R-Riches
Property Consultants Ltd.

盈卓物業
顧問有限公司

Our Ref.: DD 116 Lot 253 RP & VL
Your Ref.: TPB/A/YL-TT/663

The Secretary,
Town Planning Board,
15/F, North Point Government Offices,
333 Java Road,
North Point, Hong Kong

By Email

31 December 2024

Dear Sir,

2nd Further Information

Proposed Temporary Open Storage of Vehicles with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Lots 933 S.A and 934 in D.D. 115 and Various Lots in D.D. 116 and Adjoining Government Land, Au Tau, Yuen Long, New Territories

(S.16 Planning Application No. A/YL-TT/663)

We write to submit further information in response to department comments of the subject application.

Should you require more information regarding the application, please contact our Mr. Danny NG at (852) [redacted] or the undersigned at your convenience. Thank you for your kind attention.

Yours faithfully,

For and on behalf of
R-riches Property Consultants Limited

Christian CHIM
Town Planner

cc DPO/TMYLW, PlanD (Attn.: Ms. Eva TAM email: ekytam@pland.gov.hk)
(Attn.: Mr. Tommy MA email: tncma@pland.gov.hk)

香港新界錦田吉慶圍 236 號盈匯坊 D 座
Block D, The Richfield, 236 Kat Hing Wai, Kam Tin, NT, HK
(852) 2339 0884
(852) 5964 4378
(852) 2323 3662
christianchim@r-riches.com.hk

Responses-to-Comments

Proposed Temporary Open Storage of Vehicles with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Lots 933 S.A and 934 in D.D. 115 and Various Lots in D.D. 116 and Adjoining Government Land, Au Tau, Yuen Long, New Territories

(Application No. A/YL-TT/663)

(i) A RtoC Table:

<table>
<tr><th colspan="2">Departmental Comments</th><th>Applicant's Responses</th></tr>
<tr><td colspan="3">1. Comments of the Commissioner for Transport (C for T)</td></tr>
<tr><td>(a)</td><td>The site involves storage of vehicles of 700 numbers. The applicant shall provide traffic impact during peak hours and non-peak hours and demonstrate the traffic impact arisen would be minimal.</td><td>The breakdown of estimated trip generation/ attraction of the proposed development is as follow:

<table>
<tr><th rowspan="3">Trip/ hour</th><th colspan="7">Estimated Trip Generation/Attraction</th></tr>
<tr><th colspan="2">PC</th><th colspan="2">LGV</th><th colspan="2">LB</th><th rowspan="2">2-way total</th></tr>
<tr><th>In</th><th>Out</th><th>In</th><th>Out</th><th>In</th><th>Out</th></tr>
<tr><td>AM Peak (09:00-10:00)</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td></tr>
<tr><td>PM Peak (18:00-19:00)</td><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td></tr>
<tr><td>Average (10:00-18:00)</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>12</td></tr>
</table>

The proposed development is for open storage of vehicles pending for sale, which means no frequent delivery of vehicles will take place. Besides, vehicles to be stored/delivered will be driven into/out of the application site (the Site) by staff with trade licence ONLY during non-peak hours i.e. beyond 09:00 to 10:00 and 18:00 to 19:00). Given that the nos. of vehicular trip generated/attracted by the proposed development are minimal, adverse traffic impact to the surrounding road network are not anticipated.

For details, please refer to Sections 5.6 to 5.8 of the Planning Statement in the original submission.</td></tr>
</table>

(b)	It is noted that LGV/light bus would be used to access the site. The applicant shall provide further details on the size of the vehicles and clarify whether tow truck would be used.	With reference to the swept path analysis at Plan 13 in the original submission, the dimensions of the LGV/LB will be no more than 6.5 m (L) x 2.0 m (w). As stated in Section 5.6 of the Planning Statement, vehicles to be stored/delivered will be driven into/out of the Site by staff with trade licence, no tow truck will be deployed.
(c)	The applicant should note the local access between Long Ho Road and the site is not managed by this Department.	Noted.
2. Comments of the Chief Town Planner/Urban Design and Landscape, Planning Department (CTP/UD&L, PlanD)		
(a)	The applicant should provide the broad-brush tree survey, mitigation measures and landscape proposal to demonstrate that the proposed uses would not have adverse landscape impact on the Site and surrounding areas.	The site inspection conducted on 26.11.2024 identified 59 existing trees within the Site. All trees identified thereon are of common species. The tree survey report is enclosed at **Annex 1a.** The existing trees are proposed to be felled as they are in conflict with the proposed development scheme. In order to mitigate the potential landscape impact that would have arisen from the proposed development, the applicant proposes to plant 59 new trees of local species, i.e. *Bauhinia x blakeana*, at the Site on a 1:1 ratio, with a view to compensating for the existing trees to be felled. In view of the provision of new trees, the extend of the proposed filling of land and the area for open storage have been revised. The area of the proposed filling of land is reduced from 14,250 m^2 to 13,885 m^2 (about), whilst the area for open storage is reduced from 11,583 m^2 to 11,401 m^2 (about). The landscape plan, the revised plan showing filling of land at the Site, the revised layout plan, and revised pages of Form No. S16-III and the Planning Statement are enclosed at **Annex 1b**.
3. Comments of the Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD)		
(a)	Drainage Impact Assessment (DIA) is required for this application.	Please refer to the DIA enclosed at **Annex 2**.

Annex 1a

Tree Survey Report

永豪園綠化工程有限公司
WING HO YUEN LANDSCAPING CO., LTD.

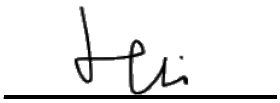
Tree Survey Report

Date of Survey: 26th November 2024

Location:

Various Lots in D.D. 115 And 116 And Adjoining Government Land, Au Tau, Yuen Long, New Territories

Prepared by:



Mak Ka Hei

Registered Arborist

Date: 28th November 2024

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Disclaimer:

The tree survey conducted indicates the condition of the surveyed trees at the time of inspection only. The assessments of amenity value, form, health and structural condition of the trees surveyed are based on visual inspection from the ground only. No aerial inspection, root digging or mapping, or diagnostic testing has been conducted as part of this survey. Wing Ho Yuen Landscaping Company Limited cannot accept responsibility for future failure or defects detected after the time of inspection of the trees surveyed in this report.

1. Introduction

The survey conducted is to record all the existing trees in the tree survey boundary. The survey include tree species identification, tree tagging with durable labels, the measurements of overall tree height, Diameter at Breast Height (DBH), average crown spread, the evaluation on amenity value, form, health and structural conditions.

The tree survey was conducted on 26th November 2024. Plants with DBH less than 95mm were not recorded in the survey.

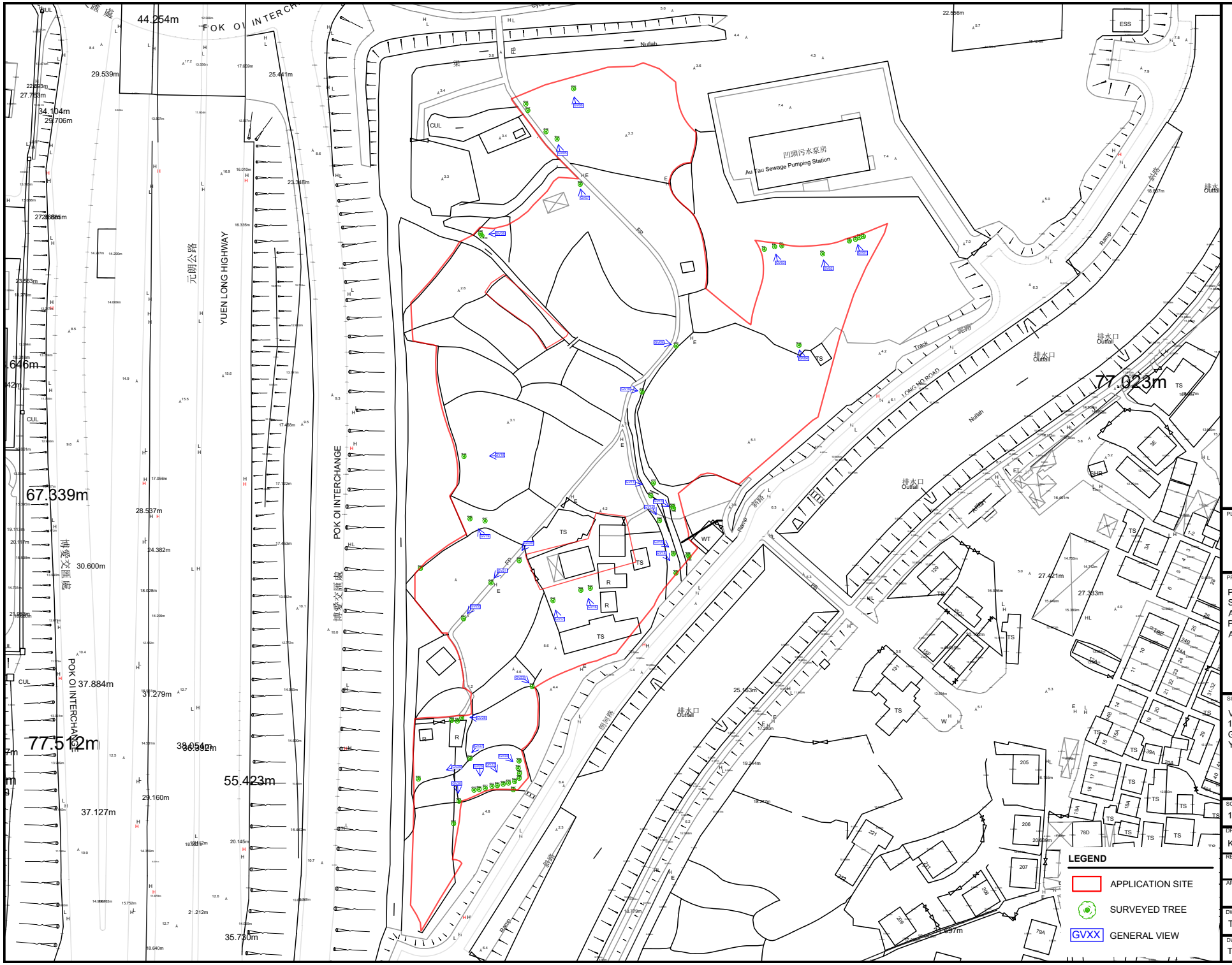
2. Summary of Existing Trees

The surveyed site is located at Various Lots in D.D. 115 And 116 And Adjoining Government Land, Au Tau, Yuen Long, New Territories.

At the time of inspection on 26th November 2024, **59 nos.** trees were found within the Site. **1** dead tree (T57) was recorded in the surveyed area. Location of individual tree refers to Appendix I.

Details of tree conditions and photo records for individual tree are recorded in the Appendix II and Appendix III respectively.

Appendix I – Tree Survey Plan



PLANNING CONSULTANT

R-Riches Property Consultants Ltd.

PROJECT

PROPOSED TEMPORARY OPEN STORAGE OF VEHICLE WITH ANCILLARY FACILITIES FOR A PERIOD OF 3 YEARS AND ASSOCIATED FILLING OF LAND

SITE LOCATION

VARIOUS LOTS IN D.D. 115 AND 116 AND ADJOINING GOVERNMENT LAND, AU TAU, YUEN LONG, NEW TERRITORIES

SCALE	1 : 1500 @ A4
DRAWN BY	KYU
DATE	28.11.2024
REVISED BY	
DATE	
APPROVED BY	
DATE	
DWG. TITLE	TREE SURVEY PLAN
DWG NO.	TSP
VER.	0

Appendix II –Tree Survey Schedule

Tree Survey Schedule

Location: Various Lots in D.D. 115 And 116 And Adjoining Government Land, Au Tau, Yuen Long, New Territories
Tree surveyor(s): Mak Ka Hei
Field Survey was conducted on: 26 November 2024

永豪園綠化工程有限公司
WING HO YUEN LANDSCAPING CO., LTD.

Tree No.	Tree Species		Tree Size Measurements			Amenity Value	Form	Health Condition	Structural Condition	Suitability for Transplanting	Remarks
	Botanical Name	Chinese Name	Overall Height (m)	DBH (mm)	Average Crown Spread (m)	High /Med /Low	Good /Fair /Poor	Good /Fair /Poor /Dead	Good /Fair /Poor	High /Med /Low	
T2	*Mangifera indica*	芒果	7.0	141	3.0	Med	Fair	Fair	Fair	Low	
T3	*Mangifera indica*	芒果	7.0	120	2.5	Med	Fair	Fair	Fair	Low	
T4	*Mangifera indica*	芒果	7.0	135	3.0	Med	Fair	Fair	Fair	Low	
T5	*Mangifera indica*	芒果	6.0	140	3.0	Med	Fair	Fair	Fair	Low	
T6	*Michelia x alba*	白蘭	7.5	130	3.0	Low	Fair	Fair	Poor	Low	crooked trunk
T7	*Michelia x alba*	白蘭	8.0	145	3.0	Low	Fair	Fair	Poor	Low	co-dominant trunks, crooked trunk
T8	*Michelia x alba*	白蘭	7.5	149	3.0	Low	Fair	Fair	Poor	Low	co-dominant trunks, crooked trunk
T9	*Michelia x alba*	白蘭	8.0	130	3.0	Low	Fair	Fair	Poor	Low	crooked trunk
T14	*Mangifera indica*	芒果	7.5	155	6.0	Med	Fair	Fair	Fair	Low	crown conflict with fence
T15	*Bombax ceiba*	木棉	12.0	200	7.5	Low	Fair	Fair	Fair	Low	
T16	*Bombax ceiba*	木棉	10.0	400	5.5	Low	Fair	Fair	Fair	Low	
T17	*Bombax ceiba*	木棉	13.5	280	7.0	Low	Fair	Fair	Fair	Low	
T18	*Bombax ceiba*	木棉	13.0	380	7.5	Low	Fair	Fair	Fair	Low	
T19	*Dimocarpus longan*	龍眼	6.5	110	2.5	Med	Poor	Fair	Fair	Low	climber
T22	*Dimocarpus longan*	龍眼	8.0	230	5.5	Med	Fair	Fair	Fair	Low	
T28	*Mangifera indica*	芒果	5.0	95	4.0	Med	Poor	Fair	Fair	Low	climber
T29	*Mangifera indica*	芒果	5.0	100	3.0	Med	Poor	Fair	Fair	Low	climber
T30	*Dimocarpus longan*	龍眼	4.0	200	5.0	Med	Fair	Fair	Fair	Low	
T31	*Macaranga tanarius var. tomentosa*	血桐	3.5	134	4.0	Low	Fair	Fair	Poor	Low	co-dominant trunks
T32	*Ficus hispida*	對葉榕(牛乳樹)	3.5	100	5.0	Low	Fair	Fair	Poor	Low	multi-stems
T33	*Macaranga tanarius var. tomentosa*	血桐	5.0	100	2.5	Low	Fair	Fair	Poor	Low	leaning
T34	*Ficus microcarpa*	榕樹(細葉榕)	12.0	1200	12.0	Low	Fair	Fair	Poor	Low	multi-stems
T35	*Macaranga tanarius var. tomentosa*	血桐	5.0	120	3.5	Low	Fair	Fair	Poor	Low	leaning
T36	*Macaranga tanarius var. tomentosa*	血桐	5.0	110	4.0	Low	Fair	Fair	Poor	Low	leaning, multi-stems
T37	*Michelia x alba*	白蘭	8.0	390	5.5	Low	Poor	Poor	Poor	Low	cavity and wound on trunk
T38	*Macaranga tanarius var. tomentosa*	血桐	5.0	110	4.5	Low	Fair	Fair	Poor	Low	leaning
T39	*Macaranga tanarius var. tomentosa*	血桐	6.5	115	5.0	Low	Fair	Fair	Fair	Low	
T40	*Leucaena leucocephala*	銀合歡	4.5	100	6.5	Low	Poor	Poor	Poor	Low	cavity and decay at trunk, leaning
T42	*Dimocarpus longan*	龍眼	7.0	263	6.0	Med	Fair	Fair	Poor	Low	co-dominant trunks
T43	*Dimocarpus longan*	龍眼	8.5	320	6.5	Med	Fair	Fair	Poor	Low	co-dominant trunks
T44	*Dimocarpus longan*	龍眼	6.5	404	7.0	Med	Fair	Fair	Poor	Low	co-dominant trunks
T45	*Macaranga tanarius var. tomentosa*	血桐	4.0	150	4.5	Low	Poor	Poor	Fair	Low	abnormal leaf size

Tree Survey Schedule

Location: Various Lots in D.D. 115 And 116 And Adjoining Government Land, Au Tau, Yuen Long, New Territories
Tree surveyor(s): Mak Ka Hei
Field Survey was conducted on: 26 November 2024

永豪園綠化工程有限公司
WING HO YUEN LANDSCAPING CO., LTD.

Tree No.	Tree Species		Tree Size Measurements			Amenity Value	Form	Health Condition	Structural Condition	Suitability for Transplanting	Remarks
	Botanical Name	Chinese Name	Overall Height (m)	DBH (mm)	Average Crown Spread (m)	High /Med /Low	Good /Fair /Poor	Good /Fair /Poor /Dead	Good /Fair /Poor	High /Med /Low	
T46	*Mangifera indica*	芒果	4.5	200	5.5	Med	Fair	Fair	Fair	Low	
T47	*Ficus hispida*	對葉榕(牛乳樹)	4.5	240	6.0	Low	Fair	Fair	Fair	Low	
T48	*Psidium guajava*	番石榴	5.0	203	4.5	Med	Fair	Fair	Poor	Low	co-dominant trunks
T49	*Celtis sinensis*	朴樹	3.0	183	2.0	Low	Poor	Fair	Poor	Low	co-dominant trunks
T50	*Dimocarpus longan*	龍眼	6.0	272	7.0	Med	Fair	Fair	Poor	Low	co-dominant trunks
T51	*Dimocarpus longan*	龍眼	6.0	311	8.0	Med	Fair	Fair	Poor	Low	trunk conflict of co-dominant trunks
T52	*Dimocarpus longan*	龍眼	3.5	190	4.0	Med	Fair	Fair	Fair	Low	
T53	*Mangifera indica*	芒果	5.0	110	3.5	Med	Fair	Fair	Poor	Low	leaning
T54	*Mangifera indica*	芒果	6.0	100	3.0	Med	Fair	Fair	Poor	Low	leaning
T55	*Mangifera indica*	芒果	6.5	120	3.0	Med	Fair	Fair	Poor	Low	crooked trunk
T56	*Mangifera indica*	芒果	6.0	110	2.5	Med	Fair	Fair	Poor	Low	crooked trunk
T57	*Mangifera indica*	芒果	3.0	130	0.5	-	-	Dead	-	-	dead tree
T58	*Mangifera indica*	芒果	6.0	100	2.0	Med	Fair	Fair	Poor	Low	crooked trunk
T59	*Mangifera indica*	芒果	5.0	143	3.5	Med	Fair	Fair	Poor	Low	co-dominant trunks
T60	*Mangifera indica*	芒果	6.5	120	3.0	Med	Fair	Fair	Fair	Low	
T61	*Mangifera indica*	芒果	2.5	120	1.0	Med	Poor	Fair	Fair	Low	climber
T62	*Mangifera indica*	芒果	7.5	130	5.0	Med	Poor	Fair	Fair	Low	dropping branch
T63	*Mangifera indica*	芒果	2.5	120	1.5	Med	Poor	Fair	Fair	Low	climber
T64	*Mangifera indica*	芒果	7.0	120	3.0	Med	Poor	Fair	Fair	Low	climber
T65	*Mangifera indica*	芒果	7.0	142	3.0	Med	Poor	Fair	Poor	Low	climber
T66	*Litchi chinensis*	荔枝	6.0	120	2.5	Med	Poor	Poor	Poor	Low	climber
T67	*Celtis sinensis*	朴樹	8.5	220	6.0	Low	Poor	Fair	Fair	Low	climber
T68	*Celtis sinensis*	朴樹	5.5	300	4.0	Low	Fair	Fair	Poor	Low	leaning
T69	*Dimocarpus longan*	龍眼	7.0	110	4.5	Med	Fair	Fair	Fair	Low	
T70	*Melia azedarach*	楝(苦楝)	12.0	270	5.5	Low	Poor	Fair	Poor	Low	leaning
T71	*Macaranga tanarius var. tomentosa*	血桐	4.5	100	5.0	Low	Poor	Fair	Fair	Low	climber
T72	*Ficus hispida*	對葉榕(牛乳樹)	4.5	110	4.5	Low	Poor	Fair	Fair	Low	climber

Notes: Amenity Value, Form, Health Condition and Structural Condition of trees were obtained by Visual Assessment Only.

