

Hong Kong Housing Authority
Agreement No. CB20120293
Planning and Engineering Study
for the Public Housing Site and
Yuen Long Industrial Estate
Extension at Wang Chau

Final Technical Report No.3I (TR-
3I) Preferred Option and Technical
Assessment - Land Requirement
Plan

REP-021-01

Final | April 2014

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

Job number 226464

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Contents

	Page
1 INTRODUCTION	1
1.1 Project Background	1
1.2 Objectives of the Report	1
1.3 Structure of this Report	2
1.4 Nomenclature and Abbreviations	3
2 PROJECT DESCRIPTION	5
2.1 Site Location	5
2.2 PH site	5
2.3 YLIEE site	5
2.4 Resumption Boundary	6
2.5 Key Infrastructures Outside Project Site	6
2.6 Tentative Implementation Programme	7
3 LAND REQUIREMENTS	8
3.1 General	8
3.2 PH Site	8
3.3 YLIEE Site	15
3.4 Temporary Works Areas	18
4 SUMMARY	21

Figures

- Figure 1.1.1 Location of Project Site
- Figure 3.1.1 Land Requirement Plan
- Figure 3.1.2 Plan of Private Lots & Leased Government Land Affected
- Figure 3.1.3 Plan of Major Landholders
- Figure 3.1.4 Plan of Structures and Buildings Affected
- Figure 3.1.5 Plan of Open Storage and Container Back-up Site Affected
- Figure 3.1.6 Plan of Burial Ground, Grave, Urns / Kam Taps and Shrines
- Figure 3.1.7 Plan of Agricultural Land and Orchard Affected
- Figure 3.1.8 Plan of Affected Minor Roads, Footpaths and Cycle Tracks
- Figure 3.1.9 Plan of Water Feature Affected
- Figure 3.1.10 Plan of Slope and Retaining Wall Affected

Appendices

Appendix A

Details of Open Storages and Container Back-Up Sites

1 INTRODUCTION

1.1 Project Background

- 1.1.1.1 As stated in the Chief Executive's 2011-12 Policy Address, the Administration is committed to expanding the land resources and increasing housing land supply. To meet this policy objective, the Planning Department (PlanD) has carried out a comprehensive review of the areas zoned "Green Belt" (GB) on the Outline Zoning Plans (OZPs) focusing on sites which are no longer green or spoiled. A number of "GB" and "Open Storage" (OS) sites in Wang Chau, Yuen Long were identified as having potential for public housing (PH) development.
- 1.1.1.2 Subsequently, the Innovation and Technology Commission (ITC) and the Hong Kong Science and Technology Parks Corporation (HKSTP) advised of the need to expand the Yuen Long Industrial Estate (YLIE), in addition to the existing three Industrial Estates (IEs) at Tai Po, Tseung Kwan O and Yuen Long. It was requested to use a portion of the Wang Chau potential housing site for this purpose.
- 1.1.1.3 After due consideration, an agreement was reached between the Housing Department (HD) and ITC to share the site, tentatively with the northerly portion to be allocated for the YLIE extension (YLIEE), while the remaining south portion would be developed for public housing use. It was further agreed that no Potential Hazardous Installations (PHIs) would be located at the YLIEE so as to minimize the potential adverse impact on the neighbouring PH development.
- 1.1.1.4 **Figure 1.1.1** shows the location of the Project site. The PH and YLIEE sites at Wang Chau are zoned GB and OS on the Ping Shan OZP No. S/YL-PS/14. It is currently occupied by OS, vehicle parks, farmland, fallow land, grassland, rural residential dwellings and temporary structures.
- 1.1.1.5 Ove Arup & Partners Hong Kong Limited (Arup) was commissioned by Hong Kong Housing Authority (HKHA) under entrustments from the Government of the Hong Kong Special Administrative Region (HKSAR) & HKSTP to conduct the Planning and Engineering Study for Public Housing Site and YLIEE at Wang Chau (the Study), which will examine the feasibility on developing public housing and YLIEE at Wang Chau by conducting planning, engineering and environmental assessments to formulate proposal for the PH site and YLIEE, and the implementation strategies and programme for the proposed development.

1.2 Objectives of the Report

- 1.2.1.1 Following on the endorsement of the Technical Report (TR) on Option Generation, Evaluation and Preliminary Assessments (TR-2)

in the Study Steering Group Meeting on 28 June 2013, a preferred development option has been formulated. According to the Clause 5.3(c) of the brief, technical assessments are required to demonstrate the feasibility of the preferred development option.

1.2.1.2 The Technical Report (TR-3) – Preferred Option and Technical Assessments under this P&E study is to undertake the technical assessments including traffic and transport assessments, drainage and sewerage impact assessment, water supply and utilities impact assessments, geotechnical assessments, foundation assessment, natural terrain hazard study, environmental impact assessment, financial assessment, air ventilation assessment and land requirement study to confirm the feasibility of the preferred development option and ascertain the implications that may arise.

