous straight-ahead movement along Sha Tau Kok Road – Lung Yeuk Tau WB Widening of refugee island for increased pedestrian storage
J11 Sha Tau Kok Road / Ma Sik Road	<ul style="list-style-type: none"> Nearside lane modification to shared straight-ahead and left-turn Cancellation of pedestrian crossing at the northern arm of Sha Tau Kok Road Modification of MOC Provision of refuge island for channelizing split movements at the western approach arm of Ma Sik Road 	Completed	<ul style="list-style-type: none"> Extension of signal green time for each stage Increase pedestrian safety with additional refugee island at Ma Sik Road SB approach Enhance capacity of straight-ahead movement for Sha Tau Kok Road – Lung Yeuk Tau Improve alignment of cycle track
	<ul style="list-style-type: none"> Conversion from signalised junction into merging and diverging lanes 	2026	<ul style="list-style-type: none"> To facilitate the connection of Sha Tau Kok Road with Fanling Bypass at J12

Junction	Description of Improvement Schemes	Works Completion / Planned Completion Year	Improvement Benefit
J13 Sha Tau Kok Road / Sui Wan Road	<ul style="list-style-type: none"> Modification of straight crossings into staggered crossing Modification of MOC Extend right-turn lanes of both directions of Sha Tau Kok Road Modification of kerb line at left turn from Sha Tau Kok Road northbound 	Completed	<ul style="list-style-type: none"> Extension of signal green time with staggered crossings Increase traffic queue storage for right-turn traffic from Sha Tau Kok Road – Lung Yeuk Tau NB to Sui Wan Road and from Sha Tau Kok Road – Lung Yeuk Tau SB to San Uk Tsuen Increase visibility at left turn from Sha Tau Kok Road – Lung Yeuk Tau NB to San Uk Tsuen
	<ul style="list-style-type: none"> Banning of right-turn movement at Sha Tau Kok Road southbound and northbound Banning of straight-ahead and left turn movement at Sui Wan Road Eastbound Banning of straight-ahead and right turn movement at Sui Wan Road Westbound Modification of MOC Modification of staggered crossing back to straight crossing 	2023	<ul style="list-style-type: none"> Coordinate with the connection of Sha Tau Kok Road with Fanling Bypass at J12 Further enhance junction capacity by the banned turns
J14 Sha Tau Kok Road / Lung Ma Road	<ul style="list-style-type: none"> Provision of an exclusive left-turn lane at Lung Ma Road northbound 	Completed	<ul style="list-style-type: none"> Exclusive Left-turn lane alleviate Sha Tau Kok Road – Lung Yeuk Tau SB traffic from roundabout
J15 Po Shek Wu Road / Choi Yuen Road	<ul style="list-style-type: none"> Lane re-configuration at Choi Yuen Road westbound 	Completed	<ul style="list-style-type: none"> Allow traffic from the two nearside traffic lanes of Choi Yuen Road WB to turn left simultaneously onto Po Shek Wu Road
	<ul style="list-style-type: none"> Local widening of Po Shek Wu Road northbound and southbound 	2026	<ul style="list-style-type: none"> Increase junction capacity with additional straight-ahead traffic lanes
J16 Jockey Club Road / Lung Sum Avenue	<ul style="list-style-type: none"> Width reduction of central reserve of Lung Sum Avenue Lane re-configuration on Lung Sum Avenue northbound 	Completed	<ul style="list-style-type: none"> Improve sub-standard design, increase carrying capacity of straight-ahead movements in both directions of Lung Sum Avenue through lane reconfiguration
	<ul style="list-style-type: none"> Local widening of Jockey Club Road eastbound and Lung Sum Avenue northbound 	2023	<ul style="list-style-type: none"> Increase junction capacity with additional traffic lanes

3.2.2.3. It is considered that the improvement works at junctions in the vicinity of the Queen's Hill Development, namely J14, J13, J11, J9, J8 and J4 have been completed (**Figure No. 60617595/PR/FIGURE 3.3**) and the remaining planned improvement works would serve

traffic at a district level context and the locations of these junctions are somewhat distant from Queen's Hill.

3.2.2.4. Subsequently, the following assessment would analyse the effect of the "R(B)" site being reallocated from private housing to public housing development (QHE) with a higher development intensity upon completion of the development, with the abovementioned traffic improvement schemes in place.

3.2.2.5. The link performances for the design year 2036 are summarised in below.

Critical Link Performance in Year 2036

Link No.	Road Link	Direction	Capacity (pcu/hr)	Year 2036 Reference Scenario ⁽¹⁾				Year 2036 Design Scenario ⁽¹⁾			
				Flow (pcu/hr)		V/C Ratio ⁽²⁾		Flow (pcu/hr)		V/C Ratio ⁽²⁾	
				AM	PM	AM	PM	AM	PM	AM	PM
RL1	Fanling Bypass (Between Sha Tau Kok Road and Fanling Highway)	NB	3,600	1,190	1,170	0.33	0.33	1,240	1,230	0.34	0.34
		SB	3,600	1,735	1,200	0.48	0.33	1,820	1,255	0.51	0.35
RL2	Lung Shan Tunnel	NB	3,600	1,595	1,075	0.44	0.30	1,605	1,080	0.45	0.30
		SB	3,600	1,390	1,530	0.39	0.43	1,400	1,540	0.39	0.43
RL3	Lung Ma Road	NB	1,520	1,070	755	0.70	0.50	1,250	910	0.82	0.60
		SB	1,520	945	645	0.62	0.42	1,120	805	0.74	0.53
RL4	Sha Tau Kok Road (Between Lung Ma Road and Sui Wan Road)	NB	3,000	1,970	1,695	0.66	0.57	2,125	1,845	0.71	0.62
		SB	3,000	2,000	1,920	0.67	0.64	2,165	2,060	0.72	0.69
RL5	Fanling Highway (Between So Kwun Po Road and Pak Wo Road)	NB	6,100	4,780	4,180	0.78	0.69	4,780	4,180	0.78	0.69
		SB	6,100	4,180	4,705	0.69	0.77	4,180	4,705	0.69	0.77
RL6	Fanling Highway (South of Lung Shan Tunnel)	NB	8,200	7,010	7,760	0.85	0.95	7,075	7,830	0.86	0.95
		SB	8,200	8,280	7,140	1.01	0.87	8,375	7,205	1.02	0.88
RL7	Fanling Highway (Between Po Shek Wu Road and So Kwun Po Road)	NB	8,200	6,330	5,905	0.77	0.72	6,380	5,940	0.78	0.72
		SB	8,200	6,320	5,885	0.77	0.72	6,350	5,910	0.77	0.72
RL8	Fanling Highway (Between Wo Hop Shek Interchange and Heung Yuen Wai Highway)	NB	8,200	6,485	7,340	0.79	0.90	6,540	7,405	0.80	0.90
		SB	8,200	8,005	6,515	0.98	0.79	8,090	6,570	0.99	0.80

Link No.	Road Link	Direction	Capacity (pcu/hr)	Year 2036 Reference Scenario ⁽¹⁾				Year 2036 Design Scenario ⁽¹⁾			
				Flow (pcu/hr)		V/C Ratio ⁽²⁾		Flow (pcu/hr)		V/C Ratio ⁽²⁾	
				AM	PM	AM	PM	AM	PM	AM	PM
RL9	a) Heung Yuen Wai Highway Slip Road (From Fanling Highway SB)	NB	1,900	340	180	0.18	0.09	340	180	0.18	0.09
	b) Heung Yuen Wai Highway Slip Road (From Fanling Highway NB)	NB	1,900	900	745	0.47	0.39	910	750	0.48	0.39
	c) Heung Yuen Wai Highway Slip Road (To Fanling Highway SB)	SB	1,900	615	805	0.32	0.42	625	815	0.33	0.43
	d) Heung Yuen Wai Highway Slip Road (To Fanling Highway NB)	SB	1,900	375	325	0.20	0.17	375	325	0.20	0.17
RL10	Sha Tau Kok Road (between Lau Shui Heung Road and Ping Che Road)	NB	3,000	825	840	0.28	0.28	840	850	0.28	0.28
		SB	3,000	785	855	0.26	0.29	800	865	0.27	0.29
RL11	Sha Tau Kok Road (between Ping Che Road and Heung Yuen Wai Highway)	NB	1,350	375	440	0.28	0.33	385	455	0.29	0.34
		SB	1,350	285	225	0.21	0.17	295	230	0.22	0.17
RL12	Sha Tau Kok Road (Between Lung Ma Road and Lau Shui Heung Road)	NB	3,000	1,075	1,100	0.36	0.37	1,090	1,115	0.36	0.37
		SB	3,000	935	1,175	0.31	0.39	950	1,185	0.32	0.40

Note:

(1) The reference scenario adopted the Subject Site as Site 2 of QH Development in the form of private housing. Meanwhile, the design scenario adopted the Subject Site as QHE in the form of public housing (i.e. SSF with 4,430 flats under the assessment).

(2) V/C ratio – Volume to Capacity Ratio

3.2.2.6. From table above, most of the critical link sections would be operating with a v/c ratio below 1.0 in the year 2036, indicating no immediate capacity concern.

3.2.2.7. The assessment identified that the Project has minimal impact to the traffic network in the vicinity when the design scenario is compared with the reference scenario. Nonetheless, it is anticipated that traffic at Fanling Highway (South of Lung Shan Tunnel) in year 2036 would be relatively slower than that of the base year. The Government would consider to implement appropriate traffic improvement works in the long-term.

3.2.2.8. The performances of the junctions are summarised below.

Junction Performance in Year 2036

Junction No.	Junction Name / Road Link	Junction Type	Year 2036 Reference Scenario ⁽¹⁾				Year 2036 Design Scenario ⁽¹⁾			
			RC (in %)		DFC		RC (in %)		DFC	
			AM	PM	AM	PM	AM	PM	AM	PM
J1	Po Shek Wu Road Interchange	Roundabout			0.92	0.67			0.92	0.69
J2	So Kwun Po Road Interchange	Roundabout			0.86	0.83			0.87	0.85
J3	Jockey Club Road / Ma Sik Road / So Kwun Po Road	Signal	20%	40%			20%	40%		
J4	Ma Sik Road / Fan Leng Lau Road	Signal	17%	24%			16%	23%		
J5	Ma Sik Road / Luen Chit Street	Signal	76%	85%			70%	76%		
J6	Ma Sik Road / Wo Tai Street	Signal	78%	77%			75%	75%		
J7	Sha Tau Kok Road / San Wan Road	Roundabout			0.78	0.76			0.81	0.79
J8	Sha Tau Kok Road / Jockey Club Road	Roundabout			0.77	0.70			0.79	0.72
J9	Sha Tau Kok Road / Lok Yip Road	Signal	17%	23%			15%	21%		
J10	Sha Tau Kok Road / Luen On Street	Signal	23%	31%			18%	24%		
J12	Fanling Bypass / Sha Tau Kok Road	Roundabout			0.75	0.68			0.84	0.78
J13	Sha Tau Kok Road / Sui Wan Road	Signal	23%	41%			15%	31%		
J14	Sha Tau Kok Road / Lung Ma Road	Roundabout			0.78	0.68			0.84	0.74
J15	Po Shek Wu Road / Choi Yuen Road	Signal	20%	41%			20%	40%		
J16	Jockey Club Road / Lung Sum Avenue	Signal	23%	38%			23%	36%		
J17	Queen's Hill Lung Ma Road / Site 1's Ring Road (Western)	Priority			0.59	0.41			0.83	0.53
J18	Queen's Hill Lung Ma Road / Site 1's Ring Road (Eastern)	Priority			0.14	0.10			0.18	0.13
J19	Sha Tau Kok Road / Lau Shui Heung Road	Roundabout			0.41	0.44			0.41	0.45
J20	Sha Tau Kok Road / Ping Che Road	Roundabout			0.38	0.40			0.39	0.40
J21	Sha Tau Kok Road / Heung Yuen Wai Highway	Roundabout			0.29	0.25			0.29	0.26

Note:

- (1) The reference scenario adopted the Subject Site as Site 2 of QH Development in the form of private housing. Meanwhile, the design scenario adopted the Subject Site as QHE in the form of public housing (i.e. SSF with 4,430 flats under the assessment).
- (2) RC – Reserve Capacity, DFC – Design Flow / Capacity Ratio

- 3.2.2.9. From the table above, it is found that most of the assessed junctions would be operating within capacity in the year 2036, indicating no immediate capacity concern.
- 3.2.2.10. It is identified that the AM peak of J1 and J2 would exceed the capacity threshold of 0.85. Nonetheless, the assessment identified that the Project has minimal impact to the traffic network in the vicinity when the design scenario is compared with the reference scenario.
- 3.2.2.11. In view of the traffic impact induced by the entire QH Development on Junction J1 and J2 is minimal, the existing traffic problem is considered as district wide problem and the problem in these junctions could only be fully addressed upon completion of the planned new roads under projects in Fanling and Sheung Shui.
- 3.2.3. Construction Traffic Impact Assessment
- 3.2.3.1. Construction works of the Development, which involves infrastructure works contract, site formation contract and building works contract by stages, is scheduled to commence in 2023 and completed by 2031. The time of the construction works for site formation and the construction works for the civil infrastructures will overlap one another throughout the construction period. It is anticipated the general background traffic is to be highest in year 2026 and assuming the amount of construction traffic will be in similar magnitude throughout the period of 2023 to 2026. Hence, year 2026 is the design year for construction traffic impact assessment. In order to minimise the impact construction traffic may bring upon Sheung Shui / Fanling, it is proposed for the construction vehicles to travel via Sha Tau Kok Road, Lung Shan Tunnel and Fanling Highway. The proposed construction traffic routings are illustrated in **Figure No. 60617595/PR/FIGURE 3.4**. Construction traffic from other projects within the AOI in year 2026 was also considered.
- 3.2.3.2. Key road links and junctions were assessed based on the traffic forecast for the reference and design scenarios in year 2026. The link performances and junction performances affected by construction traffic of the Study are summarized below.

Critical Link Performance in Year 2026

Link No.	Road Link	Direction	Capacity (pcu/hr)	2026 Reference (Without QHE Construction Traffic) ⁽¹⁾				2026 Design (With QHE Construction Traffic) ⁽¹⁾			
				AM		PM		AM		PM	
				Flow (pcu/hr)	V/C ⁽²⁾ Ratio	Flow (pcu/hr)	V/C ⁽²⁾ Ratio	Flow (pcu/hr)	V/C ⁽²⁾ Ratio	Flow (pcu/hr)	V/C ⁽²⁾ Ratio
RL2	Lung Shan Tunnel	NB	3,600	1,155	830	0.32	0.23	1,230	905	0.34	0.25
		SB	3,600	950	1,125	0.26	0.31	1,025	1,200	0.28	0.33
RL3	Lung Ma Road	NB	1,520	880	680	0.58	0.45	955	755	0.63	0.50
		SB	1,520	835	545	0.55	0.36	910	620	0.60	0.41
RL5	Fanling Highway (Between So Kwun Po Road and Pak Wo Road)	NB	6,100	3,575	3,045	0.59	0.50	3,640	3,110	0.60	0.51
		SB	6,100	3,285	3,450	0.54	0.57	3,350	3,515	0.55	0.58
RL6	Fanling Highway (South of Lung Shan Tunnel)	NB	8,200	5,700	6,035	0.70	0.74	5,710	6,045	0.70	0.74
		SB	8,200	6,705	5,640	0.82	0.69	6,715	5,650	0.82	0.69
RL7	Fanling Highway (Between Po Shek Wu Road and So Kwun Po Road)	NB	8,200	4,725	4,405	0.58	0.54	4,790	4,470	0.58	0.55
		SB	8,200	4,435	4,175	0.54	0.51	4,500	4,240	0.55	0.52
RL8	Fanling Highway (Between Wo Hop Shek Interchange and HYW Highway)	NB	8,200	5,115	5,615	0.62	0.68	5,180	5,680	0.63	0.69
		SB	8,200	6,320	4,925	0.77	0.60	6,385	4,990	0.78	0.61
RL9	a) HYW Highway Slip Road (From Fanling Highway SB)	NB	1,900	270	105	0.14	0.06	335	170	0.18	0.09
	b) HYW Highway Slip Road (From Fanling Highway NB)	NB	1,900	885	720	0.47	0.38	895	730	0.47	0.38
	c) HYW Highway Slip Road (To Fanling Highway SB)	SB	1,900	650	825	0.34	0.43	660	835	0.35	0.44
	d) HYW Highway Slip Road (To Fanling Highway NB)	SB	1,900	300	300	0.16	0.16	365	365	0.19	0.19
RL10	STK Road (between Lau Shui Heung Road and Ping Che Road)	NB	3,000	820	805	0.27	0.27	895	880	0.30	0.29
		SB	3,000	775	790	0.26	0.26	850	865	0.28	0.29
RL11	STK Road (between Ping Che Road and HYW Highway)	NB	1,350	370	430	0.27	0.32	445	505	0.33	0.37
		SB	1,350	235	180	0.17	0.13	310	255	0.23	0.19
RL12	STK Road (Between Lung Ma Road and Lau Shui Heung Road)	NB	3,000	1,070	1,050	0.36	0.35	1,145	1,125	0.38	0.38
		SB	3,000	920	1,090	0.31	0.36	995	1,165	0.33	0.39

Note:

- (1) The reference scenario adopted the Subject Site as Site 2 of QH Development in the form of private housing. Meanwhile, the design scenario adopted the Subject Site as QHE in the form of public housing (i.e. SSF with 4,430 flats under the assessment). It is found that the v/c ratio of all critical link sections would be operating satisfactorily.
- (2) V/C ratio – Volume to Capacity Ratio

- 3.2.3.3. From the above table, it is found that the v/c ratio of all critical link sections would be operating with a v/c ratio below 1.0 in the year 2026, indicating no immediate capacity concerns.

Critical Junction Performance in Year 2026

Junction No.	Junction Name / Road Link	Junction Type	Year 2026 Reference Scenario ⁽¹⁾				Year 2026 Design Scenario ⁽¹⁾			
			RC (in %)		DFC		RC (in %)		DFC	
			AM	PM	AM	PM	AM	PM	AM	PM
J14	STK Road / Lung Ma Road	Roundabout			0.73	0.62			0.75	0.63
J17	QH Lung Ma Road / QH Ring Road (Western)	Priority			0.49	0.35			0.54	0.38
J18	QH Lung Ma Road / QH Ring Road (Eastern)	Priority			0.11	0.07			0.11	0.07
J19	STK Road / Lau Shui Heung Road	Roundabout			0.41	0.41			0.43	0.44
J20	STK Road / Ping Che Road	Roundabout			0.38	0.43			0.41	0.44
J21	STK Road / HYW Highway	Roundabout			0.27	0.25			0.31	0.29

Note:

- (1) The reference scenario adopted the Subject Site as Site 2 of QH Development in the form of private housing. Meanwhile, the design scenario adopted the Subject Site as QHE in the form of public housing (i.e. SSF with 4,430 flats under the assessment). It is found that the v/c ratio of all critical link sections would be operating satisfactorily.
- (2) RC – Reserve Capacity, DFC – Design Flow / Capacity Ratio

- 3.2.3.4. From the above table, it is found that all assessed junctions would be operating within capacity in year 2026 which is considered acceptable.

3.2.4. Pedestrian Footpath Assessment

- 3.2.4.1. The Development is connected directly to Lung Ma Road within QH Housing Development, where it provides two 2.75m wide pedestrian footpaths to both sides of Lung Ma Road. There is also a 3.5m wide cycling track to the southern side of the Lung Ma Road. The pedestrian footpaths and the cycling track cover most of the Lung Ma Road, and subsequently onward to Sha Tau Kok Road and Fanling Sheung Shui New Town.
- 3.2.4.2. A pedestrian connection is proposed connecting the adjacent Fu Tei Pai Village. It is to be 1.5m in width as advised by the Home Affairs Department and will be formed by at-grade footpath, staircases and landings. The footpath also provide access to a number of existing graves nearby as shown in **Figure No. 60617595/PR/FIGURE 2.1**.
- 3.2.4.3. As the Development connects to Lung Ma Road within QH Housing Development and both vehicular and pedestrian access to all destinations would be via Lung Ma Road, the footpaths will be share-used with other developments at QH. Therefore, the study of footpath demand also considers the pedestrian trips generated from Site 1 and Site 3.
- 3.2.4.4. The trip rates were applied to the whole of QHD to derive the pedestrian trips. The Development would generate some 10,400 and attract some 7,060 pedestrians critical one-way during the morning and evening peak hours respectively, with the AM peak 2-way pedestrian trips generation of some 14,300 from the developments. It is assumed a conservative approach that 95% of pedestrians generated by the Development in the vicinity of the Development will take road-based transport (i.e. 9,878 & 6,711 ped/hr generated in AM

& PM peak respectively), while the remaining 5% would be internal trips within QH Development Site (i.e. 520 & 353 ped/hr generated in AM & PM peak respectively). According to Travel Characteristics Survey 2011 issued by Transport Department, the total distribution of taxi and private vehicle is 18%, based on this distribution we assume the remaining 82% will take public transport (i.e. 8,100 & 5,503 ped/hr generated in AM & PM peak respectively).

- 3.2.4.5. It is noted from previous liaison with HD that a proportion of Franchised Bus and GMB will terminate at different locations within the Site during peak hour. Therefore, the proportion of pedestrian trips generated taking public transport were split into various PT boarding/ alighting points within QHD.
- 3.2.4.6. The location of the PT boarding/ alighting points and the main origin and destination points concerned, together with the footpath links and uncontrolled cautionary crossings to be assessed are illustrated in **Figure No. 60617595/PR/FIGURE 3.5**.
- 3.2.4.7. A summary of the LOS at the pedestrian footpath network is summarised below.

Pedestrian Footpath Assessment

Footpath Link No.	Actual Width (m)	Effective Width (m) ⁽¹⁾	Two-Way Pedestrian Flow (ped/min/m)		Level of Service (LOS)	
			AM Peak	PM Peak	AM Peak	PM Peak
1	2.75	1.75	12.3	9.3	A	A
2	2.75	1.75	14.0	10.6	A	A
3	2.75	1.75	0.2	0.1	A	A
4	2.75	1.75	6.3	6.3	A	A
5	2.75	1.75	6.3	6.3	A	A
6	2.75	1.75	0.7	0.5	A	A
7	2.75	1.75	3.5	3.0	A	A
8	2.75	1.75	2.6	2.0	A	A
9	2.75	1.75	13.5	10.3	A	A
10	2.75	1.75	13.3	10.0	A	A

Note:

(1) 0.5m dead width on both sides to be deducted

- 3.2.4.8. With reference to TPDM, LOS C would be desirable for footpath width assessments, the assessed footpath links in QH Site are with LOS A, denoting they would be operating satisfactorily.
- 3.2.4.9. The results from the assessments for the uncontrolled cautionary crossings are summarised below.

Pedestrian Footpath Assessment

Pedestrian Crossing Link No.	Crossing Width (m)	Capacity (Ped/hr)	Pedestrian Flow (Ped/hr)	
			AM Peak	PM Peak
C1	4.0	4,800	1,295	980
C2	4.0	4,800	1,450	1,097
C3	6.25	7,200	275	214
C4	8.0	9,600	121	120
C5	4.0	4,800	659	661
C6	4.0	4,800	2,128	1,658

- 3.2.4.10. it is concluded that the pedestrian footpath and uncontrolled cautionary crossings would be operating within capacity.

Cycle Track Assessment

- 3.2.5.1. Based on the planned flat numbers of the Queen's Hill Site, the anticipated population of QHD will be approximately 48,550. According to the Travel Characteristics Survey 2011 (TCS2011) issued by TD (refer to TCS2011 Chapter 3.5), the daily cycling demand was estimated by

multiplying the population by the daily cycling trip rate of 1%. Furthermore, by making reference to the characteristics of trips made by Hong Kong residents (refer to TCS2011 Chapter E2.9), each of the AM and PM peak hour trips account for about 12% of the daily trips made. Therefore, the estimated cycling demand would be approximately 60 cycle trips per peak hour. With reference to TPDM Volume 2 Chapter 3.8, the general operating capacity for two-way is 400 cycles per metre width per hour, with the current provision of a 3.5m width cycle track at QHD, a cycling track capacity of 1,400 cycle trips per hour is provided.

- 3.2.5.2. Therefore, the provided cycle track is anticipated to have sufficient capacity to serve the amount of cycles generated by developments of QH.

3.2.6. Public Transport Services and Facilities

Existing Public Transport Services

- 3.2.6.1. The existing PT services along Sha Tau Kok (STK) Road are illustrated in **Figure No. 60617595/PR/FIGURE 3.6**. A Red Mini Bus serving between Sheung Shui (Fu Hing Street) and Ping Che & Ping Yeung also serves STK Road.

Public Transport Services for Queen's Hill Development

- 3.2.6.2. According to the Document No. 2/2020 "2020-2021 Bus Route Planning Programme for the North District" by TD, 5 nos. new bus routes was proposed, and 1 existing bus route will be extended for Queen's Hill Development. Meanwhile, Document No. 17/2021 "2021-2022 Bus Route Planning Programme for the North District" by TD recommended a new night bus service via Queen's Hill Development. Furthermore, a planned GMB service for Queen's Hill under the Document of Announcement No. 6453 on NT & HKI GMB Services is proposed and has since entered service. The proposed frequency of each bus route is shown in table below.

Recommended Bus Routes for QHD by TD

Routes	Service Hour and Frequency (Tentative, subject to adjustment according to population intake)	
New Bus Routes ⁽¹⁾		
78A Queen's Hill – Fanling Station (Circular)	5:45 am to 00:15 am every day Frequency: 15 to 30 mins	
79X Queen's Hill – Nam Cheong	From Queen's Hill: Monday to Friday (except holidays) 7:30 am (one trip)	From Nam Cheong: Monday to Friday (except holidays) 6:30 pm (one trip)
78X Queen's Hill – Kai Tak	From Queen's Hill: Monday to Friday (except holidays) 7:30 am (one trip)	From Kai Tak: Monday to Friday (except holidays) 6:30 pm (one trip)
679 Queen's Hill – Hong Kong Station (via Eastern Harbour Crossing)	From Queen's Hill: Monday to Friday (except holidays) 7:30 am (one trip each route)	From Hong Kong Station Public Transport Interchange: Monday to Friday (except holidays) 6:30 pm (one trip each route)
979 Queen's Hill – Hong Kong Station (via Western Harbour Crossing)		
Extended Bus Route ⁽¹⁾		
278A Queen's Hill – Tsuen Wan (Nina Tower) (Original destination: Luen Wo Hui Bus Terminus)	From Queen's Hill: Monday to Saturday (Except Holidays) 6:55 am and 7:15 am (Two trips in total)	From Tsuen Wan (Nina Tower): Monday to Saturday (Except Holidays) 5:55 pm and 6:15pm (Two trips in total)
Overnight Bus Route ⁽²⁾		
N78 Sheung Shui Station – Sha Tau Kok	From Sha Tau Kok : Daily 4:00 am and 4:45 am (tentatively) (Two trips in total)	From Sheung Shui Station: Daily 1:10 am and 1:50 am (Tentatively) (Two trips in total)
New GMB Route ⁽³⁾		
GMB Route No. 503 Queen's Hill – North District Hospital	Frequency: 10 to 15 mins (Operation period: 7:00 am to 8:00 pm daily)	

Note:

(1) Information extracted from Document No. 2/2020 "2020-2021 Bus Route Planning Programme for the North District" prepared by TD.

(2) Information extracted from Document No. 17/2021 "2021-2022 Bus Route Planning Programme for the North District" prepared by TD.

(3) New GMB route referred to Document of Announcement No. 6453 on NT & HKI GMB Services.

Public Transport (PT) Services and Facilities for the Development

- 3.2.6.3. To serve the population of the Queen's Hill Development, a series of planned PT facilities are provided within the Queen's Hill Development along the Lung Ma Road and are illustrated in **Figure No. 60617595/PR/FIGURE 3.7**. As it is expected that passengers will walk to/from the nearest PT boarding/alighting point of their mode choice, it is anticipated that PT demand to/from QHE, Site 1 SSF and Site 3 would make use of the closest PT facilities, i.e. the GMB lay-by and the bus lay-by to the eastern section of QHD.

- 3.2.6.4. To meet the overall demand for PT, assumptions were made for the occupancy of Franchised Bus and GMB. The capacity of double-decker buses can reach some 105 passengers, and the capacity of most GMB vehicles is 19 passengers, these are used to assess the number of trips required by QHD to serve the overall PT demand.
- 3.2.6.5. Based on the PT assessment, a total of 50 and 32 trips (combined trips of FB and GMB) giving an overall service capacity of 3,616 and 2,328 ped/hr for AM & PM peak respectively will be adequate to cater for the required PT demand for the eastern section of QHD.
- 3.2.6.6. To summarize, the potential destinations of the PT services for QHE would include (i) Fanling Station, (ii) Sheung Shui Station, (iii) Pak Wo Road, (iv) Nam Cheong Station, (v) Kai Tak, (vi) Hong Kong Station and (vii) Tsuen Wan, with potential connections to Sheung Shui Station and Sha Tau Kok during the night hours.
- 3.2.6.7. Further to the above recommendation of PT services, the potential destinations of the PT services should be subject to numerous factors such as future PT planning strategies, considerations of FB and GMB operators, government policies and consultation with the stakeholders. Therefore, it would be more appropriate to further review the PT routes by relevant parties at later stage prior to the population intake of QHE.

3.2.7. Railway Assessment

- 3.2.7.1. The East Rail Line will form part of the future “North-South Corridor” of the Shatin to Central Link. The estimation of capacity of ERL/NSC is shown in the table below.

Capacity of East Rail Line / North-South Corridor

Railway Line	Passenger Density Level	Maximum Carrying Capacity ¹ (pphpd)
North South Corridor (NSC)	6-ppsm ²	80,000
	4-ppsm ³	56,960

Notes:

- (1) Passenger per hour in one direction, rounded to the nearest thousand.
- (2) The passenger density level of 6-ppsm is referenced to the Executive Summary of Review and Update of the Railway Development Strategy 2000, Table 4.3.
- (3) The passenger density level of 4-ppsm is 71.2% of that 6-ppsm according to LegCo Paper No. CB(4)854/15-16(07), Annex 1.

- 3.2.7.2. According to the 2016 Population By-Census, some 43% of North District residents have their place of work in the Hong Kong Island, Kowloon, as well as no fixed workplace.
- 3.2.7.3. By analysing the number of mechanical trips taken by rail during the peak hours and comparing this with the overall capacities of ERL/NSC, the v/c ratio of the rail demand for QHE will equate to some 0.01 and 0.02 of the overall capacity of ERL/NSC for the 6-ppsm and 4-ppsm scenarios respectively.
- 3.2.7.4. Therefore, the railway trips generated by QHE do not anticipate to have material impact to the overall capacity of ERL/NRC.

3.3. **Summary**

- 3.3.1.1. Based on the assessment, it is concluded that the proposed change of development parameters at QHE from private housing to public housing would not create significant traffic constraints to the nearby road network by QHE taking into account the traffic mitigation measures as proposed in the previous EFS including the upgrading of Lung Ma Road and a series of junction improvement schemes.

4. **PRELIMINARY SEWERAGE IMPACT ASSESSMENT**

4.1. **Introduction**

4.1.1. General

4.1.1.1. This section describes the findings of Preliminary Sewerage Impact Assessment (PSIA) for the proposed development, and identifies any potential adverse sewerage impact and recommends mitigation measures if necessary.

4.1.2. Scope of PSIA

4.1.2.1. Sewage generated from the proposed development would be increased after increasing the development intensity from private to public housing development. PSIA has been undertaken to evaluate the impacts to the downstream sewerage infrastructures in view of the Development.

4.1.2.2. Capacity of sewerage system being constructed in QH Housing development (Site 1) by HD, as well as the existing downstream sewerage system and sewage treatment facilities would be evaluated, taking into account new sewage amount from the proposed Development and the latest estimated sewage generation from Queen's Hill Sites 1 and 3 where available. Alignment of sewerage system along Lung Ma Road up to Queen's Hill Sewage Pumping Station (QHSPS) is shown in **Figure No. 60617595/PR/FIGURE 4.1**.

4.1.2.3. Breakdown showing the current estimated sewage generation from all QH sites to be handled by QHSPS, with the "R(B)" site as private housing development, is shown below:-

Development	ADWF (m³/d)
QH Site 1	7,552
<u>QHE (as private housing development)</u>	<u>2,515</u>
QH Site 3	157
sub-total:	10,225
Others (incl. allowance for primary school at Site A, Fire Station at Site B, Open Space at Site 4, etc.)	625
Total:	10,850

Note: Totals may not sum due to rounding.

4.1.3. Updated Population

4.1.3.1. To assist HD in determining the maximum allowable development parameters and allow reasonable design flexibility, technical assessment will be carried out based on the Development population with 10% allowance to cater for critical scenario.

4.1.3.2. Design sewage flow have been estimated based on above population and the Design Unit Flow Factors (UFFs) according to EPD's "Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning" (GESF).

4.1.4. Updated Flow Projection

- 4.1.4.1. New estimated sewage generation from the proposed development as public housing development together with other sewage generation from QH sites are summarized below:

Development	ADWF (m ³ /d)
QH Site 1	7,552
<u>QHE (as public housing development)</u>	<u>3,321⁽¹⁾</u>
QH Site 3	157
sub-total:	11,031⁽²⁾
Others (incl. allowance for primary school at Site A, Fire Station at Site B, Open Space at Site 4, etc.)	625
Total:	11,657⁽²⁾

Notes:

- (1) Including 10% allowance.
(2) Totals may not sum due to rounding.

- 4.1.4.2. From the above, it is noted that additional flow of about 807 m³/d would be induced from the proposed development for the change from private to public housing development. Adequacy of downstream sewerage infrastructures has been evaluated.

4.2. **Sewage Impact Assessment**

- 4.2.1.1. Sewage generated from the proposed Development would be conveyed to QHSPS by trunk sewer along Lung Ma Road, and subsequently to Shek Wu Hu Effluent Polishing Plant (SWHEPP) for treatment. Capacity of the trunk sewer, QHSPS as well as reserved treatment capacity at SWHEPP are assessed.

4.2.2. Capacity Analysis on Trunk Sewer along Lung Ma Road in QH Site 1

- 4.2.2.1. The capacity of existing trunk sewer along Lung Ma Road connecting to the upstream of QHSPS have been examined.

- 4.2.2.2. Based on the assessment results, the existing 450 mm diameter trunk sewer would have sufficient capacity to collect the increased sewage flow generated from QH sites including the Development. i.e. additional sewage flow generated from the Development will not result in adverse impact to the trunk sewer.

4.2.3. Capacity Analysis on Queen's Hill Sewage Pumping Station

- 4.2.3.1. QHSPS is currently equipped with a total installed pump capacity of 366 L/s (2 duty + 1 standby pump arrangement with each pump capacity at 183 L/s).

- 4.2.3.2. Based on the assessment results, this installed capacity is found sufficient to cater the increased sewage flow generated from QH sites including the Development. By adjusting the pumping cycle instead of the pump flow, the increased inflow would not increase the total amount of peak flow being delivered to downstream pipelines i.e. sewerage system in Fanling North New Development Area to be commissioned in Year 2031.

- 4.2.3.3. Also, the spare volume at QHSPS could also provide a holding capacity of more than 1 hour Average Dry Weather Flow taking into account the increased total inflow, which fulfils the minimum amount as required in Environmental Permit of QHSPS.

- 4.2.3.4. Therefore, it is considered that the proposed development will not result in adverse impact to QHSPS and its associated SRM / downstream sewers.

4.2.4. Capacity Analysis on SWHEPP

- 4.2.4.1. EPD advised that the proposed development is within the catchment of SWHEPP, which is being upgraded and shall be completed by 2034. EPD advised that sufficient capacity will be timely provided in phase with the TPEDM forecasted population to be accommodated by all existing and planned development within its catchment.

4.3. **Summary**

- 4.3.1.1. Impact to the trunk sewer along Lung Ma Road from the downstream of the proposed Development, QHSPS, as well as SWHEPP are being assessed. Assessment concludes that these infrastructure works would have sufficient capacity to cater the increased sewage flow generated from QH sites including additional sewage flow generated from the proposed Development. Thus no insurmountable problem on sewerage system including trunk sewer along Lung Ma Road, QHSPS as well as SWHEPP is anticipated due to the proposed Development.
- 4.3.1.2. In view of the above, construction of about 35m 400mm diameter sewerage connection pipe from the Site to the existing sewage manhole at Lung Ma Road within QH Housing Development is proposed. Proposed sewerage connection scheme for the proposed development and associated works area is shown in **Figure No. 60617595/PR/FIGURE 4.2.**

5. PRELIMINARY DRAINAGE IMPACT ASSESSMENT

5.1. Introduction

5.1.1. General

5.1.1.1. This section describes the findings of Preliminary Drainage Impact Assessment (PDIA) for the proposed development, and identifies any potential adverse drainage impact and recommends mitigation measures if necessary.

5.1.2. Scope of PDIA

5.1.2.1. The Site have a total area of approximately 4 hectares and is currently in hilly terrain with the high point (+50 mPD) at the center of site and sloping downward toward west and north to Fu Tei Pai Village (lowest point at +21 mPD).

5.1.2.2. The Site will be mainly served by the trunk drainage along Lung Ma Road within QH Housing Development, which connects to an existing box culvert at the western tip of the QH Site 1, Ma Wat River, and eventually Ng Tung River. The drainage arrangement for the above is shown on **Figure No. 60617595/PR/FIGURE 5.1**.

5.1.2.3. Whether the catchment and runoff received by the Site would be increased or not after increasing the development intensity from private to public housing development and the associated impact to the trunk drainage along Lung Ma Road within QH Housing Development as well as Ma Wat River have been evaluated under the PDIA.

5.1.2.4. Rainfall and sea level due to climate change is also required to be reviewed to reflect the impact due to climate change. Assessment is conducted to review the drainage impact to the drainage system in QH Site 1 and the existing downstream drainage system / water bodies due to climate change effect.

5.1.3. Updated Drainage Arrangement in QH Site 1

5.1.3.1. Updated catchment arrangement for QH sites is received from HD. Assessment of potential drainage impacts to the drainage system in QH Site 1 (under construction) and the existing downstream drainage system due to the changes of catchments has also been assessed under the PDIA.

5.2. Drainage Impact Assessment

5.2.1. General

5.2.1.1. Potential drainage impact to the proposed trunk drainage system QH Site 1 development as well as its downstream drainage system are assessed. Results are presented in paragraphs below.

5.2.2. Existing Drainage System

5.2.2.1. The QHE Site is mainly served by the proposed trunk drainage to be constructed in QH Site 1 by HD, pipe size ranging from 1,200mm to 2,100mm diameter, and discharge to an existing 4,000mm (W) x 2,500mm (D) box culvert at the western tip of the QH Site. This box culvert discharges to Ma Wat River, which connects to Ng Tung River.

5.2.3. Proposed Drainage System

5.2.3.1. The existing 1,050mm dia. drainage pipe laid by HD and connected to S2.1 was proposed as the drainage discharge point to cater the all runoff from the Development. An additional 750mm dia. drainage pipe is proposed as secondary drainage discharge point to allow flexibility for HD building layout design. These two proposed discharge points are shown on **Figure No. 60617595/PR/FIGURE 5.2**.

5.2.4. Drainage Impact Assessment on Trunk Drainage along Lung Ma Road within QH Housing Development

- 5.2.4.1. Total catchment area of QH Site 1 is about 23.3 hectares in endorsed model of QH-IDC. Updated catchment area from HD shows that the total catchment of QH Site 1 is about 25.7 hectares. There are 2 hectares difference.
- 5.2.4.2. The Development has a total area of about 4 hectares. A single permanent discharge point using the existing 1,050mm dia. drain pipe laid by HD is proposed and adopted in this assessment.
- 5.2.4.3. Based on the assessment results, the existing 1,050mm dia. drainage pipe along Lung Ma Road within QH Housing Development would be able to maintain 1 in 50-year flood protection level (i.e. more than 300mm freeboard) to cater for all runoff from the Site as well as the changes in QH catchments.
- 5.2.4.4. The assessment also reveals that the trunk drainage would be able to maintain 1 in 50-year flood protection level (i.e. more than 300mm freeboard). As a result, no adverse impact to the trunk drainage is anticipated.
- 5.2.4.5. Besides, the assessment reveals that the additional 750mm dia. Drainage pipe can convey around 1.21m³/s (about 56% of total flow from the Development).

5.2.5. Drainage Impact Assessment on Ma Wat River

- 5.2.5.1. The assessment reveals that Ma Wat River would be able to maintain 1 in 50-year flood protection level after incorporating the Site and updated catchment areas. As a result, no adverse impact to Ma Wat River is anticipated.

5.2.6. Climate Change

- 5.2.6.1. Rainfall and sea level due to climate change have been evaluated. It is concluded that projection of sea level rise has nil impact to the Site in view of the far distance between the Site and the sea and the fact that the Site is located at much higher than the sea level.

5.3. Summary

- 5.3.1.1. Assessment confirms that no insurmountable problem on drainage system including trunk drainage along Lung Ma Road within QH Housing Development and downstream water bodies i.e. Ma Wat River is anticipated.
- 5.3.1.2. To allow for flexibility for HD's building design, two drainage connection points are proposed for future connection from the Site to the existing drainage manhole at Lung Ma Road within QH Housing Development, which are drainage pipe of about 17 m long 1050 mm dia. and about 17m long 750mm dia. respectively. Proposed drainage connection scheme for the Development and associated works area is shown in **Figure No. 60617595/PR/FIGURE 5.2.**

6. **PRELIMINARY WATER SUPPLY IMPACT ASSESSMENT**

6.1. **Introduction**

6.1.1. General

6.1.1.1. This section describes the findings of Preliminary Water Supply Impact Assessment (PWSIA) for the proposed development, and identifies any potential impact on the water supply system and recommends mitigation measures if necessary.

6.1.2. Scope of PWSIA

6.1.2.1. Water demand from the proposed development would be increased after increasing the development intensity from private to public housing development. PWSIA has been undertaken to evaluate the impacts to the water supply system due to the above change.

6.1.2.2. Impact to the regional water supply system, as well as the water supply network supporting the whole QHD, were evaluated, taking into account new water demands from the proposed development and the latest estimated water demands from other QH sites where available. Location of existing and planned fresh water service reservoirs and planned local water supply arrangement are shown in **Figure No. 60617595/PR/FIGURE 6.1 and 6.2** respectively.

6.1.2.3. Breakdown showing the current estimated water demand from all QH sites to be supplied by Ping Che Fresh Water Service Reservoir, with the Site as private housing development, is show below: -

Current Estimated Water Demand

Site Area	Potable Water Demand (m ³ /d)	Flushing Water Demand (m ³ /d)
QH Site 1	5,993	2,111
<u>QHE (as private housing development)</u>	<u>2,992</u>	<u>968</u>
QH Site 3	99	56
Others (incl. allowance for primary school at Site A, Fire Station at Site B, Open Space at Site 4, etc.)	259	142
Sub-Total	9,343	3,277
Total	12,620 (Say 13,000) ⁽¹⁾	

Notes:

(1) Totals may not sum due to rounding

6.1.3. Updated Population

6.1.3.1. To assist HD in determining the maximum allowable development parameters and allow reasonable design flexibility, technical assessment will be carried out based on the Development population with 10% allowance to cater for critical scenario.

6.1.3.2. Water demand has been estimated based on above population and the unit demands and peaking factors in accordance with WSD's Departmental Instruction (DI) 1309.

6.1.4. Updated Water Demand

- 6.1.4.1. New estimated water demand from the proposed development as public housing development together with other water demand from QH sites are summarized below:-

Site Area	Potable Water Demand (m ³ /d)	Flushing Water Demand (m ³ /d)
QH Site 1 ⁽¹⁾	5,668	2,710
<u>QHE (as public housing development)⁽¹⁾</u>	<u>3,350</u>	<u>868</u>
QH Site 3	99	56
Others (incl. allowance for primary school at Site A, Fire Station at Site B, Open Space at Site 4, etc.)	259	142
Sub-Total	9,376	3,776
Total	13,152 (Say 14,000) ⁽²⁾	

Notes:

(1) 10% allowance to housing developments is added to allow design flexibility in future

(2) Totals may not sum due to rounding

- 6.1.4.2. From the above, it is noted that additional water demand induced from the proposed development for the change from private to public housing development are 33 m³/d for potable water and 499 m³/d for flushing water. Adequacy of water supply system has been evaluated.