Appendix III – Photo Records

General View

General view 01

General view 02

General View

General view 03

General view 04

General View

General view 05

General view 06

General View

General view 07

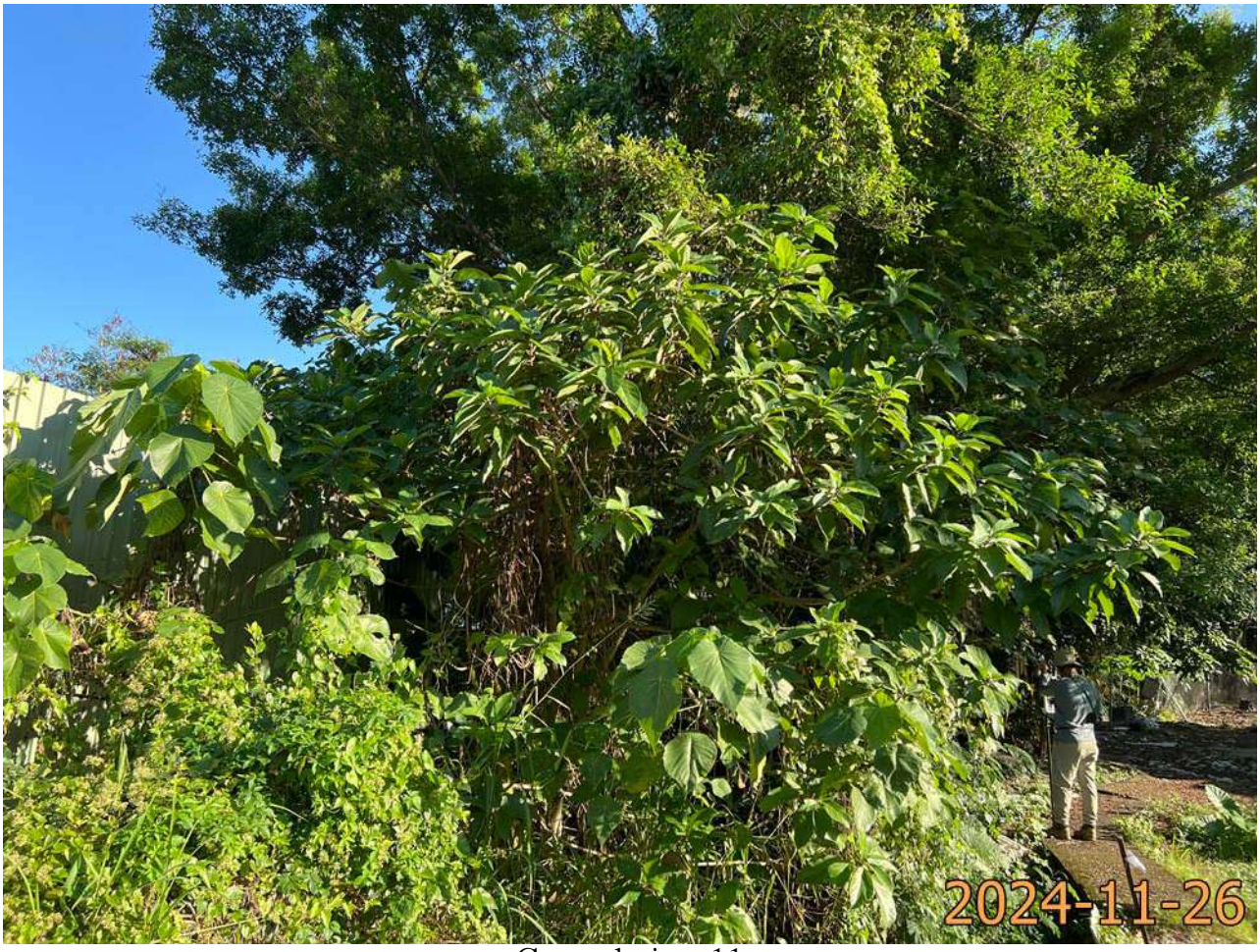
General view 08

General View

General view 09

General view 10

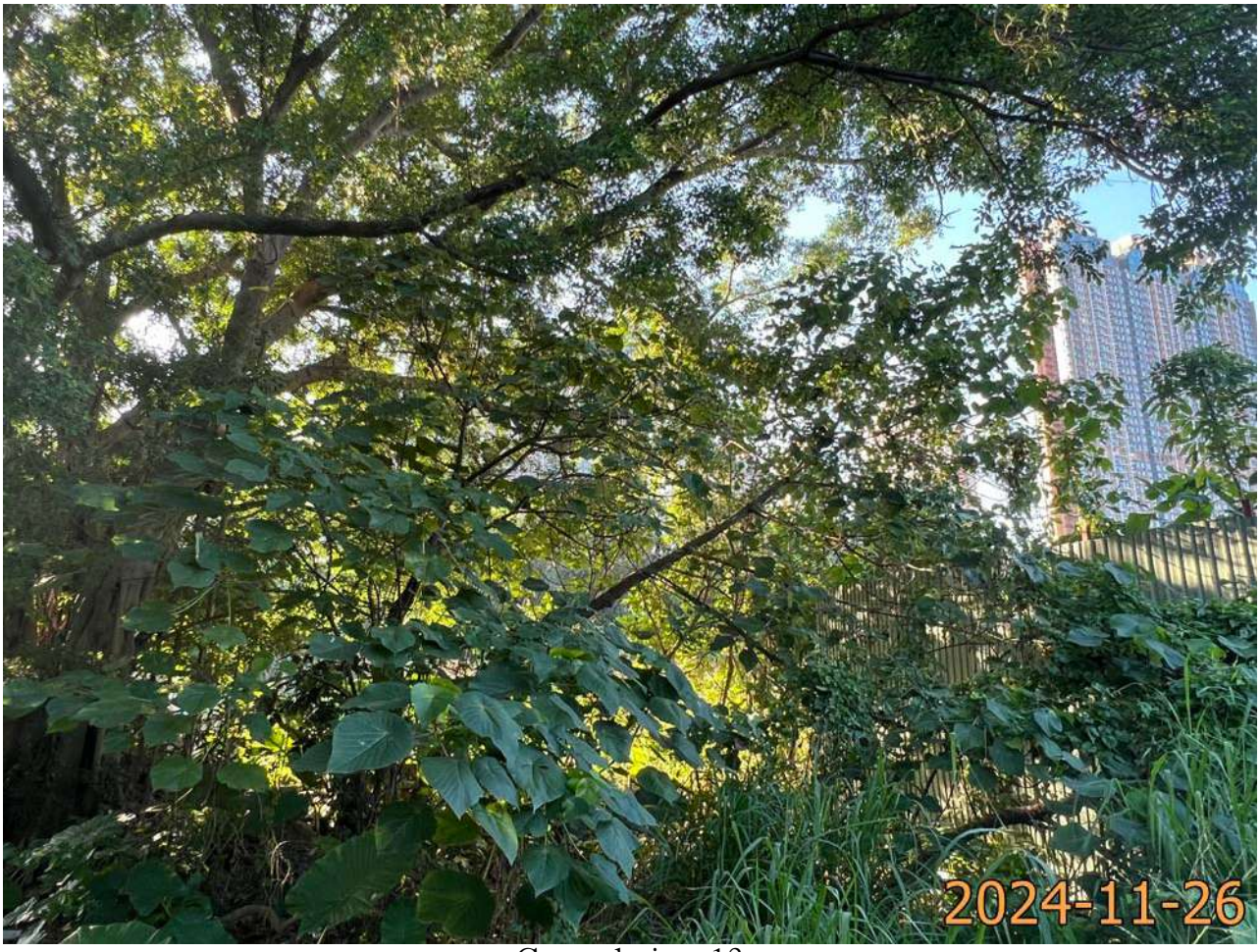
General View



General view 11

General view 12

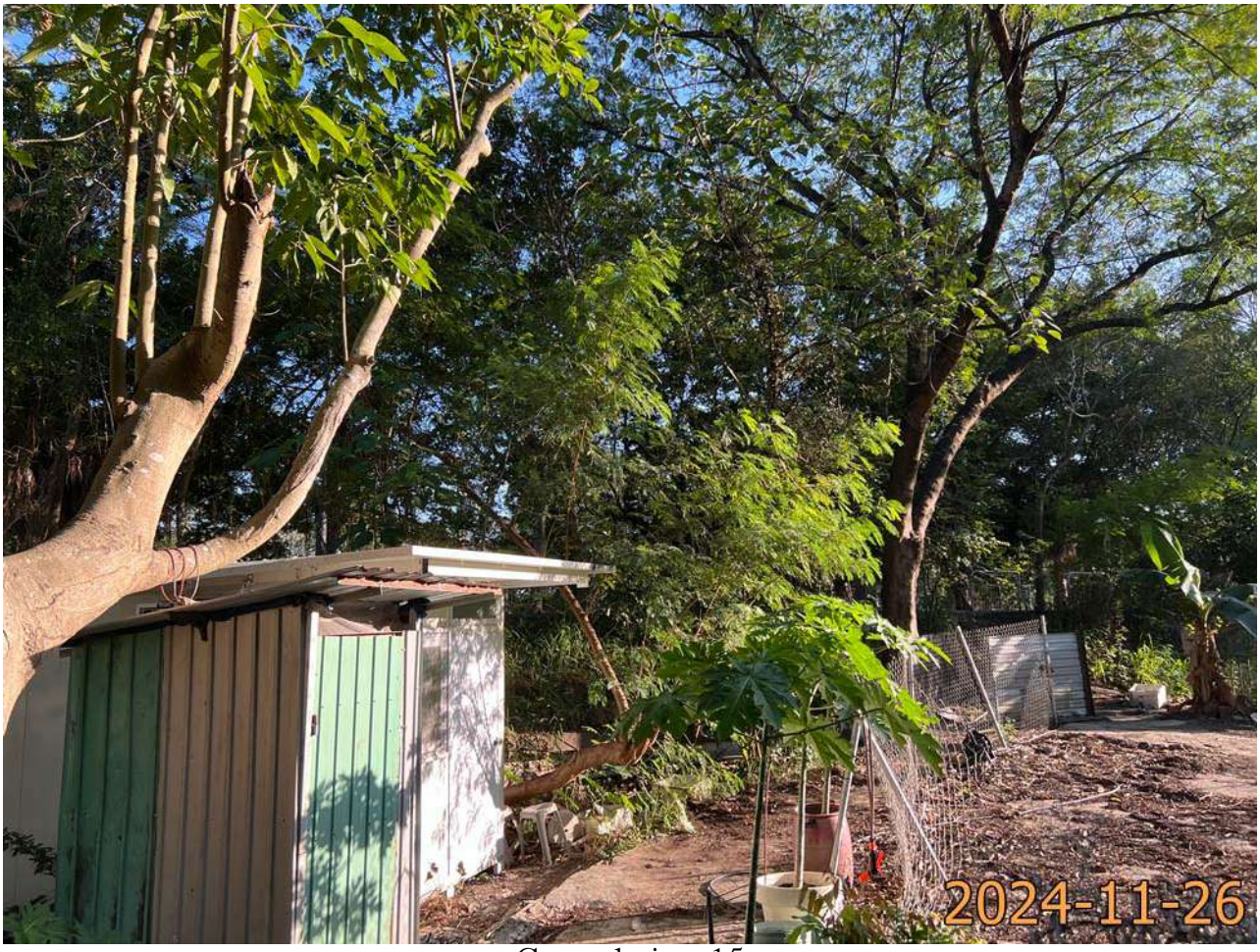
General View



General view 13

General view 14

General View

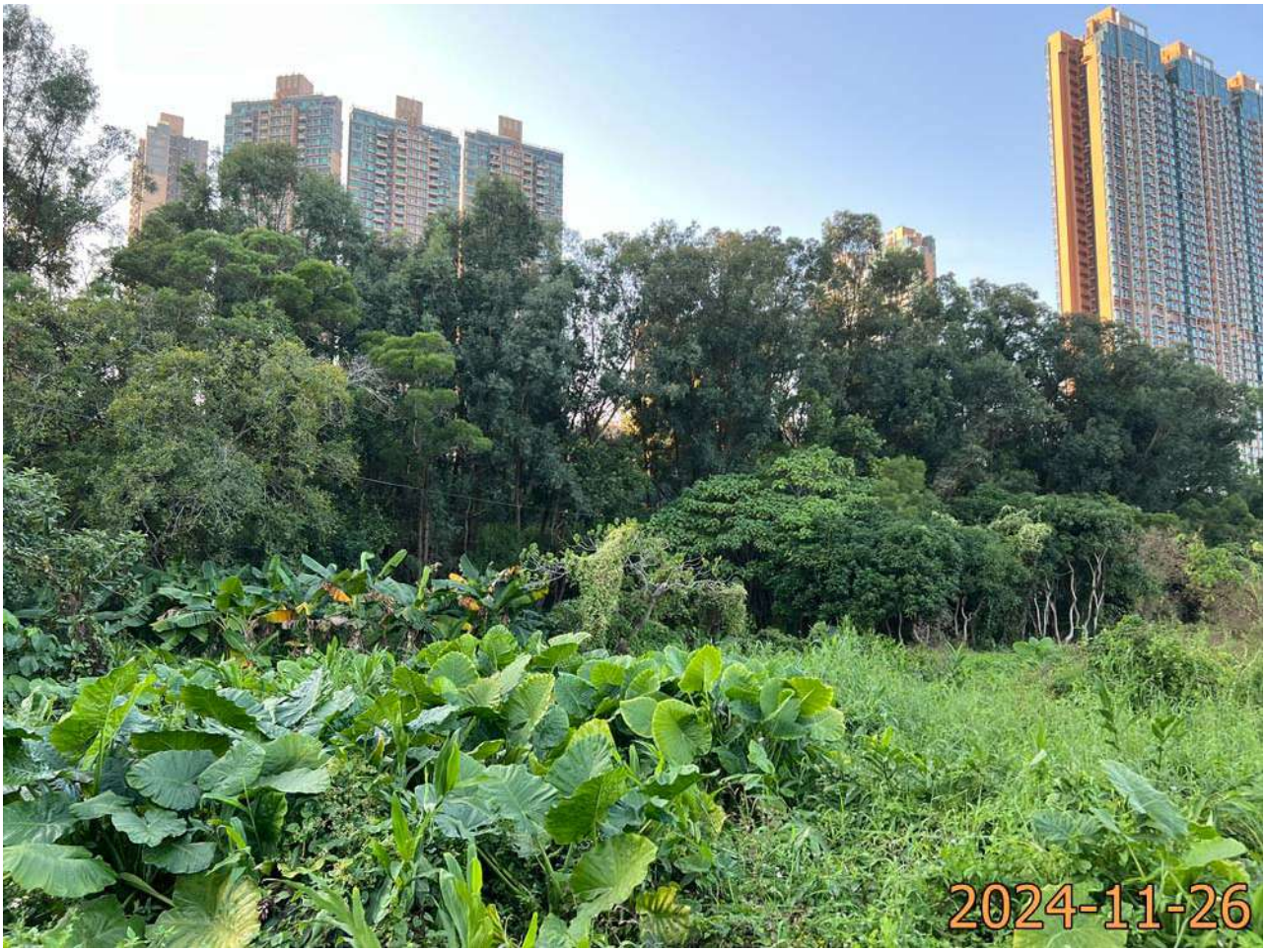


General view 15

General view 16

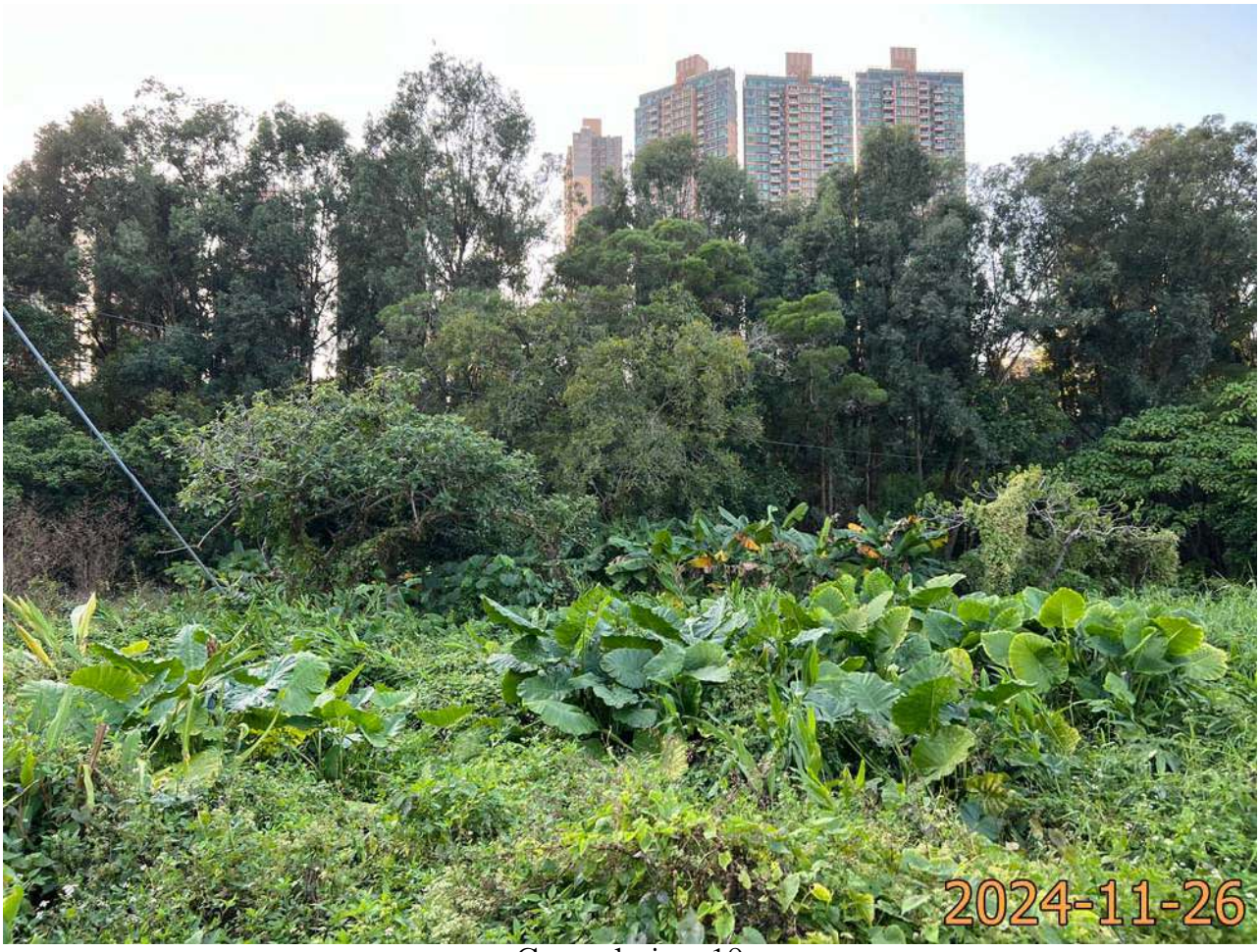
General View

General view 17



General view 18

General View



General view 19

General view 20

General View

General view 21

General view 22

General View

General view 23

General view 24

General View

General view 25

General view 26

General View