1.2.1.3 This report TR-3j forms part of the TR-3 and is to carry out a land requirement plan based on the preferred development option as well as the proposed land resumption boundary and identify any implications that may arise from land matters for the PH site and YLIEE site. According to Clause 5.3 (c)(xii) of the Brief, this land requirement study should comprise the following:

- collect the land status plan(s) for the proposed projects and its immediate vicinity from the Lands Department; and obtain information of landowner of the private lots from the Land Registry and of development proposals from the Planning Department at the start of the Study so as to identify significant areas of land holding amassed by individual owners/developers or proposed developments. The Consultants shall prepare drawing showing the locations and boundary of such area and proposed developments and associated infrastructures/facilities;
- work out the land required for the implementation of the development option and identify any resumption, clearance, reprovisioning and rehousing that may be required for the development and infrastructure;
- prepare Land Requirement Plans

1.3 Structure of this Report

1.3.1.1 The structure of this Technical Report is as follows:

Section 1	Introduces the background of the study, as well as the purpose of this report.
Section 2	Provides the site description and presents the preferred option and the land resumption boundary on which the land requirement study is based.
Section 3	Presents the key land requirement issues.
Section 4	Presents a summary.

1.4 Nomenclature and Abbreviations

1.4.1.1 The following **Table 1.1** lists out the meaning of abbreviation for expressions adopted in this report:

Table 1.1: Abbreviations

Abbreviations	Term
GB	Green Belt
GFA	Gross Floor Area
HD	Housing Department
HKHA	Hong Kong Housing Authority
HKSAR	Hong Kong Special Administrative Region
HKSTP	Hong Kong Science and Technology Parks Corporation
IE	Industrial Estate
ISWB	Integrated Social Welfare Building
LOS	Local Open Space
ITC	Innovation and Technology Commission
MTRCL	MTR Corporation Limited
OS	Open Storage
OZP	Outline Zoning Plan
PlanD	Planning Department
PH	Public Housing Site (This Project)
PR	Plot Ratio
PHI	Potential Hazardous Installation
PTI	Public Transport Interchange
SIMAR	Systematic Identification of Maintenance Responsibility of Slopes in the Territory
TR-2	Technical Report No. 2
TR-3	Technical Report No. 3
YLIE	Yuen Long Industrial Estate
YLIEE	Yuen Long Industrial Estate Extension (This Project)

1.4.1.2 **Table 1.2** also lists out the definition of the land types adopted in this report:

Table 1.2: Abbreviations

Abbreviation	Full name	Definition
OSL	Old Schedule Lot 舊批約地段	Land Parcels claimed during the Demarcation District (DD) Survey were called OSL as they were already in existence before the leasing of the New Territories (NT). They are land held under the Block Government Lease (BGL) granted by or on behalf of the Governor in 1905 pursuant to the New Territories (Land Court) Ordinance 1900 to the persons described in the Schedule to the lease.
TTLot	Tso & Tong Lot 祖堂地	Tso and Tong are lineage trusts whereby village lands owned by traditional family organisations are held in common ownership for the benefit of the whole lineage. Under S.15 of the New Territories Ordinance (Cap. 97), whenever any land is held from the Government under lease or other grant, agreement or licence in the name of a clan (宗族), family (家族) or tong (堂), such

Abbreviation	Full name	Definition
		clan, family and tong shall appoint a manager (司理) to represent it. The appointed manager shall be registered at the appropriate New Territories District Office of the Home Affairs Department. Consent of the District Officer is required for any transactions with the land.
LOA	Letter of Approval 批准書	The approval given under the land grant condition (including BGL) of leasehold agricultural land to farmers who wishes to construct agricultural structures (e.g. greenhouses, livestock sheds, hatcheries, fish ponds, store rooms etc.)
MOT	Modification of Tenancy 放寬租約牌照	Similar to LOA, but there is no limitation to agricultural uses. It is seldom issued nowadays and is superseded by the issue of Short Term Wavier (STW).
BL	Building Licence 建屋牌照	A licence granted to any person by the Government under or by virtue of the lease permitting the erection on the land of a building or buildings, in relation to any land which is the subject of a Government grant.
STW	Short Term Waiver 短期豁免書	It is issued to the land owner or occupier waiving the government right of re-entry for such a limited period, during which time the lessee may vary the use of the land with payment of prescribed fees.
NNG	New Grant Lot 新批地段	Land parcels in the NT, or Crown land (i.e. land not claimed during the DD Survey), which were disposed of after 1905 either by way of public auction or by direct sale are known as the NNG. The land parcel granted before World War II are commonly known as Old New Grant Lot (ONG) while that granted after are commonly known as New New Grant Lot.
STT	Short Term Tenancy 短期租約	A lease expressed to be granted for a term of not more than 7 years for specified use under conditions.
GLL	Government Land Licence 政府租約牌照	A Licence confers a non-exclusive right of occupation of unleased government land. It mainly associates with habitation by people animal/poultry or cultivation/fishing/plantation. It may be issued under Cap. 28, but is rarely issued nowadays and is superseded by the issue of STT.

