

圖例
NOTATION

ZONES		地帶
VILLAGE TYPE DEVELOPMENT	V	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	GIC	政府、機構或社區
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
CONSERVATION AREA	CA	自然保育區
COMMUNICATIONS		交通
ELEVATED ROAD		高架道路
MISCELLANEOUS		其他
BOUNDARY OF PLANNING SCHEME		規劃範圍界線

土地用途及面積一覽表
SCHEDULE OF USES AND AREAS

USES	大約面積及百分率 APPROXIMATE AREA & %			用途
	公頃 HECTARES	%	百分率	
VILLAGE TYPE DEVELOPMENT	27.62	8.04		鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	11.28	3.28		政府、機構或社區
RECREATION	16.68	4.85		康樂
OTHER SPECIFIED USES	108.96	31.71		其他指定用途
AGRICULTURE	59.73	17.38		農業
GREEN BELT	107.35	31.25		綠化地帶
CONSERVATION AREA	4.24	1.23		自然保育區
RIVER CHANNEL	7.77	2.26		河道
TOTAL PLANNING SCHEME AREA	343.63	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2017年12月5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
5 DECEMBER 2017

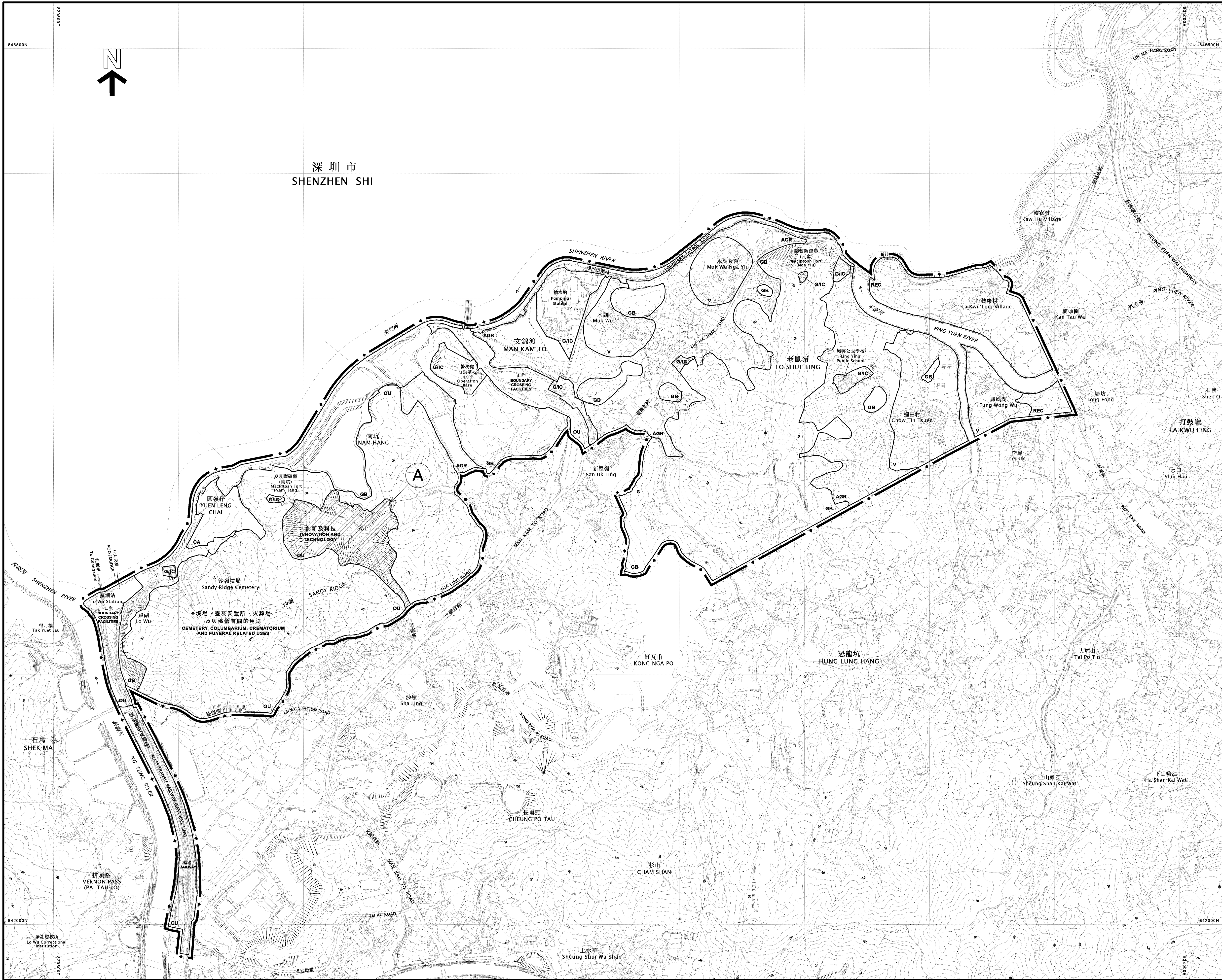
Signed Ms Wendy LEUNG 梁鑑儀女士 簽署
CLERK TO THE EXECUTIVE COUNCIL 行政會議秘書

香港城市規劃委員會依據城市規劃條例擬備的文錦渡分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
MAN KAM TO - OUTLINE ZONING PLAN

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

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

圖則編號
PLAN No. S/NE-MKT/4



圖例
NOTATION

ZONES		地帶
VILLAGE TYPE DEVELOPMENT	V	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	G/C	政府、機構或社區
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
CONSERVATION AREA	CA	自然保育區
COMMUNICATIONS		交通
ELEVATED ROAD		高架道路
MISCELLANEOUS		其他
BOUNDARY OF PLANNING SCHEME		規劃範圍界線

土地用途及面積一覽表
SCHEDULE OF USES AND AREAS

USES	大約面積及百分率 APPROXIMATE AREA & %		用途
	公頃 HECTARES	% 百分率	
VILLAGE TYPE DEVELOPMENT	27.62	8.04	鄉村式發展
GOVERNMENT, INSTITUTION OR COMMUNITY	11.28	3.28	政府、機構或社區
RECREATION	16.68	4.85	康樂
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AGRICULTURE	59.73	17.38	農業
GREEN BELT	107.35	31.25	綠化地帶
CONSERVATION AREA	4.24	1.23	自然保育區
RIVER CHANNEL	7.77	2.26	河道
TOTAL PLANNING SCHEME AREA	343.63	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 - M K T / 4 的修訂
AMENDMENT TO APPROVED PLAN No. S/NE-MKT/4

AMENDMENT EXHIBITED UNDER SECTION 5
OF THE TOWN PLANNING ORDINANCE

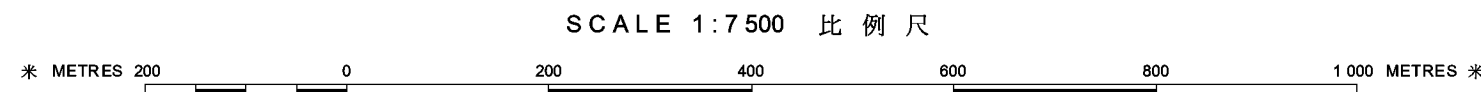
按照城市規劃條例第 5 條
展示的修訂

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文錦渡分區計劃大綱圖
TOWN PLANNING ORDINANCE, HONG KONG TOWN PLANNING BOARD
MAN KAM TO - OUTLINE ZONING PLAN



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

圖則編號
PLAN No. S/NE-MKT/4A

DRAFT APPROVED MAN KAM TO OUTLINE ZONING PLAN NO. S/NE-MKT/4A

(Being *a Draft* ~~an Approved~~ 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 railway tracks, and boundaries between zones may be subject to minor adjustments as detailed planning proceeds.
- (8) The following uses or developments are always permitted on land falling within the boundaries of the Plan except (a) where the uses or developments are specified in Column 2 of the Notes of individual zones or (b) as provided in paragraph (9) in relation to areas zoned “Conservation Area” :
- (a) maintenance, repair or demolition of a building;
 - (b) provision, maintenance or repair of plant nursery, amenity planting, open space, rain shelter, refreshment kiosk, footpath, bus/public light bus 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 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 areas zoned “Conservation Area”,
- (a) the following uses or developments are always permitted:
 - (i) maintenance or repair of plant nursery, amenity planting, sitting out area, rain shelter, refreshment kiosk, road, watercourse, nullah, public utility pipeline, electricity mast, lamp pole, telephone booth, shrine and grave;
 - (ii) geotechnical works, local public works, road works, sewerage works, drainage works, environmental improvement works, marine related facilities, waterworks (excluding works on service reservoir) and such other public works co-ordinated or implemented by Government; and
 - (iii) provision of amenity planting by Government; and
 - (b) the following uses or developments require permission from the Town Planning Board:

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

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

road, on-street vehicle park and railway track.

- (11) (a) Except in areas zoned "Conservation Area", temporary use or development of any land or building not exceeding a period of two months is always permitted provided that no site formation (excavation or land/pond filling) 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) *above*, and subject to temporary uses for open storage and port back-up purposes which are prohibited in areas zoned "Conservation Area", temporary use or development of any land or building not exceeding a period of three years requires permission from the Town Planning Board. Notwithstanding that the use or development is not provided for in terms of the Plan, the Town Planning Board may grant permission, with or without conditions, for a maximum period of three years, or refuse to grant permission.

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

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

- (13) In 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).

DRAFT APPROVED MAN KAM TO OUTLINE ZONING PLAN NO. S/NE-MKT/4A

Schedule of Uses

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CONSERVATION AREA	4413

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 Refuse Collection Point Government Use (Police Reporting Centre, Post Office only) House (New Territories Exempted House only) On-Farm Domestic Structure Public Convenience Religious Institution (Ancestral Hall only) Rural Committee/Village Office	Burial Ground Eating Place Field Study/Education/Visitor Centre Flat Government Refuse Collection Point Government Use (not elsewhere specified) # Hotel (Holiday House only) House (not elsewhere specified) Institutional Use (not elsewhere specified) # Market Place of Recreation, Sports or Culture Private Club Public Clinic Public Convenience Public Transport Terminus or Station Public Utility Installation # Public Vehicle Park (excluding container vehicle) Religious Institution (not elsewhere specified) # Residential Institution # School # Shop and Services Social Welfare Facility # Utility Installation for Private Project

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

Eating Place
Library
School
Shop and Services

(Please see next page)

VILLAGE TYPE DEVELOPMENT (Cont'd)

Planning Intention

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

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building (except development or redevelopment to those annotated with #) shall result in a total development and/or redevelopment in excess of a maximum building height of 3 storeys (8.23m) or the height of the 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 diversion of streams or 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	Funeral Facility
Government Use (not elsewhere specified)	Holiday Camp
Hospital	Hotel
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	Residential Institution
Public Vehicle Park (excluding container vehicle)	Sewage Treatment/Screening Plant
Recyclable Collection Centre	Shop and Services (<i>not elsewhere specified</i>)
Religious Institution	Utility Installation for Private Project
Research, Design and Development Centre	Zoo
Rural Committee/Village Office	
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.

RECREATION

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

(Please see next page)

RECREATION (Cont'd)

Planning Intention

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

Remarks

- (a) No residential development (except 'New Territories Exempted House') shall result in a total development in excess of a maximum plot ratio of 0.2 and a maximum building height of 2 storeys.
- (b) 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.
- (c) Any diversion of streams or 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.

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 “Boundary Crossing Facilities” only

Ambulance Depot	Government Use (not elsewhere specified)
Boundary Crossing Facilities	
Eating Place	
Fire Station	
Government Refuse Collection Point	
Petrol Filling Station	
Police Station	
Public Convenience	
Public Transport Terminus or Station	
Public Utility Installation	
Radar, Navigational Aid, and Communication Devices	
Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation	
Sewage Treatment/Screening Plant	
Shop and Services	
Utility Installation for Private Project	

Planning Intention

This zone is intended primarily for the development of the boundary crossing facilities.

(Please see next page)

OTHER SPECIFIED USES (Cont'd)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
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For "Cemetery, Columbarium, Crematorium and Funeral Related Uses" only

Columbarium	Eating Place
Crematorium	Place of Recreation, Sports or Culture
Funeral Facility	Religious Institution
Government Use	Shop and Services
Grave	Utility Installation for Private Project
Public Convenience	
Public Transport Terminus or Station	
Public Utility Installation	

Planning Intention

This zone is intended primarily for the provision of land for cemetery, columbarium, crematorium and funeral related facilities serving the needs of the general public.

(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>
<u>For “Innovation and Technology” only</u>	
<i>Eating Place</i>	<i>Broadcasting, Television and/or Film</i>
<i>Flat (Staff Quarters only)</i>	<i>Studio</i>
<i>Government Refuse Collection Point</i>	<i>Creative Industries</i>
<i>Government Use</i>	<i>Exhibition or Convention Hall</i>
<i>Information Technology and Telecommunications</i>	<i>Residential Institution</i>
<i>Industries</i>	
<i>Office</i>	
<i>Public Convenience</i>	
<i>Public Utility Installation</i>	
<i>Radar, Telecommunications Electronic</i>	
<i>Microwave Repeater, Television and/or Radio</i>	
<i>Transmitter Installation</i>	
<i>Research, Design and Development Centre</i>	
<i>Shop and Services</i>	
<i>Training Centre</i>	
<i>Utility Installation for Private Project</i>	

Planning Intention

This zone is intended primarily to provide development space for data centres and related purposes.

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 building height of 115 metres above Principal Datum, or the height of the existing building, whichever is the greater.***
- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restriction stated in paragraph (a) above may be considered by the Town Planning Board on application under Section 16 of the Town Planning Ordinance.***

(Please see next page)

OTHER SPECIFIED USES (Cont'd)

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

Railway Track

Government Refuse Collection Point
Government Use (not elsewhere specified)
Public Utility Installation
Utility Installation for Private Project

Planning Intention

This zone is intended primarily to provide land for the railway track of the Mass Transit Railway (East Rail Line).

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 Government Use (Police Reporting Centre only) On-Farm Domestic Structure Public Convenience Religious Institution (Ancestral Hall only) Rural Committee/Village Office	Animal Boarding Establishment Barbecue Spot Burial Ground Field Study/Education/Visitor Centre Government Refuse Collection Point 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

Any diversion of streams or filling of land/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. 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
<p>Agricultural Use Barbecue Spot Government Use (Police Reporting Centre only) Nature Reserve Nature Trail On-Farm Domestic Structure Picnic Area Public Convenience Tent Camping Ground Wild Animals Protection Area</p>	<p>Animal Boarding Establishment Broadcasting, Television and/or Film Studio Burial Ground Columbarium (within a Religious Institution or extension of existing Columbarium only) Crematorium (within a Religious Institution or extension of existing Crematorium only) Field Study/Education/Visitor Centre Firing Range Flat Golf Course Government Refuse Collection Point Government Use (not elsewhere specified) Helicopter Landing Pad Holiday Camp House (other than rebuilding of New Territories Exempted House or replacement of existing domestic building by New Territories Exempted House permitted under the covering Notes) Petrol Filling Station Place of Recreation, Sports or Culture Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation Religious Institution Residential Institution Rural Committee/Village Office School Service Reservoir Social Welfare Facility Utility Installation for Private Project Zoo</p>

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

CONSERVATION AREA

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Agricultural Use (Fish Pond Culture Only)	Field Study/Education/Visitor Centre
Nature Reserve	Government Refuse Collection Point
On-Farm Domestic Structure	Government Use (not elsewhere specified)
Wetland Habitat	House (Redevelopment only)
Wild Animals Protection Area	Nature Trail
	Public Convenience
	Public Utility Installation
	Utility Installation for Private Project

Planning Intention

The planning intention of this zone is to conserve the ecological value of wetland and fish ponds which form an integral part of the wetland ecosystem. The “no-net-loss in wetland” principle is adopted for any change in use within this zone. The primary intention is to discourage new development unless it is required to support the conservation of the ecological integrity of the wetland ecosystem or the development is an essential infrastructure project with overriding public interest.

Remarks

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

~~APPROVED DRAFT~~ MAN KAM TO OUTLINE ZONING PLAN NO. S/NE-MKT/4A

EXPLANATORY STATEMENT

APPROVED-DRAFT MAN KAM TO OUTLINE ZONING PLAN NO. S/NE-MKT/4A

EXPLANATORY STATEMENT

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APPROVED-DRAFT MAN KAM TO OUTLINE ZONING PLAN NO. S/NE-MKT/4A

(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 *draft approved* Man Kam To Outline Zoning Plan (OZP) No. S/NE-MKT/4A. It reflects the planning intention and objectives of the Town Planning Board (the Board) for various land use zonings of the Plan.

2. AUTHORITY FOR THE PLAN AND PROCEDURE

2.1 On 10 September 2004, under the power delegated by the Chief Executive (CE), the then Secretary for Housing, Planning and Lands directed the Board, under section 3(1)(b) of the Town Planning Ordinance (the Ordinance), to prepare a draft plan designating the Man Kam To area as a development permission area (DPA). Subsequently on 17 June 2010, the Secretary for Development (*SDEV*) directed the Board to extend the coverage of the draft DPA plan.

2.2 On 30 July 2010, the draft Man Kam To DPA Plan No. DPA/NE-MKT/1 was exhibited for public inspection under section 5 of the Ordinance. ~~During the two-month exhibition period, a total of 6 valid representations were received. On 8 October 2010, the representations were published for three weeks for public comments and 1 valid comment was received.~~ The DPA Plan was subsequently amended and exhibited for public inspection under section 7 of the Ordinance.

~~2.3 On 25 February 2011, the Board considered the representations and comments and decided to defer the consideration of the representations and comments pending further review by the Planning Department on the land use proposals, in particular on the "Village Type Development" ("V") zones, taking into account the views of the representers and commenters and any other relevant planning considerations.~~

~~2.4 On 16 June 2011, the CE, under section 8(2) of the Ordinance, agreed to extend the statutory time limit for the Board to submit the draft DPA Plan to the Chief Executive in Council (CE in C) for approval for a period of six months from 30 June 2011 to 30 December 2011.~~

~~2.5 On 8 September 2011, upon further consideration of the representations to the draft Plan, the Board decided to propose amendment to partially meet a representation by rezoning an area to the northwest of Chow Tin Tsuen from "Agriculture" ("AGR") to "V". On 16 September 2011, the proposed amendment was published for public inspection under section 6C(2) of the Ordinance. Upon expiry of the three-week~~

- public inspection period, 1 further representation was received. On 11 November 2011, the Board considered the further representation and decided not to uphold the further representation. The Board decided that the proposed amendment to the DPA Plan would form part of the DPA Plan under section 6F(8) of the Ordinance.
- ~~2.6~~ On 28 October 2011, the draft Man Kam To DPA Plan No. DPA/NE-MKT/2, incorporating amendments to rezone an area to the north and a strip of land to the east of Muk Wu from “AGR” to “V”, was exhibited for public inspection under section 7 of the Ordinance. Upon expiry of the two-month public inspection period, no representation was received.
- 2.73 On 8 May 2012, the *Chief Executive in Council* (CE in C), under section 9(1)(a) of the Ordinance, approved the draft Man Kam To DPA Plan, which was subsequently re-numbered as DPA/NE-MKT/3. On 18 May 2012, the approved Man Kam To DPA Plan No. DPA/NE-MKT/3 was exhibited for public inspection under section 9(5) of the Ordinance.
- 2.84 On 8 February 2013, under the power delegated by the CE, the SDEV directed the Board, under section 3(1)(a) of the Ordinance, to prepare an OZP to cover the Man Kam To area.
- 2.95 On 19 July 2013, the draft Man Kam To OZP No. S/NE-MKT/1 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 11 October 2013, 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 28 February 2014, the Board decided not to propose any amendment to the draft OZP to meet the representations under section 6B(8) of the Ordinance.~~
- ~~2.10~~ On 3 June 2014, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Man Kam To OZP, which was subsequently renumbered as S/NE-MKT/2. On 13 June 2014, the approved Man Kam To OZP No. S/NE-MKT/2 was exhibited for public inspection under section 9(5) of the Ordinance.
- ~~2.11~~ On 7 February 2017, the CE in C, under section 12(1)(b)(ii) of the Ordinance, referred the approved Man Kam To OZP No. S/NE-MKT/2 to the Board for amendment. ~~The reference back of the OZP was notified in the Gazette on 17 February 2017 under section 12(2) of the Ordinance. The OZP was subsequently amended once and~~
- ~~2.12~~ On 7 April 2017, the draft Man Kam To OZP No. S/NE-MKT/3 was exhibited for public inspection under section 5 of the Ordinance. ~~The amendments to the OZP were the excision of a piece of land near Kong Nga Po from the planning scheme area for incorporation into the draft Fu Tei Au and Sha Ling OZP No. S/NE-FTA/15. Upon the expiry of the two-month exhibition period, no representation was received.~~
- 2.137 On 5 December 2017, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Man Kam To OZP, which was subsequently renumbered as S/NE-MKT/4. On 15 December 2017, the approved Man Kam To OZP No. S/NE-MKT/4 was exhibited for public inspection under section 9(5) of the Ordinance.

- 2.8 *On 8 March 2024, the SDEV referred the approved Man Kam To OZP No. S/NE-MKT/4 to the Board for amendment under section 12(1A)(a)(ii) of the Ordinance. The reference back of the OZP was notified in the Gazette on 15 March 2024 under section 12(2) of the Ordinance.*
- 2.9 *On XX December 2024, the draft Man Kam To OZP No. S/NE-MKT/5 (the Plan), incorporating amendments mainly to rezone an area at Sandy Ridge from “Other Specified Uses” (“OU”) annotated “Cemetery, Columbarium, Crematorium and Funeral Related Uses” to “OU” annotated “Innovation and Technology” (“OU(I&T)”), was exhibited for public inspection under section 5 of the Ordinance.*

3. OBJECT OF THE PLAN

- 3.1 The object of the Plan is to indicate the broad land use zonings for the Man Kam To area (the Area) so that development and redevelopment within the Area can be put under statutory planning control. It also provides the planning framework for preparing more detailed non-statutory plans which form the basis for public works planning and site reservation for various uses.
- 3.2 The Plan is to illustrate the broad principles of development and 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

- 5.1 The Planning Scheme Area covers a total area of about 344 hectares. It is located approximately 3.5 km to the north of Fanling/Sheung Shui. It is bounded by the southern bank of Shenzhen River in the north, Ping Che Road in the east, Hung Lung Hang in the southeast, Lo Wu Station Road in the southwest and Ng Tung River in the west. The boundary of the Area is shown by a heavy broken line on the Plan.
- 5.2 The Area commands the cross boundary location in the northernmost rural area of the North District. Except Shenzhen City (Shenzhen Shi) which lies immediately outside the Hong Kong Special Administrative Region (HKSAR) in the north, the

surroundings are predominantly agricultural land spotted with rural settlements. The elongated Sandy Ridge with an elevation up to about 130 *metres above Principal Datum* (mPD) in the west is the prominent mountain ridge in the Area. The hilly ridge of Lo Shue Ling is located in the east which rises to about 85 mPD lying in a north-south direction. The extensive lowlands mainly comprise arable land intermixed with clusters of village settlements, undisturbed woodland, vegetated habitats and natural watercourses.

- 5.3 The landscape features of the Area are woodlands, vegetated uplands, knolls and foothills. It covers a spectrum of natural habitats including large tracts of mature woodland, ‘fung-shui’ wood, freshwater/brackish wetland, lowland forest, mixed shrubland and natural watercourse.
- 5.4 Economic activities are limited in the Area due to its rugged relief and limited accessibility of the Area. People therein are mainly engaged in horticultural and agricultural activities including growing of vegetables, flowers and fruits. The farming activities are of small-scale and most farmers are self-employed.
- 5.5 Graded historic buildings within the Area include MacIntosh Forts at Nam Hang and Nga Yiu (both Grade 2), Tin Hau Temple in Muk Wu Tsuen (Grade 3), Entrance Gate of Muk Wu Wai (Grade 3), Ng Ancestral Hall and Yeung Ancestral Hall in Fung Wong Wu (both Grade 3). ~~The Muk Wu Nga Yiu Kilns (site of archaeological interest)~~ *Site of Archaeological Interest* also ~~fall~~*falls* within the Area. Muk Wu and Fung Wong Wu villages contain some new items in addition to the list of 1,444 historic buildings. These items are subject to the grading assessment by the Antiquities Advisory Board (AAB).

6. POPULATION

Based on the ~~2011~~**2021** Population Census, the population of the Area was estimated by the Planning Department as about ~~600,800~~ persons. It is estimated that the planned population of the Area would be about ~~6,660,200~~**6,662,100** persons.

7. OPPORTUNITIES AND CONSTRAINTS

7.1 Opportunities

7.1.1 *Northern Metropolis Action Agenda (NMAA)*

The Area generally falls within the Boundary Commerce and Industry Zone under the Northern Metropolis Action Agenda promulgated in 2023. Two boundary control points (BCPs), namely Lo Wu and Man Kam To, are located within the Area, which have good potential for developments to meet the need for cross-boundary services, and complement the emerging industries in the New Territories North (NTN) New Town as well as the innovation and technology industries in San Tin Technopole.

7.1.2 Accessibility

Access through the central and eastern portions of the Area is reasonably good along Man Kam To Road and Ping Che Road. Lin Ma Hang Road also provides convenient access to the northeastern portions of the Areas to the villages of Muk Wu and Muk Wu Nga Yiu and links with Ping Che Road. In addition, the Area is easily accessible from Fanling/Sheung Shui via Man Kam To Road, and from the Fanling North New Development Area (NDA) and Ping Che/Ta Kwu Ling via Man Kam To Road and Ping Che Road respectively. ***There are also strategic transport infrastructures proposed under the NMAA such as the Northern Link Eastern Extension and Northern Metropolis Highway (NTN New Town Section), which may run near the Area. The good accessibility could provide opportunities for enhanced development in the Area.***

7.1.23 Tourism

The Area is scenically attractive with green environment. The villages are relatively unspoiled and retain much of their traditional character. Such setting provides a wide array of unique and attractive tourism opportunities. The strategic roles of the Area for countryside conservation and agricultural priority are recognized whereas recreational development could be allowed without compromising the conservation resources. There is also good recreational for cultural heritage and eco-tourism. Provision of tourism and recreational related developments such as well connected hiking trails, cycle tracks, dining and overnight accommodation facilities would be required so as to realize this tourism potential.

7.1.34 Agricultural

The relatively flat land in the eastern portion of the Area has been identified as good agricultural land which provides an opportunity for sustainable agriculture and to accommodate the growing demand for organic and healthier food options. On the other hand, with basic agricultural infrastructure, including irrigation facilities, the other fallow arable land can be easily rehabilitated for agricultural purpose. The traditional agricultural land uses can be enhanced with the diversification of permitted uses, including extension to agri-tourism and other leisure or recreational uses associated with the agricultural sector.

