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Appendix I

Details of the Affected Business Premises

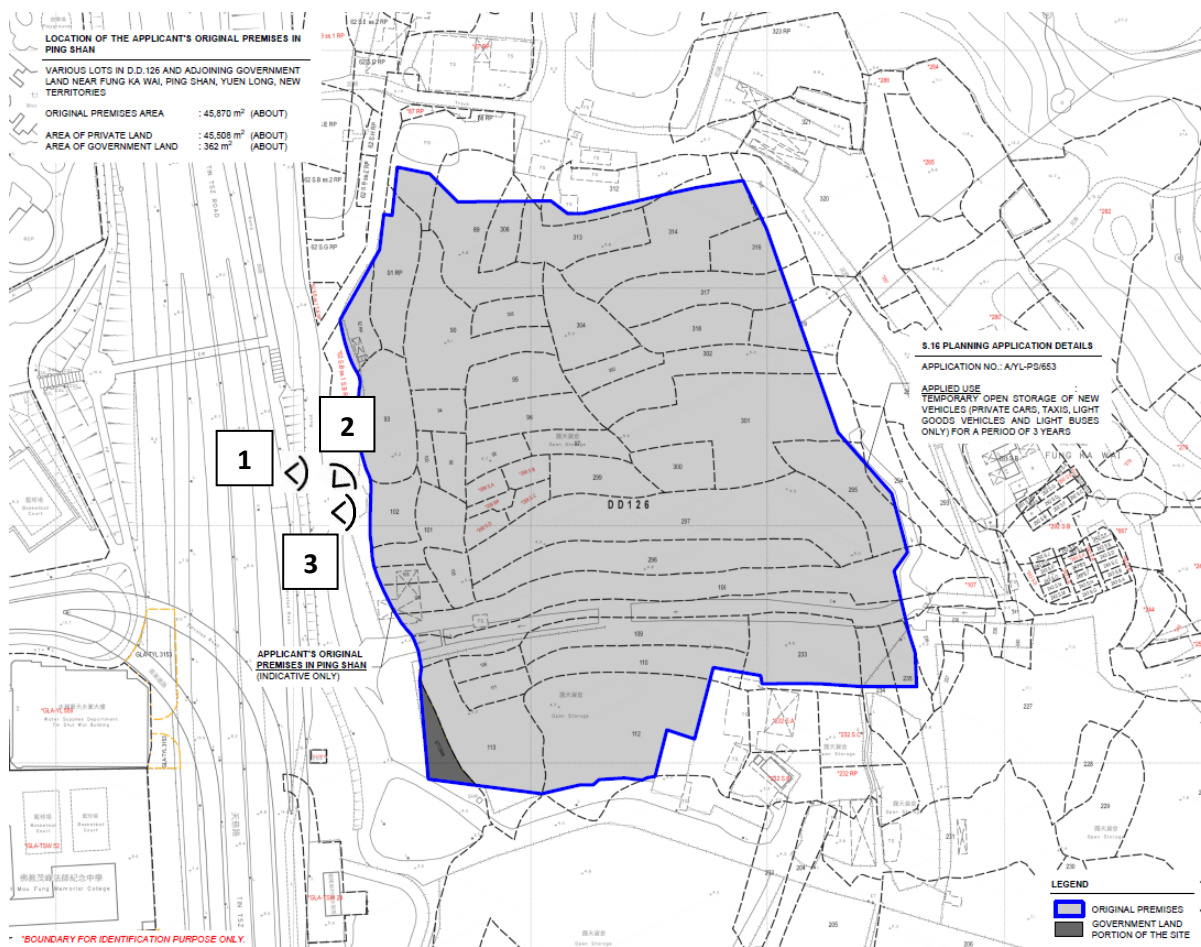
Appendix I – Details of the Affected Business Premises

Company Name: **Crown Motors Limited** **皇冠汽車有限公司**
(authorised Asia 68 Limited as applicant of the current application)

Details of Business Premises

Location: Various Lots in D.D. 126 and adjoining Government Land near Fung Ka Wai,
Ping Shan, Yuen Long, New Territories

Use of Premises: Open Storage of Vehicle







Appendix II

Details of Alternative Sites for Relocation

Appendix II – Alternative Sites for the Relocation of the Applicant's Original Premises in Ping Shan, Yuen Long

Alternative Sites/ Application Site	Site 1	Site 2	Site 3	Site 4	Site 5	Application Site
Location	Various Lots in D.D. 86, San Uk Ling, Man Kam To, New Territories	Various Lots in D.D. 93, Ma Tso Lung, New Territories	Various Lots in D.D. 104, Ngau Tam Mei, Yuen Long, New Territories	Various Lots in D.D. 129, Lau Fau Shan, Yuen Long, New Territories	Various Lots in D.D. 135, Pak Nai, Yuen Long, New Territories	Various Lots in D.D. 115 and D.D. 116, Au Tau, Yuen Long, New Territories
Site Area	3,678 m ² (about)	30,190 m ² (about)	2,900 m ² (about)	10,740 m ² (about)	13,320 m ² (about)	14,250 m ² (about)
Accessibility	Accessible from Lin Ma Hang Road via a local access	Accessible from Ma Tso Lung Road via a local access	Accessible from Ngau Tam Mei Road via a local access	Accessible from Deep Bay Road via a local access	Accessible from Nim Wan Road via a local access	Accessible from Long Ho Road via a local access
Distance from Original Premises	25.2 km (about)	20.8 km (about)	13.4 km (about)	5.7 km (about)	8.8 km (about)	8.8 km (about)
Outline Zoning Plan	Approved Man Kam To OZP No.: S/NE-MKT/4	Approved Ma Tso Lung and Hoo Hok Wai OZP No.: S/NE-MTL/3	Approved Ngau Tam Mei OZP No.: S/YL-NTM/14	Approved Lau Fau Shan & Tsim Bei Tsui OZP No.: S/YL-LFS/11	Approved Sheung Pak Nai and Ha Pak Nai OZP No.: S/YL-PN/9	Approved Tai Tong OZP No.: S/YL-TT/20
Zoning	"Green Belt" ("GB")	"Conservation Area (1)" ("CA(1)")	"GB"	"GB"	"Coastal Protection Area" ("CPA")	"Agriculture"
Existing Condition	Covered with tree groups and vegetation	Mostly vacant, covered with vegetation and occupied by fishpond	Covered with tree groups and ponds	Covered with vegetation and woodland	Occupied by temporary structures and fishponds	Vacant, generally flat and partly covered with vegetation
Surrounding Area	Surrounded by residential development and woodland	Surrounded by vegetation, pond, some GIC uses and residential use	Surrounded by ponds, agricultural land, GIC use and temporary structures for residential use	Surrounded by tree groups, temporary structures for open storage and residential use	Surrounded by fishpond and some temporary structures	Surrounded by unused/vacant land, public roads, public utility installations and temporary structures
Suitability for Relocation	<u>Not suitable</u> for relocation - 92% <u>smaller</u> than the original premises - tree felling is required - site area is too small for current business - not compatible with the surrounding area - relatively distanced from original premises	<u>Not suitable</u> for relocation - within the "CA(1)" zone - pond filling is required - not compatible with the surrounding area - relatively distanced from original premises - remote location	<u>Not suitable</u> for relocation - 63% <u>smaller</u> than the original premises - tree felling is required - site area is too small for current business - active agricultural activities - not compatible with the surrounding area	<u>Not suitable</u> for relocation - tree felling is required - not compatible with the surrounding area - remote location	<u>Not suitable</u> for relocation - within the "CPA" zone - pond filling is required - not compatible with the surrounding area - remote location	<u>Comparatively suitable</u> for relocation: - in close proximity to built-up area and major road network - relatively flat and mostly vacant - no active agricultural activities