2 PROJECT DESCRIPTION

2.1 Site Location

2.1.1.1 The Project site is bounded by the existing YLIE, Fuk Hi Street and Fuk Hing Garden and Sai Tau Wai to the east, Long Ping Road and Long Ping Estate to the south, Kai Shan to the west, as well as Shing Uk Tsuen, Tai Tseng Wai and Ng Uk Tsuen to the north as indicated in **Figure 1.1.1**.

2.2 PH site

2.2.1.1 The PH site has a site area of 18.81 ha. Types of the proposed land use within the PH site boundary include residential with local open space and parking spaces, retail, schools, integrated social welfare building (ISWB), Public Transport Interchange (PTI), roads, amenity greening and slope.

2.2.1.2 Within the PH site, about 14.49ha is residential site area. A plot ratio (PR) of 6.0 (i.e. 5.86 domestic and 0.14 non-domestic) and maximum building height of 41 storeys is proposed. A total of a domestic GFA of 848,750 m² and retail GFA of 19,760 m² will be accommodated. The proposed development option could provide a total of 16,975 flats to cater for around 52,113 populations.

2.2.1.3 The PH site can be roughly divided into three portions. The southwestern portion of the PH site consists of the area around residential blocks 1 to 10 (Phase 1), the middle portion consists of the area around residential blocks 11 to 17 (Phase 2), and the northern portion consists of the area around buildings 18 to 24 (Phase 3). The middle and northern portions are bisected by the proposed northern local access road.

2.2.1.4 The latest PH site boundary and the proposed development layout plan is given in **Figure 1.1.1**.

2.3 YLIEE site

2.3.1.1 The YLIEE site has a total area of 14.65ha with 11.66 ha reserved for industrial use. It consists of 16 individual industrial plots. A PR ratio of 2.5 and a maximum building height of 8 storeys for the industrial lots are proposed.

2.3.1.2 The major types of land use are industrial uses, local open space (LOS), car parking space, road and slope area. The LOS is currently occupied by woodland which will be preserved on-site. On-site ecological compensation area and woodland compensation area are also proposed and the existing woodland within the woodland compensation area will be retained in situ.

2.3.1.3 The latest YLIEE site boundary and the proposed development layout plan is given in **Figure 1.1.1**.

2.4 Resumption Boundary

2.4.1.1 A land resumption boundary for the development site (also shown in the Land Requirement Plan - **Figure 3.1.1**) has been proposed to mark out the land required for future land acquisition, taking into account the area for the proposed rezoning as well as the development area of PH site and YLIEE site. This boundary is delineated based on the following:

- Where practicable, the whole lot will be resumed to avoid the area remained to be tiny and in irregular shape; and
- Structures / temporary structures, fencings, slopes, burial urns, and graves will be avoided unless they are unavoidable.

2.4.1.2 It shall be noted that this land requirement plan is based on the current boundary of development and works required. Topographical survey will be carried out, in particular to determine the exact location of nearby graves, Kam Taps, urns and any other critical features. The land resumption boundary will be reviewed in the next stage of study.

2.5 Key Infrastructures Outside Project Site

2.5.1 Road Improvement Works

2.5.1.1 There are a total of 4 local improvement proposals on existing road junctions to meet the increase traffic demand due to the development of PH and YLIEE site. All these proposed improvements are within the boundary of existing highway infrastructure.

2.5.1.2 The tentative scope of the proposed road improvement works roads are summarized in table below.

Table 2.1: Summary of Road Improvement Works

Junction		Proposed Improvement Works
Ref	Location	
RW1	Fuk Hi Street / Long Ping Road and access road to PH site	<ul style="list-style-type: none"> • Preliminary junction improvement has been included for this junction. • A section of approximately 150m long of the north bound of Fuk Hi Street would be widened • A section of approximately 150m long of the north bound of Long Ping Road would be widened • Some minor refinement of the local access road to Ting Fook Villas
RW2	Fuk Hi Street / Wang Lok Street	<ul style="list-style-type: none"> • An additional left turn lane from Wang Lok Street to Fuk Hi Street
RW3	Long Ping Road / Fung Chi Road and access road to GIC building	<ul style="list-style-type: none"> • Minor reconfiguration of road junction layout to facilitate new access road connection
RW5	Shui Bin Wai Interchange	<ul style="list-style-type: none"> • Local junction reconfiguration at WB lane from Long Ping Road into Shui Bin Wai Interchange

2.5.1.3 The proposed road or junction improvement works and its associated tentative temporary works areas are shown in **Figure 1.1.1**. It shall be noted that parts of the road improvement works overlap with the resumption boundaries of PH site and YLIEE site. Subject to further discussion and agreement with LandsD and HD, it is required to clarify in the future CAF submission whether the proposed road improvement works would be carried out under the land resumption of PH site and YLIEE site respectively or would be gazette under Cap. 370 as part of the associated road works.

2.5.2 Sewerage/Drainage/Fresh Water Supply Infrastructure

2.5.2.1 Construction of new sewers / stormwater drainage pipes and upgrading works for existing sewers / drainage pipes / fresh water mains outside the Project Site have been proposed along Fuk Hi Street, Long Ping Road and Fung Chi Road to cater for the increase population of the proposed development.