6.2. **Water Supply Impact Assessment**

6.2.1. Impact to Regional Water Supply System

- 6.2.1.1. As advised by WSD, potable water supply to QH sites would be fed by Tong Hang No. 3 Fresh Water Service Reservoir (FWSR) and flushing water supply to QH sites would be fed by Table Hill Reclaimed Water Service Reservoir (RWSR). Both service reservoirs are currently being constructed and planned to be commissioned before population intake of the proposed development.
- 6.2.1.2. Considering the slight increase in respective water demand due to the proposed development as compared with the capacity of respective service reservoirs, it is concluded that the proposed development would impose insignificant impact to the existing /planned regional water supply system.

6.2.2. Impact to Local Water Supply System

- 6.2.2.1. To cope with the future water demand of QHE, a 300mm dia. potable water connection, a 150mm dia. flushing water connection and a 300mm dia. fire mains connection shall be provided, tapping to the respective water mains along Lung Ma Road in Queens Hill Estate and Shan Lai Court.
- 6.2.2.2. The hydraulic performance of the local water supply network, which includes water mains along Lung Ma Road in Queens Hill Estate and Shan Lai Court, for supporting existing Queens Hill Estate and Shan Lai Court, as well as the Development, has been assessed.
- 6.2.2.3. Based on the assessment results, the local water supply network would have adequate capacity and residual head. However, there would be deficiency in achieving minimum flow velocity of 0.9m/s at certain section of water mains along Lung Ma Road in Queens Hill Estate and Shan Lai Court regardless of the update in water demand, causing stagnation of water in such sections of water mains. In order to keep the water flowing in the concerned section of

water mains, provisions have been allowed at water mains along Lung Ma Road in Queens Hill Estate and Shan Lai Court for regular use of water.

6.3. Summary

- 6.3.1.1. Impact to the regional water supply system i.e. Tong Hang No. 3 FWSR and Table Hill RWSR are being assessed. Assessment confirms that these water supply systems would have sufficient capacity to cater the increased fresh water and flushing water demand generated from QH sites including additional demand from the proposed development. Thus no insurmountable problem on water supply system including the water mains and service reservoirs is anticipated.
- 6.3.1.2. Construction of a 300mm dia. portable water connection, 150mm dia. flushing water connection and a 300mm dia. fire service connection (about 25m long in total) from the Site to the existing watermain at the Lung Ma Road outside Shan Lai Court is proposed. Proposed water supply connection scheme for the Development and associated works area is shown in **Figure No. 60617595/PR/FIGURE 6.3.**

7. PRELIMINARY ENVIRONMENTAL REVIEW

7.1. Introduction

7.1.1. General

7.1.1.1. This section describes the findings of Preliminary Environmental Review (PER) for the proposed development.

7.1.1.2. To evaluate potential environmental impacts associated with the construction and operation of the proposed infrastructure works supporting the proposed development as well as the operation, relevant impact assessments are conducted based on respective assessment areas derived from works area for construction of proposed infrastructure works and the Site accordingly.

7.1.2. Environmental Impact Assessment Ordinance Implications

7.1.2.1. The proposed development does not involve construction or major modification to expressway, trunk road, primary distributor road or district distributor road. Thus, the proposed development does not fall into any item of the category Item A of Schedule 2 of the EIAO and does not constitute a DP under the EIAO.

7.1.2.2. The Site would not encroach within Deep Bay Buffer Zone 1 or 2, and would be served by public sewerage networks at the time of the population intake. Hence, the proposed development does not fall into the category of neither Item P.1 and P.2 of Schedule 2 of the EIAO and does not constitute a DP under the EIAO.

7.1.2.3. The major works for the proposed development does not fall within any Country Park, special area, conservation area, marine park, marine reserve, site of cultural heritage and site of special scientific interest. Hence, the proposed development does not fall into the category of Item Q.1 of Schedule 2 of the EIAO and does not constitute a DP under the EIAO.

7.1.2.4. The proposed development does not involve construction or major modification to expressway, trunk road, primary distributor road or district distributor road. Thus, the proposed development does not fall into any item of the category Item A of Schedule 2 of the EIAO and does not constitute a DP under the EIAO.

7.2. Air Quality

7.2.1. Introduction

7.2.1.1. This section presents the assessment of the potential air quality impacts associated with the construction and operation of the proposed infrastructure works and operation of the proposed development. Recommendations for mitigation measures have been provided, where necessary, to minimise the identified air quality impacts to an acceptable level.

7.2.2. Air Sensitive Receivers (ASRs)

7.2.2.1. Nearby ASRs within 500m assessment area which would be potentially affected are listed below. Locations of these ASRs are shown in **Figure No. 60617595/PR/FIGURE 7.2.1.**

Representative Air Sensitive Receivers

<u>ASR ID</u>	<u>Description</u>	<u>Existing / Planned Land Use</u>	<u>Nearest Distance from Project (m)</u>	<u>Affected during Construction Phase</u>	<u>Affected during Operation Phase</u>
<u>A1</u>	<u>Village houses in Fu Tei Pai</u>	<u>Residential</u>	90	✓	✓
<u>A2</u>	<u>Committed Residential Blocks at QH Site 1</u>	<u>Residential</u>	6	✓	✓
<u>A3</u>	<u>Proposed Residential Blocks at Site</u>	<u>Residential</u>	7	✗	✓
<u>A4</u>	<u>Proposed Welfare Block at Site</u>	<u>GIC and Commercial</u>	20	✗	✓

7.2.3. Potential Air Quality Impact

Construction Phase

- 7.2.3.1. In general, major potential sources of air quality impacts arising from the construction of proposed infrastructure works would be dust emissions generated from dusty construction activities including excavation, loading or unloading stockpile material, wind erosion of exposed areas.
- 7.2.3.2. Emissions of other air pollutants such as carbon monoxide and dioxide, nitrogen oxides and sulphur dioxide generated by powered mechanical equipment (PME) and vehicle exhausts on-site should be minor since on-site electricity supply would be provided for powered mechanical equipment during construction stage as much as practicable, and the project scale is small. Following the requirements stipulated in Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation and Air Pollution Control (Fuel Restriction) Regulations (i.e. use of ultra-low sulphur diesel), adverse air quality impacts from the criteria pollutants (such as NO₂, SO₂, and CO) are not anticipated.

Operation Phase

- 7.2.3.3. Potential air quality impact on the surrounding ASRs during the operation phase of the proposed Development is mainly related to the vehicle emissions from the Lung Ma Road within QH Housing Development, the proposed Development and Lung Ma Road, which are both Local Distributors based on the description of the Transport Planning and Design Manual (TPDM). With no road works required for the proposed development, there would be no change to the carriageway of the Lung Ma Road within QH Housing Development. Therefore, the vehicle emissions arising from the proposed development to the identified ASRs is considered minor. Besides, accordingly to the latest block layout design of the proposed development, it will have a buffer distance of at least 5m from the road kerb of the Lung Ma Road within QH Housing Development. This would comply with the recommendations set by HKPSG.
- 7.2.3.4. As a result, no adverse impact on proposed ASRs is anticipated.
- 7.2.4. **Industrial and Domestic Chimneys Emission**
- 7.2.4.1. A chimney survey in form of site visit at 500m Study Area was conducted. Two chimneys are identified. One is an industrial chimney at Tung Chun Soy Sauce Company, and another is a

domestic chimney. They are located at the northwest and north of the Site near Sha Tau Kok Road respectively.

7.2.4.2. As recommended by HKPSG, a minimum of 200m buffer distance for high-rise buildings would be required between the proposed development and these chimneys.

7.2.4.3. Since the industrial and domestic chimneys are located at about 420m and 450m correspondingly from the site boundary of the Development, adverse chimney emission impact on the Development is not anticipated.

7.2.5. Proposed Mitigation Measures

Construction Phase

7.2.5.1. Dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation should be incorporated to control dust emission from the construction work site. With the implementation of dust suppression measures, construction dust impact could be minimised as far as possible and no adverse impact is anticipated.

7.2.5.2. The major relevant control measures listed below are recommended:

- Skip hoist for material transport should be totally enclosed by impervious sheeting.
- All dusty materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet.
- All stockpiles of aggregate or spoil should be covered and sprayed with water.
- The height from which excavated materials are dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading.
- A stockpile of dusty materials shall not extend beyond the pedestrian barriers, fencing or traffic cones.
- Any dusty materials remaining after a stockpile is removed shall be wetted with water and cleared from the surface of roads or streets.
- Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites.
- The load of dusty materials carried by a vehicle leaving a construction site should be covered entirely by clean impervious sheeting to ensure dust materials do not leak from the vehicle.
- Provision of not less than 2.4m high hoarding from ground level along site boundary.
- Locate the haul road away from the adjacent existing ASRs.
- Avoid dusty works or placing stockpile near the adjacent existing ASRs.

7.2.5.3. Guidelines stipulated in EPD's Recommended Pollution Control Clauses for Construction Contracts should also be incorporated in the contract documents to abate dust impacts. The clauses include:

- The Contractor shall observe and comply with the Air Pollution Control Ordinance and its subsidiary regulations, particularly the Air Pollution Control (Open Burning) Regulation and Air Pollution Control (Construction Dust) Regulation and Air Pollution Control (Smoke) Regulation.
- The Contractor shall undertake at all times to prevent dust nuisance and smoke as a result of his activities.

- The Contractor shall ensure that there will be adequate water supply/storage for dust suppression.
- The Contractor shall devise, arrange methods of working and carrying out the works in such a manner so as to minimise dust impacts on the surrounding environment, and shall provide experienced personnel with suitable training to ensure that these methods are implemented.
- For better smoke control, the Contractor shall not use diesel hammer for percussive piling.
- Before the commencement of any works, the Engineer may require the methods of working, plant, equipment and air pollution control system to be used on the site to be made available for inspection and approval to ensure that they are suitable for the project.

7.2.5.4. In addition to meeting the emission standards and requirements prescribed in Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, emissions control of NRMM in capitals works contracts of public works under Technical Circular (Works) No. 1/2015 of Development Bureau shall be followed. As stipulated in the Circular, no exempted generators, air compressors, excavators and crawler cranes shall be allowed new capital works contracts of public works (including design and build contracts) with an estimated contract value exceeding \$200 million, unless is at the discretion of the Architect/Engineer considering no feasible alternative.

Operation Phase

7.2.5.5. Adverse air quality impact arising from vehicles, industrial and domestic chimneys during operation phase is not anticipated, and hence no additional mitigation measure is required.

7.3. Noise

7.3.1. Introduction

7.3.1.1. This section presents an assessment of the potential construction noise, operational road traffic noise and operational fixed plant noise impacts associated with the proposed development. Appropriate mitigation measures are recommended to alleviate the potential construction and operation phase noise impacts if necessary.

7.3.1.2. On the other hand, the proposed infrastructure works would not induce any fixed plant noise pollution source. Therefore fixed plant noise impact arising from the infrastructures during operation phase is not anticipated.

7.3.2. Noise Sensitive Receivers (NSRs)

7.3.2.1. Nearby NSRs within 300m assessment area which would be potentially affected are listed below. Locations of these NSRs are presented in **Figure No. 60617595/PR/FIGURE 7.3.1.**

Representative Noise Sensitive Receivers

<u>NSR ID</u>	<u>Description</u>	<u>Existing / Planned Land Use</u>	<u>Nearest Distance from Project (m)</u>
<u>N-FTP</u>	<u>Village houses in Fu Tei Pai</u>	<u>Residential</u>	90
<u>N-QH</u>	<u>Committed Residential Blocks at QH Site 1</u>	<u>Residential</u>	6
<u>N-EA</u>	<u>Proposed Residential Blocks at Site</u>	<u>Residential</u>	7
<u>N-EW</u>	<u>Proposed Welfare Block (with Proposed Kindergarten) at Site</u>	<u>GIC and Commercial</u>	20

7.3.3. Potential Noise Impact

Construction Phase

- 7.3.3.1. In general, construction noise generated from the use of powered mechanical equipment (PME) for the construction of proposed infrastructure works would be the potential noise source.
- 7.3.3.2. Proper noise mitigation measures should be implemented to minimize the noise impact, such as the use of quiet PME, noise barriers and/or enclosures. With proper implementation of the mitigation measures, construction noise impacts should be reduced.

Operation Phase – Road Traffic Noise Impact

- 7.3.3.3. Traffic data and latest development layout, the road traffic noise levels at the noise sensitive users under unmitigated scenario have been assessed.
- 7.3.3.4. All façade of residential blocks of the proposed development would comply with the noise criteria of 70dB(A). However, exceedance of 65dB(A) for educational institution is predicted at proposed kindergarten at proposed welfare block. Besides, exceedance of 70dB(A) noise criterion for residential dwellings/office is also predicted at proposed welfare block with potential residential uses.

Operation Phase – Fixed Plant Noise Impact

- 7.3.3.5. With no fixed plant noise pollution source induced from proposed infrastructure works, fixed plant noise impact arising from the proposed infrastructure works during operation phase is not expected.
- 7.3.3.6. Detailed design of the proposed development is not available at this stage. Fixed plant noise impact arising from provision of any fixed plants for the proposed development, if any, will be assessed by others in separate environmental study. Any future fixed plants associated, however, shall be designed in accordance to below practical solutions for alleviating potential fixed plant noise impacts caused as far as possible:
- Place noisy equipment inside a plant room with thick walls as far as possible;
 - Locate the equipment away from the nearby and future NSRs;
 - Orientate the duct openings/air inlets/air outlets away from NSRs;
 - Choose equipment of low noise brands or models;
 - Make reference to the statutory noise limit and include noise levels specification when ordering new equipment;
 - Conduct regular maintenance, such as lubricating moving parts, tightening loosen parts (bolts/nuts, driving belts, panels, etc.), replacing worn-out components (bearings) and inspecting equipment alignment;
 - Implement proper noise control measures:
 - Erect noise barrier, partial and completed enclosures to block the noise propagation path to the NSRs;
 - Install silencers at air inlets and outlets;
 - Install inertia block and vibration isolator to isolate the vibrating machines and to prevent structural vibration transmission;
 - Apply damping material on the vibrating duct work;
 - Provide acoustic mat on the water surface of water cooling towers to reduce the water splashing noise;

- Adjust the operation mode, such as reducing fan speed and switching off non-essential equipment at night.

7.3.3.7. The potential fixed noise impact arising from any future fixed plants could be mitigated with the above solutions in place.

7.3.3.8. Regarding the potential noise impacts from the existing fixed plants during operation of the proposed development, a site visit was conducted at the 300m Study Area and no operation of fixed plants or noticeable noisy activity was observed during the site visit. As the fixed plant noise levels predicted at the identified NSRs in QH Site 1 would all comply with stipulated noise criterion, adverse fixed plant noise impact from existing fixed plants on proposed NSRs during the operation of the proposed development is therefore not anticipated.

7.3.4. Proposed Mitigation Measures

Construction Phase

7.3.4.1. To mitigate potential adverse construction noise impact on NSRs, noise mitigation measures, such as good site practices, use of quiet PME, movable noise barriers and noise enclosures are recommended.

7.3.4.2. Good site practices are easy to implement and do not impact upon the works schedule. The site practices listed below should be followed during each phase of construction:

- Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program;
- Silencers or mufflers on construction equipment should be utilized and should be properly maintained during the construction program;
- Mobile plant, if any, should be sited as far from NSRs as possible;
- Machines and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum;
- Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs;
- Material stockpiles and other structures should be effectively utilized, wherever practicable, in screening noise from on-site construction activities; and
- The contractor should schedule the works to non-school hours or school vacations to alleviate the potential noise impact on the school as far as practicable.

7.3.4.3. In addition, the “Recommended Pollution Control Clauses for Construction Contracts” published by the EPD should be adopted in the Contract Specification for the Contractors to follow and implement relevant measures in minimising noise impact.

Operation Phase – Road Traffic Noise Impact

7.3.4.4. As the predicted road traffic noise levels at assessed NSRs would exceed the noise criteria, it is recommended to provide appropriate noise mitigation measures to alleviate the potential impacts.

7.3.4.5. To alleviate the noise exceedance, residential uses (including homes for the aged) and educational uses (including kindergarten) shall not be planned at non-compliance areas; otherwise, fixed glazing and provisions allowed for installation of split-type air-conditioning by future occupants shall be provided as agreed by HD.

7.3.4.6. Environmental Assessment Study will be conducted by HD in later stage to further review and update above measures according to the latest development layout.

Operation Phase – Fixed Plant Noise

- 7.3.4.7. Since no adverse fixed plant noise impact is anticipated, mitigation measures are not required.
- 7.3.4.8. Environmental Assessment Study will be conducted by HD in later stage to further review and update the above according to the latest development layout.

7.4. Water Quality

7.4.1. Introduction

- 7.4.1.1. This section presents an assessment of the potential water quality impacts associated with the construction and operation of the proposed infrastructure works and operation of the proposed development. Recommendations for mitigation measures have been provided, where necessary, to minimise the identified water quality impacts to an acceptable level.

7.4.2. Water Sensitive Receivers (WSRs)

- 7.4.2.1. Key water sensitive receivers near the Site would be the Kwan Tei River and Ng Tung River which are located at approximately 390 m and 570 m away from the Site respectively. Kwan Tei River is the upstream tributaries of Ng Tung River. Its source is from the Lau Shui Heung Reservoir. The river runs through Tai Leng Pei, Tai Wo, San Tong Po, Fu Tei Pai and joins Ng Tung River near Kwan Tei. Ng Tung River (also known as River Indus) collects other major rivers including Tan San River, Ma Wat River, Shek Sheung River and Sheung Yue River, and finally joins the Shenzhen River. There are also some minor streams within the 500m from the works area. The location of inland watercourses within 500m from the works area are illustrated in **Figure No. 60617595/PR/FIGURE 7.4.1**.

7.4.3. Potential Water Quality Impact

Construction Phase – General Construction Activities

- 7.4.3.1. Effluent discharged from temporary site facilities should be controlled to prevent direct discharge to the neighbouring inland waters and storm drains. Such effluent may include wastewater generated from wheel washing of site vehicles at site entrances, discharge of debris and rubbish such as packaging, construction materials and refuse. Adoption of the guidelines and good site practices for handling and disposal of construction discharges would minimise the potential impacts.

Construction Phase – Construction Site Runoff

- 7.4.3.2. Surface runoff generated from the construction site may contain increased loads of SS and contaminants. Potential pollution sources of site runoff may include:
- Runoff and erosion of exposed bare soil and earth, drainage channel, earth working area and stockpiles;
 - Wash water from dust suppression sprays and wheel washing facilities; and
 - Fuel, oil and lubricants from maintenance of construction vehicles and equipment.
- 7.4.3.3. It is important that proper site practice and good site management should be followed to prevent run-off with high level of SS from entering the surrounding waters. Best Management Practices (BMPs) in controlling construction site discharges are recommended for this Project. With the implementation of BMPs to control run-off and drainage from the construction site, disturbance of water bodies would be avoided and deterioration in water quality would be minimal.

Construction Phase – Accidental Spillage of Chemicals

- 7.4.3.4. The use of engine oil and lubricants, and their storage as waste materials has the potential to create impacts on the water quality of adjacent inland water bodies or storm drains if spillage

occurs. Waste oil may infiltrate into the surface soil layer, or run-off into local water courses, increasing hydrocarbon levels. The potential impacts could however be mitigated by practical mitigation measures and good site practices.

Construction Phase – Sewage Effluent from Construction Workforce

- 7.4.3.5. During construction, the workforce on site will generate sewage effluents, which are characterized by high levels of BOD, ammonia and E. coli counts. Potential water quality impacts upon the local drainage and freshwater system may arise from these sewage effluents, if uncontrolled.
- 7.4.3.6. However, this temporary sewage can be adequately treated by interim sewage treatment facilities, such as portable chemical toilets. The number of the chemical toilets required for the construction sites should be subject to later detailed design, the capacity of the chemical toilets, and contractor's site practices. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.
- 7.4.3.7. Provided that sewage is not discharged directly into stormwater drains or inland waters adjacent to the construction site, and temporary sanitary facilities are used and properly maintained, it is unlikely that sewage generated from the Site would have a significant water quality impact.

Operation Phase – Sewage and Sewerage System

- 7.4.3.8. Sewage effluent will be generated from the proposed development. As sewage generated would be conveyed to the existing sewerage system for onward treatment at SWHEPP, there will be no net increase in pollution load to Deep Bay waters. No adverse water quality impact is therefore anticipated.

Operation Phase – Surface Runoff

- 7.4.3.9. Surface runoff generated from the Site may contain pollutants which may also affect the quality of the nearby receiving water environment, if uncontrolled. Proper drainage systems with silt traps should be installed. With implementation of mitigation measures and best stormwater management practices, adverse impact associated with the discharge of surface runoff is not anticipated.

7.4.4. Proposed Mitigation Measures

Construction Phase

- 7.4.4.1. During construction phase, all predicted impacts are able to be reduced to acceptable levels, provided that all recommended mitigation measures are implemented and all construction site/works area discharges comply with the Technical Memorandum on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS) issued under Section 21 of the Water Pollution Control Ordinance (WPCO) and "Professional Persons Environmental Consultative Committee Practice Note" (ProPECC PN) issued by the EPD. ProPECC PN 1/94 "Construction Site Drainage" and ProPECC PN 5/93 "Drainage Plans subject to Comments by Environmental Protection Department" should be observed. In addition, application of discharge license under the WPCO shall be obtained before discharging effluent.

Operation Phase

- 7.4.4.2. During operation phase, all predicted impacts are able to be minimise by discharge of all sewerage into the public sewer and providing and maintaining adequate drainage system and pollution control facilities. As all domestic sewage generated from the proposed housing development will be discharged to the public sewerage system at QH Site 1 and diverted to

sewage treatment works for proper treatment. No adverse water quality impact is anticipated. Mitigation measure is therefore not required.

7.5. Waste Management Implications

7.5.1. Introduction

- 7.5.1.1. The major waste sources include construction and demolition (C&D) materials and waste, chemical waste and general refuse generated during the construction works.
- 7.5.1.2. On the other hand, it is expected that the operation phase of the proposed infrastructure works and QHE development would not generate any significant quantity of waste and the relevant requirements of Waste Disposal Ordinance (Cap. 354) and Public Cleansing and Prevention of Nuisances Regulation (Cap. 132BK) would be followed during the waste collection, handling and disposal, hence no significant waste implications during the operation phase is anticipated.
- 7.5.1.3. Thus, this section would identify the types of construction-related wastes that are likely to be generated by the construction of proposed infrastructure works and evaluates the potential environmental impacts that may result from handling, transport and disposal of the waste.

7.5.2. Potential Waste Impact

- 7.5.2.1. Construction activities would generate a variety of wastes that could be divided into distinct categories based on their composition and method of disposal. The identified waste types include:
- construction and demolition (C&D) materials from the construction works;
 - general refuse from the workforce; and
 - chemical waste from any maintenance of construction plant and equipment.

C&D Materials

- 7.5.2.2. C&D materials contain a mixture of inert and non-inert materials. The inert portion, such as soil, rock, concrete, brick and asphalt etc., is the “public fill” and the non-inert portion, including metal, timber, paper and glass is the “C&D waste”. C&D materials comprise unwanted materials generated during construction, including rejected structures and materials, materials which have been over-ordered and materials which have been used and discarded.
- 7.5.2.3. It is anticipated that the total quantity of C&D materials generated during construction of the proposed infrastructure works would be less than 100m³. The Contractor is responsible for transfer of C&D materials to public fill reception facilities or landfills, depending on the type of material and the percentage of inert C&D materials. The inert C&D materials should be reused on site or disposed to public fill reception facilities for beneficial uses. The non-inert C&D materials should be reused or recycled and, disposal of at landfills as the last resort.
- 7.5.2.4. C&D materials should be sorted on-site and be separated as inert C&D materials and non-inert C&D materials. Due to the inert nature of most of the C&D materials generated, disposal would be unlikely to raise long-term environmental concerns. However, as some construction works areas would be in close proximity to roads, improper management of waste may cause severe nuisance to local residents.
- 7.5.2.5. The generation of C&D materials would be minimised and proper management of the C&D material would be followed. Hence, it is not envisaged to have any adverse impact on the capacity of landfills.

Chemical Wastes

- 7.5.2.6. The Waste Disposal (Chemical Waste) (General) Regulation defines chemical waste as any substance being scrap material or unwanted substances specified in its Schedule 1 and provides a complete list of such substances. However, substances likely to be generated by construction activities would mainly arise from the maintenance of equipment.
- 7.5.2.7. It is anticipated that the quantity of chemical waste, including lubricating oil and solvent, etc. produced from plant maintenance, would be nominal and less than 10L over the whole construction period. The amount of chemical waste to be generated will be quantified in the site Waste Management Plan to be prepared by the Contractor.

General Refuse

- 7.5.2.8. Throughout construction, the workforce would generate general refuse comprising food scraps, waste paper, empty containers, etc. It is estimated that a factor of 0.65 kg per worker per day of general refuse will be generated. The total quantity of waste generated would thus be estimated 9.75 kg per day, assuming the size of the work force would be a maximum of 15 construction workers.
- 7.5.2.9. With the implementation of the recommended waste management practices at the site, adverse environmental impacts arising from the storage, handling and transportation of refuse would not be expected.

7.5.3. Proposed Mitigation Measures

- 7.5.3.1. Waste management practices including the good site practices, waste reduction measurements, specific mitigation measures for C&D materials, chemical wastes and general refuse are recommended during the construction phase and should be incorporated into the specifications of the works contracts.

Good Site Practices

- 7.5.3.2. It is anticipated that adverse impacts would not occur in the construction site, provided that good site practices are strictly followed. Recommendations for good site practices during the construction activities include:
- Nomination of approved personnel, such as a site manager, to be responsible for good site practices, and making arrangements for collection of all wastes generated at the site and effective disposal to an appropriate facility.
 - Training of site personnel in proper waste management and chemical waste handling procedures.
 - Provision of sufficient waste reception/ disposal points, of a suitable vermin-proof design that minimises windblown litter.
 - Arrangement for regular collection of waste for transport off-site and final disposal.
 - Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers.
 - Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.
 - A recording system for the amount of wastes generated, recycled and disposed (including to disposal sites) should be proposed.
 - A Waste Management Plan (WMP), as part of the Environmental Management Plan (EMP) should be prepared in accordance with ETWB TC(W) No. 19/2005 and submitted to the Architect/Engineer for approval.

Waste Reduction Measures

7.5.3.3. Good management and control of construction site activities/ processes can minimize the generation of waste. Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include:

- Segregate and store different types of construction related waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.
- Provide separate labelled bins to segregate recyclable waste such as aluminium cans from other general refuse generated by the work force, and to encourage collection by individual collectors.
- Any unused chemicals or those with remaining functional capacity shall be recycled.
- Maximising the use of reusable steel formwork to reduce the amount of C&D materials.
- Prior to disposal of non-inert C&D materials, it is recommended that wood, steel and other metals shall be separated for re-use and / or recycling to minimise the quantity of waste to be disposed of to landfill.
- Adopt proper storage and site practices to minimise the potential for damage to, or contamination of, construction materials.
- Plan the delivery and stock of construction materials carefully to minimise the amount of waste generated.
- Minimise over ordering of concrete, mortars and cement grout by doing careful checks before ordering.

C&D Materials

7.5.3.4. The C&D materials generated from excavation works should be sorted on-site into inert C&D materials and non-inert C&D materials. To minimize the impact resulting from collection and transportation of C&D materials as far as practicable, non-inert C&D materials, such as wood, plastic, steel and other metals should be reused or recycled and, as a last resort, disposed to landfill. A suitable area should be designated within the site for temporary stockpiling of C&D materials and to facilitate the sorting process. Within the stockpile areas, the following measures should be taken to control potential environmental impacts or nuisance:

- Soil should be handled and stored well to ensure secure containment;
- Materials should be covered during heavy rainfall;
- A stockpiling area should be provided with covers and water spraying system to prevent materials from being wind-blown or washed away;
- Stockpiles should be located to minimise potential visual impacts;
- Land intake of stockpile areas should be minimised as far as possible; and
- Implement a trip-ticket system in accordance with DEVB TC(W) No. 6/2010 Trip-ticket System for Disposal of C&D material to ensure that the disposal of C&D materials are properly documented and verified.

Chemical Wastes

7.5.3.5. If chemical wastes are produced at the construction site, the Contractor would be required to register with the EPD as a Chemical Waste Producer, and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good

quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the waste such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall use a licensed collector to transport the chemical wastes. The licensed collector shall deliver the waste to the CWTC at Tsing Yi, or other licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.

- 7.5.3.6. With only a small quantity of chemical wastes generated and with the implementation of the recommended mitigation measures for the handling, transportation and disposal of the identified waste arising, adverse residual impact is not expected to occur during the construction of the works.

General Refuse

- 7.5.3.7. Recycling bins should be placed to encourage recycling. General refuse should be stored in enclosed bins or compaction units separate from C&D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from C&D materials. An enclosed and covered area is preferred to reduce the occurrence of 'wind blown' light material.
- 7.5.3.8. With the implementation of the recommended waste management practices at the site, adverse environmental impacts arising from the storage, handling and transportation of refuse are not expected.

7.6. Land Contamination

7.6.1. Introduction

- 7.6.1.1. This section presents the review of the potential land contamination impacts associated with the construction of proposed infrastructure works.
- 7.6.1.2. On the other hand, it is expected that there will be no potential land contamination impact associated with operation phase of the proposed infrastructure works and the proposed development.

7.6.2. Identification of Potential Land Contamination Impacts

Review of Historical Land Uses

- 7.6.2.1. A review of historical aerial photographs and topographic maps available in the Survey and Mapping Office of Lands Department was undertaken. The aim of the review is to identify any historical land uses within the works area for proposed infrastructure works that may have potential contamination implications. Based on the review of aerial photographs, no historical potentially contaminating land uses were identified within the works area.

Acquisition of Information from Government Departments

- 7.6.2.2. The Environmental Protection Department (EPD) and Fire Services Department (FSD) have been contacted for (i) records on any release of chemicals and chemical waste, (ii) records of dangerous goods (DG), (iii) records of Chemical Waste Producer(s) (CWP(s)) and (iv) records of reported fire incidents within the works area.
- 7.6.2.3. Based on the replies given by EPD and FSD, no potential land contamination impact is anticipated.

7.6.3. Proposed Mitigation Measures

- 7.6.3.1. As no potential land contamination impact is anticipated, no mitigation measure is required.

Site Appraisal

- 7.6.3.2. A site appraisal, in the form of desktop review and site walkover, had been carried out to identify the past and current potentially contaminating land uses within the works area.
- 7.6.3.3. Based on findings of the site appraisal, mainly non-contaminating land uses were identified within the works area. Land contamination impacts are not anticipated.

7.7. Ecology

7.7.1. Introduction

- 7.7.1.1. This section provides the assessment of potential ecological impacts arising from the construction and operation of the proposed infrastructure works and operation of the proposed development within the 500m assessment area.

7.7.2. Baseline Ecological Condition

- 7.7.2.1. The Site is located at the western hillside of Queen's Hill, where the northern remaining portion of the Ex-Burma Lines Military Site is situated at. No sites of conservation importance were identified within the assessment area.
- 7.7.2.2. Ten habitat types i.e. woodland, mixed woodland, shrubland, grassland, marsh, watercourse, pond, agricultural land & village/orchard, and developed area were identified within the assessment area. Apart from the developed area situated within the Site and the marsh (which were both considered of 'moderate to high' ecological value), most of the remaining habitats possessed low to moderate diversity and abundance of wildlife, with ecological values ranging from 'low' to 'moderate'.
- 7.7.2.3. The Site was also found to support a diverse bat assemblage and the roosts for more than 100 Himalayan Leaf-nosed Bat. A total of 43 species of conservation importance were identified within the assessment area, with 15 recorded within the Site, including 2 flora and 13 fauna species, which most of them are common in Hong Kong. Details please refer to the table listed below.

Species of Conservation Importance Recorded within the Assessment Area from Current Surveys

Common Name	Scientific Name	Distribution in Hong Kong ⁽²⁾	Protection Status	Within Site Area
Flora				
Incense Tree	<i>Aquilaria sinensis</i>	Common ⁽³⁾	Cap. 586 ⁽⁴⁾ , Category II ⁽⁵⁾ , Endangered ⁽⁶⁾ , Vulnerable ⁽⁷⁾	✓
-	<i>Aralia chinensis</i>	Common ⁽³⁾	Vulnerable ⁽⁷⁾	
Lamb of Tartary	<i>Cibotium barometz</i>	Very Common ⁽³⁾	Cap. 586 ⁽⁴⁾ , Category II ⁽⁵⁾	✓
Small Persimmon	<i>Diospyros vaccinioides</i>	Very Common ⁽³⁾	Critically Endangered ⁽⁷⁾ , Threatened ⁽⁸⁾	
Luofushan Joint-fir	<i>Gnetum luofuense</i>	Very Common ⁽³⁾	Near Threatened ⁽⁷⁾	
Avifauna⁽⁹⁾				
Chinese Pond Heron	<i>Ardeola bacchus</i>	Common	PRC (RC) ⁽¹⁰⁾	
Little Egret	<i>Egretta garzetta</i>	Common	PRC (RC) ⁽¹⁰⁾	
Black Kite ⁽⁴⁾	<i>Milvus migrans</i>	Common	(RC) ⁽¹⁰⁾ , Class II ⁽¹¹⁾	

Common Name	Scientific Name	Distribution in Hong Kong ⁽²⁾	Protection Status	Within Site Area
Crested Serpent Eagle ⁽⁴⁾	<i>Spilornis cheela</i>	Uncommon	(LC) ⁽¹⁰⁾ , Class II ⁽¹¹⁾ , Vulnerable ⁽¹²⁾ , Near Threatened ⁽¹³⁾	
Slaty-legged Crane	<i>Rallina eurizonoides</i>	Common	Vulnerable ⁽¹³⁾	
Common Emerald Dove	<i>Chalcophaps indica</i>	Scarce	Vulnerable ⁽¹²⁾	
Greater Coucal	<i>Centropus sinensis</i>	Common	Class II ⁽¹¹⁾ , Vulnerable ⁽¹²⁾	
Rufous-capped Babbler	<i>Stachyridopsis ruficeps</i>	Common	LC ⁽¹⁰⁾	✓
Red-billed Starling	<i>Spodiopsar sericeus</i>	Common	GC ⁽¹⁰⁾	
Tristram's Bunting	<i>Emberiza tristrami</i>	Uncommon	Near Threatened ⁽¹³⁾	
Butterfly				
Grass Demon	<i>Udaspes folus</i>	Rare	-	
Oriental Straight Swift	<i>Parnara bada bada</i>	Rare	-	
Colon Swift	<i>Caltoris bromus bromus</i>	Very Rare	-	
Grey Scrub Hopper	<i>Aeromachus jhora</i>	Rare	-	
Small Cabbage White	<i>Pieris rapae crucivora</i>	Rare	-	
Metallic Cerulean	<i>Jamides alecto alocina</i>	Very Rare	-	
Plain Hedge Blue	<i>Celastrina lavendularis limbata</i>	Very Rare	LC ⁽¹⁰⁾	
Common Archduke	<i>Lexias pardalis</i>	Unknown	-	
Odonate				
Chinese Tiger	<i>Gomphidia kelloggi</i>	Uncommon	Endangered ⁽⁷⁾ , GC ⁽¹⁰⁾	
Herptofauna				
Spotted Narrow-mouthed Frog	<i>Kalophrynus interlineatus</i>	Widely distributed	Near Threatened ⁽¹³⁾	✓
Chinese Bullfrog	<i>Hoplobatrachus rugulosus</i>	Widely distributed	PRC ⁽¹⁰⁾ , Class II ⁽¹¹⁾ , Endangered ⁽¹³⁾	
Common Rat Snake	<i>Ptyas mucosus</i>	Widely distributed	PRC ⁽¹⁰⁾ , Endangered ⁽¹³⁾⁽¹⁴⁾	
Chinese Cobra	<i>Naja atra</i>	Widely distributed	Vulnerable ⁽⁷⁾ ⁽¹³⁾⁽¹⁴⁾ , PRC ⁽¹⁰⁾	
Mammal ⁽⁹⁾				
Short-nosed Fruit Bat	<i>Cynopterus sphinx</i>	Very Common	Near Threatened ⁽¹³⁾	✓
Intermediate Horseshoe Bat	<i>Rhinolophus affinis</i>	Uncommon	(LC) ⁽¹⁰⁾	✓
Least Horseshoe Bat	<i>Rhinolophus pusillus</i>	Uncommon	PRC (RC) ⁽¹⁰⁾	✓
Chinese Horseshoe Bat	<i>Rhinolophus sinicus</i>	Very Common	-	✓
Himalayan Leaf-nosed Bat	<i>Hipposideros armiger</i>	Very Common	(LC) ⁽¹⁰⁾	✓
Unknown Myotis species 1	-	-	-	
Chinese Noctule	<i>Nyctalus plancyi</i>	Common	PRC (RC) ⁽¹⁰⁾	✓
Japanese Pipistrelle	<i>Pipistrellus abramus</i>	Very Common	-	✓
Unknown Vespertilionidae species 1	-	-	-	✓

Common Name	Scientific Name	Distribution in Hong Kong ⁽²⁾	Protection Status	Within Site Area
Unknown Vespertilionidae species 2	-	-	-	✓
Lesser Bamboo Bat	<i>Tylonycteris fulvida</i>	Very Common	(LC) ⁽¹⁰⁾ , Rare ⁽¹⁵⁾	✓
Pallas's Squirrel	<i>Callosciurus erythraeus styani</i>	Common	-	✓
Freshwater Communities				
-	<i>Acrossocheilus parallens</i>	Rare ⁽¹⁶⁾	GC ⁽¹⁰⁾	
Predaceous Chub	<i>Parazacco spilurus</i>	Common ⁽¹⁶⁾	Vulnerable ⁽¹⁷⁾	
Ruby Darter (larva)	<i>Rhodothermis rufa</i>	Common	LC ⁽¹⁰⁾	

Notes:

- [1] Code for Habitat Type: WL=Woodland; MWL=Mixed Woodland; MA=Marsh; WC=Watercourse; PO=Pond; AL=Agricultural Land; VO=Village/ Orchard; DA=Developed Area.
- [2] AFCD (2020).
- [3] Hong Kong Herbarium (2020).
Corlett, R., Xing, F., Ng, S. C., Chau, L. & Wong, L. (2000).
Xing, F.W., Ng, S.C. & Chau, L.K.C. (2000).
- [4] Protected under Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586).
- [5] Protected by List of Wild Plants Under State Protection.
- [6] Fu, K.L. (1992).
- [7] IUCN. (2020). IUCN Red List of Threatened Species. Version 2020.2.
- [8] Listed under Threatened Species List of China's Higher Plants (Qin et al., 2017).
- [9] Protected under Wild Animals Protection Ordinance (Cap. 170).
- [10] Fellowes et al. (2002). LC=Local Concern; RC=Regional Concern; PRC=Potential Regional Concern; GC=Global Concern; PGC=Potential Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in nesting and/or roosting sites rather than in general occurrence.
- [11] Protected by List of Wild Animals Under State Protection.
- [12] Listed under China Red Data Book of Endangered Animals: Aves (Zheng & Wang, 1998).
- [13] Listed under Red List of China's Vertebrates (Jiang et al., 2016).
- [14] Listed under China Red Data Book of Endangered Animals. Amphibia and Reptilia (Zhao, 1998).
- [15] Listed under China Red Data Book of Endangered Animals: Mammalia (Wang, 1998).
- [16] Lee, et al. (2004). Field Guide to the Freshwater Fish of Hong Kong. Friends of the Country Parks.
Reels, G.T. (2019). An Annotated Check List of Hong Kong Dragonflies and Assessment of Their Local Conservation Significance. Faunistic Studies in South-east Asian and Pacific Island Odonata. Journal of the International Dragonfly Fund, 30:1-49.
- [17] Listed under China Red Data Book of Endangered Animals: Pisces (Yue et al., 1998).

7.7.3. Potential Ecological Impact

Construction Phase

- 7.7.3.1. No loss or fragmentation of natural habitat is anticipated, and no significant ecological impact is anticipated to arise from the loss of developed area within the works boundary.
- 7.7.3.2. Most of the recorded fauna in the vicinity of the Site is of high mobility (e.g. avifauna, bats, and butterflies), thus direct impact from potential injury or mortality on these species is considered minor. Flora species located within the Site (e.g. Incense Tree and Lamb-of-Tartary) are anticipated to be transplanted to Tong Hang site upon the completion of site formation work. As such, no additional impact is anticipated to arise from the direct injury / mortality of flora and fauna within the Site. Whilst impacts resulting from the site formation will be assessed and presented under the PER Report under the Agreement No. CE 55/2019 (CE), it is also suggested that appropriate mitigation measures for the bat roost as mentioned in para. 7.7.2.3 shall be considered under site formation works to minimize the potential ecological impact on such. For example, construction activities under site formation works contract including demolition of abandoned structure where the roost is identified shall preferably be conducted during non-roosting period where bats are likely to be absent or present in lowest abundance; pre-construction bat survey shall be conducted prior to commence of demolition of abandoned structure where the roost is identified to verify that no

bat individuals are roosting within; and apply exclusion devices to ensure no potential re-entry of bats during the course of demolition process.

- 7.7.3.3. Also, since the limited fauna recorded around the Site are mostly mobile (i.e. avifauna and bat), impact resulting from increase of human presence and potential disturbances (e.g. noise, glare and dust) would unlikely pose a determining effect. With implementation of appropriate mitigation measures, the impact would be considered to be insignificant.
- 7.7.3.4. As several individuals of flora species of conservation importance, Incense Tree and Small Persimmon were found in close proximity (within 20 m northwest and southeast) to the Site, dust generated from the proposed works and transportation of works materials might potentially cover these vegetations, potentially hindering their biochemical processes and eventually their growth and productivity. Implementation of appropriate mitigation measures (e.g. environmental control measures as stipulated in the Air Pollution Ordinance (Construction Dust) Regulation) should be considered to minimise dust emission, the impact is considered to be minor.
- 7.7.3.5. Sensitive habitats such as the marsh and the woodland in the south of the assessment area would unlikely be affected by the Project, considering the far distance between and that Queen's Hill Site 1 in between could serve as a potential barrier against the aforementioned disturbance impacts. As Kwan Tei River and other watercourses are distantly located from the Site, potential impacts to these waterbodies and their associated freshwater communities would likewise, unlikely be anticipated.

Operation Phase

- 7.7.3.6. The Development might induce noise, light, air quality and disturbance impacts to the nearby off-site habitats and fauna. Compounded with the adjoining QH Site 1 residential development, surrounding habitats would be subject to prolonged, elevated human disturbance. Nonetheless, habitats in the immediate vicinity of the Site are mostly modified and possessed 'low' to 'low to moderate' ecological value and limited flora and fauna assemblages. The incorporation of appropriate mitigation measures would minimise the aforementioned disturbance impact.

7.7.4. Proposed Mitigation Measures

Construction Phase

- 7.7.4.1. Flora species of conservation importance Incense Tree and Small Persimmon were recorded outside the Site, in close proximity to the works area. These identified plant individuals should be labelled and fenced off prior to the commencement of works for better protection accordingly.
- 7.7.4.2. Despite most of the recorded fauna around the Site are of high mobility, several individuals of flora species of conservation importance are located closely to the works area. Proper screening (e.g. hoarding or barrier) should be provided to restrict construction activities within the works area and minimise the direct collision or damages to nearby wildlife. Besides, good site practices should be implemented to minimise the disturbance impacts (e.g. noise, glare and dust) to the surrounding habitats and their associated wildlife arising from the construction activities, including but not limited to the following:
- Noise mitigation measures by means of screening provisioning (noise barriers with absorptive materials), effective placing of material stockpiles as screening, shut down of machines and plants that are in intermittent use, and the use of Quiet Mechanical Plant (QMP) to limit noise emissions at source;
 - Glare reduction measures such as of restriction of construction hours, hoarding provisioning, night-time lighting control and avoidance of any directional lightings to the

adjoining habitats to minimise the impact to nearby nocturnal fauna especially avifauna and bat; and

- Dust suppression measures such as regular spraying of haul roads, proper storage of construction materials to avoid and minimise emission and dispersal dust, which would cover vegetation and subsequently suppress their health and growth.

7.7.4.3. Other standard good site practices should also be supplemented throughout the entire construction phase in order to minimise the impacts and avoid pollution of waterbodies, which include:

- Placement of equipment or stockpile in designated works areas and access routes selected on existing disturbed land to minimise disturbance to natural habitats, and ensure litter and fuels would not enter nearby drainages and waterbodies;
- Construction activities should be restricted to clearly demarcated works areas;
- All temporary works areas should be reinstated after completion of the works; and
- Sufficient waste skip and waste disposal point should be provided to collect general refuse and construction wastes and should be properly disposed in a timely manner.