Appendix III

Traffic Review

**Proposed Temporary Open Storage of Vehicle with
Ancillary Facilities and Associated Filling of Land for a
Period of 3 Years**

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

**Traffic Review Report
July 2025**

Section 16 Planning Application

Proposed Temporary Open Storage of Vehicle with Ancillary Facilities and Associated Filling of Land for a Period of 3 Years

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

**Traffic Review Report
July 2025**

Contents Amendment Record

This report has been issued and amended as follows:

Revision	Description	Prepared / Date	Checked / Date	Approved / Date
R0b	TR	04/07/2025 Various	04/07/2025 TC	04/07/2025 SC

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Appendix A Layout Plan and Swept Path Analysis

Appendix B 2025 Junction Calculation Sheets

Appendix C 2029 Junction Calculation Sheets

1 INTRODUCTION

1.1 General

- 1.1.1 Ozzo Technology (HK) Limited was commissioned to undertake a traffic study in support of the S16 planning application for the Proposed Temporary Open Storage of Vehicle with Ancillary Facilities and Associated Filling of Land for a Period of 3 Years ("Application Site").

1.2 Project Descriptions

- 1.2.1 The Application Site is located at Au Tau, abutting Long Ho Road which serve as an access route of the Site.

1.3 Study Objectives

- 1.3.1 The main objectives of this traffic study are to:
- (i) evaluate the existing vehicular traffic and transport conditions of the Application site and to assess the traffic and transport implications of the development to the adjacent road network for the operation of the Application Site;
 - (ii) identify any existing and potential traffic and transport problems and to recommend possible mitigation measures and advise any necessary traffic arrangement;
 - (iii) recommend traffic improvement measures for the Application Site, as necessary.

1.4 Report Structure

- 1.4.1 Following this introductory chapter, this report is arranged as follow:
- Chapter 2 describes the Application Site;
 - Chapter 3 outlines the existing traffic conditions;
 - Chapter 4 presents the finding of traffic forecast;
 - Chapter 5 provides the conclusion of the Study.

2 DESCRIPTONS OF THE APPLICATION SITE

2.1 Site Location

- 2.1.1 The site is located in Au Tau and can be accessed via Long Ho Road which serves as the access route of site as shown in **Figure 2-1**.

2.2 Development Parameters for the Application Site

- 2.2.1 The Application Site consisting of various Lots in D.D. 115 and D.D. 116 in Au Tau, with a Site area of 14,250m².
- 2.2.2 The site involves a temporary open storage of vehicle with ancillary facilities. The current application is intended to facilitate the relocation of the applicant's affected business premises in Ping Shan to the Application Site. Not more than 700 vehicles will be stored at the Site which include private car and light goods vehicles .
- 2.2.3 The operation hours of the proposed development are Monday to Saturday from 09:00 to 19:00. No operations on Sunday and public holiday. It is anticipated to accommodate not more than 2 staffs. Visitor is not anticipated at the Site.

2.3 Development Traffic and Parking Facilities

- 2.3.1 Only 1 private car is expected to be generated/ attracted by the Development for staff during peak period. Vehicles to be stored in the Site will be driven into/out of the Site by staff with trade license during non-peak hours (i.e.11:00-17:00) with an hourly rate of 6 vehicles on average for both generation/ attraction as stated in the planning statement. **Table 2-1** presents the traffic induced by the operation of the Site during peak hour.

Table 2-1 Development Traffic

Time Period	Trip Generation and Attraction (veh/hr)	
	Private Vehicle	
	In	Out
Trip at AM Peak hour	1	0
Trip at PM Peak hour	0	1
Total	1	1

- 2.3.2 **Table 2-2** summarizes the internal transport facilities to be provided in the Application Site. Ancillary transport facilities are provided based on users' requirements to meet operational needs.

Table 2-2 Ancillary Transport Facilities Based on User's Requirement

Type of Ancillary Transport Facilities	Size	Provision based on User's Requirement
Private Car Parking Space	2.5m (W) x 5m (L)	1

- 2.3.3 The conceptual layout plan of the Application Site is included in **Appendix A** for easy reference.

2.4 Vehicular Access Arrangement

- 2.4.1 All vehicles from the Site will be scheduled and managed by the applicant to ensure only one-way direction traffic travelling to/from the Site. Swept path analysis is also conducted for 6.5m LGV accessing/ leaving the Site. **Appendix A** presents the swept path analysis for the vehicular access of the Application Site, as well as internal circulation to/from the parking space within the site. The results indicating that sufficient spaces can be provided.