2.5.2.2 The proposed infrastructure works and its associated tentative temporary works areas are shown in **Figure 1.1.1**. They are all within the boundary of existing highway infrastructure.

2.6 Tentative Implementation Programme

2.6.1.1 The PH site would be implemented in three phases and the YLIEE site would be developed in a single phase. The following summarises the tentative commissioning dates for both the PH and the YLIEE sites:

- a) Year 2022: Granting of YLIEE's land starting from 2022 which will take about 4 years to complete
- b) Year 2024: Population intake of PH Site Phase 1
- c) Year 2026: Population intake of PH Site Phases 2 & 3

3 LAND REQUIREMENTS

3.1 General

- 3.1.1.1 The Land Requirement Plan for the PH site, YLIEE site and the associated temporary works areas for road improvement works and sewerage, drainage, flushing water and water supply works are given in **Figure 3.1.1**.
- 3.1.1.2 The current land status of the Project site has been established through desktop review of the aerial photos (dated 2011), B1000 topographic maps (dated 2010 - 2012), C1000 land boundary maps (dated 2010 - 2012), OZPs and the current ownership information from Land Registry (dated 2012). Aerial photographs provide a source of up-to-date ground condition of the area; B1000 maps provide the existing ground features such as houses, graves, open storage, foot paths etc; C1000 maps provide the existing land status such as graphical location, land ID, land current status etc; OZPs provide the land use status of the area; and the ownership information from Land Registry provides the land status and the ownership of private lots/holdings.
- 3.1.1.3 Alongside the desktop study, site visits were conducted in early 2013 to survey ground features such as graves, temporary structures, watercourses, open storages, agricultural lands and orchards etc. Only accessible areas were covered in this exercise.
- 3.1.1.4 A summary of the private and government land area affected by the development of PH site and YLIEE site is given in **Table 3.1** below:

Table 3.1: Summary of private and government land area in PH site and YLIEE site

	PH	YLIEE	Temporary Works Areas
Total Area of Land Resumption (m ²)	193,038	153,652	29,738 (tentative)
Total Private Land Area (m ²)	131,122	74,777	0
Total Government Land Area (m ²)	61,916	78,875	29,738
Percentage of Private Land Area over Site Area	68%	49%	0

Remarks:

Government land here refers to lands other than Old Schedule Lots (OSL) and New Grant Lots (NNG) irrespective of whether the Government land is left in its natural terrain situation or has been developed as buildings, amenity areas and various man-made items for public use.

3.2 PH Site

3.2.1 Private Land Lots/Holdings

- 3.2.1.1 About 131,122 m² (~68%) of the area within the resumption boundary of PH site are private lands. A total of 327 private lots, which are all OSLs, will be potentially affected by the proposed PH site. Amongst them, there are 5 Letter of Approval (LOA), 41 Modification of

Tenancy (MOT), 2 Building Licence (BL), 20 Short Term Waiver (STW). Majority of the lots will be resumed entirely with a few are partially resumed only. The private lots required resumption are illustrated in **Figure 3.1.2**.

3.2.1.2 The 10 major landholders of the private lots is shown in **Figure 3.1.3**. The percentage of the ownership is calculated from the affected area of each owner out of the total private land area of the whole site (i.e. both PH and YLIEE). A total of 24 Tso and Tong lots are also identified and scattered within the PH site. These land lots are also OSL and they are owned by traditional family organisations and are held in common ownership for the benefit of the whole lineage.

3.2.1.3 **Table 3.2** shows the number and area of potentially affected land lots by the proposed PH development site.

Table 3.2: Number and area of private lots affected

Type of Land Records	No. Affected	Approximate Area Affected (m ²)
OSL	325 ^[2]	131,122 ^[3]
Tso and Tong Lots ^[1]	24	14,599
LOA ^[1]	5	414
MOT ^[1]	41	4,122
BL ^[1]	2	108
STW ^[1]	20	9,492

Note:

[1] The numbers and areas affected are quoted according to LandsD's records provided on 24 January 2014.

[2] Number of OSL which falls within the boundary of PH site. Any lot crossing over the common boundary of both PH and YLIEE has also been counted.

[3] Total area of OSL within the boundary of PH site.

3.2.2 Leased Government Land

3.2.2.1 Other than private land lots, the remaining land within the resumption boundary of PH site comprises mainly unleased Government land, as well as few leased Government land held under Short Term Tenancies (STT) on the northern portion of PH site and Government Land Licence (GLL) on the southern portion of PH site (see **Figure 3.1.2**).

3.2.2.2 **Table 3.3** shows the number and area of potentially affected leased government land by the proposed PH development site.

Table 3.3: Number and area of Leased Government Land affected

Type of Land Records	No. Affected	Approximate Area Affected (m ²)
STT ^[1]	10	5,896
GLL ^[1]	3	189

Note:

[1] The numbers and areas affected are quoted according to LandsD's records provided on 24 January 2014.