Operation Phase

7.7.4.4. Increased level of disturbance, road and pedestrian traffic and artificial lighting would be anticipated during operation of the Development. In order to minimise excessive illumination and light spill, intensive lighting should also be avoided from directing towards the surrounding habitats, especially the mixed woodland located in the east of the Site. With the mitigation measure mentioned above, no unacceptable adverse ecological impacts would be anticipated.

7.8. Cultural Heritage

7.8.1. Introduction

- 7.8.1.1. This section presents the assessment for potential cultural heritage impacts arising from the proposed infrastructure works for the proposed development. It also takes note of the site constraints and provides appropriate mitigation measures with reference to relevant legislation and guidelines.
- 7.8.1.2. Queen's Hill Barracks were among those remaining post-war military facilities in the New Territories. A total of 87 buildings / structures of the Barracks of Queen's Hill remains in and around the Site, which include the Hindu Temple. It is a Grade 3 Historic Building containing cultural heritage significance due to its unique architectural style and special symbolic meanings in Hinduism (**Figure No. 60617595/PR/FIGURE 7.8.1**). Other barracks of Queen's Hill are Utilitarian style buildings/structures with no distinct architectural merits and are simplistic in nature, which was typical during the post-WWII.
- 7.8.1.3. Part of the Site is located within Queen's Hill Site of Archaeological Interest (SAI). Archaeological survey has been conducted. There is no archaeological potential in the works area of the Site.

7.8.2. Potential Cultural Heritage Impacts

Built Heritage

- 7.8.2.1. 38 barracks of Queen's Hill within the Site are to be demolished under the proposed site formation works under CE 55/2019 (CE).
- 7.8.2.2. The Hindu Temple, a Grade 3 Historic Building, is located at about 80 m from the proposed works area. Given the considerable distance, no direct impact on the built heritage is anticipated.

Archaeology

- 7.8.2.3. Since there is no archaeological potential in the works area, no impact to archaeology arising from the proposed infrastructure works would be anticipated.

7.8.3. Proposed Mitigation Measures

Built Heritage

- 7.8.3.1. The buildings / structures to be demolished under proposed site formation works under CE 55/2019 (CE) would be preserved by record through 3D scanning, cartographic and photographic surveys (ground level and aerial (via drone or any feasible technology)).
- 7.8.3.2. To minimize the potential indirect impacts to Hindu Temple (Grade 3) and 6 other barracks of Queen's Hill within 100 m of the Site, regular monitoring of ground-borne vibration, tilting and soil settlement could be implemented during the construction if necessary.

Archaeology

- 7.8.3.3. As no impact to archaeology would be anticipated, no mitigation measures would be required.

7.9. Summary

- 7.9.1.1. Assessments in the aspects of air quality, noise, water quality, ecology, waste, land contamination and cultural heritage were conducted. It is anticipated that there would be no insurmountable issue from the environmental point of view.

8. PRELIMINARY LANDSCAPE AND VISUAL IMPACT ASSESSMENT

8.1. Introduction

8.1.1. General

8.1.1.1. This section describes the findings of Preliminary Landscape and Visual Impact Assessment (PLVIA) for the proposed development, and identifies any potential impact on the visual and landscape aspects and recommends mitigation measures if necessary.

8.1.2. Scope of PLVIA

8.1.2.1. PLVIA has been taken to evaluate the impact to landscape and visual perspective arising from the proposed development and suggest the mitigation measures.

8.1.2.2. The Visual impact is defined by the visual envelope of the proposed visually intrusive works of the proposed development.

8.1.2.3. The landscape assessment and preliminary tree survey were conducted for the proposed development such that the value of landscape can be determined, the likely impacts can be assessed, and feasible mitigation measures can be identified.

8.2. Proposed Development

8.2.1. Description

8.2.1.1. The Site is located at a rural setting with predominantly 2 to 3-storey village settlement intermixed with agricultural land and open storage uses, while the surrounding natural landscape including the well-vegetated Queen's Hill to its east and Lung Shan to the immediate east and south, serve as a mountain backdrop for the Site.

8.2.1.2. There was a conceptual scheme (i.e. the Compliant Scheme) formulated for the Site during previous rezoning for QHD in Year 2014, under which the Site was rezoned as a "R(B)" site for private housing development. The Site had been proposed to construct 21 residential blocks with a maximum height of around +85 mPD.

8.2.1.3. The Site will be rezoned for public housing development. The Proposed Scheme of the Development will comprise of 6 housing blocks with maximum building height of +175 mPD, as an extension of Queen's Hill public housing development in a height ranged from +100 mPD to +145 mPD. Comparing to the Compliant Scheme, the number of proposed buildings is reduced, but with a larger individual building footprint and increased building height

8.2.1.4. The design height of the building blocks is summarized below accordingly:

Building Block	Maximum Building Height
Block A	+175 mPD
Block B	+175 mPD
Block C	+175 mPD
Block D	+175 mPD
Block E	+175 mPD
Block F	+175 mPD
Welfare	+70 mPD

8.2.1.5. Based on the Development Building Layout, a conceptual Landscape scheme is prepared to demonstrate a possible arrangement but subject to change by Housing Department (HD). It is designed to meet the HKPSG requirement of a minimum of 1 m² open space per person for the housing development, providing approximately 1.0 m² local open space per person

(i.e. about 11,278 m²*). Around 30% of public housing site area for greenery coverage (i.e. approx. 12,300 m²) can be provided based on the preliminary landscape master plan, which the greening coverage requirement of at least 20% of site area can be provided and target of achieving 30%. Calculation of the local open space (in the case of SSF option) and the greening coverage are illustrated in **Figure No. 60617595/PR/FIGURE 8.1** and **FIGURE 8.2** respectively. The relevant requirements from HKPSG are listed out in below Table.

Nature	HKPSG Requirements		
Local Open Space	A minimum of 10 ha per 100 000 persons (i.e. 1m ² per person) for Local Open Space		
Greenery Area	Public housing development 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.		
Recreational Facilities	<ul style="list-style-type: none"> Indoor facilities such as badminton courts, table tennis rooms, multi-purpose activity rooms, and fitness rooms should be designed to cater for users of all ages including the elderly. Appropriate outdoor facilities for core activities shall be provided, in accordance with Table 6, Chapter 4 of HKPSG, cited as below: 		
	Core Activities	Basketball Court	Children's Playground
	Population Requirement	1 per 10,000	400 m ² per 5000

The above requirements are retrieved from **Chapter 4 - Recreation, Open Space & Greening of Hong Kong Planning Standards and Guidelines**.

*To explore the technical feasibility of increasing the development intensity for the proposed public housing development at the QHE site, two options of public housing developments are being considered with relevant proposed development parameters for design flexibility: Option 1 - PRH with 5,035 flats (i.e. with the population of about 14,098) ; Option 2 - SSF with 4,028 flats (i.e. with the population of about 11,278). The type of public housing is yet to be confirmed under the EFS and the assumed number of flats is for technical assessment purpose only, which is subject to change in detailed design stage.

8.3. Visual Impacts

8.3.1. Visual Envelope (VE)

8.3.1.1. The VE of the proposed development has been identified by desktop study maps, photographs and site visit to determine visibility of the proposed development from various locations. As the topography of the area is mostly low-lying flat land, the VE is therefore defined by the surrounding high-density built development. The visual envelope bounded by the ridgeline of Tsung Shan to the north; Ko Po Tsuen to east, San Uk Tsuen to the west and extended to the ridgeline of Lung Shan to the south. The extent of the VE is indicated **Figure No. 60617595/PR/FIGURE 8.3**.

8.3.2. Existing Visual Condition and Key Visual Elements

8.3.2.1. Within the Visual Envelope, scattered low-rise village settlement is located to the north. The ridgeline and lush green hillside of Wa Shan (+139 mPD) to the north and Lung Shan(+360 mPD) to the south are the prominent and large-scale visual element in shaping the view to the north. Queen's Hill housing development is surrounded to the south and to the west of the Site where views toward southern west are generally blocked. There are total 13 nos. of housing blocks, with domestic floors ranged from 23 – 40 nos storeys., and building height ranged from approx. +100 mPD to +140 mPD. Key visual resources include the ridgeline of Wa Shan and Lung Shan at the backdrop; amenity and domestic planting distributed throughout village area; and open sky view due to dominant low-rise village houses in this area. The above-mentioned visual resources are indicated in **Figure No. 60617595/PR/FIGURE 8.3**.

8.3.3. Selection of Viewpoint

8.3.3.1. The key public viewers are briefly described below and are mapped in **Figure No. 60617595/PR/FIGURE 8.3 – Visual Envelope and Viewpoints**. The table below summarized the VSRs for each Viewpoint (VP).

Viewpoint	Representing VSRs	Overall Sensitivity
Viewpoint 1 - Kwan Tei Bus Station	Road users along Sha Tau Kok Road (T1), residents in Kwai Tei Tsuen (R1) and Fu Tei Pai (R3)	Low to High
Viewpoint 2 - Peak of Tsung Shan	Hikers at Tsung Shan and Wa Shan (RE2), Kwan Tei North Tsuen (R2) and Ko Po North Tsuen (R5)	Medium to High
Viewpoint 3 - Lung Yeuk Tau Bus Station	Road users along Sha Tau Kok Road (T1) and San Uk Tsuen (R6)	Low to Medium
Viewpoint 4 - Wa Shan Military Road	Hikers at Tsung Shan and Wa Shan (RE2)	High
Viewpoint 5 - Footbridge (NF326) at Sha Tau Kok Road	Road users along the Sha Tau Kok Road (T1) and residents in San Uk Tsuen (R6)	Low to Medium
Viewpoint 6 - Po Kak Tsai Road	Travellers along Po Kak Tsai Road (T2)	Low
Viewpoint 7 - Tung Kok Wai Children's Playground	Recreational user in Tung Kok Wai Children's Playground (RE1)	Low
Viewpoint 8 - Dao Yang Road	Residents in Ma Liu Shui San Tsuen (R4)	High

8.3.4. Appraisal of Visual Changes

8.3.4.1. Proposed Scheme is illustrated in this Section in comparison with the Compliant Scheme. The layouts and design parameters for the schemes are detailed in Section 8.3. Photomontages from VP1 to 8 of Compliant Scheme and Proposed Scheme are shown in **Figure No. 60617595/PR/FIGURE 8.4** to **FIGURE 8.11** for comparison of visual changes.

8.3.4.2. Viewpoint 1 – Kwan Tei Bus Station (refer to Photomontage 1 – **Figure No. 60617595/PR/FIGURE 8.4**)

8.3.4.3. Visual composition – As shown in the photomontage, the Development would be visible at a medium viewing distance in this VP. The existing roadside planting and the pond beside the Kwan Tei Children's Playground are dominant in the view, with discontinuous portion of ridgeline of Lung Shan. In comparison with the Compliant Scheme, the Proposed Scheme of QHE Development will block the ridgeline at the back, while the proposed building could read as an integration with the adjoining residential buildings of public housing development at Queen's Hill. With the existing roadside greenery and the pond dominant in the foreground maintained, the project development shall be visually compatible and blend with adjoining residential clusters.

8.3.4.4. There is no change to the visual harmony of this VP with the presence of the proposed buildings. The scale of proposed buildings is considered compatible with public housing development in QH Site 1.

8.3.4.5. **Visual obstruction:** The open sky view is intercepted by the Development inevitably. The perceived change in sense of openness to the sky shall be minimized with careful position of the building blocks and wall effect shall be avoided. On the other hand, as shown in the Compliant Scheme of **Figure No. 60617595/PR/FIGURE 8.4**, the existing Lung Shan ridgeline which has already been visually disturbed by housing blocks of QH at central area,

and the remaining portion of the natural ridgeline will be further obstructed by the Proposed Scheme resulted in discontinuous ridgelines after construction. There is no intervention to the existing ornamental planting, roadside planting and the river in the foreground.

- 8.3.4.6. **Effect on public viewers:** For the travellers along the Sha Tau Kok road (Lung Yeuk Tau) (T1) and residents in Kwan Tei Tsuen (R1) and Fu Tei Pai (R3). The proposed buildings will be visible to the above VSRs. Perceivable sense of openness to the sky would be weakened and the visibility of existing ridgeline would be further reduced. With the proposed mitigation measures, in particular on providing aesthetically pleasing design on building façade to break down the scale, the effect of visual changes to these public viewers are still considered as substantial.
- 8.3.4.7. **Effect on visual resources:** The key visual resources in this view would be the amenity planting at foreground, open sky view and the natural ridgeline adjoining Lung Shan. As mentioned above, the open sky view and ridgeline would inevitably be intruded, which shall reduce the sense of openness of the view and resulted in discontinuous ridgeline. With the adoption of proposed mitigation measures such as increase visual permeability through provision of visual corridor between buildings, it shall help to alleviate the sense of visual intrusiveness.
- 8.3.4.8. As stated above, the Development will have partial obstructions to the sky and background ridgeline view. As there is already high-rise component - Queen's Hill Site 1 (under construction) occupying the background views, considering the cumulative effect of QH Site 1 with similar nature, it is likely that the Development will partially degrade the visual amenity that is enjoyed from VP1, while open sky is still large visible with existing roadside planting and pond view at foreground not being affected by proposed development. Therefore, visual impact to VP1 anticipated from the Development is **moderately adverse**.
- 8.3.4.9. Viewpoint 2 – Peak of Tsung Shan (refer to Photomontage 2 – **Figure No. 60617595/PR/FIGURE 8.5**)
- 8.3.4.10. **Visual composition:** As shown in photomontage, the Development is an extension of the existing housing development at Queen's Hill Site 1 and match with the ridgeline of Lung Shan in the background. Although it will become visual dominant in this view, it will integrate with the adjoining residential housing in the background. Hence, it is considered compatible to the surrounding visual context.
- 8.3.4.11. **Visual obstruction:** Consider the Site is surrounded by extensive greenery on expansive flatland, the Proposed Scheme of QHE Development would inevitably block the view to natural hillside at the backdrop, similar to Compliant Scheme which has less obstruction. As shown in the photomontage, the Proposed Scheme of QHE Development will not affect the visual openness of the open sky view. By implementation of proposed mitigation measure such as provisioning visual corridor, it shall help to improve visual permeability and alleviate the visual interruption to the hillside view.
- 8.3.4.12. **Effect on public viewers:** Residents in Kwan Tei North Tsuen (R2); Ko Po North Tsuen (R5); and hikers at Tsung Shan and Wa Shan (RE2) are anticipated an irreversible, large scale and permanent change of the panoramic view. Due to their strategic location, QHE Development will be fully visible. There would be perceivable loss in visual greenery and degrade in the quality of view. Thus, the effect of the visual changes on public viewers from this VP is graded as moderate.
- 8.3.4.13. **Effect on visual resources:** The Development would inevitably block the view to natural hillside at back drop. Provision of visual corridors is proposed to minimize the impact on sense of openness and visual permeability. There will be slight change to the skyline and ridgeline in the background of this view.

- 8.3.4.14. As stated above, the Development will cause partial obstruction to the view to natural visual resource. Although the effect of visual change is moderate, it will not have adverse change on the skyline and ridgeline in the background and is unlikely that the Development will substantially degrade the visual amenity that is enjoyed from this VP. Therefore, visual impact to VP2 anticipated from the Development is **moderately adverse**.
- 8.3.4.15. Viewpoint 3 – Lung Yeuk Tau Bus Station (refer to Photomontage 3 – **Figure No. 60617595/PR/FIGURE 8.6**)
- 8.3.4.16. Visual composition – As shown in the photomontage, after the completion of the proposed development, the visual impact of the proposed building is insignificant since the proposed building mass corresponds the existing building developments at Queen's Hill Site 1 (under construction). The visual composition is considered to be compatible.
- 8.3.4.17. **Visual obstruction:** Similar to Compliant Scheme, the visible part of the building structures of Proposed Scheme would slightly disrupt the sky openness. The visual components including bus stop structures and existing vegetation provide visual coverage for the foreground, of which proposed buildings at the back corner are less conspicuous as they are read compatible existing building clusters. The visibility of blocks in the view is less prominent than in other view due to the viewing angle.
- 8.3.4.18. **Effect on public viewers:** As shown in the photomontage, the proposed development would read as an extension of the adjoining public housing development at Queen's Hill Site 1 (under construction). The residential tower of the proposed development will be visible for both the residents in San Uk Tsuen (R6) and road users along Sha Tau Kok Road (T1). Based on the nature of the public viewers at the viewpoint (the road users T1) is not frequent and in a very short period of time, duration of the impact will be considered to be minimal. Hence, the effect on public viewers will be slight.
- 8.3.4.19. **Effect on visual resources:** As mentioned above, the Development will have slight visual impact on the view. The Development would echo with the existing city skyline and read as a nice visual rhythmic massing.
- 8.3.4.20. As stated above, the Development will have no obstruction to the view. It is considered as an extension of the residential clusters. It is unlikely that the Development will degrade the visual amenity that is enjoyed from this VP. Therefore, visual impact to VP3 anticipated from the Development is **slightly adverse**.
- 8.3.4.21. Viewpoint 4 - Wa Shan Military Road (refer to Photomontage 4 – **Figure No. 60617595/PR/FIGURE 8.7**)
- 8.3.4.22. **Visual composition:** As shown in photomontage, the Development is an extension of the existing housing development at Queen's Hill Site 1 (under construction). It is noted that there would be alternation of existing hillside view and become dominant. With proposed mitigation measures, such as provision of viewing corridors and aesthetically designed man-made structures, it shall help to enhance the compatibility of QHE Development.
- 8.3.4.23. **Visual obstruction:** In comparison to Compliant Scheme, the ridgeline of Lung Shan is intercepted by the Proposed Scheme of QHE Development inevitably. However, the Proposed Scheme of QHE Development will not affect the visual openness of the open sky view. By implementation of proposed mitigation measure such as provision of visual corridor, it shall help to improve visual permeability and alleviate the visual interruption to the hillside view.
- 8.3.4.24. **Effect on public viewers:** The impact on hikers of Tsung Shan and Wa Shan (RE2) are anticipated an irreversible, with large scale and permanent change of the panoramic view. Due to their strategic location, QHE Development will be fully visible. There would be

perceivable loss in visual greenery and degrade in the quality of view. As the nature of recreational users of RE2 are transient in nature, which their duration of view is relatively short and in general, the overall landscape could still be observed without substantial degradation. Therefore, the magnitude of change to RE2 is considered as moderate.

- 8.3.4.25. **Effect on visual resources:** In comparison to Compliant Scheme, the Proposed Scheme of QHE Development would inevitably disconnect the continuous natural hillside at back drop. The height of proposed housing blocks is close to ridgeline at backdrop; the disconnection is not significant without intrusion to existing open sky view. Provision of visual corridors is proposed to alleviate visual interruption to mountain backdrop and enhance the visual permeability and harmony. Mitigation measures such as careful position of the building blocks, aesthetically pleasing design on the building façade and maximization of greenery provision shall be proposed.
- 8.3.4.26. As stated above, the Development will cause partial obstruction to the view of hillside. Lung Shan serves as one of the available hiking trails for leisure and landscape scenery in the North District. Although the effect of visual change is moderate, it will not have adverse change on the skyline and is unlikely that the Development will substantially degrade the visual amenity that is enjoyed from the VP. Regarding this VP is transient in nature and the viewing duration is relatively short. Therefore, visual impact to VP4 anticipated from the Development is **moderately adverse**.
- 8.3.4.27. Viewpoint 5 - Footbridge (NF326) at Sha Tau Kok Road (Lung Yeuk Tau) (refer to Photomontage 5 - **Figure No. 60617595/PR/FIGURE 8.8**)
- 8.3.4.28. **Visual composition:** As shown in photomontage, the Development would be visible at a medium viewing distance. The proposed buildings at QHE Development shall match with the adjoining public housing development at Queen's Hill Site 1. The temporary structures in the foreground have already dominated the view. Therefore, the proposed buildings will be well compatible with the surrounding.
- 8.3.4.29. **Visual obstruction:** In comparison to Compliant Scheme, the Proposed Scheme of QHE Development would inevitably create visual obstruction to the sky and the ridgeline in the background. A reduced sense of openness and visual permeability would be expected. Most of the remaining natural ridgeline and open sky view in this VP will be further intercepted by the proposed QHE. By implementation of the proposed mitigation measures such as the pleasing design of the building structures, it shall help to improve visual permeability and alleviate the visual interception to the sky view.
- 8.3.4.30. **Effect on public viewers:** The value of this view is primarily attached to the visual amenity of the existing open space and the semi-sky view. QHE Development will be visible at a medium distance with the building height compatible to the adjacent housing blocks. However, R4 would anticipate a reduced visual permeability with blockage of the remaining natural ridgeline and open sky view in this VP. The visual permeability of T1 would also be affected, given that the nature of travelling users (T1) along Sha Tau Kok Road (Lung Yeuk Tau) is transient with short duration of view, their impact is anticipated to be acceptable. In general, the effect on public viewers will be considered as substantial.
- 8.3.4.31. **Effect on visual resources:** The key visual resources in this view would be the amenity planting at foreground, open sky view and limited natural ridgeline. As mentioned above, the Development will partially intercept the open sky view. Also, the limited ridgeline will be further intercepted in this VP and resulted in less available visual resources perceived. The amenity planting at foreground are not being affected which are still mostly visible; and they help to soften the bulkiness of proposed blocks.

- 8.3.4.32. As stated above, the visual compatibility of Proposed Scheme of QHE Development will be degraded by the Development with less available visual resources perceived. Although Lung Shan serves as one of the available hiking trails for leisure and landscape scenery in the North District, the Development will partially intercept the open sky and ridgeline and there will be significant impact on the existing visual amenity. The visual impact to VP5 anticipated from the Development is **significantly adverse**.
- 8.3.4.33. Viewpoint 6 – Po Kat Tsai Road (refer to Photomontage 6 – **Figure No. 60617595/PR/FIGURE 8.9**)
- 8.3.4.34. **Visual composition:** Since the existing plantings at the natural hillside and housing development in Queen's Hill have already dominant the view, there is no change to the visual harmony of this VP with the presence of the proposed buildings. The scale of proposed buildings is considered as appropriate and will not create incompatibility with the surroundings.
- 8.3.4.35. **Visual obstruction:** – As shown in the photomontage, similar to the Compliant Scheme, the Proposed Scheme of QHE Development would inevitably create partial visual obstruction to the open sky in the background. There is no intervention to the existing lush greenery in the foreground.
- 8.3.4.36. **Effect on public viewers:** For the travellers along Po Kak Tsai Road (T2), the visual attachment of this view is primarily due to the open sky. Although there is perceivable change to sense of openness, the Development would provide visual contrast and create a rhythmic skyline as an extension of the adjoining public housing development in Queen's Hill Site 1. Therefore, the magnitude of change for this VP is considered as moderate.
- 8.3.4.37. **Effect on visual resources:** – The view would experience an irreversible, medium scale and permanent change of the panoramic sky view. In order to improve visual permeability and maintain visual harmony, mitigation measures such as careful position of the building blocks, aesthetically pleasing design on building façade and maximization of greenery provision shall be proposed.
- 8.3.4.38. As stated above, the Development will have obstruction to the open sky view. As the Development shall be of similar nature as the existing public housing development in Queen's Hill Site 1, it is considered as an extension of the residential clusters. It is unlikely that the Development will substantially degrade the visual amenity that is enjoyed from the VP. Therefore, visual impact of VP6 anticipated from the Development is **moderately adverse**.
- 8.3.4.39. Viewpoint 7 – Tung Kok Wai Sitting Out Area (refer to Photomontage 7 – **Figure No. 60617595/PR/FIGURE 8.10**)
- 8.3.4.40. **Visual composition:** As shown in the photomontage, both Compliant Scheme and Proposed Scheme of QHE Development are largely blocked and visually overlapped by the existing public housing development in Queen's Hill Site 1. The Development shall be visually compatible and blend with adjoining residential clusters.
- 8.3.4.41. **Visual obstruction:** In comparison with the Compliant Scheme, the Proposed Scheme would be partially intercepted a small portion of existing open sky view. By implementation of the proposed mitigation measures such as provision of visual corridors, it shall help to improve visual permeability and alleviate the visual interception to the open sky view.
- 8.3.4.42. **Effect on public viewers:** The value of this view is primarily attached to the visual amenity of the existing roadside vegetation and the open sky view. The Development will not affect the visual openness of the open sky view. There is also no significant change on the views currently enjoyed. Thus, it is predicted that the impact will be negligible for the recreational users in RE1 (Tung Kok Wai Children's Playground).

- 8.3.4.43. **Effect on visual resources:** As mentioned above, the Development will have negligible visual impact on the open sky view. The sense of openness of this VP will not be changed. Besides, the Development shall be compatible to the adjoining residential clusters. Thus, there is no degradation on the existing visual condition of this VP.
- 8.3.4.44. As stated above, the Development will only have partial obstructions to a small portion of the open sky view. It is unlikely that the Development will degrade the visual amenity that is enjoyed from the VP. Therefore, visual impact of VP7 anticipated from the Development is **negligible**.
- 8.3.4.45. Viewpoint 8 – Dao Yang Road (refer to Photomontage 8 – **Figure No. 60617595/PR/FIGURE 8.11**)
- 8.3.4.46. **Visual composition:** As shown in the photomontage, similar to the Compliant Scheme, the Proposed Scheme of QHE Development is visible in the background of this VP in a larger extent. They will be visually compatible and blend in with adjoining residential developments.
- 8.3.4.47. **Visual obstruction:** The Proposed Scheme would inevitably create partial visual obstruction to the sky in the background in comparison to Compliant Scheme. A reduced sense of openness and visual permeability would be expected. By implementation of the proposed mitigation measures such as the pleasing design of the building structure, it shall help to improve visual permeability and alleviate the visual interception to the sky view.
- 8.3.4.48. **Effect on public viewers:** Residents in Ma Liu Shui San Tsuen (R4) would anticipate a slightly reduced visual permeability with partially blockage of the visual corridor only. QHE Development will be visible at a medium distance with the building height compatible to the adjacent housing blocks. However, the open space and existing greenery at the foreground will remain unchanged. Thus, the effect of visual changes on public viewers from this VP is qualitatively graded as moderate.
- 8.3.4.49. **Effect on visual resources:** The Development will have partial obstruction to the open sky. The building block will be visible while the structure itself is visually compatible with the existing public housing development at Queen's Hill Site 1.
- 8.3.4.50. As stated above, the Development will have partial obstructions to the open sky. Given these factors, it is considered that Dao Yang Road is not a major road with relatively small number of residents in Ma Liu Shui San Tsuen, the impacts of VP8 are considered as **moderately adverse**.

8.3.5. Evaluation of Overall Visual Impact

- 8.3.5.1. The design and layout of the proposed development has carefully considered the surrounding contexts and key public viewers located within the assessment area. The massing and disposition of the building blocks have been carefully considered not to create sufficient visual blockage to reduce the visual impact on the surrounding. Key mitigation measures are listed and described below:

VM1 - Creation of Visual Greening Connection and Breezeways

- Potential visual impact and obstruction resulting from the Development with the greenery hillside as background would be unavoidable. In order to reduce the effect of these potential impact, visual and air corridors between building blocks are maintained to increase visual permeability of the development taking accounting of the requirements of the Sustainable Building Design Guideline. To lessen the extra over landscape and visual impact from the currently permitted plot ratio, a approx. 25m visual corridor between Block C and Block B and approx. 20m visual corridor cum wind corridor next to the welfare building area is designed to maintain the site permeability and serve as green corridor, building blocks are placed with a minimum approx. 13m

separation to increase overall permeability of the area. The visual corridor can also provide greenery connection to create a comprehensive greenery network.

VM2 - Control of Development Heights and Massing

- Development heights and massing within the Development shall be designed to create and define the spatial character of the Site. Building deployment and massing control shall maximize the overall permeability of the area which shall also act to increase ventilation, allow sunlight penetration and preserve views.

VM3 -Visual Compatibility of the Development

- The Development shall be visually compatible with the adjacent landscape setting. The overall setting of the Development, including building layouts and forms, materials, finishing (e.g. colour theme, pattern, texture), shall be carefully designed and effectuated to match the adjoining environment, providing a compatible extension from the adjoining residential built-up areas in Queen's Hill Site 1.

VM4- Maximization of Greenery Provision

- Under the proposed development, the greening opportunities, in terms of trees and shrub planting etc. shall be maximized to soften the future development so as to maximize the greening opportunities and minimize any potential adverse visual changes.

8.3.5.2. With the introduction of the proposed visual mitigation measures in the design layout, it is anticipated that there would still be adverse visual changes to the adjacent public viewing points. Having considered the sensitivity of public viewers, the visual composition, the visual resources, the effects on public viewers and the effects on visual resources, it will not generate significantly adverse visual impact. The visual change caused by the Development is not significant when viewed from the identified VPs with well-implementation of proposed mitigation measures, including MM4 - Aesthetical pleasing design of all man-made structures; MM5 - Maximize greenery provision; MM6 - Landscape treatments on slope; and MM7 - Provision of Visual Corridor. The corresponding visual impact are summarised below:

Viewpoint Reference / Location	Impact
VP1 - Kwan Tei Bus Station	Moderately adverse
VP2 - Peak of Tsung Shan	Moderately adverse
VP3 - Lung Yeuk Tau Bus Station	Slightly adverse
VP4 - Wa Shan Military Road	Moderately adverse
VP5 - Footbridge (NF326) at Sha Tau Kok Road (Lung Yeuk Tau)	Significantly adverse
VP6 - Po Kat Tsai Road	Moderately adverse
VP7 - Tung Kok Wai Sitting Out Area	Negligible
VP8 - Dao Yang Road	Moderately adverse

8.3.5.3. The visual impact of VP5 is graded as significantly adverse; VP1, VP2, VP4, VP6 and VP8 are graded as moderately adverse; VP3 and VP7 is graded as slightly adverse and negligible respectively. It will not detract the visual value attached to the views or have an overall significant impact to the visual accessibility to the existing visual amenity and resources nearby.

- 8.3.5.4. Other mitigation measures such as greening measures and façade treatments may be explored in subsequent architectural detailed design stage to further improve the overall aesthetics and visual interests of the proposed development.
- 8.3.5.5. To this end, efforts have been made to ameliorate the potential visual impact of the proposed development as far as possible. In return, the proposed development will make a positive contribution to the supply of housing units and optimize land utilization. The resultant overall impact is therefore concluded as **moderately adverse**.

8.4. Landscape Impacts

8.4.1. Tree Survey

- 8.4.1.1. Out of the 1,475 nos. of tree surveyed within and near the Site, 24 nos. of trees are proposed to be retained with 5 nos. of retained trees located within rezoning boundary, 18 nos. of trees are proposed to be transplanted off site near Tong Hang and 1,428 nos. of trees are proposed to be removed, excluding 5 no. of undesirable trees.
- 8.4.1.2. No Old and Valuable Trees (OVTs) and potential OVTs are identified since the Site is not located within the built-up areas or tourist attraction spots in village areas as defined in Appendix A of DEVB TC(W) No. 5/2020. In accordance with the Guidelines for Tree Risk Assessment and Management Arrangement, total 24 nos. Trees of Particular Interest (TPI) are identified within the Site and affected by the site formation works. Among the 24 nos. of TPI, 18 nos. are *Aquilaria sinensis* with conservation importance under the Protection of Endangered Species of Animals and Plants Ordinance (Schedule III, Cap.586 of the Law of Hong Kong), and 6 nos. are mature trees with DBH over 1000mm in common landscape and hillside species including *Ficus religiosa*, *Casuarina equisetifolia*, *Ficus elastica*, *Celtis sinensis* and *Cleistocalyx nervosum*.

8.4.2. Landscape Resources

- 8.4.2.1. The locations of baseline LRs which will be potentially affected by the Development are mapped in **Figure No. 60617595/PR/FIGURE 8.12**.
- 8.4.2.2. The details of Baseline LCAs which will be potentially affected by the Development, are mapped in **Figure No. 60617595/PR/FIGURE 8.13**.

8.4.3. Magnitude of Landscape Impacts

- 8.4.3.1. The magnitude of unmitigated landscape impacts associated with the construction phase and operational phases of the Development are assessed and described below.

ID	Landscape Resources/ Character Areas	Potential Source of Impact	Magnitude of Change (Large/ Intermediate/ Small/ Negligible)
LR-1	Mixed Woodland	Approximately 41,000 m ² of area and 1,451 nos. of existing trees will be affected by the Development	Large
LR-2	Marsh	Nil	Negligible
LR-3	Watercourse & Pond	Nil	Negligible
LR-4	Agricultural Land/ Orchard	Approximately 400 m ² of Agricultural Land/ Orchard is within the work boundary of Development and will be affected during construction.	Small
LR-5	Vegetation in Developed Area	Nil	Negligible
LCA-1	Rural Inland Plain Landscape LCA	Approximately 41,000 m ² of LCA-1 will be affected by the development	Intermediate
LCA-2	Upland and Hillside Landscape LCA	Nil	Negligible
LCA-3	Miscellaneous Rural Fringe Landscape LCA	Nil	Negligible
LCA-4	Residential Urban Landscape LCA	Nil	Negligible

8.4.4. Preliminary Landscape Mitigation Measures

Design Consideration

8.4.4.1. Design consideration should be adopted during the design stage before construction in order to minimize footprint of landscape and visual impact by refining project design where possible. Suggestions are provided as below:

- Buffer areas should be considered during design stage, in order to avoid visual impact due to hard edge of proposed structures, and allow sufficient space for provision of landscape and visual mitigations such as screen and amenity planting etc; and
- Coherent design of structures and materials should be considered, which helps to co-ordinate façade of built form with the surroundings in harmony through proper choice of colour scheme (e.g. light and earthy tones) which would help to recess and blend into natural environment. Also, naturalistic finishing materials are suggested to merge proposed building with adjacent context. The shape of buildings should also be carefully articulated to minimize the building bulk.

8.4.4.2. Based on the potential landscape changes identified in previous section, preliminary Landscape Mitigation Measures are therefore proposed to alleviate the potential adverse landscape impact.

8.4.4.3. The proposed landscape mitigation measures in the construction and operation are listed in below table.

ID No.	Landscape Mitigation Measures
MM1	<p>Preservation of Existing Vegetation</p> <p>All the existing Trees to be retained and not to be affected by the Project shall be carefully protected within and near the site during construction accordance with DEVB TCW No. 4/2020 - Tree Preservation and the latest Guidelines on Tree Preservation during Development issued by GLTM Section of DevB. Any existing vegetation which will not be affected by the Project shall be carefully preserved.</p>
MM2	<p>Transplanting of Affected Trees</p> <p>Tree with particular interest and high amenity value unavoidable affected by the site formation works shall be transplanted where practical. A detail transplanting proposal will be submitted to relevant government departments for approval in accordance with DEVB TC(W) Nos. 6/2015 and 4/2020 and Guidelines on Tree Transplanting by DEVB and final locations of transplanted trees should be agreed prior to commencement of the work.</p> <p>18 nos. of tree of particular interest <i>Aquilaria sinensis</i> will be affected by the construction. It should be transplanted straight to a final receptor site and not held in a temporary nursery where feasible to ensure the survival rate after transplanting. The final off-site location shall be in the foothill area of Tong Hang. The detailed arrangement shall be developed in detailed design phase.</p>
MM3	<p>Compensatory Tree Planting</p> <p>Any Trees to be removed under the Development shall be compensated in accordance with DEVB TCW No. 4/2020 – Tree Preservation. Due to the site constraints, off-site compensatory planting at Tong Hang is proposed in current stage. The whip tree planting on slope shall be maximised as far as practicable and in consideration of sufficient space for tree growth.</p>
MM4	<p>Aesthetical pleasing design of all man-made structures</p> <p>The form, textures, finishes and colours of the buildings shall be compatible with the existing surroundings. Light earthy tone colours shall be considered to blend in the Development with the surroundings context and the Public Housing Development at Queen's Hill Site 1.</p>
MM5	<p>Maximize greenery provision</p> <p>To lessen the extra over landscape and visual impact from the currently permitted plot ratio, provision of greenery shall be maximized as far as appropriate. Extensive landscape and recreation areas will be provided at podium and ground levels (e.g. such as green roof & podium garden) to enhance the amenity of the Development as well as provide a source of visual relief for residents and viewers from surrounding area. On the other hand, planting on slopes and vertical greening on retaining walls at the east, north and west sides of the Development will be introduced to soften the structures and to create harmonized relationship with the surrounding environment.</p> <p>Greenery coverage will be targeted at 30% of the site area, the total area of greenery area will be approximate 12,300 m².</p>

ID No.	Landscape Mitigation Measures
MM6	<p>Landscape treatments on slope</p> <p>Approximately 4,350 m² of Landscape treatments to be carried out on cut/ fill slope.</p> <p>Woodland mix with native whip tree planting on fill slope below 35-degree gradient shall be incorporated in accordance with GEO Publication No. 1/2011 – Technical Guidelines on Landscape Treatment for Slopes and the Guiding Principles on Use of Native Plant Species in Public Works Projects issued by DEVB. The greening on slope shall enhance the environment and the visual amenity value of the area.</p> <p>Hydroseeding with seeds of shrubs will be implemented on cut slope and fill slope under CEDD's site formation works for further landscape treatment on slope including whip tree planting, climbers to be implemented by HD.</p> <p>Climber planting in toe planter with min. 300mm soil depth will be implemented to cut slope (slope angle approx. 55°).</p>
MM7	<p>Provision of Visual Corridor</p> <p>Visual corridors are created to break up the massiveness of the built structures and minimize the overall visual impact, also to visually connect with the existing greenery network and rural landscape. The proposed building height at +175 mPD max. is not higher than the nearby ridgeline, e.g. Lung Shan at around +360 mPD; and similar height to Tai Leng Pei at around +170 mPD, such that the mountain backdrop is kept for habitant's enjoyment.</p>
MM8	<p>Provision of Local Open Space</p> <p>It is designed to meet the HKPSG requirement of a minimum of 1m² open space per person (total of about 11,278 m²**) for the housing development. Proposed local open space of approximately 16,670 m² is shown in Figure No. 60617595/PR/FIGURE 8.1 for illustration only. The final provision and layout are subject to HD's detailed design.</p>

* Remarks I: The arrangement of maintenance/management agencies is subject to agreement with corresponding departments/parties in accordance with DEVB TCW No. 6/2015.

**Remark II: Calculation of the local open space in the case of SSF option is illustrated, please refer to para. 8.2.1.5 for more detail. The type of public housing is yet to be confirmed under the EFS and the assumed number of flats and proposed area of local open space is for technical assessment purpose only, which is subject to change in detailed design stage.

8.4.5. Residual Landscape Impacts

- 8.4.5.1. The potential significance of the landscape impacts during the construction and operation phases, before and after mitigation, is provided in **Table 8.5**. With assumption that the mitigation measures identified in above table are well-implemented, the full effect of the soft landscape mitigation measures would be realised after ten (10) years.
- 8.4.5.2. It is estimated that approximately 1,451 nos. (1,433 to be removed + 18 nos. to be transplanted) of existing trees in Kwan Tai mix woodland (LR-1) will be affected by the proposed development during site formation works under CE 55/2019 (CE). Affected tree species include *Acacia confusa*, *Bauhinia variegata*, *Celtis sinensis*, *Ficus hispida*, *Ligustrum sinense*, *Macaranga tanarius var. tomentosa*. They are generally in poor to fair form, poor to fair health and low to medium amenity value.
- 8.4.5.3. 24 nos. of trees are proposed to be retained in-situ (as shown in **Figure No. 60617595/PR/FIGURE 8.14**) during construction and 18 nos. of tree of particular interest *Aquilaria sinensis* will be proposed to be transplanted. Besides, for the other 6 nos. of Trees

of Particular Interest with DBH over 1000mm in common landscape and hillside species, they are proposed to be removed due to direct conflict with the site formation works of the Development. Transplantation is not recommended for these trees with mature sizes in view of the technical infeasibility of forming proper root ball for transplanting for such large trees, irrecoverable form after transplanting and low chance of survival upon transplanting of the mature trees in senile age.

- 8.4.5.4. The sensitivity of this LR is high and the magnitude of impact is large. The resultant unmitigated landscape impact on this LR would be substantial during construction and operation. With the implementation of proposed mitigation measures, including transplanting of affected trees, and maximisation greenery provision and landscape treatments on slope, it is predicted that there would be substantial residual impact during construction, substantial impact during day 1 of operation and slight residual impact on LR-1 when the proposed landscape treatment on slope become mature during year 10 of operation.
- 8.4.5.5. Apart from LR-1, it is predicted that there would not be any discernible change in other LRs identified within the study boundary of the Development.
- 8.4.5.6. The proposed development mainly falls within the Rural Inland Plain Landscape LCA (LCA-1), which would be converted to Residential Urban Landscape LCA. As this may consider as expansion of adjacent LCA in Queen's Hill housing development, the proposed development will create a new landscape character which is compatible to the adjacent Residential Urban Landscape LCA. With the implementation of proposed mitigation measures, the residual impact of the new LCA will be Slight in day 1 of operation and will further be reduced to insubstantial in year 10 of operation. For the remaining LCAs, the residual landscape impact will be insubstantial.
- 8.4.5.7. Apart from LCA-1, it is predicted that there would not be any discernible change in other LCAs identified within the study boundary of the Development.
- 8.4.6. Conceptual Landscape Plan
- 8.4.6.1. The conceptual landscape plan prepared based on the building layout provided by HD with mitigation measures incorporated are illustrated in **Figure No. 60617595/PR/FIGURE 8.14**. An indicative planting proposal is illustrated in **Figure No. 60617595/PR/FIGURE 8.15**. The conceptual landscape plan only demonstrates a possible arrangement subject to change by HD.
- 8.4.6.2. The landscape areas for the proposed development are separated into two areas. The Ground Level will be mostly streetscape, existing slope works and surrounding areas which will be best utilized as buffer landscape that merges the built work with the existing natural green areas. The Podium Level will be composed of the residential landscape areas including of passive and active spaces.
- 8.4.6.3. The planting proposal is proposed by selecting native species and plant species with various flowering period in order to blend with the surrounding existing vegetation and enhance the ecological value for wildlife in long term. The selection of plant species shall be in accordance with the Greening Master Plan promulgated by CEDD, the Street Tree Selection Guide and the Guiding Principles on Use of Native Plant Species in Public Works Projects issued by DEVB.

Table 8.5 - Significance of Landscape Impacts during Construction and Operation Phases

ID No.	Landscape Resource / Character Areas	Sensitivity (Low, Medium, High)	Magnitude of Change (Negligible, Small, Intermediate, Large)	Impact Significance before Mitigation, (Insubstantial, Slight, Moderate, Substantial)	Recommended Mitigation Measures	Significance of Residual Impact (Insubstantial, Slight, Moderate, Substantial)		
						Construction	Operation	
							Day 1	Year 10
Landscape Resources								
LR-1	Mixed Woodland	High	Large	Substantial	MM1, MM2, MM3, MM4, MM5, MM6, MM7	Substantial	Substantial	Slight
LR-2	Marsh	High	Negligible	Insubstantial	N/A	Insubstantial	Insubstantial	Insubstantial
LR-3	Watercourse & Pond	Low	Negligible	Insubstantial	N/A	Insubstantial	Insubstantial	Insubstantial
LR-4	Agricultural Land/ Orchard	Medium	Small	Slight/Moderate	MM1	Slight	Insubstantial	Insubstantial
LR-5	Vegetation in Developed Area	Medium	Negligible	Insubstantial	N/A	Insubstantial	Insubstantial	Insubstantial
Landscape Character Areas								
LCA-1	Rural Inland Plain Landscape LCA	Medium	Intermediate	Moderate	MM1, MM2, MM3, MM4, MM5, MM6, MM7	Moderate	Slight	Insubstantial
LCA-2	Upland and Hillside Landscape LCA	High	Negligible	Insubstantial	N/A	Insubstantial	Insubstantial	Insubstantial
LCA-3	Miscellaneous Rural Fringe Landscape LCA	Low	Negligible	Insubstantial	N/A	Insubstantial	Insubstantial	Insubstantial
LCA-4	Residential Urban Landscape LCA	Low	Negligible	Insubstantial	N/A	Insubstantial	Insubstantial	Insubstantial

8.4.7. Preliminary Tree Preservation Proposal

- 8.4.7.1. Retained Trees will not be affected by the proposed site formation works and will be preserved in-situ on site. During construction period, retained Trees will be protected from impact from construction activity as per General Specification for Civil Engineering Works (2020 Edition), Section 26 Preservation and Protection of Trees.
- 8.4.7.2. 18 nos. of Trees of Particular Interest with conservation importance, *Aquilaria sinensis*, are proposed to be transplanted due to direct conflict with the site formation works of the proposed development. Although the suitability of transplanting for these trees are considered low due to irrecoverable form after transplanting and low chance of survival upon transplanting of this species, it is worthwhile to propose for transplanting as far as practical in view of the conservation importance of this species, tree size which is technically feasible for forming proper root ball and relatively fair health condition of the trees.
- 8.4.7.3. Besides, for the other 6 nos. of Trees of Particular Interest with DBH over 1000mm in common landscape and hillside species including *Ficus religiosa*, *Casuarina equisetifolia*, *Ficus elastica*, *Celtis sinensis* and *Cleistocalyx nervosum*, they are proposed to be removed due to direct conflict with the site formation works of the Development. Transplantation is not recommended for these trees with mature sizes in view of the technical infeasibility of forming proper root ball for transplanting for such large trees, irrecoverable form after transplanting and low chance of survival upon transplanting of the mature trees in senile age. As 6 nos. of mature trees are located in hillside slope area, which is hardly accessible for general public, these trees are considered less sensitive and would not possibly cause significant social impact and public awareness.
- 8.4.7.4. A summary of the trees treatment by the Project are summarized below:-

Maintenance Department to provide comments*		Total trees	Trees to be removed	Trees to be retained	Trees to be transplanted
Before	After				
LandsD	LandsD	24	-	24	0
LandsD	-	1,428 [^]	1,428 [^]	-	-
LandsD	CEDD/LandsD ⁺	18	0	0	18 nos. of Trees of Particular Interest - <i>Aquilaria sinensis</i>
Total		1,470[^]	1,428[^]	24	18

^{*} Only apply to the proposed new planting, retained trees and compensatory planting after the completion of the Development.