7.1.45 Nature Conservation

The Area comprises large tracts of dense and undisturbed woodlands around the hilly slopes of Sandy Ridge and Lo Shue Ling, freshwater/brackish wetland around some of the watercourses in the Area and 'fung-shui' woodland of high scenic value. The natural vegetation together with the rugged topographic backdrop provides a picturesque landscape forming an integral part of the natural environment that should be conserved. Future development of the Area would need to take into account the area's ecological resources including a small patch of land at Yuen Leng Chai near the foothill of Sandy Ridge and west of McIntosh Fort at Nam Hang where existing mitigation habitats and wetlands are found. Prior consultation with

relevant Government departments should be sought if development proposal would affect these sites.

7.2 Constraints

7.2.1 Geotechnical Aspect

- (a) A majority of the Area, especially the western part, is characterized by relatively steep mountains and natural hilly terrain. There is a history of landslides on the natural slopes in the areas near Sandy Ridge and Lo Shue Ling. Such topographic relief imposes geological constraints on development. Due consideration and geotechnical assessment study would be required for any proposed developments involving site formation and slope stabilization works.
- (b) There are existing geotechnical features that could affect or be affected by development/redevelopment within the area. Upon development/redevelopment, the stability of these geotechnical features should be assessed and, if necessary, upgraded to the current safety standards.

7.2.2 Limited Transport Infrastructure

All vehicular accesses *currently* are of a limited capacity and not intended for heavy traffic. Due to the limited transport infrastructure in the Area, unco-ordinated development would create problems and hazards to both pedestrian and vehicular traffic. Improvements to transport facilities are required in future.

7.2.3 Land Ownership

About ~~23~~22% of land in the Area is private land. A majority of these private land are concentrated in the lowland in the eastern portion of the Area which are mainly active/fallow agricultural land and village settlements.

7.2.4 Cemetery and Burial Grounds

Sandy Ridge Cemetery, with an area of about ~~928~~1 ha, ~~which is planned for development into an all-inclusive funeral venue with services, including columbarium, crematorium, funeral parlours, visitor service center and ancillary restaurant and convenience store,~~ may pose constraints on development in the surrounding area. Besides, the permitted burial grounds for indigenous villagers located in existing hilly areas have to be retained. Any development that will adversely affect those permitted burial grounds should be avoided.

7.2.5 Environmental, Sewerage and Drainage Constraints

There are a number of potential noise and air pollution sources within the Area including San Uk Ling Firing Range, Lo Wu MTR Station, the two helipads *at Sandy Ridge and near Man Kam To Operational Base*, Muk Wu Nga Yiu cement plant, Man Kam To ~~Boundary Control Point (BCP)~~, vehicle

holding area and Man Kam To Road, Lin Ma Hang Road and Ping Che Road; as well as a number of potential odorous sources which would affect the future developments in the Area, i.e. Shenzhen River, the planned Organic Waste Treatment Facilities Phase II, Sheung Shui Water Treatment Works, Shek Wu Hui Sewerage Treatment Works, Sheung Shui Slaughter House and existing livestock farms. The Area falls within the Deep Bay catchment, therefore, any new developments in the Area should include proper on-site ~~sewerage~~ **sewage** treatment facilities **or be connected to public sewer** to ensure ~~no net increase of pollution load will be discharged to the sensitive Deep Bay~~ **no additional pollution loading to Deep Bay**. The lowland areas near Shenzhen River in the north and the floodplains of Ping Yuen River in the east are prone to flooding and underlain by alluvial and colluvial soils and pond deposits. Such deposits are typically saturated and require soil treatments and earth filling for any development to take place.

7.2.6 Overhead Transmission Lines

There are two 400 kV overhead lines (including Tai Po – Daya Bay overhead line circuit) extending over Lo Shue Ling running north-south across the eastern portion of the Area. Also, there are 132 kV overhead lines passing through in a north-south direction. Chapter 7 of the Hong Kong Planning Standards and Guidelines should be observed when formulating development proposals.

7.2.7 Heritage and Cultural Features

The two Grade 2 historic buildings, i.e. MacIntosh Forts at Nam Hang and Nga Yiu, are located on the hilltops at the western and eastern portions of the Area overlooking the border area. The forts were two of the chain of police observation posts built during the period ~~1946~~**1949** to 1953. They remain as a reminder of the development of Hong Kong's military defence. ~~Given the historical interest, they are worthy of preservation and major developments in the vicinity should be avoided as far as possible.~~ **There are seven Grade 3 historic buildings located in the Area, i.e. Village house, No. 19 Muk Wu, Tin Hau Temple, Muk Wu Tsuen, Entrance Gate of Muk Wu Wai, Ng Ancestral Hall and Yeung Ancestral Hall in Fung Wong Wu, Village houses, Nos. 24-25 Fung Wong Wu and Village houses, Nos. 35-37, Fung Wong Wu.** In addition, ~~the Muk Wu Nga Yiu Kilns (site of archaeological interest), Tin Hau Temple in Muk Wu Tsuen and Entrance Gate of Muk Wu Wai and the ancestral halls at Fung Wong Wu are built heritages in the Area.~~ **Site of Archaeological Interest is archaeological heritage in the Area.**

8. GENERAL PLANNING INTENTION

The general planning intention of the Area is to promote cultural conservation, recreation tourism and provide suitable facilities to meet the territorial need and cross-boundary infrastructure. It is also the planning intention to retain good quality agricultural land for agricultural purposes or leisure farming and to preserve the existing heritage features and historic buildings.

9. LAND USE ZONINGS

9.1 “Village Type Development” (“V”) : Total Area 27.62 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 infrastructure 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 (NTEH). Other commercial, community and recreational uses may be permitted on application to the Board. In order to provide opportunities for short-term accommodation in existing NTEH, “Hotel (Holiday House only)” may also be permitted on application to the Board. The accommodation can complement any proposed agricultural and recreational uses to promote village life experience, leisure farming and agri-tourism.
- 9.1.2 There are four recognized villages within the Area, namely Muk Wu, Muk Wu Nga Yiu, Chow Tin Tsuen and Fung Wong Wu. The boundaries of “V” zones are drawn up having regard to the existing village ‘environs’, outstanding Small House applications, Small House demand forecast, local topography, existing settlement pattern, ecologically important areas and other site specific characteristics. Areas of difficult terrain, dense vegetation, burial grounds and stream courses have been avoided where possible. As parts of the villages may be subject to traffic noise impact from Lin Ma Hang Road and Ping Che Road, sufficient setback should be allowed where possible.
- 9.1.3 Except for those specified, no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum building height of 3 storeys (8.23 m) or the height of the building which was in existence on the date of first publication in the Gazette of the notice of the draft DPA plan, whichever is the greater.
- 9.1.4 In order to address the potential impacts from developments on existing stream courses in general, concerned departments including Agriculture, Fisheries and Conservation Department and Planning Department should be consulted when processing Small House grant and applications in close proximity to existing stream courses, to ensure that all relevant departments would have adequate opportunity to review and comment on the applications.
- ~~9.1.5 To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the building height restriction may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.~~

- 9.1.65 As diversion of streams or filling of pond 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.
- 9.1.6 Part of the area under this zoning falls on Muk Wu Nga Yiu Kilns Site of Archaeological Interest. Prior consultation with Antiquities and Monuments Office (AMO) should be made if any development, redevelopment or rezoning proposals might affect the above site of archaeological interest and their immediate environs.**
- 9.2 “Government, Institution or Community” (“G/IC”) : Total Area 11.28 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 the territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institutional establishments.
- 9.2.2 Major existing facilities under this zoning include Ling Ying Public School, ~~three~~ **two Water Supplies Department’s** pumping stations ~~and staff quarters at Muk Wu and River Ganges~~, Hong Kong Police Force (HKPF) Man Kam To Operation Base, MacIntosh Forts at Nam Hang and Nga Yiu, a livestock monitoring station, an animal inspection station and food inspection facilities at Man Kam To BCP. Two disused schools, i.e. ex-Sam Wo Public School at Lin Ma Hang Road near Muk Wu and ex-Lo Wu Public School, are also zoned “G/IC”. ~~Existing school buildings~~, **which** can be put to adaptive re-use for other GIC uses, including farmland rehabilitation and organic farm centre to promote eco-tourism. As detailed planning proceeds, land may be designated from other uses to this zoning to meet the envisaged demands of the growing population in the Area.
- 9.2.3 The MacIntosh Forts are located within Government land and currently occupied by radio and communication equipment for the use of HKPF. The “G/IC” zone is to reflect their current use. Given their historic building status, they are worthy of preservation. **According to the Northern Metropolis Development Strategy (NMDS), these two MacIntosh Forts, together with five others in other districts, are chosen to be opened up with provision of viewing facilities.** ~~and major developments in the vicinity should be avoided as far as possible.~~ Relevant Government departments would be consulted on any adaptive re-use proposal of them.
- 9.3 “Recreation” (“REC”) : Total Area 16.68 ha
- 9.3.1 This zone is intended primarily for recreational developments for the use of the general public. It encourages the development of active and/or passive recreation and tourism/eco-tourism. Uses in support of the recreational developments may be permitted subject to planning permission.
- 9.3.2 An area to the north of Ping Yuen River around Ta Kwu Ling Village and a small area to the east of Fung Wong Wu are designated as “REC” zone in

view of the existing extensive abandoned agricultural land adjoining traditional villages that may have opportunities to create visitor destinations that celebrate the heritage, village-life, agricultural and recreational assets of the area. Any potential adverse impacts on drainage, landscape and ecology that might be caused by new developments, of which planning permission is required from the Board, should be addressed by the applicant and examined by concerned Government departments during planning application stage.

- 9.3.3 As the area around Ta Kwu Ling Village may be subject to traffic noise impact from Lin Ma Hang Road and Ping Che Road, sufficient setback should be allowed for any planned sensitive uses from these potential polluting sources. Suitable noise mitigation measures such as self-protective building design, noise barriers, etc. would be required.
- 9.3.4 Recreational uses like holiday camp with sporting facilities are always permitted within this zone. It is intended to provide low-intensity recreational uses such as horse riding school, visitor centre, local historical museum, camping ground, recreational facilities or adventure park that are primarily outdoor nature-based activities. The recreational areas are intended to integrate with other recreational facilities such as the hiking/heritage/bicycle trails promoting low-intensity tourism while preserving natural and rural character. However, the recreational development in this area should be restricted to low-intensity development so as not to overload the infrastructure of the area.
- 9.3.5 No residential development (except NTEH) shall result in a total development in excess of a maximum plot ratio of 0.2 and a maximum building height of 2 storeys. ~~To provide flexibility for innovative design adapted to the characteristics of particular sites, minor relaxation of the plot ratio and building height restrictions may be considered by the Board through the planning permission system. Each proposal will be considered on its individual planning merits.~~
- 9.3.6 As diversion of streams or filling of pond 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.
- 9.4 “Other Specified Uses” (“OU”) : Total Area 108.96 ha

The planning intention of this zone is to provide land for specific uses in the Area. This zone covers land annotated for the following specific uses:

“OU (Boundary Crossing Facilities)” (“OU(BCF)”) : Total Area 10.15 ha

- 9.4.1 This zone is intended primarily for the development of boundary crossing facilities. The existing Lo Wu and Man Kam To BCPs are designated under this zone. Uses that are related to boundary crossing facilities are permitted under this zone.

“OU (Cemetery, Columbarium, Crematorium and Funeral Related Uses)”: Total Area 92.08 **81.49** ha

9.4.2 This zone is intended primarily for the provision of land for cemetery and related ~~uses. facilities including columbarium, crematorium and funeral parlours and other related uses, and a visitor center, ancillary restaurant and convenience store serving the needs of the general public.~~ The existing Sandy Ridge Cemetery is included under this zone ~~and is reserved for cemetery and related uses.~~

9.4.3 ~~An engineering feasibility study on the site formation and associated infrastructural works for development of columbarium, crematorium and related facilities was completed. Detailed design including detailed visual, environmental and traffic impact assessments on the site formation and associated infrastructural works has been commenced in July 2013. Moreover, crematorium is a designated project under the Environmental Impact Assessment Ordinance (EIAO) such that the buffer distance and appropriate mitigation measures would be required, subject to confirmation by an EIA study under EIAO. To mitigate concern on visual impact, the number of building blocks should be minimized to allow integrated landscaping and reduced massing of buildings across the site. In this regard, a detailed landscape plan is required to address the impact of the development on the surrounding environment.~~

“OU (Innovation and Technology)” (“OU(I&T)” : Total Area 10.59 ha

9.4.3 *The site, situated to the north of Man Kam To Road and southeast of Yuen Leng Chai and MacIntosh Fort (Nam Hang), at Sandy Ridge within the Northern Metropolis, near Lo Wu is zoned “OU” annotated “I&T” (“OU(I&T)”) primarily intended to provide development space for data centres and related purposes.*

9.4.4 *An Engineering Feasibility Study (EFS) has been conducted and demonstrated that the proposed data centres and related uses with a maximum Gross Floor Area (GFA) of 250,000m² and a maximum building height of 115mPD is technically feasible at the site. Further increase in GFA would be subject to confirmation of the technical feasibility at the detailed design stage.*

9.4.5 *The development parameters and layout for individual land parcel(s) will be subject to detailed design by the future project proponent(s). Necessary restrictions may be imposed through relevant statutory and/or administrative control in order to ensure the development is under proper control.*

“OU (Railway)” : Total Area 6.73 ha

9.4.46 A strip of land to the east of Ng Tung River is zoned “OU(Railway)” primarily for the railway track of the Mass Transit Railway (East Rail Line). The remaining railway alignment within the other zone is either elevated or at grade.

9.5 “Agriculture” (“AGR”) : Total Area 59.73 ha

- 9.5.1 This zone is intended primarily to retain and safeguard good quality agricultural land, farm 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.
- 9.5.2 Majority of the agricultural land of good quality are found in lowland areas in the west and central parts of the Area. Also, parcels of agriculture land along Lin Ma Hang Road have been converted to aquarium business. With basic agricultural infrastructure, including irrigation facilities, fallow arable land can be easily rehabilitated for agricultural purpose. On the other hand, the agricultural land around villages has the potential to provide low-intensity leisure farming or organic farming to promote village life experience.
- 9.5.3 The “AGR” zones near Muk Wu (along Lin Ma Hang Road) and near Lo Shue Ling (southwest of Chow Tin Tsuen) are surrounded by active and fallow agricultural land and are located in a rural setting, despite sporadic sites along Lin Ma Hang Road near San Uk Ling which are currently used for open storage. It is considered that these areas are not suitable for uses that would cause adverse environmental and traffic impacts such as warehouse or port back-up uses.
- 9.5.4 As diversion of streams or 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 for genuine agricultural practice including laying of soil not exceeding 1.2m in thickness for cultivation, and construction of agricultural structure with prior written approval from the Lands Department is exempted from the control.
- 9.5.5 Part of the area under this zone falls on Muk Wu Nga Yiu Kilns Site of Archaeological Interest. Prior consultation with AMO should be made if any development, redevelopment or rezoning proposals might affect the above site of archaeological interest and its immediate environs.***

9.6 “Green Belt” (“GB”) : Total Area 107.35 ha

- 9.6.1 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.
- 9.6.2 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.
- 9.6.3 The “GB” zone mainly covers the mountainous areas west of the boundary crossing at Man Kam To and in Lo Shue Ling in the east, the densely vegetated areas which include fung-shui woodlands that are mainly scattered around the village settlements including Chow Tin Tsuen and Muk Wu and

the permitted burial grounds for indigenous villagers. The fung-shui woodlands near Chow Tin Tsuen and Muk Wu are zoned “GB” due to their low to moderate ecological value, with low plant diversity and high susceptibility to human disturbance.

- 9.6.4 As diversion of streams, filling of land/pond or 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.

9.7 “Conservation Area” (“CA”) : Total Area 4.24 ha

- 9.7.1 The planning intention of this zone is to conserve the ecological value of wetland and fish ponds which form an integral part of the wetland ecosystem. The “no-net-loss in wetland” principle is adopted for any change in use within this zone. The primary intention is to discourage new development unless it is required to support the conservation of the ecological integrity of the wetland ecosystem or the development is an essential infrastructure project with overriding public interest.

- 9.7.2 A small patch of land at Yuen Leng Chai near the foothill of Sandy Ridge and west of MacIntosh Fort at Nam Hang is occupied by existing mitigation habitats and wetlands and is zoned “CA”. The fish ponds were created as an ecological mitigation area associated with the previous Shenzhen River regulation works. The “CA” zone will provide appropriate protection to the fishpond/wetland habitat at the site.

- 9.7.3 New residential development is not permitted under this zone. The redevelopment of an existing house shall not result in a total redevelopment in excess of the plot ratio, site coverage and height of the house which was in existence on the date of the first publication of the draft DPA plan.

- 9.7.4 Diversion of streams, filling of land/pond or excavation of land may cause adverse drainage impacts on the adjacent areas and adverse impacts on the natural environment. In view of the conservation value of the area within this zone, permission from the Board is required for such activities.

9.8 For the zones where minor relaxation of relevant restrictions are applicable, based on the individual merits of a development or redevelopment proposal, minor relaxation of plot ratio/building height restrictions as stated in the relevant paragraphs above may be considered by the Board on application under section 16 of the Ordinance. Each application will be considered on its own merits.

10. COMMUNICATIONS

10.1 Road Network

Man Kam To Road and Lin Ma Hang Road are the major distributors in the Area. Currently, the capacity of these vehicular accesses is considered adequate to serve the Area. The Area is also served by Ping Che Road and Lo Wu Station Road leading from the southern area. There are also narrow local van tracks

traversing the Area to serve the residents, especially the clustered population at Muk Wu, Chow Tin Tsuen and Fung Wong Wu.

10.2 Mass Transit Railway

Lo Wu, situated at the western part of the Area, is served by the Mass Transit Railway (East Rail Line) which provides an important transport link to Kowloon as well as between the HKSAR and the Mainland.

10.3 Public Transport

The Area is not well served by public transport facilities due to its remoteness and sparse population. There are public franchised bus (No. 73K) and green ~~minibus~~ *minibuses* (No. 59K and 59S) plying between the Area *Man Kam To Road* and Sheung Shui MTR Station. ***To cope with the future developments in the Area, the public transport arrangements shall be reviewed under the respective Traffic and Transport Impact Assessment (TTIA) study.***

11. UTILITY SERVICES

11.1 Sewerage and Drainage System

11.1.1 The drainage system of the Area comprises mainly natural channels. The runoff from developments can be conveyed to Shenzhen River through west tributary of Ping Yuen River. Drainage system of the Area was improved by the river training works at Ping Yuen River which were completed in 2006. Drainage improvement works at Sandy Ridge under 'Drainage Improvement in Northern New Territories - Package B' were implemented in 2011. Notwithstanding, major developments should be subject to Drainage Impact Assessment to address the local drainage impacts on areas in the vicinity, as well as the provision of proper drainage facilities for development such as detention tanks.

11.1.2 The Area falls within the Deep Bay catchment and therefore no additional pollution loading should be discharged into the Deep Bay as a result of any new and proposed developments. ~~The Government has at present no programme to further extend the public sewer to the Area.~~ ***Sewer upgrading and village sewerage improvement works in part of the Area are being planned/carried out by the Government.*** ~~Depending on the availability of public sewer in the future, the lack~~ ***Subject to the availability of public sewerage system, the inadequacies*** of sewerage infrastructure may form a constraint to new development in the area. ***Advice from the Environmental Protection Department (EPD) and DSD should be sought in assessing the sewerage implications of the proposed development. For the developments at locations where public sewerage is not available, on-site sewage treatment facilities are required.***

11.2 Water Supply

- 11.2.1 Potable water supply is generally available in the Area. The Area is served by Ping Che and Table Hill Fresh Water Service Reservoirs which are outside the Area. Currently, temporary mains fresh water is used for flushing as supply of seawater for flushing is not available. Upgrading of existing water supply system will be required for new developments. On the other hand, part of the Area falls within the consultation zone of Sheung Shui Water Treatment Works and this will form a constraint to new developments in the southern part of the Area.
- 11.2.2 Donjiang water transfer facilities including Muk Wu raw water pumping stations and various sizes of Donjiang water mains are located within the Area. ~~In addition, River Ganges River Indus Lowland raw water pumping stations and associated raw water mains are within the Area.~~ Advice from the Water Supplies Department should be sought in protecting these waterworks facilities.

11.3 Other Public Utility Services

- 11.3.1 Solid waste disposal relies on small refuse collection points scattered throughout the Area. Collected wastes are transported to the North East New Territories Landfill for disposal.
- 11.3.2 Electricity supply and telephone networks are available in the Area. There are existing 400kV overhead lines passing through Lo Shue Ling at the eastern part of the Area. There is however no existing piped gas system in the Area.

12. CULTURAL HERITAGE

- 12.1 ~~Graded historic buildings within~~**Within** the Area, ~~include~~ **there are** two Grade 2 historic buildings, i.e. MacIntosh Forts at Nam Hang and Nga Yiu; and ~~four~~ **seven** Grade 3 historic buildings, i.e. **Village House, No. 19 Muk Wu**, Tin Hau Temple in Muk Wu Tsuen, Entrance Gate of Muk Wu Wai, Ng Ancestral Hall and Yeung Ancestral Hall in Fung Wong Wu, Village houses, **Nos. 24-25 Fung Wong Wu and Village houses, Nos. 35-37, Fong Wong Wu**. ~~Also, the Muk Wu Nga Yiu Kilns (site of archaeological interest) fall within the Area. All the above site of archaeological interest and graded historic buildings/structures are worthy of preservation. The list of graded buildings will be updated from time to time.~~
- 12.2 **On 19 March 2009, the Antiquities Advisory Board (AAB) released the list of 1,444 buildings, and accorded grading to some buildings/structures.** The AAB also released a list of new items ~~in addition to the list of 1,444 historic buildings.~~ These items are subject to grading assessment **pending 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> **<https://www.aab.gov.hk/en/historic-buildings/results-of-the-assessment/index.html>**.

12.3 Muk Wu Nga Yiu Kilns Site of Archaeological Interest is also situated in the Area.

~~12.34~~ Prior consultation with the ~~Antiquities and Monuments Office~~ **AMO of the Development Bureau** of the ~~Leisure and Cultural Services Department~~ should be made, if any **works**, development, redevelopment or rezoning proposals ~~might~~ **may** affect **declared monuments, proposed monuments, the above graded historic buildings/structures, and sites graded by AAB, sites of archaeological interest or Government historic sites identified by AMO; the new items pending grading assessment or site of archaeological interest mentioned in paragraph 12.2 above; or any other buildings/structures identified with heritage value, both at grade and underground, and their/its immediate environs. Information of the declared monuments, proposed monuments, historic buildings and sites graded by the AAB, sites of archaeological interest and Government historic sites identified by AMO are available on the website of AMO: <https://www.amo.gov.hk/en/historic-buildings/heritage-sites-lists/index.html>.**

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 on land 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 draft DPA plan and which are not in compliance with the terms of the Plan may have adverse impact on the environment, drainage and traffic of the area. Although no action is required to make such use conform to the Plan, any material change of such use or any other development (except minor alteration and/or modification to the development of the land or

building in respect of such use which is always permitted) must be always permitted in terms of the Plan or, if permission is required, in accordance with a permission granted by the Board. The Board will consider these applications on their individual merits. Those alteration and/or modification works which may lead to an environmental improvement or upgrading to the Area may be considered favourably by the Board.

- 14.3 Planning applications to the Board will be assessed on individual merits. In general, the Board, in considering planning applications, will take into account all relevant planning considerations including guidelines published by the Board. 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, 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 land included in this Plan on or after the date of the first publication in the Gazette of the notice of the draft DPA plan may be subject to enforcement proceedings under the Ordinance. Any filling of land/pond, excavation of land or diversion of streams in the relevant zones on or after the date of the first publication in the Gazette of the notice of the draft DPA plan without permission from the Board may also be subject to enforcement proceedings. Moreover, there is a presumption against filling of ponds for temporary land uses/developments in conservation related zonings, such as "CA".

Agreement No. CE30/2023

Term Consultancy for Site Formation and Infrastructure Works for Proposed Housing and Other Developments in Zone 4 (2023 - 2027) - Feasibility Study

Task Order No. 1 – Study For I&T and Related Purpose Development at Sandy Ridge in North District



Planning Report for Proposed Amendments to the Approved Man Kam To Outline Zoning Plan No. S/NE-MKT/4

November 2024
(Ref: TR24A-04)

EXECUTIVE SUMMARY

- E1. The Chief Executive's 2023 Policy Address (PA 2023) promulgated that the Government will change the use of the 2 hectare (ha) formed platform of the former public columbarium project at Sandy Ridge for Innovation and Technology (I&T) and related uses given the sufficient supply of public niches in the future. Following 2023 PA, the Innovation, Technology and Industry Bureau (ITIB) proposed that the said site along with the expanded area on man-made slopes and a section of Sha Ling Road, totalling about 10 ha of area (the Site), has potential for data centre development. In December 2023, AECOM was instructed to ascertain the technical feasibility and support the amendments to the statutory plan for data centre development at the site. To unleash the development potential of the Site for I&T development, it is proposed to rezone it from "Other Specified Uses" ("OU") annotated "Cemetery, Columbarium, Crematorium and Funeral Related Uses" to "OU" annotated "Innovation and Technology" ("OU(I&T)"). Subsequently, taking into account the location, infrastructure planning, the supply of digital infrastructure and the industry's keen demand for digital infrastructure from the I&T industry, the Government decided that in addition to the 2 ha site, the adjoining man-made slopes can be used for data centres and related purposes to form a spade-ready site with a total area of about 10.59 ha, as announced in the PA 2024.
- E2. This Planning Report is prepared to support the proposed amendments to the approved Man Kam To Outline Zoning Plan (OZP) No. S/NE-MKT/4 by rezoning the Site from "OU" annotated "Cemetery, Columbarium, Crematorium, and Funeral Related Uses" to "OU(I&T)" to reflect the proposed data centre and related uses at the Site.
- E3. The Site is located in Sandy Ridge in a rural area of the northeast New Territories bordering Shenzhen. To the east, approximately 2 km away, lies the Man Kam To Boundary Control Point (BCP) and the west, approximately 2 km away, lies Mass Transit Railway (MTR) Lo Wu Station and Lo Wu BCP. The proposed data centre development at the Site aims to contribute to Hong Kong's positioning as an "International I&T Centre" promulgated under the National 14th Five-Year Plan by capitalising on opportunities in the Shenzhen-Hong Kong BCP Economic Belt in Shenzhen. As promulgated in the Northern Metropolis Action Agenda in 2023, the New Territories North New Town and Lo Wu/Man Kam To (LW/MKT) Area would be developed into a BCP business district and a base for emerging industries to conform to Hong Kong's new industry pattern of "South-North Dual Engine (finance-innovation and technology)" that can complement the I&T industry in San Tin Technopole, the Hong Kong-Shenzhen Innovation and Technology Park (HSITP) and as well as to support the collaboration and creates synergy with San Tin Technopole and Shenzhen I&T zone.