3.2.2.3 Termination and clearance of these licences/tenancies are required for the Project.

3.2.3 Structures/Buildings

- 3.2.3.1 Based on current site survey and desktop review, the location of temporary structures (both “In Living” and “Non-In Living”) and houses/buildings required clearance are identified and shown in **Figure 3.1.4**. 44 houses/buildings, 108 temporary structures (In Living) and 79 temporary structures (Non-In Living) will be affected. All occupied temporary structures and houses/buildings are assumed to be residential use with occupants. The occupants need to be moved and/or resettled upon the development. Local rehousing is recommended to be provided to clearers that are eligible for public rental housing.
- 3.2.3.2 It should be noted that the numbers of temporary structures and house/building required clearance will still be subject to update and confirmation upon completion of freezing survey conducted by Clearance Unit of DLO/YL after finalization of the resumption/clearance limit.

3.2.4 Open Storage and Container Back-up Site

- 3.2.4.1 The open storage and container backup site are mostly in the northern portion of the PH site. The number of open storage and container back-up site to be cleared are shown in **Figure 3.1.5** and **Appendix A**. The total affected open storage and container backup site area in the PH site is 73,059 m².

3.2.5 Permitted Burial Grounds, Graves, Urns/Kam Taps and Shrines

- 3.2.5.1 To the west of the PH site, permitted burial grounds YL65, YL 69, and YL 70 with significant amount of graves and urns/kam taps can be found on Kai Shan and in areas to the south of the hill (see **Figure 3.1.6**). Although they are very close to the PH site, the burial grounds and most of the graves and urns/kam taps have already been excluded from the Project site boundary and hence the land resumption boundary.
- 3.2.5.2 However, the paved area of one grave (G1) and four graves (G2-G5) (see **Figure 3.1.6c**) will still be affected by the development of PH site. Details of the graves are shown in **Table 3.4** and their photos are shown in **Plate 3.1**. These five graves are all located in government land and are either totally or partially outside the designated burial ground. Three of these graves (i.e. G2-G4) are located at the bottleneck area where the proposed access road at the southern portion will run through. Together with the provision of footpath and the proposed u-shaped retaining structures, the area of land take required cannot be further reduced. Thus the relocation of three graves (G2-G4) and the removal of the paved area of another grave (G1) is unavoidably required. Besides, another grave (i.e. G5) is marginally located at the PH site boundary near the central portion. Relocation of

this grave is also recommended as the development is constraint by the proposed EVA.

Table 3.4: Graves and associated paved area affected by the development of PH site

Grave ID	Family	Date of Original Burial	Date of Renovation	Grave Affected	Area of Paved Area Affected (m ²)	Proposed Treatment
G1	[REDACTED]	Unknown	1987 [Area paved in 2012-2013]	N	80	Remove paved area
G2	[REDACTED]	Unknown	2004	Y	10	Relocation of Grave
G3	[REDACTED]	2008	N/A	Y	27	Relocation of Grave
G4	[REDACTED]	Unknown	2003	Y	58	Relocation of Grave
G5	[REDACTED]	Unknown	N/A	Y	12	Relocation of Grave

Plate 3.1 Photos of Graves affected by the development of PH site



	Photo	Inscription
G4		
G5		

3.2.5.3 There are two shrines and a well located within the PH site (see **Figure 3.1.6b-c**) but they are proposed to be retained and preserved on site. The shrine named Pak Kung Shrine is situated at the most southern end of PH site, while the well and its associated shrine are situated at the central portion of PH site. Photos of the Pak Kung Shrine and the well and shrine are shown in **Plate 3.2**.

3.2.5.4 However since submission of the TR-3 report, discussion between AMO and HD was made regarding the need of preservation of the Pak Kung Shrine (nil grade) in Phase 1 development of PH site. In order to maximise the development potential for Phase 1 of PH site, it is considered that the shrine would unavoidably need to be removed/relocated. Such change will be taken into account in the revised development layout plan to be formulated separately for Phase 1 in next stage of the study.

Plate 3.2 Photos of Pak Kung Shrine and Well and Shrine within PH site

Pak Kung Shrine

Well and Shrine

3.2.6 Crops and/or Fruit Trees

- 3.2.6.1 Agricultural lands and orchards are identified in the vicinity of the existing rural settlements in the northern and southern portion of PH site. Their locations in terms of the extent to be cleared are shown in **Figure 3.1.7**. The areas of affected active farmlands and orchards are estimated to be 11,053 m² and 12,740 m² respectively. Compensation to the owner may be required to cover the loss of crops and fruit trees upon resumption and clearance.

3.2.7 Minor Roads or Footpaths

- 3.2.7.1 The location of existing minor roads and footpaths are shown in **Figure 3.1.8**.
- 3.2.7.2 A number of footpaths and tracks connecting to Kai Shan or the rural settlements and village houses within the PH site will be potentially affected. It is recommended that footpaths and tracks connecting to Kai Shan should be reprovisioned where practicable to allow public access to the existing graves and urns on Kai Shan. Accesses to those existing rural settlements which are outside the project limit and

would be rendered land-locked as a result of the proposed PH development should also be reprovided. However, local consultation through DO/YL is yet to be conducted at this stage. This issue will be consulted in formal DC consultation in the next stage of study and the re-provisioning of access and the temporary arrangements during construction stage will be included in the future CAF submission.