⁺ 3 years post-planting maintenance by CEDD before handing back the site to LandsD.

[^] Excluded 5 no. of undesirable species which would be removed but not require compensation according to TC(W) No. 4/2020

- 8.4.7.5. A summary of the Trees of Particular Interest (TPIs) and their treatment are summarized below:

Scientific Name	Chinese Name	Nos. of Affected Trees	Proposed Treatment	Justification
<i>Ficus religiosa</i>	菩提樹	2	Remove	<ul style="list-style-type: none"> Existing Trees with DBH over 1000mm. Common landscape and hillside species, no particular public and social concern due to restricted access of the former Queen's Hill Camp.
<i>Casuarina equisetifolia</i>	木麻黃	1		
<i>Ficus elastica</i>	印度榕	1		
<i>Celtis sinensis</i>	朴樹	1		
<i>Cleistocalyx nervosum</i>	水翁	1		
<i>Aquilaria sinensis</i>	土沉香	18	Transplant	<ul style="list-style-type: none"> Endangered Species under Cap. 586
Total		24		

8.4.8. Tree Transplanting Proposals

- 8.4.8.1. Among the trees affected by proposed site formation works, trees are selected as far as possible for transplanting to reduce the impact on existing trees. The preparation of Tree Transplanting Proposal shall follow the Guidelines on Tree Transplanting issued by GLTM Section of DevB. Transplanting should be considered as far as possible unless the trees affected are of low conservation and amenity value, or have a low chance of surviving or recovering to its normal form after transplanting. If the trees to be transplanted to other permanent locations within site are not possible, transplant the trees to a permanent location off-site. Location of receptor site should preferably be within the same area for retention of amenity value in the vicinity. To strike a balance between cost and benefit, only trees with high conservation value or high amenity value including rare and precious species and "transplantable" trees (i.e. trees that have a very good chance of recovering to its normal form) should be considered for transplanting.

- 8.4.8.2. A cost-effective transplanting strategy should be established at the Design Phase of the Project. Transplanted trees are recommended to be relocated to final locations without the use of Holding Nursery under single handling where possible subject to the sequence of construction of the works. This will minimize the cost and ensure the better survival of the trees after transplanting. However, if single transplanting handling is not possible, the transplanted trees shall be translocated to a holding nursery before the commencement of the engineering works, and will be replanted back to the receptor sites once the engineering works are completed.

8.4.9. Tree Compensatory Proposals

- 8.4.9.1. According to current site formation design available under CE 55/2019 (CE) QHE Site Formation – IDC, it is anticipated that above-mentioned trees within QHE site are required to be removed to facilitate construction of site formation and the development at QHE site.

According to existing site condition, QHE site is an abandoned military campsite on a hilly terrain adjoining extensive slopes. The site consists of hard-paved access road, footpaths & staircases, and structures on flat areas; and dense vegetation / trees on remaining slopes / hilly terrain. In fact, majority of the existing trees are found located on slopes.

8.4.9.2. As stipulated in TC(W) No. 4/2020, “the number of compensatory trees onsite and offsite not be lower than that of the number of trees removed including dead trees, but excluding trees of undesirable species.” In accordance with the TC, the on-site new tree planting and off-site compensatory tree planting will be discussed in the below sections.

8.4.9.3. Total of 1,428 nos. of trees (excluding 5 no. of undesirable species) will be removed by the site formation works under CE 55/2019 (CE). In support of the compensation quantity, in particular where quantity ratio cannot be achieved, on-site and off-site tree planting are considered.

8.4.10. On-site Tree Planting

8.4.10.1. To improve the overall value of landscape setting within the housing site, approximately 685 nos. of whip trees (with density of about 2 m spacing) as new planting on fill slope area would be implemented by HD*, and approx. 240 nos. of proposed heavy standard new trees would be provided in newly formed platform by HD, in order to increase the overall greenery coverage within site. The exact number shall be subject to HD detailed design. In total, 925 nos. of new trees would be implemented by HD, which maximize the greening and the landscape quality on site.

8.4.10.2. As housing development will be carried out after the site formation works under CE 55/2019 (CE), any planting within the site is not favorable to the plants and the subsequent construction works by HD. Therefore, on-site tree compensatory planting and transplantation works will not be carried out.

8.4.11. Off-site Compensatory Planting

8.4.11.1. Study is carried out to explore potential area for off-site compensatory planting, described below:

8.4.11.2. QHE is located adjacent to (1) Fu Tei Pai Village which is a developed area zoned “Village Type Development” with private lands of which its planning intention is primarily for development of Small House; (2) Queen's Hill which is a mountain with dense vegetation and trees and (3) QH Site 1 Development which is already well-planned by HD and being constructed currently. Although off-site compensatory planting opportunity in (3) QH Site 1 Development seems having comparatively high possibility amongst the above 3 locations, it is noted that HD has optimised and utilized their usable development area for multi-purpose including welfare and recreational facilities, cycle track and bicycle parking facilities, necessary maintenance access, utilities laying, etc.

8.4.11.3. Subsequently, off-site compensatory planting opportunity in North District is further explored. A site near Tong Hang is identified as the most viable off-site compensatory planting and final receptor site for the transplanted trees for QHE's project due to the following reasons:

- comparatively low ecological value of existing shrubland habitats;
- potential value of vegetation diversity and ecological enhancement through thinning of exotic species and undesirable species, and planting of native species;
- good connectivity and ecological linkage with the existing woodland in the vicinity near Tong Hang Village;

- relatively gradual gradient, which facilitates site preparation and transplanting;
- less disturbed as locate away from built-up area in the district, particularly suitable for the final receptor site of the transplanting of trees of particular interest;
- relatively remote location with minimal public safety concern;
- accessible by maintenance vehicle to the Tong Hang Fresh Water Service Reservoir;
- readily available for the final receptor location of the transplanted trees of particular interest, to minimize the transplanting shock in one operation;
- locate within the same district of the Project (around 1.5 - 2km from the Project Boundary), its detailed location is shown in **Figure No. 60617595/PR/FIGURE 8.16**;
- the natural terrain and existing plantation at Tong Hang would help to screen-off the sunlight which avoid over-heating of transplanted *Aquilaria sinensis*; and
- within government land identified and reserved as off-site compensatory planting for other housing sites in North District under CE 52/2017 (CE), without conflict with potential / planned permanent development. And a holistic tree planting proposal with a larger area with other proposed housing sites in North District could maximize the landscaping and greening effect.

8.4.11.4. The potential off-site compensatory area is proposed at the hillside north to the Tong Hang Fresh Water Service Reservoir within the district (approx. 1.5 - 2km from QHE Site). Native whip size trees will be proposed for compensatory planting for their higher survival rate and high adaption to new habitats, together with the prolonged establishment period to 3 years by CEDD, no future regular tree maintenance work is expected upon the establishment period. As preliminary recommendation, 1,428 nos. of whip trees are proposed with density of about 2m spacing (about 0.3 nr/m²), subject to detailed site condition. On the other hand, transplantation of 18 nos. *Aquilaria sinensis* is proposed at the foothill area of Tong Hang where the gradient of final receptor site is relatively gradual, which facilitates site preparation and transplantation. The above tree planting works would require approx. 5,500 m² for planting and would be carried out at suitable area within the studied zone (studied zone area approx. 13,600 m²). The off-site planting arrangement is shown in **Figure No. 60617595/PR/FIGURE 8.16**.

Summary of Proposed Tree Planting

Location	Total no. of trees surveyed (Approx. trees)	Trees to be retained (Approx. trees)	Trees to be removed (Approx. trees)	Trees to be transplanted (Approx. trees)	Proposed compensatory tree planting (Approx. trees)	Proposed new trees planting (Approx. trees)
Proposed Housing Site	1,475 (incl. 24 nos. of Trees of Particular Interest)	24	1,428 (incl. 6 nos. of Trees of Particular Interest) (excl. 5 nos. of <i>Leucaena leucocephala</i>)^	18 nos. of Trees of Particular Interest - <i>Aquilaria sinensis</i> (transplant to off-site location)	0	240 (heavy standard) 685 (Whip trees on cut/ fill slope)
Off-site	NA	NA	NA	Final receptor location for 18 nos. of Trees of Particular Interest - <i>Aquilaria sinensis</i>	1,428 (Whip trees)	NA
Total	1,475	24	1,428	18	1,428	925
Ratio of tree removal to on-site new tree planting					1,428 : 925 = 1 : 0.65	
Ratio of tree removal to off-site compensatory planting					1,428 : 1,428 = 1 : 1	

Note:

^Undesirable species which would be removed but not require compensation according to TC(W) No. 4/2020

8.4.11.5. 1,428 nos. of off-site compensatory trees to be implemented at Tong Hang, together with on-site new tree planting within QHE site committed by HD for landscape purpose, which includes woodland mix on cut/ fill slope (685 nos. of whip trees) and proposed heavy standard trees (240 nos.) in newly formed platform. In total, 2,353 nos. of off-site and on-site tree planting would be implemented by CEDD and HD, which is promising in terms of quantity as well as quality. These tree planting would provide sufficient greening and restore the landscape quality on site. Recommended locations for compensatory whip trees and tree transplanting on site are illustrated in **Figure No. 60617595/PR/FIGURE 8.17**.

8.4.11.6. With the implementation of CEDD's off-site compensatory tree planting at Tong Hang together with HD's committed new tree planting at QHE, it is considered that the overall tree planting proposal could well-fulfilled the requirement as stated in TC(W) No. 4/2020 and the initiatives / intention of quality greening encouraged by DEVB.

- 8.4.11.7. The proposed tree species for on-site and off-site whip tree planting have made reference to the recommendations in GMP of North District and GEO Publication No. 1/2011. A table showing an indicative list of species and size to be planted as compensatory trees at Tong Hang is listed below: -

Botanical Name	Chinese Name	Origin	Size	Spacing (mm)
Trees				
<i>Bridelia tomentosa</i> ⁽¹⁾	土蜜樹	Native	Whip Tree	2000
<i>Cratogeomys cochinchinense</i> ⁽¹⁾	黃牛木			
<i>Rhus succedanea</i> ⁽¹⁾	木蠟樹			
<i>Ficus hispida</i> ⁽¹⁾	對葉榕			
<i>Polyspora axillaris</i> ⁽¹⁾	大頭茶			

Note:

(1): Native species to enhance ecological value of site

- 8.4.11.8. Indicative Schedule for Proposed Climber to be planted at toe planter along cut slope of the Development:

Botanical Name	Chinese Name	Origin	Remarks
<i>Duranta erecta</i>	假連翹	Exotic	Pre-grown to 1.2 m

- 8.4.11.9. Sufficient space shall be provided for the planting of compensatory trees taking into the account the adequate space required to cater for the establishment and healthy growth of the trees up to maturity.

8.5. Summary

8.5.1. Preliminary Visual Impact

- 8.5.1.1. With the implementation of proposed mitigation measures in the design layout, including creation of visual greening connection and breezeways, control of development heights and massing, visual compatibility of the proposed development and maximization of greenery provision, it is anticipated that there would still be some adverse visual changes to the adjacent public viewing points.

- 8.5.1.2. Efforts have been made to ameliorate the potential visual impact of the proposed development as far as possible. In return, the proposed development will make a positive contribution to the supply of housing units and optimize land utilization. The resultant overall impact is therefore concluded as moderate adverse.

8.5.2. Preliminary Landscape Impact

- 8.5.2.1. With the implementation of proposed mitigation measures including preservation of existing vegetation, compensatory tree planting, reinstatement of landscape areas, provision of visual green corridors, aesthetical pleasing design of all man-made structures and maximisation greenery provision, the residual impacts to different LRs and LCAs will be insubstantial to substantial in day 1 of operation and will further be reduced to insubstantial/slight when the proposed tree planting become matures in year 10 of operation.

- 8.5.2.2. The overall predicted residual landscape impact of the proposed development is therefore reduced to an acceptable level with mitigation measure.

9. **PRELIMINARY AIR VENTILATION ASSESSMENT IN THE FORM OF EXPERT EVALUATION**

9.1. **Introduction**

9.1.1. General

9.1.1.1. This section describes the findings of Preliminary Air Ventilation Assessment in the form of Expert Evaluation (PAVA-EE) for the proposed development, and identifies any potential impact on the air ventilation aspect and recommends mitigation measures if necessary.

9.1.2. Wind Availability and Site Wind Environment

9.1.2.1. As reference to the Regional Atmospheric Modelling System (RAMS) wind data released from Hong Kong Planning Department, the wind data of Grid (077, 083) is extracted. The annual winds of the study area mainly come from the easterly quadrants (i.e. E, ENE, ESE), while in summer, the local wind environment would be determined by E, S and SSW winds as shown in below diagram.

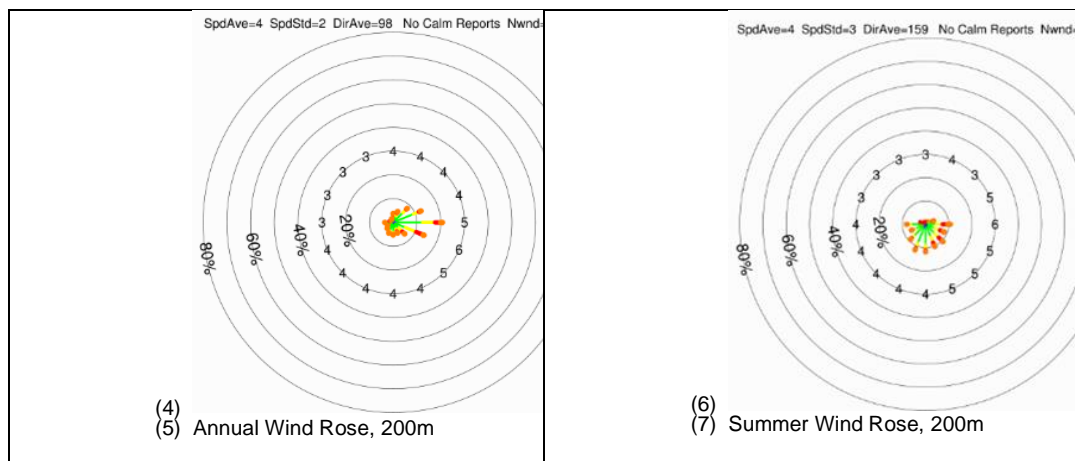


Diagram 9.1.1 Wind Rose extracted from RAMS model at grid (077, 083)

9.1.2.2. The Site is located at the inland region of northeast New Territory and surrounded by hilly terrain from east and south. The topographical elevation in site ranges from around +25 mPD to +50 mPD.

9.1.2.3. The topographical feature near the Site gradually rises from relatively flat and low-rise terrain level at the northwest towards the southeast. Several small knolls, around +60 mPD to +80 mPD in height, are formed to the east, southeast and south of the Site. The terrain to the further east / southeast and south of the Site continues to rise into the high-rise mountainous terrains, which implies the easterly and southerly prevailing winds would be moderated and weakened before reaching the Site. However, downhill air movement may occur in summer seasons near the Site, which would result in an enhancement of the wind environment.

9.1.2.4. The Site is currently occupied by former Queen's Hill Barrack (vacated). The vicinity areas are mainly occupied by low to mid-rise village type developments which have relative low morphology densities, except the Queen's Hill Site 1 (Site 1) to its immediate southern region with planned high-rise residential buildings. Among the wind corridors through the Site 1, three (i.e. (a), (b), (c)) are aligning in roughly N / NNE – S / SSW direction, two (i.e. (d), (e)) are aligning in ENE – WSW directions and one (i.e. (f)) is facilitating ESE winds to flow through.

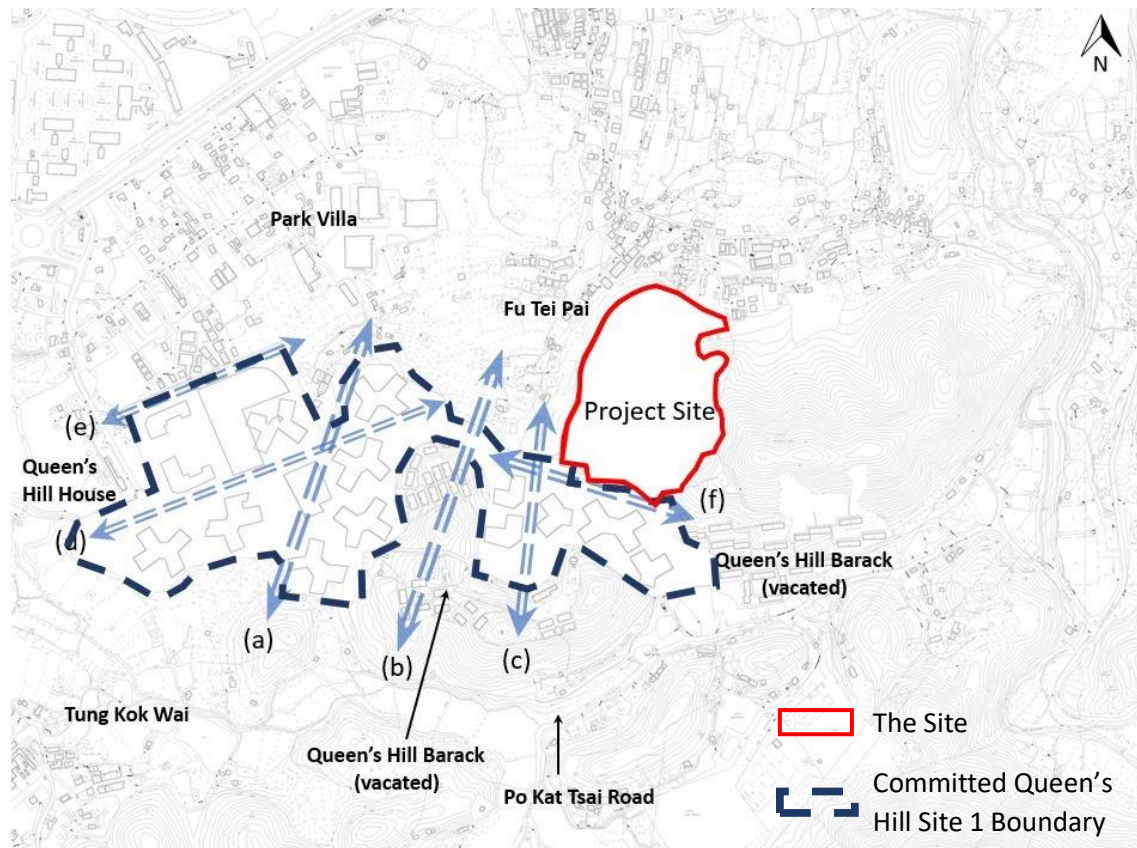
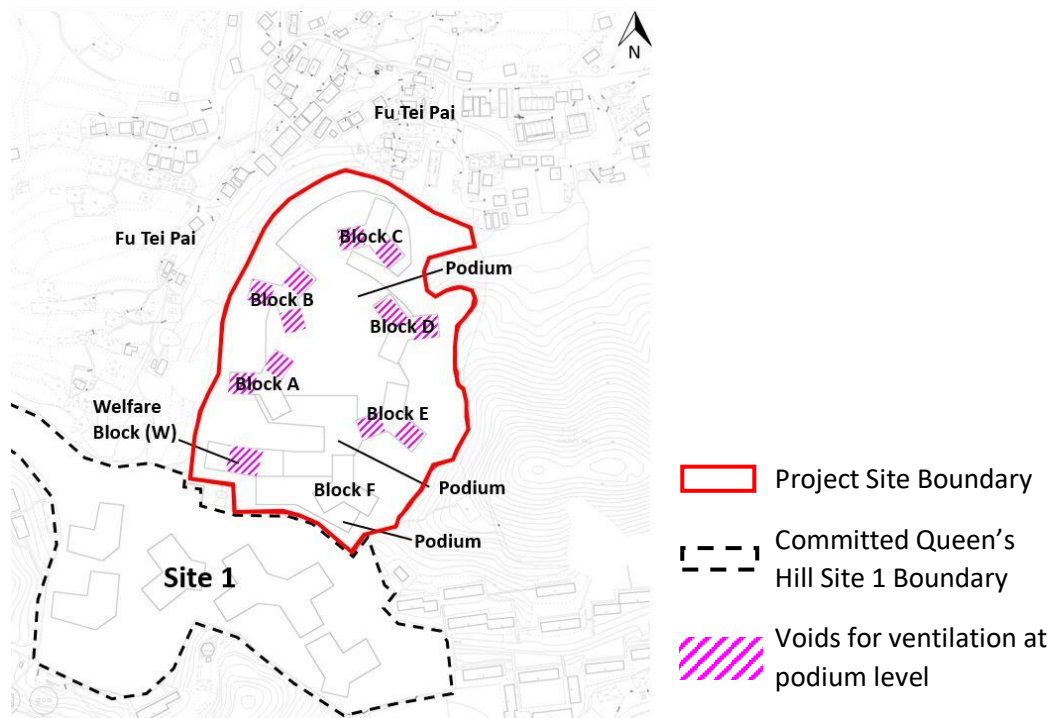


Diagram 9.1.2 Wind corridors identified in Air Ventilation Assessment for the Proposed Public Housing at Queen's Hill Site 1

9.1.3. Preliminary Proposed Scheme

- 9.1.3.1. The Site is planned for six high-rise residential buildings with heights about +175 mPD. These buildings sit on a large podium structure of around +50 to +55 mPD (i.e. around 17 m to 22 m above ground at site formation level of about +33 mPD) in height. A welfare block of around +70 mPD at the south-west corner of the podium. The details of the preliminary proposed scheme (the Proposed Scheme) are presented below diagram.



	Blocks / Structures	Height (approx.)
1	Residential Block A	+175 mPD
2	Residential Block B	+175 mPD
3	Residential Block C	+175 mPD
4	Residential Block D	+175 mPD
5	Residential Block E	+175 mPD
6	Residential Block F	+175 mPD
7	Podium (carpark / retail under)	+50 to +55 mPD
8	Welfare Block (W)	+70 mPD

Diagram 9.1.3 The Preliminary Proposed Scheme for the Development

9.2. Qualitative Assessment – Expert Evaluation

- 9.2.1.1. Comparing to the current conditions of open ground and low-rise barrack blocks at the Site, the construction of the Proposed Scheme with high-rise residential buildings would impose a certain magnitude of blockage in wind flow through the Site. The wind influence area would reach roughly a distance of one building height downwind of the proposed building.
- 9.2.1.2. Portion of the annual ENE winds would be able to enter the wind corridor (i.e. wind corridor (d) and marker (2) in **Diagram 9.2.1**) reserved in QH Site 1 after flowing through the voids incorporated in the Proposed Scheme, thus facilitate the wind environment in western region of the QH Site 1 as well as the further west. Other ENE winds (i.e. markers (1) and (3) in **Diagram 9.2.1**) would skim through the northern and southern regions of the Site and QH Site 1 to reach Ma Liu Shui San Tsuen and Tung Kok Wai respectively. The open voids at the podium level of the proposed scheme would facilitate the wind environment in western portion of the Queen's Hill Development, and the 10 m setback of Block C from the northern boundary reserves air path allowing the ENE wind to skim over the Development and Fu Tei Pai.

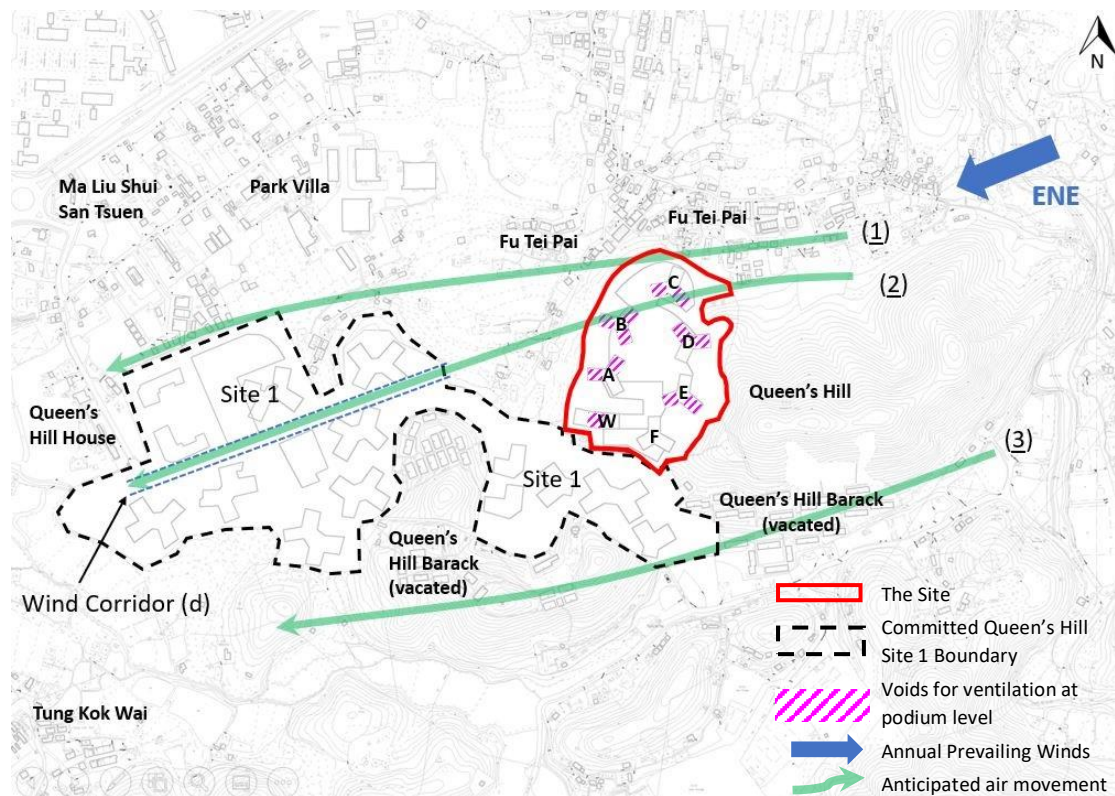


Diagram 9.2.1 Air movements under the ENE prevailing wind for Proposed Scheme

- 9.2.1.3. Although the E and ESE winds would be weakened by Queen's Hill before reaching the Site, the wind environment at Fu Tei Pai and Ma Liu Shui San Tsuen are maintained owing to the open voids for ventilation at podium level of Block B, C and D would allow air penetration towards the west, facilitating the flow of these prevailing winds (i.e. markers (4) and (4') in **Diagram 9.2.2**). A portion of these air flow (i.e. marker (5) in **Diagram 9.2.2**) would be channelled into Wind Corridor (f) between committed buildings in QH Site 1. In addition, the building gap on podium between Block A – E and Block F – Welfare Block in the southern portion of the Development (i.e. marker (5') in **Diagram 9.2.2**) would create a wind corridor to facilitate wind environment at the central-west portion of Queens Hill Estate. Furthermore, a portion of air flow will flow around the southern buildings of QH Site 1 and skimming towards the area north to Tung Kok Wai.

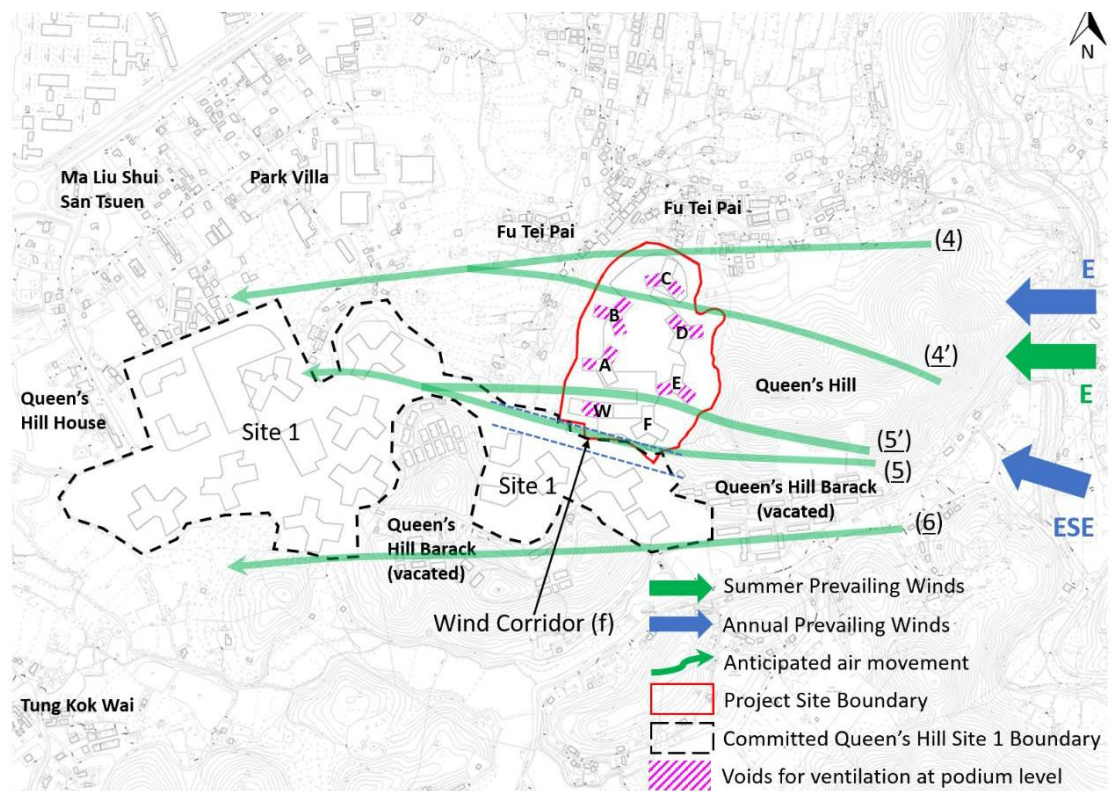


Diagram 9.2.2 Air movements under the E and ESE prevailing winds for Proposed Scheme

- 9.2.1.4.
- 9.2.1.5. In light of the blockage of the developments in QH Site 1, the wind impacts induced by Proposed Scheme itself may not be significant under southerly winds. With the setback of Blocks D and E from eastern of the Site, the wind influence on the areas east of Fu Tei Pai is alleviated (i.e. marker (7) in **Diagram 9.2.3**). Other existing air streams of the S and SSW winds would continue to flow towards north via the building separations (i.e. markers (8), (9), (10) in **Diagram 9.2.3**).

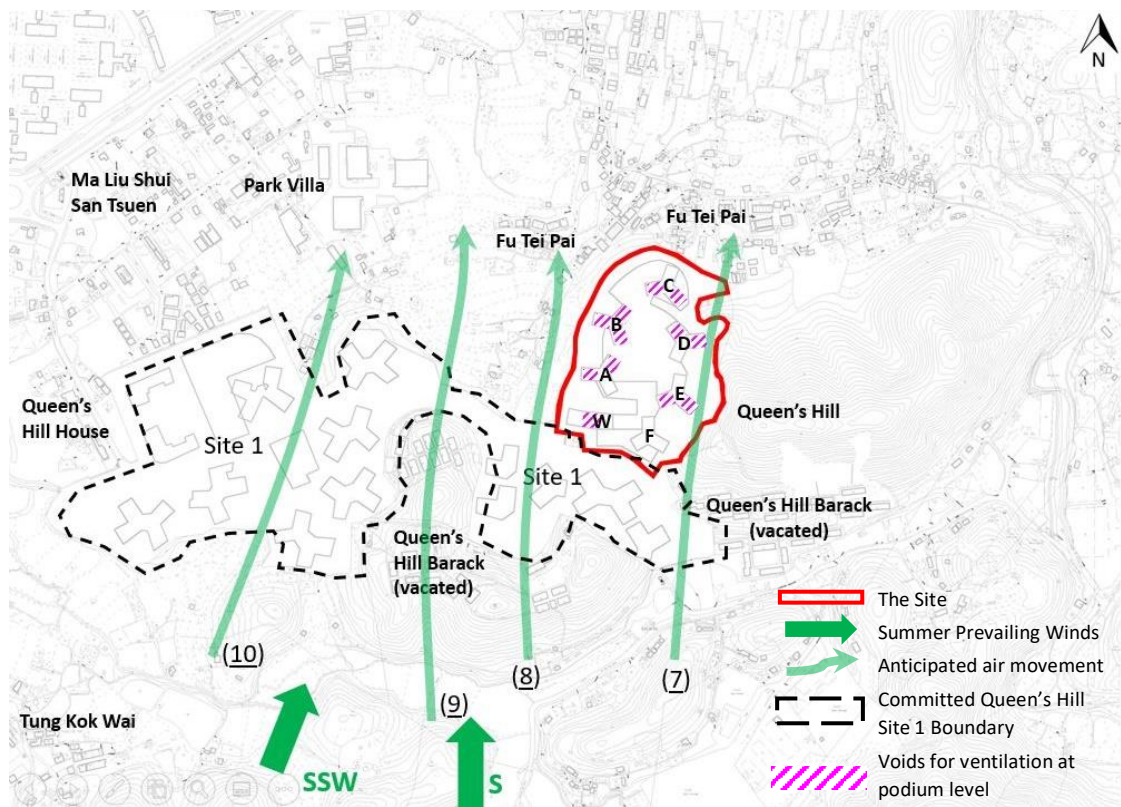


Diagram 9.2.3 Air movements under the SSW and S prevailing winds in Proposed Scheme

9.3. Summary

- 9.3.1.1. The Proposed Scheme is expected to induce wind influence zone reaching around 175m to the downstream direction, which may reach the western portion of Fu Tei Pai as well as part of the Queen's Hill Site 1 under the easterly prevailing winds (i.e. ENE, E, ESE annual / summer prevailing winds) and eastern portion of Fu Tei Pai under the southerly prevailing winds (i.e. S and SSW summer winds) respectively. However, the Proposed Scheme has incorporated several merit measures such as the void for ventilation at podium level, building separations and setback from the Project Site boundary, which allows air flows to reach key downstream areas and alleviate the possible wind influences.
- 9.3.1.2. A few general merit measures to improve air ventilation performance are also recommended to the building designs for the Proposed Scheme. These measures include the provision of sufficient permeability, avoidance of long-façades and incorporation of greenery. Considering that the surrounding of the Project Site is relatively open, and the Proposed Scheme has already provided permeability to allow winds reaching key downstream areas, the incorporation of suggested general measures would further increase the wind availability to the vicinity surrounding.
- 9.3.1.3. Based on the expert evaluation results, no significant air ventilation issues within the study area and its surroundings are anticipated. To further enhance the surrounding wind environment, quantitative AVA should be carried out to ascertain the air ventilation impact of the future development at the detailed design stage to help refine the design for scheme optimisation.

10. CONCLUSIONS

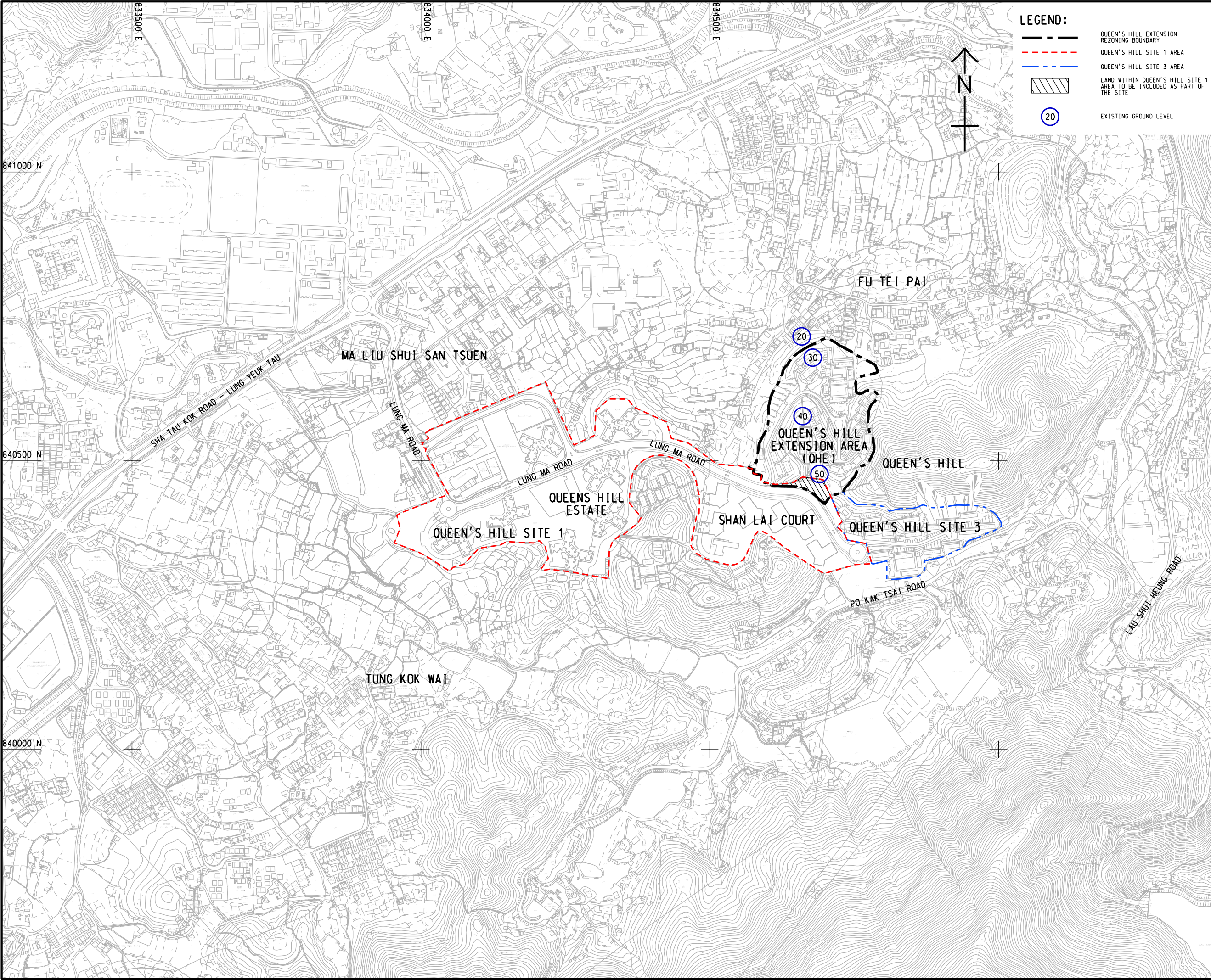
10.1. Summary on Findings under Technical Assessments

- 10.1.1.1. The Development and proposed infrastructure works for supporting the proposed development have been studied under this EFS, and the study concluded that there is no insurmountable problem in terms of traffic, sewerage, drainage, water supply, environmental, heritage, visual and landscape as well as air ventilation aspects.
- 10.1.1.2. Overall, the EFS predicted that the proposed development would be environmentally acceptable with the implementation of proposed mitigation measures for construction and operation phases.
- 10.1.1.3. Whilst sewerage, drainage and water supply connection schemes for the proposed development are proposed, no new roadwork is required for supporting population intake of the proposed development.

Figures

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PUBLIC HOUSING DEVELOPMENT
AT QUEEN'S HILL EXTENSION,
FANLING - FEASIBILITY STUDY

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比例

A3 1 : 6000

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN
位置圖

PROJECT NO.
項目編號

60617595

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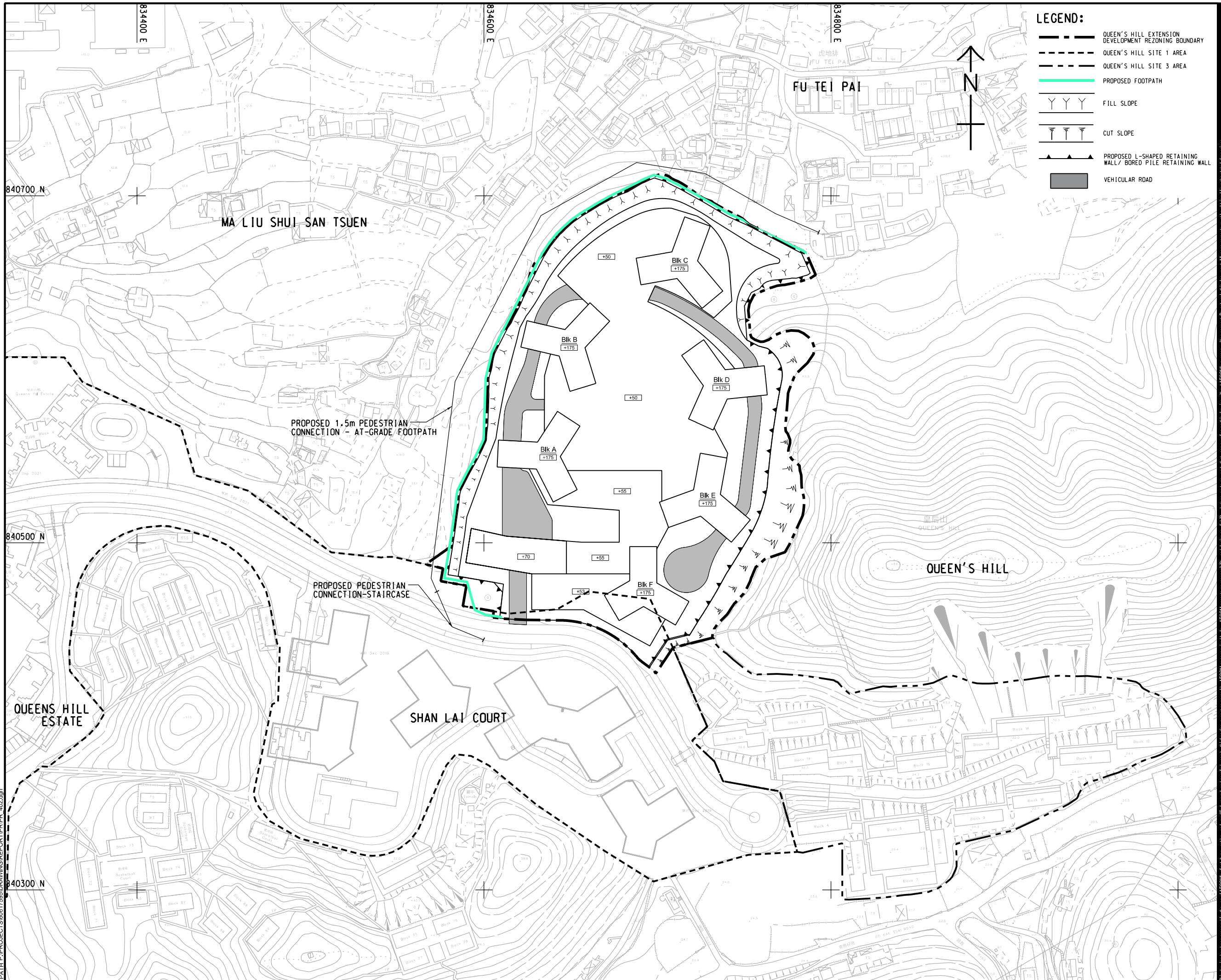
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LOCATION PLAN

SHEET NUMBER
圖紙編號

60617595/PR/FIGURE 1.1



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PROJECT

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METRES

KEY PLAN

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CE 12/2019 (CE

SHEET TITLE
1992-93 Ex 85

圖式 4

ORIGINAL SITE LAYOUT PLAN

SHEET NUMBER

圖紙類

60617595/PR/FIGURE 2.1

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LEGEND	LANDSCAPE MITIGATION MEASURES
	Trees to be retained in-situ
	Aesthetical pleasing design of all man-made structures
	Maximize greenery provision
	Provision of Visual Corridor
	Provision of Local Open Space
LEGEND	AIR VENTILATION MEASURES
	Voids for ventilation at podium level
	Setback from Boundary



LEGEND:	
	QHE REZONING BOUNDARY
	INDICATIVE PLATFORM BOUNDARY FOR HOUSING DEVELOPMENT
	PROPOSED FOOTPATH ALIGNMENT
	PROPOSED MAINTENANCE ACCESS
	QHE HOUSING SITE BOUNDARY
	VEHICULAR ROAD

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尺寸單位 METRES

KEY PLAN
索引圖

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項目編號 60617595

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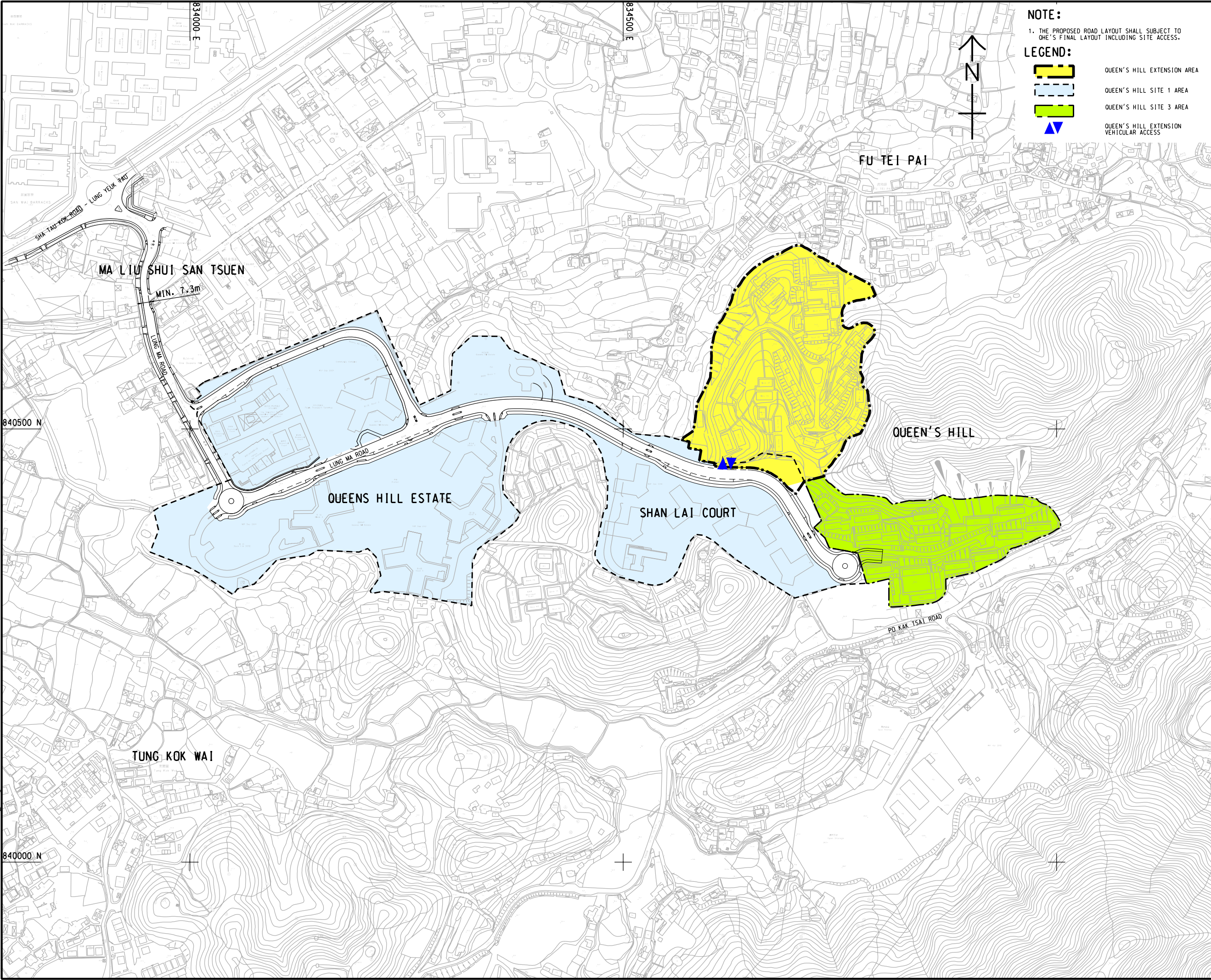
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圖紙名稱 LANDSCAPE AND AIR VENTILATION MITIGATION PLAN

SHEET NUMBER
圖紙編號 60617595/PR/Figure 2.2

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NOTE:
1. THE PROPOSED ROAD LAYOUT SHALL SUBJECT TO
OHE'S FINAL LAYOUT INCLUDING SITE ACCESS.