General view 27

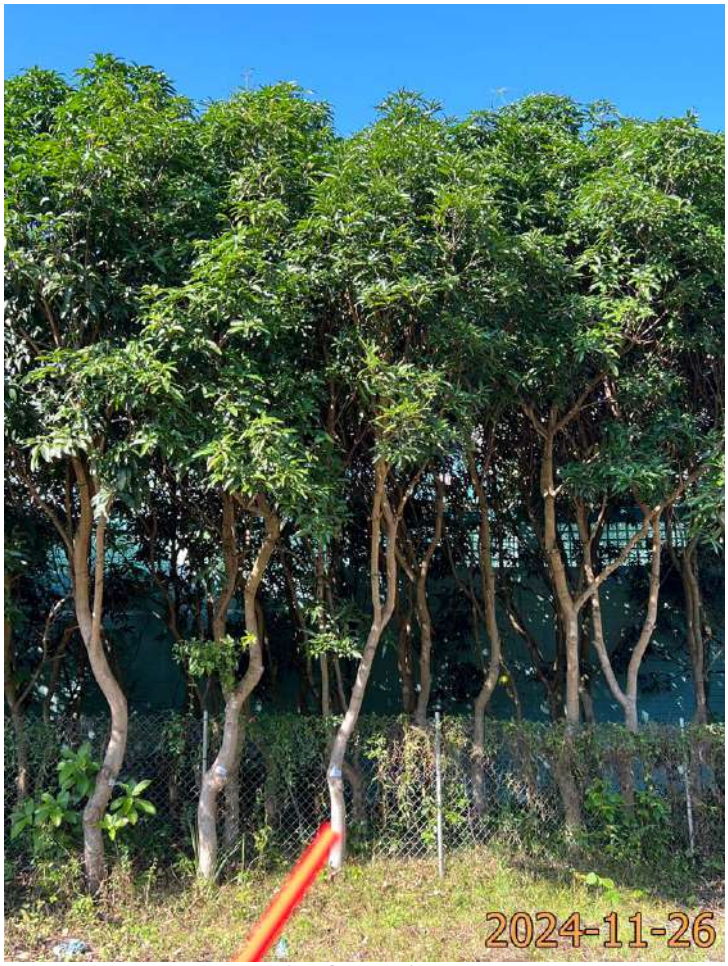
General view 28

General View

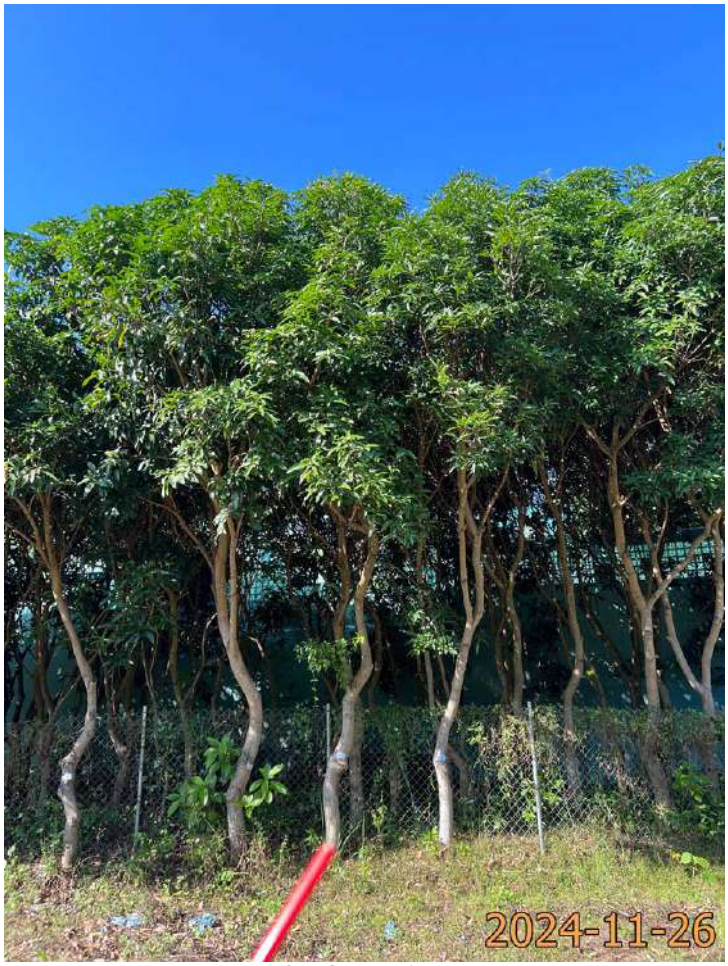
General view 29

General view 30

Photo Records



T2 (Overview)



T3 (Overview)

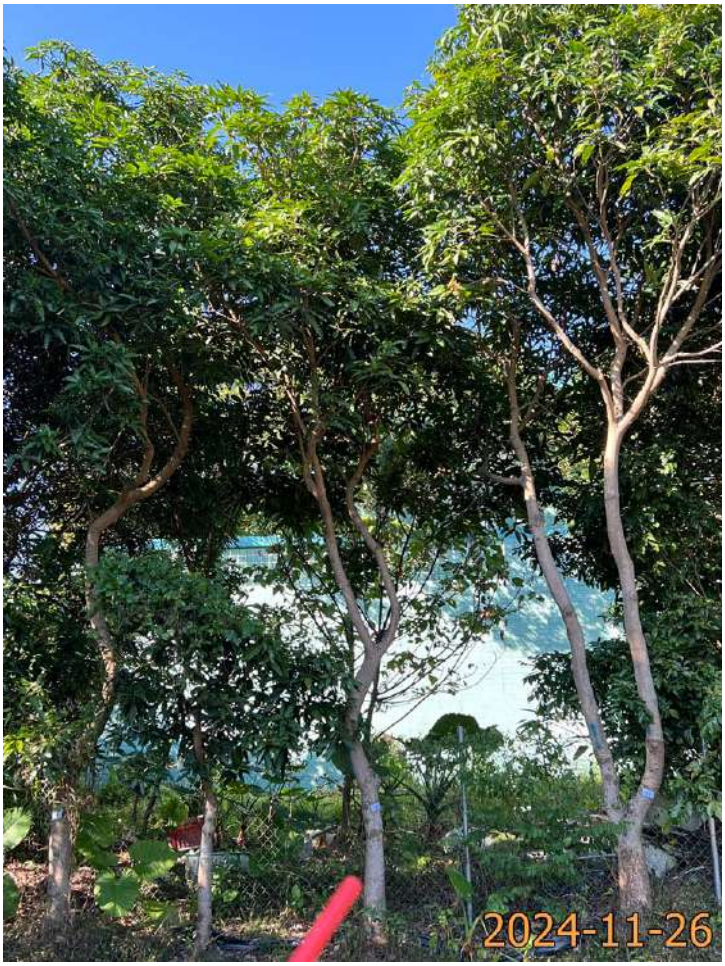
T4 (Overview)

T5 (Overview)

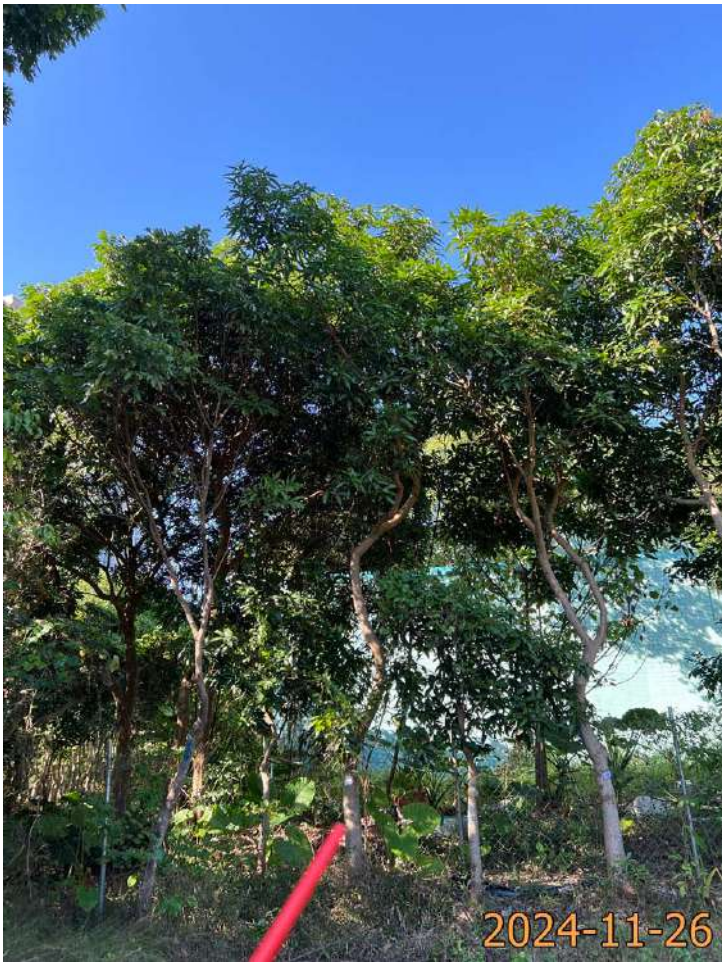
Photo Records

T6 (Overview)

T7 (Overview)



T8 (Overview)



T9 (Overview)

Photo Records

T14 (Overview)

T15 (Overview)

T16 (Overview)

T17 (Overview)

Photo Records

T18 (Overview)

T19 (Overview)

T22 (Overview)

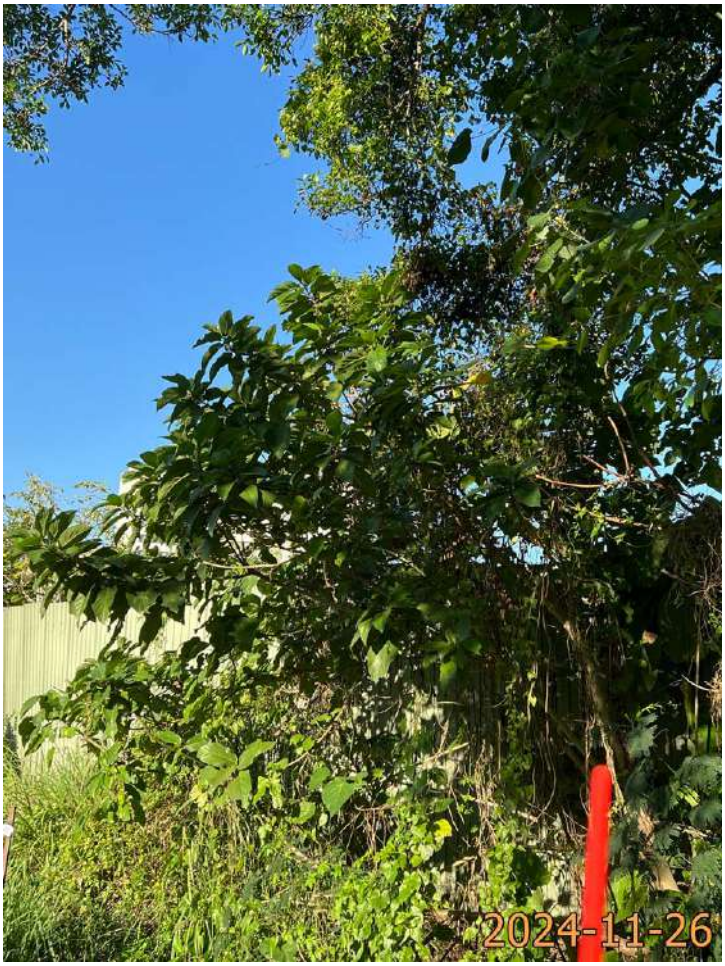
T28 (Overview)

Photo Records

T29 (Overview)

T30 (Overview)

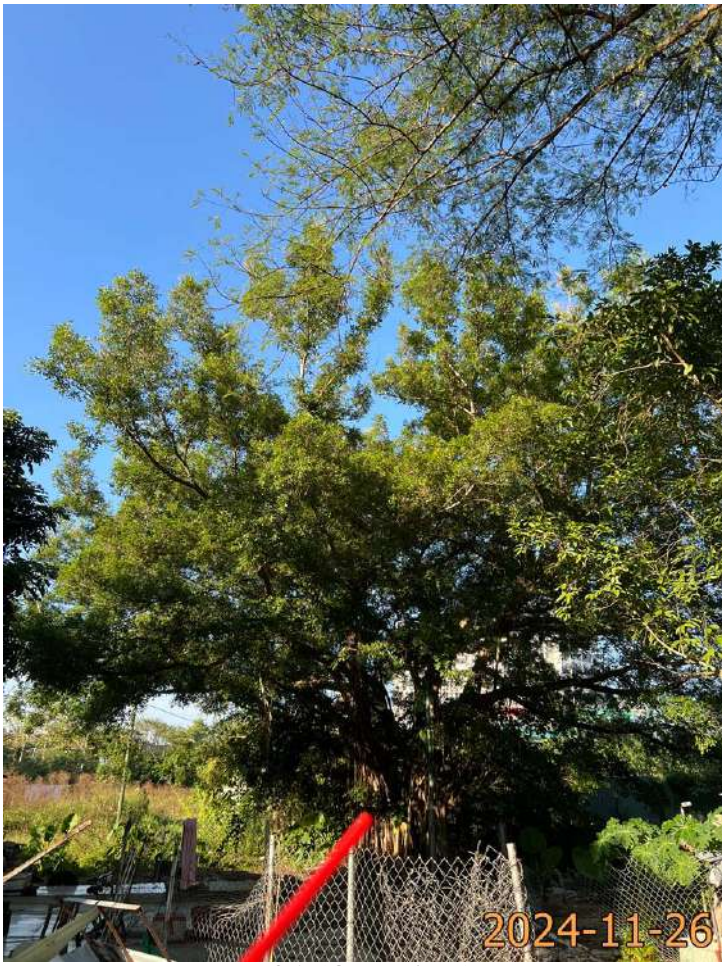
T31 (Overview)



T32 (Overview)

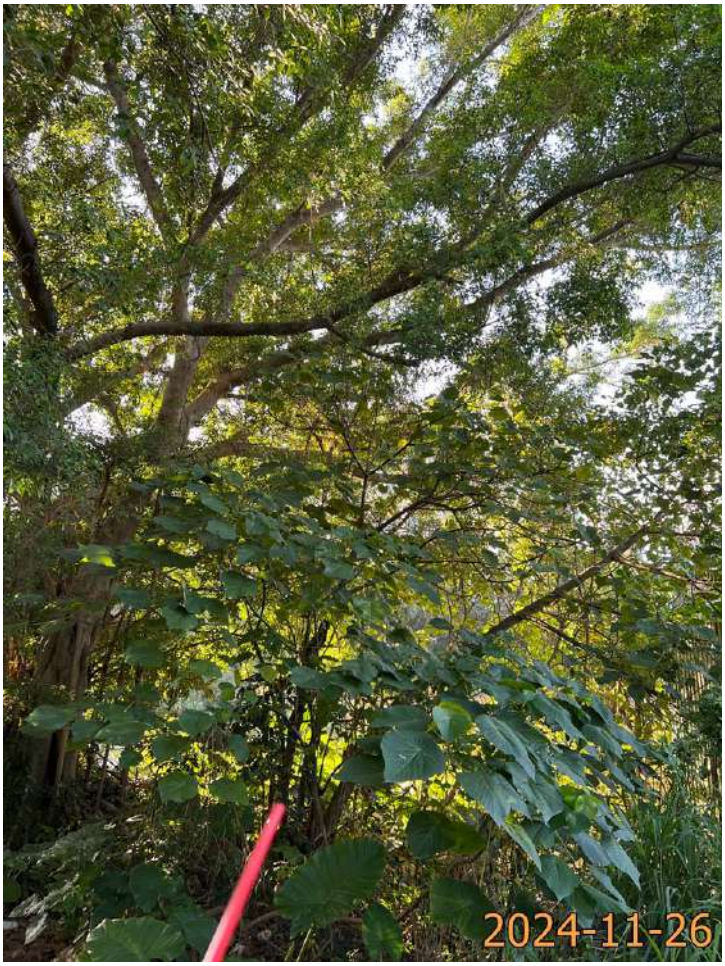
Photo Records

T33 (Overview)



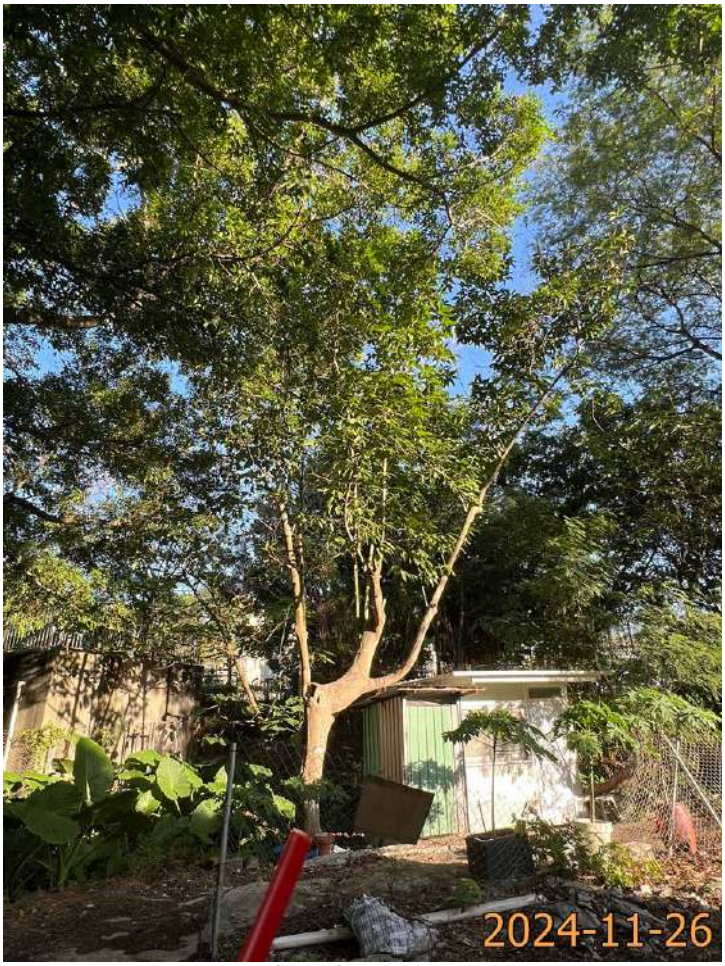
T34 (Overview)

T35 (Overview)



T36 (Overview)