3 EXISTING TRAFFIC AND TRANSPORT CONDITIONS

3.1 Existing Road Network

- 3.1.1 The Site is bounded by Long Ho Road as shown in **Figure 2-1** which is a single track access road with passing bays along the road.

3.2 Traffic Surveys

- 3.2.1 Vehicular count survey was conducted on a typical weekday in June 2025 at the critical junction and link shown in **Figure 2-1** during the period of 07:00-10:30 for AM peak and 16:00-19:30 for PM peak. The details of the critical junction and link are listed in **Table 3-1** below.

Table 3-1 Critical Junction and Link

Index	Location	Type
J1	Long Ho Road/ Yau Tin West Road	Priority
L1	Long Ho Road (East of Yau Tin West Road)	Road Link

3.3 Existing Vehicle Traffic Conditions

All vehicle flows recorded during the traffic surveys have been converted to passenger car unit (PCU) based on the PCU factors as indicated in Table 2.3.1.1 of Volume 2 of Transport Planning and Design Manual (TPDM) as illustrated in **Table 3-2**.

Table 3-2 Passenger Car Unit Conversion Factors

Vehicle Type	PCU Conversion Factor ⁽¹⁾
	Priority junction/ Roundabout
Car / Taxi	1.00
Public Light Bus / Minibus / Light Goods Vehicle	1.50
Medium Goods Vehicle	2.00
Heavy Goods Vehicle	2.50
Bus / Coach	2.50

Notes: (1) Table 2.3.1.1, Chapter 2.3, Volume 2, TPDM-2024

3.3.1 By applying the above PCU factors, vehicular traffic flows in PCUs are calculated and the AM and PM peak hour is identified to occur at 07:30-08:30 and 17:45-18:45 for AM peak and PM peak respectively. **Figure 3-1** presents the 2025 observed Weekday AM and PM peak hour traffic flows in the vicinity of the Application Site.

3.3.2 Based on the existing traffic flows, the peak hour performances of the key junction are assessed. The assessment results are indicated in **Table 3-3** and detailed junction calculation sheets are given in **Appendix B**.

Table 3-3 2025 Peak Hour Junction Capacity Assessment

Jn. ID.	Location ⁽¹⁾	Type	Capacity Index ⁽²⁾	2025 Weekday	
				AM Peak	PM Peak
J1	Long Ho Road/ Yau Tin West Road	Priority	DFC	0.09	0.18

Notes:

(1) Refer to Figure 2-1 for junction locations

(2) DFC = Design Flow to Capacity for priority junction and roundabout

3.3.3 The results reveal that the assessed key junction is operated satisfactorily during the peak hours.

3.3.4 Based on the existing traffic flows, the peak hour performances of the key road link outside the Application Site is also assessed and the results are indicated in **Table 3-4**.

Table 3-4 2025 Peak Hour Road Link Capacity Assessment

No.	Location ⁽¹⁾	Direction	Design ⁽²⁾ Capacity (veh/hr)	Weekday AM Peak		Weekday PM Peak	
				Flows (veh/hr)	P/Df ⁽³⁾	Flows (veh/hr)	P/Df ⁽³⁾
L1	Long Ho Road (East of Yau Tin West Road)	2-way	100	30	0.3	29	0.29

Notes: (1) Refer to Figure 2-1 for road link locations

(2) TPDM Vol 2 Chapter 3.11.3.1

(3) P/Df = Peak Hourly Flows/Design Flow Ratios (P/Df) for road links

3.3.5 The results reveal that the key road link outside the Application Site operate within capacity during the peak hours.

4 TRAFFIC FORCAST

4.1 Design Year

- 4.1.1 According to current programme, the proposed open storage will commission in the year of 2026 and last for 3 years, the design year for traffic forecast is therefore set to be 2029.

4.2 Methodology

- 4.2.1 In forecasting the future traffic flows on the road network in the Study Area, due considerations are given to the following information and factors:

- Historical traffic data from Annual Traffic Census (ATC) published by Transport Department;
- The forecasted population and employment from the 2021-based Territorial Population and Employment Data Matrices (TPEDM) planning data published by Planning Department;
- Committed and planned developments in the Study Area.

- 4.2.2 The following steps are undertaken to derive the 2029 Peak Hour Reference Flows (i.e. without the Application Site) and Design Flows (i.e. with the Application Site).

2029 Background Flows = 2025 Flows x annual growth factors

2029 Reference Flows = 2029 Background Flows + additional traffic by
planned and committed developments

2029 Design Flows = 2029 Reference Flows + development traffic

- 4.2.3 The traffic impact to be induced by the Development is assessed by comparing the Peak Hour Reference Traffic Flows against the Peak Hour Design Traffic Flows for the Design Year.

4.3 Future Year Traffic Flows

Historical Traffic Growth

- 4.3.1 To gain an understanding of the historical trends of traffic growth on the nearby road network, relevant traffic data over the 5-year period of 2019 to 2023 are extracted from the Annual Traffic Census (ATC) 2023 for the ATC stations in the vicinity the Application Site. **Table 4-1** describes the locations of the nearby ATC stations and provide the corresponding traffic data.

Table 4-1 Traffic Data from ATC in the vicinity of the site

Stn	Road	Between		2019	2020	2021	2022	2023	Average Annual Growth 2019-2023
5694	Yuen Long Highway	Shap Pat Heung Int	Pok Oi Int	91,050	77,080	66,160	63,230	67,190	-7.32%
5711	Shap Pat Heung Rd	Fung Ki Road	Shap Pat Heung Int	23,400	26,860	29,360	28,060	29,810	6.24%
Total				114,450	103,940	95,520	91,290	97,000	-4.05%

- 4.3.2 As indicated in **Table 4-1**, the traffic on the road network in the vicinity of the Application Site has a negative growth of -4.05% p.a. on average over the period from 2019 – 2023.

2021-Based TPEDM

- 4.3.3 **Table 4-2** presents the population and employment data in Yuen Long district for 2021, 2026 and 2031 from the 2021-based Territorial Population and Employment Data Matrices (TPEDM) planning data published by Planning Department.