- E4. The proposed “OU(I&T)” will be subject to a maximum building height (BH) restriction of 115 mPD to provide design flexibility for future project proponent while ensuring compatibility with the surrounding environment. To demonstrate the feasibility of the proposed data centre development, an Indicative Scheme has been formulated with two Data Centre Blocks providing Gross Floor Area (GFA) of 196,000 m² and two ancillary Office Towers providing GFA of 54,000 m². The design of the Indicative Scheme draws upon benchmarking examples of similar Data Centre developments in Hong Kong to meet the operational requirements in the industry. It is estimated that the Indicative Scheme would generate about 1,870 employment positions.
- E5. The proposed amendments to OZP to facilitate data centre development at the Site can be justified based on several factors as follows.
- E6. Firstly, it effectively responds to the PA on I&T development, addressing the need for repurposing the former columbarium site at Sandy Ridge to I&T and related uses. Secondly, it aligns with the national and local policy direction of developing Hong Kong into an international I&T centre, supporting Hong Kong’s strategic new role as bestowed in the National 14th Five Year Plan. It also conforms with the planning objective of Embracing New Economic Opportunities and Challenges under the Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030. Additionally, considering the significant growth and importance of the data centre industry as highlighted under the Hong Kong I&T Development Blueprint, the proposed data centre development could respond to the urgent market demand for data centres. The Site’s “spade-ready” condition allows for an optimised development process with no need for land resumption and significant site formation or infrastructure upgrading works.
- E7. Moreover, the Site is an ideal location for footloose industries such as data centre with low traffic demand. This ensures that the data centre development will not have a substantial adverse impact on local traffic or the surrounding community. Furthermore, the proposed development demonstrates compatibility with the surrounding land uses and is envisioned to integrate harmoniously into the nearby planned development in the Northern Metropolis in the future. Lastly, technical assessments conducted under this Agreement demonstrate that the proposed data centre development will not result to any insurmountable adverse impact in various aspects.

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ABBREVIATION

<u>Abbreviation</u>	<u>Full title</u>
AGR	“Agriculture”
BCP	Boundary Control Point
BD	Buildings Department
BH	Building Height
BHR	Building Height Restrictions
CA	“Conservation Area”
CAP	Closed Area Permit
CEDD	Civil Engineering and Development Department
DoT	Definition of Terms
DPO	Digital Policy Office
EIA	Environmental Impact Assessment
EP	Environmental Permit
EPD	Environmental Protection Department
EVA	Emergency Vehicular Access
FEHD	Food and Environmental Hygiene Department
FTA OZP	Approved Fu Tei Au and Sha Ling OZP no. S/NE-FTA/18
F-t-F	Floor-to-floor
GB	Green Belt
GFA	Gross Floor Area
ha	hectare
HKPF	Hong Kong Police Force
HKPSG	Hong Kong Planning Standards and Guidelines
Hong Kong 2030+	Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030
HSITP	Hong Kong-Shenzhen Innovation and Technology Park
I&T	Innovation and Technology
I&T Blueprint	Hong Kong I&T Development Blueprint
ICT	information and communications technology
ITIB	Innovation, Technology and Industry Bureau
LW/MKT	Lo Wu / Man Kam To
mPD	metres above principal datum
MKT OZP	Man Kam To Outline Zoning Plan
MTR	Mass Transit Railway
NM	Northern Metropolis
NTN	New Territories North
ODP of GBA	Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area

OU	“Other Specified Uses”
OU(I&T)	“Other Specified Uses” annotated “Innovation and Technology”
OZP	Outline Zoning Plan
PA 2023	The Chief Executive’s 2023 Policy Address
PA 2024	The Chief Executive’s 2024 Policy Address
PR	Plot Ratio
SBDG	Sustainable Building Design Guidelines
TPB	Town Planning Board
WCP	Wetland Conservation Parks
V	“Village Type Development”

1. INTRODUCTION

1.1. Background of the Study

- 1.1.1. AECOM Asia Co Ltd (AECOM) has been commissioned by the Civil Engineering Office, Civil Engineering and Development Department (CEDD) to undertake Agreement No. CE30/2023 (CE) - Term Consultancy for Site Formation and Infrastructure Works for Proposed Housing and Other Developments in Zone 4 (2023-2027) - Feasibility Study (hereafter referred as “the Project”), Task Order No.1 – Study for I&T and Related Purpose Development at Sandy Ridge in North District (hereafter referred as “the Study”) in consultation with Digital Policy Office (DPO), Innovation, Technology and Industry Bureau (ITIB).
- 1.1.2. According to the Chief Executive’s 2023 Policy Address (PA 2023) announced on 25 October 2023, having reviewed the plan to build a public columbarium at Sandy Ridge in the North District, the Government will change the use of the 2 hectare (ha) site for I&T and related purposes given the sufficient supply of public niches in the future.
- 1.1.3. Following PA 2023, ITIB proposes that the Site at Sandy Ridge has the potential for data centre development taking into account the location of the Site, infrastructure planning, lead time for developing the Site, commercial, transport and community facilities in the vicinity, as well as the industry's keen demand for similar facilities. Data centre is considered as one of the key supporting facilities to Hong Kong’s pillar industries and other emerging service industries, particularly financial services & insurance and trading & logistics sectors. Increasing demand for data centre is observed as various sectors rely on information and communications technology (ICT), e-commerce and cloud computing.¹

¹ Source: Office of the Government Chief Information Officer (OGCIO) – Why Hong Kong?
<https://www.datacentre.gov.hk/en/whyhk.html>

- 1.1.4. According to a review study commissioned by DPO in 2020, in Hong Kong, the data centre market is primarily supply-driven. Currently, there are about 60 data centres in Hong Kong with an estimated total floor space of about 970,000 m². In a survey to data centre operators conducted by DPO in 2023, the respondents responded that a total GFA of about 300,000 m² will be required for their data centre development in future. Meanwhile, with reference to a recent market report, the data centre occupancy rate in Hong Kong is estimated to rise from about 80% in 2021 to about 95% in 2028. According to another market report, various smart city initiatives and the increase in demand of smart devices, coupled with expansion of 5G services, have contributed to the growth of data centre facilities in Hong Kong. With digital economy and innovation and technology (I&T) driving the future growth of Hong Kong, the demand for data centre facilities in Hong Kong is expected to remain strong.
- 1.1.5. The Sandy Ridge site was originally formed for the development of columbarium with a formed flat platform of about 2 ha at an elevation of about 50 metres above principal datum (mPD) which was intended for pickup/drop off area serving the columbarium; and man-made slopes which were intended for the columbarium blocks, ancillary offices and the garden of remembrance. Having regard to the existing site condition, including the extent of the existing formed platform and man-made slope as well as the access road leading to the Sandy Ridge site, the development site area has been expanded to about 10 ha (the Site) covering larger extent of the public columbarium site to facilitate more efficient land utilisation. AECOM was instructed to ascertain the technical feasibility and support the amendments to the statutory plan for data centre development at the Site.
- 1.1.6. Subsequently, taking into account the location, infrastructure planning, the supply of digital infrastructure and the industry's keen demand for digital infrastructure from the I&T industry, the Government decided that in addition to the 2 ha site, the adjoining man-made slopes can be used for data centres and related purposes to form a spade-ready site with a total area of about 10.59 ha, as announced in the PA 2024.
- 1.1.7. The Site comprises wholly Government land on and along Sha Ling Road in Sandy Ridge in a rural area of the northeast New Territories near Shenzhen. To the east, approximately 2 km away, lies the Man Kam To Boundary Control Point (BCP) and the west, approximately 2 km away, lies Mass Transit Railway (MTR) Lo Wu Station and Lo Wu BCP. The Site is currently vacant and formed.

1.1.8. The Site falls entirely within the project boundary under CEDD's separate study (Agreement No. CE1/2013 (CE) Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery – Design and Construction), the Environmental Impact Assessment (EIA) Report was approved under the EIA Ordinance on 8 August 2016. Environmental Permit (EP) No.: EP-534/2017 for the works area at Sandy Ridge granted on 7 April 2017 to CEDD for the Site formation and associated infrastructure works under Agreement No. CE1/2023 (CE). Subsequently, a variation of EP and two further EPs (FEP) were granted. The latest EP and FEP are EP No.: EP-01/534/2017/A and FEP-01/534/2017/A. Site formation works were carried out under two works contracts which are Contract No. CV/2016/01 and CV/2017/02 and the construction works have been completed. The Site of the proposed data centre development falls entirely within area covered under the above EIA report.

1.1.9. This study shall cover the following tasks:

- a. Review the land uses of about 10 ha for the development of data centre in Sandy Ridge;
- b. Technical reviews on site formation, traffic, environment, drainage, sewage, water supply networks, power supply and telecommunication demand and landscape and visual aspects and other requirements at the existing site; and
- c. Proposed suitable mitigation measures, if applicable, to relieve the potential impacts due to this development.

1.2. Purpose of the Report

1.2.1. To facilitate development of the proposed data centre, it is proposed that the Site should be rezoned from currently "Other Specified Uses" ("OU") annotated "Cemetery, Columbarium, Crematorium and Funeral Related Uses" on the Approved Man Kam To Outline Zoning Plan (OZP) No. S/NE-MKT/4 to "OU" annotated "Innovation and Technology" ("OU(I&T)"). The purpose of this report is to facilitate support such proposed amendment by setting out the planning context and infrastructural/technical basis for the proposed development and giving recommendations for proposed amendments to the OZP.

1.2.2. The rezoning boundary is shown in **Figure 1.1**.

1.3. Structure of the Report

1.3.1. This Planning Report is structured into 6 sections including this introductory section:

- **Section 1 – Introduction:** To introduce and provide the background of the Project. The scope of this Report also outlined.
- **Section 2 – Review of Site and Planning Context:** To review the Site and its planning context for identification of key issues and constraints to be addressed in formulating the development layout for the Development; and
- **Section 3 – Proposed Development Layout for the Development and Infrastructure Works:** To present the Indicative Scheme, including the indicative development layout, development parameters and design principles;
- **Section 4 – Proposed Amendments to the Statutory Plan:** based on the Indicative Scheme for the Site and the required infrastructure, this Section will propose the amendments required to the OZP;
- **Section 5 – Planning Justifications:** To justify the proposed amendments to facilitate the Indicative Scheme at the Site and the proposed amendments to the OZP; and
- **Section 6 – Conclusion:** To summarise the findings of this Planning Report.

2. SITE CONTEXT

2.1. Government Initiatives and Strategic Planning Context

The Chief Executive's Policy Address

- 2.1.1. According to the PA 2023 announced on 25 October 2023, after reviewing the plan to build a public columbarium at Sandy Ridge in the North District, the Government will change the use of the 2 ha site for I&T and related purposes, considering the sufficient supply of public niches in the future without affecting the current niches application. According to the data from Food and Environmental Hygiene Department (FEHD), starting from mid-2020, all applicants are allocated with public niches with no waiting time.
- 2.1.2. Following PA 2023, ITIB proposes that the Site has the potential for data centre development taking into account the location of the Site, infrastructure planning, lead time for developing the Site, commercial, transport and community facilities in the vicinity, as well as the industry's keen demand for similar facilities².
- 2.1.3. Subsequently, taking into account the location, infrastructure planning, the supply of digital infrastructure and the industry's keen demand for digital infrastructure from the I&T industry, the Government decided that in addition to the 2 ha site, the adjoining man-made slopes can be used for data centres and related purposes to form a spade-ready site with a total area of about 10.59 ha, as announced in the PA 2024.

Hong Kong Innovation and Technology Development Blueprint

- 2.1.4. To support Hong Kong's vision towards an international I&T centre as outlined in the "National 14th Five-Year Plan", the Hong Kong Government promulgated the Hong Kong I&T Development Blueprint (I&T Blueprint) in 2022 to set out major policies under four broad development directions.

²The Secretary for Innovation, Technology and Industry visits Sandy Ridge in North District on new land supply for innovation and technology use:
<https://www.info.gov.hk/gia/general/202312/01/P2023120100606.htm?fontSize=1>

2.1.5. In terms of I&T infrastructure and related land supply, as highlighted in the I&T Blueprint, Hong Kong has a significant demand for data centre facilities. The 2023 Global Data Centre Market Comparison ranked Hong Kong's data centre market fourth globally and second in the Asia-Pacific region. Recognising the urgency to address the immediate demand for data centres, The I&T Blueprint proposes a strategy called "To Accelerate the Development of the Digital Economy and Smart City to Enhance Citizens' Quality of Life". As part of this strategy, the I&T Blueprint projects that the data centre's floor area in Hong Kong will increase by over 700,000 m². between 2022 and 2026. By leveraging the Site, Hong Kong can expedite the provision of data centre facilities to address the immediate demand, as outlined in the I&T Blueprint.³

Hong Kong 2030+

2.1.6. The city's Territorial Strategic Plan, "Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030" (Hong Kong 2030+), proposed three overarching Building Blocks (Planning Objectives). Notably, Building Block 2 "Embracing New Economic Opportunities and Challenges" emphasises the provision of adequate and suitable spaces for cultivating a dynamic I&T ecosystem of which data centres, smart factories, modern industrial estates, and I&T parks are highlighted as essential hardware for a I&T ecosystem and the realisation of Industry 4.0.

2.1.7. The spatial implications of the Planning Vision and Building Blocks have been translated into a proposed spatial framework consisting of the Two Strategic Growth Areas: The "Harbour Metropolis" at the south and the "Northern Metropolis" at the north. Within this framework, the Northern Metropolis (NM) is positioned as the second economic engine for Hong Kong, with a specific focus on I&T industries. Locating within the Northern Metropolis, the Site holds significant potential for engaging in I&T industries, promoting synergistic collaboration with I&T developments in both Hong Kong and Shenzhen.

Northern Metropolis

2.1.8. The vision of NM is to develop as a "new international I&T city". According to the NM Action Agenda, the NM is divided into Four Major Zones. The Site falls within the "Boundary Commerce and Industry Zone", possessing significant locational advantages to support the boundary commerce and emerging industries and aligns with Hong Kong's new role as an international I&T centre as outlined in the National 14th Five-Year Plan.

³ Source: <https://www.cushmanwakefield.com/en/spain/insights/global-data-center-market-comparison>

- 2.1.9. The Site is situated between Lo Wu BCP and Man Kam To BCP. Lo Wu BCP connects to the Luohu District in Shenzhen, which is an established area with a significant presence of Hong Kong enterprises and communities. According to Shenzhen's planning, the Luohu Port Area would be delegated for the businesses of cross-boundary consumption, technological cooperation, creative design, and cultural tourism. Meanwhile, Man Kam To BCP connects to the Wenjindu Port Area in Shenzhen, which is designated for research and development services, the transformation of technological achievements, and professional consultancy. In addition, one of the proposed action items under the Northern Metropolis Development Strategy is to study the relocation of existing fresh food boundary-crossing and inspection facilities at MKT BCP to land adjacent to Heung Yuen Wai Control Point. This is to facilitate the functional transformation of MKT BCP and unleash the development potential at Lo Wu / Man Kam To (LW/MKT) area, including the subject site.
- 2.1.10. The NM Action Agenda positions the development of New Territories North (NTN) New Town and LW/MKT Area as a BCP business district and a base for emerging industries that can complement the I&T industry in San Tin Technopole. These emerging industries include food technology, green/environmental industry and advanced construction industry. The developments at the Site could provide I&T infrastructure such as data centre for cross-boundary businesses and emerging industries, supporting the positions of NTN New Town and LW/MKT in the NM. Given the Site's immediate availability and its prime location in proximity of Hong Kong-Shenzhen boundary, it is believed that the proposed data centre at the Site can offer a wider spectrum of land choices, beyond the San Tin Technopole and the HSITP, to the market for I&T and related purpose development, in respect of the strong demand as advised by ITIB/DPO. Moreover, given the large scale I&T development and location of San Tin Technopole, the Site also has the potential in serving San Tin Technopole as supporting back office/supporting data processing uses, in order to create synergy between the Site and San Tin Technopole.
- 2.1.11. The Luohu district located on the opposite side of the Shenzhen River is the earliest developed area in Shenzhen. In line with the NM Action Agenda, there is a vision for collaboration between the NTN New Town and LW/MKT and the development of the Luohu district in Shenzhen. The NTN New Town and LW/MKT aims to foster growth of various service to cater the demand for cross-boundary service such as business services, retail financial services, healthcare services and leisure consumption, etc. Given the Site's proximity to the Lo Wu BCP, the Site has the potential to complement the development of the area by providing I&T infrastructure to support future cross-boundary business corporate in the area.

- 2.1.12. Directly connected to the LW/MKT area via Man Kam To Road, the Site has the potential to provide employment opportunities for future residents of NM. Conversely, future development of NM can serve as a potential residential area for talents working at the Site. Simultaneously, the development on the Site generates housing and commercial demand, thereby contributing to the growth of the NM.

Sha Ling/Nam Hang Nature Park

- 2.1.13. The NM Development Strategy advocates a Proactive Conservation Policy approach to natural conservation in the NM. In line with this approach, the government has proposed the resumption of private wetlands and fish ponds with conservation value for Nature Park development. Five Nature Parks are proposed, namely Nam Sang Wai Wetland Conservation Park, Sam Po Shue Wetland Conservation Park, Hoo Hok Wai Wetland Conservation Park, Hong Kong Wetland Park Expansion Area, and Sha Ling/Nam Hang Nature Park. These parks, along with the existing Hong Kong Wetland Park, Mai Po Nature Reserve and Long Valley Nature Park, are intended to form a Wetland Conservation Parks (WCP) System spanning approximately 2,000 hectares.
- 2.1.14. Under the “Strategic Feasibility Study on the Development of Wetland Conservation Parks System under the NM Development Strategy” conducted by the Agriculture, Fisheries and Conservation Department (AFCD), the “CA” zone of wetland and fishpond at Yuen Leng Chai (圓嶺仔), which is located immediately west of the Site, is recommended to be incorporated into the adjacent Hoo Hok Wai WCP. It is to ensure that the wetland conservation work and ecological connectivity of the entire area can be planned and managed in a more holistic manner and to optimise administration efficiency. The potential impacts of the proposed development to Yuen Leng Chai were evaluated in the impact assessments.

2.2. The Site and Its Surroundings

Existing Land Use Zoning and OZP

- 2.2.1. The Site, with an area of about 10.59 ha, falls within an area zoned “OU” annotated “Cemetery, Columbarium, Crematorium and Funeral Related Uses” on the approved Man Kam To OZP No. S/NE-MKT/4. It is located in a secluded location surrounded by vegetated hillslopes of Sandy Ridge and public cemetery.
- 2.2.2. The site location and existing land use zoning are shown in **Figure 1.1**.

Physical Context and Site Topography

- 2.2.3. The Site, is located in the middle of Sandy Ridge Cemetery (comprises the Sandy Ridge Cemetery and Sandy Ridge Urn Cemetery), which is gazetted under Public Health and Municipal Services Ordinance (Cap. 132) for the development of cemetery and related facilities including columbarium, crematorium and funeral parlours, etc. Sandy Ridge Cemetery consists mainly of hillslopes and graves/urns, with no significant building structures.
- 2.2.4. The Site is currently formed and vacant. No graves/urns were found within the Site.
- 2.2.5. Apart from the original alignment of the Sha Ling Road⁴, majority of the Site falls within the Sandy Ridge Cemetery (comprises the Sandy Ridge Cemetery and Sandy Ridge Urn Cemetery). The deposit area of the Sandy Ridge Cemetery and Sandy Ridge Urns Cemetery are shown in **Figure 1.1**.
- 2.2.6. The Site also falls entirely within the project area intended for public columbarium development. The associated site formation works were completed in 2021. With the proposal not being realised due to sufficient supply of public niches in the future, the Site remains vacant with a platform formed at an elevation of about 50 mPD and man-made slopes.

⁴ Road works had been carried out on Sha Ling Road in 2015 under CEDD’s separate study (Agreement No. CE1/2013 (CE) Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery – Design and Construction).

2.2.7. The Site is situated in a rural area of the northeast New Territories bordering Shenzhen. To the northeast, approximately 2km away, is Man Kam To BCP and to the southwest, approximately 2km away, are MTR Lo Wu Station and Lo Wu BCP. To the further southwest across Ng Tung River are hillslopes of Tai Shek Mo situated within the Approved Ma Tso Lung and Hoo Hok Wai OZP No. S/NE-MTL/3. The surrounding areas have the following characteristics:

- (a) to the north are a grassland in Nam Hang zoned “Green Belt” (“GB”) on the OZP at 50.6 mPD. To the further north across Shenzhen River are the high-rise residential and commercial clusters in Luohu District, Shenzhen;
- (b) to the east and northeast are natural slopes of Sandy Ridge; to the further east are some active/fallow agricultural land and ancillary temporary structures for agricultural purposes. To the further northeast are Man Kam To BCP and rural settlement of San Uk Ling within an area zoned ‘Village Type Development’ (“V”) on the approved Fu Tei Au and Sha Ling OZP no. S/NE-FTA/18 (FTA OZP);
- (c) to the south are some temporary structures and squatters. Across Man Kam To Road to the further south within the area of the FTA OZP are some brownfield operations (including concrete batching plant, warehouses, storage/open storage yards and logistics centres) and government facilities (e.g. Organic Resources Recovery Centre Phase 2 and a border district police headquarters zoned “Government, Institution or Community”); and
- (d) to the northwest are a wetland with mitigation habitats in Yuen Leng Chai zoned “Conservation Area” (“CA”) at 5.9 mPD and MacIntosh Fort (Nam Hang) (Grade 2 Historic Building). To the further west is Lo Wu BCP and some low-rise domestic structures of Lo Wu. Across Ng Tung River is the hillslopes of Tai Shek Mo.

2.2.8. The surrounding area of the Site is in **Figure 2.1**.

2.3. Statutory Planning Context

- 2.3.1. According to the Notes of the OZP, the planning intention of the “OU” annotated “Cemetery, Columbarium, Crematorium and Funeral Related Uses” zone is primarily intended for *the provision of land for cemetery, columbarium, crematorium, and funeral-related facilities serving the needs of the general public*. There is no provision for I&T and related development under the said zone. Rezoning of the Site to an appropriate zoning on the OZP is therefore required to facilitate the future I&T development.

2.4. Land Status

- 2.4.1. The Site is located on Government land. It is envisaged that there would be no land clearance and land resumption in the implementation process.
- 2.4.2. Majority part of the Site is also located within the gazetted boundary of Sandy Ridge Cemetery and Sandy Ridge (Urn) Cemetery under Public Health and Municipal Services Ordinance (Cap. 132). Degazette procedure to remove the area of the Site from the Sandy Ridge Cemetery and Sandy Ridge (Urn) Cemetery boundary would be required.

2.5. Height Profile of the Surrounding

- 2.5.1. The Site is in the middle of Sandy Ridge with an undulating height profile decreasing from the peak (128.9mPD) to 85.6mPD from the west to the east along Man Kam To Road. Three hills of varying height of 98.4mPD, 61.1mPD and 50.6mPD enclosing the Site on its south and north. Nam Hang (13.2mPD) and Yuen Leng Chai (5.9mPD) can be found as two lower points immediately to the north and the west of the Site. The height profile of the surroundings is shown in **Figure 2.2**.

2.6. Site Accessibility and Connectivity

- 2.6.1. The Site is accessible via Sha Ling Road (a single-two lane road) leading to Man Kam To Road and further connects with the road networks of the North District (**Plate 2.1**). The Site is in proximity with Lo Wu BCP (about 2 km away) and Man Kam To BCP (about 2 km away), requiring only about 5-minute drive to Man Kam To BCP and Lo Wu BCP.

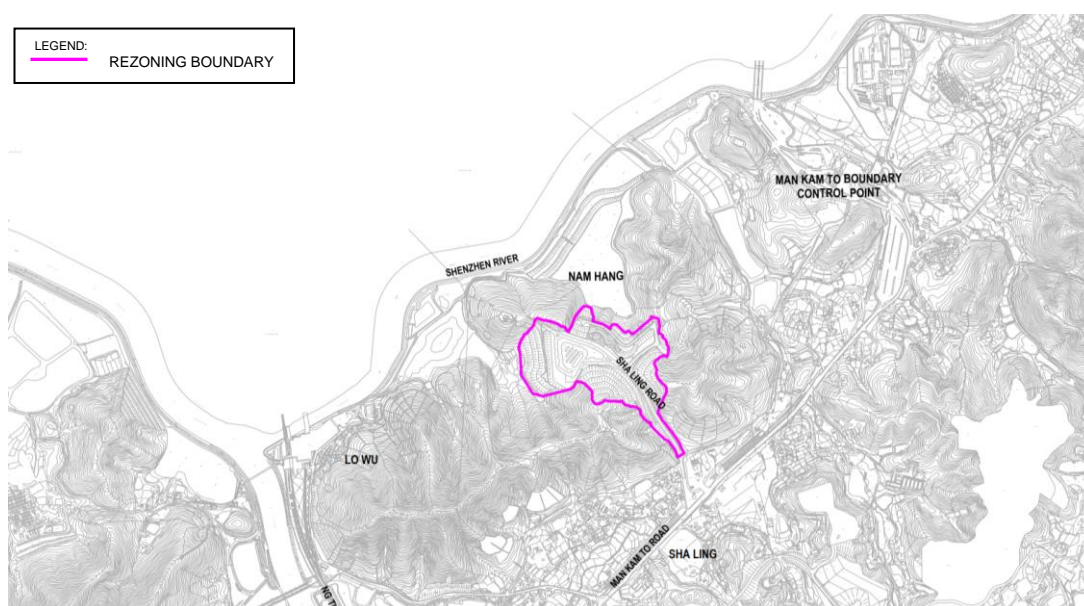


Plate 2.1 – Location of the Sandy Ridge Site

2.6.2. In terms of public transport connection, the area is currently served by taxis, Green minibus (“GMB”) and franchised buses. GMB services plying through Man Kam To Road. The franchised bus and GMB routes run along Man Kam To Road, Jockey Club Road, Po Shek Wu Road, Po Wan Road, San Fung Avenue, Lung Sum Avenue and San Wan Road. These routes allow visitors travelling to Sheung Shui Town Centre, MTR Sheung Shui Station, Man Kam To BCP, Lin Ma Hang and Heung Yuen Wai BCP. The existing franchised bus and GMB services are summarised in **Table 2.1** below and in **Figure 2.3**.

Table 2.1 – Existing Franchised bus and GMB services

Route No.	Origin/Destination
Existing Franchised Bus	
73K	SHEUNG SHUI / MAN KAM TO (SAN UK LING)
Existing Green Minibus (GMB)	
59K	SHEUNG SHUI / LIN MA HANG
59S	SHEUNG SHUI / HEUNG YUEN WAI BCP

2.6.3. The future working population to / from the proposed development will be served by alternative transport services, such as non-franchised shuttle bus services provided by the development’s operator with sufficient pick-up / drop-off or transport facilities to be provided within the development. Subject to the actual design and operational transport demand of the future development, the share of each transport mode, and transport facilities within the development may be further assessed in consultation with relevant parties.