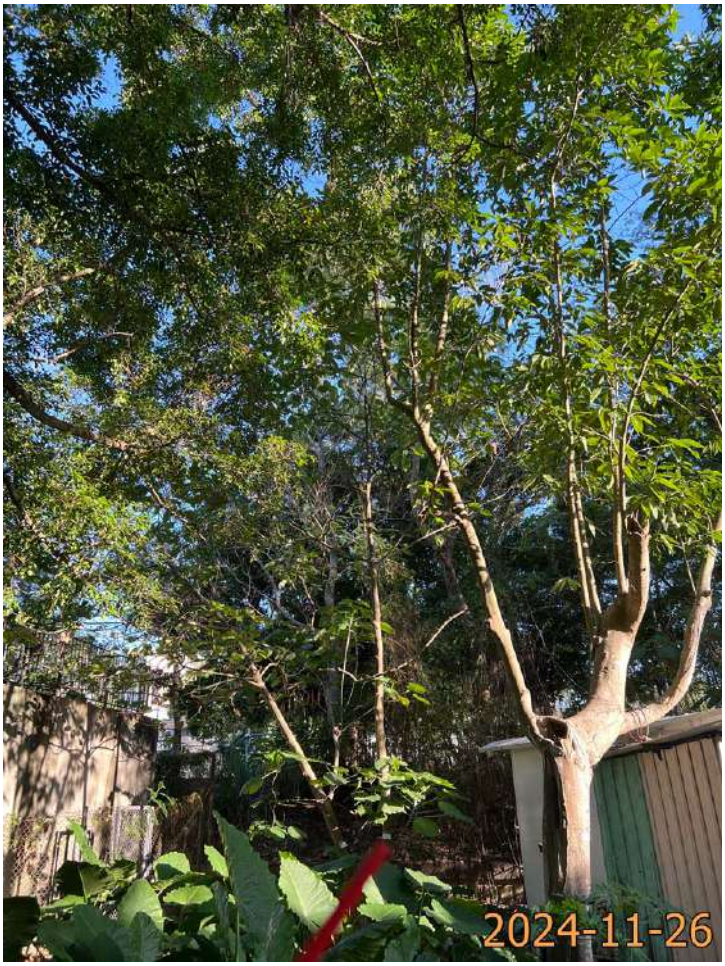
Photo Records



T37 (Overview)

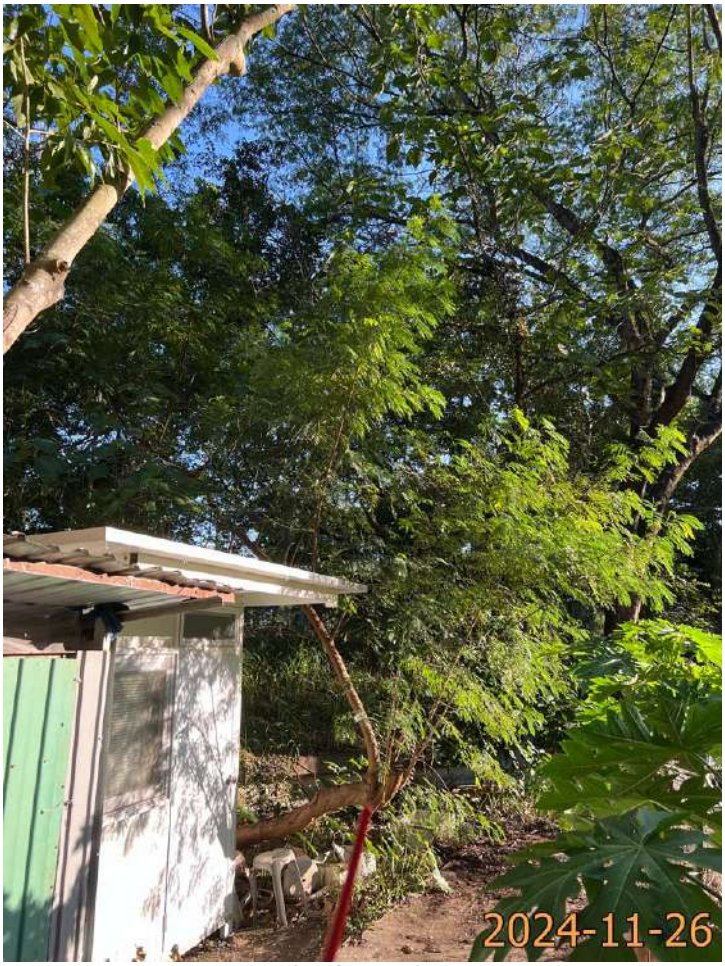
T37 Cavity and wound on trunk

T38 (Overview)



T39 (Overview)

Photo Records



T40 (Overview)

T40 Cavity and decay at trunk

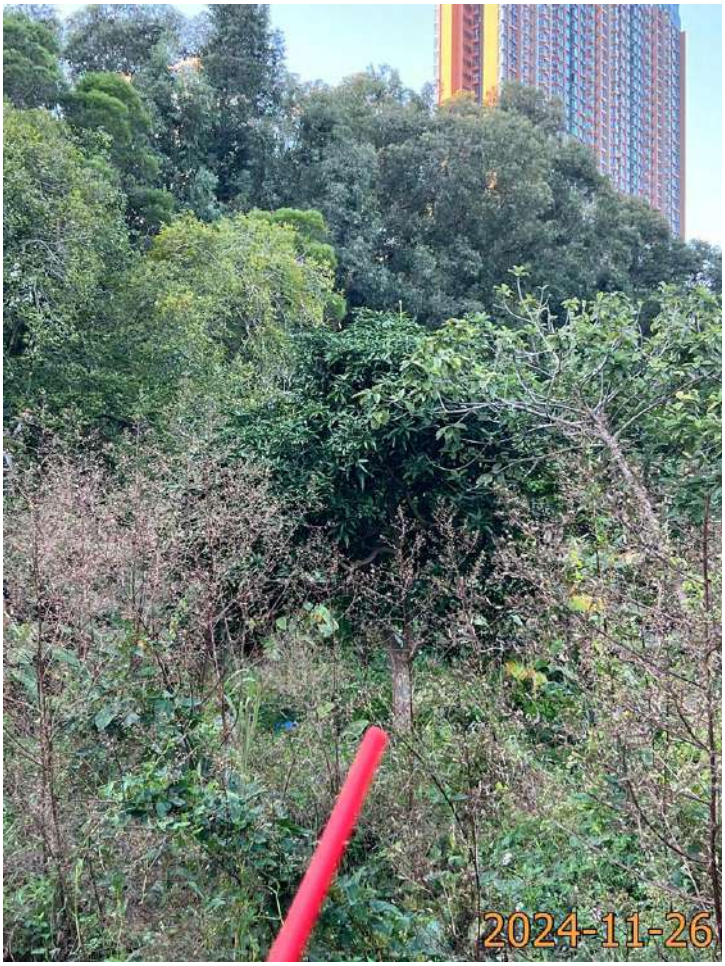
T42 (Overview)

T43 (Overview)

Photo Records

T44 (Overview)

T45 (Overview)



T46 (Overview)

T47 (Overview)

Photo Records

T48 (Overview)

T49 (Overview)

T50 (Overview)

T51 (Overview)

Photo Records

T51 Trunk conflict of co-dominant trunks

T52 (Overview)

T53 (Overview)

T54 (Overview)

Photo Records

T55 (Overview)

T56 (Overview)

T57 (Overview)

T58 (Overview)

Photo Records

T59 (Overview)

T60 (Overview)

T61 (Overview)

T62 (Overview)

Photo Records

T63 (Overview)

T64 (Overview)

T65 (Overview)

T66 (Overview)

Photo Records

T67 (Overview)

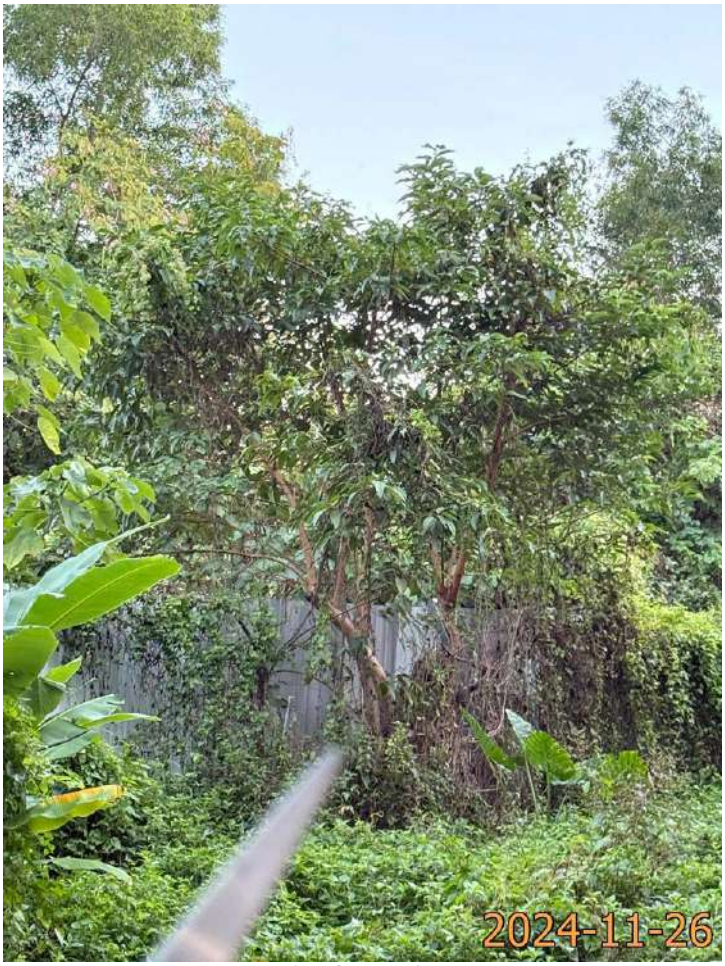
T68 (Overview)

T69 (Overview)

T70 (Overview)

Photo Records

T71 (Overview)



T72 (Overview)

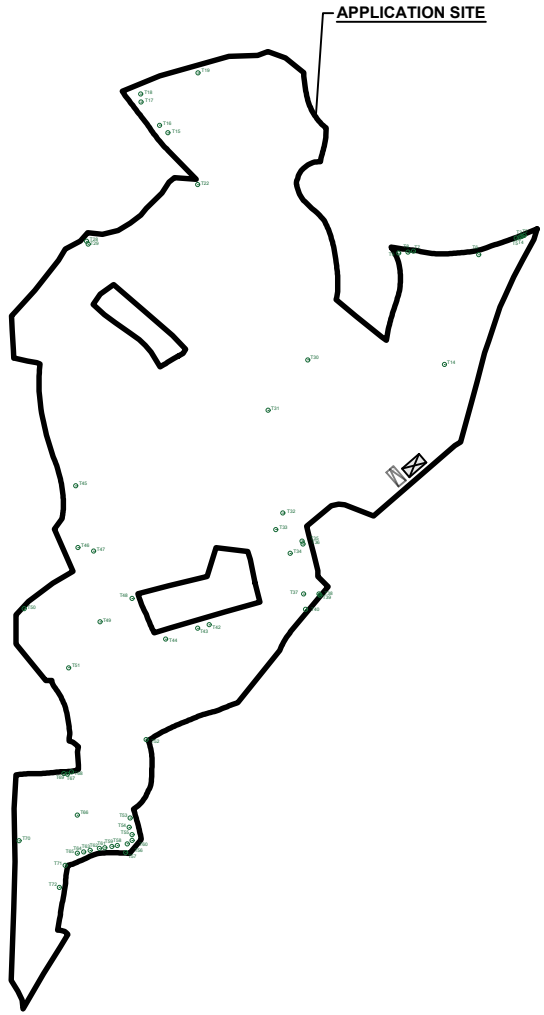
Annex 1b

Landscape Plan, Revised Plan showing Filling of Land at the Site,

Revised Layout Plan and Revised Page of Form No. S16-III & Planning Statement

EXISTING LANDSCAPE

APPLICATION SITE AREA	: 14,250 m^2 (ABOUT)	
NOS. OF EXISTING TREE	: 59	
SPECIES OF TREE	: T2-T5, T14, T28-T29, T46 & T53-T65	- *Mangifera indica*
	T19, T22, T30, T42-T44, T50-T52 & T69	- *Dimocarpus longan*
	T31, T33, T35-T36, T38-T39, T45 & T71	- *Macaranga tanarius var. tomentosa*
	T6-T9 & T37	- *Michelia x alba*
	T32, T47 & T72	- *Ficus hispida*
	T34	- *Ficus microcarpa*
	T40	- *Leucaena leucocephala*
	T48	- *Psidium guajava*
	T66	- *Litchi chinensis*
	T70	- *Melia azedarach*
NOS. OF TREE TO BE FELLED	: 59	



LEGEND

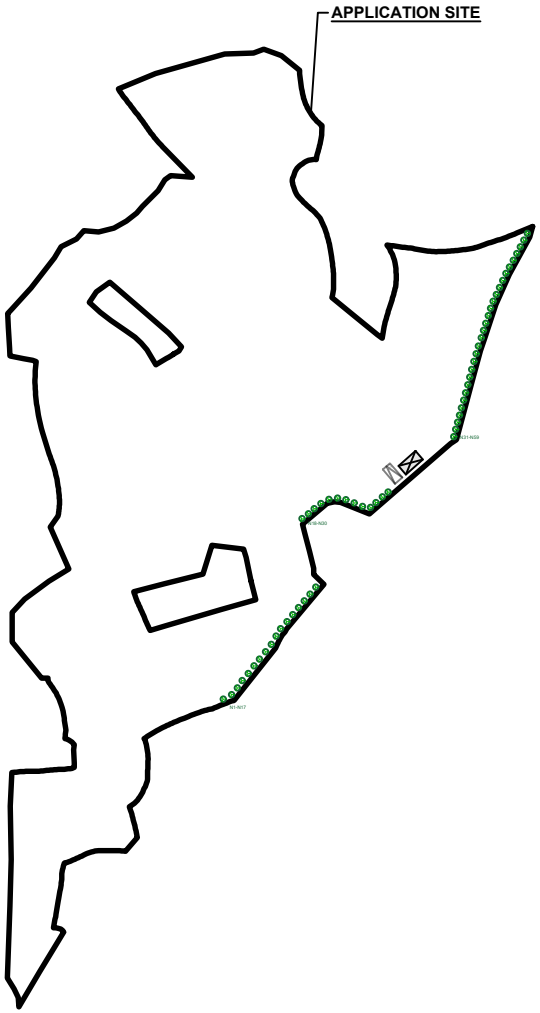
- APPLICATION SITE
- STRUCTURE
- PARKING SPACE (PC)
- EXISTING TREES
- PROPOSED TREES

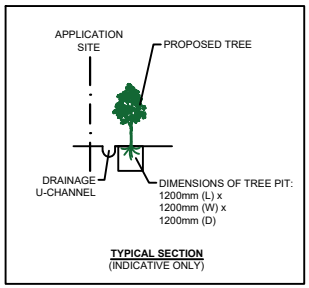
LANDSCAPE PLAN

APPLICATION SITE AREA	: 14,250 m^2 (ABOUT)
NOS. OF TREE TO BE PLANTED	: 59 (N1-N59)
SPECIES OF NEW TREES	: *BAUHINIA x BLAKEANA*
HEIGHT OF NEW TREES	: NOT LESS THAN 2.75 m
SPACING OF NEW TREES	: NOT LESS THAN 4 m
DIMENSION OF TREE PITS	: 1.2 m (W) X 1.2 m (L) X 1.2 m (D)

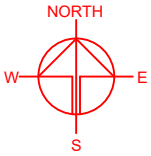
NOTES:

1) THE APPLICANT WILL MAINTAIN TREES IN GOOD CONDITION DURING THE PLANNING APPROVAL PERIOD.
2) THE APPLICANT WILL REPLACE TREES WHICH ARE DYING OR DEAD DURING THE PLANNING APPROVAL PERIOD.
3) THE APPLICANT WILL PROVIDE ADEQUATE IRRIGATION FOR TREES.





TYPICAL SECTION
(INDICATIVE ONLY)



PLANNING CONSULTANT

R-Riches Property Consultants Ltd.

PROJECT

PROPOSED TEMPORARY OPEN STORAGE OF VEHICLE WITH ANCILLARY FACILITIES FOR A PERIOD OF 3 YEARS AND ASSOCIATED FILLING OF LAND

SITE LOCATION

VARIOUS LOTS IN D.D. 115 AND 116 AND ADJOINING GOVERNMENT LAND, AU TAU, YUEN LONG, NEW TERRITORIES

SCALE

1 : 2000 @ A4

DRAWN BY	DATE
CC	31.12.2024
CHECKED BY	DATE
APPROVED BY	DATE

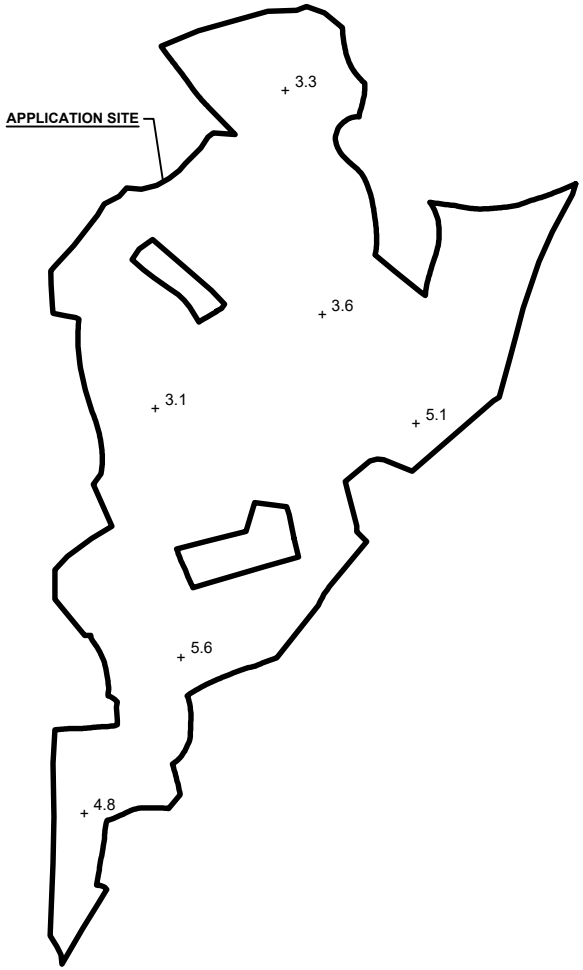
DWG. TITLE

LANDSCAPE PLAN

DWG NO.	VER.
PLAN 1	001

EXISTING CONDITION OF THE APPLICATION SITE

APPLICATION SITE AREA	: 14,250 m^2	(ABOUT)
EXISTING SITE LEVELS	: +3.1 mPD - +5.6 mPD	(ABOUT)



**SITE LEVELS ARE FOR REFERENCE ONLY.*
EXACT SITE LEVELS ARE SUBJECT TO DETAILED SURVEY.

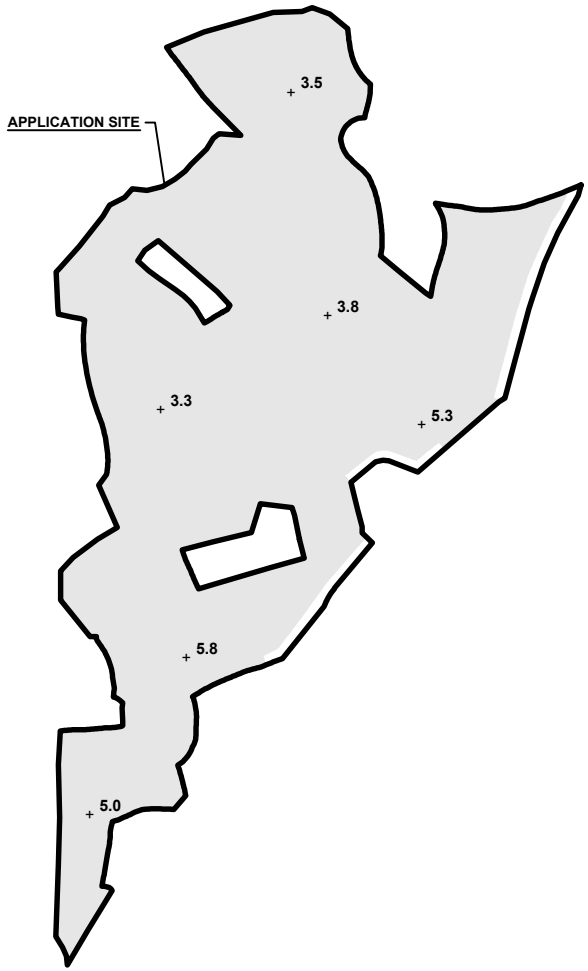
LEGEND

APPLICATION SITE

+10.2 EXISTING SITE LEVEL

PROPOSED FILLING OF LAND AT THE APPLICATION SITE

APPLICATION SITE AREA	: 13,885 m^2	(ABOUT)
MATERIAL OF FILLING	: CONCRETE	
PROPOSED DEPTH OF FILLING	: NOT MORE THAN 0.2 m	
PROPOSED SITE LEVELS	: +3.3 mPD - +5.8 mPD	(ABOUT)
PURPOSE OF FILLING	: SITE FORMATION OF STRUCTURE, STORAGE OF VEHICKE, PARKING SPACES AND CIRCULATION AREA	

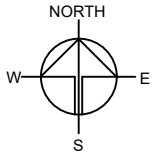


LEGEND

APPLICATION SITE

FILLING OF LAND AREA

+10.2 PROPOSED SITE LEVEL



PLANNING CONSULTANT

R-Riches Property Consultants Ltd.