Table 4-1 2021-Based TPEDM for Yuen Long district

Category	2021	2025 ⁽¹⁾	2031	2025-2031 Average Growth (% p.a.)
Population	668,100	681,620	760,600	1.84%
Employment	152,850	221,370	258,200	2.60%
Total	820,950	902,990	1,018,800	2.03%

Source: 2021-based TPEDM open version available from the website of Planning Department

Note (1): 2025 population and employment places are calculated by interpolation between 2021 and 2026 from TPEDM.

- 4.3.4 It is anticipated that the population and employment places in Yuen Long district would be increased by 1.84% and 2.6% p.a. respectively, i.e. an overall increase of 2.03% per annum.

For conservative, annual growth rate derived from 2021-Based TPEDM of 2.03% will be adopted in the Study.

Planned and Committed Developments

- 4.3.5 By referring to the TPB website, it is known that there would be other planned developments commissioned in the vicinity of the application site, as listed in **Table 4-3**.

Table 4-3 Planned / Committed Developments in the Site Vicinity

Application No.	Location	Land Use	Site Area (m ²)	Application Status
A/YL/315	Lot 2086 RP in D.D.116 and Adjoining Government Land, Yuen Long, New Territories	Proposed Temporary Shop and Services and Ancillary Office for a Period of 6 Years'	144.6	Approved (05/07/2024)
A/YL/327	Lots 825 RP (Part), 839, 840 and 843 in D.D. 116 and Adjoining Government Land, Yuen Long, New Territories	Proposed Temporary Shop and Services and Eating Place with Ancillary Facilities for a Period of 6 Years	860	Approved (20/06/2025)
A/YL/310	Lots 881 S.B RP (Part) and 904 S.A (Part) in D.D. 116, Yuen Long, New Territories	Proposed Temporary Eating Place for a Period of 6 Years	550	Approved (27/10/2023)

2029 Reference Flows

- 4.3.6 By incorporating the planned development traffic and annual growth mentioned in **Section 4.3.5** and **Section 4.3.4** respectively, the 2029 Reference Traffic Flow are presented in **Figure 4-1**.

2029 Design Flows

- 4.3.7 The additional development traffic mentioned in **Section 2.3** is then assigned onto the nearby road network in addition to the Reference Traffic Flow presented in **Figure 4-1**. The resulting 2029 Design Traffic Flow are shown in **Figure 4-2**.

4.4 Future Year Junction Capacity Assessments

- 4.4.1 The critical road junctions as identified in **Section 3.2** are assessed in the light of traffic forecast for the design year 2029 defined in **Section 4.1**. The results are shown in **Table 4-4** with detailed junction calculation sheets provided in **Appendix C**.

Table 4-4 2029 Peak Hour Junction Capacity Assessment

Jn. ID.	Location ⁽¹⁾	Type	Capacity Index ⁽²⁾	2029 Reference Scenario		2029 Design Scenario	
				AM Peak	PM Peak	AM Peak	PM Peak
J1	Long Ho Road/ Yau Tin West Road	Priority	DFC	0.09	0.19	0.10	0.19

Notes:

(1) Refer to Figure 2-1 for junction locations

(2) DFC = Design Flow to Capacity for priority junction and roundabout

- 4.4.2 It is indicated in the above **Table 4-4** that the identified critical junction would operate satisfactorily during peak hours in the design years of 2029 without and with the Development in place, taking account of the known planned/ committed major developments in the vicinity of the Application Site. As the difference between Design Scenario and Reference Scenario is very less (0.01), it can be concluded that the impact of the development is insignificant to the critical junction during peak hour.

4.5 Future Year Link Capacity Assessments

4.5.1 The critical road link as identified in **Section 3.2** are also assessed based on the future year traffic flow derived in **Section 4.3** and the results are presented in **Table 4-5**.

Table 4-5 2029 Peak Hour Road Link Capacity Assessment

No.	Location ⁽¹⁾	Dir.	Design ⁽²⁾ Capacity (veh/hr)	2029 Reference Scenario (AM Peak)		2029 Reference Scenario (PM Peak)		2029 Design Scenario (AM Peak)		2029 Design Scenario (PM Peak)	
				Flows (veh/hr)	P/Df ⁽³⁾	Flows (veh/hr)	P/Df ⁽³⁾	Flows (veh/hr)	P/Df ⁽³⁾	Flows (veh/hr)	P/Df ⁽³⁾
L1	Long Ho Road (East of Yau Tin West Road)	2-way	100	33	0.33	31	0.31	34	0.34	32	0.32

Notes: (1) Refer to Figure 2-1 for road link locations
(2) TPDM Vol 2 Chapter 3.11.3.1 and
(3) P/Df = Peak Hourly Flows/Design Flow Ratios (P/Df) for road links

4.5.2 The results in the above **Table 4-5** indicate that the key road link would be operating within their capacity in the design year of 2029. As the difference between Design Scenario and Reference Scenario is very less (0.01), it can be concluded that the impact of the development is insignificant to the critical link during peak hour.

5 SUMMARY AND CONCLUSION

5.1 Summary

- 5.1.1 Ozzo Technology (HK) Limited is commissioned to undertake this traffic study to assess the traffic impact to be induced by the Application Site on the nearby road link and junction.
- 5.1.2 Capacity assessments are undertaken to reveal the AM and PM peak hour traffic conditions for year 2025 and 2029 on the critical link and junction. The assessment results indicate that the critical link and junction perform satisfactorily during the AM and PM peak hours on a normal weekday for both the Reference and Design scenarios. The impact of the development is considered to be insignificant.

5.2 Conclusion

- 5.2.1 The impact assessment results indicate that the Application Site would not induce significant traffic impacts and considered acceptable from traffic engineering viewpoint.