LEGEND:

- QUEEN'S HILL EXTENSION AREA
- QUEEN'S HILL SITE 1 AREA
- QUEEN'S HILL SITE 3 AREA
- QUEEN'S HILL EXTENSION
VEHICULAR ACCESS

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SCALE
比例

DIMENSION UNIT
尺寸單位

A3 1 : 4000 METRES

KEY PLAN
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PROJECT NO.
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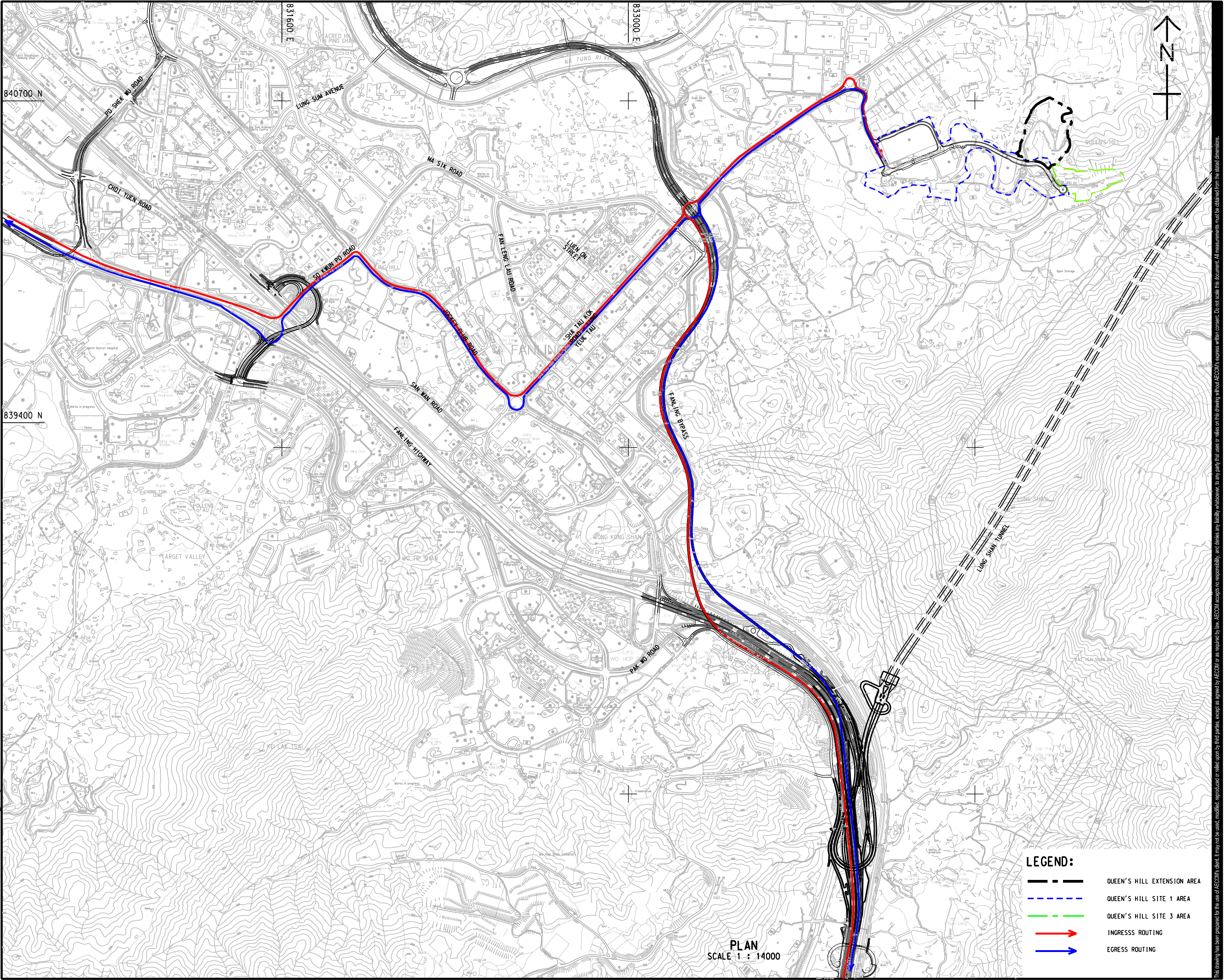
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PROPOSED VEHICULAR ACCESS
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SHEET NUMBER
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60617595/PR/FIGURE 3.1

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PLAN
SCALE 1 : 14000

- LEGEND:
- QUEEN'S HILL EXTENSION AREA
 - QUEEN'S HILL SITE 1 AREA
 - QUEEN'S HILL SITE 3 AREA
 - INGRESS ROUTING
 - EGRESS ROUTING

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KEY PLAN
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圖紙名稱

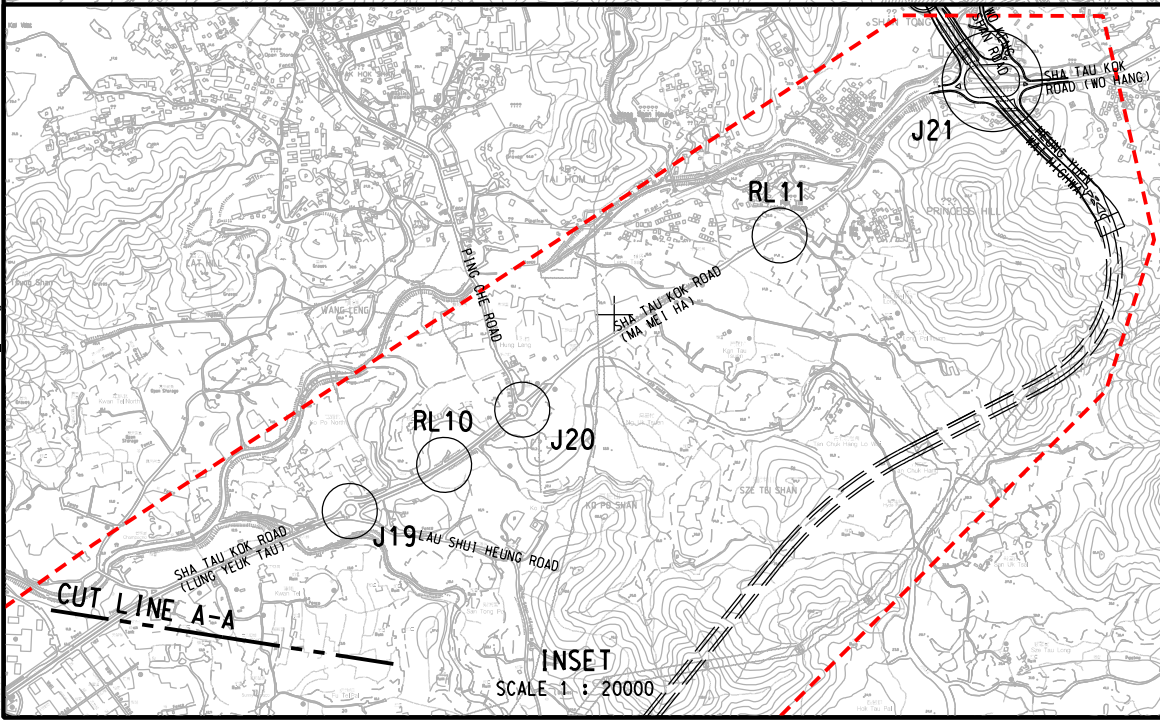
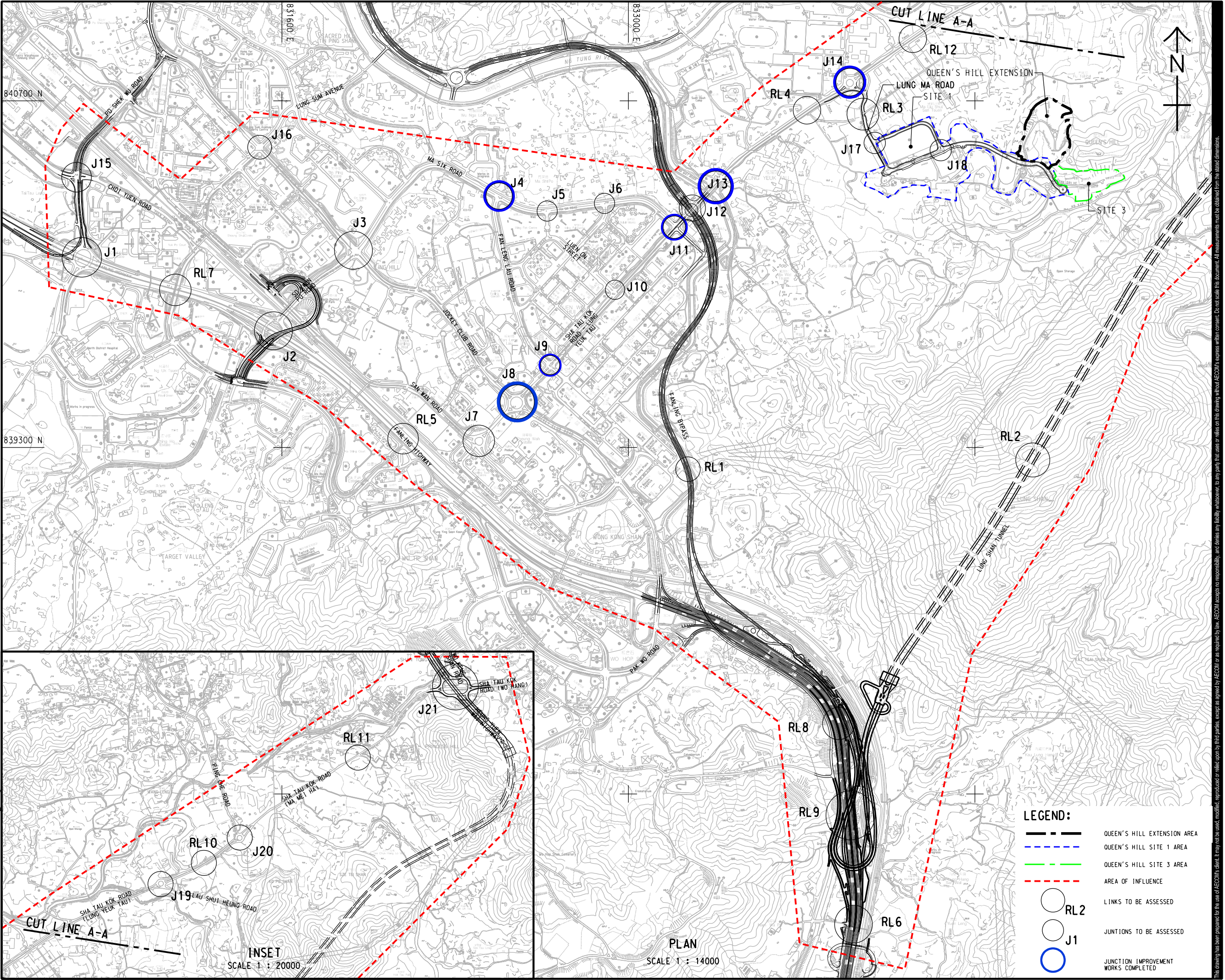
VEHICULAR ROUTINGS

SHEET NUMBER
圖紙編號

60617595/PR/FIGURE 3.2

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LEGEND:

- QUEEN'S HILL EXTENSION AREA
- QUEEN'S HILL SITE 1 AREA
- QUEEN'S HILL SITE 3 AREA
- AREA OF INFLUENCE
- RL2 LINKS TO BE ASSESSED
- J1 JUNCTIONS TO BE ASSESSED
- JUNCTION IMPROVEMENT WORKS COMPLETED

PROJECT NO. 60617595
AGREEMENT NO. CE 12/2019 (CE)

SHEET TITLE AREA OF INFLUENCE AND ASSESSED JUNCTION & ROAD LINKS

SHEET NUMBER 60617595/PR/FIGURE 3.3

AECOM

PROJECT
INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENT AT QUEEN'S HILL EXTENSION, FANLING - FEASIBILITY STUDY

CLIENT
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Civil Engineering and Development Department

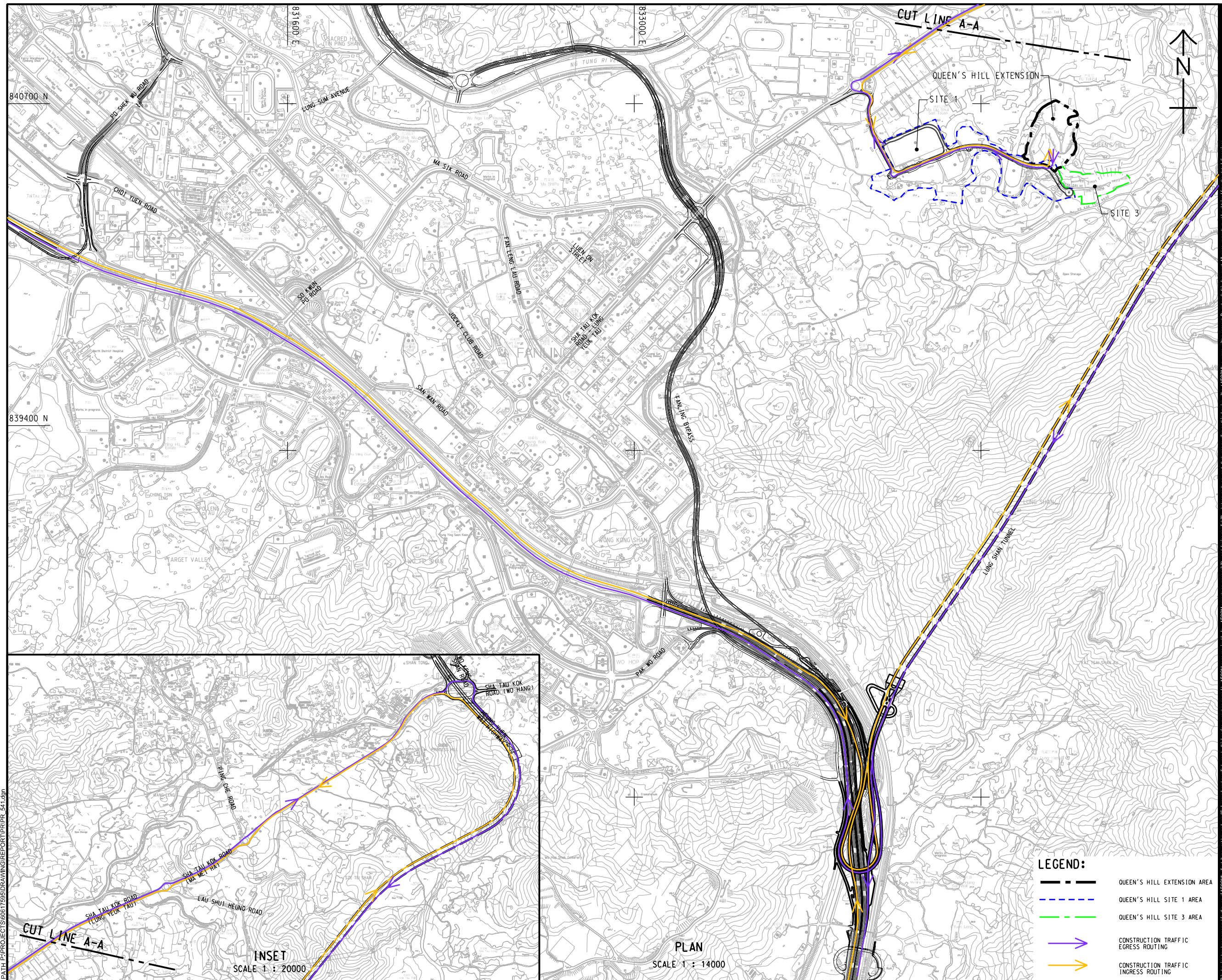
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ISSUE/REVISION			
3/24			
I/R	DATE	DESCRIPTION	CHK.
修訂	日期	內容摘要	校核

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2021/11/18

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STATUS
05/19

SCALE 比例	DIMENSION UNIT 尺寸單位
A3 AS SHOWN	METRES

KEY PLAN

PROJECT NO. 項目編號	AGREEMENT NO 協議編號
60617595	CE 12/2019 (CE

SHEET TITLE
図紙名欄

PROPOSED CONSTRUCTION TRAFFIC ROUTING

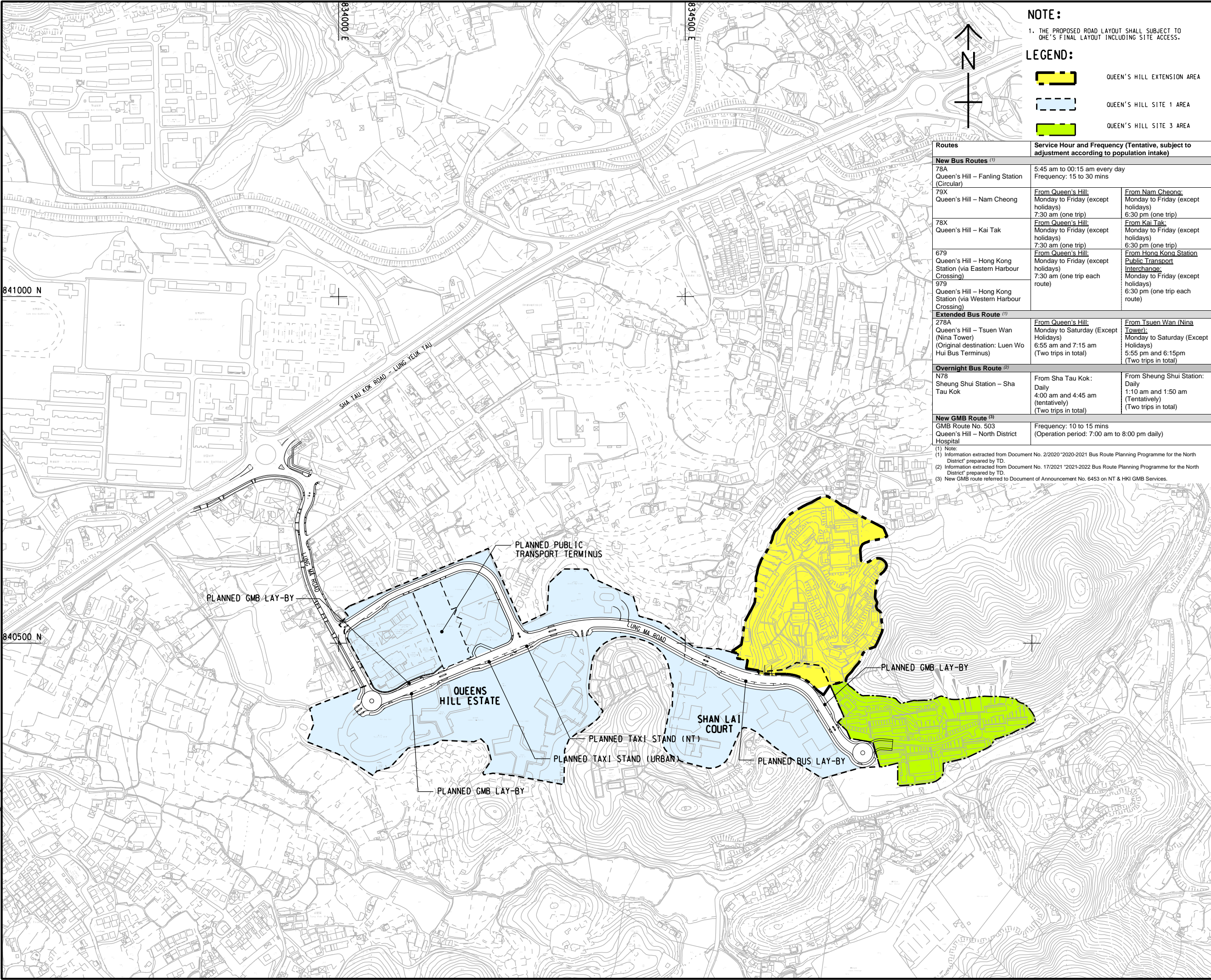
SHEET NUMBER

60617595/PR/FIGURE 3.4

60617595/PR/FIGURE 3.5

60617595/PR/FIGURE 3.6

ISO A1 594mm x 841mm
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Checked:
Designer:
Project Management Initials:
Plot File by: LUH9
2021/11/10
PATH P:\PROJECTS\60617595\DRAWING\REPORT\PRPR_537.dgn



NOTE:

1. THE PROPOSED ROAD LAYOUT SHALL SUBJECT TO
OHE'S FINAL LAYOUT INCLUDING SITE ACCESS.

LEGEND:

- QUEEN'S HILL EXTENSION AREA
- QUEEN'S HILL SITE 1 AREA
- QUEEN'S HILL SITE 3 AREA

Routes		Service Hour and Frequency (Tentative, subject to adjustment according to population intake)	
New Bus Routes ⁽¹⁾			
78A Queen's Hill – Fanling Station (Circular)	5:45 am to 00:15 am every day Frequency: 15 to 30 mins		
79X Queen's Hill – Nam Cheong	<u>From Queen's Hill:</u> Monday to Friday (except holidays) 7:30 am (one trip)	<u>From Nam Cheong:</u> Monday to Friday (except holidays) 6:30 pm (one trip)	
78X Queen's Hill – Kai Tak	<u>From Queen's Hill:</u> Monday to Friday (except holidays) 7:30 am (one trip)	<u>From Kai Tak:</u> Monday to Friday (except holidays) 6:30 pm (one trip)	
679 Queen's Hill – Hong Kong Station (via Eastern Harbour Crossing)	<u>From Queen's Hill:</u> Monday to Friday (except holidays) 7:30 am (one trip each route)	<u>From Hong Kong Station</u> <u>Public Transport Interchange:</u> Monday to Friday (except holidays) 6:30 pm (one trip each route)	
979 Queen's Hill – Hong Kong Station (via Western Harbour Crossing)			
Extended Bus Route ⁽¹⁾			
278A Queen's Hill – Tsuen Wan (Nina Tower) (Original destination: Luen Wo Hui Bus Terminus)	<u>From Queen's Hill:</u> Monday to Saturday (Except Holidays) 6:55 am and 7:15 am (Two trips in total)	<u>From Tsuen Wan (Nina Tower):</u> Monday to Saturday (Except Holidays) 5:55 pm and 6:15pm (Two trips in total)	
Overnight Bus Route ⁽²⁾			
N78 Sheung Shui Station – Sha Tau Kok	From Sha Tau Kok: Daily 4:00 am and 4:45 am (tentatively) (Two trips in total)	From Sheung Shui Station: Daily 1:10 am and 1:50 am (Tentatively) (Two trips in total)	
New GMB Route ⁽³⁾			
GMB Route No. 503 Queen's Hill – North District Hospital	Frequency: 10 to 15 mins (Operation period: 7:00 am to 8:00 pm daily)		

- (1) Note:
(1) Information extracted from Document No. 2/2020 "2020-2021 Bus Route Planning Programme for the North District" prepared by TD.
(2) Information extracted from Document No. 17/2021 "2021-2022 Bus Route Planning Programme for the North District" prepared by TD.
(3) New GMB route referred to Document of Announcement No. 6453 on NT & HKI GMB Services.

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PROJECT
INFRASTRUCTURE WORKS FOR
PUBLIC HOUSING DEVELOPMENT
AT QUEEN'S HILL EXTENSION,
FANLING - FEASIBILITY STUDY

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STATUS

SCALE

A3 1 : 5000

DIMENSION UNIT

METRES

KEY PLAN

PROJECT NO.

60617595

AGREEMENT NO.

CE 12/2019 (CE)

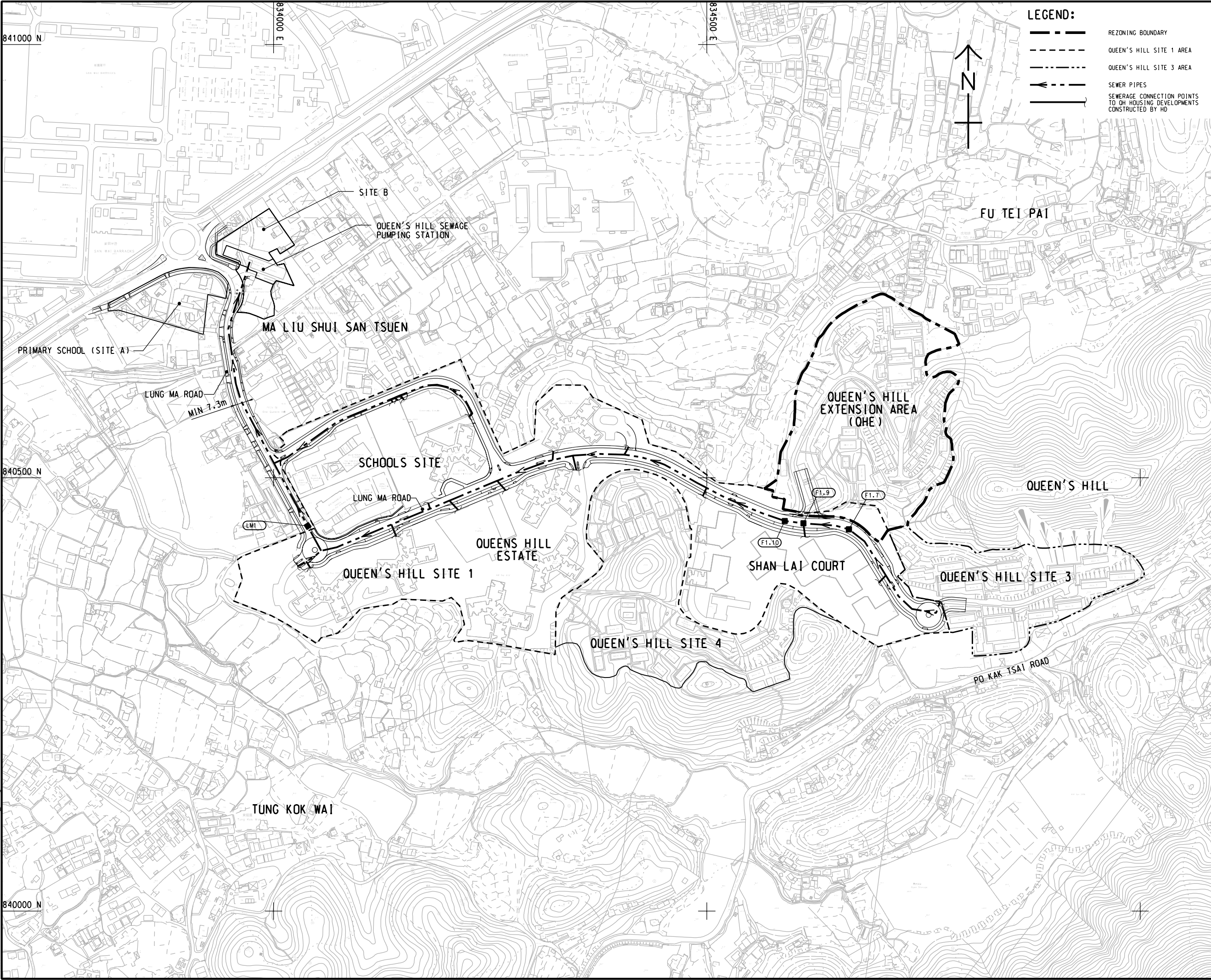
SHEET TITLE

PLANNED PUBLIC
TRANSPORT FACILITIES

SHEET NUMBER

60617595/PR/FIGURE 3.7

ISO A1 594mm x 841mm
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PROJECT
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INFRASTRUCTURE WORKS FOR
PUBLIC HOUSING DEVELOPMENT
AT QUEEN'S HILL EXTENSION,
FANLING - FEASIBILITY STUDY

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DATE
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DESCRIPTION
修改描述

CHK.
校核

STATUS
狀態

SCALE
比例

DIMENSION UNIT
尺寸單位

A3 1 : 4000

METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號

AGREEMENT NO.
協議編號

60617595

CE 12/2019 (CE)

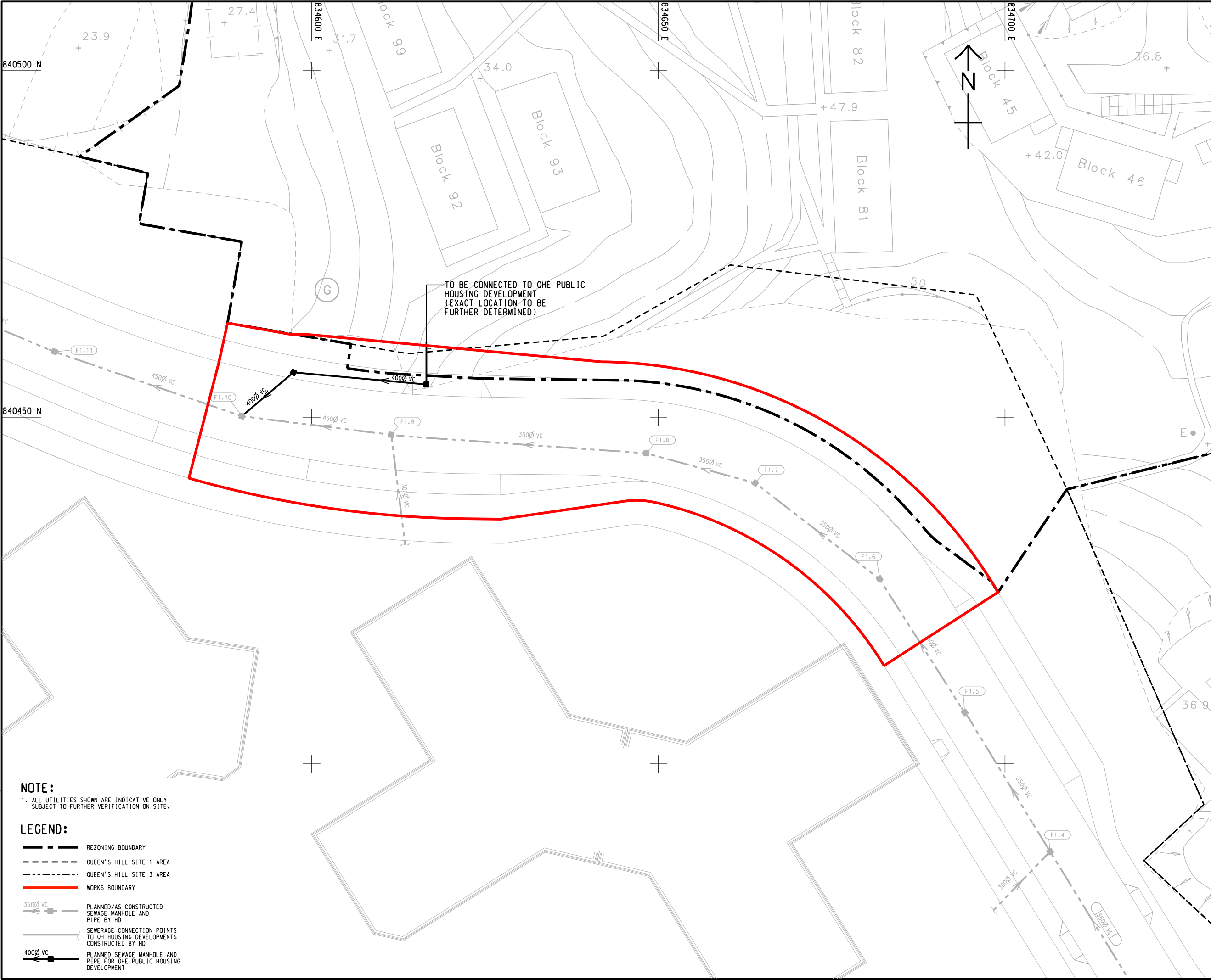
SHEET TITLE
圖紙名稱

SEWERAGE LAYOUT PLAN

SHEET NUMBER
圖紙編號

60617595/PR/FIGURE 4.1

ISO A1 594mm x 841mm
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2021/11/10
Plot File by: llyyang
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NOTE:
1. ALL UTILITIES SHOWN ARE INDICATIVE ONLY
SUBJECT TO FURTHER VERIFICATION ON SITE.

- LEGEND:**
- REZONING BOUNDARY
 - - - QUEEN'S HILL SITE 1 AREA
 - - - QUEEN'S HILL SITE 3 AREA
 - WORKS BOUNDARY
 - 350Ø VC --- PLANNED/AS CONSTRUCTED SEWAGE MANHOLE AND PIPE BY HD
 - SEWERAGE CONNECTION POINTS TO QH HOUSING DEVELOPMENTS CONSTRUCTED BY HD
 - 400Ø VC --- PLANNED SEWAGE MANHOLE AND PIPE FOR QHE PUBLIC HOUSING DEVELOPMENT

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PROJECT
INFRASTRUCTURE WORKS FOR
PUBLIC HOUSING DEVELOPMENT
AT QUEEN'S HILL EXTENSION,
FANLING - FEASIBILITY STUDY

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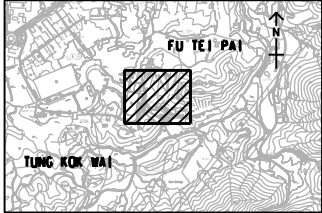
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設計	日期	修改/補遺	校核

STATUS
待校核

SCALE
比例
A3 1 : 500

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖
A3 1 : 80000



PROJECT NO.
項目編號
60617595

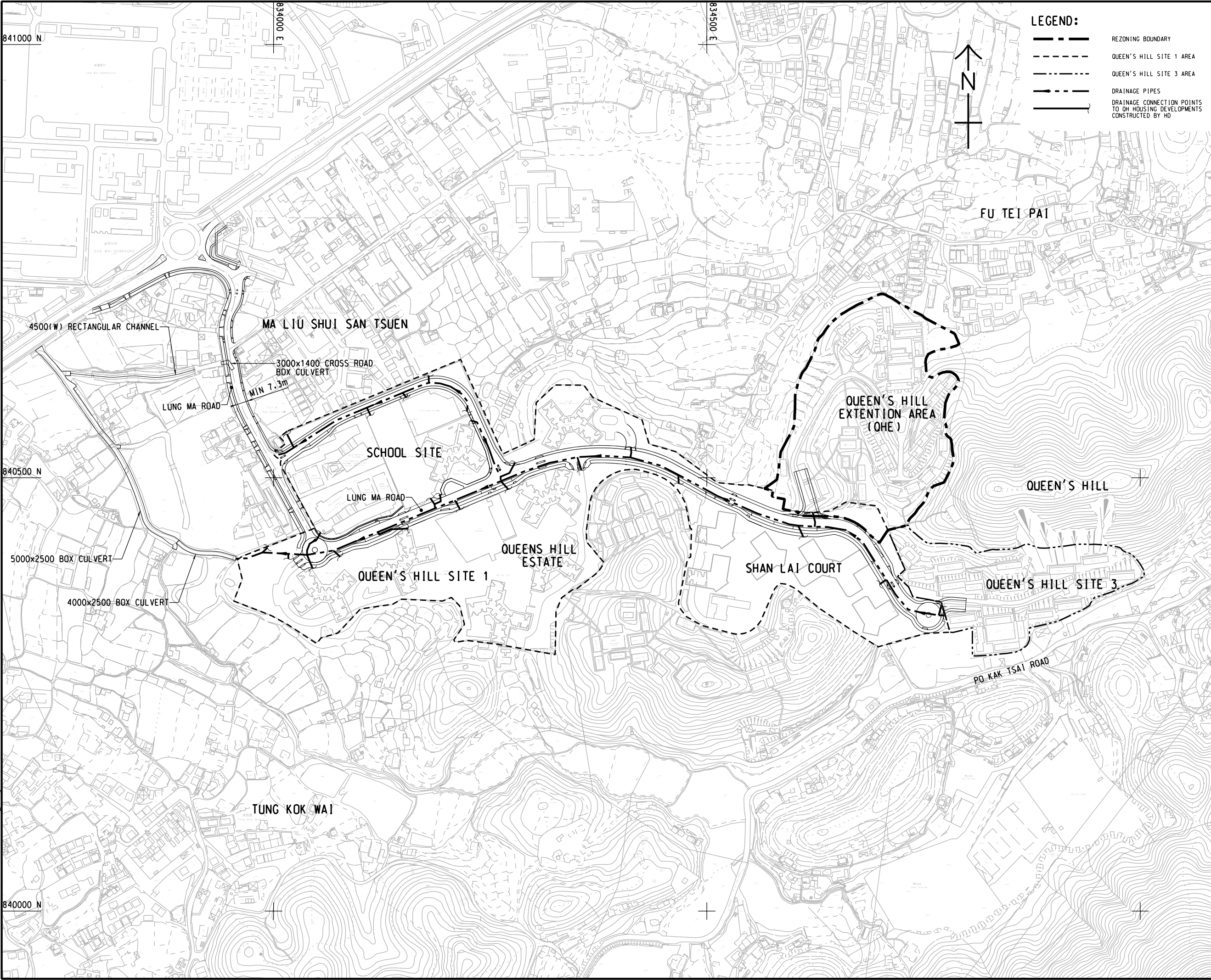
AGREEMENT NO.
協議編號
CE 12/2019 (CE)

SHEET TITLE
圖紙名稱
PROPOSED SEWERS ALONG LUNG
MA ROAD WITHIN QH HOUSING
DEVELOPMENT

SHEET NUMBER
圖紙編號
60617595/PR/FIGURE 4.2

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INFRASTRUCTURE WORKS FOR
PUBLIC HOUSING DEVELOPMENT
AT QUEEN'S HILL EXTENSION,
FANLING - FEASIBILITY STUDY

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STATUS
狀態

SCALE
比例

A3 1 : 4000

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號

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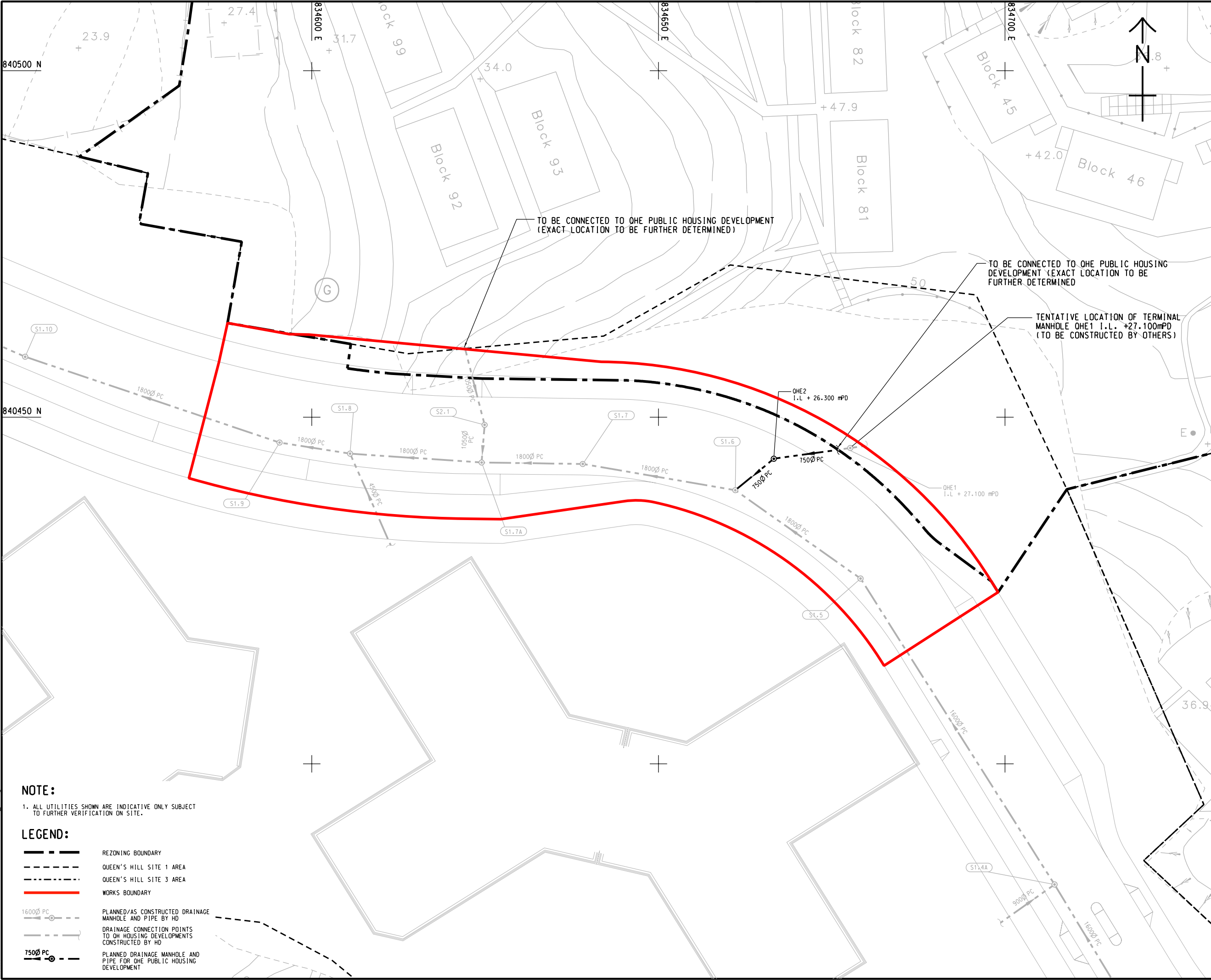
SHEET TITLE
圖紙名稱

DRAINAGE LAYOUT PLAN

SHEET NUMBER
圖紙編號

60617595/PR/FIGURE 5.1

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Plot File by: llyyang
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NOTE:
1. ALL UTILITIES SHOWN ARE INDICATIVE ONLY SUBJECT TO FURTHER VERIFICATION ON SITE.