3.2.8 Watercourses, Culverts and Nullahs

3.2.8.1 **Figure 3.1.9** illustrates the watercourses, culverts and nullahs within the Project site. Several existing watercourses or drains are identified flowing across the PH site at the downstream of Kai Shan and will be affected by the proposed housing development. They will be demolished and diverted to the proposed new drainage system.

3.2.9 Earth Retaining Structures or Slopes

3.2.9.1 Source information for this item is obtained from Systematic Identification of Maintenance Responsibility of Slopes in the Territory (SIMAR) Project. Some of the affected slopes will be subject to modification or upgrading works.

3.2.9.2 Details of man-made and retaining wall features to be affected are shown in **Table 3.5** and they are shown in **Figure 3.1.10**.

Table 3.5: Registered Feature affected by the development of PH site

Registered Feature No.	Feature Type (Cut / Fill / Retaining Wall)	Existing Maintenance Responsibility	Current Consequence to Life Category	Retain / Remove / Modify
6NW-B/C103	Cut	Private DD122 Lot1144 & 1143/ Gov Dept Lands D	3	Retain
6NW-B/C104	Cut	Lands D	3	Modify
6NW-B/C105	Cut	Lands D	3	Modify
6NW-B/C122	Cut	Private DD122 Lot1201/ Gov Dept Lands D	1	Remove
6NW-B/R88	Retaining Wall	HyD	2	Remove
6NW-B/C23	Cut	HyD	2	Remove
6NW-B/C24	Cut	Lands D	3	Retain
6NW-B/C16	Cut	DSD	1	Modify
6NW-B/C154	Cut	DSD	1	Remove

3.2.10 Land Licence Area occupied by MTRCL

3.2.10.1 The southern end of the PH site will encroach into the area within MTRCL's Railway Protection Boundary LN177/03 PKCR held under Government land (see **Figure 3.1.1**). It should be noted that any proposals for new building, engineering works and developments (e.g. site formation/foundation works, ground investigation works, underground drainage works, demolition works etc.) to be carried out within the Railway Protection Boundary are subject to MTRCL's

comment and special scrutiny of the Building Authority prior to giving approval to the plans and/or consent for commencing the construction works.

- 3.2.10.2 Besides, the West Rail Emergency Access Point and the area within West Rail Vesting Boundary GN911/04 RVB are outside the PH site boundary and will not be affected. It is expected that adequate separation will be provided between the railway tracks and the PH site during construction and operation stages such that no impact will be imposed onto the West Rail operation.
- 3.2.10.3 Further liaison with MTRCL will be made in the detailed design stage of the Project to secure their comments and approval.

3.3 YLIEE Site

3.3.1 Private Land Lots/Holdings

- 3.3.1.1 About 74,777 m² (~49%) of the area within the resumption boundary of YLIEE site are private land. A total of 217 private lots will be potentially affected by the proposed YLIEE site. Amongst them, there are 216 OSLs (with 7 STW) and 1 NNG located in the northern portion of YLIEE site. Majority of the lots will be resumed entirely with a few are partially affected. The affected private lots are illustrated in **Figure 3.1.2**.
- 3.3.1.2 The 10 major landholders of the private lots is shown in **Figure 3.1.3**. The percentage of the ownership is calculated from the affected area of each owner out of the total private land area of the whole site (i.e. both PH and YLIEE). A total of 7 Tso and Tong lots are identified and scattered within the site. These land lots are also OSL and they are owned by traditional family organisations and are held in common ownership for the benefit of the whole lineage.
- 3.3.1.3 **Table 3.6** shows the number and area of potentially affected land lots by the proposed YLIEE site.

Table 3.6: Number and area of affected private lots

Type of Land Records	No. Affected	Approximate Area Affected (m ²)
OSL	216 ^[2]	74,387 ^[3]
<i>Tso and Tong Lots</i>	7	1,355
STW ^[1]	7	3,385
NNG	1	390 [65 for building land and 339.7 for agricultural land]

Note:

[1] The numbers and areas affected are quoted according to LandsD's records provided on 24 January 2014.

[2] Number of OSL which falls within the boundary of PH site. Any lot crossing over the common boundary of both PH and YLIEE has also been counted.

[3] Total area of OSL within the boundary of PH site.

3.3.2 Leased Government Land

3.3.2.1 Other than private land lots, the remaining land within the resumption boundary of YLIEE site comprises mainly unleased Government land, as well as few leased Government land held under Short Term Tenancies (STT) on the southern portion of YLIEE site (see **Figure 3.1.2**).

3.3.2.2 **Table 3.7** shows the number and area of potentially affected leased government land by the proposed YLIEE site.

Table 3.7: Number and area of affected Leased Government Land

Type of Land Records	No. Affected	Approximate Area Affected (m ²)
STT ^[1]	13	10,207

[1] The number and area affected are quoted according to LandsD's records provided on 24 January 2014.