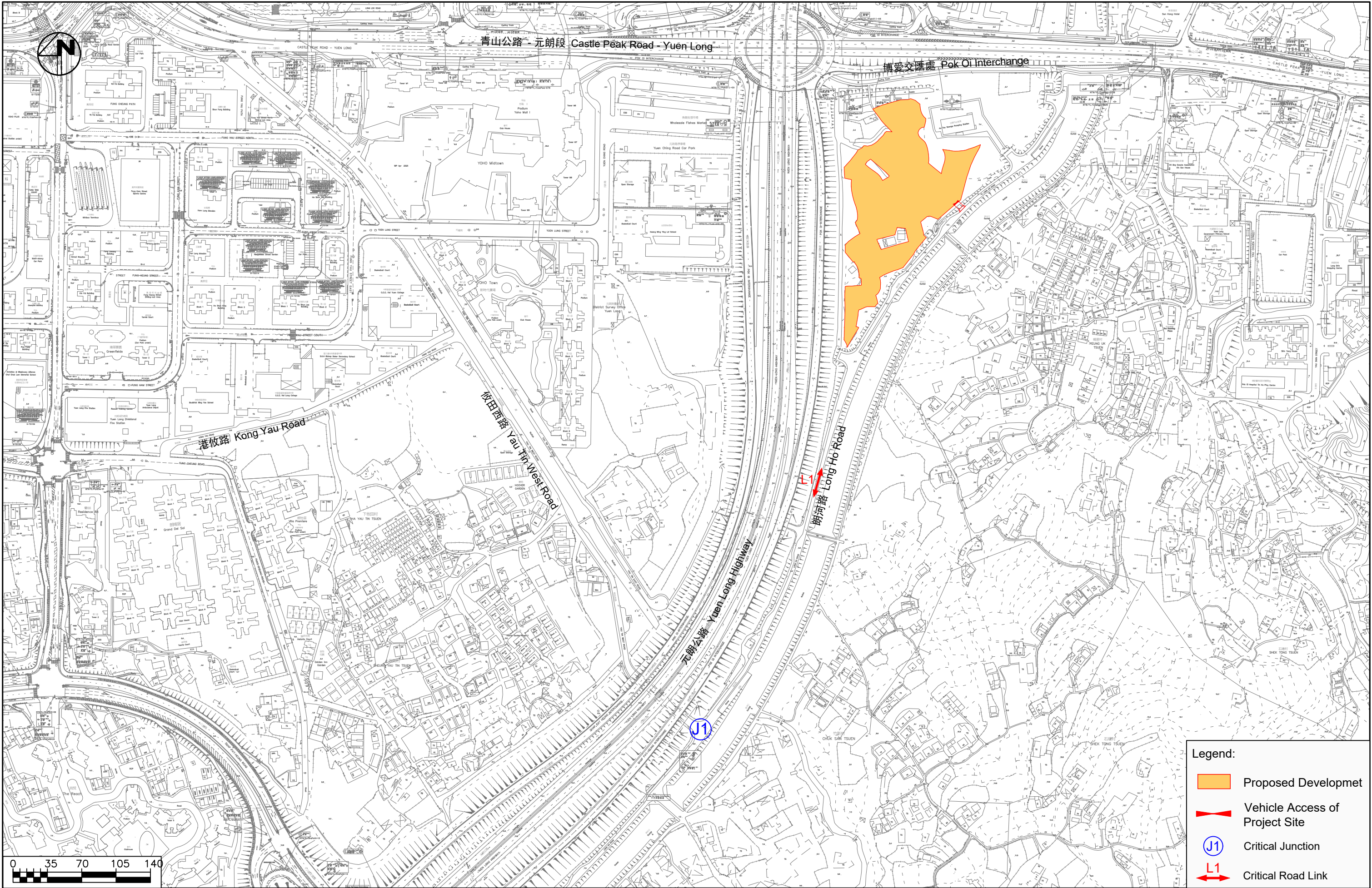
Proposed Temporary Open Storage of Vehicle with Ancillary Facilities
for a Period of 3 Years in Au Tau, Yuen Long, New Territories

Traffic Review Report



Figures

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- Legend:
- Proposed Developmet
 - Vehicle Access of Project Site
 - Critical Junction
 - Critical Road Link

Project Title		Proposed Temporary Open Storage of Vehicles with Ancillary Facilities and Associated Filling of Land for a Period of 3 Years	
Date	23/06/2025	Scale	1:3500

Critical Junctions and Road Links

Project No. 83242	Rev.
Dwg No. Figure 2-1	-

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攸田西路 Yau Tin West Road

朗河路 Long Ho Road

(14) 1
(106) 54
(46) 163
(2) 7
J1
23(10)
2(3)

Legend:

Proposed Developmet

J1

Critical Junction

Weekday AM Peak Hour Traffic Flow(in PCUs)

123(123)Weekday PM Peak Hour Traffic Flow(in PCUs)

Note:Minor Road Link not shown for clarity

Date24/06/2025 ScaleNTS		Project Title Proposed Temporary Open Storage of Vehicles with Ancillary Facilities and Associated Filling of Land for a Period of 3 Years	OZZO TECHNOLOGY	
			Project No. 83242 Dwg No. Figure 3-1	Rev. -

2025 Existing Peak Hour Traffic Flows

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攸田西路 Yau Tin West Road

朗河路 Long Ho Road

(15) 1
(115) 59
(50) 177
(2) 8
J1
25(11)
2(3)

Legend:

Proposed Developmet

J1 Critical Junction

Weekday AM Peak Hour Traffic Flow(in PCUs)

Weekday PM Peak Hour Traffic Flow(in PCUs)

Note:Minor Road Link not shown for clarity

Project Title
Proposed Temporary Open Storage of Vehicles with Ancillary Facilities and Associated Filling of Land for a Period of 3 Years

Date
24/06/2025

Scale
NTS

2029 R eference Traffic Flows



Project No. 83242
Dwg No. Figure 4-1

Rev.
-

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攸田西路 Yau Tin West Road

朗河路 Long Ho Road

(15) 2
(115) 59
(50) 177
(2) 8
J1
25(12)
2(3)

Legend:

Proposed Developmet

J1

Critical Junction

Weekday AM Peak Hour Traffic Flow(in PCUs)

Weekday PM Peak Hour Traffic Flow(in PCUs)