2.7. Development Opportunities and Constraints

- 2.7.1. PA 2023 announced the change of plan for Sandy Ridge Site from public columbarium use to I&T and related use development considering that there is sufficient supply of public niches in the future. Following PA 2023, ITIB considered the Site is suitable for data centre development.
- 2.7.2. The I&T Blueprint also emphasised the significant demand for data centre facilities in Hong Kong. The Site could be leveraged to expedite the provision of data centre facilities as outlined in the blueprint. The Government's decision as promulgated in PA 2023 to review the Site for I&T and related uses also aligned with the NM's vision to develop as “new international I&T city” and complement the positioning of nearby planned development. The proposed data centre at the Site can offer a wider spectrum of land choices beyond the San Tin Technopole and the Hong Kong-Shenzhen Innovation and Technology Park (HKSITP) to the market for I&T and related purpose development, in respect of the strong demand as advised by ITIB/DPO. Moreover, given the large scale I&T development and location of San Tin Technopole, the Site also has the potential in serving San Tin Technopole as supporting back office/supporting data processing uses, to order to create synergy between the Site and San Tin Technopole.
- 2.7.3. The strategic location of the Site within the Boundary Commerce and Industry Zone of NM, in close proximity to Lo Wu BCP, Man Kam To BCP and the Luohu district in Shenzhen, presents significant development potential. The proximity to the Hong Kong Shenzhen boundary also offers potential for cross-boundary business opportunities and collaboration. Moreover, the Site's “spade-ready” condition provides a valuable opportunity for immediate development without the need for a lengthy land resumption process or extensive site formation and infrastructure works, enabling a timely response to market demand in data centre as highlighted under the I&T Blueprint.
- 2.7.4. With regards to the Site's proximity to area with ecological value (i.e. Yuen Leng Chai and Nam Hang) and its limited accessibility, I&T uses such as data centre that do not generate substantiate traffic/people flow is favourable. Also, due consideration is given in terms of building height profile of the proposed data centre development interfacing with the adjoining “CA” and “GB” zones.

3. PROPOSED INDICATIVE SCHEME FOR THE DEVELOPMENT

3.1. Development Proposal and Major Development Parameter

- 3.1.1. To demonstrate the feasibility of the proposed amendments, an Indicative Scheme has been formulated for the proposed data centre and ancillary office development, as shown in **Figure 3.1**, as a single development lot for assessment purpose. With this arrangement, spaces for internal road, emergency vehicular access (EVA) and infrastructure facilities could be minimised thus allowing more flexible arrangement of Data Centre and Office Blocks and open space.
- 3.1.2. The Indicative Scheme for the proposed data centre and ancillary office development consists of two blocks of data centres, an office complex consisted of two Office Towers with carpark and office at four lower ground levels (LGs). The Site consist of about 80% of cut slope and fill slope area, which impose certain engineering constraints to the developable area. Considering the weight of the data centre, the data centre blocks are preferred to be allocated on the formed platform with a base level of 50 mPD occupying the majority of the flat area of the Site, with some premises on the fill slope at the northeastern side. Meanwhile, the office complex with greater flexibility for better façade design and less loading requirement is allocated on the fill slope at the western side of the Site, establishing an aesthetic appeal of the proposed data centre facing the “CA” zone at Yuen Leng Chai and the Shenzhen-Hong Kong boundary.
- 3.1.3. Data Centre of Global Switch Tseung Kwan O InnoPark was reviewed and referenced to for the proposed parameters of the data centre development, which includes Development GFA 70,545 m², typical floor area of 12,449 m², and floor-to-floor height of 6m, and an average building height of 8 storeys. The Indicative Scheme referencing the major parameters of the case, are further studied, and elaborated in following sections and figures.
- 3.1.4. An Indicative Scheme is formulated based on a total GFA of about 250,000 m², within which about 196,000 m² is for data centre and 54,000 m² is for the ancillary office. The major development parameter is presented in **Table 3.1** and schematic drawings are presented in **Figures 3.1 to 3.4**.

Table 3.1 - Major Development Parameters for the Indicative Scheme

Major Development Parameters for the Indicative Scheme		
<i>* Assume Sha Ling Road portion within the Site is private road</i>		
Site Area (about)		10.59 ha
GFA (about) ⁵ <i>Data Centre</i> <i>Ancillary Office</i>		250,000 m ²
		196,000 m ²
		54,000 m ²
No. of Blocks		4
Site Coverage (about)		Not Exceeding 30%
Building Footprint (about)		29,100 m ²
BH (about)		Not Exceeding +110 mPD
No. of Storey <i>* Excluding Storey(s) under Ground Floor Level (50 mPD)</i>		8-11 storeys
Typical Floor-to-floor (F-t-F) Height ⁶		6m (Data Centre)
		4.2m (Ancillary Office)
Greenery Coverage (about)		Primary zone: Approx. 25.4% ⁷ Overall: Approx. 30%%
Open Space		Not less than 935 m ²
Estimated No. of Employment⁸		1870
No. of Ancillary Car Parking Spaces and Laybys		
Parking Spaces	<i>Private car</i>	458
	<i>Motorcycles</i>	38
	<i>Goods Vehicle</i>	14
Loading/unloading Bays / Lay-bys	<i>Private car</i>	3
	<i>Goods Vehicle</i>	47

3.2. General Planning and Design Principles

- 3.2.1. The Indicative Scheme has followed the general planning and design principles in aspects as set out below to enhance the compatibility of the proposed development with the surrounding context.

⁵ GFA for lower ground carparking space (24,900 m²) and CLP in-feed substation (6,400 m²) are assumed to be disregarded from the GFA calculation, subject to agreement from relevant government departments including Building Authority's consideration under building regime at the detailed design stage.

⁶ Typical f-t-f height for Data Centre referencing the Data Centre of Global Switch Tseung Kwan O InnoPark.

⁷ Primary Zone: 15m vertical zone of a site along the abutting street level as per Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (PNAP) APP152 Sustainable Building Design Guidelines.

⁸ Employment density assumption adopted for data centre portion in the Indicative Scheme is based on the specific employment assumption adopted for data centre in San Tin Technopole.

Building Disposition

- 3.2.2. At a prime location that adjoins the Shenzhen-Hong Kong BCP economic belt in Shenzhen⁹, the proposed data centre development sits on a spade-ready development site facing Shenzhen side to the west. The Indicative Scheme as a low-to-medium density development aims to provide a world leading nature-friendly data centre development, sitting harmoniously in natural surroundings, and at the same time aesthetically demonstrating the building appearance in the gateway position in proximity to Lo Wu BCP.
- 3.2.3. The proposed Indicative Scheme consists of building composition of two blocks of Data Centre and two blocks of ancillary office. To fully utilise potential built areas to accommodate the development of different uses, formed platform and existing slope area with less engineering constraints were identified for the major built forms of the building disposition. Office Towers 1, 2 and the lower ground premises (LG1-LG4) are located with terraced building mass on the slope area of fill slope in the western part of the Site, with main building facade facing the “CA” zone at Yuen Leng Chai, Shenzhen River and Lo Wu BCP. Data Centre Blocks 1 and 2 are located mainly on the formed platform area, which has a direct access and connection to the public road via Sha Ling Road.
- 3.2.4. The internal vehicular access is connected through the existing single road alignment to the southeast of Sha Ling Road. A proposed loop alignment of the internal carriageway around the Data Centre Building mass provides resilient support to the proposed Data Centre Blocks while having the Office Towers at the outer Ring side for separate access. Reserved Utilities Area and potential alignment of common utility tunnel are also taken into consideration of the proposed carriageway alignment to have least impact on the private development use, and enhance safety. EVAs and fire break were incorporated into Indicative Scheme. EVA requirement follows the industrial use in the Hong Kong Planning Standard and Guidelines (HKPSG) Chapter 8 Table 2 and Graph 3.2.6. and FS Code Section 6.

⁹ The Outline of the 14th Five-year Plan of Guangdong Province and Shenzhen Municipality released in 2021 proposed “high-standard planning and development of the Shenzhen-Hong Kong BCP Economic Belt” as one of the major policy objectives of promoting intensive Hong Kong-Shenzhen cooperation.

- 3.2.5. A continuous pedestrian connection is ensured from the Sha Ling Road in southeast to the police helipad and MacIntosh Fort (Nam Hang) to northwest of the Site. The proposed pedestrian sidewalks are along south and west façade of Data Centre Blocks and east of office towers, which can be potentially shared with public. A shared shuttle bus layby is located along the pedestrian route and in between the Data Centre and ancillary office for the daily commute of the users.
- 3.2.6. The Indicative Master Layout Plan of building disposition is illustrated in **Figure 3.1** and further elaborated in sections below.

Site Coverage and Indicative Functional Layout

- 3.2.7. The disposition and arrangements of the proposed data centre development look into a compacted layout with a site coverage of approximately 28% to balance between providing sufficient flexible operational floor area for Data Centre Blocks and Office Tower while maintaining a nature-friendly building environment.
- 3.2.8. The proposed total building footprint is approximately 29,100 m² which consists of footprints of about 11,600 m² and about 8,000 m² for Data Centre Blocks 1 and 2 respectively; and a footprint of approximately 9,500 m² of the ancillary office function towers and the lower ground premises under main office function (i.e. LG1-LG4), lay on the filled slope below 50 mPD. The two Office Towers footprint above 50mPD have already been included into the counting of the total building footprint in this case.
- 3.2.9. The proposed Indicative Scheme demonstrate the building mass of Data Centre 1 and 2 to adopt a more regular shape with typical dimensions that better serve data centre function, hence a larger footprint to provide sufficient floor area for data centre operation (referring to Data Centre of Global Switch Tseung Kwan O InnoPark of which the building footprint is about 12,000m²). Façade treatment to break down the large data centre building mass is proposed in the Indicative Scheme, where divisions of the façade into smaller portions with different types of detailed treatment is proposed to achieve a visual break down of the building mass.

3.2.10. The main office function accommodates the 2 Office Towers spread up over from the ground level (50mPD). The lower ground premises of Office Towers 1 and 2 accommodate parking spaces and a small portion of ancillary facilities such as mechanical and electrical plant rooms, storerooms, etc below 50mPD. Two primary substations will be incorporated with Data Centre Block 1, while the CLP bulk in-feed substation and two other primary substations will be incorporated within Data Centre Block 2. The Indicative Functional Layout and Section Drawings are illustrated in **Figures 3.2 and 3.3**.

Building Separation

- 3.2.11. The proposed Indicative Scheme has considered visual and air permeability in term of massing layout and building height profile. The proposed layout plan has incorporated two building separations between Data Centre Blocks 1 and 2, and between Office Towers and Data Centre Block 1 to allow permeability according to Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (PNAP) APP-152 Sustainable Building Design Guidelines (SBDG), Appendix B, Section 4.4 on assessment, which aims to lower potential urban heatwaves issue that might cause by the future data centre development. Having building separation would help to improve the air permeability, such layout would be further refined in later design stage.
- 3.2.12. Following PNAP APP-152 SBDG, Section 4(b) design requirement, set back of office podium and Data Centre Block 2 of minimum 7.5m from the rezoning boundary was ensured in the Indicative Scheme addressing permeability.
- 3.2.13. Besides the proposed building separation, terraced building form and stepped building height profile are incorporated or further improving the air ventilation and permeability of the proposed development, which will be further elaborated in sections below. Furthermore, additional design measures for compliance with PNAP APP-152 SBDG may be incorporated by future project proponent in detailed design stage.

Extensive Greenery

- 3.2.14. To enhance the amenity of the proposed development and for the enjoyment of future users, the proposed development seeks to provide an adequate number of greenery referencing to Minimum Site Coverage of Greenery set out in PNAP APP-152 SBDG. The SBDG state a total Site Coverage of Greenery of 30% is required for site areas of 20,000 m² or above and to provide at-grade greenery area of no less than half (15%) of the required Site Coverage of Greenery. The Indicative Scheme provides no less than 30% of Site Coverage of Greenery, including no less than 15% of site area of greenery at primary zone. Under the Indicative Scheme, site coverage of 25.4% greenery at primary zone and overall 30% greenery are attained in accordance with the minimum requirements outlined under PNAP APP-152. The primary greenery is located mainly on engineered slopes encompassing the Site. Further greening measures such as vertical green and green roof at the proposed buildings shall be explored at later detailed design stage to provide additional greening and visual amenities to the visitors and users.
- 3.2.15. The proposed planting, greening on slope and greening fronting the proposed development contribute to alleviating potential visual impact and ensuring green connection and landscape quality for user and visitors. These provisions shall provide a smooth transition to the natural surrounding and enhance compatibility of the proposed development to its surrounding environment including Shenzhen River and Lo Wu BCP. Further elaboration of landscape and greenery is in **Section 3.3** and illustrated in **Figure 3.5**.

Building Height

- 3.2.16. To aim to contribute a coherent visual and harmony building height profile to the natural surroundings, the proposed building height of the Indicative Scheme demonstrates a stepped building height profile from the man-made slope facing the lower point of 5.9 mPD at “CA” at Yuen Leng Chai in the west, coordinating with the existing slope terrain, to the formed platform in the east, and the mountain ridgelines surrounds. The following approaches could be further explored as effective design measures in later detailed design stage:
- a) The building mass of data centre is proposed to adopt a more regular shape with typical dimensions that better serve data centre function, hence a larger footprint to provide sufficient floor area for data centre operation.
 - b) Façade treatment is proposed in the Indicative Scheme by applying different types of façade detail to create a visual division of the façade into smaller portions, hence a visual break down of the building mass.

- c) It is proposed to adopt a stepped building height profile ascending from the man-made slope facing the lower point of 5.9 mPD at “CA” zone at Yuen Leng Chai in the west, coordinating with the existing slope terrain, to the formed platform in the east, and the mountain ridgelines surrounds.
- d) Any additional design measure may be incorporated by future project proponent in detailed design stage.

3.2.17. The proposed BH of Office Towers 1 and 2 are 8 to 11 storeys and 4 storeys on lower ground (50mPD as Ground floor level), with stepped building height proposed to be 83.6mPD and 96.2mPD. The proposed BH of Data Centre is 10 storeys above ground level (50mPD), with stepped BH proposed to be 110mPD. The overall stepping BH and terraced form of development area are beneficial to air ventilation.

3.2.18. The Indicative Section illustrated in **Figure 3.3** indicates the stepped BH, while the perspective drawings illustrated in **Figure 3.4** indicates an overall image of the proposed development sitting harmoniously in natural surroundings and provide a natural-friendly appearance.

3.3. Landscape Design

3.3.1. The objective of the landscape design includes the followings:

- to create high quality and enjoyable outdoor landscape areas for workers, users and visitors;
- to minimise the impact on existing trees and maximise greening opportunities within the Site;
- to blend in the proposed development with adjacent existing and planned landscape context; and
- to provide measures to mitigate any potential adverse landscape and visual impact

3.3.2. Landscape design proposal includes the followings:

- at-grade greening and slope greening opportunities shall be maximised;
- existing trees within the Project shall be preserved as much as possible;
- provision of vegetated roof and vertical greening on proposed development and associated utility buildings within the work boundary to provide a source of visual relief for users and viewers from surrounding area while maximising greenery as on-site compensation; and

- in consideration of future flexible design arrangement, landscape proposal of the Project shall be designed and implemented by the future development proponent including site formation platform.

3.3.3. The Indicative Landscape Master Plan is shown at **Figure 3.5**.

3.4. Pedestrian and Vehicular Access

3.4.1. The Site is accessible via Sha Ling Road (a single-two lane road) leading to the Man Kam To Road.

3.4.2. In the Indicative Scheme, the proposed road connecting Sha Ling Road would be designed with sufficient road width and turning radius to facilitate the manoeuvring of long vehicles. Meanwhile, a layby with length of 70m (which could accommodate 5 coaches approximately) for passengers boarding/ alighting would be provided.

3.4.3. Besides, the proposed road should also satisfy the requirement for EVA mentioned in the Code of Practice for Means of Access for Firefighting and Rescue published by the Buildings Department (BD). As there is no specific guideline for data centre, the guideline for industrial building is referenced. In the proposed road layout, an EVA in the form of a 2-way carriageway with the width of not less than 13.5m and u-turning facilities are provided for the manoeuvring of emergency vehicles and long vehicles. The indicative road layout plan is shown in **Figure 3.6**.

3.4.4. The design capacity for the planned 3m footpaths along both sides of Sha Ling Road with Level-of-Service C (with flow rate of 23 to 33 ped/min/m) will be 5,520 ped/hr to 7,920 ped/hr, which should be sufficient to cater for the pedestrian demand for the 1,870 employees for the Site.

3.5. Associated Infrastructure Works

Drainage

- 3.5.1. The capacities of the as-constructed drainage outlets (including the local outlets within rezoning boundary and the ultimate outlets discharging run-off to Shenzhen River and Ng Tung River) have been reviewed based on the Indicative Scheme with the relevant manual and technical guidance notes. The capacities are found to be adequate. Therefore, no upgrading works would be required.

Water Supply

- 3.5.2. Water cooled chiller using cooling towers as the means to dissipate heat is proved to be very effective means for cooling plant. Cooling Towers have been used for various data centres in Hong Kong and proved to be the best way for heat dissipation. Therefore, infrastructure to allow for cooling tower should be considered.
- 3.5.3. The water demand for data centre and ancillary office in the Indicative Scheme is estimated to be about 13,100 m³/day (including air conditioning (A/C) system and employee uses).
- 3.5.4. The existing DN400 watermain along Man Kam To Road has been reviewed and found to adequate in providing the required amount, no upgrading for this watermain would be required. There is an as-constructed DN200 water main for fire services and an as-constructed DN150 water main for freshwater supply in the Site. Upgrade of the DN150 water main is proposed in the Indicative Scheme. To ensure security of fresh water supplies, two DN400 incoming water supply mains (connecting to the existing DN400 along Man Kam To Road) are proposed.
- 3.5.5. While the two incoming water mains are coming off from the same water main and the same reservoir, the two pipes provided an opportunity for replacing valves and meters at the incoming mains without interruption of water. This dual-feed DN400 arrangement to the Site would also facilitate switching over to reclaimed water once the reclaimed water supply at NM Development areas become available in future.
- 3.5.6. Water storage tanks are also proposed in the Indicative Scheme for contingency and supply fluctuation, the size will be subjected to the detailed design by the future developer.
- 3.5.7. To conserve freshwater supply, the following measures are proposed:
- implementation of rainfall harvesting system to capture, divert and store rainwater for landscape irrigation; and
 - the use of bleed-off water from A/C system circulation for toilet flushing.

Sewerage

- 3.5.8. As the water circulated in the cooling tower system for a few times, some water will be evaporated for heat dissipation, the cooling water will have higher concentration of chemicals and considered not suitable for discharge into drainage systems. The bleed-off water is proposed to be discharged to sewerage system. As mentioned in **paragraph 3.5.7**, a certain amount of bleed-off water can be used for flushing water purposes to minimise freshwater demand.
- 3.5.9. Sewage discharge from data centre and ancillary office in the Indicative Scheme is estimated to be about 2,300 m³/day (including A/C system bleed-off and employee uses). The capacities of the as-constructed DN225 sewer along Sha Ling Road and the as-constructed downstream DN800 sewer along Man Kam To Road have been reviewed and found adequate in withstanding the estimated sewage discharge. The as-constructed DN800 sewer along Man Kam To Road will be connecting to the new Sha Ling Pumping Station under another project of North East New Territories Sewerage System Upgrade with target completion by 2028, which would be before the earliest commissioning of the proposed development. No further upgrading works would be required for the proposed development in the Site.

Utilities – Power Supply

- 3.5.10. Based on the Indicative Scheme and coordination with CLP Power Hong Kong Limited, to support the estimated IT loading for data centre with 220MW and total power connection to the development of 470MW, 3 routes of 132kV connections are proposed (i.e. along Sha Ling Road and wayleaves from existing 132kV overhead lines) in the Indicative Scheme to allow dual-feed arrangement for back-up power supply to support data centre and ancillary office operation.
- 3.5.11. To accommodate the high-power demand for data centre and ancillary office, it is proposed to include a localised power supply source as a bulk feed-in substation with estimated size of 0.32 ha within the Site for circuit distribution.
- 3.5.12. Transmission plant rooms shall be reserved within the data centre building premises, to allow CLP to install associated infrastructure (including dual-feed 132kV customer substation within the customer's premises) connecting to the bulk feed-in substation. These facilities will serve as suitable accommodation to house the necessary equipment for drawing power supply from bulk feed-in substation (upon bulk feed-in substation in operation) to support the operation of data centre and ancillary office facilities operations.

Utilities – Telecommunication Services

- 3.5.13. Telecommunications are the core requirements for data centre. 3 paths of telecommunication provisions with 24 nos. ducts in each path (i.e. total 72 nos. ducts for Sandy Ridge site data centre and ancillary office) are proposed to support the data centre and ancillary office operation. The 3 paths strategy has allowed dual-feed arrangement to ensure continual telecommunication services to the Site.
- 3.5.14. 2 paths of telecommunication provisions would be allowed at either side of the footpaths adjacent to Sha Ling Road. For the 3rd path, construction of a new footpath of 1.5m to 2m wide (outside Sandy Ridge rezoning boundary) from Lo Wu Patrol Road along existing slope toe to proposed common manhole at the edge of rezoning boundary would be a possible solution to facilitate cable laying to support data centre operations.

Utilities – Common Utility Enclosure

- 3.5.15. Common utility enclosures (CUE) are proposed in the Indicative Scheme on either side of adjacent footpath of Sha Ling Road, to accommodate 132kV connections and 24 nos. of telecommunication services connections as mentioned in **paragraphs 3.5.10 and 3.5.14**. Ducting for 132kV cables and telecommunication services are allowed to be placed at cable brackets to be installed at the internal walls of CUE for ease of maintenance. Typical minimum 2.2m (H) x 1.5m (W) working access area would be reserved for maintenance. Adequate clearance from as-constructed and newly proposed water infrastructure provision (i.e. drainage, sewage pipes and watermains) to CUE has been allowed.

4. PROPOSED AMENDMENTS TO OZP

4.1. The Rezoning Proposal

- 4.1.1. The Site is currently zoned “OU” annotated “Cemetery, Columbarium, Crematorium and Funeral Related Uses” on the Approved MKT OZP No. S/NE-MKT/4. According to the Notes of the OZP, the planning intention of the “OU annotated “Cemetery, Columbarium, Crematorium and Funeral Related Uses” zone is primarily for the provision of land for cemetery, columbarium, crematorium, and funeral-related facilities serving the needs of the general public. There is no provision for proposed data centre or I&T related uses under the said zone. To realise the proposed data centre development, the Site is proposed to be rezoned to “OU(I&T)” with the intention to provide land for data centres and related purposes.
- 4.1.2. Considering the proposed data centre development may be implemented by future project proponent in the private sector, controls on the BH is proposed to be incorporated to the Site to ensure the future development will not create adverse impact to the surrounding area in the vicinity of the Site. As discussed in **Section 3.1**, a BH of +83.6 mPD to +110 mPD is proposed in the Indicative Scheme to accommodate a total GFA of 250,000 m² as advised by DPO/ITIB, of which 196,000 m² are for data centre and 54,000 m² are for ancillary office use¹⁰. The Indicative Scheme is prepared in consultation with DPO/ITIB while taking into account the height profile of the existing hilly and undulating topographic profile in the surroundings with a series of valleys and ridges with height profiles ranging from +50.6 mPD to +98.4 mPD, with the highest peak reaching +128.9mPD.
- 4.1.3. In order to allow room for design flexibility, the BH restriction (BHR) is proposed at +115 mPD to allow a 5m buffer from the building height of the Indicative Scheme, which should be incorporated into the Notes of the OZP for proposed development control purpose. The Indicative Scheme demonstrated that a building height of not more than +115mPD can provide sufficient operational area that support the proposed data centre development while achieving a compatible building height profile with the surrounding. Considering the roof-top structures supporting data centre (e.g. plant rooms, cooling towers, water tanks, etc) are likely to be bulkier and taller than typical roof-top structure of other uses, a BHR allowing more than 115mPD is not recommended in order to ensure compatibility with the surrounding landscape.

¹⁰ The total GFA and the ratio of GFA between data centre and ancillary office were confirmed with ITIB/DPO on 12 March 2024, in order to formulate the Indicative Scheme for feasibility assessment. The actual GFA and the ratio will be subject to project development and future detailed design by the future developer(s).

- 4.1.4. The Site is subject to constraints from the existing infrastructural capacity and a significant extent of the Site is occupied by cut slopes and fill slopes. In order to allow design flexibility for the future development, it is suggested not to impose plot ratio/GFA restrictions onto the Notes of the proposed “OU(I&T)” zone. Nevertheless, a total GFA of about 250,000m² is suggested to be included in the Explanatory Statement of the OZP to guide future development. The development parameters and layout for individual land parcel(s) will be subject to detailed design by the future project proponent(s). Necessary restrictions may be imposed through relevant statutory and/or administrative control in order to ensure the development is under proper control.

4.2. Summary of Technical Assessments for the proposed development

Preliminary Traffic and Transport Impact Assessment

- 4.2.1. Traffic surveys were carried out in March 2023 at the key road links and junctions in Fanling / Sheung Shui areas, no overloading issue for the key road links and junctions was discovered. The performance of key road links and junctions were assessed for the proposed development, and it is considered that all key road links and junctions will operate with ample capacity in the design year of 2031.
- 4.2.2. The performance of key road links and junctions were assessed based on the Scheme of 70:30 for Data Centre : Office with a higher trip generation and attraction flows to obtain a more conservative assessment result, it is considered that all key road links and junctions under the assessment will operate with ample capacity in the design year of 2031. It is anticipated that all key road links and junctions would operate with better performance under the Scheme of 78:22 for Data Centre : Office in the design year of 2031. A sensitivity test adopting the Transport Planning and Design Manual (TPDM) upper limit for office trip rate was also conducted, the result revealed that all key road links and key junctions would be operating within their capacities.
- 4.2.3. Schematic vehicular and pedestrian arrangements for the subject site were proposed in the Indicative Scheme to accommodate the pickup/dropoff activity and vehicle parking and loading/unloading activity for the Site.
- 4.2.4. With the findings summarised above, the proposed development at the Site has no insurmountable problem from traffic point of view.