- LEGEND:**
- REZONING BOUNDARY
 - QUEEN'S HILL SITE 1 AREA
 - QUEEN'S HILL SITE 3 AREA
 - WORKS BOUNDARY
 - PLANNED/AS CONSTRUCTED DRAINAGE MANHOLE AND PIPE BY HD
 - DRAINAGE CONNECTION POINTS TO QH HOUSING DEVELOPMENTS CONSTRUCTED BY HD
 - PLANNED DRAINAGE MANHOLE AND PIPE FOR QHE PUBLIC HOUSING DEVELOPMENT



PROJECT
INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENT AT QUEEN'S HILL EXTENSION, FANLING - FEASIBILITY STUDY

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STATUS
有效

SCALE
比例
A3 1 : 500

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖
A3 1 : 40000



PROJECT NO.
項目編號
60617595

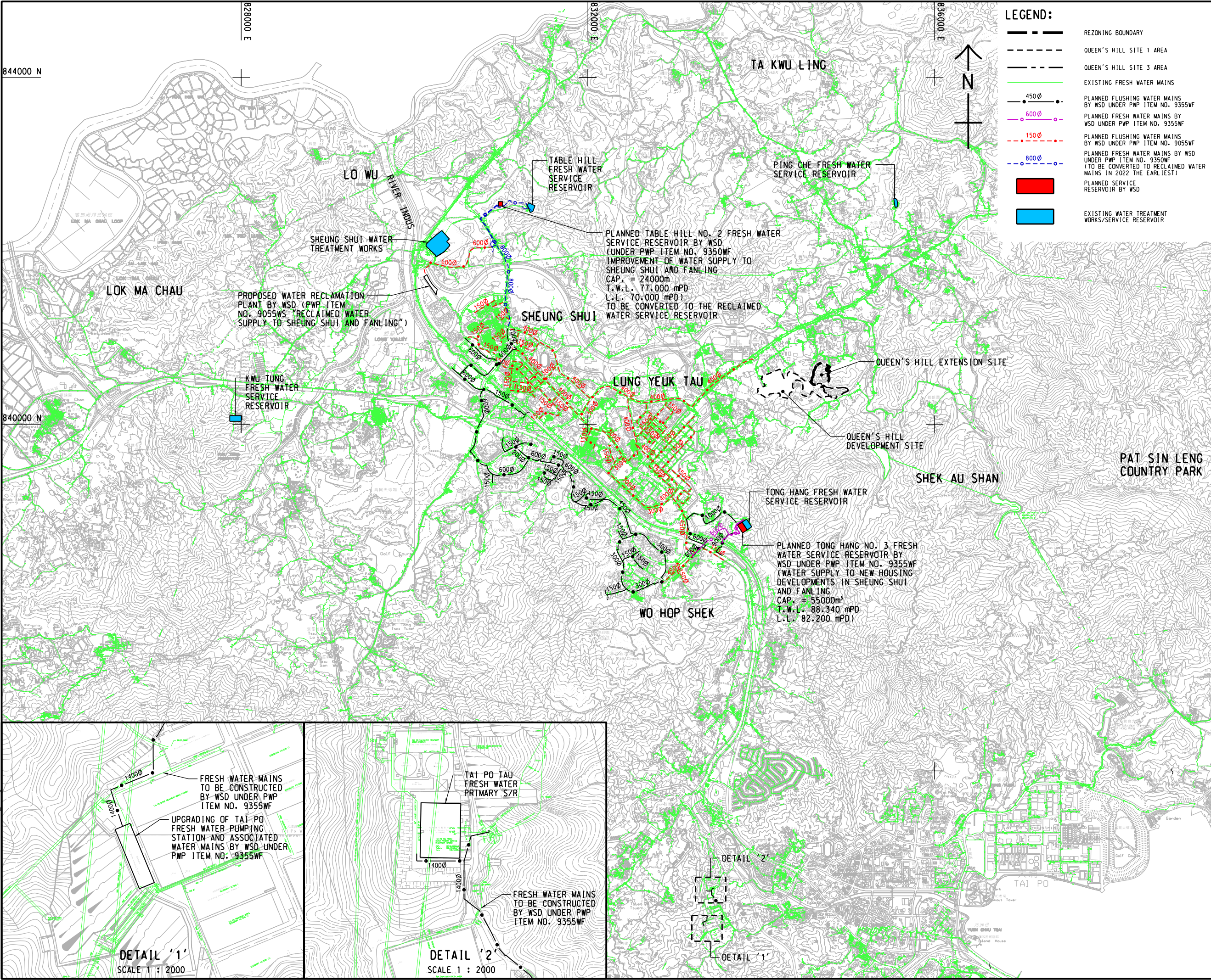
AGREEMENT NO.
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SHEET TITLE
圖紙名稱
PROPOSED DRAINS ALONG LUNG MA ROAD WITHIN QH HOUSING DEVELOPMENT

SHEET NUMBER
圖紙編號
60617595/PR/FIGURE 5.2

ISO A1 594mm x 841mm
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LEGEND:

- REZONING BOUNDARY
- QUEEN'S HILL SITE 1 AREA
- QUEEN'S HILL SITE 3 AREA
- EXISTING FRESH WATER MAINS
- 450Ø PLANNED FLUSHING WATER MAINS BY WSD UNDER PWP ITEM NO. 9355WF
- 600Ø PLANNED FRESH WATER MAINS BY WSD UNDER PWP ITEM NO. 9355WF
- 150Ø PLANNED FLUSHING WATER MAINS BY WSD UNDER PWP ITEM NO. 9055WF
- 800Ø PLANNED FRESH WATER MAINS BY WSD UNDER PWP ITEM NO. 9350WF (TO BE CONVERTED TO RECLAIMED WATER MAINS IN 2022 THE EARLIEST)
- PLANNED SERVICE RESERVOIR BY WSD
- EXISTING WATER TREATMENT WORKS/SERVICE RESERVOIR

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INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENT AT QUEEN'S HILL EXTENSION, FANLING - FEASIBILITY STUDY

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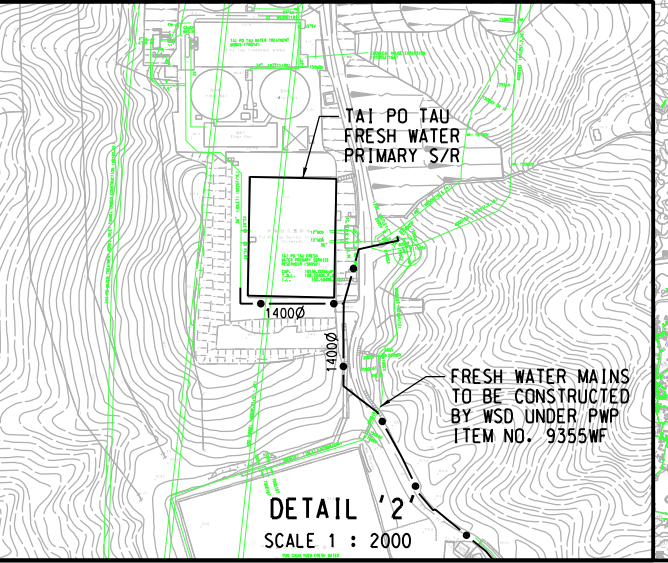
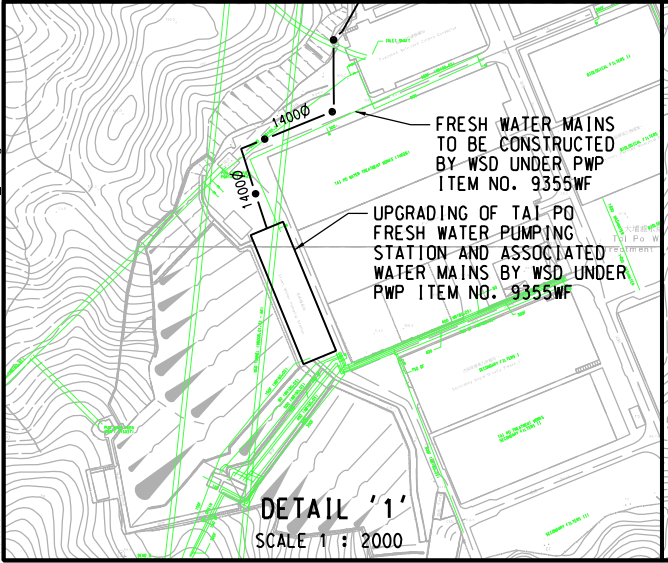
STATUS
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SCALE
比例: A3 1:40000

DIMENSION UNIT
尺寸單位: METRES

KEY PLAN
索引圖



PROJECT NO.
土庫編號: 60617595

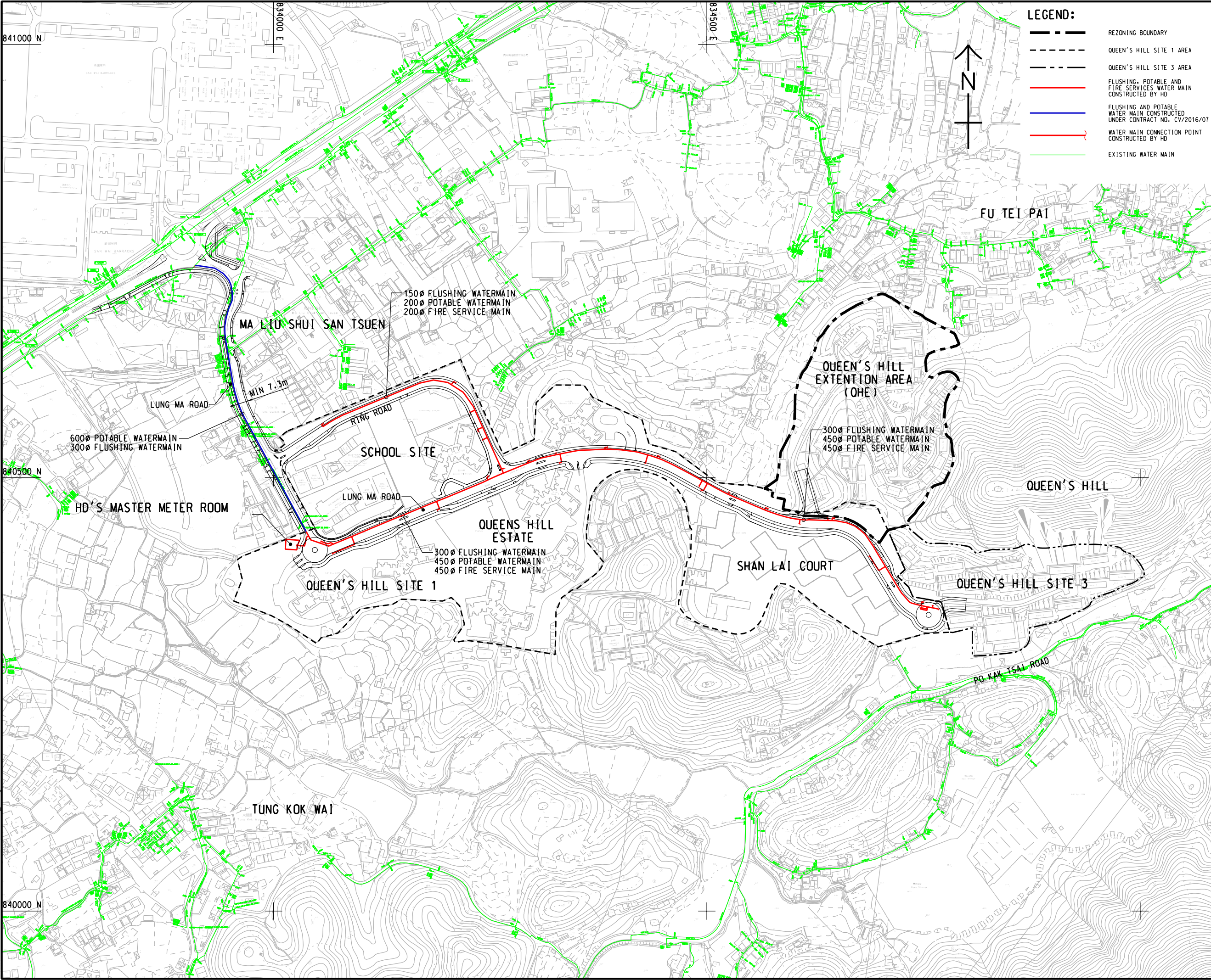
AGREEMENT NO.
協議編號: CE 12/2019 (CE)

SHEET TITLE
圖紙名稱: EXISTING AND PLANNED FRESH WATER SERVICE RESERVOIRS

SHEET NUMBER
圖紙編號: 60617595/PR/FIGURE 6.1

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LEGEND:

- REZONING BOUNDARY
- - - QUEEN'S HILL SITE 1 AREA
- - - QUEEN'S HILL SITE 3 AREA
- FLUSHING, POTABLE AND FIRE SERVICES WATER MAIN CONSTRUCTED BY HD
- FLUSHING AND POTABLE WATER MAIN CONSTRUCTED UNDER CONTRACT NO. CV/2016/07
- WATER MAIN CONNECTION POINT CONSTRUCTED BY HD
- EXISTING WATER MAIN

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STATUS
校核

SCALE
比例
A3 1 : 4000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
圖則名稱

PROJECT NO.
項目編號
60617595

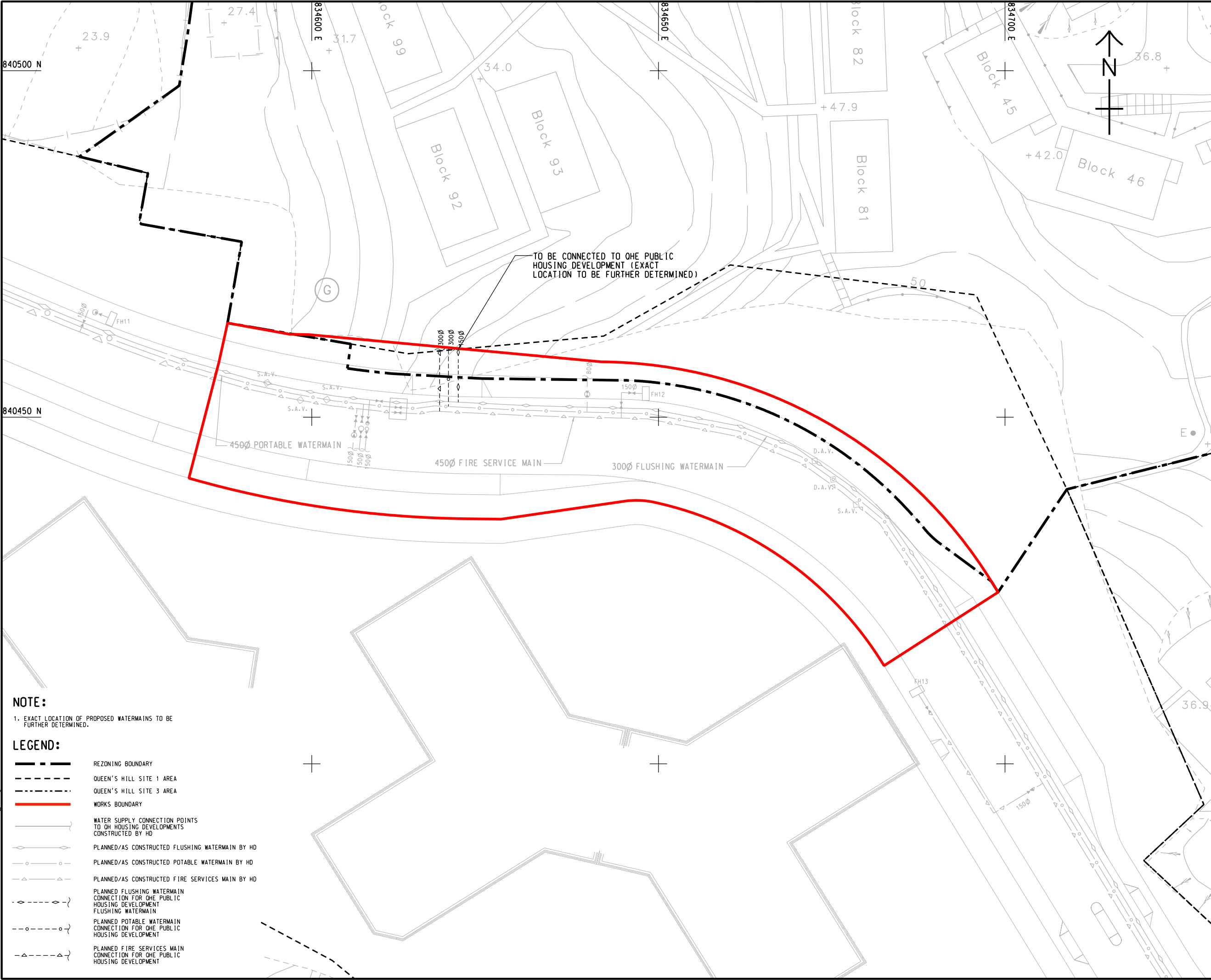
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CE 12/2019 (CE)

SHEET TITLE
圖則名稱
PLANNED LOCAL WATER SUPPLY ARRANGEMENT

SHEET NUMBER
圖則編號
60617595/PR/FIGURE 6.2

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NOTE:

1. EXACT LOCATION OF PROPOSED WATERMAINS TO BE FURTHER DETERMINED.

LEGEND:

- REZONING BOUNDARY
- QUEEN'S HILL SITE 1 AREA
- QUEEN'S HILL SITE 3 AREA
- WORKS BOUNDARY
- WATER SUPPLY CONNECTION POINTS TO QH HOUSING DEVELOPMENTS CONSTRUCTED BY HD
- PLANNED/AS CONSTRUCTED FLUSHING WATERMAIN BY HD
- PLANNED/AS CONSTRUCTED POTABLE WATERMAIN BY HD
- PLANNED/AS CONSTRUCTED FIRE SERVICES MAIN BY HD
- PLANNED FLUSHING WATERMAIN CONNECTION FOR QHE PUBLIC HOUSING DEVELOPMENT
- PLANNED POTABLE WATERMAIN CONNECTION FOR QHE PUBLIC HOUSING DEVELOPMENT
- PLANNED FIRE SERVICES MAIN CONNECTION FOR QHE PUBLIC HOUSING DEVELOPMENT

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STATUS

SCALE
A3 1 : 500

DIMENSION UNIT
METRES

KEY PLAN
A3 1 : 40000

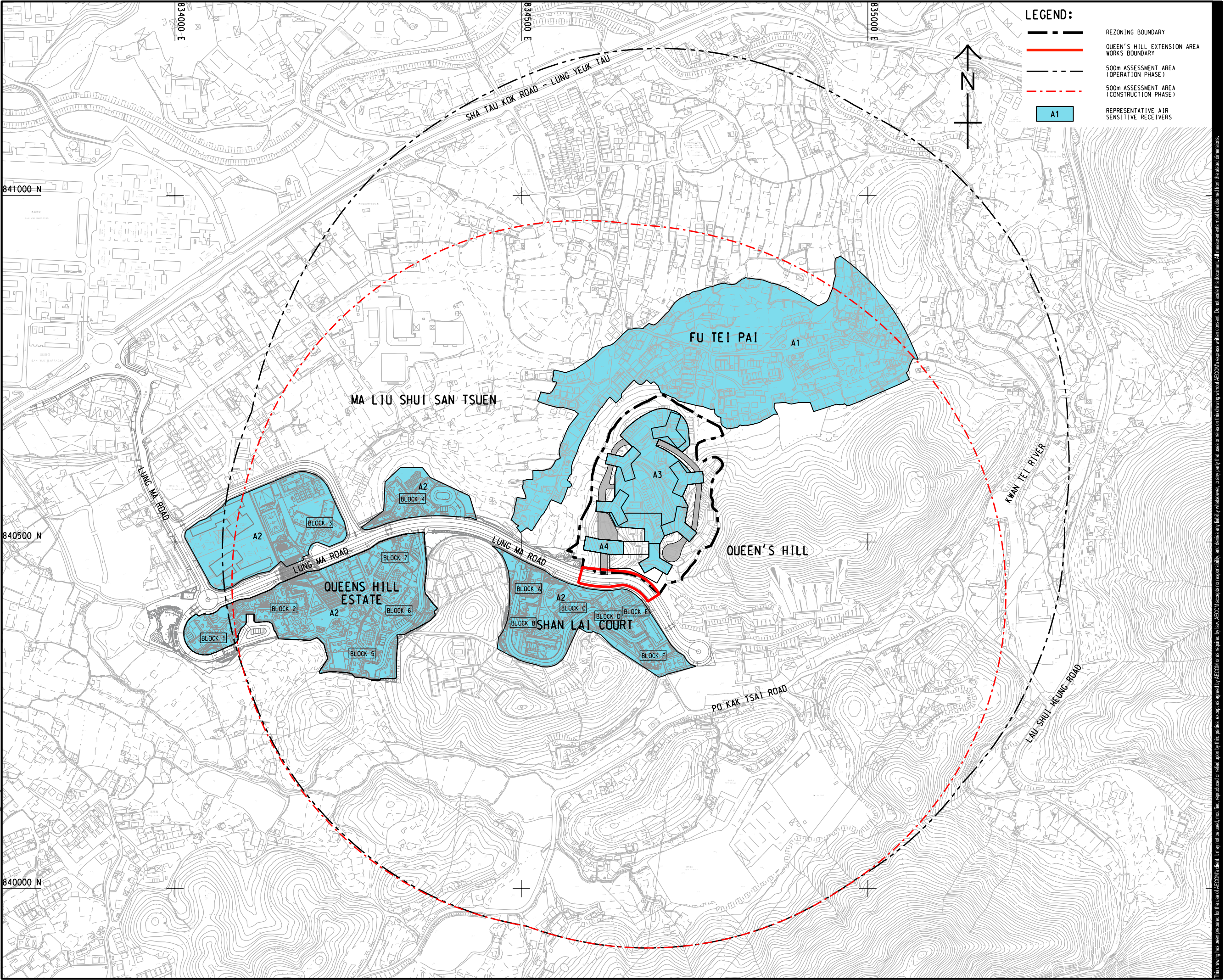
PROJECT NO.
60617595

AGREEMENT NO.
CE 12/2019 (CE)

SHEET TITLE
PROPOSED WATER MAIN CONNECTIONS FOR QHE

SHEET NUMBER
60617595/PR/FIGURE 6.3

ISO A1 594mm x 841mm
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PROJECT
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AT QUEEN'S HILL EXTENSION,
FANLING - FEASIBILITY STUDY

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STATUS
狀態

SCALE
比例
A3 1 : 5000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號
60617595

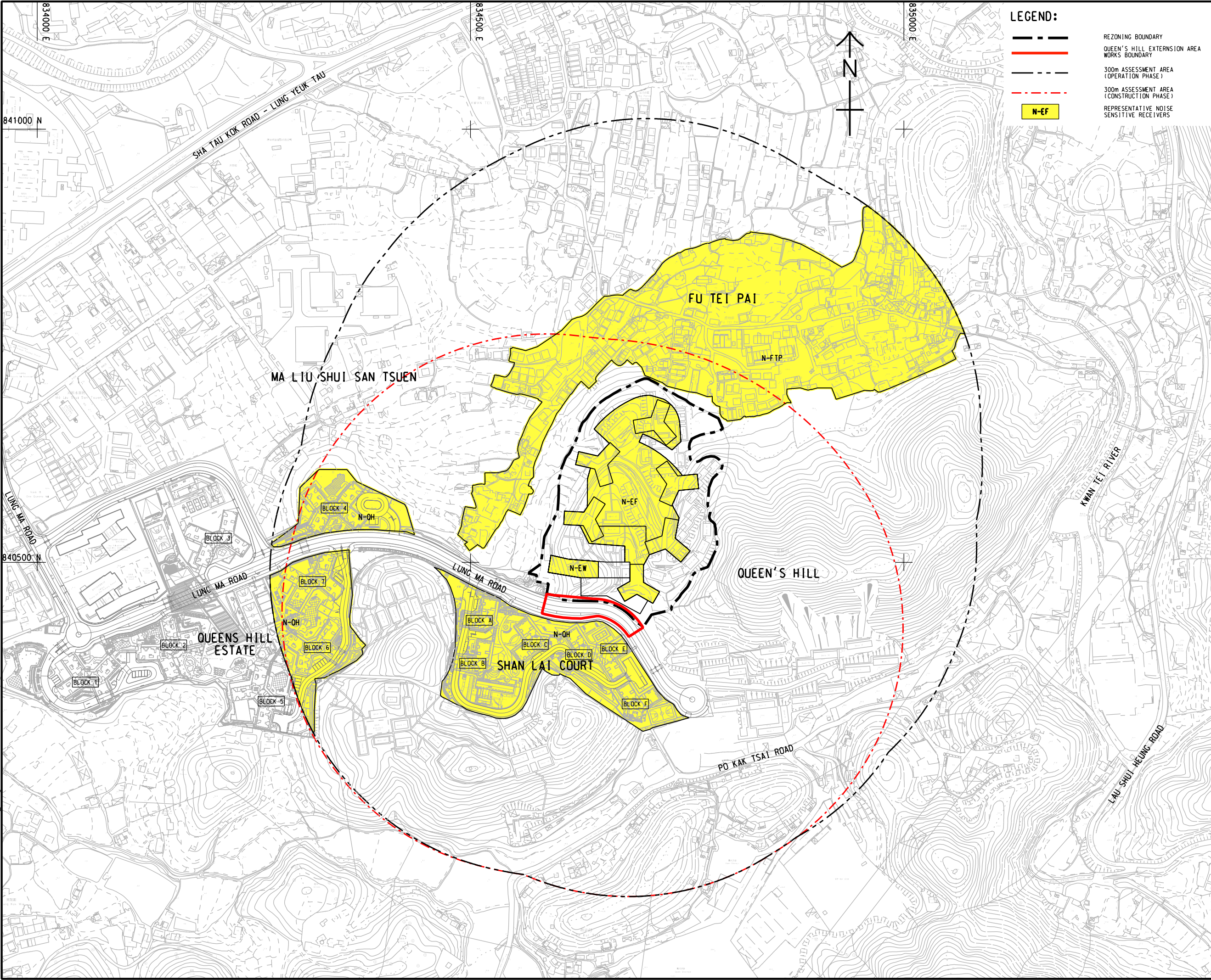
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CE 12/2019 (CE)

SHEET TITLE
圖紙名稱
LOCATIONS OF REPRESENTATIVE
AIR SENSITIVE RECEIVERS

SHEET NUMBER
圖紙編號
60617595/PR/FIGURE 7.2.1

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PROJECT
INFRASTRUCTURE WORKS FOR
PUBLIC HOUSING DEVELOPMENT
AT QUEEN'S HILL EXTENSION,
FANLING - FEASIBILITY STUDY

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SCALE
A3 1 : 4000

DIMENSION UNIT
METRES

KEY PLAN

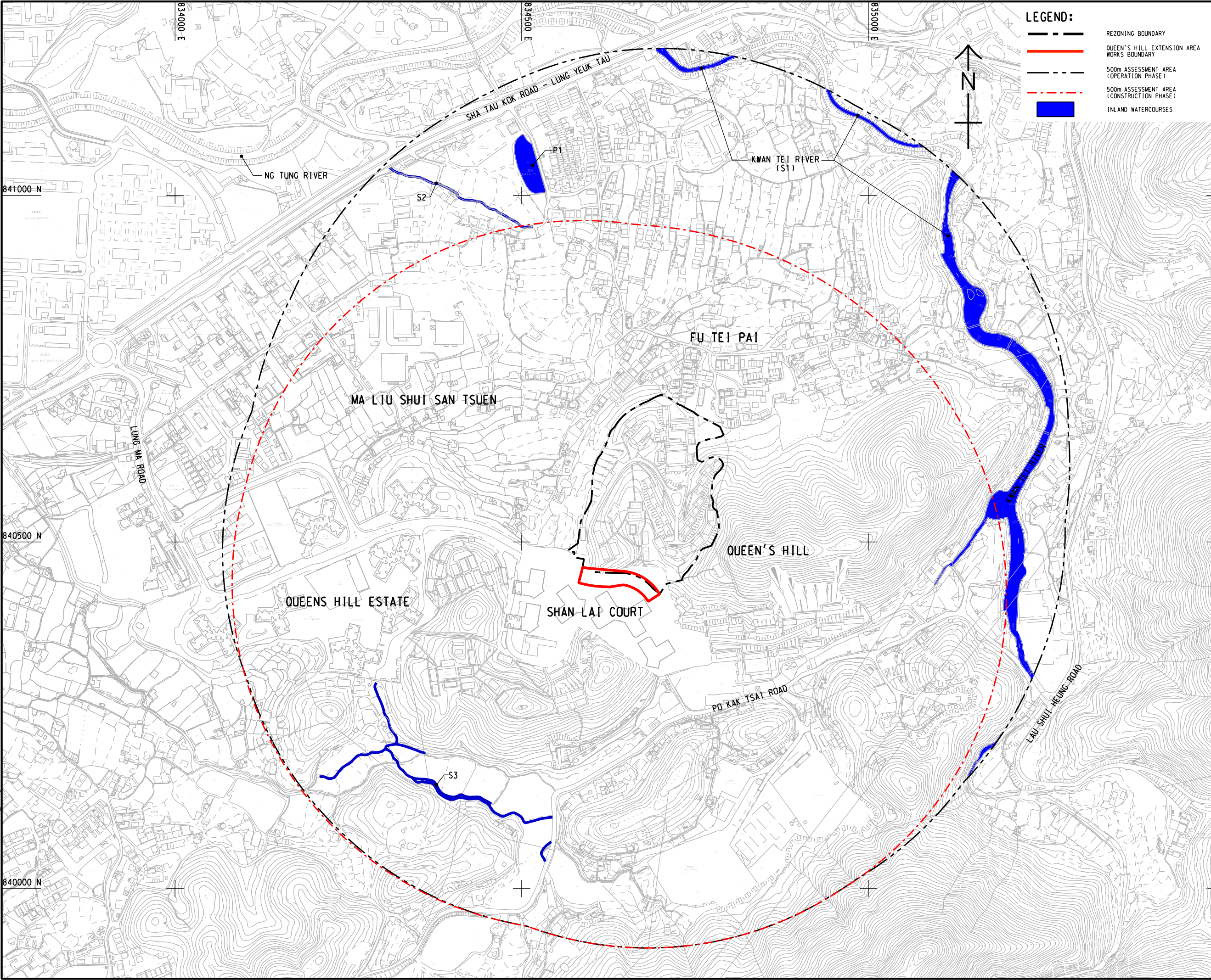
PROJECT NO.
60617595

AGREEMENT NO.
CE 12/2019 (CE)

SHEET TITLE
LOCATIONS OF REPRESENTATIVE
NOISE SENSITIVE RECEIVERS

SHEET NUMBER
60617595/PR/FIGURE 7.3.1

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LEGEND:

- REZONING BOUNDARY
- QUEEN'S HILL EXTENSION AREA WORKS BOUNDARY
- - - 500m ASSESSMENT AREA (OPERATION PHASE)
- - - 500m ASSESSMENT AREA (CONSTRUCTION PHASE)
- INLAND WATERCOURSES

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STATUS
校核

SCALE	DIMENSION UNIT
A3 1 : 5000	METRES
小比例尺	公尺

KEY PLAN
小比例尺

PROJECT NO.
土研項目編號
60617595

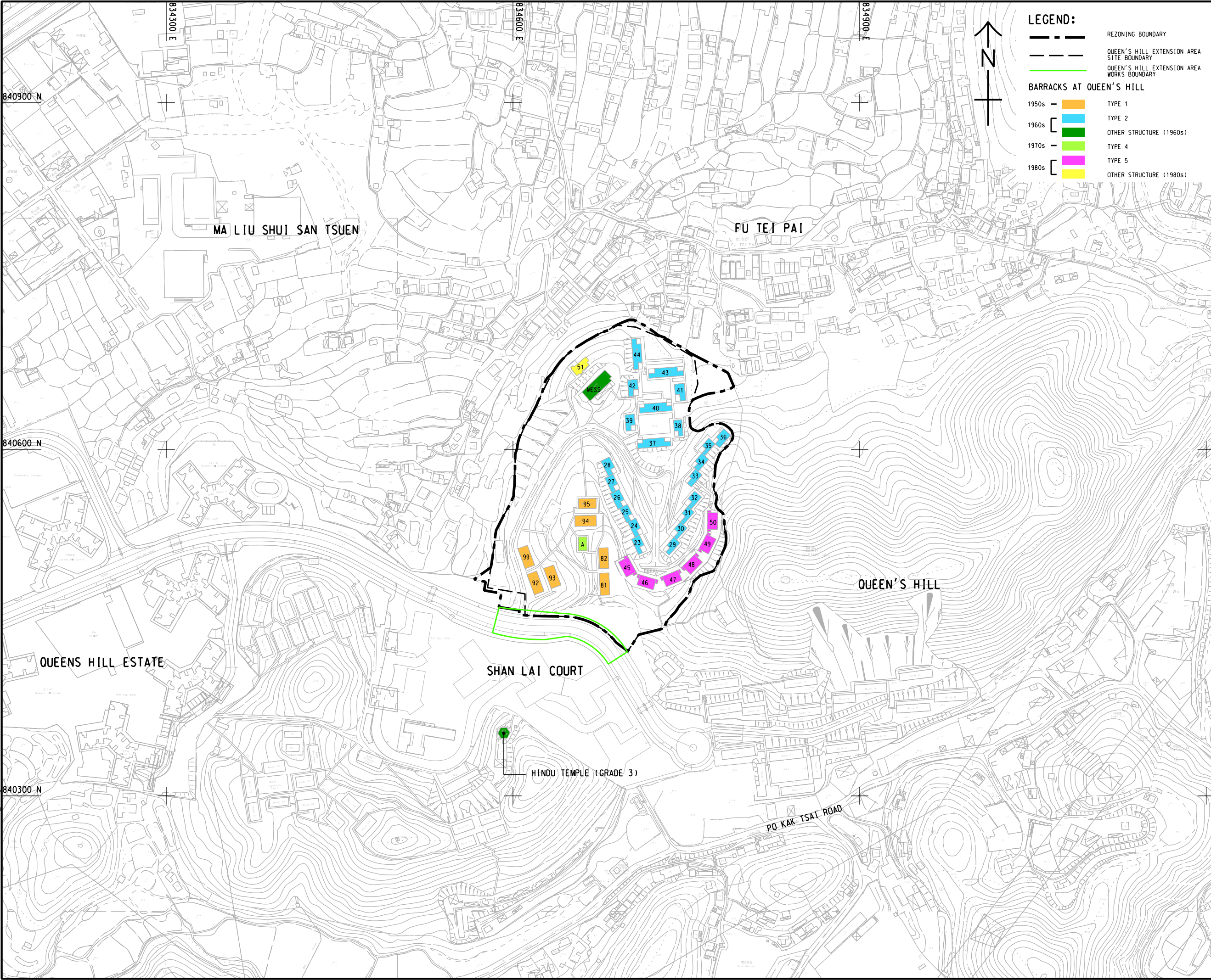
AGREEMENT NO.
協議編號
CE 12/2019 (CE)

SHEET TITLE
圖紙名稱
KEY WATER BODIES WITHIN STUDY AREA

SHEET NUMBER
圖紙編號
60617595/PR/FIGURE 7.4.1

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LEGEND:

--- REZONING BOUNDARY
--- QUEEN'S HILL EXTENSION AREA SITE BOUNDARY
--- QUEEN'S HILL EXTENSION AREA WORKS BOUNDARY

BARRACKS AT QUEEN'S HILL

1950s	TYPE 1
1960s	TYPE 2
1970s	OTHER STRUCTURE (1960s)
1980s	TYPE 4
	TYPE 5
	OTHER STRUCTURE (1980s)

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INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENT AT QUEEN'S HILL EXTENSION, FANLING - FEASIBILITY STUDY

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校核			
SCALE		DIMENSION UNIT	
比例		尺寸單位	
A3 1 : 3000		METRES	
KEY PLAN			
索引圖			

PROJECT NO. 項目編號	AGREEMENT NO. 協議編號
60617595	CE 12/2019 (CE)
SHEET TITLE 圖紙名稱	
BARRACKS AT QUEEN'S HILL IN THE ASSESSMENT AREA	
SHEET NUMBER 圖紙編號	
60617595/PR/FIGURE 7.8.1	

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CALCULATION OF LOCAL OPEN SPACE	
MIN. OPEN SPACE REQUIRED (SQM)	About 11,278*
TOTAL AREA OF OPEN SPACE PROPOSED (SQM)	About 16,670
PROPOSED LOCAL OPEN SPACE RATIO:	1:1.478

LEGEND:

QUEEN'S HILL SITE 1 AREA

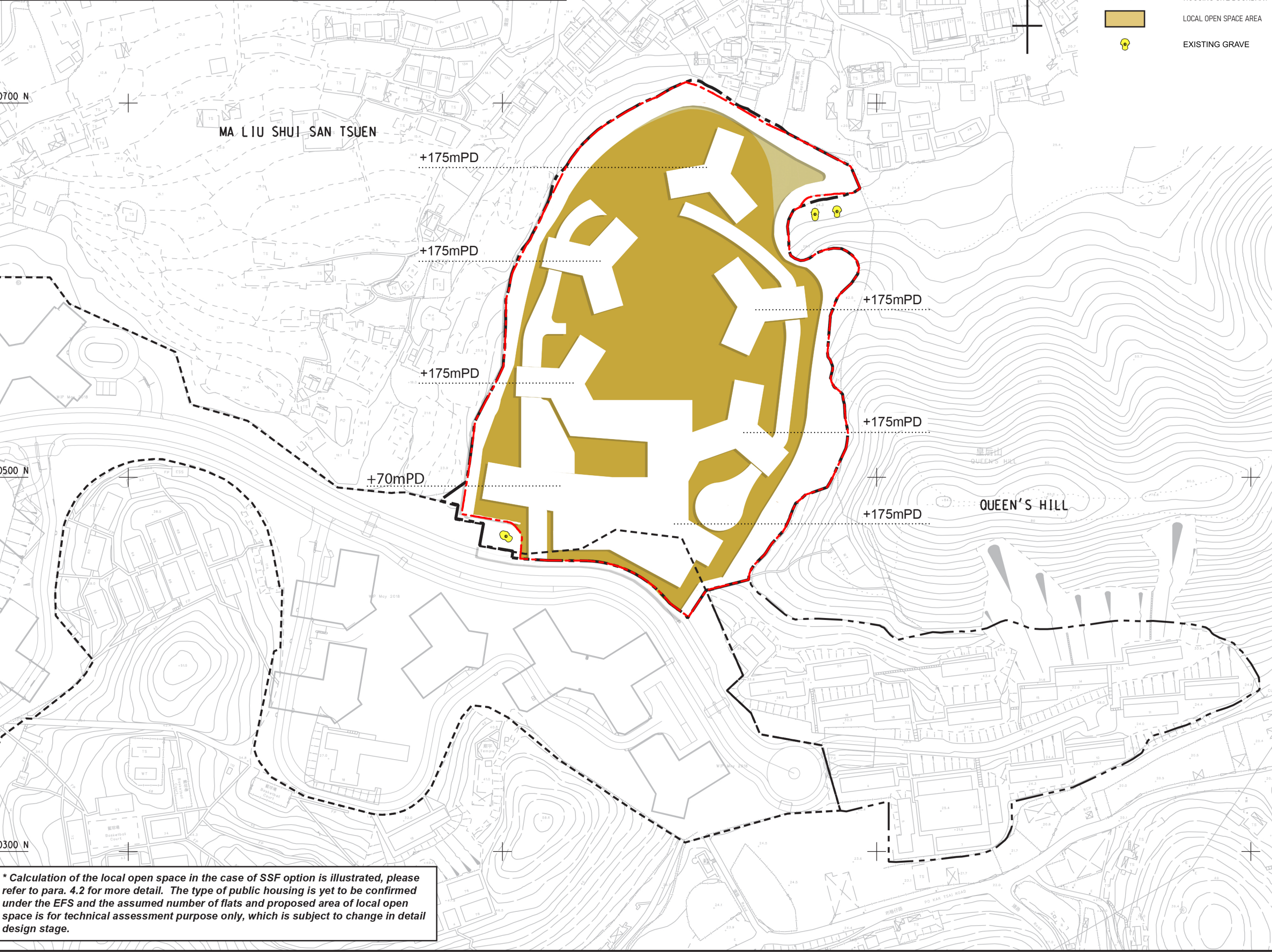
QUEEN'S HILL SITE 3 AREA

RE-ZONING BOUNDARY

HOUSING SITE BOUNDARY

LOCAL OPEN SPACE AREA

EXISTING GRAVE



* Calculation of the local open space in the case of SSF option is illustrated, please refer to para. 4.2 for more detail. The type of public housing is yet to be confirmed under the EFS and the assumed number of flats and proposed area of local open space is for technical assessment purpose only, which is subject to change in detail design stage.