Note:Minor Road Link not shown for clarity

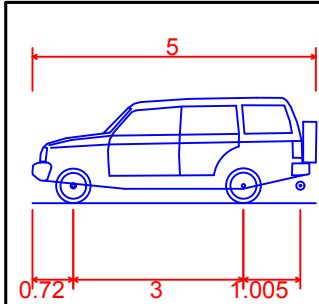
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Date	Scale	2029 Design Traffic Flows				Project No. 83242	Rev.
24/06/2025	NTS					Dwg No. Figure 4-2	-



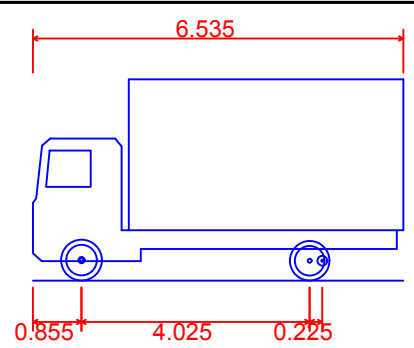
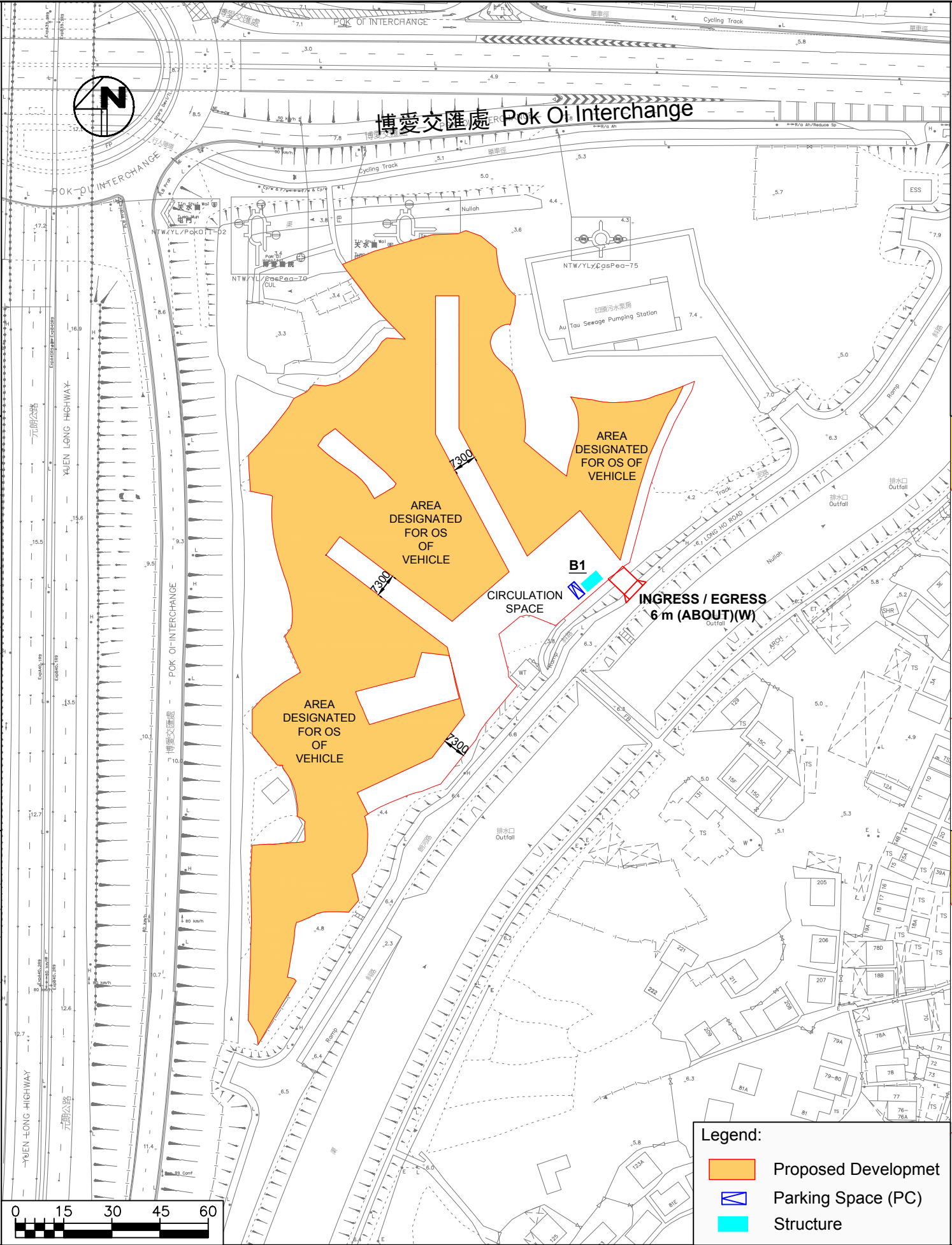
Appendix A