PROJECT

PROPOSED TEMPORARY OPEN STORAGE OF VEHICLE WITH ANCILLARY FACILITIES FOR A PERIOD OF 3 YEARS AND ASSOCIATED FILLING OF LAND

SITE LOCATION

VARIOUS LOTS IN D.D. 115 AND 116 AND ADJOINING GOVERNMENT LAND, AU TAU, YUEN LONG, NEW TERRITORIES

SCALE	1 : 2000 @ A4
DRAWN BY: CC	DATE: 31.12.2024
REVISED BY	DATE
APPROVED BY	DATE
DWG. TITLE	FILLING OF LAND
DWG NO.: PLAN 2	VER.: 001

DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 14,250 m^2	(ABOUT)
COVERED AREA	: 18 m^2	(ABOUT)
UNCOVERED AREA	: 14,232 m^2	(ABOUT)
PLOT RATIO	: 0.001	(ABOUT)
SITE COVERAGE	: 0.1 %	(ABOUT)
NO. OF STRUCTURE	: 1	
DOMESTIC GFA	: NOT APPLICABLE	
NON-DOMESTIC GFA	: 18 m^2	(ABOUT)
TOTAL GFA	: 18 m^2	(ABOUT)
BUILDING HEIGHT	: 3 m	(ABOUT)
NO. OF STOREY	: 1	
AREA FOR OPEN STORAGE	: 11,401 m^2	(ABOUT)

STRUCTURE	USE	COVERED AREA	GFA	BUILDING HEIGHT
B1	GUARDROOM	18 m^2 (ABOUT)	18 m^2 (ABOUT)	3 m (ABOUT)(1-STOREY)
	TOTAL	**18 m^2 (ABOUT)**	**18 m^2 (ABOUT)**	

PARKING PROVISIONS

NO. OF PRIVATE CAR PARKING SPACE	: 1
DIMENSION OF PARKING SPACE	: 5 m (L) x 2.5 m (W)

LEGEND

- APPLICATION SITE
- STRUCTURE
- OPEN STORAGE AREA
- PARKING SPACE (PC)
- INGRESS / EGRESS

PLANNING CONSULTANT: R-Riches Property Consultants Ltd.	PROJECT: PROPOSED TEMPORARY OPEN STORAGE OF VEHICLE WITH ANCILLARY FACILITIES FOR A PERIOD OF 3 YEARS AND ASSOCIATED FILLING OF LAND	ADDRESS: VARIOUS LOTS IN D.D. 115 AND 116 AND ADJOINING GOVERNMENT LAND, AU TAU, YUEN LONG, NEW TERRITORIES	SCALE: 1 : 1200 @ A4	TITLE: LAYOUT PLAN
			DRAWN BY: CC / DATE: 31.12.2024	
			REVISED BY / DATE	DWG NO.: PLAN 3 / VER.: 001

NORTH
W E
S

Proposed operating hours 擬議營運時間
09:00 to 19:00 from Monday to Saturday. No operation on Sunday and public holiday.

(d) Any vehicular access to the site/subject building? 是否有車路通往地盤／有關建築物？	Yes 是	☑ There is an existing access. (please indicate the street name, where appropriate) 有一條現有車路。(請註明車路名稱(如適用)) Accessible from Long Ho Road via a local access ☐ There is a proposed access. (please illustrate on plan and specify the width) 有一條擬議車路。（請在圖則顯示，並註明車路的闊度）
	No 否	☐

(e) Impacts of Development Proposal 擬議發展計劃的影響
(If necessary, please use separate sheets to indicate the proposed measures to minimise possible adverse impacts or give justifications/reasons for not providing such measures. 如需要的話，請另頁註明可盡量減少可能出現不良影響的措施，否則請提供理據/理由。)

(i) Does the development proposal involve alteration of existing building? 擬議發展計劃是否包括現有建築物的改動?	Yes 是	☐ Please provide details 請提供詳情
	No 否	☑
(ii) Does the development proposal involve the operation on the right? 擬議發展是否涉及右列的工程?	Yes 是	☑ (Please indicate on site plan the boundary of concerned land/pond(s), and particulars of stream diversion, the extent of filling of land/pond(s) and/or excavation of land) (請用地盤平面圖顯示有關土地／池塘界線，以及河道改道、填塘、填土及／或挖土的細節及/或範圍) ☐ Diversion of stream 河道改道 ☐ Filling of pond 填塘 Area of filling 填塘面積 …… sq.m 平方米 ☐About 約 Depth of filling 填塘深度 …… m 米 ☐About 約 ☑ Filling of land 填土 Area of filling 填土面積 ……13,885…. sq.m 平方米 ☑About 約 Depth of filling 填土厚度 .not more than 0.2. m 米 ☑About 約 ☐ Excavation of land 挖土 Area of excavation 挖土面積…… sq.m 平方米 ☐About 約 Depth of excavation 挖土深度 ……m 米 ☐About 約
	No 否	☐

(iii) Would the development proposal cause any adverse impacts? 擬議發展計劃會否造成不良影響？			
	On environment 對環境	Yes 會 ☐	No 不會 ☑
	On traffic 對交通	Yes 會 ☐	No 不會 ☑
	On water supply 對供水	Yes 會 ☐	No 不會 ☑
	On drainage 對排水	Yes 會 ☐	No 不會 ☑
	On slopes 對斜坡	Yes 會 ☐	No 不會 ☑
	Affected by slopes 受斜坡影響	Yes 會 ☐	No 不會 ☑
	Landscape Impact 構成景觀影響	Yes 會 ☐	No 不會 ☑
	Tree Felling 砍伐樹木	Yes 會 ☐	No 不會 ☑
	Visual Impact 構成視覺影響	Yes 會 ☐	No 不會 ☑
	Others (Please Specify) 其他 (請列明)	Yes 會 ☐	No 不會 ☑
	_____		
	_____		

5. DEVELOPMENT PROPOSAL

Development Details

5.1 The Site consists of an area of 14,250 m^2 (about), including 630 m^2 (about) of GL. Details of development parameters are shown at **Table 2** below.

Table 2*:* Development Parameters of the Proposed Development

Application Site Area	14,250 m^2 (about), including 630 m^2 (about) of GL
Covered Area	18 m^2 (about)
Uncovered Area	14,232 m^2 (about)
Plot Ratio	0.001 (about)
Site Coverage	0.1% (about)
Number of Structure	1
Total GFA - *Domestic GFA* - *Non-Domestic GFA*	18 m^2 (about) *Not applicable* *18 m^2 (about)*
Building Height	3 m (about)
No. of Storey	1

5.2 A single-storey structure is proposed at the Site for guardroom use with total GFA of 18 m^2 (about), the remaining open area is reserved for open storage of vehicles, vehicle parking space and circulation area (**Plan 10**). Details of the structure are shown at **Table 3** below.

Table 3: Details of Proposed Structures

Structure	Use	Covered Area	GFA	Building Height
B1	Guardroom	18 m^2	18 m^2	3 m (about) (1-storey)
Total		**18 m^2 (about)**	**18 m^2 (about)**	**-**

Hard-paving at the Site

5.3 The majority of the Site (i.e. 13,885 m^2 (about)) is proposed to be hard-paved with concrete of not more than 0.2 m (in depth) for open storage of vehicles, site formation of structure, parking space and circulation area (**Plan 11**). As the Site is currently of soiled ground, concrete site formation is required to provide a relatively flat and solid surface for the applied use. Hence, hard-paving of the Site is

considered required and has been kept to minimal to meet the operation need of the proposed development.

Operation Mode

5.4 The Site is designated for open storage of not more than 700 vehicles, including private cars (PCs), light goods vehicles (LGVs) and light buses (LBs), which is the same as the applicant's original premises. The area designated for open storage of vehicles is 11,401 m^2 (about). Operation hours are Monday to Saturday from 09:00 to 19:00. There is no operation on Sunday and public holidays.

5.5 It is estimated that the Site would be able to accommodate not more than 2 staff. The ancillary facilities (i.e. office, washroom etc.) are intended to provide indoor workspace for administrative staff to support the daily operation of the Site. As no shopfront is proposed at the Site, visitor is not anticipated at the Site.

Minimal Traffic Impact

5.6 The Site is accessible from Long Ho Road via a local access (**Plan 1**). A 6 m (about) wide ingress/egress is provided at the eastern part of the Site (**Plan 10**). 1 PC parking space for staff use is provided at the Site. No loading/unloading space will be provided at the Site. Vehicles to be stored/delivered will be driven into/out of the Site by staff with trade licence during non-peak hours (i.e. outside 09:00 to 10:00 and 18:00 to 19:00). Details of parking space provision are shown at **Table 4** below:

Table 4 – Parking Space Provision

Type of Space	**No. of Space**
PC Parking Space - *2.5 m (W) x 5 m (L)*	1

5.7 Sufficient space is provided for vehicle to manoeuvere smoothly within the Site to ensure that no vehicle will be allowed to queue back to or reverse onto/from the Site to the public road (**Plans 12** and **13**). Staff is deployed to station at the ingress/egress of the Site to direct incoming/outgoing vehicles to enhance pedestrian safety. The breakdown of estimated trip generation and attraction of proposed development at AM and PM peak hours are provided at **Table 5** below.

Annex 2

Drainage Impact Assessment

Proposed Temporary Open Storage of Vehicle with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Various Lots in D.D. 115 and 116 and Adjoining Government Land, Au Tau, Yuen Long, New Territories

Drainage Impact Assessment

December 24

Table of Contents

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1 Introduction

1.1 Background

1.1.1 The applicant seeks planning permission from the Town Planning Board (the Board) under Section (S.) 16 of the Town Planning Ordinance (Cap. 131) (the Ordinance) to use Various Lots in D.D. 115 and D.D. 116 and Adjoining Government Land (GL), Au Tau, Yuen Long, New Territories (the Site) for 'Proposed Temporary Open Storage of Vehicle with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land'.

1.1.2 This report aims to support the development in drainage aspect.

1.2 Application Site

1.2.1 The application site is situated beside Pok Oi Interchange. It has an area of approx. 14,250 m^2. The site location is shown in **Figure 1**.

1.2.2 The existing site is partly hard paved with level various from approx. +3.3mPD to + 5.6mPD. The proposed site is intent to be fully paved for formation of structures, parking, circulation area.

1.2.3 There is an existing stream at the west of the application site, which would eventually discharge to 2.5m x 2m box culvert. **Figure 2** indicate the existing drainage system of the area.

2 Development Proposal

2.1 The Proposed Development

2.1.1 The total site area is approximately 14,250 m^2. After the development the site would be fully paved. The catchment plan is shown in **Figure 4-2**.

Proposed Development	
Total Site Area (m^2)	14,250
Paved Area after Development (m^2)	14,250

Table 1 – Site Development Area

3 Assessment Criteria

3.1.1 The Recommended Design Return Period based on Flood Level from SDM (Table 10) is adopted for this report. The recommendation is summarized in **Table 2** below.

Description	Design Return Periods
Intensively Used Agricultural Land	2 – 5 Years
Village Drainage Including Internal Drainage System under a polder Scheme	10 Years
Main Rural Catchment Drainage Channels	50 Years
Urban Drainage Trunk System	200 Years
Urban Drainage Branch System	50 Years

Table 2– Design Return Periods under SDM

3.1.2 The proposed drainage system intended to collect runoff from internal site and external catchment. 1 in 10 years return period is adopted for the drainage design.

3.1.3 Stormwater drainage design will be carried out in accordance with the criteria set out in the Stormwater Drainage Manual published by DSD. The proposed design criteria to be adopted for design of this stormwater drainage system and factors which have been considered are summarised below.

1. Intensity-Duration-Frequency Relationship – The Recommended Intensity-Duration-Frequency relationship is used to estimate the intensity of rainfall. It can be expressed by the following algebraic equation.

$$i = \frac{a}{(t_d + b)^c}$$

The site is located within the HKO Zone. Therefore, for 10 years return period, the following values are adopted.

a	=	485
b	=	3.11
c	=	0.397

2. The peak runoff is calculated by the Rational Method
   i.e. $Q_p = 0.278CiA$

where	Q_p	=	peak runoff in m^3/s
	C	=	runoff coefficient (dimensionless)
	i	=	rainfall intensity in mm/hr
	A	=	catchment area in km^2

3. The run-off coefficient (C) of surface runoff are taken as follows:

   1. Paved Area: C = 0.95
   2. Unpaved Area: C = 0.35

4. Manning's Equation is used for calculation of velocity of flow inside the channels:

Manning's Equation: $v = \frac{R^{\frac{1}{6}}}{n} R^{\frac{1}{2}} S_f^{\frac{1}{2}}$

Where,

V = velocity of the pipe flow (m/s)
S_f = hydraulic gradient
n = manning's coefficient
R = hydraulic radius (m)

5. Colebrook-White Equation is used for calculation of velocity of flow inside the pipes:

Colebrook-White Equation: $\underline{v} = -\sqrt{32gRS}\ log\ log\ (\frac{k_s}{14.8R} + \frac{1.255v}{R\sqrt{32gRS_f}})$

where,

V	=	velocity of the pipe flow (m/s)
S_f	=	hydraulic gradient
k_f	=	roughness value (m)
v	=	kinematics viscosity of fluid
D	=	pipe diameter (m)
R	=	hydraulic radius (m)

4 Proposed Drainage System

4.1. Proposed Channels

4.1.1 Proposed channels are designed for collection of runoff for internal and external catchment. They are proposed to connect to the storage tank for storage of additional runoff.

4.1.2 The design calculations of proposed UChannel and capacity checking against site flow are shown in **Appendix A1**.

4.1.3 The alignment, size, gradient and details of the proposed drains are shown in **Figure 3**.

4.1.4 The catchment plan is shown in **Figure 4**.

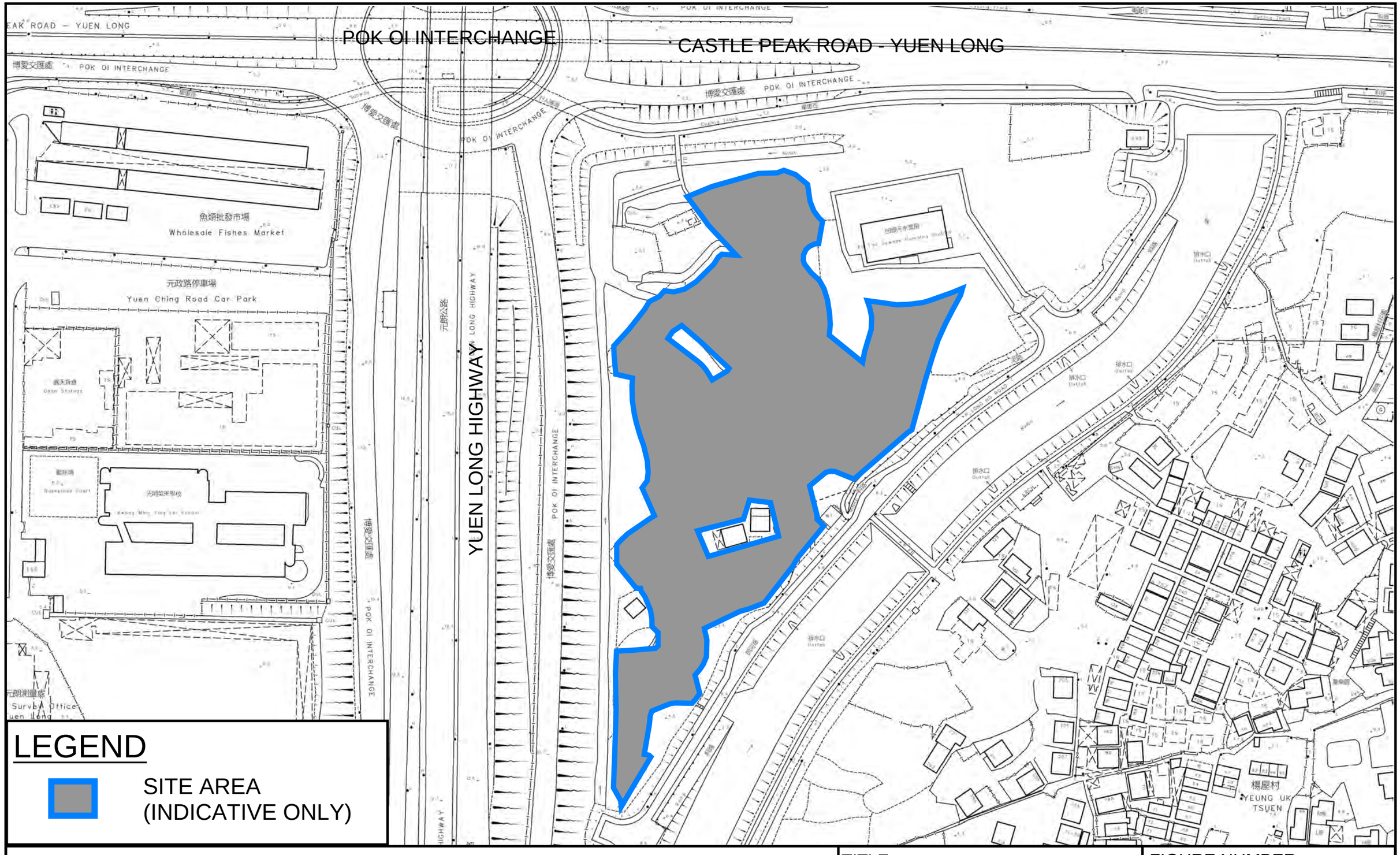
4.1.5 Reference Drawings are shown in **Appendix C** for reference.

5 Conclusion

5.1.1 Drainage review has been conducted for the Proposed Development. With implementation of proposed drainage system, no unacceptable adverse drainage impact is anticipated.