Preliminary Landscape Impact Assessment

- 4.2.5. Within the Site, a total of 6 Landscape Resources (LR) are identified and illustrated in **Figure 4.2**. The predicted impact mainly occurs in uphill shrubby grassland (LR2), vegetation at engineered slope (LR4) and manmade area/on-going development (LR6) due to removal of ornamental/ grass/weed /whips/trees species. The remaining LR that no impact is anticipated include hillside woodland distribute a valley (LR1), foothill and middle hill shrubby grassland (LR3), plantation (LR5). The magnitude of change is considered as intermediate (for LR4), small (for LR2 & LR6) and negligible for the remaining LRs discussed above during construction period. Considered there is no proposed works within other landscape resources, the magnitude of change is considered as intermediate for LR4 and negligible for the remaining LRs.
- 4.2.6. The predicted residual landscape impact of the Project is considered acceptable with full implementation of the proposed mitigation measures. Mitigation measures such as protection and preservation of tree, erection of decorative hoarding, dust and erosion control for exposed Soil, tree transplant when applicable, protection of natural streams/rivers, provision of screen planting, maximize greenery provision, aesthetical pleasing design of all man-made structures, new tree planting, control of development heights and massing. The residual impact will be slight during construction phase, negligible during operation phase when the proposed planting becomes matures. There will be slight adverse effects on landscape character/ resources. The impact is slight, but these can be eliminated, reduced or moderated to a certain extent by design and mitigation measures.
- 4.2.7. No Old and Valuable Tree (OVT) nor Tree of Particular Interest (TPI) is identified within the Rezoning Boundary. Currently, there were 212 nos. of trees being planted within the rezoning boundary after completion of the site formation works. These trees were mainly planted in the slopes adjacent to Sha Ling Road, and the flat platform area. The existing trees as well as woodland mix are recommended to retain until future development submit their tree felling application with 1:1 compensatory ratio in considering/optimising the land uses and tree reservation. The proposed works design shall optimise and minimise on affecting existing trees and woodland planting as far as practicable, any affected trees will be studied on its technical feasibility on the transplanting.

4.2.8. The final provision and layout are subject to later detailed design. The Indicative Scheme has provided no less than 30% of Site Coverage of Greenery, including no less than 15% of site area of greenery at primary zone. Under the Indicative Scheme, site coverage of 25.4% greenery at primary zone and overall 30% greenery is attained in accordance with the minimum requirements outlined under PNAP APP-152. The primary greenery are located mainly on engineered slopes encompassing the project site. Further greening measures such as vertical green and green roof at the proposed buildings shall be explored at later detail design stage to provide additional greening and visual amenities to the visitors and users. The proposed works design shall optimise and minimise on affecting existing trees as far as feasible, any affected trees should be studied on its technical feasibility on the transplanting.

4.2.9. The indicative landscape master plan is shown in **Figure 3.5**.

Preliminary Visual Impact Assessment

4.2.10. The Project is currently a vacant formed platform. The visual envelope of the Project is bounded by the ridgeline from Tai Shek Mo to the west, Cham Shan to the south and Lo Shue Ling to the east. The assessment area also covers the immediate surroundings of the proposed developments such as the MacIntosh Fort (Nam Hang) to the North-west and encompassed by the hilly terrain of Sandy Ridge. Key positive visual resources include Ridgeline of Tai Shek Mo to the west, Cham Shan to the South and Lo Shue Ling to the east, scattered of low-rise rural settlement and village type development southeast and southeast to the development are the streetscape, landscape buffer and roadside greenery along Sha Ling Road, Man Kam To, Lo Wu Station Road and Lin Ma Hang Road. The Sandy Ridge Cemetery are the negative visual detractors identified.

4.2.11. As compared with the existing condition, the proposed developments would cause negligible to slightly adverse visual impacts to most of the selected public viewing points (VPs) (i.e. 5 out of 7 VPs) and moderately to significantly adverse to the remaining 2 VPs in close proximity of the Site. Although the proposed developments would become a new visual element in its immediate rural locality, it would be in general perceived as an extension of existing urban and high-rise developments in Shenzhen to the north of the Site in a wider context. The visual impact assessed via viewpoints VP 1 to VP7 are shown in **Figures 4.3 to 4.10**.

- 4.2.12. Currently a variety of mitigation measures are proposed to minimize the effect during construction and operation phase. These include provision of screen planting (OM1), maximise greenery provision (OM2), aesthetical pleasing design of all man-made structures (OM3), new tree planting (OM4) and control of development heights and massing (OM5). Design measures as demonstrated under current notional scheme shall be considered in the detailed design stage. This include minimum 15m-wide setbacks from the site boundaries on several directions, minimum 15m-wide building separation and terraced building height fronting the Shenzhen river. This will further enhance the overall aesthetics and visual interests of the Development.

Preliminary Air Ventilation Assessment (AVA)

- 4.2.13. The Site is situated in between Nam Hang and the terrains of Sandy Ridge as illustrated in **Figure 4.11**, in which Nam Hang is located to its near north and the terrains of Sandy Ridge is located to its southwest direction. To the southeast direction of the Site exists the Man Kam To Road. The annual prevailing wind towards the Site and vicinity areas are mainly from NNE, E and ESE directions. While in summer, the prevailing wind are composed by E, SE, SSE, SW, and SSW wind.
- 4.2.14. The Site lies on terrains with gentle gradient and is currently flattened with site formation level of approximately 50mPD. The Site is surrounded by terrains with topographical heights ranging from approximately 6mPD to 100mPD. To the near west and north direction of the Site locates the conservation area and green belt area respectively with almost flat terrain, while to the near northeast and east directions appear terrains of approximately 74mPD and 86mPD respectively. The most observable terrains of Sandy Ridge appear to have gradual rise from approximately 100mPD to 129mPD to the southwest of the Site.
- 4.2.15. The existing developments at the near vicinity of the Site include MacIntosh Fort (Nam Hang) to its near west as well as Lo Wu Public School, and Lo Wu Station to the southwest over the terrains of Sandy Ridge. These places are identified as potential wind sensitive areas which locate to the downwind of the Site under the southeastern quadrant prevailing wind. In addition, the hiking trails embedded at the terrains of Sandy Ridge with frequent pedestrian access together with the above-mentioned places are identified as potential wind sensitive areas under the southeastern quadrant prevailing wind. Moreover, the nearest downwind areas under the NNE prevailing wind with frequent pedestrian access are the hiking trails of Sandy Ridge, FEHD Sandy Ridge Cemetery Office and the nearby Sha Ling Playground, while under the SW and SSW summer prevailing wind, the Man Kam To Operation Base Ta Kwu Ling Division Hong Kong Police Force and Man Kam To Control Point are located to the far downwind of the Site. Therefore, these additional discussed places are also identified as potential wind sensitive areas.

- 4.2.16. The Proposed Scenario formulated for data centre and related uses within the Site under the indicative scheme consist of 4 blocks with maximum heights of approximately 96.2mPD to 110mPD. Among the four proposed blocks, two are planned for data centre with proposed building heights of 110mPD, while the rest two are office towers with indicative building heights of 96.2mPD. The proposed Office Towers all are situated on a site formation level of 50mPD. In addition, the MacIntosh Fort (Nam Hang) is located to the near west of the Site. It should be noted that the proposed developments under the indicative scheme have not yet reached the maximum building height restriction (115mPD) of the Site. This is beneficial in allowing development flexibility for the future proposed development while maintaining limited disturbance on the surrounding air ventilation performance.
- 4.2.17. A qualitative assessment of the wind performance of the proposed data centre and office towers development has been carried out. Due to the geographical location of the Site, in which it is mainly surrounded by terrains of Sandy Ridge, the prevailing wind would be weakened before reaching the Site. The proposed high-rise blocks under the Proposed Scenario are expected to induce wind wake areas to respective the downstream regions, however, most of the identified potential wind sensitive areas are located to the far downstream areas which the wind environment is anticipated to be less affected by the induced wind wakes. The nearest identified potential wind sensitive receiver is the MacIntosh Fort (Nam Hang) located to the near west of the Site, which may be affected by the wind wakes generated by the proposed developments under the southeastern quadrant prevailing wind. In addition, the hiking trails embedded at the terrains of Sandy Ridge near the Site are also identified as a potential wind sensitive receiver under the NNE and E prevailing wind. Nevertheless, the proposed development layout has incorporated setback distances from the rezoning boundary and maintained observable distance from the down-stream areas, attempting to minimize the potential induced wind impacts. In view of this above discussions, no significant adverse air ventilation impact on the surrounding pedestrian wind environment is anticipated upon the proposed developments within the Site.

- 4.2.18. Apart from the above, the indicative building layout has maintained building separations of at least 15m in between the proposed developments. In addition, the proposed buildings have imposed setback distances of more than 15m from the rezoning boundary. It is worthwhile to point out that the assessed indicative building layout complies with the requirements documented in the SBDG, and also the proposed building heights under the indicative layout have not reach the maximum building height restriction of 115mPD, implying there may still be rooms for incorporation of additional permeable elements in future development stages. Furthermore, the southeastern portion of the Site is designed to be free of developments with only access roads. All the mentioned above are good air ventilation design strategies target to minimize the disturbance due to the proposed developments to the nearby wind environment near the Site.
- 4.2.19. The Site is located near the potential development area of the ongoing 'Remaining Phase Development of the NTN - Planning and Engineering Study for NTN New Town and Man Kam To - Investigation' (NTN Study). The proposed development area of Lo Wu/Man Kam To (LW/MKT) under Northern Metropolis lies to the east and south of the Site. Upon the potential developments of NTN, the E, ESE, SSE and SE prevailing winds towards the Site may be weakened. The planning context of its surrounding area is subject to the recommendations of the NTN Study under which relevant technical assessment will be conducted to assess the impact and identify mitigation/improvement measures. On the other hand, the Site is at the upwind area of the proposed development area of LW/MKT under the SSW/SW prevailing winds, and there are two proposed setbacks included in the design of the proposed buildings to facilitate the SSW/SW wind penetration.
- 4.2.20. Under the NNE annual prevailing wind as Shenzhen Region is located to the far upwind of the Site with more than 700m separation distance. It is anticipated the impact on the wind availability at the Site due to the developments at Shenzhen would not be significant. Nevertheless, under the E, ESE, SE, SSE, SW and SSW prevailing wind, Shenzhen region is located at the downwind of the Site with proposed developments, however, located far from the Site (with a separation distance of more than 200m), together with the good designs of the proposed developments within the Site with setback distance of more than 20m from the western rezoning boundary included, it is anticipated the impacts on the wind environment at Shenzhen region due to the proposed developments within the Site under the aforementioned prevailing wind directions would not be significant.

- 4.2.21. Last but not least, general good design measures to improve air ventilation performance are further recommended to the building designs for finetuning the proposed development layout under the Proposed Scenario. It is recommended that any future fine-tuning on proposed development layouts should follow the recommendations documented in the SBDG as well as refer to the HKPSG. Owing to the geographical location of the Site with limited potential wind sensitive receivers under the influence of the induced wind wakes by the proposed developments together with good air ventilation design measures already incorporated under the current proposed development layout, potential wind impacts due to the proposed developments within the Site on the vicinity regions are anticipated to be alleviated. Therefore, further quantitative AVA Study is considered not required at the detailed design stage.

Preliminary Environmental Review

- 4.2.22. There are no adverse air quality, noise, water quality, waste management impacts anticipated, given proper implementation of recommended measures.
- 4.2.23. The proposed development does not fall within the designated projects under Schedule 2 & 3, Environmental Impacts Assessment Ordinance (Cap. 499). While the environmental permit for the proposed development is not required, a preliminary Environmental Review has been carried out to identify and determine the possible environmental impacts arising from and encountered by the proposed development and to recommend mitigation measures, if required, to alleviate the potential impacts.
- 4.2.24. Given the Site is situated between Nam Hang and the terrains of Sandy Ridge, the existing air sensitive receivers, which may likely be affected by the proposed development including the MacIntosh Fort (Nam Hang) and Lo Wu village/Lo Wu station to its immediate north-west and south-west respectively. Noting that the MacIntosh Fort (Nam Hang) mainly involves hikers visiting the area while Lo Wu village/Lo Wu station are far away from the proposed development with limited air effluent in terms of the operation and vehicle traffic, adverse air quality impact arising the development to the surrounding area is not anticipated. The major dust impact during the construction stage could be minimized by adopting good site practice, etc. to ensure no adverse impact is created.

- 4.2.25. Since the proposed development is located far away and no existing nor potential sensitive receiver has been identified within 300m from the development, with the traffic noise generated from the development is expected limited. Central air conditioning will be recommended, hence the ventilation would not rely on opened windows. No adverse noise impact from the development is anticipated.
- 4.2.26. Since the Site is a vacant formed platform, no potential water sensitive receiver has been identified to be affected by the proposed development. Water quality associated with during the construction stage would be controlled by implementing recommended mitigation measures such as good site practices, adequate construction site drainage, portable chemical toilet, etc. The key potential sources of water quality impact during the operation would be mainly related to pollution from road surfaces and the sewage generated from the development, which would be discharged through the connection to the public sewerage system. Stormwater control measures including adequate stormwater drainage system with suitable pollutant removal devices, and best stormwater management practices are recommended for the Project to minimise the nonpoint source pollution. With proper implementation of the recommended mitigation measures, it is anticipated that the water quality impacts associated with the non-point source discharge from the Project would be minimised.
- 4.2.27. Waste types are generally referred to the construction wastes and general refuse, which would be handled and disposed of strictly following the good site and management practices with no adverse impact to the surrounding is anticipated.

Preliminary Ecological Impact Assessment (EcolA)

- 4.2.28. The EcolA concluded that there would be no direct impact to recognised sites of conservation importance and species of conservation importance. Most of the indirect impacts including disturbance to nearby natural habitat, associated wildlife and their flight path would be low. To mitigate these potential impacts on habitats and fauna, several measures will be implemented, including the implementation of good site practices should be carried out. Overall, no unacceptable adverse ecological impact arising from the proposed development was anticipated.

Preliminary Drainage Impact Assessment

- 4.2.29. With the considerations mentioned in **Paragraph 3.5.1**, the Preliminary Drainage Impact Assessment concludes that the capacity of the existing drainage network is found to be adequate to support the proposed development under the Indicative Scheme. Therefore, there is no insurmountable problem to the drainage system and no upgrading works would be required.

Preliminary Sewerage Impact Assessment

- 4.2.30. With the considerations mentioned in **Paragraph 3.5.8** and **3.5.9**, the Preliminary Sewerage Impact Assessment concludes that capacity of the sewerage network is found to be adequate to support the proposed development under the Indicative Scheme. There is no insurmountable problem to the sewerage system. Apart from the on-going sewerage upgrading works by another project, no further upgrading works for the proposed development would be required.

Preliminary Water Supply Impact Assessment

- 4.2.31. With the considerations mentioned in **Paragraph 3.5.2** to **3.5.7**, the Preliminary Water Supply Impact Assessment concludes that it is feasible to supply the water demand of the proposed development, and there is no insurmountable problem to the existing water supply network.

Preliminary Utility Impact Assessment

- 4.2.32. With the considerations mentioned in **Paragraph 3.5.10** to **3.5.15**, the Preliminary Utility Impact Assessment concludes that it is feasible to provide the required utility support for proposed development and there is no insurmountable problem to the existing utilities.

Preliminary Geotechnical Assessment

- 4.2.33. The geotechnical design under CE 1/2013 (CE) has been reviewed based on the post-2016 GI information and development scheme. The previous geotechnical design has no significant discrepancy in the geological condition obtained from the latest GI information works. The results of post-2016 laboratory test indicate the geotechnical design parameters as adopted in the previous study are generally appropriate.
- 4.2.34. Under the Indicative Scheme with data centre and ancillary office buildings, and Sha Ling Road as an emergency vehicle access, 4 nos. of existing man-made slopes which are original designed with factor of safety (FoS) greater than 1.2 are recommended to be upgraded to FoS greater than 1.4.

Preliminary Site Formation Assessment

- 4.2.35. The available geological maps, geological memoirs, aerial photographs, and ground investigation reports of previous projects. Field and laboratory tests data from existing GI information have been reviewed to assess geological and geotechnical condition of the Site.
- 4.2.36. Subject to the change of consequences-to-life and economic consequence related to 4 nos. of geotechnical features namely 3NW-C/C258, 3NW-C/C494, 3NW-C/C495 and 3NW-C/C497 associated with the proposed development, upgrading works consisting of soil nails mainly are proposed as part of the Site formation works and found to be technically feasible and cost-effective scheme with minimal impact to trees and existing site and minimal earthworks.
- 4.2.37. In conclusion, no insurmountable problem is found for the proposed change of land use in terms of site formation.

Land Requirement Report

- 4.2.38. As all the lands within the Site are all government land, no private lot will be affected by permanent land acquisition for the proposed data centres and related purposes.
- 4.2.39. The impacts on cultural heritage, trees, graves, ponds, modified watercourse, nearby villages and brownfield site and other land lots have been reviewed /identified with no insurmountable land issue expected.

5. PLANNING JUSTIFICATIONS

5.1. Responding to the Policy Address on I&T Development at the Former Columbarium

- 5.1.1. According to PA 2023, the Government has decided to change the use of the 2 ha formed platform at the former columbarium site to data centres and related purposes. NM Action Agenda indicates that the proposed I&T and related uses will tie in with the overall development of the NM. PA 2023 also outlined the Government's strategies to raise competitiveness to attract enterprises and talents, particularly those pertinent to Hong Kong's development as the "eight centres", including key enterprises and leading representatives in advanced technology, innovation and strategic industries.
- 5.1.2. In order to fully maximise the Site's strategic location near the two BCPs and create a vibrant I&T ecosystem that attracts key enterprises, the proposed amendments will expand the development area from 2 ha to 10 ha. Subsequently, taking into account the location, infrastructure planning, the supply of digital infrastructure and the ardent demand for digital infrastructure from the I&T industry, the Government decided that in addition to the 2 ha site, the adjoining man-made slopes can be used for data centres and related purposes to form a spade-ready site with a total area of about 10.59 ha, as announced in the PA 2024.
- 5.1.3. The expansion contributes to the goal of developing Hong Kong into an "International Innovation and Technology Centre" with "key enterprises and leading representatives in advanced technology, innovation and strategic industries". By providing additional economic floorspace and utilities, the expansion caters to the anticipated growth of the I&T industries in Hong Kong, driven by intensifying cooperation with the Mainland and potentially create an attractive investment and employment location, especially for enterprises and talents in the Greater Bay Area.

5.2. Aligning with National and Local Policy Direction on Developing Hong Kong into International I&T Centre

- 5.2.1. The proposed amendments are in line with the National and Local Strategic Planning, which aspire Hong Kong as an I&T centre and a bridge connecting the Mainland and the World. In PA 2023, it is proposed to dovetail with the National 14th Five-Year Plan to enhance the development of "eight centres"¹¹, developing Hong Kong into an international I&T centre at full speed and to further implement the Hong Kong I&T

¹¹ The 14th Five-Year Plan has supported the development of Hong Kong in eight key areas ("eight centres"), including the international financial centre, international innovation and technology centre, East-meets-West centre for international cultural exchange, international trade centre, international shipping centre, international aviation hub, centre for international legal and dispute resolution services in the Asia-Pacific region as well as regional intellectual property trading centre.

Blueprint promulgated by the Government in December 2022 from the perspective of top-level planning and design.

- 5.2.2. Conforming to the Government’s major strategies under the I&T Blueprint, the proposed amendments can contribute to promoting the development of I&T ecosystem and emerging industries, achieving “new industrialisation” in Hong Kong. The proposed amendments provide land for I&T development and facilitates the integration of I&T into the overall national development agenda, leveraging its strategic gateway location to deepen cooperation with the Mainland. This also conforms with the planning objective of “Embracing New Economic Opportunities and Challenges” under the Hong Kong 2030+ and echoes the development goals of industry-driven planning and promoting integration of the Greater Bay Area as promulgated under the NM Action Agenda.

5.3. Responding to the Urgent Market Demand of Data Centre

- 5.3.1. The proposed data centre development responds to significant market demand. Given the Government’s strong policy support for I&T development as outlined in the PA, it is envisioned to have strong land demand for a diverse range of I&T development in Hong Kong.
- 5.3.2. As highlighted in the I&T Blueprint, Hong Kong has a significant demand for data centre facilities. The 2023 Global Data Centre Market Comparison ranked Hong Kong’s data centre market fourth globally and second in the Asia-Pacific region. Recognising the urgency to address the immediate demand for data centres, The I&T Blueprint proposes a strategy called “To Accelerate the Development of the Digital Economy and Smart City to Enhance Citizens’ Quality of Life”. As part of this strategy, the I&T Blueprint projects that the data centre’s floor area in Hong Kong will increase by over 700,000 m². between 2022 and 2026. By leveraging the Site, Hong Kong can expedite the provision of data centre facilities to address the immediate demand, as outlined in the I&T Blueprint.

5.4. Optimising Development Process by Utilising the “Spade-ready” Site

- 5.4.1. The Site is a "spade-ready site" with site formation works, slope works and necessary infrastructure upgrade completed for the former intended use. Additionally, it falls entirely within government land, which requires no land resumption before development. Hence, it is well-prepared and equipped for immediate development. This could reduce the need for time-consuming and costly preliminary groundwork and land resumption procedures, allowing potential project proponents to swiftly proceed with their development plans and effectively respond to market demand in a timely manner.

5.5. Leveraging Development Opportunities in the Northern Metropolis and Shenzhen-Hong Kong BCP Economic Belt

- 5.5.1. The Site is in close proximity of both LW and MKT BCPs. It is located at a strategic location in the NM and Hong Kong-Shenzhen boundary, with the densely developed Luohu district of Shenzhen in the north, HKSITP and the proposed San Tin Technopole in the farther southwest. Its strategic location offers great opportunities and convenience for cross-boundaries interactions.
- 5.5.2. Given the Site's immediate availability and its prime location in proximity of Hong Kong-Shenzhen boundary, it is believed that the Site can offer a wider spectrum of land choices, beyond the San Tin Technopole and the HSITP, to the market for I&T and related purpose development, in respect of the strong demand as advised by ITIB/DPO. Moreover, given the large scale I&T development and location of San Tin Technopole, the Site also has the potential in serving San Tin Technopole as supporting back office/supporting data processing uses, to order to create synergy between the Site and San Tin Technopole. The proposed amendments can also complement the overall I&T landscape along Hong Kong side from Lok Ma Chau to Man Kam To that adjoins the Shenzhen-Hong Kong BCP Economic Belt.
- 5.5.3. Under the NM Action Agenda, NTN New Town and LW/MKT are proposed to be developed as a BCP business district and a base for emerging industries. The proposed data centre development can serve as digital infrastructure to support the BCP business at LW/MKT and support the future growth and development of the emerging industries in NTN New Town. Since the Site is anticipated to be available for development earlier than most areas being studied in the NTN New Town and LW/MKT development, the I&T development at the Site can offer alternative land options in a shorter timeframe for potential project proponent and respond to potential market demand more efficiently.

5.6. An Ideal Site for Footloose Industries with Low Traffic Demand in Sparsely Populated Area

- 5.6.1. Data Centre Development are especially suitable for independent functioning with low traffic demand. This is particularly advantageous considering the Site is located in a sparsely populated area with limited connectivity, served by only a single two-lane vehicular access. Data Centre can operate independently and less reliant on external transport services (i.e. Footloose Industries). Considering the Site's limited accessibility, the project proponent could arrange public transport with service providers or provide shuttle bus services at detailed design stage.

5.7. Not Incompatible with Surrounding Uses

- 5.7.1. The Site is located in a rural area away from other development zones in the northeast New Territories bordering Shenzhen. The existing topography surrounding the Site is hilly and undulating with a series of valleys and ridges with height profiles ranging from 50.6 mPD to 98.4 mPD, with the highest peak reaching 128.9mPD. Developments in the vicinity of the Site include the public cemetery where the graves are largely on the other side of the hill and not visible from the formed platform of the Site; the Macintosh Fort (Nam Hang); and low-rise village settlement in Sha Ling Village.
- 5.7.2. In terms of development scale, due consideration has been given to the ridgeline and the need for design flexibility. The BHR is proposed at 115 mPD, which allows for a 5m buffer from the building height of the Indicative Scheme (i.e. 110mPD). This ensures the BH of the future development at the Site does not exceed the highest peak on Sandy Ridge while reserving a buffer for design flexibility for future project proponent as needed.
- 5.7.3. At territory level, the Site is situated at the periphery of the NM. With the Government's vision to develop the NM into a "New International I&T City", it is envisaged that the Proposed Amendment would align with future developments in the area and support the positioning of NM's vision.

5.8. No Insurmountable Impacts in Technical Aspects

- 5.8.1. Various technical assessments/reviews on landscape and visual impacts, traffic and transport, drainage, sewerage, water supply, utility, geotechnical, air ventilation and environmental aspects have been conducted to ascertain the technical feasibility of the proposed data centre development at the Site. The findings and recommendation are summarised in **Section 4.2**. The technical assessments demonstrated that there are no insurmountable problems in the technical aspects.

6. Conclusion

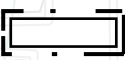
- 6.1.1. The technical assessments conducted under this Agreement has demonstrated that the proposed data centre and I&T related development at the Site is technically feasible. Upon the implementation of the proposed mitigation measures and improvement works, the proposed development will not result to any insurmountable adverse impact in terms of landscape, visual, traffic, infrastructure, environmental, air ventilation and geotechnical aspects.