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INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENT AT QUEEN'S HILL EXTENSION, FANLING - FEASIBILITY STUDY

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階段

SCALE

比例

A3 1 : 2000

DIMENSION UNIT

尺寸單位

METRES

KEY PLAN

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SHEET TITLE

圖紙名稱

CALCULATION OF LOCAL OPEN SPACE

SHEET NUMBER

圖紙編號

60617595/PR/Figure 8.1

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CALCULATION OF GREENERY AREA

MIN. GREENERY AREAS REQUIRED (SQM)	APPROX. AREA	% of Total Site Area
PROPOSED PROVISION OF GREENERY AREAS (SQM):	About 8,200	20
PROPOSED PUBLIC HOUSING DEVELOPMENT SITE AREA (SQM):	About 12,300	30
	About 41,000	100

LEGEND:

QUEEN'S HILL SITE 1 AREA

QUEEN'S HILL SITE 3 AREA

RE-ZONING BOUNDARY

HOUSING SITE BOUNDARY

GREENERY AREA

EXISTING GRAVE



PROJECT
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階段

SCALE
比例
A3 1 : 2000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號
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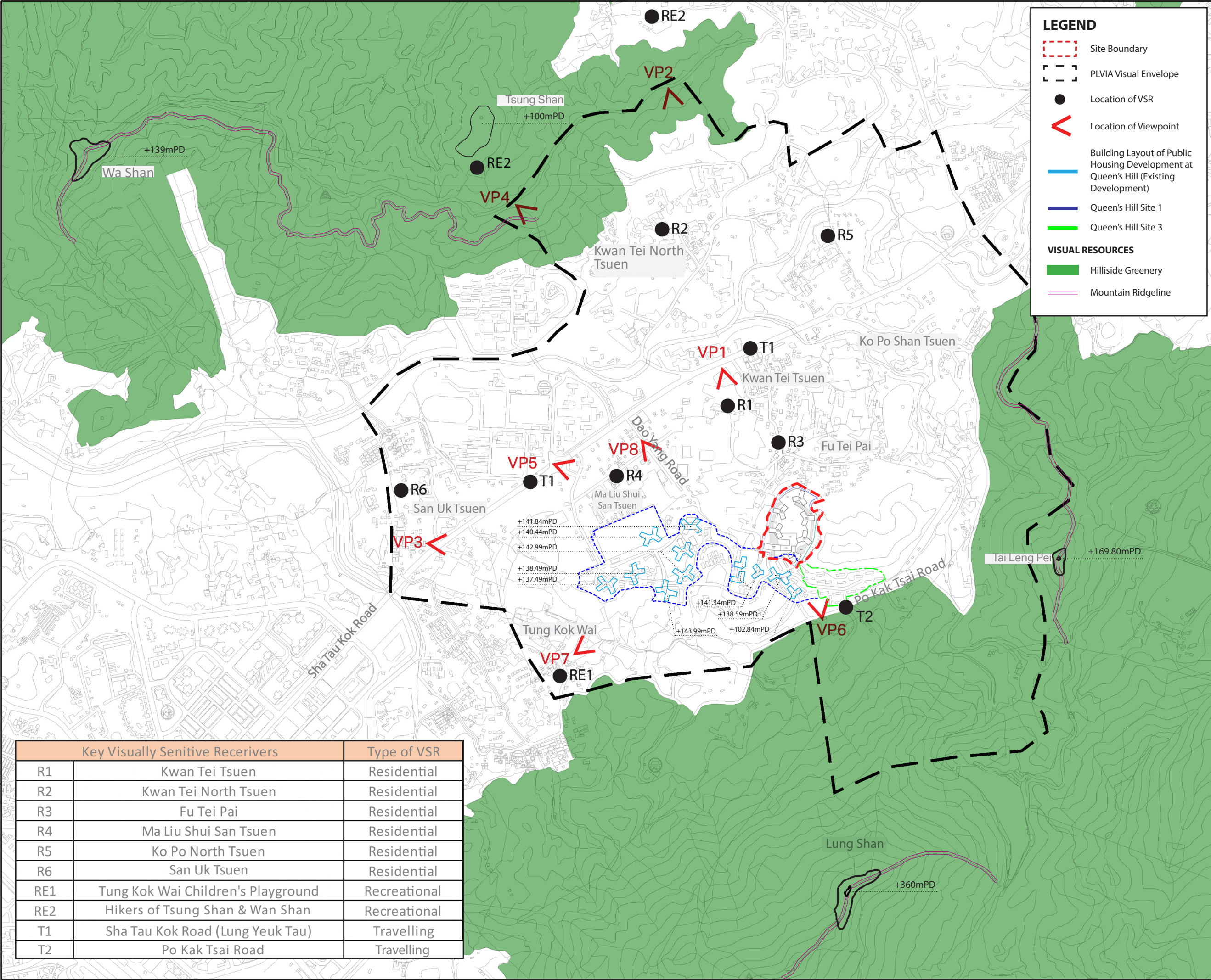
SHEET TITLE
圖紙名稱
CALCULATION OF GREENERY
AREA

SHEET NUMBER
圖紙編號
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Key Visually Senitive Recerivers		Type of VSR
R1	Kwan Tei Tsuen	Residential
R2	Kwan Tei North Tsuen	Residential
R3	Fu Tei Pai	Residential
R4	Ma Liu Shui San Tsuen	Residential
R5	Ko Po North Tsuen	Residential
R6	San Uk Tsuen	Residential
RE1	Tung Kok Wai Children's Playground	Recreational
RE2	Hikers of Tsung Shan & Wan Shan	Recreational
T1	Sha Tau Kok Road (Lung Yeuk Tau)	Travelling
T2	Po Kak Tsai Road	Travelling

LEGEND

Site Boundary

PLVIA Visual Envelope

Location of VSR

Location of Viewpoint

Building Layout of Public Housing Development at Queen's Hill (Existing Development)

Queen's Hill Site 1

Queen's Hill Site 3

VISUAL RESOURCES

Hillside Greenery

Mountain Ridgeline

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比例

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN
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圖紙名稱

Visual Envelope and Viewpoints

SHEET NUMBER
圖紙編號

60617595/PR/ Figure 8.3

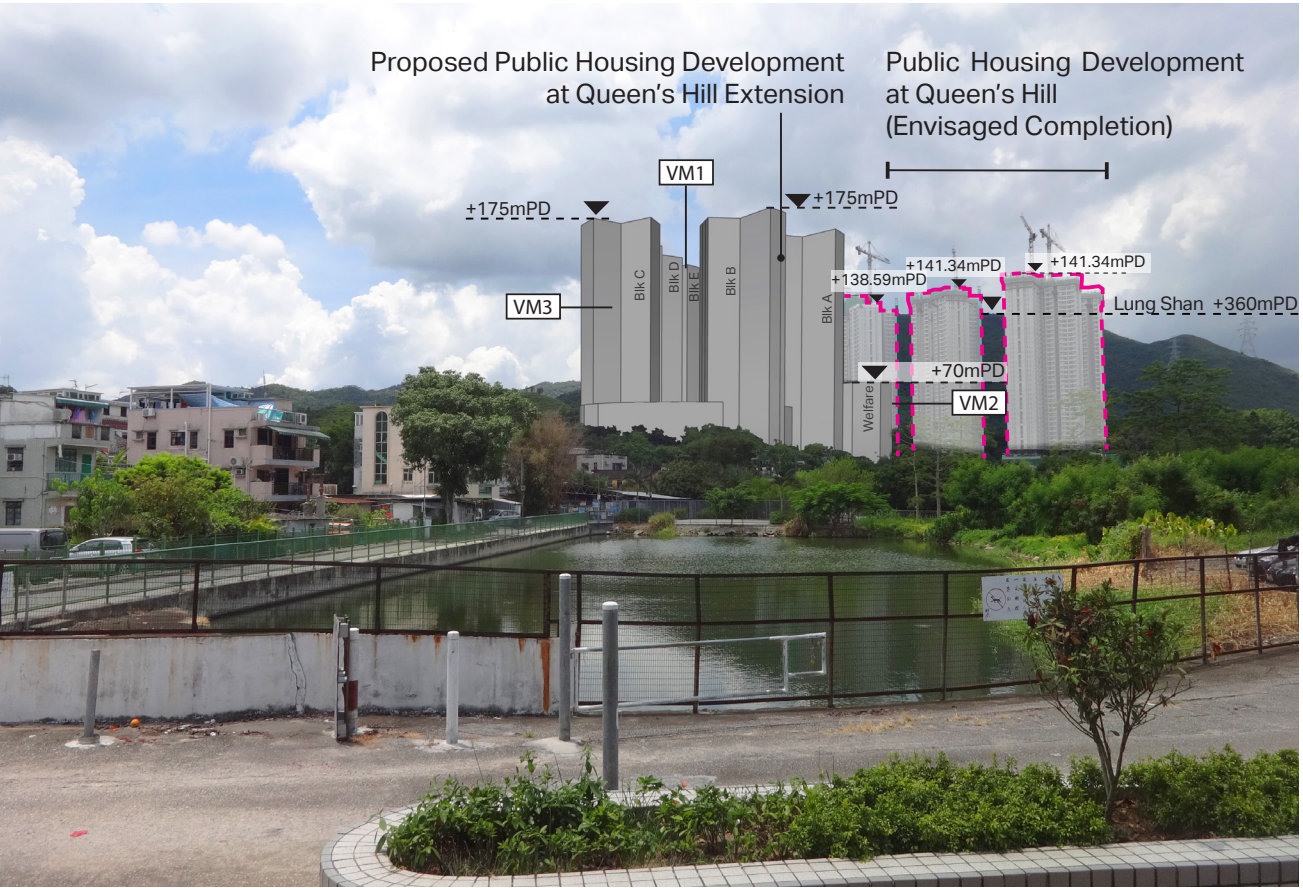
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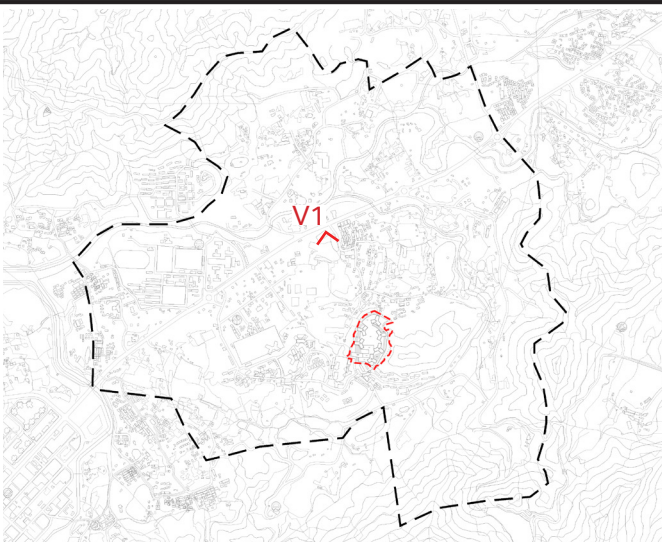
Existing Photo of VP1- Kwan Tei Bus Station (Without Development)



Photomontage of VP1
(With Development under Compliant Scheme +85mPD on OZP)



Photomontage of VP1
(With Development under Proposed Scheme +175mPD)



Key Plan

Visual Mitigation Measures

- VM1** Creation of Visual Greening Connection and Breezeways
 - VM2** Control Development Heights and Massing
 - VM3** Visual Compatibility of the Proposed Development
- Envisaged Completion of Public Housing Development of Queen's Hill with Predicted Finish Level

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SCALE
比例
DIMENSION UNIT
尺寸單位
METRES

KEY PLAN

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SHEET TITLE
圖紙名稱
PHOTOMONTAGE - VIEWPOINT 1

SHEET NUMBER
圖紙編號
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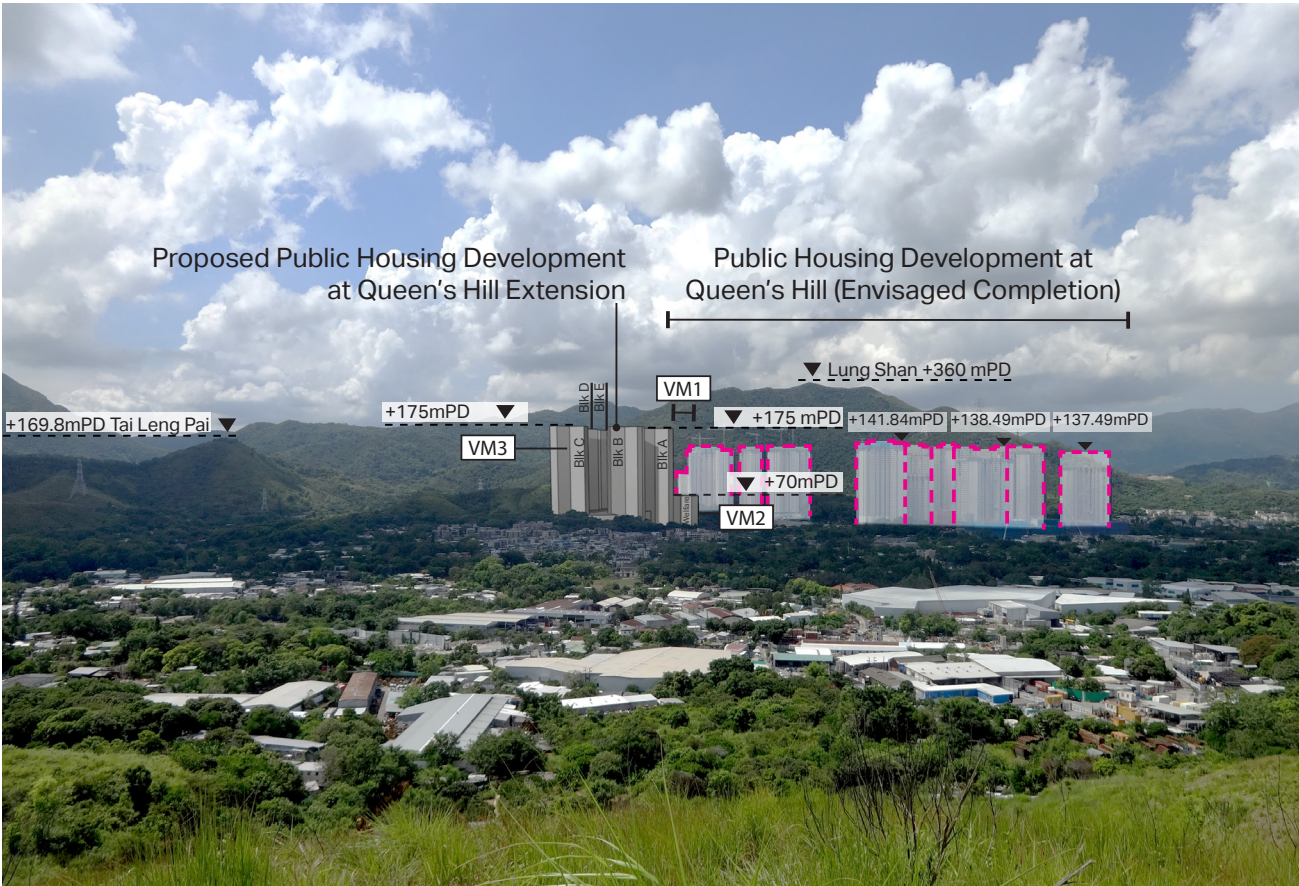
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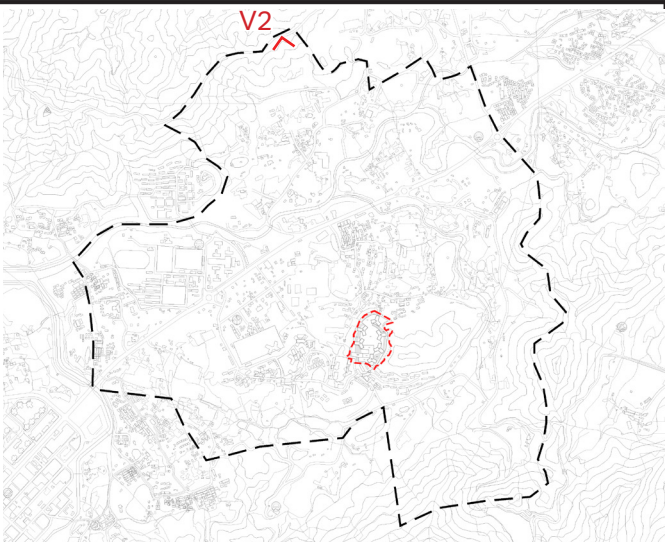
Existing Photo of VP2- Peak of Tsung Shan (Without Development)



Photomontage of VP2
(With Development under Compliant Scheme +85mPD on OZP)



Photomontage of VP2
(With Development under Proposed Scheme +175mPD)



Key Plan

Visual Mitigation Measures

- VM1** Creation of Visual Greening Connection and Breezeways
 - VM2** Control Development Heights and Massing
 - VM3** Visual Compatibility of the Proposed Development
- Envisaged Completion of Public Housing Development of Queen's Hill with Predicted Finish Level

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PHOTOMONTAGE - VIEWPOINT 2

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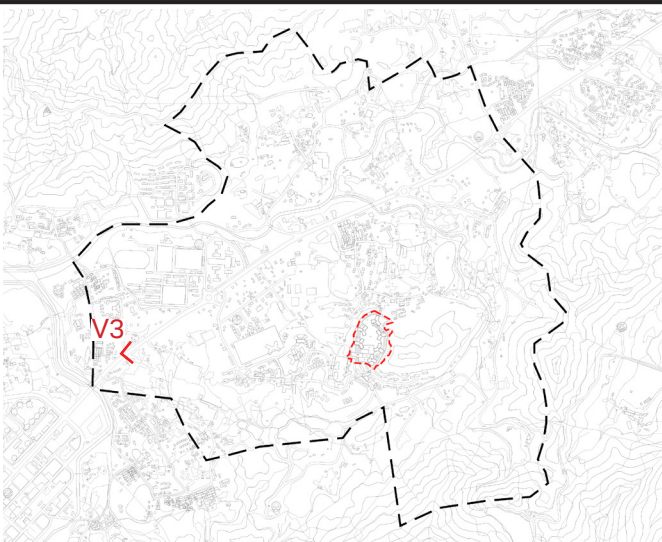
Existing Photo of VP3 - Lung Yeuk Tau Bus Station (Without Development)



Photomontage of VP3
(With Development under Compliant Scheme +85mPD on OZP)



Photomontage of VP3
(With Development under Proposed Scheme +175mPD)



Key Plan

Visual Mitigation Measures

- VM3 Visual Compatibility of the Proposed Development
- Envisaged Completion of Public Housing Development of Queen's Hill with Predicted Finish Level



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METRES

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SHEET TITLE
圖紙名稱
PHOTOMONTAGE - VIEWPOINT 3

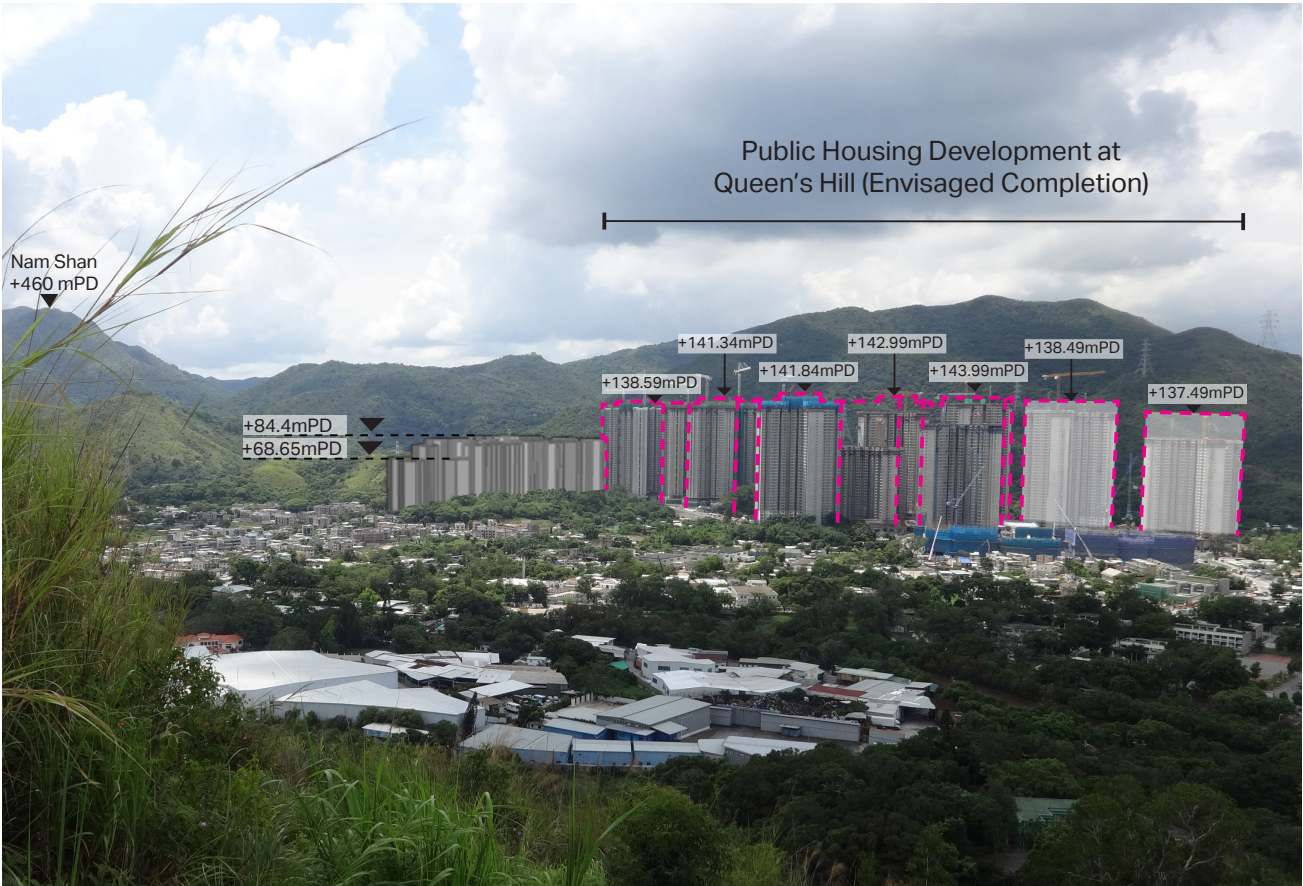
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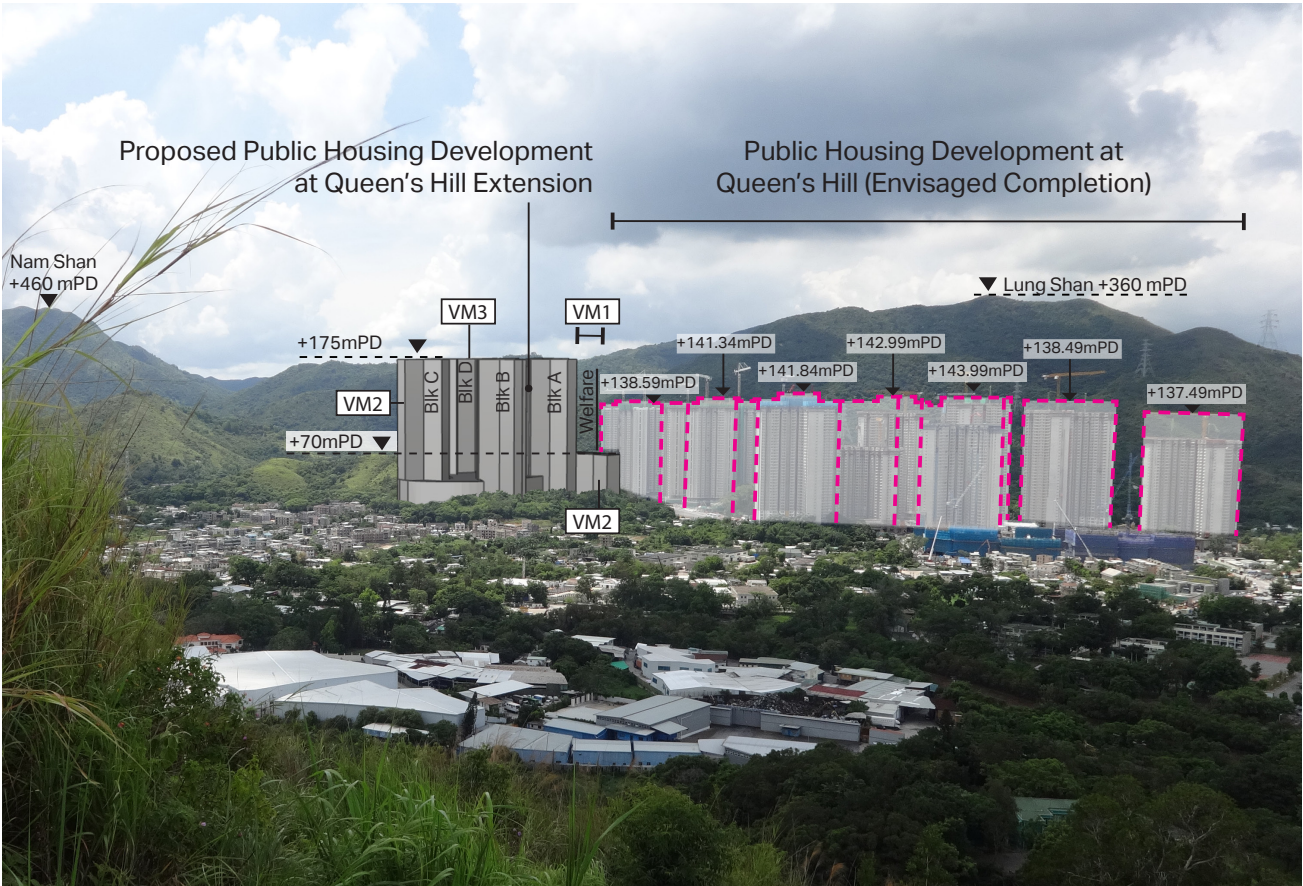
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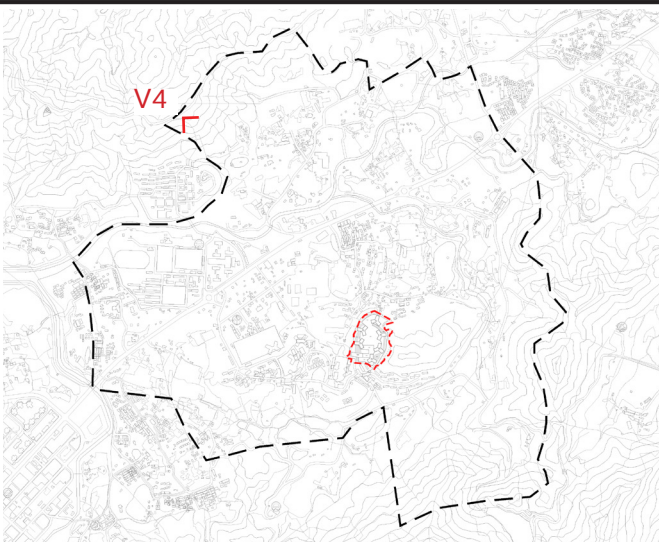
Existing Photo of VP4 - Wa Shan Military Road



Photomontage of VP4
(With Development under Compliant Scheme +85mPD on OZP)



Photomontage of VP4
(With Development under Proposed Scheme +175mPD)



Key Plan

Visual Mitigation Measures

- VM1 Creation of Visual Greening Connection and Breezeways
- VM2 Control Development Heights and Massing
- VM3 Visual Compatibility of the Proposed Development

Envisaged Completion of Public Housing Development of Queen's Hill with Predicted Finish Level

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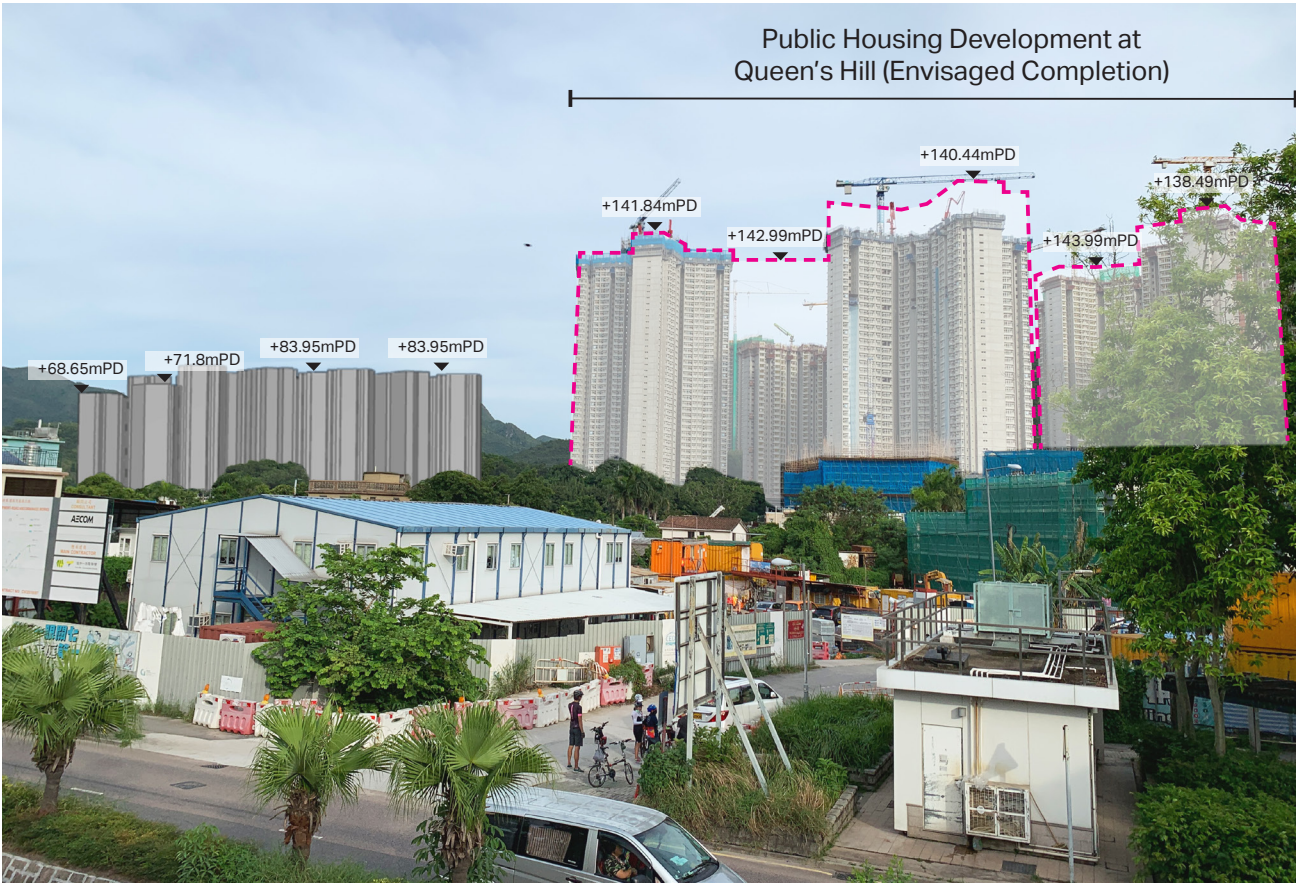
SHEET TITLE
圖紙名稱
PHOTOMONTAGE - VIEWPOINT 4

SHEET NUMBER
圖紙編號
60617595/PR/ Figure 8.7

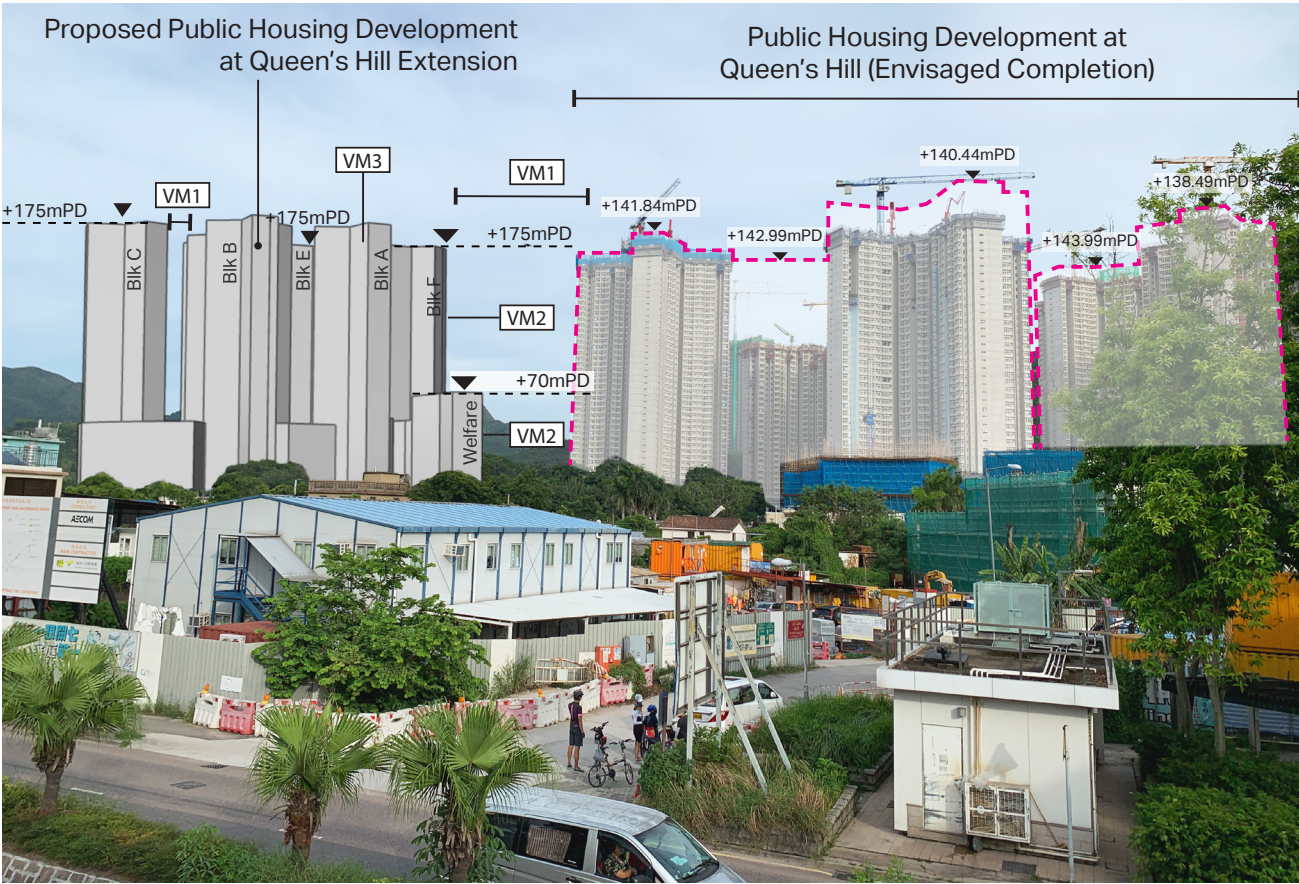
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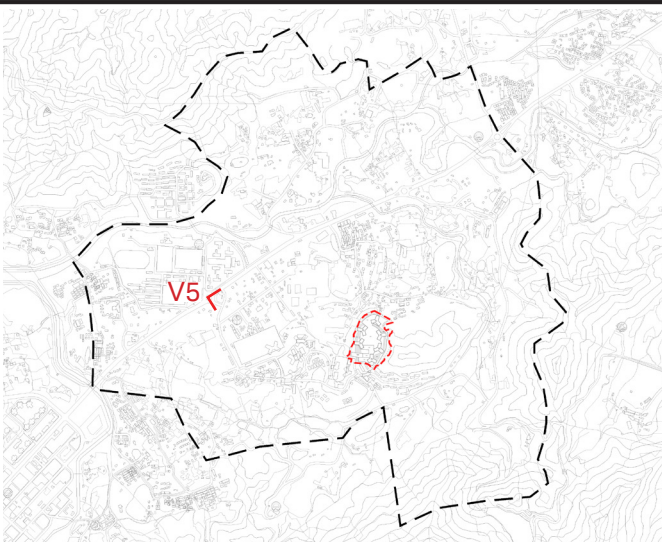
Existing Photo of VP5 - Footbridge (NF326) at Sha Tau Kok Road (Lung Yeuk Tau)



Photomontage of VP5
(With Development under Compliant Scheme +85mPD on OZP)



Photomontage of VP5
(With Development under Proposed Scheme +175mPD)



Key Plan

Visual Mitigation Measures

- VM1 Creation of Visual Greening Connection and Breezeways
- VM2 Control Development Heights and Massing
- VM3 Visual Compatibility of the Proposed Development

Envisaged Completion of Public Housing Development of Queen's Hill with Predicted Finish Level

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SCALE
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DIMENSION UNIT
尺寸單位

METRES

KEY PLAN
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SHEET TITLE
圖紙名稱

PHOTOMONTAGE - VIEWPOINT 5

SHEET NUMBER
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60617595/PR/ Figure 8.8

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Public Housing Development at Queen's Hill (Under Construction)



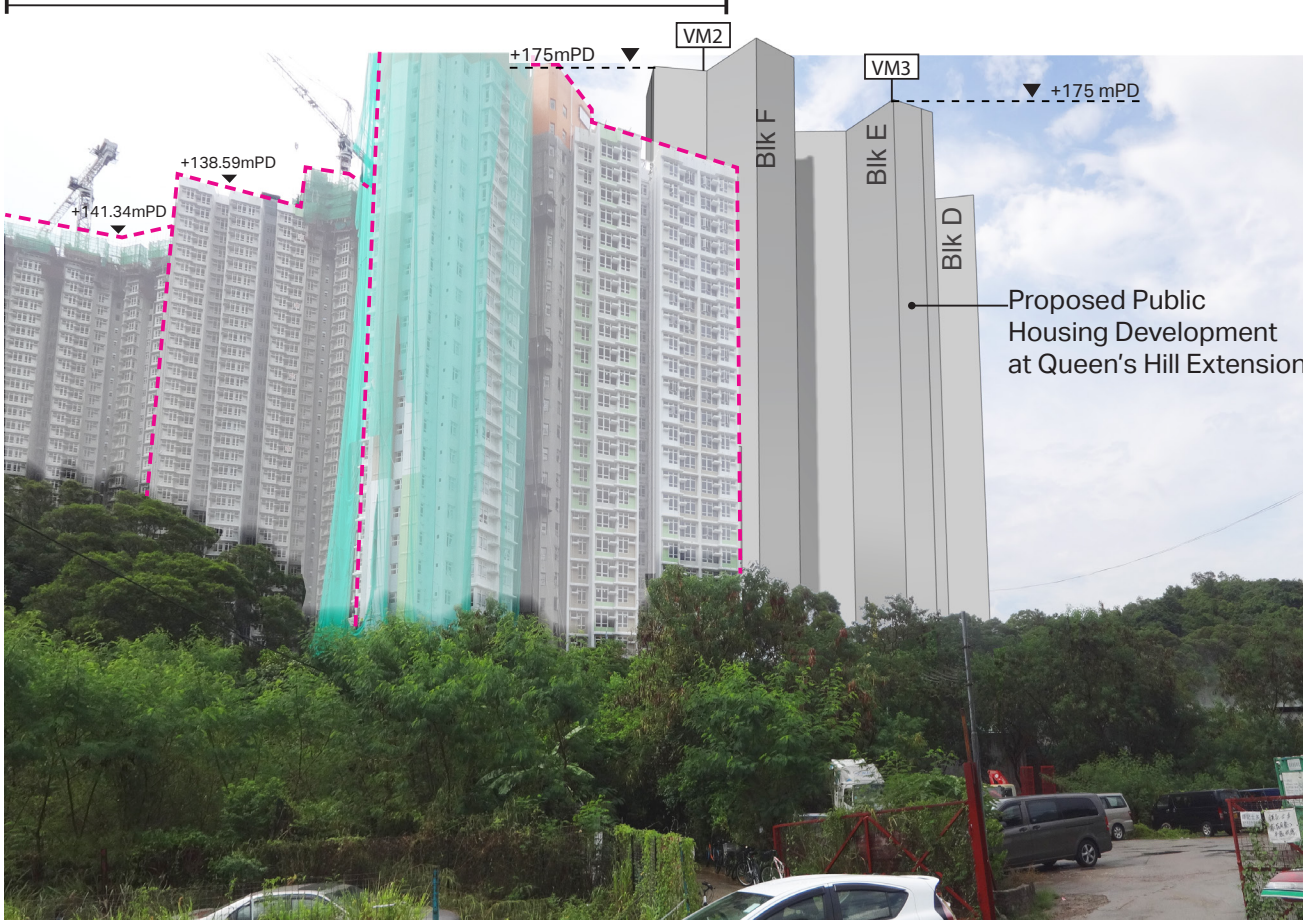
Existing Photo of VP6 - Po Kak Tsai Road (Without Development)

Public Housing Development at Queen's Hill (Envisaged Completion)

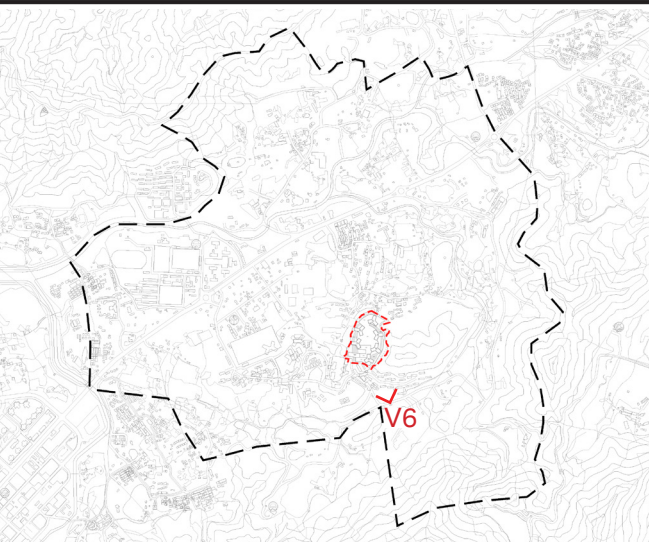


Photomontage of VP6 (With Development under Compliant Scheme +85mPD on OZP)

Public Housing Development at Queen's Hill (Envisaged Completion)



Photomontage of VP6 (With Development under Proposed Scheme +175mPD)



Key Plan

Visual Mitigation Measures

- VM2 Control Development Heights and Massing
- VM3 Visual Compatibility of the Proposed Development

Envisaged Completion of Public Housing Development of Queen's Hill with Predicted Finish Level

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項目
INFRASTRUCTURE WORKS FOR PUBLIC HOUSING DEVELOPMENT AT QUEEN'S HILL EXTENSION, FANLING - FEASIBILITY STUDY

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SCALE
比例
DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

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60617595
AGREEMENT NO.
協議編號
CE 12/2019 (CE)

SHEET TITLE
圖紙名稱
PHOTOMONTAGE - VIEWPOINT 6

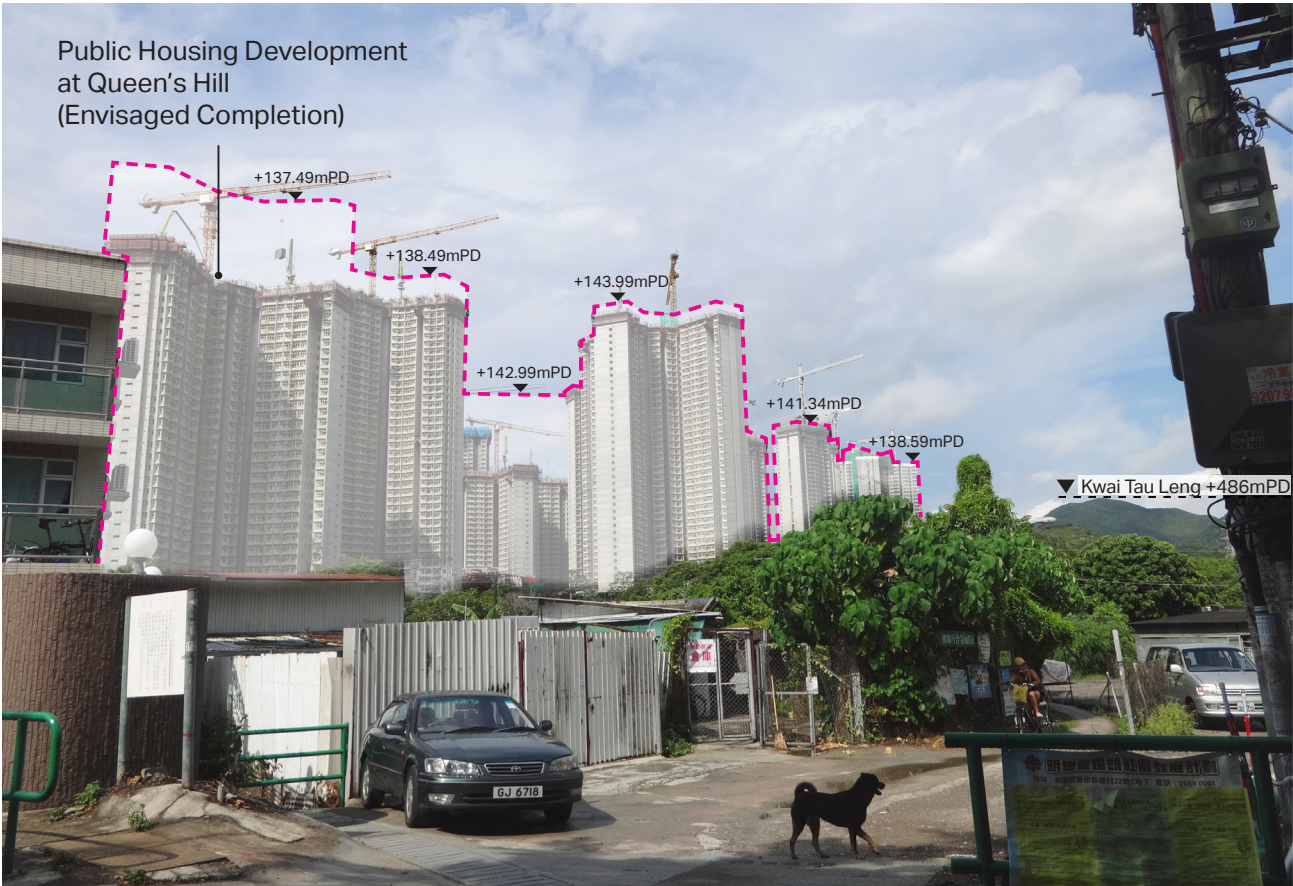
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60617595/PR/ Figure 8.9