- End of Text -

FIGURES



LEGEND

SITE AREA
(INDICATIVE ONLY)

PROJECT:
Proposed Temporary Open Storage of Vehicle with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone

TITLE
SITE LOCATION PLAN

FIGURE NUMBER
FIGURE 1

LOCATION:
Various Lots in D.D. 115 and 116 and Adjoining Government Land, Au Tau, Yuen Long, New Territories

VER	DESCRIPTION	DATE

LEGEND

SITE AREA
(INDICATIVE ONLY)

LEGEND:

Combined Manhole	Tapping Point (Sewer)	Tapping Point (Storm)
Overflow (Combined)	Sewer Terminal Manhole	Storm Water Terminal Manhole
Pipe (Combined)	Catchpit	Tunnel Protection Zone (100m / 200m)
Interface Valve Chamber	Inlet	Tunnel Protection Zone (General Range)
Sewer Manhole	Storm Water Manhole	Tunnel / Box Culvert (Sewer)
Oil / Petrol Interceptor	Outlet	Tunnel / Box Culvert (Storm)
Overflow (Sewer)	Pipe (Storm)	
Pipe (Sewer)	Sand Trap	

PROJECT:
Proposed Temporary Open Storage of Vehicle with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone

TITLE
EXISTING DRAINAGE PLAN

FIGURE NUMBER
FIGURE 2

LOCATION:
Various Lots in D.D. 115 and 116 and Adjoining Government Land, Au Tau, Yuen Long, New Territories

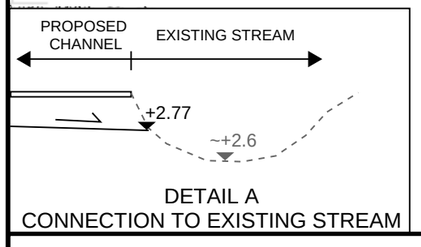
VER	DESCRIPTION	DATE

LEGEND

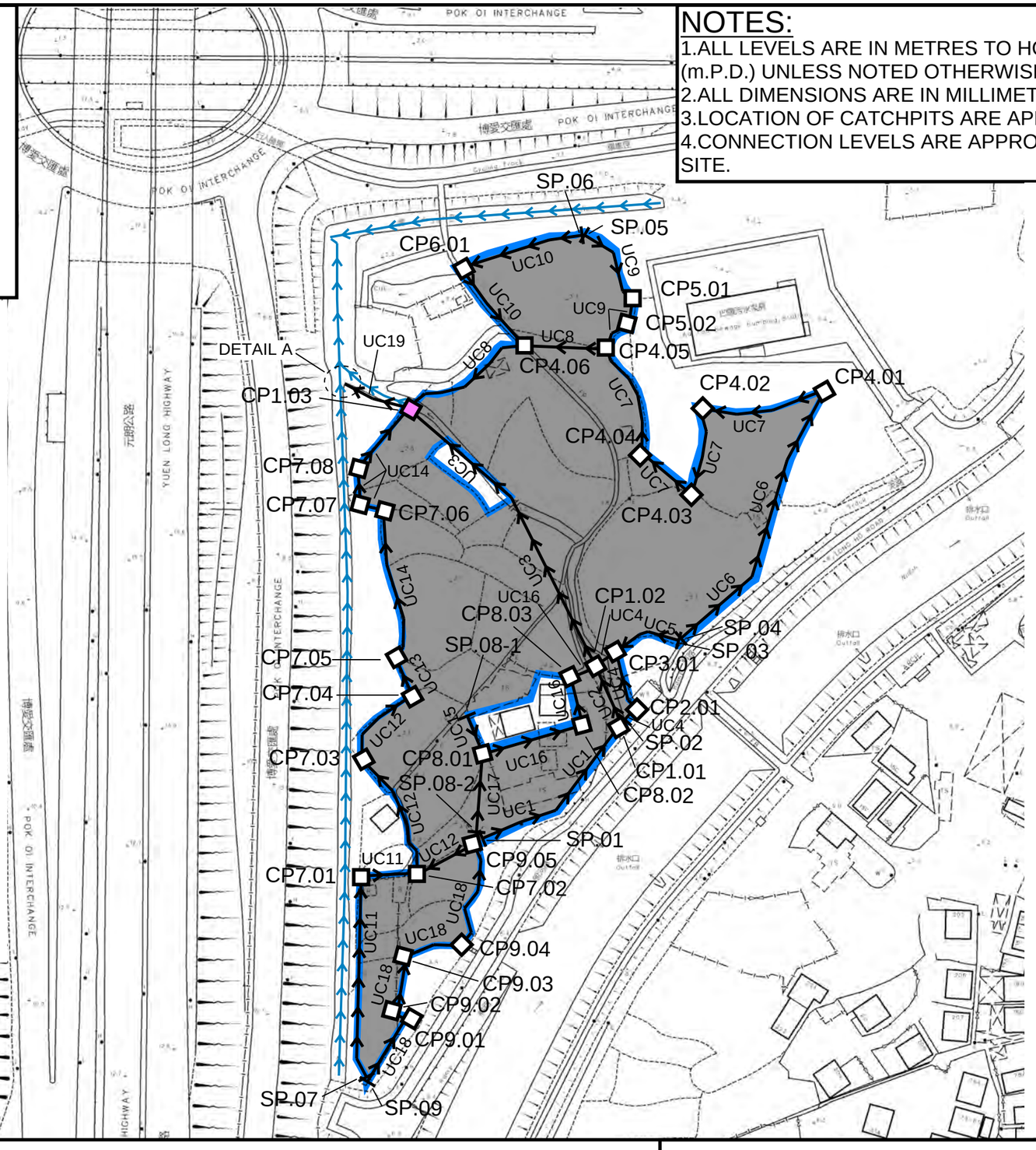
- SITE AREA (INDICATIVE ONLY)
- EXISTING STREAM
- PROPOSED CHANNEL
- PROPOSED CATCHPIT
- PROPOSED CATCHPIT w/TRAP

PROPOSED CHANNEL

- Proposed Channel UC1, 300 mm, 1 in 150
- Proposed Channel UC2, 300 mm, 1 in 150
- Proposed Channel UC3, 675 mm, 1 in 150
- Proposed Channel UC4, 225 mm, 1 in 150
- Proposed Channel UC5, 225 mm, 1 in 150
- Proposed Channel UC6, 225 mm, 1 in 150
- Proposed Channel UC7, 600 mm, 1 in 250
- Proposed Channel UC8, 675 mm, 1 in 300
- Proposed Channel UC9, 225 mm, 1 in 200
- Proposed Channel UC10, 375 mm, 1 in 250
- Proposed Channel UC11, 375 mm, 1 in 150
- Proposed Channel UC12, 450 mm, 1 in 150
- Proposed Channel UC13, 600 mm, 1 in 150
- Proposed Channel UC14, 600 mm, 1 in 250
- Proposed Channel UC15, 225 mm, 1 in 150
- Proposed Channel UC16, 300 mm, 1 in 150
- Proposed Channel UC17, 375 mm, 1 in 100
- Proposed Channel UC18, 300 mm, 1 in 150
- Proposed Channel UC19, 750 mm, 1 in 150



DETAIL A
CONNECTION TO EXISTING STREAM



NOTES:

1. ALL LEVELS ARE IN METRES TO HONG KONG PRINCIPAL DATUM (m.P.D.) UNLESS NOTED OTHERWISE.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
3. LOCATION OF CATCHPITS ARE APPROX. ONLY.
4. CONNECTION LEVELS ARE APPROX. ONLY AND SHALL BE VERFIED ON SITE.

MANHOLE/PIT SCHEDULE

PIT#	GROUND LEVEL (mPD)	INVERT LEVEL (mPD)
SP01	5.80	5.50
CP1.01	5.30	5.00
CP1.02	5.00	4.14
CP1.03	3.70	2.90
SP02	5.30	5.08
CP2.01	5.30	5.04
SP03	5.30	5.08
CP3.01	5.00	4.78
SP04	5.30	5.08
CP4.01	4.50	3.90
CP4.02	4.10	3.50
CP4.03	4.10	3.39
CP4.04	4.10	3.32
CP4.05	4.10	3.18
CP4.06	4.10	3.10
SP05	4.10	3.88
CP5.01	4.10	3.75
CP5.02	4.10	3.71
SP06	4.10	3.73
CP6.01	4.10	3.58
CP6.02	4.10	3.46
CP7.01	4.90	3.96
CP7.02	5.00	3.85
CP7.03	4.60	3.59
CP7.04	4.40	3.41
CP7.05	4.10	3.33
CP7.06	3.80	3.15
CP7.07	3.70	3.10
CP7.08	3.60	3.00
SP08-1	4.80	4.58
CP8.01	5.30	4.49
CP8.02	5.00	4.29
CP8.03	5.00	4.19
SP08-2	5.80	5.43
SP09	5.00	4.70
CP9.01	5.00	4.56
CP9.02	5.00	4.54
CP9.03	5.00	4.42
CP9.04	5.60	4.31
CP9.05	5.80	4.08

PROJECT:

Proposed Temporary Open Storage of Vehicle with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “Agriculture” Zone

TITLE
PROPOSED DRAINAGE SYSTEM

FIGURE NUMBER
FIGURE 3

LOCATION:
Various Lots in D.D. 115 and 116 and Adjoining Government Land, Au Tau, Yuen Long, New Territories

VER	DESCRIPTION	DATE

LEGEND:

FALL

+5.0 PROPOSED LEVEL

N

+4.1

A1c: 1,316 m²

+4.1

B1: 1,443 m²

+3.7

+4.1

+4.1

A1b: 5,799 m²

C1: 179 m²

+3.8

A2: 3,448 m²

+5.3

+5.0

B2a: 1,719 m²

B2b: 359 m²

39m² PAVED

+5.3

C2: 370 m²

A1a: 122 m²

+5.8

A4: 1,033 m²

A3: 2,530 m²

B3: 306 m²

+5.0

B4: 797 m²

魚類批發市場

Wholesale Fishes Market

元政路停車場

Yuen Ching Road Car Park

博愛交匯處 POK OI INTERCHANGE

元朗公路 YUEN LONG HIGHWAY

元朗測量處

Survey Office Yuen Long

楊屋村

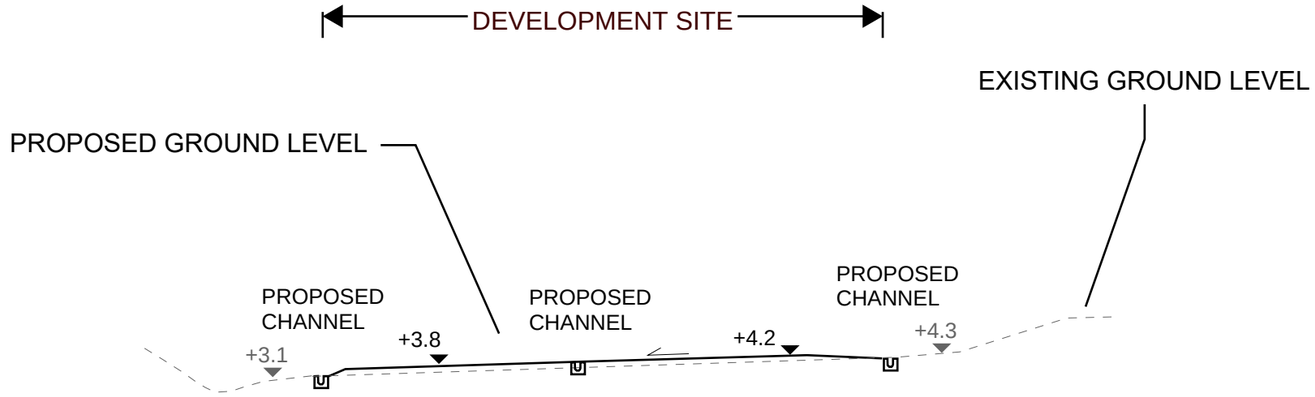
YEUNG UK TSUEN

PROJECT: Proposed Temporary Open Storage of Vehicle with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “Agriculture” Zone	TITLE CATCHMENT PLAN	FIGURE NUMBER FIGURE 4
LOCATION: Various Lots in D.D. 115 and 116 and Adjoining Government Land, Au Tau, Yuen Long, New Territories		

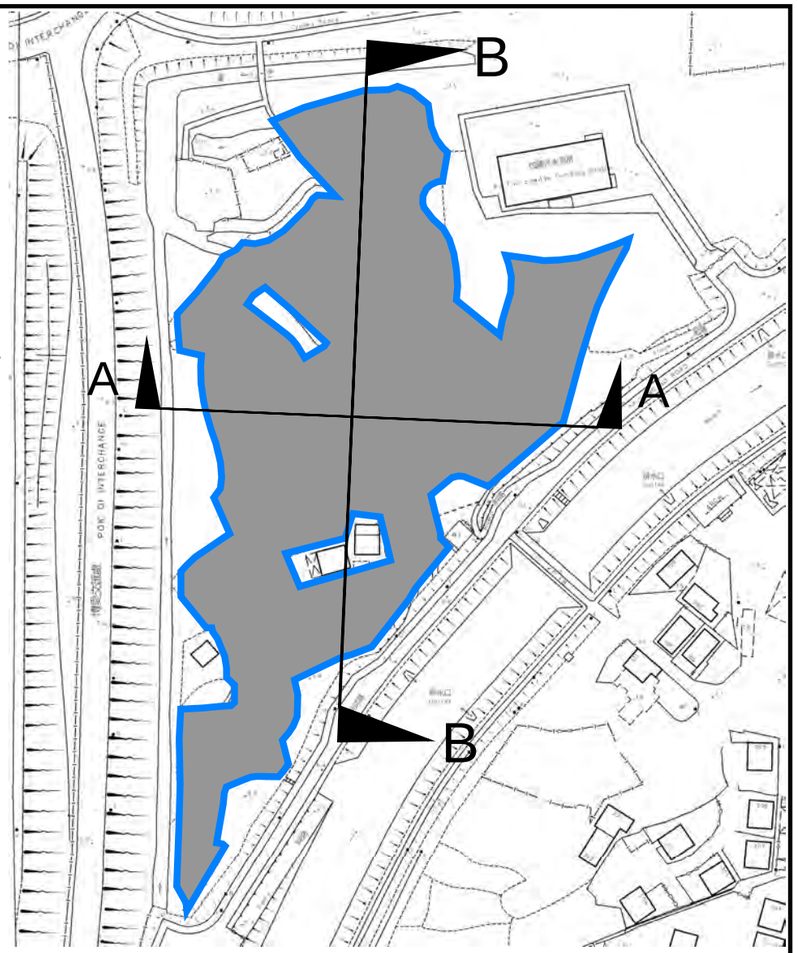
VER	DESCRIPTION	DATE

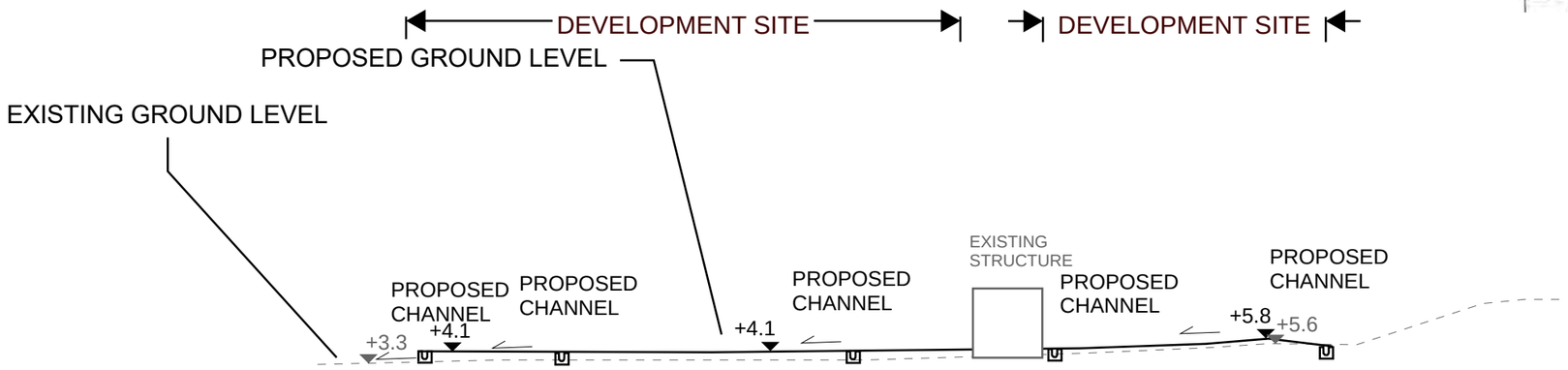
LEGEND

SITE AREA
(INDICATIVE ONLY)



N.T.S.
SECTION A-A





N.T.S.
SECTION B-B

PROJECT:
Proposed Temporary Open Storage of Vehicle with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “Agriculture” Zone

TITLE
SECTIONS

FIGURE NUMBER
FIGURE 5

LOCATION:
Various Lots in D.D. 115 and 116 and Adjoining Government Land, Au Tau, Yuen Long, New Territories

VER	DESCRIPTION	DATE

APPENDIX

Appendix A1: Design Calculation

Zone

HKO

Return Period	1 in	10	years

n	0.014
Ks	0.15
Viscosity	0.000001

Storm Constant		
	HKO a	485
	HKO b	3.11
	HKO c	0.397

Catchment Area Table (Area in m^2)

Catchment	A1a	A1b	A1c	A2	A3	A4	B1	B2a	B2b	B3	B4	C1	C2	Total Site Area (Before Development)	Total Site Area (After Development)
Total Area	122	5799	1316	3461	2530	1012	1443	1719	359	306	797	179	370	14250	14250
Hard Paved Area	122	5799	1316	3461	2530	1012	0	0	39	0	0	0	370	970	14250
Unpaved Area	0	0	0	0	0	0	1443	1719	320	306	797	179	0	13280	0
Equival. Area	115.9	5509.05	1250.2	3287.95	2403.5	961.4	505.05	601.65	149.05	107.10	278.95	62.65	351.50	5569.50	13537.50

Pavement Type	Hard Paved	Unpaved
Runoff Coefficient	0.95	0.35

DRAINAGE DESIGN

Item	Total Equivalent Area m2	ToC min	Intensity mm/hr	Total Discharge m3/s	Size mm	Gradient 1 in	V m/s	Capacity m3/s	Utilitization	Remark
	(1)		(2)	(3)			(4)	(5)	(6)	
Design of Channel UC1 for Catchment, A4,B3	1,069	2.80	239.56	0.071	300	150	1.29	0.10	68.6%	
Design of Channel UC2 for Catchment, A1a,A4,B3	1,184	2.80	239.56	0.079	300	150	1.29	0.10	76.0%	
Design of Channel UC3 for Catchment, A1a,A1b,A2,A4,B2b	10,545	2.80	239.56	0.702	675	150	2.22	0.90	77.9%	
Design of Channel UC4 for Catchment, A1a,B2b	265	2.80	239.56	0.018	225	150	1.07	0.05	36.6%	
Design of Channel UC5 for Catchment, B2b	149	2.80	239.56	0.010	225	150	1.07	0.05	20.6%	
Design of Channel UC6 for Catchment, B2a	602	2.80	239.56	0.040	225	150	1.07	0.05	83.2%	
Design of Channel UC7 for Catchment, A1b,B1,B2a	6,616	2.80	239.56	0.441	600	250	1.59	0.51	86.4%	
Design of Channel UC8 for Catchment, A1b,A1c,B1,B2a	7,866	2.80	239.56	0.524	675	300	1.57	0.64	82.2%	
Design of Channel UC9 for Catchment, B1	505	2.80	239.56	0.034	225	200	0.92	0.04	80.6%	
Design of Channel UC10 for Catchment, A1c	1,250	2.80	239.56	0.083	375	250	1.16	0.15	57.1%	
Design of Channel UC11 for Catchment, A3	2,404	2.80	239.56	0.160	375	150	1.50	0.19	85.1%	
Design of Channel UC12 for Catchment, A3,B4	2,682	2.80	239.56	0.179	450	150	1.69	0.31	58.4%	
Design of Channel UC13 for Catchment, A2,A3,B4,C2	6,322	2.80	239.56	0.421	600	150	2.05	0.66	63.9%	
Design of Channel UC14 for Catchment, A2,A3,B4,C1,C2	6,385	2.80	239.56	0.425	600	250	1.59	0.51	83.3%	
Design of Channel UC15 for Catchment, C2	352	2.80	239.56	0.023	225	150	1.07	0.05	48.6%	
Design of Channel UC16 for Catchment, A4,C2	1,313	2.80	239.56	0.087	300	150	1.29	0.10	84.3%	
Design of Channel UC17 for Catchment, A4	961	2.80	239.56	0.064	375	100	1.84	0.23	27.8%	
Design of Channel UC18 for Catchment, B4	279	2.80	239.56	0.019	300	150	1.29	0.10	17.9%	
Design of Channel UC19 for Catchment, Total Site Area (After Development),C1,C2	13,952	2.80	239.56	0.929	750	150	2.38	1.19	77.8%	