Figures

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LEGEND:



PLAN SCHEME AREA OF
MAN KAM TO



REZONING BOUNDARY



OTHER SPECIFIED USES (OU)



VILLAGE TYPE
DEVELOPMENT (V)



OPEN STORAGE (OS)



GOVERNMENT, INSTITUTION
OR COMMUNITY (G/IC)



DEPOSIT AREA OF SANDY RIDGE CEMETERY
AND SANDY RIDGE (URN) CEMETERY



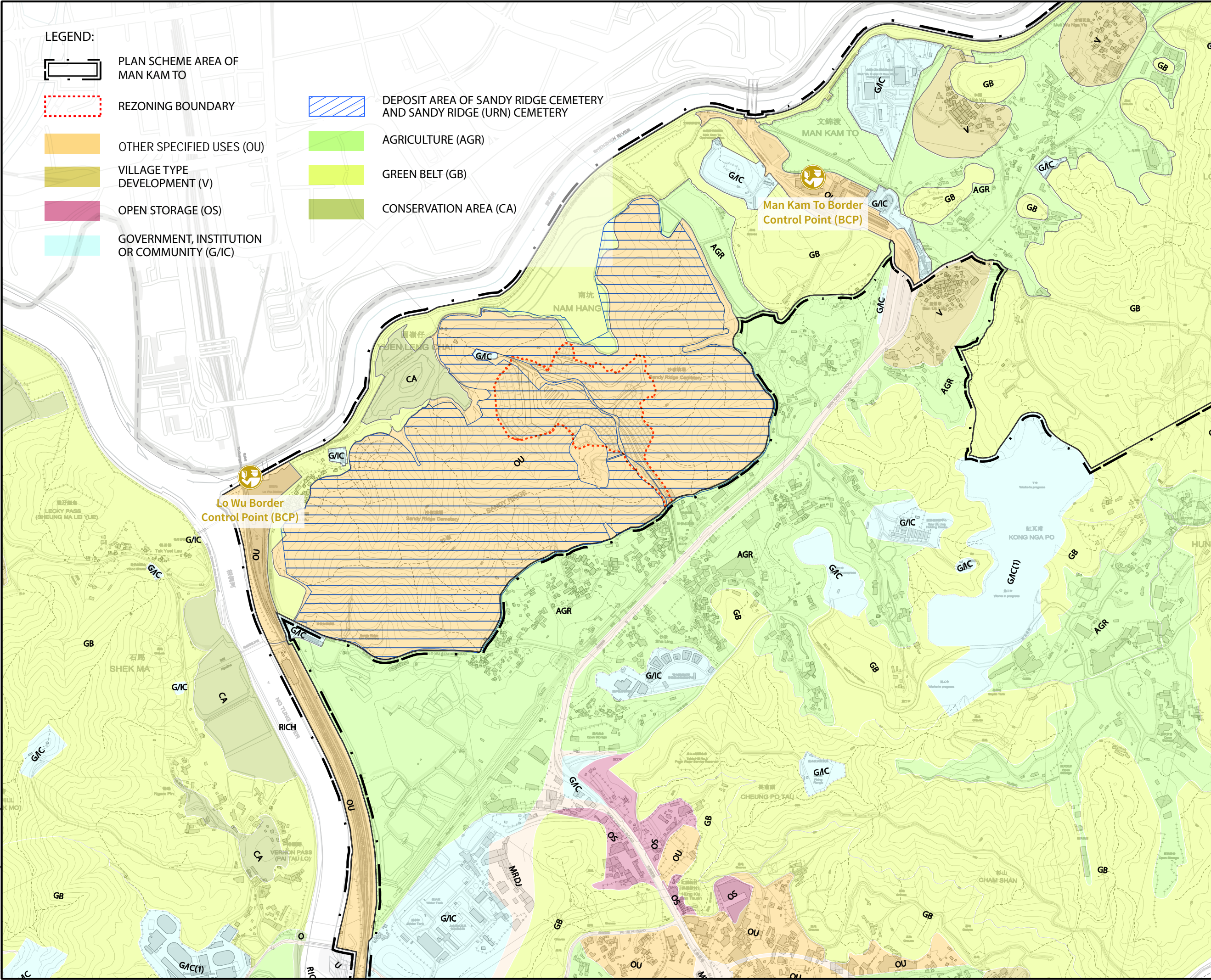
AGRICULTURE (AGR)



GREEN BELT (GB)



CONSERVATION AREA (CA)



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TERM CONSULTANCY FOR SITE
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WORKS FOR PROPOSED HOUSING
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FEASIBILITY STUDY
TASK ORDER NO.1 -
STUDY FOR I&T AND RELATED
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SCALE

比例

A3 1 : 10000

DIMENSION UNIT

尺寸單位

METRES

KEY PLAN

索引圖

PROJECT NO.

項目編號

60717392

AGREEMENT NO.

協議編號

CE/30/2023(CE)

SHEET TITLE

圖紙名稱

LOCATION PLAN AND LAND USE
ZONING PLAN

SHEET NUMBER

圖紙編號

FIGURE 1.1

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LEGEND:



REZONING BOUNDARY

SHENZHEN



H. High-rise Developments in Shenzhen across SZ River

H



F. Man Kam To BCP

F



I. San Uk Ling Village

N



N. Proposed Kong Nga Po Police Training Facilities (image source: Hong Kong Police Force)

DIMENSION UNIT

METRES

KEY PLAN

FIGURE 2.1

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TERM CONSULTANCY FOR SITE FORMATION AND INFRASTRUCTURE WORKS FOR PROPOSED HOUSING AND OTHER DEVELOPMENTS IN ZONE 4 (2023 - 2027) - FEASIBILITY STUDY
TASK ORDER NO.1 - STUDY FOR I&T AND RELATED PURPOSE DEVELOPMENT AT SANDY RIDGE IN NORTH DISTRICT

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PROJECT NO.

60717392

AGREEMENT NO.

CE/30/2023(CE)

SHEET TITLE

SURROUNDING CONTEXT OF THE SITE

SHEET NUMBER

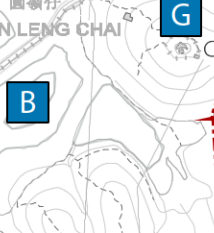
FIGURE 2.1



A. Lo Wu Station and BCP



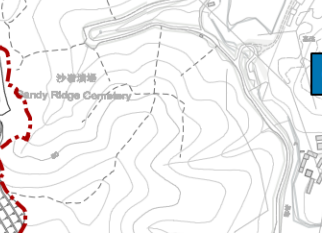
B. Conservation Area at Yuen Leng Chai



G. MacIntosh Fort (Nam Hang)



O. Agricultural Land (image source: Google Street Map)



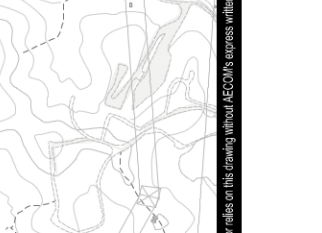
J. Border District Police Headquarters



M. Organic Resources Recovery Centre Phase 2



K. Brownfield Operation at Sha Ling



L. Tai Shek Mo



E. Sha Ling Cement Plant



D. Rural Settlements at Sha Ling Village

C. Sandy Ridge Cemetery

F. Man Kam To BCP

I. San Uk Ling Village

N. Proposed Kong Nga Po Police Training Facilities (image source: Hong Kong Police Force)

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B. Conservation Area at Yuen Leng Chai

A. Lo Wu Station and BCP

G. MacIntosh Fort (Nam Hang)

O. Agricultural Land (image source: Google Street Map)

H. High-rise Developments in Shenzhen across SZ River

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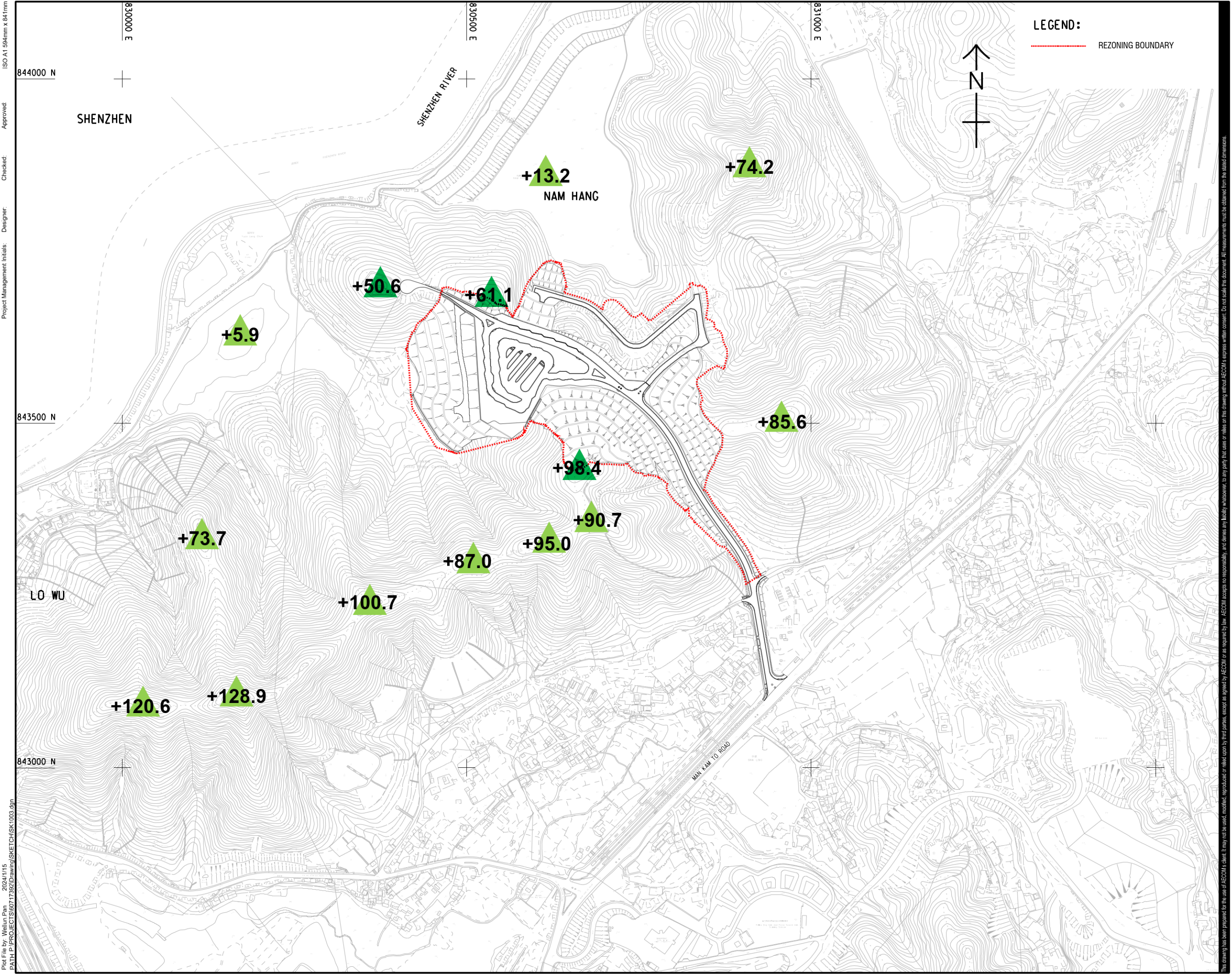
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N. Proposed Kong Nga Po Police Training Facilities (image source: Hong Kong Police Force)

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LEGEND:
REZONING BOUNDARY

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TERM CONSULTANCY FOR SITE FORMATION AND INFRASTRUCTURE WORKS FOR PROPOSED HOUSING AND OTHER DEVELOPMENTS IN ZONE 4 (2023 - 2027) - FEASIBILITY STUDY
TASK ORDER NO.1 - STUDY FOR I&T AND RELATED PURPOSE DEVELOPMENT AT SANDY RIDGE IN NORTH DISTRICT

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SCALE
比例

A3 1 : 5000

DIMENSION UNIT
尺寸單位

METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號

60717392

AGREEMENT NO.
協議編號

CE/30/2023(CE)

SHEET TITLE
圖紙名稱

HEIGHT PROFILE OF THE SURROUNDING

SHEET NUMBER
圖紙編號

FIGURE 2.2

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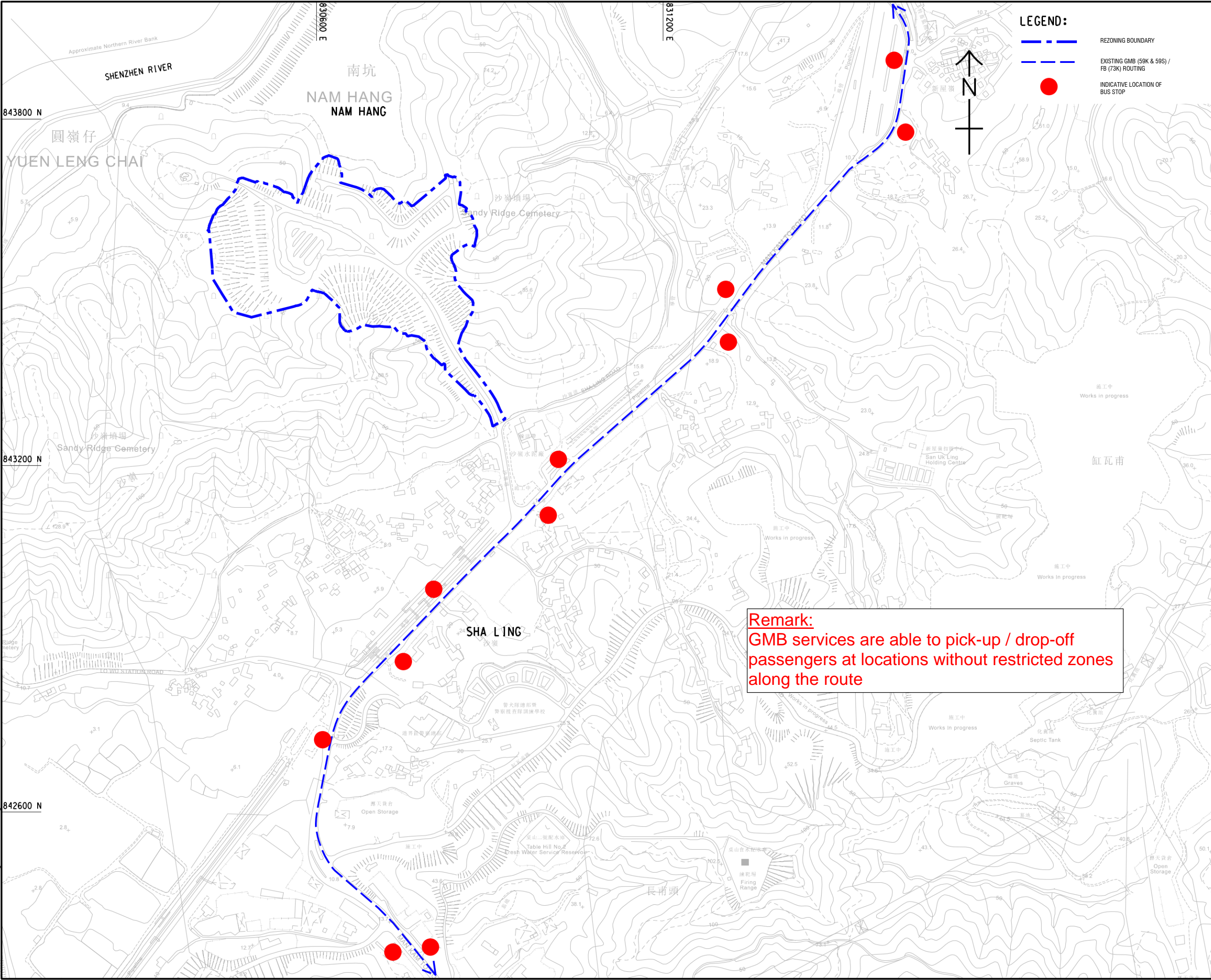
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Remark:
GMB services are able to pick-up / drop-off passengers at locations without restricted zones along the route



PROJECT
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TERM CONSULTANCY FOR
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比例
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METRES

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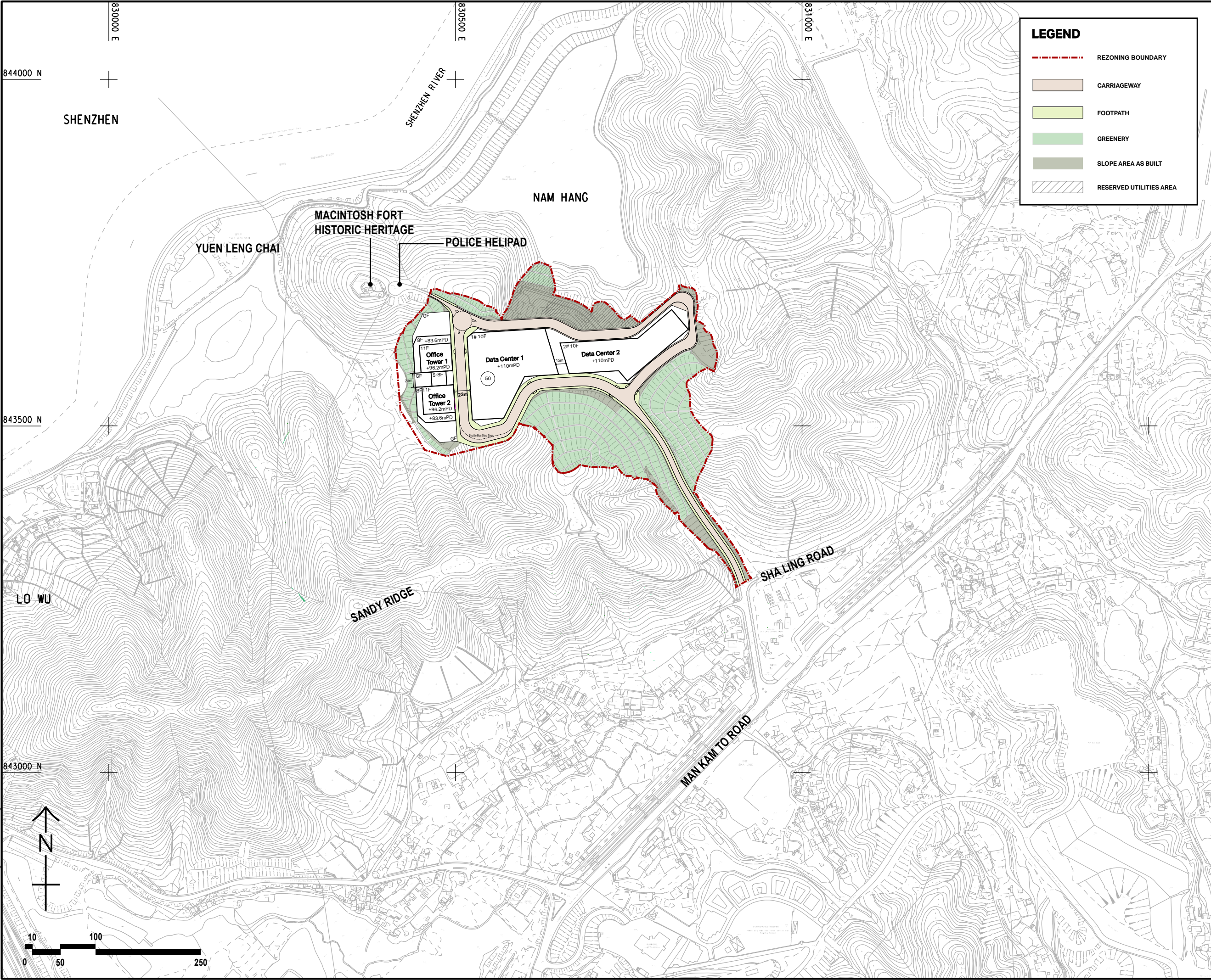
EXISTING FRANCHISED BUS AND
GMB ALONG MAN KAM TO ROAD

SHEET NUMBER
圖紙編號
60717392/FIGURE 2.3

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階段

SCALE	DIMENSION UNIT
比例	尺寸單位
A3 1 : 5000	METRES

KEY PLAN

索引圖

PROJECT NO.	AGREEMENT NO.
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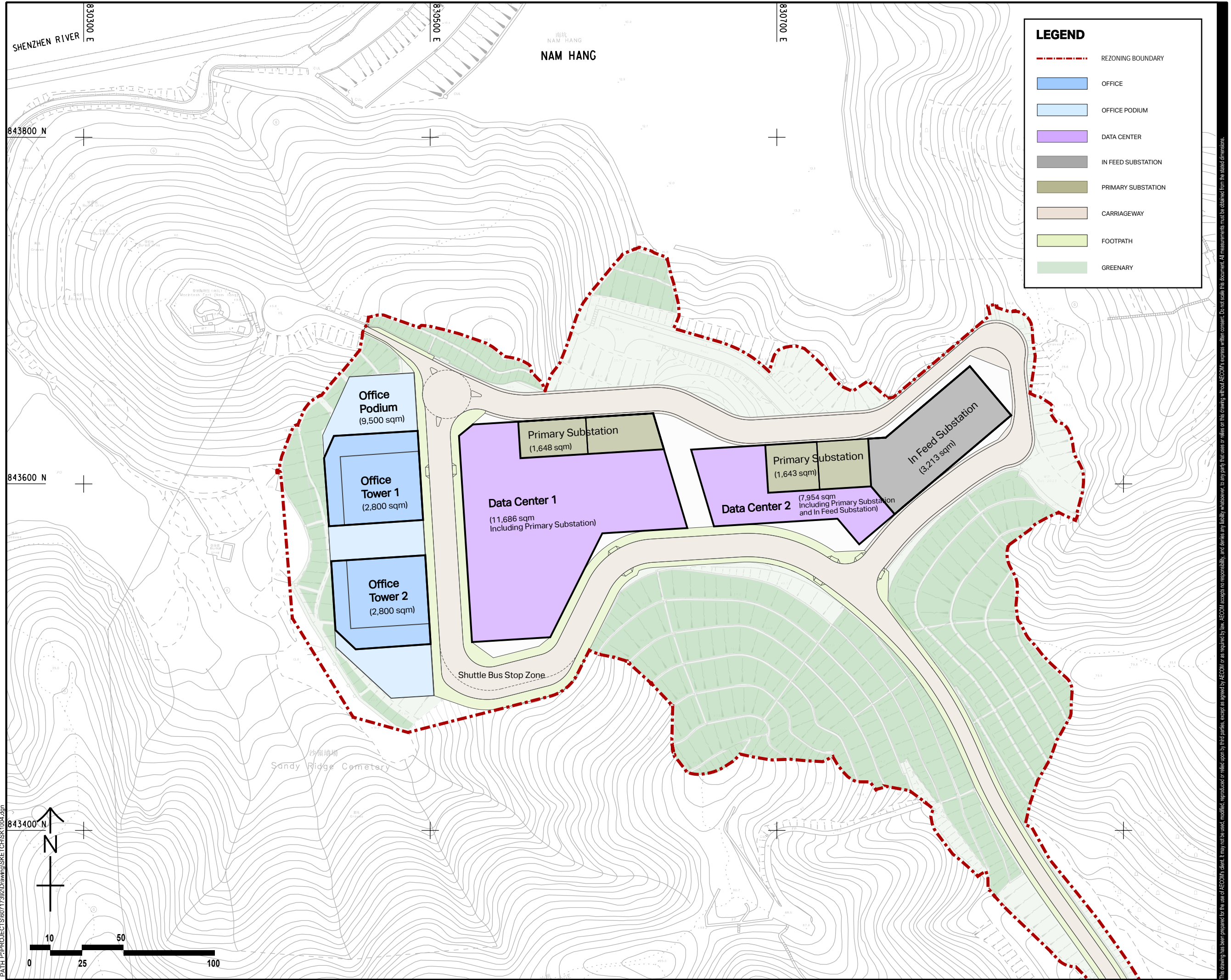
圖紙名稱

INDICATIVE MASTER LAYOUT PLAN - BLOCK PLAN

SHEET NUMBER

圖紙編號

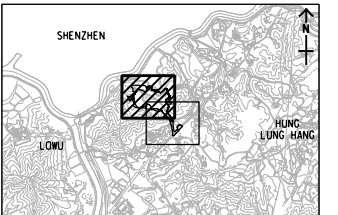
FIGURE 3.1



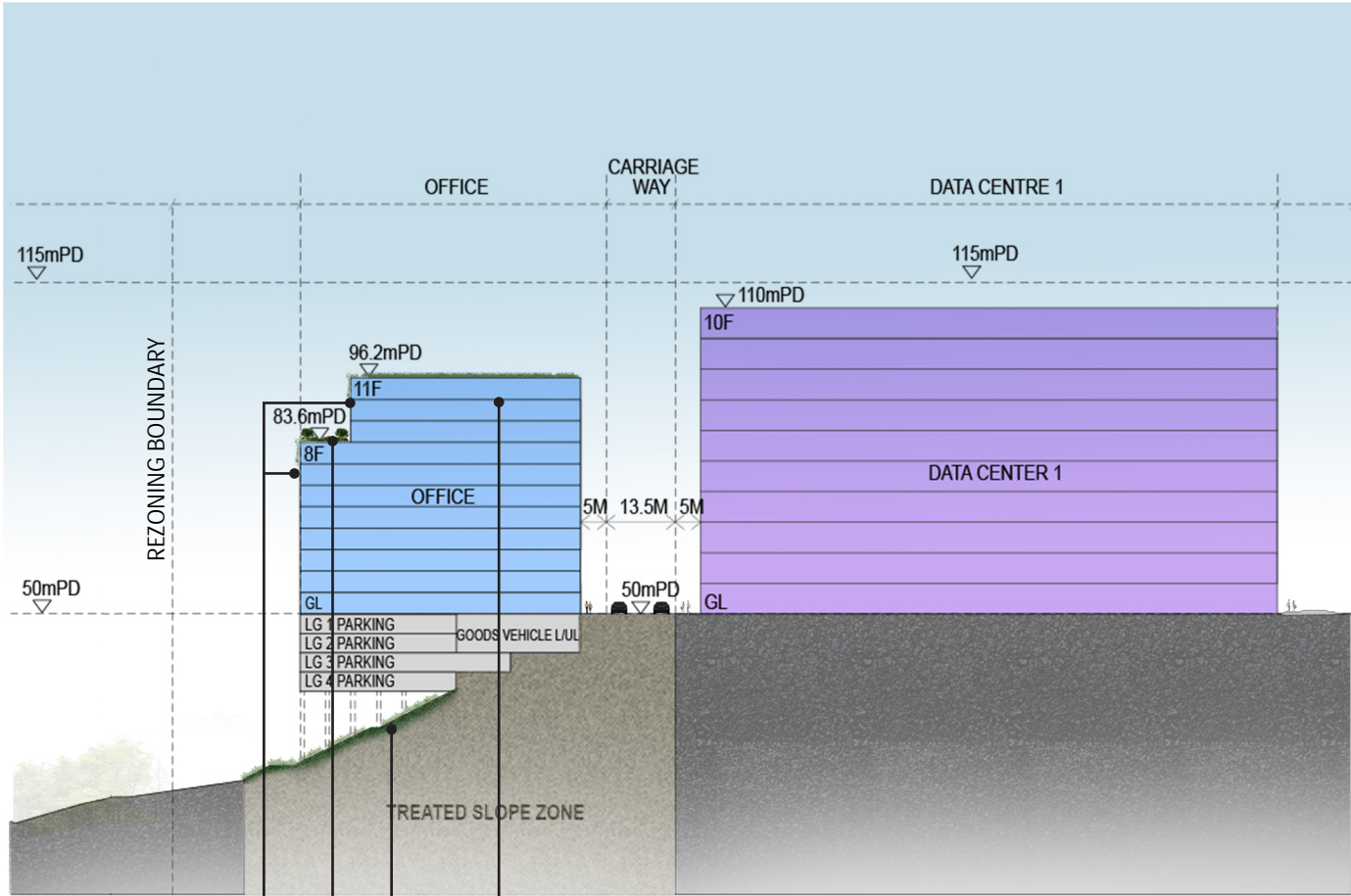
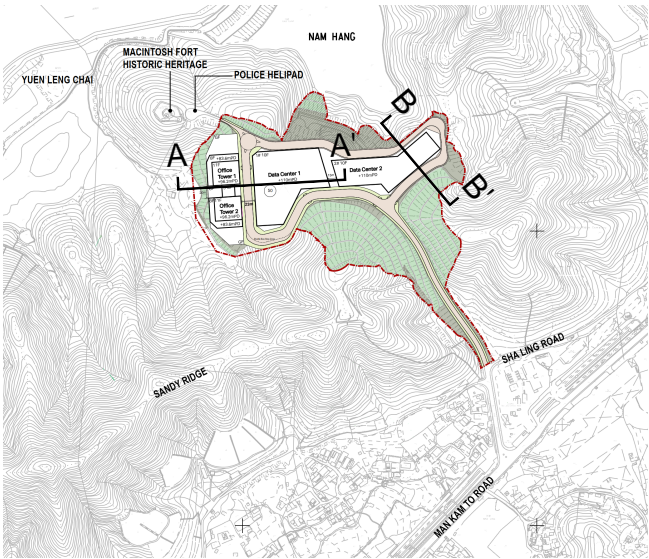
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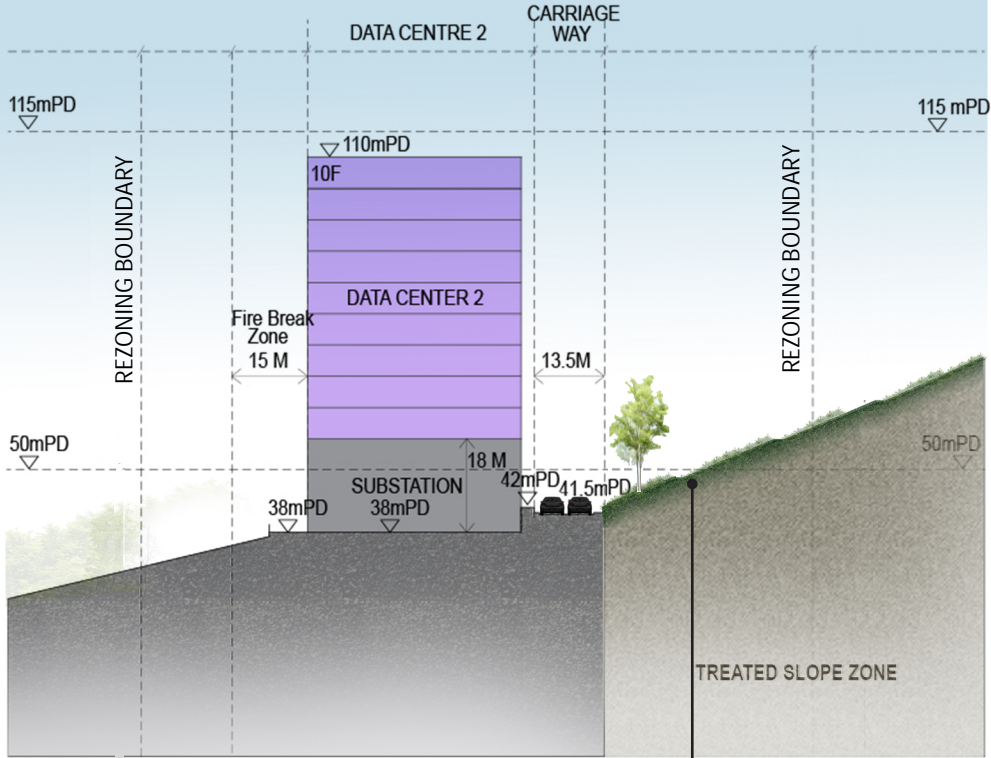