Conceptual Layout Plan and Swept Path Analysis

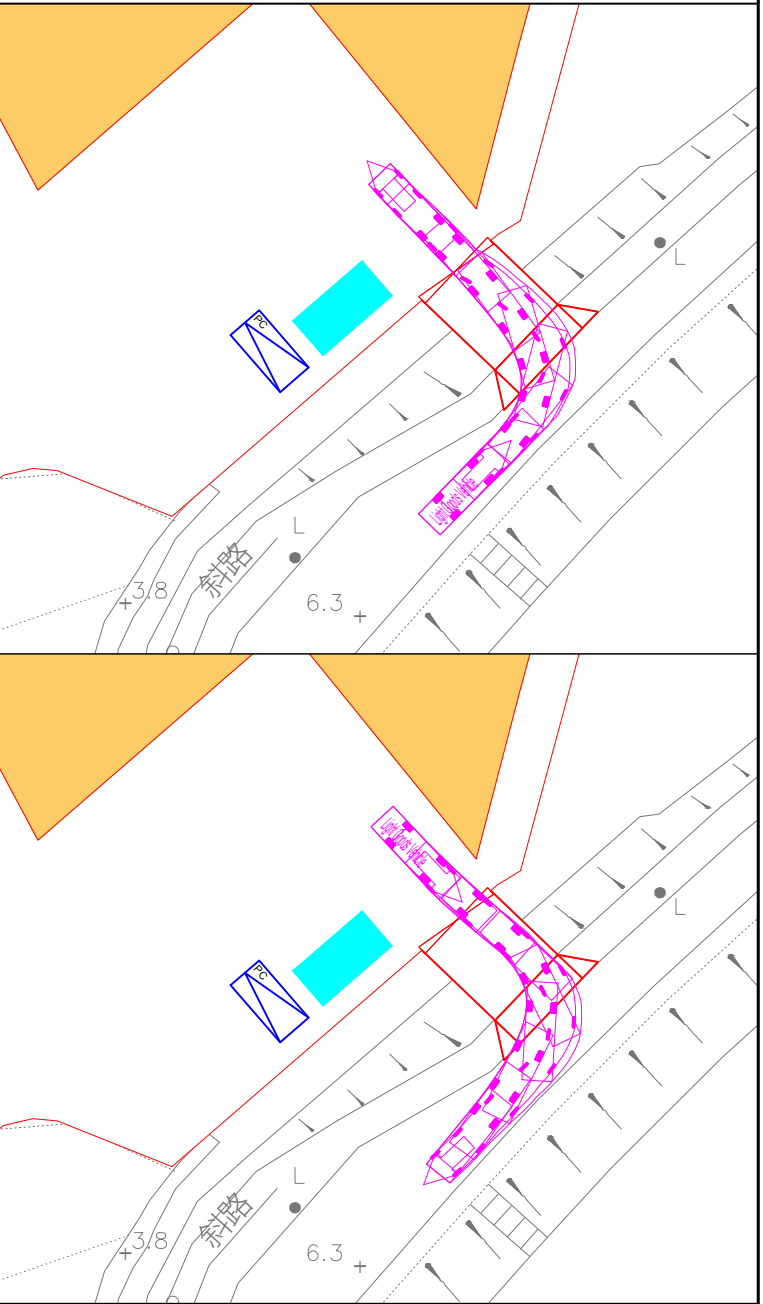
X:\Ozzo\83242_Proposed Temporary Open Storage of Vehicle at Various Lots in DD 115 and DD 116, Yuen Long\Drawings\Figure SP1.dwg 2025/06/25 16:07:29



Private Car (5m)
Overall Length 5.000m
Overall Width 1.785m
Overall Body Height 1.860m
Min Body Ground Clearance 0.254m
Max Track Width 1.745m
Lock to lock time 2.00s
Kerb to Kerb Turning Radius 6.400m



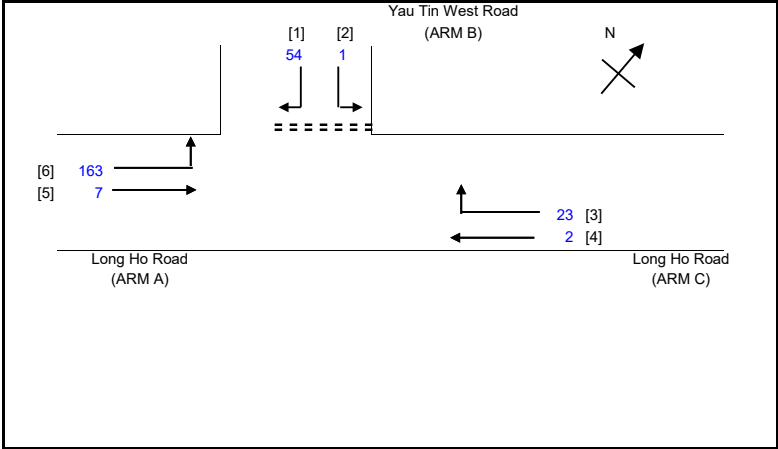
Light Goods Vehicle
Overall Length 6.535m
Overall Width 1.994m
Overall Body Height 3.550m
Min Body Ground Clearance 0.345m
Max Track Width 2.064m
Lock to lock time 2.00s
Wall to Wall Turning Radius 7.150m





Appendix B

2025 Junction Calculations

OZZO TECHNOLOGY (HK) LIMITED		PRIORITY JUNCTION CALCULATION		INITIALS	DATE
Proposed Temporary Open Storage of Vehicle with Ancillary Facilities for a Period of 3 Years Various Lots in D.D. 115 and D.D. 116 and Adjoining Government Land Au Tau, Yuen Long, New Territories		PROJECT NO.:	83242	PREPARED BY:	TC Jun-25
J1: Long Ho Road / Yau Tin West Road	2025 AM	FILENAME :		CHECKED BY:	TC Jun-25
2025 Observed AM Peak Hour Traffic Flows		J1_ Long Ho Road_Yau Tin West Road_P.xls	REVIEWED BY:	SC Jun-25	
		NOTES : (GEOMETRIC INPUT DATA) W = MAJOR ROAD WIDTH W cr = CENTRAL RESERVE WIDTH W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b D = STREAM-SPECIFIC B-A E = STREAM-SPECIFIC B-C F = STREAM-SPECIFIC C-B Y = (1-0.0345W)			
GEOMETRIC DETAILS: MAJOR ROAD (ARM A) W = 6.3 (metres) W cr = 0 (metres) q a-b = 163 (pcu/hr) q a-c = 7 (pcu/hr) MAJOR ROAD (ARM C) W c-b = 3.0 (metres) Vr c-b = 30 (metres) q c-a = 2 (pcu/hr) q c-b = 23 (pcu/hr) MINOR ROAD (ARM B) W b-a = 5.8 (metres) W b-c = 5.8 (metres) Vi b-a = 70 (metres) Vr b-a = 48 (metres) Vr b-c = 48 (metres) q b-a = 54 (pcu/hr) q b-c = 1 (pcu/hr) GEOMETRIC FACTORS : D = 1.0728365 E = 1.1269291 F = 0.8628491 Y = 0.783685 F for (Qb-ac) = 0.0181818 THE CAPACITY OF MOVEMENT : Q b-a = 640 Q b-c = 817 Q c-b = 601 Q b-ac = 642.5 Q b-c (O) = 799.8 TOTAL FLOW = 250 (PCU/HR) COMPARISON OF DESIGN FLOW TO CAPACITY: DFC b-a = 0.0844 DFC b-c = 0.0012 DFC c-b = 0.0383 DFC b-ac = 0.0856 CRITICAL DFC = 0.09					