1) Sum of Area in Catchment Table

2) $i = \frac{a}{(t_d + b)^c}$

3) 0.278 x Intensity x Equivalent Area

4) Channel: Manning Equation, Pipe Colebrook-White Equation

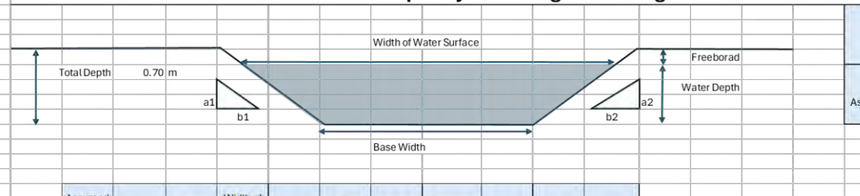
5) Q = A x V

6) Less than 90%, for 10% allowance for siltation

Manning Equation $v = \frac{R^{\frac{1}{6}}}{n} R^{\frac{1}{2}} S_f^{\frac{1}{2}}$

Colebrook-White Equation $\underline{v} = -\sqrt{32gRS}\ log\ log\ (\frac{k_s}{14.8R} + \frac{1.255v}{R\sqrt{32gRS_f}})$

Capacity Checking of Existing Stream



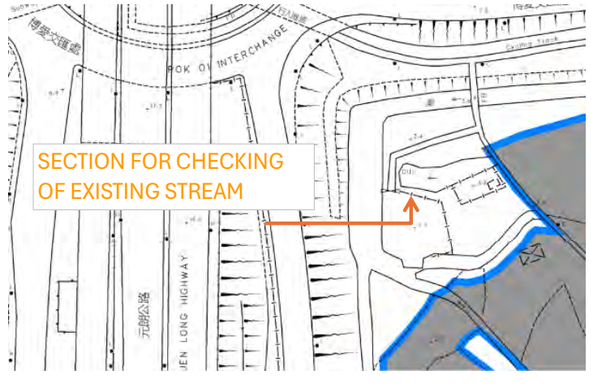
a1	1	
b1	2.43	
a2	1	
b2	4	
Total Depth	0.70	m
Base Width	4.00	m
Assumed Water Depth	0.50	m
Freeboard	0.20	m

Assumed Water Depth	Freeboard	Base Width*	Width of Water Surface	Flow Area	Wetted Perimeter	Hydralic Radius	Manning's Roughness	Gradient	Velocity	Capacity
m	m	m	m	m^2	m	m		1 in	m/s	m^3/s
0.50	0.20	4.00	7.21	2.80	7.37	0.38	0.035	500	1.06	2.97

Total Flow from The Application Site	=	0.93	m^3/s
Utilization Rate	=	31.3%	

Total flow from Application Site only occupy 31.3% of the existing stream.

*Base Width of Existing Stream is about 5.5m, assume 4m base width for conserative purpose

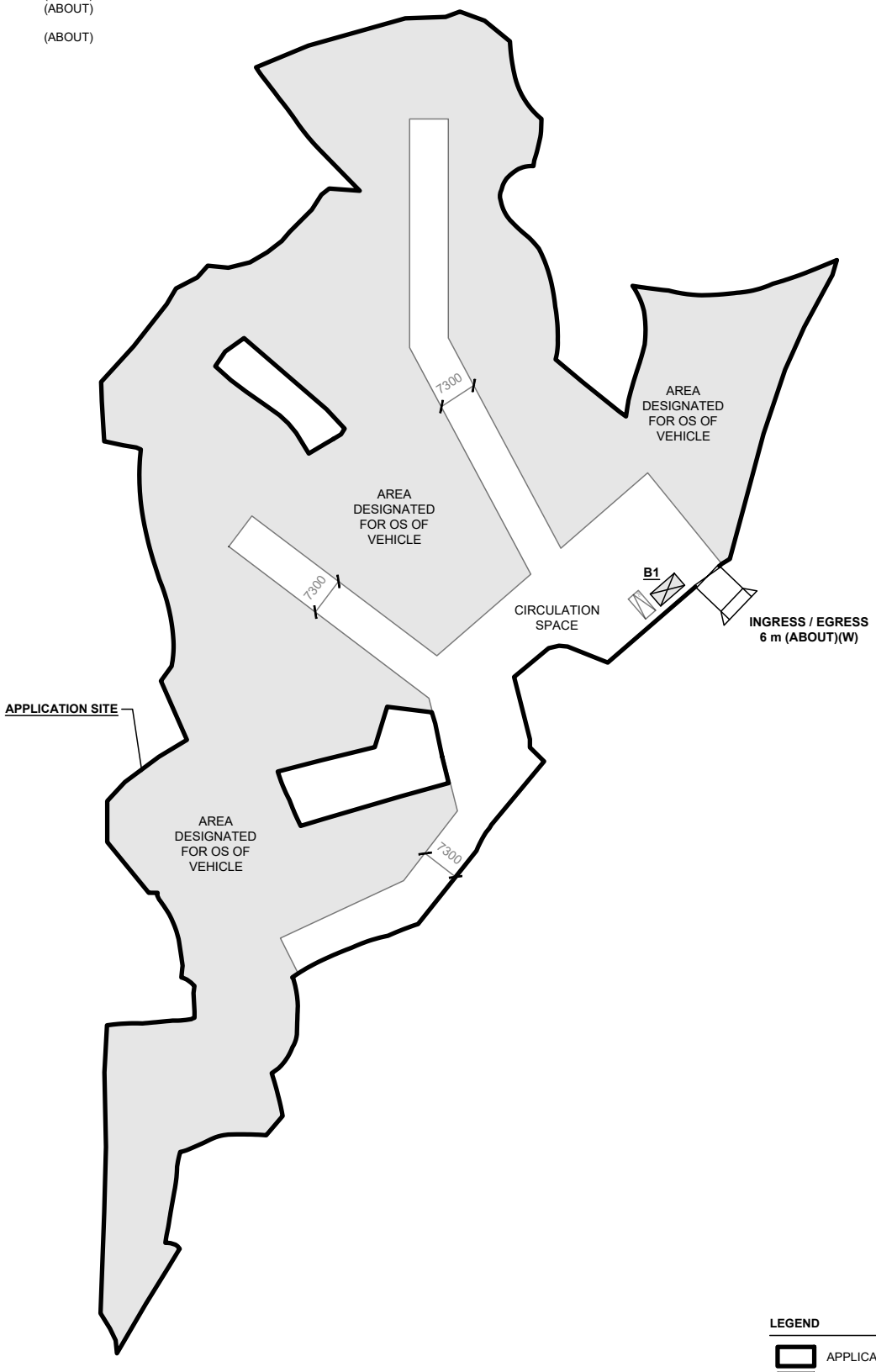


APPENDIX B - PROPOSED SITE LAYOUT PLAN

DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 14,250 m^2	(ABOUT)
COVERED AREA	: 18 m^2	(ABOUT)
UNCOVERED AREA	: 14,232 m^2	(ABOUT)
PLOT RATIO	: 0.001	(ABOUT)
SITE COVERAGE	: 0.1 %	(ABOUT)
NO. OF STRUCTURE	: 1	
DOMESTIC GFA	: NOT APPLICABLE	
NON-DOMESTIC GFA	: 18 m^2	(ABOUT)
TOTAL GFA	: 18 m^2	(ABOUT)
BUILDING HEIGHT	: 3 m	(ABOUT)
NO. OF STOREY	: 1	

STRUCTURE	USE	COVERED AREA	GFA	BUILDING HEIGHT
B1	GUARDROOM	18 m^2 (ABOUT)	18 m^2 (ABOUT)	3 m (ABOUT)(1-STOREY)
	TOTAL	**18 m^2 (ABOUT)**	**18 m^2 (ABOUT)**	



PARKING PROVISIONS

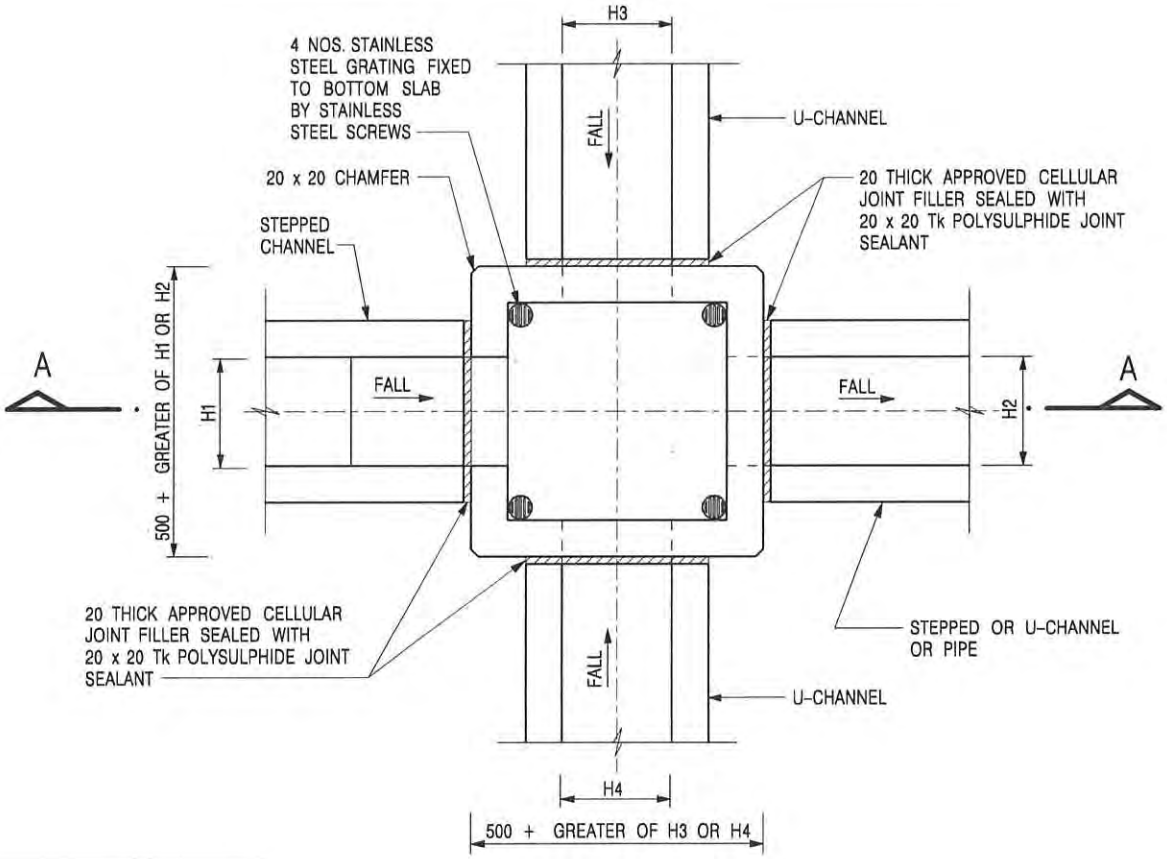
NO. OF PRIVATE CAR PARKING SPACE	: 1
DIMENSION OF PARKING SPACE	: 5 m (L) x 2.5 m (W)

LEGEND

- APPLICATION SITE
- STRUCTURE
- OPEN STORAGE AREA
- PARKING SPACE (PC)
- INGRESS / EGRESS

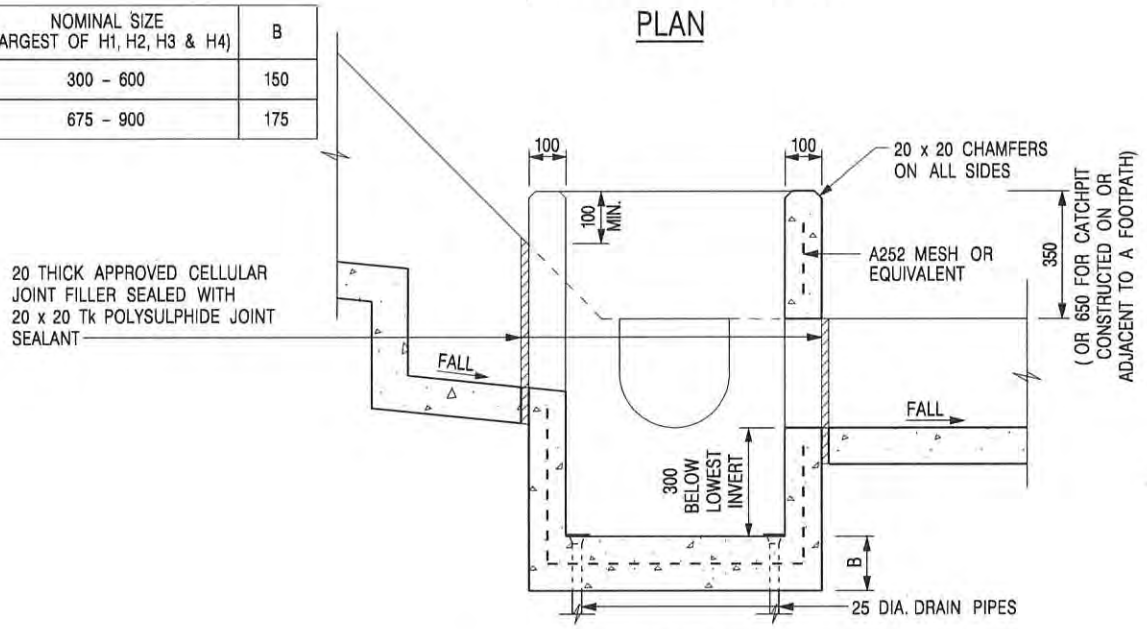
PLANNING CONSULTANT: R-Riches Property Consultants Ltd.	PROJECT: PROPOSED TEMPORARY OPEN STORAGE OF VEHICLE WITH ANCILLARY FACILITIES FOR A PERIOD OF 3 YEARS AND ASSOCIATED FILLING OF LAND	ADDRESS: VARIOUS LOTS IN D.D. 115 AND 116 AND ADJOINING GOVERNMENT LAND, AU TAU, YUEN LONG, NEW TERRITORIES	SCALE: 1 : 1500 @ A4	TITLE: LAYOUT PLAN
			DRAWN BY: MN / DATE: 7.6.2024	
			REVISED BY / DATE	DWG NO.: PLAN 10 / VER.: 001

NORTH, W, E, S



PLAN

NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
300 – 600	150
675 – 900	175



SECTION A – A

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REFER TO SHEET 2 FOR OTHER NOTES.

REF.	REVISION	SIGNATURE	DATE
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

CATCHPIT WITH TRAP

(SHEET 1 OF 2)

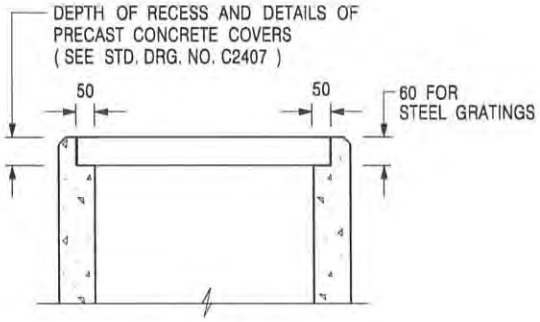
CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2406 /1

卓越工程 建設香港 We Engineer Hong Kong's Development



ALTERNATIVE TOP SECTION FOR PRECAST CONCRETE COVERS / GRATINGS

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE SHALL BE GRADE 20 /20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.
4. FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.
5. CONCRETE TO BE COLOURED AS SPECIFIED.
6. UNLESS REQUESTED BY THE MAINTENANCE PARTY AND AS DIRECTED BY THE ENGINEER, CATCHPIT WITH TRAP IS NORMALLY NOT PREFERRED DUE TO PONDING PROBLEM.
7. UPON THE REQUEST FROM MAINTENANCE PARTY, DRAIN PIPES AT CATCHPIT BASE CAN BE USED BUT THIS IS FOR CATCHPITS LOCATED AT SLOPE TOE ONLY AND AS DIRECTED BY THE ENGINEER.
8. FOR CATCHPITS CONSTRUCTED ON OR ADJACENT TO A FOOTPATH, STEEL GRATINGS (SEE DETAIL 'A' ON STD. DRG. NO. C2405 /2) OR CONCRETE COVERS (SEE STD. DRG. NO. C2407) SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.
9. IF INSTRUCTED BY THE ENGINEER, HANDRAILING (SEE DETAIL 'J' ON STD. DRG. NO. C2405 /5; EXCEPT ON THE UPSLOPE SIDE) IN LIEU OF STEEL GRATINGS OR CONCRETE COVERS CAN BE ACCEPTED AS AN ALTERNATIVE SAFETY MEASURE FOR CATCHPITS NOT ON A FOOTPATH NOR ADJACENT TO IT. TOP OF THE HANDRAILING SHALL BE 1 000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1 000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1 000 mm MEASURED FROM THE INVERT LEVEL TO THE ADJACENT GROUND LEVEL. AND, STEP IRONS (SEE DSD STD. DRG. NO. DS1043) AT 300 c/c STAGGERED SHALL BE PROVIDED. THICKNESS OF CATCHPIT WALL FOR INSTALLATION OF STEP IRONS SHALL BE INCREASED TO 150 mm.
11. FOR RETROFITTING AN EXISTING CATCHPIT WITH STEEL GRATING, SEE DETAIL 'G' ON STD. DRG. NO. C2405 /4.
12. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

REF.	REVISION	SIGNATURE	DATE
A	MINOR AMENDMENT.	Original Signed	04.2016
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

CATCHPIT WITH TRAP (SHEET 2 OF 2)