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SECTION A-A'

Verticle green
Greening on podium
Slope greening
Green roof



SECTION B-B'

Slope greening

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TERM CONSULTANCY FOR SITE FORMATION AND INFRASTRUCTURE WORKS FOR PROPOSED HOUSING AND OTHER DEVELOPMENTS IN ZONE 4 (2023 - 2027) - FEASIBILITY STUDY
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STATUS
階段

SCALE
比例
A3

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號
60717392

AGREEMENT NO.
協議編號
CE/30/2023(CE)

SHEET TITLE
圖紙名稱

INDICATIVE SECTION

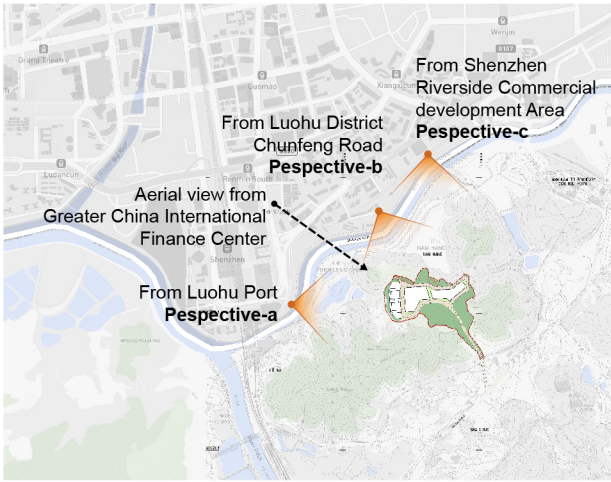
SHEET NUMBER
圖紙編號

FIGURE 3.3

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Aerial View from Greater China International Finance Center, Shenzhen



Aerial View	
	Perspective-a
Perspective-b	Perspective-c

Perspective-b from Luohu District Chunfeng Road



Perspective-a from Shenzhen Luohu Port



Perspective-c from Shenzhen Riverside Commercial Development Area



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TERM CONSULTANCY FOR SITE FORMATION AND INFRASTRUCTURE WORKS FOR PROPOSED HOUSING AND OTHER DEVELOPMENTS IN ZONE 4 (2023 - 2027) - FEASIBILITY STUDY
TASK ORDER NO.1 - STUDY FOR I&T AND RELATED PURPOSE DEVELOPMENT AT SANDY RIDGE IN NORTH DISTRICT
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STATUS
階段

SCALE	DIMENSION UNIT
比例	尺寸單位
A3	METRES

KEY PLAN
索引圖

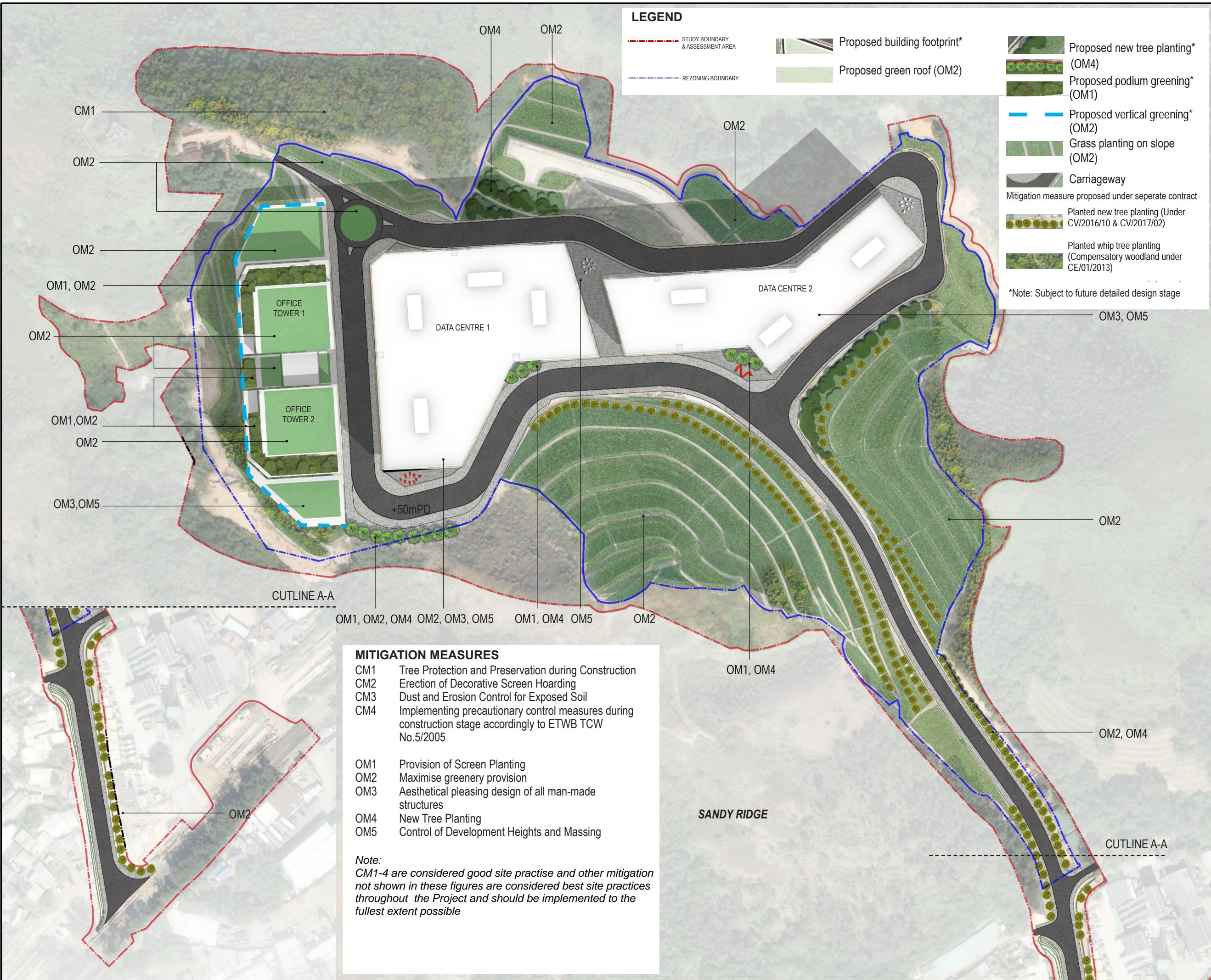
PROJECT NO.
項目編號
60717392
AGREEMENT NO.
協議編號
CE/30/2023(CE)

SHEET TITLE
圖紙名稱
INDICATIVE PERSPECTIVE

SHEET NUMBER
圖紙編號

FIGURE 3.4

ISO A1 594mm x 841mm
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SCALE 比例
A3 1 : 5000
DIMENSION UNIT 尺寸单位
METRES

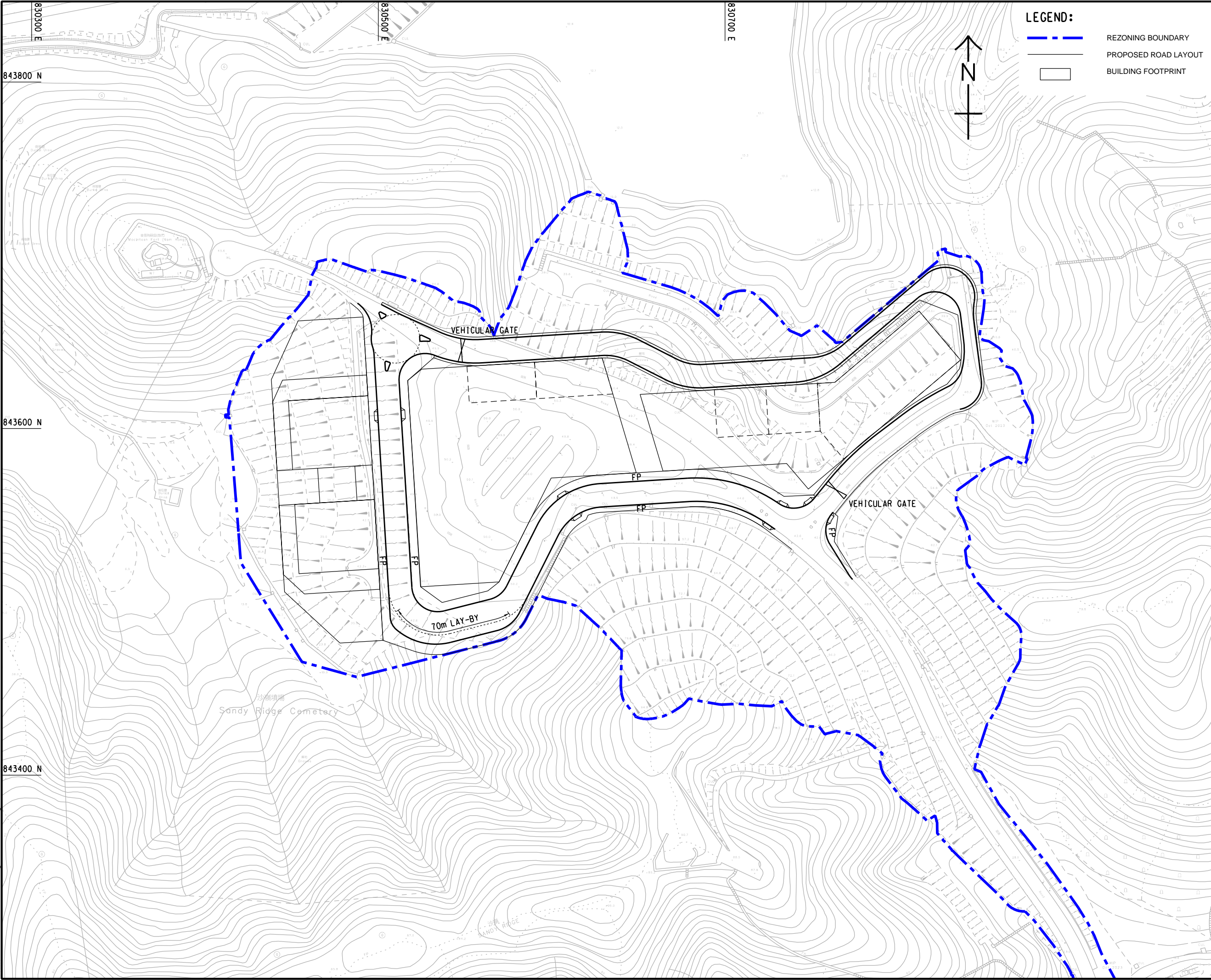
KEY PLAN
索引图

PROJECT NO. 项目编号
60717392
AGREEMENT NO. 协议编号
CE/30/2023(CE)

SHEET TITLE 图底名称
INDICATIVE LANDSCAPE MASTER PLAN

SHEET NUMBER 图底编号
FIGURE 3.5

ISO A1 594mm x 841mm
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LEGEND:

REZONING BOUNDARY

PROPOSED ROAD LAYOUT

BUILDING FOOTPRINT

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PROJECT

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階段

SCALE

比例

A1 1 : 1000

DIMENSION UNIT

尺寸單位

METRES

KEY PLAN

索引圖

PROJECT NO.

項目編號

60717392

AGREEMENT NO.

協議編號

CE 30/2023(CE)

SHEET TITLE

圖紙名稱

PROPOSED ROAD LAYOUT PLAN

SHEET NUMBER

圖紙編號

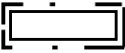
FIGURE 3.6

V:\BAKU\US5-BAK\CSWP\p\ddr\Create PH file\new CSWP-75\color\pht
Plot File by: LUH9
PATH P:\PROJECTS\60717392\Drawing\SKET\CH\SK002.dgn

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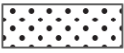
PLAN SCHEME AREA OF
MAN KAM TO



AGRICULTURE (AGR)



OTHER SPECIFIED USES (OU)



REZONING AREA



GOVERNMENT, INSTITUTION
OR COMMUNITY (G/IC)



CONSERVATION AREA (CA)



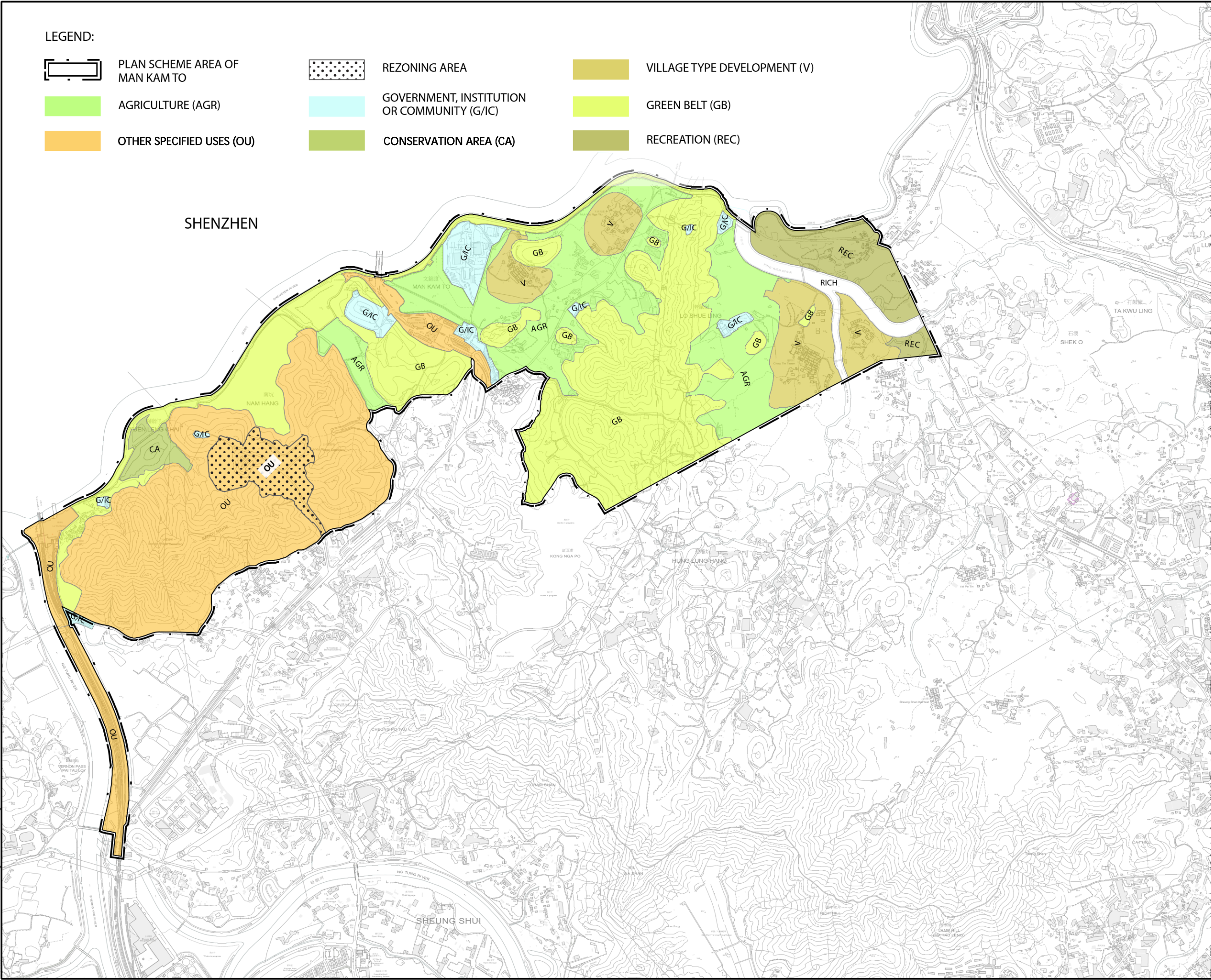
VILLAGE TYPE DEVELOPMENT (V)



GREEN BELT (GB)



RECREATION (REC)



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PROJECT

TERM CONSULTANCY FOR SITE
FORMATION AND INFRASTRUCTURE
WORKS FOR PROPOSED HOUSING
AND OTHER DEVELOPMENTS IN
ZONE 4 (2023 - 2027) -
FEASIBILITY STUDY
TASK ORDER NO. 1 -
STUDY FOR I&T AND RELATED
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STATUS

預核

SCALE

比例 1:15000

DIMENSION UNIT

尺寸單位 公尺

KEY PLAN

索引圖

PROJECT NO.

項目編號 60717392

AGREEMENT NO.

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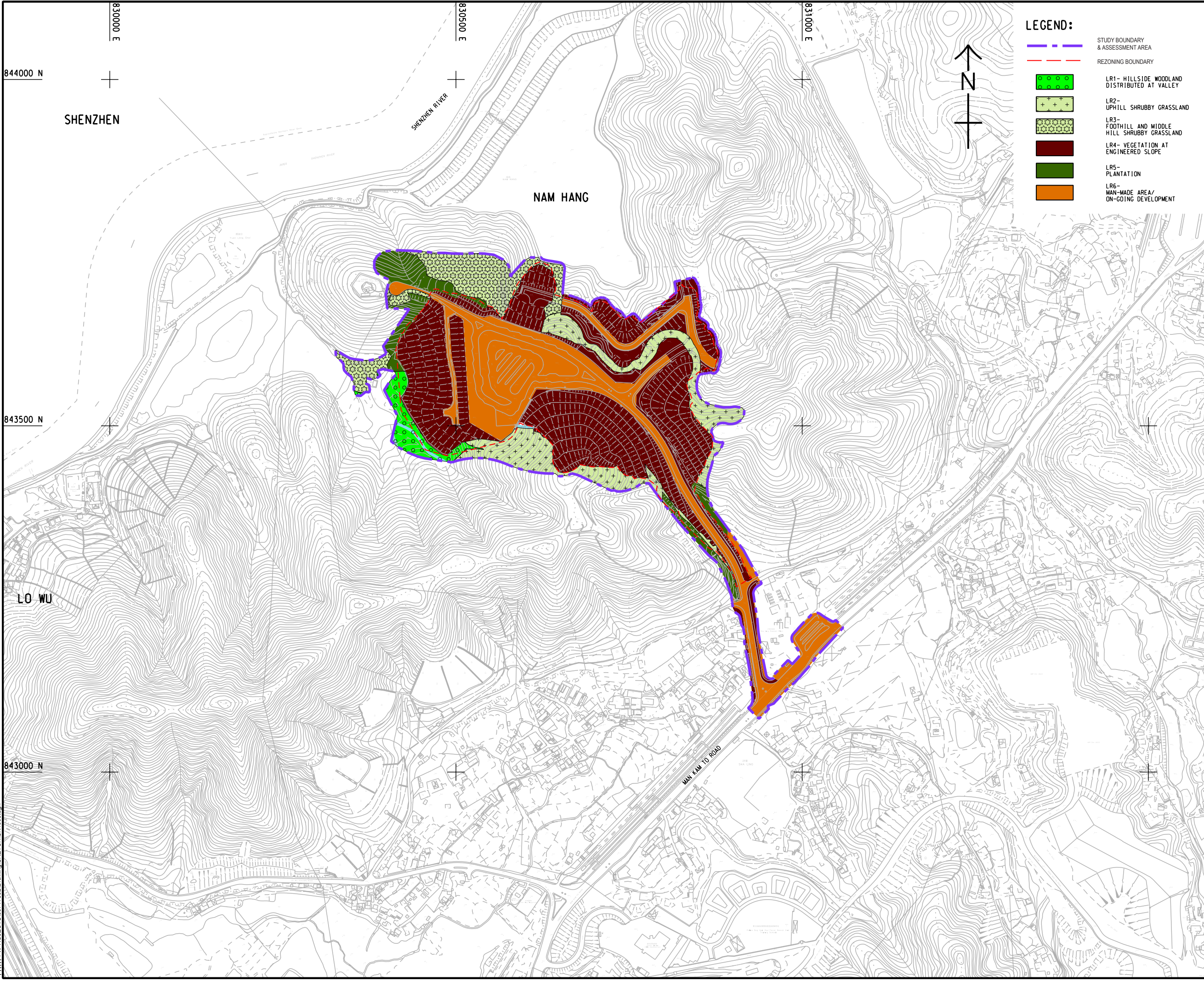
SHEET TITLE

圖紙名稱
PROPOSED AMENDMENTS TO THE
APPROVED MAN KAM TO OUTLINE
ZONING PLAN NO. S/NE-MKT/4

SHEET NUMBER

圖紙編號
FIGURE 4.1

ISO A1 594mm x 841mm
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Project Management Initials:
Plu File by: SongW1
3/21/2024
PATH: P:\PROJECTS\00717392\Drawing\SKETCH\008.dgn



LEGEND:

STUDY BOUNDARY & ASSESSMENT AREA
REZONING BOUNDARY

LR1- HILLSIDE WOODLAND DISTRIBUTED AT VALLEY
LR2- UPHILL SHRUBBY GRASSLAND
LR3- FOOTHILL AND MIDDLE HILL SHRUBBY GRASSLAND
LR4- VEGETATION AT ENGINEERED SLOPE
LR5- PLANTATION
LR6- MAN-MADE AREA/ ON-GOING DEVELOPMENT

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STATUS
阶段

SCALE
比例

DIMENSION UNIT
尺寸单位

A3 1 : 5000 METRES

KEY PLAN
索引图

PROJECT NO.
项目编号

AGREEMENT NO.
协议编号

60717392 CE/30/2023(CE)

SHEET TITLE
图纸名称

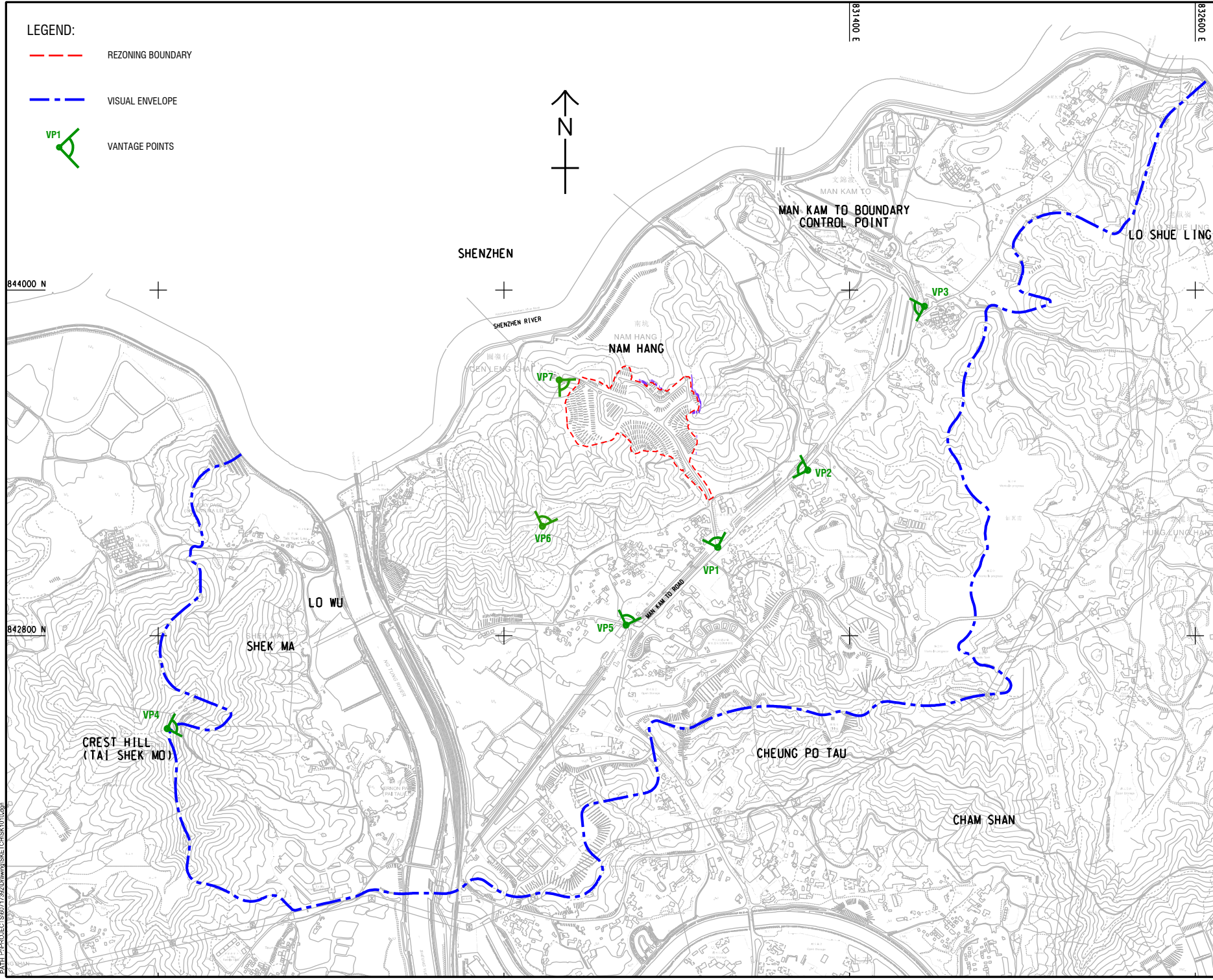
LANDSCAPE RESOURCE

SHEET NUMBER
图纸编号

FIGURE 4.2

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- LEGEND:
- REZONING BOUNDARY
 - VISUAL ENVELOPE
 - VANTAGE POINTS

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2/01	2/01	2/01	2/01
3/01	3/01	3/01	3/01
4/01	4/01	4/01	4/01
5/01	5/01	5/01	5/01
6/01	6/01	6/01	6/01
7/01	7/01	7/01	7/01
8/01	8/01	8/01	8/01
9/01	9/01	9/01	9/01
10/01	10/01	10/01	10/01