3.3.2.3 Termination and clearance of these tenancies are required for the Project.

3.3.3 Structures/Buildings

3.3.3.1 Based on current site survey and desktop review, the location of temporary structures (both "In Living" and "Non-In Living") and houses/buildings required clearance are identified and shown in **Figure 3.1.4**. 1 houses/buildings, 3 temporary structures (In Living) and 24 temporary structures (Non-In Living) will be affected. All occupied temporary structures and houses/buildings are assumed to be residential use with occupants. The occupants need to be moved and/or resettled upon the development. Local rehousing is recommended to be provided to clearers that are eligible for public rental housing.

3.3.3.2 It should be noted that the numbers of temporary structures and house/building required clearance will still be subject to update and confirmation upon completion of freezing survey conducted by Clearance Unit of DLO/YL after finalization of the resumption/clearance limit.

3.3.4 Open Storage and Container Back-up Site

3.3.4.1 The open storage and container backup site cover most of the whole YLIEE site. The number of open storage and container back-up site in YLIEE site to be cleared are shown in **Figure 3.1.5** and **Appendix A**. The total affected open storage and container backup site area in the YLIEE site is 100,406 m².

3.3.5 Permitted Burial Grounds, Graves and Urns/Kam Taps

3.3.5.1 To the west of the YLIEE site, permitted burial grounds YL65 with significant amount of graves and urns/kam taps can be found on Kai Shan (see **Figure 3.1.6**). Although they are very close to the YLIEE site, the burial grounds and all of the graves have already been

excluded from the YLIEE site boundary. Therefore, no burial ground and graves will be affected by the development of YLIEE site.

- 3.3.5.2 However, four urns/kam taps (i.e. U1-U4) were found within the northern portion of YLIEE site. Photos of these urns are shown in **Plate 3.3**. Relocation of these urns/kam taps will be required.

Plate 3.3 Photos of Urns/Kam Taps affected by the development of YLIEE site



3.3.6 Crops and/or Fruit Trees

- 3.3.6.1 Agricultural lands and orchards are identified in the vicinity of the existing rural settlements in the northern portion of YLIEE site. Their locations in terms of the extent to be cleared are shown in **Figure 3.1.7**. The areas of affected active farmlands and orchards are estimated to be 14,157 m² and 725 m² respectively. Compensation to the owner may be required to cover the loss of crops and fruit trees upon resumption and clearance.

3.3.7 Minor Roads or Footpaths

- 3.3.7.1 The location of existing minor roads and footpaths are shown in **Figure 3.1.8**.
- 3.3.7.2 A number of footpaths and tracks connecting to Kai Shan will be potentially affected. It is recommended that footpaths and tracks connecting to Kai Shan should be reprovisioned where practicable to allow public access to the existing graves and urns on Kai Shan. Accesses to those existing rural settlements which are outside the project limit and would be rendered land-locked as a result of the proposed YLIEE development should also be reprovided. However, local consultation through DO/YL is yet to be conducted at this stage.

This issue will be consulted in formal DC consultation in the next stage of study and the re-provisioning of access and the temporary arrangements during construction stage will be included in the future CAF submission.

3.3.8 Watercourses, Culverts and Nullahs

3.3.8.1 **Figure 3.1.9** illustrates the watercourses, culverts and nullahs within the Project site. Several existing watercourses or drains are identified flowing across the YLIEE site at the downstream of Kai Shan. Tai Tseng Wai Nullah is also identified along the eastern boundary of YLIEE site adjacent to the existing YLIE. They will be demolished and diverted to the proposed new drainage system.

3.3.9 Earth Retaining Structures or Slopes

3.3.9.1 Source information for this item is obtained from Systematic Identification of Maintenance Responsibility of Slopes in the Territory (SIMAR) Project. Some of the affected slopes will be subject to modification or upgrading works.

3.3.9.2 Details of man-made and retaining wall features to be affected are shown in **Table 3.8** and they are shown in **Figure 3.1.10**.

Table 3.8: Registered Feature affected by the development of YLIEE site

Registered Feature No.	Feature Type (Cut / Fill / Retaining Wall)	Existing Maintenance Responsibility (G - Government / P - Private / M - Mixed)	Current Consequence to Life Category	Retain / Remove / Modify
6NW-B/C99	Cut	Lands D	3	Remove
6NW-B/C145	Cut	Private DD126 Lots 268A, 5472B, 573, 574. Gov Dept Lands D	3	Modify
6NW-B/C146	Cut	Lands D	3	Modify
6NW-B/C107	Cut	Lands D	3	Retain
6NW-B/C108	Cut	Lands D	3	Retain
6NW-B/C109	Cut	Private DD126 Lot581G Gov Dept Lands D	3	Remove
6NW-B/F204	Fill	Private DD126 Lots 565, 581G, 563, 557. Gov Dept Lands D	1	Modify

3.4 Temporary Works Areas

3.4.1 Private Land Lots/Holdings and Leased Government Lands

3.4.1.1 The proposed upgrading works of existing sewerage, drainage, flushing water and water supply as well as the road improvement works will not affect any private lands or leased government lands. All temporary works areas fall within unleased government land only.