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2406 /2A

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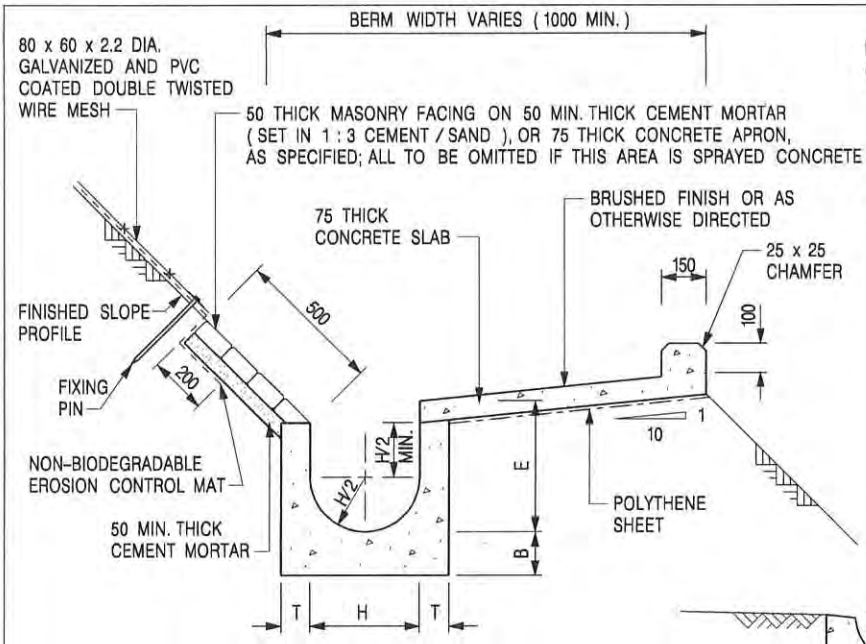
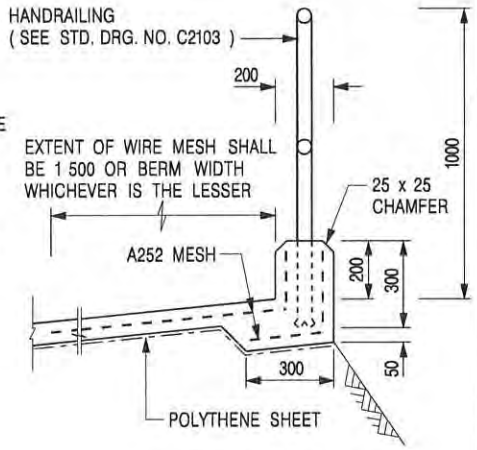
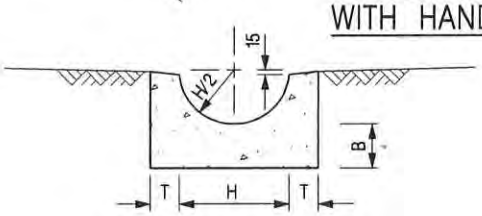


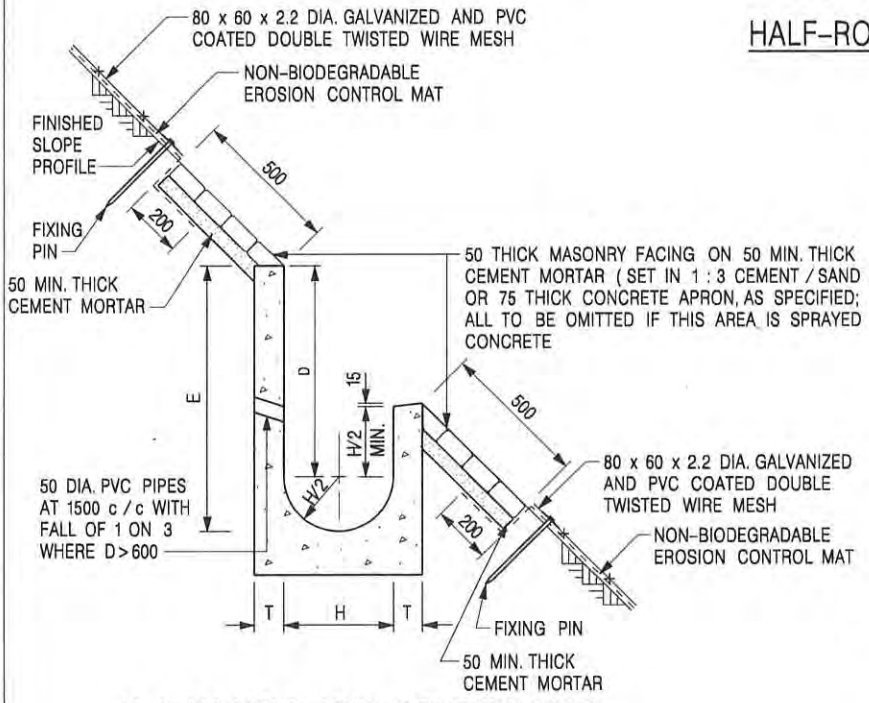
U-CHANNELS CONSTRUCTED ON BERM



DETAILS OF BERM WITH HANDRAILING



HALF-ROUND CHANNEL



U-CHANNELS NOT CONSTRUCTED ON BERM

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE TO BE GRADE 20 / 20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2, F2 OR BRUSHED FINISH AS DIRECTED.
4. SPACING OF EXPANSION JOINT IN CHANNELS, BERM SLABS AND APRONS TO BE 10 METRES MAXIMUM, SEE STD. DRG. NO. C2413 FOR DETAILS.
5. JOINTS FOR CHANNELS, BERM SLABS, APRONS AND WALLS, ETC. TO BE ON THE SAME ALIGNMENT.
6. FOR DIMENSIONS T, H, & B, SEE TABLE BELOW.
7. BIODEGRADABLE EROSION CONTROL MAT IF REQUIRED, SEE STD. DRG. NO. C2511/1E.
8. CONCRETE TO BE COLOURED AS SPECIFIED.
9. CONCRETE U-CHANNEL CAN BE CAST IN-SITU OR PRECAST CONCRETE SUBJECT TO THE ENGINEER'S AGREEMENT ON THE DETAILS.
10. DETAILS OF EROSION CONTROL MAT AND WESH MESH ON BERM. (SEE STD DRG. NO. C2511/1E)

NOMINAL SIZE H	T	B	REINFORCEMENT
300	80	100	A252 MESH PLACED CENTRALLY AND T=100 WHEN E>650
375 - 600	100	150	
675 - 900	125	175	A252 MESH PLACED CENTRALLY

REF.	REVISION	SIGNATURE	DATE
I	MINOR AMENDMENT.	Original Signed	07.2018
H	THICKNESS OF MASONRY FACING AMENDED.	Original Signed	01.2005
G	MINOR AMENDMENT.	Original Signed	01.2004
F	GENERAL REVISION.	Original Signed	12.2002
E	DRAWING TITLE AMENDED.	Original Signed	11.2001
D	MINOR AMENDMENT.	Original Signed	08.2001
C	150 x 100 UPSTAND ADDED AT BERM.	Original Signed	6.99
B	MINOR AMENDMENTS.	Original Signed	3.94

DETAILS OF HALF-ROUND AND U-CHANNELS (TYPE A - WITH MASONRY APRON)

CEDD **CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT**

SCALE 1 : 25

DATE JAN 1991

DRAWING NO. C2409I

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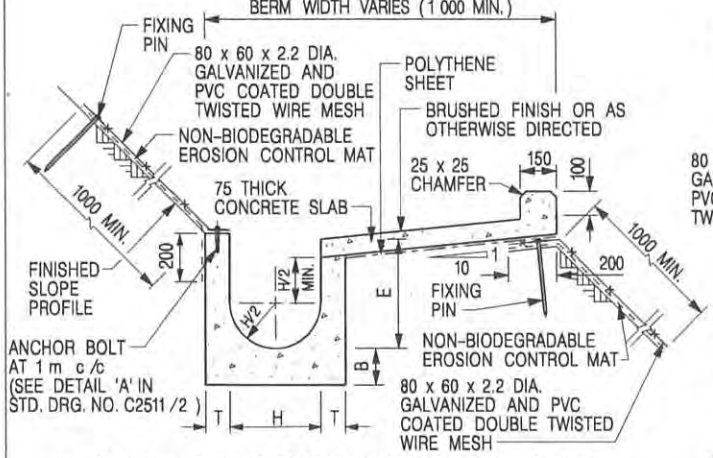
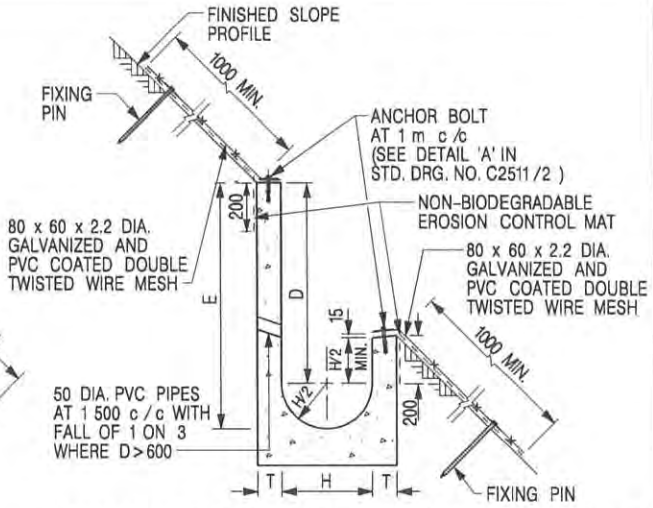
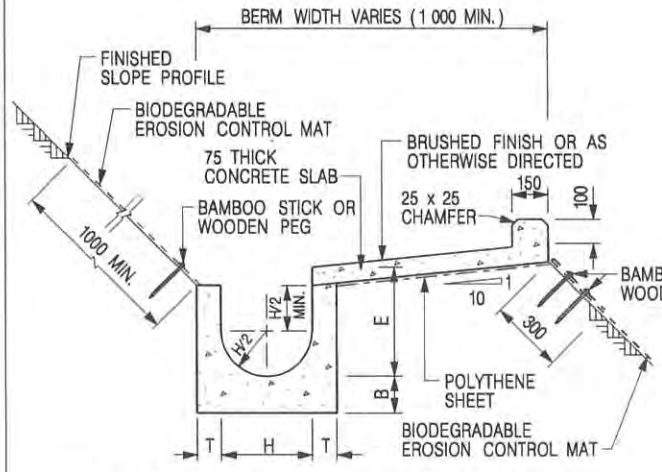


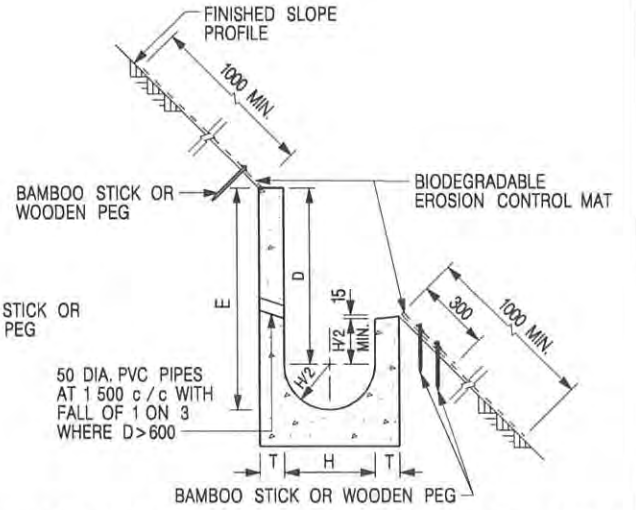
U-CHANNELS CONSTRUCTED ON BERM WITH NON-BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS NOT CONSTRUCTED ON BERM WITH NON-BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS CONSTRUCTED ON BERM WITH BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS NOT CONSTRUCTED ON BERM WITH BIODEGRADABLE EROSION CONTROL MAT

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE TO BE GRADE 20 /20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2, F2 OR BRUSHED FINISH AS DIRECTED.
4. SPACING OF EXPANSION JOINT IN CHANNELS, BERM SLABS AND APRONS TO BE 10 METRES MAXIMUM, SEE STD. DRG. NO. C2413 FOR DETAILS.
5. JOINTS FOR CHANNELS, BERM SLABS, APRONS AND WALLS, ETC. TO BE ON THE SAME ALIGNMENT.
6. FOR DIMENSIONS T, H, & B, SEE TABLE BELOW.
7. FOR TYPICAL FIXING PIN DETAILS, SEE STD. DRG. NO. C2511/2.
8. MINIMUM SIZE OF 25 x 50 x 300mm SHALL BE PROVIDED FOR WOODEN PEG.
9. MINIMUM SIZE OF 10mm DIAMETER WITH 200mm LONG SHALL BE PROVIDED FOR BAMBOO STICK.
10. THE FIXING DETAILS OF NON-BIODEGRADABLE AND BIODEGRADABLE EROSION CONTROL MATS ON EXISTING BERM SHALL REFER TO STD. DRG. NO. C2511/1.

NOMINAL SIZE H	T	B	REINFORCEMENT
300	80	100	A252 MESH PLACED CENTRALLY AND T=100 WHEN E>650
375 – 600	100	150	
675 – 900	125	175	A252 MESH PLACED CENTRALLY

REF.	REVISION	SIGNATURE	DATE
I	MINOR AMENDMENT.	Original Signed	07.2018
H	FIXING DETAILS OF BIODEGRADABLE EROSION CONTROL MAT ADDED.	Original Signed	12.2017
G	DIMENSION TABLE AMENDED.	Original Signed	01.2005
F	MINOR AMENDMENT.	Original Signed	01.2004
E	GENERAL REVISION.	Original Signed	12.2002
D	MINOR AMENDMENT.	Original Signed	08.2001
C	150 x 100 UPSTAND ADDED AT BERM.	Original Signed	6.99
B	MINOR AMENDMENT.	Original Signed	3.94
A	MINOR AMENDMENT.	Original Signed	10.92

DETAILS OF HALF-ROUND AND U-CHANNELS (TYPE B – WITH EROSION CONTROL MAT APRON)

CEDD **CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT**

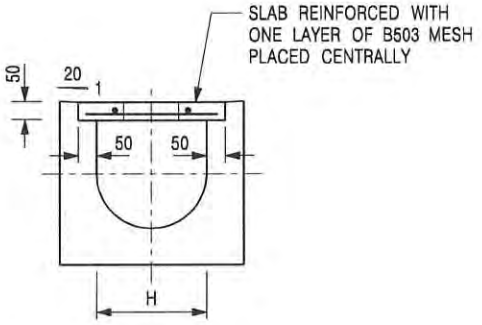
SCALE DIAGRAMMATIC

DATE JAN 1991

DRAWING NO. C2410I

卓越工程 建設香港

We Engineer Hong Kong's Development



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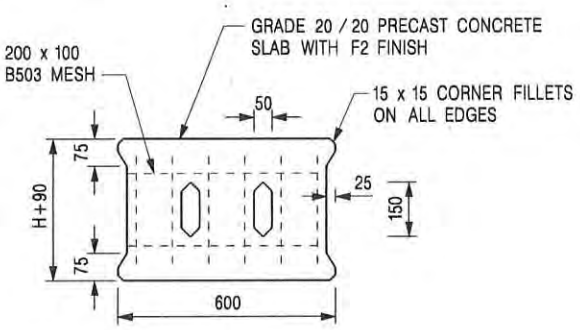
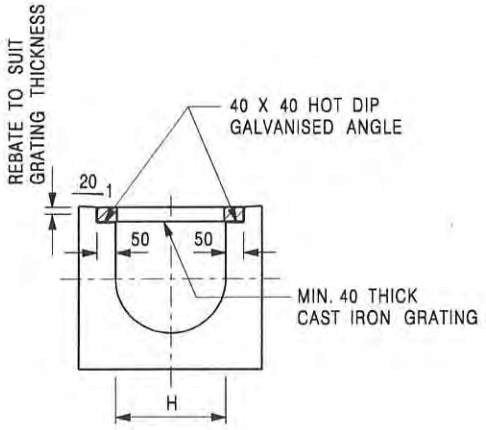


PLAN OF SLAB

U-CHANNELS WITH PRECAST CONCRETE SLABS

(UP TO H OF 525)



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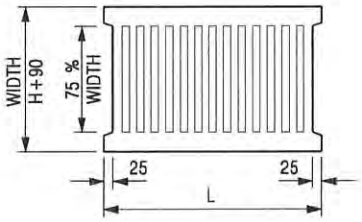


L = 600mm FOR H ≤ 375mm
L = 400mm FOR H > 375mm

CAST IRON GRATING

(DIMENSIONS ARE FOR GUIDANCE ONLY, CONTRACTOR MAY SUBMIT EQUIVALENT TYPE)

U-CHANNEL WITH CAST IRON GRATING

(UP TO H OF 525)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. H = NOMINAL CHANNEL SIZE.
3. ALL CAST IRON FOR GRATINGS SHALL BE GRADE EN-GJL-150 COMPLYING WITH BS EN 1561.
4. FOR COVERED CHANNELS TO BE HANDED OVER TO HIGHWAYS DEPARTMENT FOR MAINTENANCE, THE GRATING DETAILS SHALL FOLLOW THOSE AS SHOWN ON HyD STD. DRG. NO. H3156.

REF.	REVISION	SIGNATURE	DATE
E	NOTES 3 & 4 AMENDED.	Original Signed	12.2014
D	NOTE 4 ADDED.	Original Signed	06.2008
C	MINOR AMENDMENT. NOTE 3 ADDED.	Original Signed	12.2005
B	NAME OF DEPARTMENT AMENDED.	Original Signed	01.2005
A	CAST IRON GRATING AMENDED.	Original Signed	12.2002

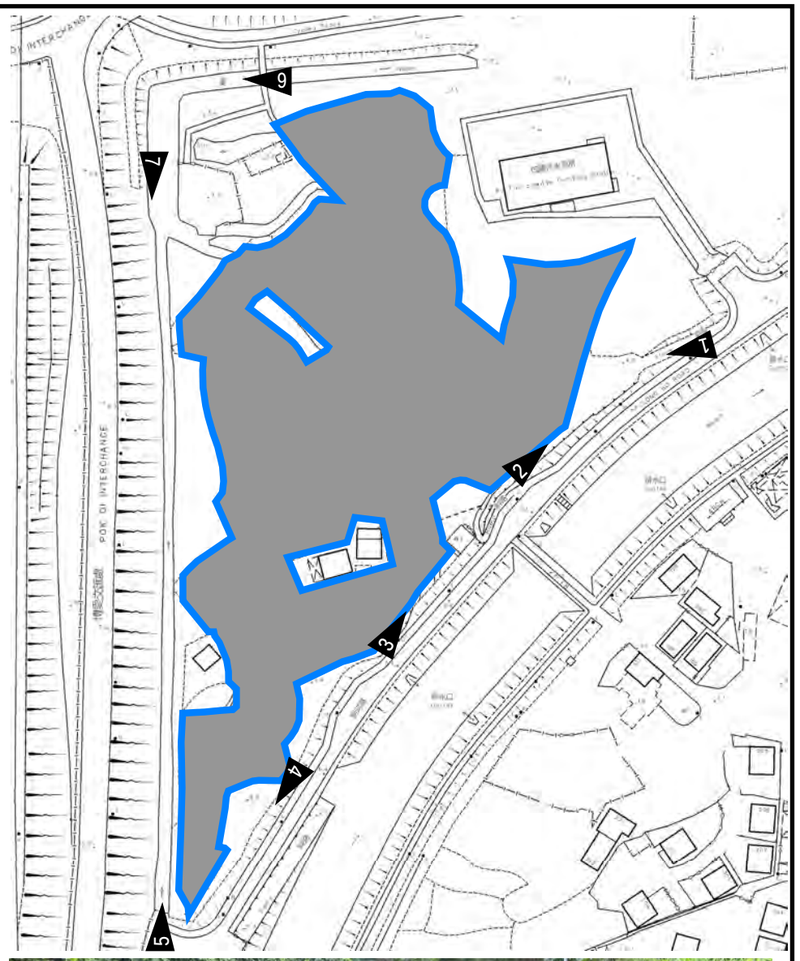
COVER SLAB AND CAST IRON GRATING FOR CHANNELS

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2412E



PROJECT:
Proposed Temporary Open Storage of Vehicle with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “Agriculture” Zone

SITE PHOTOS

APPENDIX D

LOCATION:
Various Lots in D.D. 115 and 116 and Adjoining Government Land, Au Tau, Yuen Long, New Territories

VER	DESCRIPTION	DATE