STATUS

SCALE
A3 1:12000
DIMENSION UNIT
METRES

KEY PLAN

PROJECT NO.
60717392
AGREEMENT NO.
CE/30/2023(CE)

SHEET TITLE
VISUAL ENVELOPE AND
VIEWPOINTS

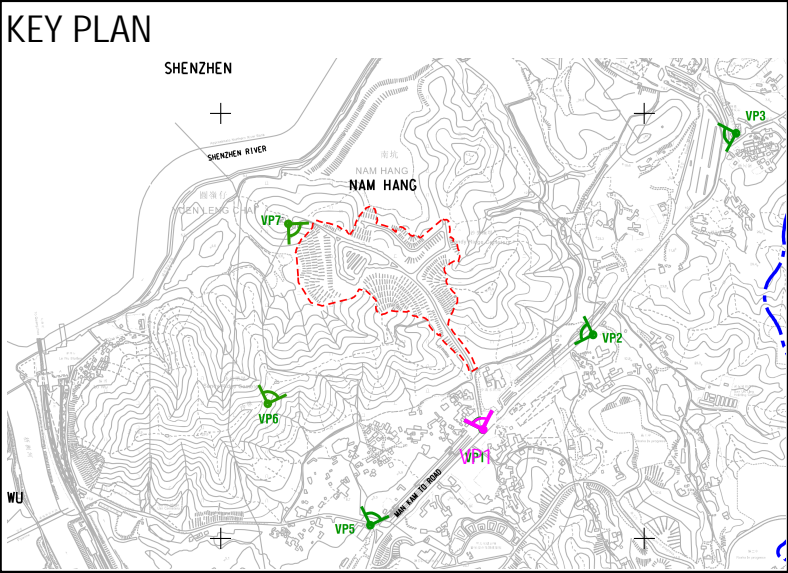
SHEET NUMBER
FIGURE 4.3



Existing baseline condition



Proposed development



PROJECT
項目
TERM CONSULTANCY FOR
SITE FORMATION AND
INFRASTRUCTURE WORKS FOR
PROPOSED HOUSING AND
OTHER DEVELOPMENTS IN
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STATUS
階段

SCALE
比例

DIMENSION UNIT
尺寸單位

KEY PLAN
索引圖

PROJECT NO.
項目編號
60717392

AGREEMENT NO.
協議編號
CE/30/2023(CE)

SHEET TITLE
圖紙名稱

PHOTOMONTAGE OF VP1 - VIEW FROM
SHA LING ROAD AND MAN KAM TO
ROAD INTERCHANGE

change
SHEET NUMBER
圖紙編號

FIGURE 4.4

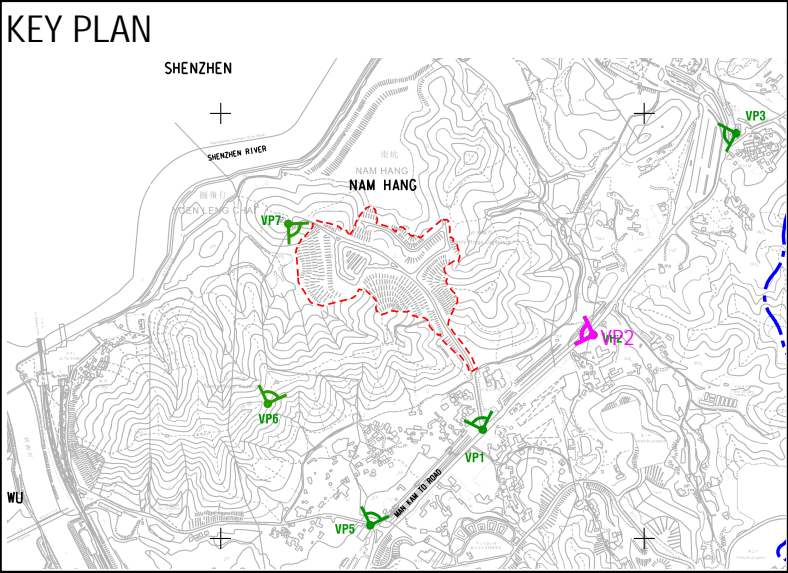
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Existing baseline condition



Proposed development



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STATUS
階段

SCALE 比例	DIMENSION UNIT 尺寸單位
A3 1 : 12000	METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號	AGREEMENT NO. 協議編號
60717392	CE/30/2023(CE)

SHEET TITLE
圖紙名稱
PHOTOMONTAGE OF VP2 - VIEW FROM
MAN KAM TO ROAD

SHEET NUMBER
圖紙編號
FIGURE 4.5

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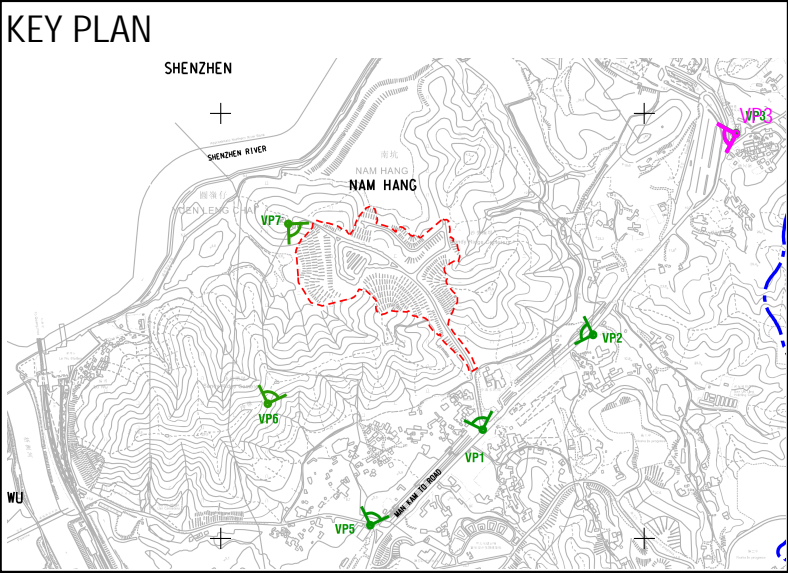
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Existing baseline condition



Proposed development



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STATUS
階段

SCALE
比例

DIMENSION UNIT
尺寸單位

KEY PLAN
索引圖

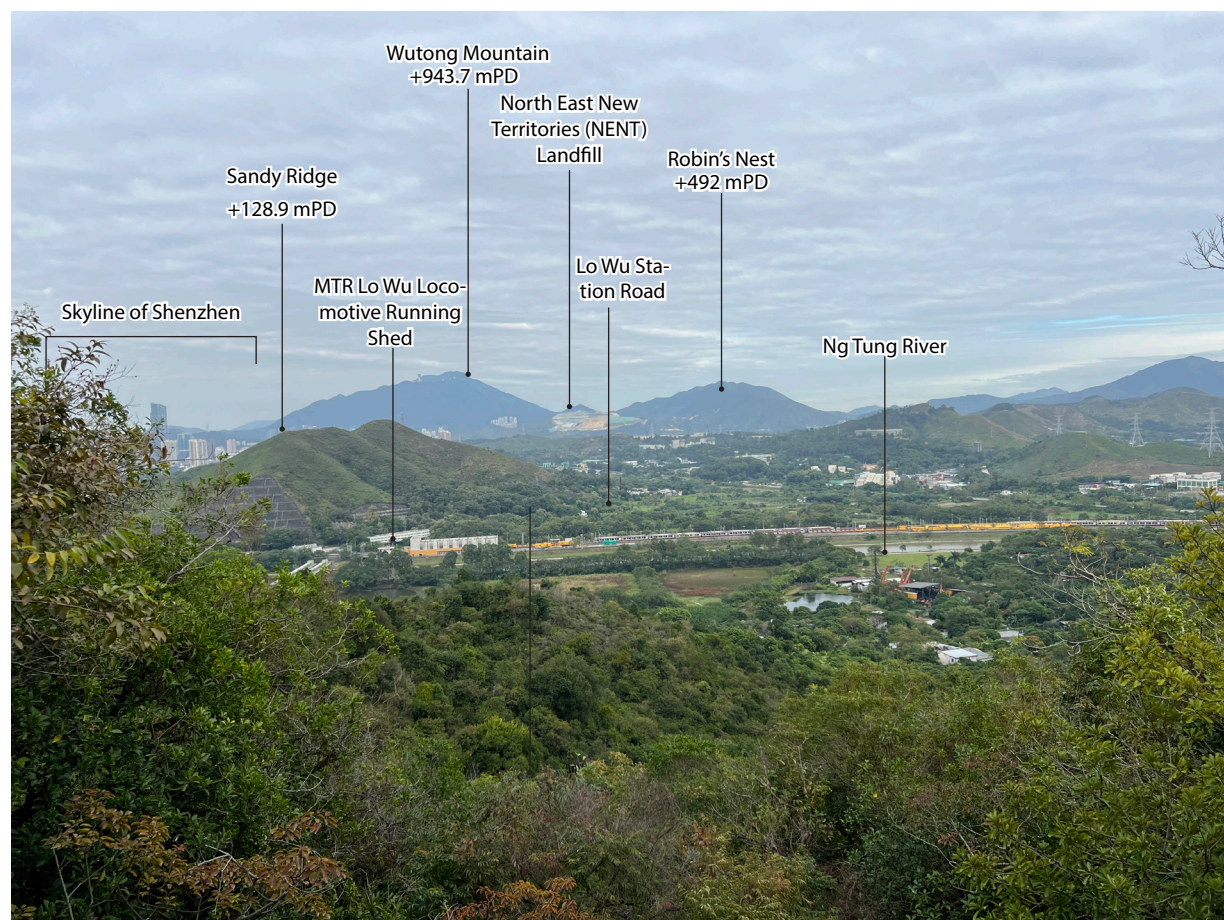
PROJECT NO.
項目編號
60717392

AGREEMENT NO.
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CE/30/2023(CE)

SHEET TITLE
圖紙名稱
PHOTOMONTAGE OF VP3 - VIEW FROM
LIN MA HANG ROAD AND SUN UK LING
PLAYGROUND

ground
SHEET NUMBER
圖紙編號
FIGURE 4.6

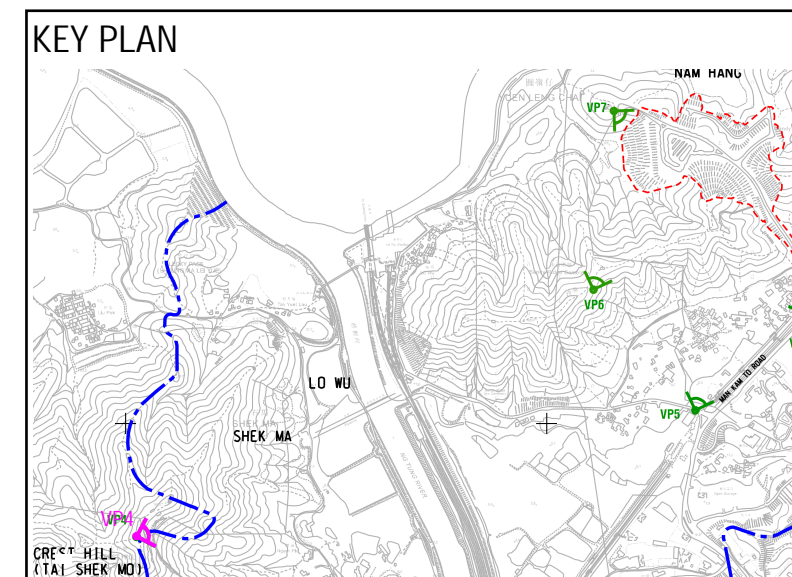
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Existing baseline condition



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STATUS

SCALE

比例

DIMENSION UNIT

DIME
尺寸單位

KEY PLAN

索引圖

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AGREEMENT NO.

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SHEET TITLE

圖紙名稱

PHOTOMONTAGE OF VP4 - VIEW FROM
HIKING TRAIL ALONG CREST HILL

SHEET NUMBER

0112

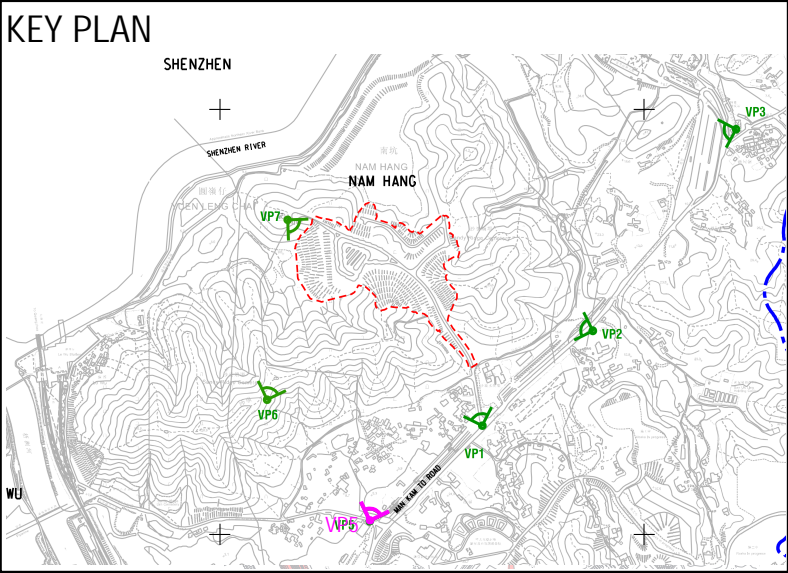
FIGURE 4.7



Existing baseline condition



Proposed development



PROJECT
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STATUS
階段

SCALE
比例

DIMENSION UNIT
尺寸單位

KEY PLAN
索引圖

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SHEET TITLE
圖紙名稱
PHOTOMONTAGE OF VP5 - VIEW FROM
SHA LING PLAYGROUND

SHEET NUMBER
圖紙編號
FIGURE 4.8

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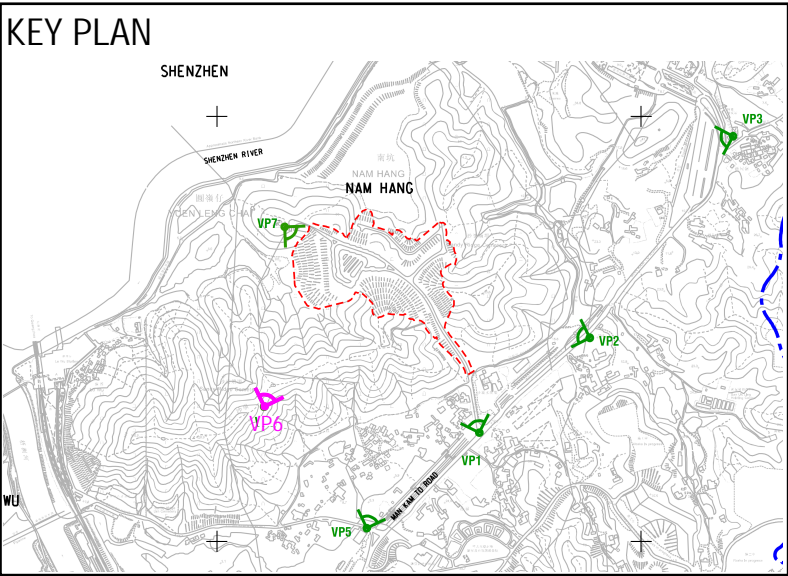
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Existing baseline condition



Proposed development



AECOM

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階段

SCALE
比例

DIMENSION UNIT
尺寸單位

KEY PLAN
索引圖

PROJECT NO.
項目編號

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60717392

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SHEET TITLE
圖紙名稱

PHOTOMONTAGE OF VP6 - VIEW FROM
HIKING TRAIL ALONG SANDY RIDGE

SHEET NUMBER
圖紙編號

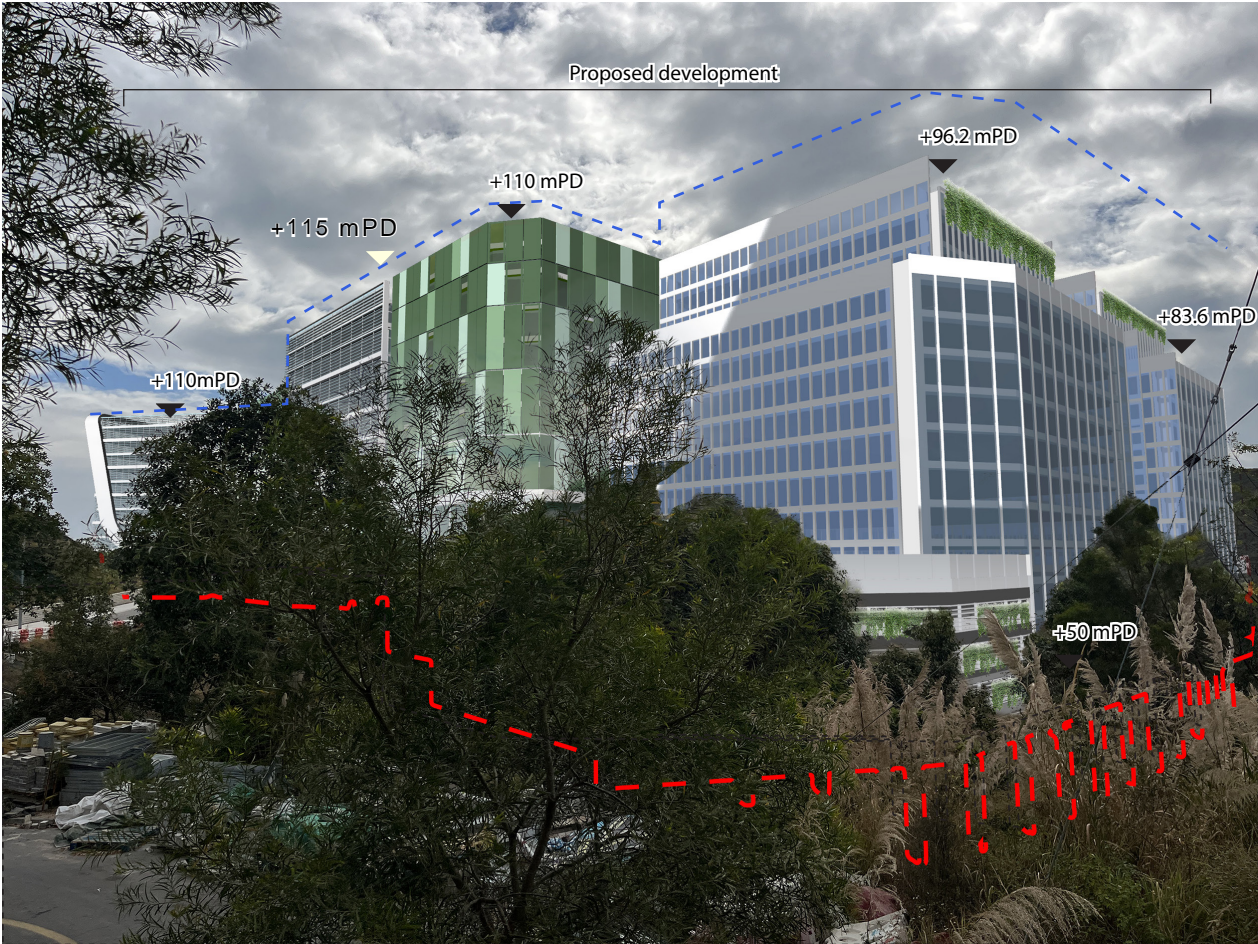
FIGURE 4.9

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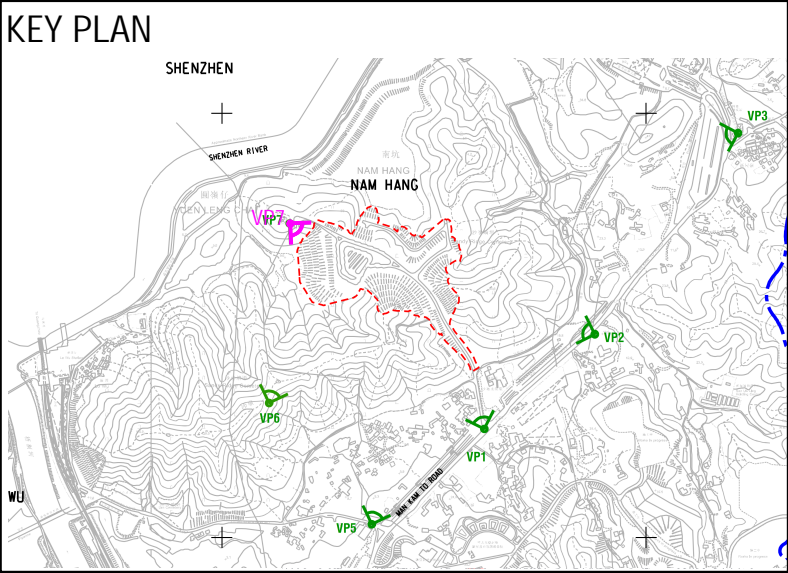
ISO A1 594mm x 841mm
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Project Management Initials:
Plot File by: Wailun Pan 2024/1/24
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比例

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PROJECT NO.
項目編號
60717392

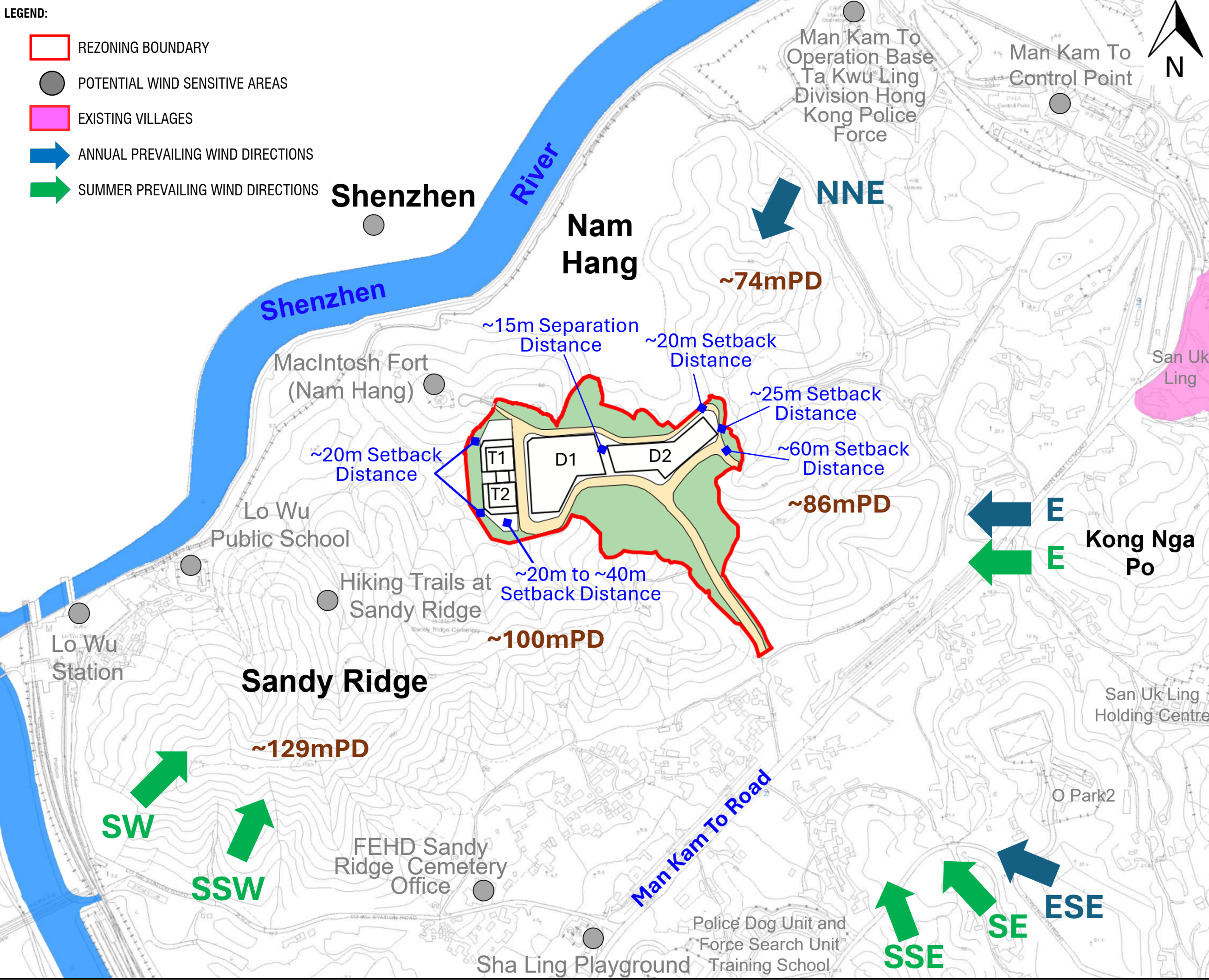
AGREEMENT NO.
協議編號
CE/30/2023(CE)

SHEET TITLE
圖紙名稱
PHOTOMONTAGE OF VP1 - VIEW FROM
MACINTOSH FORTS (NAM HANG)

SHEET NUMBER
圖紙編號
FIGURE 4.10

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- LEGEND:**
- REZONING BOUNDARY
 - POTENTIAL WIND SENSITIVE AREAS
 - EXISTING VILLAGES
 - ANNUAL PREVAILING WIND DIRECTIONS
 - SUMMER PREVAILING WIND DIRECTIONS

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PROJECT
TERM CONSULTANCY FOR SITE FORMATION AND INFRASTRUCTURE WORKS FOR PROPOSED HOUSING AND OTHER DEVELOPMENTS IN ZONE 4 (2023 - 2027) - FEASIBILITY STUDY
TASK ORDER NO.1 - STUDY FOR I&T AND RELATED PURPOSE DEVELOPMENT AT SANDY RIDGE IN NORTH DISTRICT
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PROJECT NO.
60717392

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SHEET TITLE
POTENTIAL WIND ENVIRONMENT

SHEET NUMBER
FIGURE 4.11