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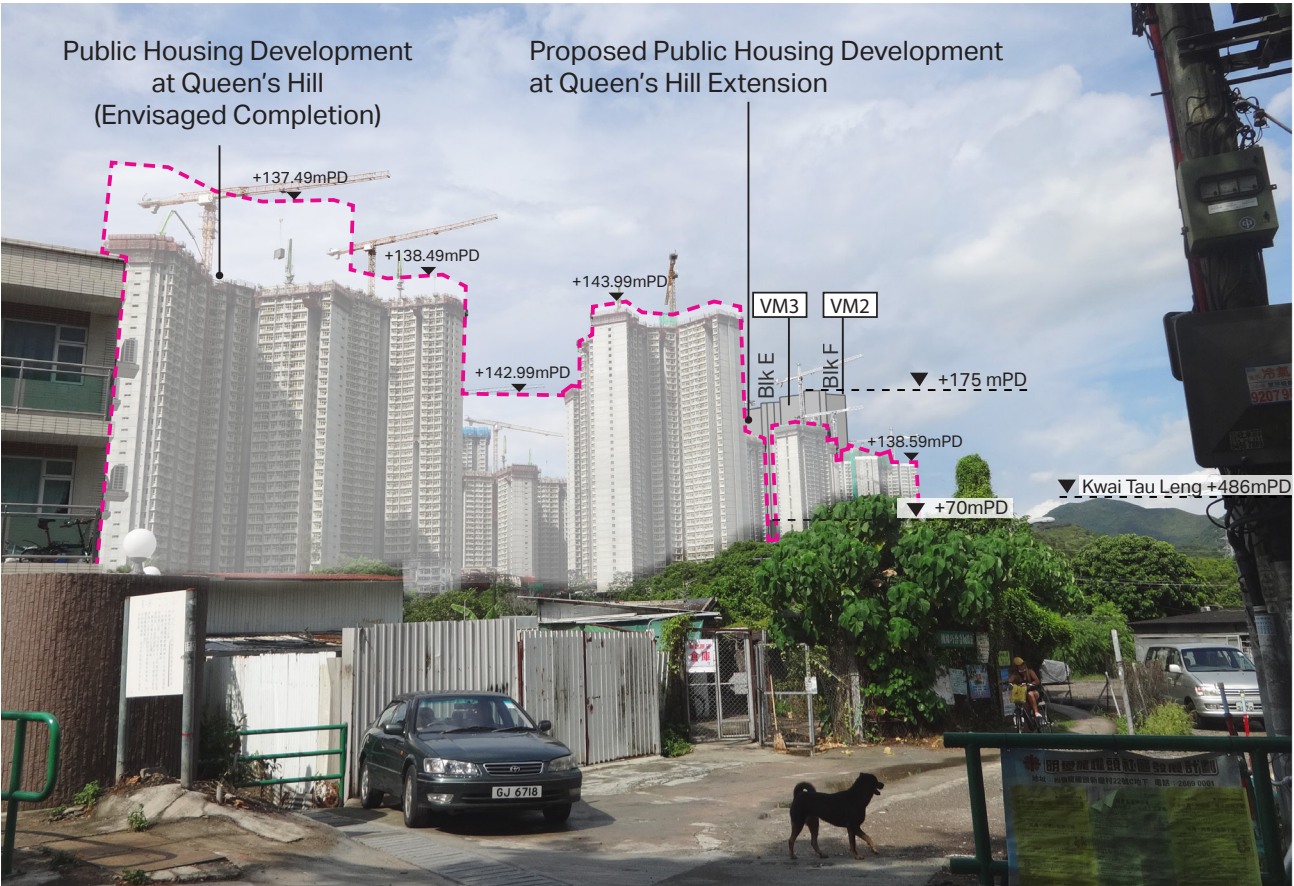
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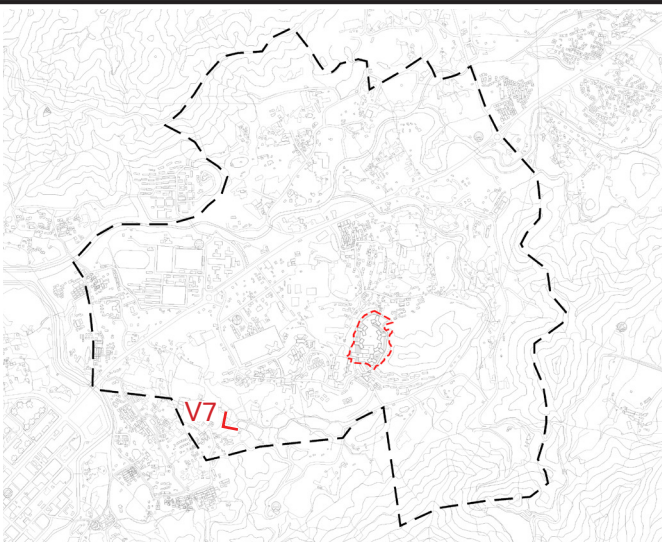
Existing Photo of VP7 - Tung Kok Wai Sitting Out Area (Without Development)



Photomontage of VP7
(With Development under Compliant Scheme +85mPD on OZP)



Photomontage of VP7
(With Development under Proposed Scheme +175mPD)



Key Plan

Visual Mitigation Measures

- VM2 Control Development Heights and Massing
- VM3 Visual Compatibility of the Proposed Development
- Envisaged Completion of Public Housing Development of Queen's Hill with Predicted Finish Level

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SCALE
DIMENSION UNIT
METRES

KEY PLAN

PROJECT NO.
60617595
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CE 12/2019 (CE)

SHEET TITLE
PHOTOMONTAGE - VIEWPOINT 7

SHEET NUMBER
60617595/PR/ Figure 8.10

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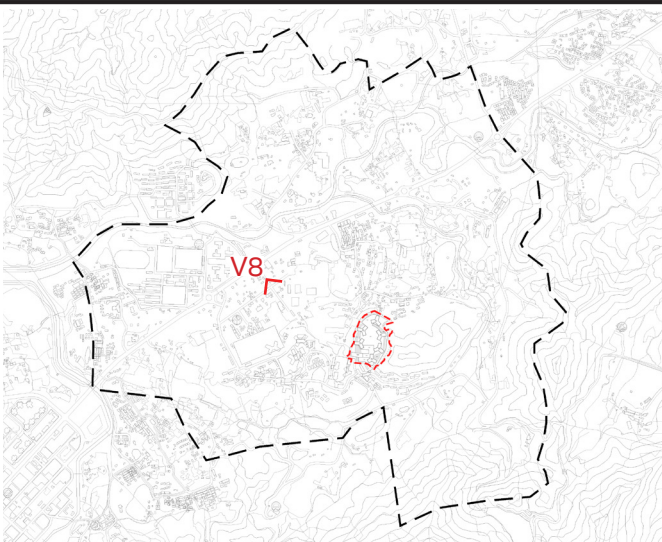
Existing Photo of VP8 - Dao Yang Road



Photomontage of VP8
(With Development under Compliant Scheme +85mPD on OZP)



Photomontage of VP8
(With Development under Proposed Scheme +175mPD)



Key Plan

Visual Mitigation Measures

- VM1 Creation of Visual Greening Connection and Breezeways
- VM2 Control Development Heights and Massing
- VM3 Visual Compatibility of the Proposed Development

Envisaged Completion of Public Housing Development of Queen's Hill with Predicted Finish Level

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SCALE
比例
DIMENSION UNIT
尺寸單位
METRES

KEY PLAN

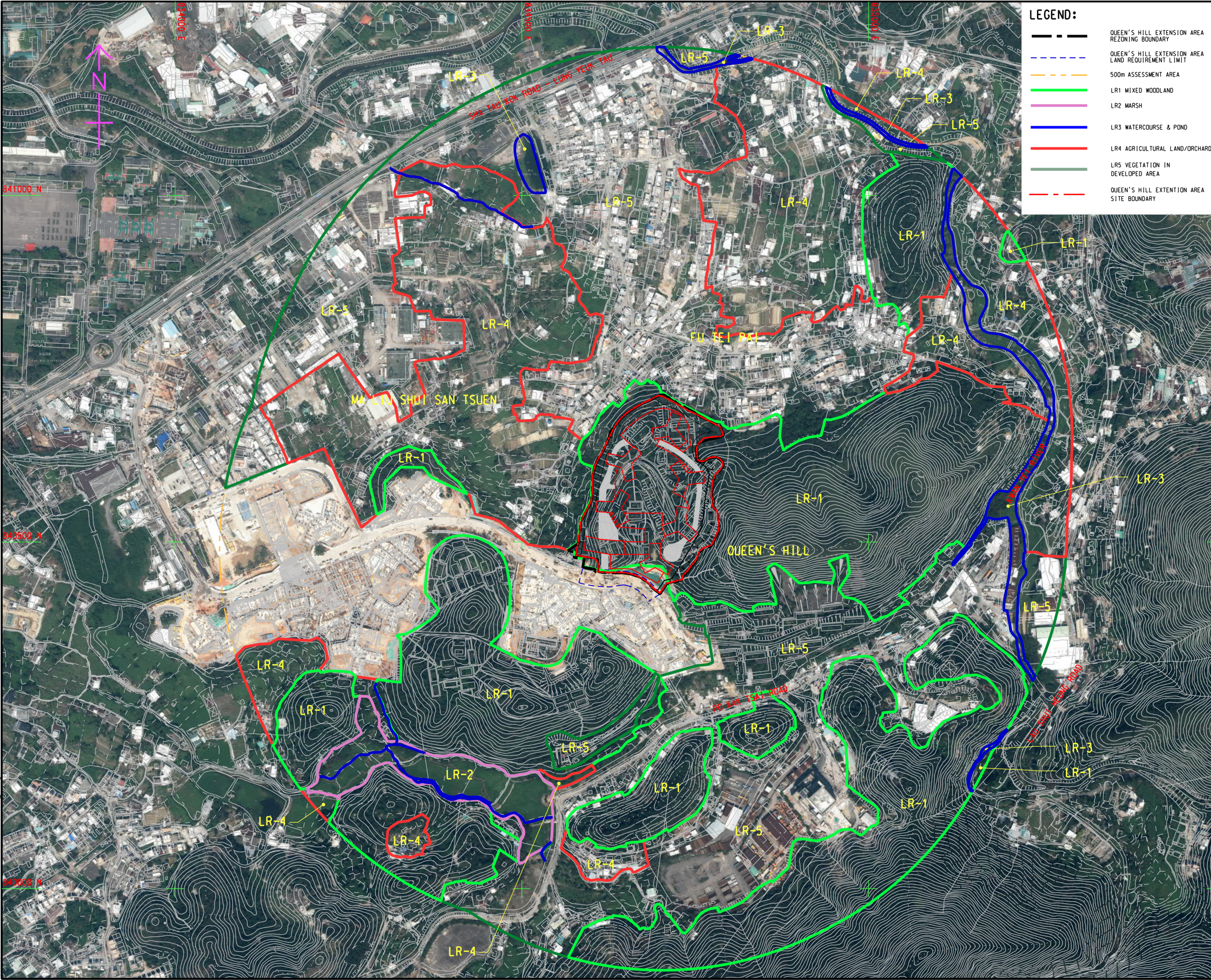
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協議編號
CE 12/2019 (CE)

SHEET TITLE
圖紙名稱
PHOTOMONTAGE - VIEWPOINT 8

SHEET NUMBER
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60617595/PR/ Figure 8.11

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LEGEND:

- QUEEN'S HILL EXTENSION AREA REZONING BOUNDARY
- QUEEN'S HILL EXTENSION AREA LAND REQUIREMENT LIMIT
- 500m ASSESSMENT AREA
- LR1 MIXED WOODLAND
- LR2 MARSH
- LR3 WATERCOURSE & POND
- LR4 AGRICULTURAL LAND/ORCHARD
- LR5 VEGETATION IN DEVELOPED AREA
- QUEEN'S HILL EXTENSION AREA SITE BOUNDARY

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STATUS

SCALE DIMENSION UNIT

A3 1 : 5000 METRES

KEY PLAN

PROJECT NO. AGREEMENT NO.

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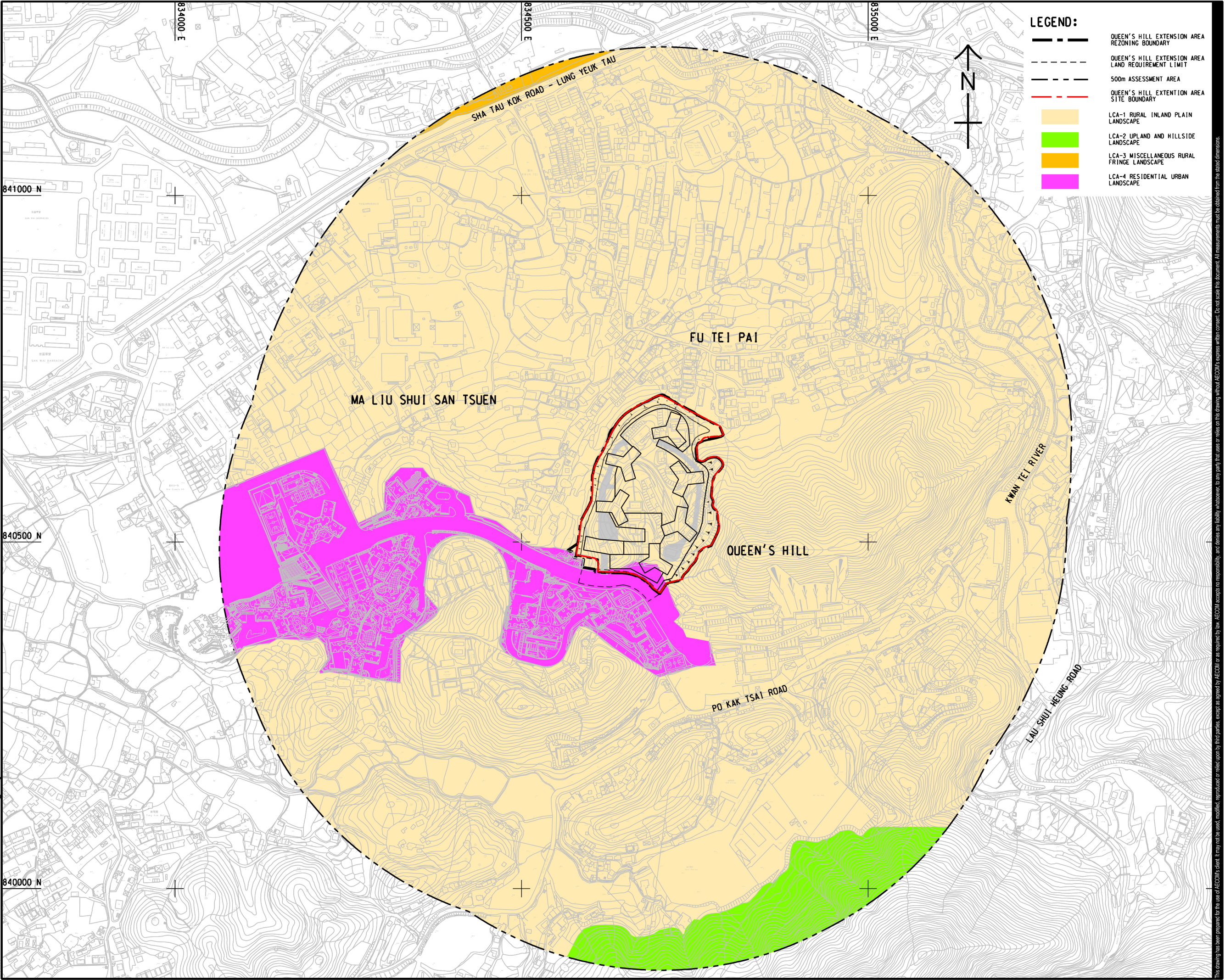
SHEET TITLE

LANDSCAPE RESOURCES

SHEET NUMBER

60617595/PR/Figure 8.12

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- LEGEND:**
- QUEEN'S HILL EXTENSION AREA REZONING BOUNDARY
 - QUEEN'S HILL EXTENSION AREA LAND REQUIREMENT LIMIT
 - 500m ASSESSMENT AREA
 - QUEEN'S HILL EXTENSION AREA SITE BOUNDARY
 - LCA-1 RURAL INLAND PLAIN LANDSCAPE
 - LCA-2 UPLAND AND HILLSIDE LANDSCAPE
 - LCA-3 MISCELLANEOUS RURAL FRINGE LANDSCAPE
 - LCA-4 RESIDENTIAL URBAN LANDSCAPE

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附 註

SCALE
比 例
A3 1 : 5000

DIMENSION UNIT
尺 寸 單 位
METRES

KEY PLAN
水 汀 圖

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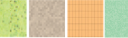
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SHEET TITLE
圖 紙 名 稱
LANDSCAPE CHARACTER







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圖 紙 編 號
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ID No.	Legend	Landscape Mitigation Measures
MM1		Preservation of Existing Vegetation
MM2		Transplant of affected trees to off-site receptor site at Tong Hang (Refer to Fig. 8.16)
MM3		Compensatory Tree Planting to off-site planting area at Tong Hang (Refer to Fig. 8.16)
MM4		Aesthetical pleasing design of all man-made structures
MM5		Maximize greenery provision
MM6		Landscape treatments on slope
MM7		Provision of Visual Corridor
MM8		Provision of Local Open Space




LEGEND	
	Extension Area Site Boundary
	Site 1 Area
	Site 3 Area
	RE-ZONING BOUNDARY
	HOUSING SITE BOUNDARY
	EXISTING GRAVE

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FANLING - FEASIBILITY STUDY

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STATUS
階段

SCALE
比例

A3 1 : 2000

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN
索引圖

PROJECT NO.
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60617595

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SHEET TITLE
圖紙名稱

LANDSCAPE MITIGATION PLAN

SHEET NUMBER
圖紙編號

60617595/PR/Figure 8.14

Notes: The conceptual landscape plan is for indicative only, subject to detail design by HD

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Notes: The conceptual landscape plan is for indicative only, subject to detail design by HD

KEY:

- 1 Ground level streetscape
- 2 Emergency Vehicular Access (EVA)
- 3 Ground level pathwalks
- 4 Multi-function lawn space
- 5 Passive space - sitting area
- 6 Active space - fitness stations
- 7 Active space - ball courts
- 8 Active space - play areas
- 9 Podium pathwalks

LEGEND

- RE-ZONING BOUNDARY
- HOUSING SITE BOUNDARY
- TENTATIVE ALIGNMENT OF FOOTPATH
- EXISTING GRAVE
- EXISTING TREE TO BE RETAINED

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SCALE
比例
A3 1 : 2000
DIMENSION UNIT
尺寸單位
METRES

KEY PLAN

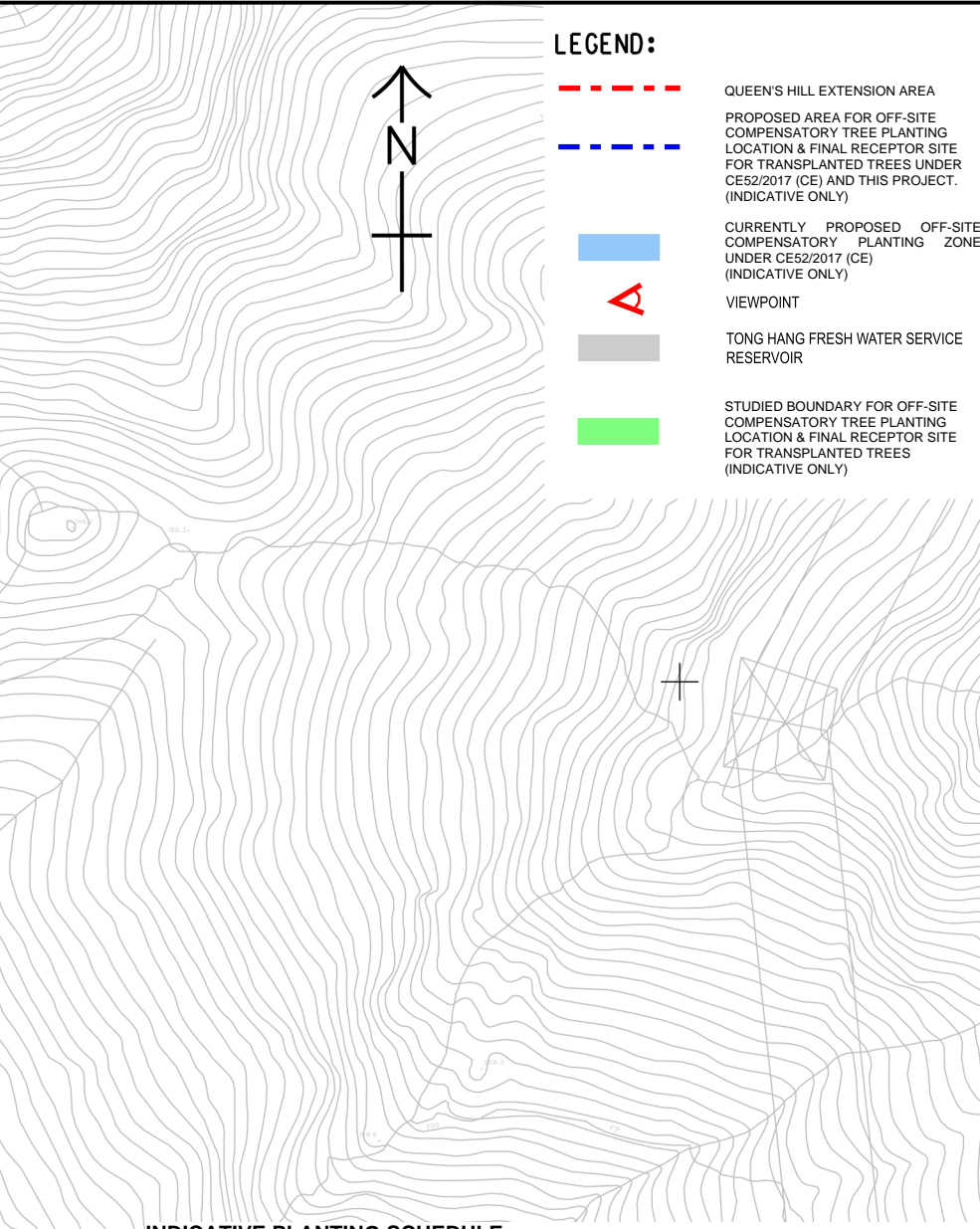
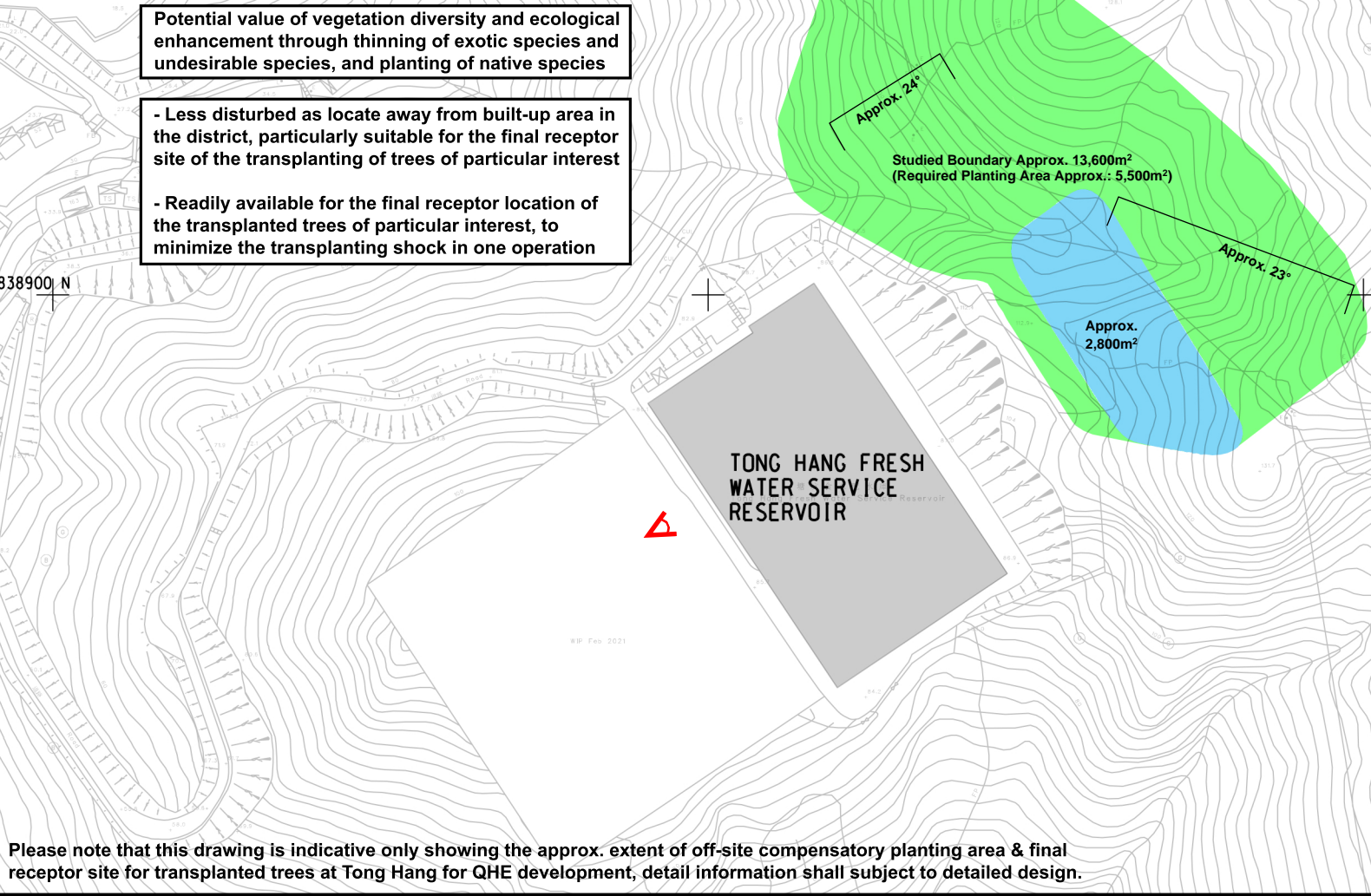
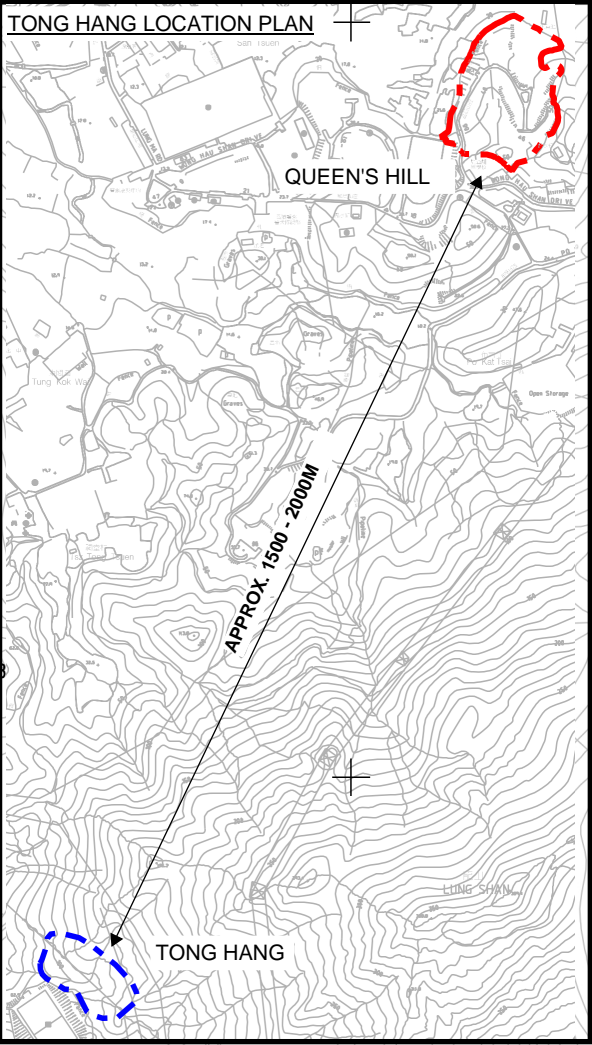
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CE 12/2019 (CE)

SHEET TITLE
圖紙名稱
CONCEPTUAL LANDSCAPE
PLAN

SHEET NUMBER
圖紙編號
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- LEGEND:
- QUEEN'S HILL EXTENSION AREA
 - PROPOSED AREA FOR OFF-SITE COMPENSATORY TREE PLANTING LOCATION & FINAL RECEPTOR SITE FOR TRANSPLANTED TREES UNDER CE52/2017 (CE) AND THIS PROJECT. (INDICATIVE ONLY)
 - CURRENTLY PROPOSED OFF-SITE COMPENSATORY PLANTING ZONE UNDER CE52/2017 (CE) (INDICATIVE ONLY)
 - VIEWPOINT
 - TONG HANG FRESH WATER SERVICE RESERVOIR
 - STUDIED BOUNDARY FOR OFF-SITE COMPENSATORY TREE PLANTING LOCATION & FINAL RECEPTOR SITE FOR TRANSPLANTED TREES (INDICATIVE ONLY)

INDICATIVE PLANTING SCHEDULE
WHIP TREES OF WOODLAND MIX AT TONG HANG

Botanical Name	Chinese Name	Origin	Size	Min. Spacing (mm)
Trees				
<i>Bridelia tomentosa</i> ¹	土蜜樹	Native	Whip Tree	2000
<i>Cratogeomys cochinchinense</i> ¹	黃牛木			
<i>Rhus succedanea</i> ¹	木蠟樹			
<i>Ficus hispida</i> ¹	對葉榕			
<i>Polyspora axillaris</i> ¹	大頭茶			

VIEW OF PROPOSED OFF-SITE COMPENSATORY AREA & FINAL RECEPTOR SITE FOR TRANSPLANTED TREES NEAR WSD TONG HANG FRESH WATER SERVICE RESERVOIR



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SCALE
比例尺

DIMENSION UNIT
尺寸單位

A3 1 : 2000

KEY PLAN
索引圖

PROJECT NO.
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圖紙名稱

OFF-SITE COMPENSATORY PLANTING & FINAL RECEPTOR SITE FOR TRANSPLANTED TREES AT TONG HANG

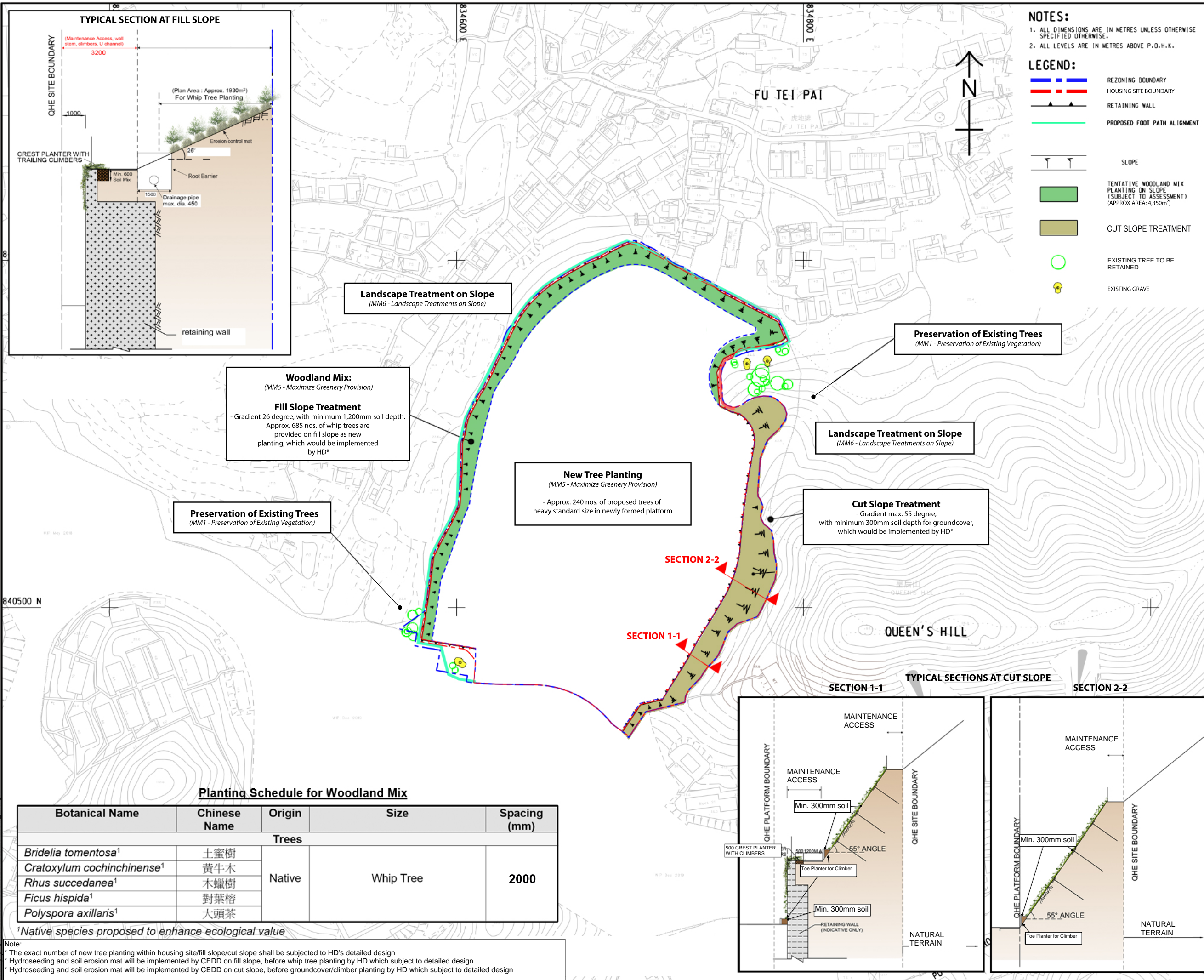
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SCALE
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A3 1 : 2000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
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圖紙名稱

NEW PLANTING PROPOSAL

SHEET NUMBER
圖紙編號

60617595/PR/Figure 8.17

**Provision of Major Community Facilities and Open Space in
Lung Yeuk Tau and Kwan Tei South and Hok Tau Areas**

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 (including existing provision)	
District Open Space	10 ha per 100,000 persons ¹	6.37 ha	0 ha	3.68 ha	- 2.5 ha
Local Open Space	10 ha per 100,000 persons ¹	6.37 ha	0.96 ha	5.54 ha	- 0.83 ha
Secondary School	1 whole-day classroom for 40 persons aged 12-17	96 classrooms	0 classroom	0 classroom	- 96 classrooms
Primary School	1 whole-day classroom for 25.5 persons aged 6-11	171 classrooms	60 classrooms	84 classrooms	- 87 classrooms
Kindergarten/ Nursery	34 classrooms for 1,000 children aged 3 to 6	67 classrooms	0 classroom	31 classrooms	- 36 classrooms
Hospital	5.5 beds per 1,000 persons	359 beds	0 bed	0 bed	- 359 beds ²
Clinic/Health Centre	1 per 100,000 persons	0	0	0	0
Child Care Centre	100 aided places per 25,000 persons ¹	254 places	0 place	100 places	- 154 places ³
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
Magistracy (with 8 courtrooms)	1 per 660,000 persons	0	0	0	0

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 (including existing provision)	
Integrated Children and Youth Services Centre	1 for 12,000 persons aged 6-24 ¹	1	0	1	0
Integrated Family Services Centre	1 for 100,000 to 150,000 persons ¹	0	0	1	+ 1
District Elderly Community Centre	One in each new development area with a population of around 170,000 or above ¹	N.A.	0	0	N.A
Neighbourhood Elderly Centre	One in a cluster of new and redeveloped housing areas with a population of 15,000 to 20,000 persons, including both public and private housing ¹	N.A.	0	2	N.A
Community Care Services (CCS) Facilities	17.2 subsidised places per 1,000 elderly persons aged 65 or above ^{1,4}	195 places	12 places	182 places	- 13 places ³
Residential Care Homes for the Elderly	21.3 subsidised beds per 1,000 elderly persons aged 65 or above ¹	242 beds	0 bed	150 beds	- 92 beds ³
Library	1 district library for every 200,000 persons	0	0	0	0
Sports Centre	1 per 50,000 to 65,000 persons ¹	0	0	0	0
Sports Ground/ Sport Complex	1 per 200,000 to 250,000 persons ¹	0	0	0	0
Swimming Pool Complex – standard	1 complex per 287,000 persons ¹	0	0	0	0

Notes:

The planned residential population in Lung Yeuk Tau and Hok Tau Areas would be about 63,400 and 1,900 respectively. If excluding transients, the overall planned population is about 61,800 for Lung Yeuk Tau Area and 1,800 for Hok Tau Area. All population figures have been adjusted to the nearest hundred.

- 1 The requirements excluded planned population of transients.
- 2 The provision of hospital beds would be monitored and addressed by the Hospital Authority on a regional basis.
- 3 This is a long-term goal and the actual provision would be subject to the consideration of the Social Welfare Department in the planning and development process as appropriate.
- 4 The planning standard of the Community Care Services (CCS) Facilities (including both centre-based and home-based) is population-based. There is no rigid distribution between centre-based CCS and home-based CCS stated in the Elderly Services Programme Plan. Nonetheless, in general, 60% of CCS demand will be provided by home-based CCS and the remaining 40% will be provided by centre-based CCS.

Provision of Major Community Facilities and Open Space in North District

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 (including existing provision)	
District Open Space	10 ha. per 100,000 persons ¹	64.52 ha	22.83 ha	67.91 ha	+ 3.39 ha
Local Open Space	10 ha. per 100,000 persons ¹	64.52 ha	62.39 ha	104.48 ha	+ 40.05 ha
Secondary School	1 whole-day classroom for 40 persons aged 12-17	798 classrooms	608 classrooms	818 classrooms	+ 20 classrooms
Primary School	1 whole-day classroom for 25.5 persons aged 6-11	1,129 classrooms	770 classrooms	1,358 classrooms	+ 229 classrooms
Kindergarten/ Nursery	34 classrooms for 1,000 children aged of 3 to under 6	416 classrooms	263 classrooms	466 classrooms	+ 50 classrooms
District Police Station	1 per 200,000-500,000 persons	1	1	2	+ 1
Divisional Police Station	1 per 100,000-200,000 persons	3	3	4	+ 1
Magistracy (with 8 courtrooms)	1 per 660,000 persons	1	1	1	0
Hospital	5.5 beds per 1,000 persons	3,611 beds	658 beds	2,158 beds	- 1,453 ² beds
Clinic/Health Centre	1 per 100,000 persons	6	4	7	+ 1

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 (including existing provision)	
Child Care Centre	100 aided places per 25,000 persons ¹	2,580 places	382 places	1,438 places	- 1,142 ³ places
Integrated Children and Youth Services Centre	1 for 12,000 persons aged 6-24 ¹	8	7	7	- 1 ³
District Elderly Community (DEC) Centre	1 for 170,000 persons in each new development area ¹	1	1	2	+ 1 ⁴
Neighbourhood Elderly Centre (NEC)	1 for 15,000 to 20,000 persons in a cluster of new and redeveloped housing areas ¹	N.A.	6	16	N.A. ⁵
Community Care Services (CCS) Facilities	17.2 subsidised places per 1,000 elderly persons aged 65 or above ^{1,6}	3,080 places	344 places	1,064 places	- 2,016 ³ places
Residential Care Homes for the Elderly	21.3 subsidised beds per 1,000 elderly persons aged 65 or above ¹	3,814 beds	1,342 beds	4,942 beds	+ 1,127 beds
Integrated Family Services Centre	1 per 100,000 to 150,000 persons ¹	4	3	6	+ 2
Library	1 district library for every 200,000 persons	3	4	5	+ 2

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 (including existing provision)	
Sports Centre	1 per 50,000 to 65,000 persons ¹	9	5	8	-1 ⁷
Sports Ground/ Sports Complex	1 per 200,000 to 250,000 persons ¹	2	1	2	0
Swimming Pool Complex - standard	1 complex per 287,000 persons ¹	2	1	2	0

Notes:

The planned population of the North District would be about 656,600 persons. If excluding transients, the overall planned population is about 645,200. All population figures have been adjusted to the nearest hundred.

1. The requirements excluded planned population of transients.
2. A site has been reserved in Kwu Tung North (KTN) New Development Area (NDA) for development of a hospital with information on the number of bed to be determined at a later stage. The provision of hospital beds would be monitored and addressed by the Hospital Authority on a regional basis.
3. This is a long-term goal and the actual provision would be subject to the consideration of the Social Welfare Department in the planning and development process as appropriate.
4. Provision of DEC Centre is only applicable for NDA (i.e. Fanling North (FLN) and KTN NDAs in North District).
5. Provision of NEC is only applicable for clusters of new and redeveloped housing areas with 15,000 to 20,000 persons.
6. The planning standard of the CCS Facilities (including both centre-based and home-based) is population-based. There is no rigid distribution between centre-based CCS and home-based CCS stated in the Elderly Services Programme Plan. Nonetheless, in general, 60% of CCS demand will be provided by home-based CCS and the remaining 40% will be provided by centre-based CCS.
7. Provision of an additional sports centre will be considered in the FLN NDA development.

Sha Tin, Tai Po and North District

Agenda Item 3

Section 12A Application

[Open Meeting (Presentation and Question Sessions only)]

Y/NE-LYT/12 Application for Amendment to the Approved Lung Yeuk Tau & Kwan Tei South Outline Zoning Plan No. S/NE-LYT/17 and Approved Hok Tau Outline Zoning Plan No. S/NE-HT/5, To Rezone the Application Site from “Agriculture” and “Green Belt” to “Other Specified Uses” annotated “Cemetery”, Sung Him Tong Sung Chan Wui Kei Tuk Kau Fan Cheung, Lot 2213 in D.D. 83, Kwan Tei, Fanling
(RNTPC Paper No. Y/NE-LYT/12B)

3. The Secretary reported that the application was submitted for proposed rezoning to regularise the existing cemetery and columbarium use at the site. The following Members had declared interests on the item:

Mr H.W. Cheung (The Vice-chairman)	- being a member of the Private Columbaria Licensing Board; and
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Mr Ivan C.S. Fu	- being a member of the Private Columbaria Appeal Board.
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4. As the interests of the Vice-chairman and Mr Ivan C.S. Fu were indirect, the Committee agreed that they could stay in the meeting.

5. The Committee noted that a replacement page (page 1) of the Paper, rectifying the Lands Department’s comment of the Paper, was tabled at the meeting for Members’ reference.

Presentation and Question Sessions

6. The representatives of the Planning Department (PlanD), Mr Tony Y.C. Wu, District Planning Officer/ Sha Tin, Tai Po and North (DPO/STN) and Mr Tim T.Y. Fung, Senior Town Planner/Sha Tin, Tai Po and North (STP/STN) were invited to the meeting at this point.

7. The Chairman extended a welcome and informed Members that the applicant and his representative had indicated that they would not attend the meeting. He then invited PlanD's representative to brief Members on the application.

8. With the aid of a PowerPoint presentation, Mr Tim T.Y. Fung, STP/STN, presented the application and covered the following main points as detailed in the Paper :

- (a) the proposed rezoning of Sung Him Tong Sung Chan Wui Kei Tuk Kau Fan Cheung (SHT Cemetery) from "Agriculture" ("AGR") and "Green Belt" ("GB") zones to "Other Specified Uses" annotated "Cemetery" ("OU (Cemetery)") zone to regularize the existing cemetery and columbarium use;
- (b) the SHT Cemetery was gazetted as a cemetery in 1931 and was a private cemetery under Part 2 of the Fifth Schedule of the Public Health and Municipal Services Ordinance (Cap. 132). Since the private cemetery use on the Site was in existence immediately before the publication of the Interim Development Permission Area/Development Permission Area plans, such use was an existing use under the Town Planning Ordinance (TPO);
- (c) the columbarium completed in 2005 with written consent by the Food and Environmental Hygiene Department (FEHD) under s.4(1) of Private Cemeteries Regulation (Cap. 132BF) could be considered as part and parcel of the private cemetery under Cap. 132BF;
- (d) pursuant to s.4 of the Private Columbaria Ordinance (PCO) (Cap. 630), the PCO did not apply to a columbarium within a private cemetery under Part 2

of the Fifth Schedule of Cap. 132; and

- (e) since the SHT Cemetery was an existing use under the TPO, it was not necessary to apply for regularisation of the cemetery and columbarium use.

9. In response to the Chairman's enquiry on whether the applicant had been informed on the above, Mr Tim T.Y. Fung, STP/STN indicated that the applicant had been informed and agreed to the arrangement for not further processing the application.

10. As Members had no further questions, the Chairman thanked Mr Tony Y.C. Wu, DPO/STN and Mr Tim T.Y. Fung, STP/STN, for their attendance to answer Members' enquiries. They left the meeting at this point.

Deliberation Session

11. In response to a Member's enquiry, the Secretary responded that as the columbarium use was considered as part and parcel of the private cemetery, which was an existing use under the TPO, it was not necessary to apply for regularisation of such use. However, the relevant Outline Zoning Plans would be amended to reflect the existing use when opportunity arose.

12. After deliberation, the Committee noted that the planning application for rezoning of the Site from "AGR" and "GB" to "OU (Cemetery)" was not required and agreed that the application would not be further processed. A reply would be issued to the applicant by the Secretariat.