3.4.2 Roads, Pedestrian Walkways and Cycle Tracks

- 3.4.2.1 To cater for the additional traffic due to the increase in population of the PH development, a section of Fuk Hi Street and Long Ping Road will be widened and minor improvement work on Long Ping Road is recommended (for the proposed new access road to the southern portion of the PH site and new bus stops/lay-bys). Minor junction improvement works are also proposed to be carried out at Fuk Hi Street-Wang Lok Street Junction and Long Ping Road – Long Tin Road Junction.
- 3.4.2.2 A very short section of an existing cycle track will need to be removed in order to provide connection of the new access road at the southern portion of the PH site to the junction of Long Ping Road and Fung Chi Road, but the signal-controlled crossing will be re-provided to maintain the linkage between this end of the cycle track and the one at the opposite side of the road.
- 3.4.2.3 The minor junction improvement works at Fuk Hi Street - Wang Lok Street Junction will also temporarily affect the existing cycle tracks and pedestrian walkway which require reprovisioning (see **Figure 3.1.8**).
- 3.4.2.4 The proposed widening works at the junction of Long Ping Road and Fuk Hi Street, however, will not affect the existing cycle tracks as the works will only be carried out next to the PH site boundary without encroachment onto the other side of the road where the cycle track encircles Long Ping Estate.

3.4.3 Watercourses, Culverts and Nullahs

- 3.4.3.1 **Figure 3.1.9** illustrates the watercourses, culverts and nullahs within the Project site. An existing open drain is identified flowing parallel to Fuk Hi Street and along the boundary of PH site where proposed road improvement works will be carried out. It will be demolished and diverted to the proposed new drainage system.

3.4.4 Land Licence Area occupied by MTRCL

- 3.4.4.1 The proposed road improvement works will encroach into the area within MTRC's Railway Protection Boundary LN177/03 PKCR as well as the West Rail Vesting Boundary GN911/04 RVB held under Government land around the road junction of Fung Chi Road and Wang Tat Road (see **Figure 3.1.1**). At-grade works will be carried out under the viaduct of the railway and no impact will be imposed onto the West Rail operation. It should be noted that any proposals for new building, engineering works and developments (e.g. site formation/foundation works, ground investigation works, underground drainage works, demolition works etc.) to be carried out within the Railway Protection Boundary are subject to MTRCL's comment and special scrutiny of the Building Authority prior to giving approval to the plans and/or consent for commencing the construction works.

3.4.4.2 Further liaison with MTRCL will be made in the subsequent phases of the Project to secure their comments and approval.

4 SUMMARY

4.1.1.1 A summary of the features affected by the development of PH site and YLIEE site is listed as follows:

Table 4.1: Features affected within PH site and YLIEE site

Features	PH		YLIEE		Total	
	Nos.	Area (m ²)	Nos.	Area (m ²)	Nos.	Area (m ²)
OSL	325 ^[2]	131,122 ^[3]	216 ^[2]	74,387 ^[3]	535	205,509
NNG	0	-	1	390 [65 for Building Land and 339.7 for Agricultural Land]	1	390 [65 for Building Land and 339.7 for Agricultural Land]
Tso/Tong lots ^[1]	24	14,599	7	1,355	31	15,954
LOA ^[1]	5	414	0	-	5	414
MOT ^[1]	41	4,122	0	-	41	4,122
BL ^[1]	2	108	0	-	2	108
STW ^[1]	20	9,492	7	3,385	27	12,877
STT ^[1]	10	5,896	13	10,207	23	16,103
GLL ^[1]	3	189	0	-	3	189
Houses (In living)	44	1,550	1	64	42	1,506
Houses (Not in living)	0	-	0	-	0	-
Houses (Undefined)	0	-	0	-	0	-
Temporary structures (In living)	108	4,301	3	69	111	4,370
Temporary structures (Not in living)	79	13,173	24	3,999	100	17,172
Open storage and container back-up sites	48 ^[4]	73,059 ^[5]	63 ^[4]	100,406 ^[5]	99	173,465
Graves	4	-	0	-	4	-
Urns/kam taps	0	-	4	-	4	-
Active agricultural land	-	11,053	-	14,157	-	25,209
Orchard	-	12,740	-	725	-	13,465
Slope and retaining wall features (Category I and Category II features)	9	-	7	-	16	-

Note:

- [1] The numbers and areas affected are quoted according to LandsD's records provided on 24 January 2014.
- [2] Number of OSL which falls within the boundary of respective sites (i.e. either PH site or YLIEE site). Any lot crossing over the common boundary of both PH and YLIEE has also been counted.
- [3] Total area of OSL within the boundary of respective sites.
- [4] Number of premises which falls within the boundary of respective sites. Any premises crossing over the common boundary of both PH and YLIEE has also been counted.
- [5] Total area of premises within the boundary of respective sites.