OZZO TECHNOLOGY (HK) LIMITED		PRIORITY JUNCTION CALCULATION		INITIALS	DATE
Proposed Temporary Open Storage of Vehicle with Ancillary Facilities for a Period of 3 Years Various Lots in D.D. 115 and D.D. 116 and Adjoining Government Land Au Tau, Yuen Long, New Territories		PROJECT NO.:	83242	PREPARED BY:	TC Jun-25
J1: Long Ho Road / Yau Tin West Road	2025 PM	FILENAME :		CHECKED BY:	TC Jun-25
2025 Observed PM Peak Hour Traffic Flows		J1_ Long Ho Road_Yau Tin West Road_P.xls	REVIEWED BY:	SC Jun-25	

Yau Tin West Road (ARM B)

Long Ho Road (ARM A)

Long Ho Road (ARM C)

NOTES : (GEOMETRIC INPUT DATA)

W = MAJOR ROAD WIDTH

W cr = CENTRAL RESERVE WIDTH

W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a

W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c

W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b

Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a

Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a

Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c

Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b

D = STREAM-SPECIFIC B-A

E = STREAM-SPECIFIC B-C

F = STREAM-SPECIFIC C-B

Y = (1-0.0345W)

GEOMETRIC DETAILS:		GEOMETRIC FACTORS :		THE CAPACITY OF MOVEMENT :		COMPARISON OF DESIGN FLOW TO CAPACITY:	
MAJOR ROAD (ARM A)							
W	= 6.3 (metres)	D	= 1.0728365	Q b-a	= 662	DFC b-a	= 0.1601
W cr	= 0 (metres)	E	= 1.1269291	Q b-c	= 833	DFC b-c	= 0.0168
q a-b	= 46 (pcu/hr)	F	= 0.8628491	Q c-b	= 631	DFC c-b	= 0.0158
q a-c	= 2 (pcu/hr)	Y	= 0.783685	Q b-ac	= 678.2	DFC b-ac	= 0.1769
MAJOR ROAD (ARM C)		F for (Qb-ac) = 0.1166667		TOTAL FLOW = 181 (PCU/HR)			
W c-b	= 3.0 (metres)						
Vr c-b	= 30 (metres)						
q c-a	= 3 (pcu/hr)						
q c-b	= 10 (pcu/hr)						
MINOR ROAD (ARM B)							
W b-a	= 5.8 (metres)						
W b-c	= 5.8 (metres)						
Vi b-a	= 70 (metres)						
Vr b-a	= 48 (metres)						
Vr b-c	= 48 (metres)						
q b-a	= 106 (pcu/hr)						
q b-c	= 14 (pcu/hr)						

CRITICAL DFC = 0.18



Appendix C

2029 Junction Calculations

OZZO TECHNOLOGY (HK) LIMITED		PRIORITY JUNCTION CALCULATION		INITIALS	DATE
Proposed Temporary Open Storage of Vehicle with Ancillary Facilities for a Period of 3 Years Various Lots in D.D. 115 and D.D. 116 and Adjoining Government Land Au Tau, Yuen Long, New Territories		PROJECT NO.:	83242	PREPARED BY:	TC Jun-25
J1: Long Ho Road / Yau Tin West Road		2029 Ref_PM	FILENAME :	CHECKED BY:	TC Jun-25
2029 Reference PM Peak Hour Traffic Flows			J1_ Long Ho Road_Yau Tin West Road_P.xls	REVIEWED BY:	SC Jun-25

NOTES : (GEOMETRIC INPUT DATA)

W = MAJOR ROAD WIDTH

W cr = CENTRAL RESERVE WIDTH

W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a

W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c

W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b

Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a

Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a

Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c

Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b

D = STREAM-SPECIFIC B-A

E = STREAM-SPECIFIC B-C

F = STREAM-SPECIFIC C-B

Y = (1-0.0345W)

GEOMETRIC DETAILS: MAJOR ROAD (ARM A) W = 6.3 (metres) W cr = 0 (metres) q a-b = 50 (pcu/hr) q a-c = 2 (pcu/hr) MAJOR ROAD (ARM C) W c-b = 3.0 (metres) Vr c-b = 30 (metres) q c-a = 3 (pcu/hr) q c-b = 11 (pcu/hr) MINOR ROAD (ARM B) W b-a = 5.8 (metres) W b-c = 5.8 (metres) Vi b-a = 70 (metres) Vr b-a = 48 (metres) Vr b-c = 48 (metres) q b-a = 115 (pcu/hr) q b-c = 15 (pcu/hr)	GEOMETRIC FACTORS : D = 1.0728365 E = 1.1269291 F = 0.8628491 Y = 0.783685 F for (Qb-ac) = 0.1153846	THE CAPACITY OF MOVEMENT : Q b-a = 661 Q b-c = 833 Q c-b = 630 Q b-ac = 677.1 Q b-c (O) = 796.8 TOTAL FLOW = 196 (PCU/HR)	COMPARISON OF DESIGN FLOW TO CAPACITY: DFC b-a = 0.1740 DFC b-c = 0.0180 DFC c-b = 0.0175 DFC b-ac = 0.1920 CRITICAL DFC = 0.19
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OZZO TECHNOLOGY (HK) LIMITED		PRIORITY JUNCTION CALCULATION		INITIALS	DATE
Proposed Temporary Open Storage of Vehicle with Ancillary Facilities for a Period of 3 Years Various Lots in D.D. 115 and D.D. 116 and Adjoining Government Land Au Tau, Yuen Long, New Territories		PROJECT NO.:	83242	PREPARED BY:	TC Jun-25
J1: Long Ho Road / Yau Tin West Road	2029 Des__AM	FILENAME :		CHECKED BY:	TC Jun-25
2029 Design AM Peak Hour Traffic Flows		J1_ Long Ho Road_Yau Tin West Road_P.xls		REVIEWED BY:	SC Jun-25

NOTES : (GEOMETRIC INPUT DATA)

W = MAJOR ROAD WIDTH

W cr = CENTRAL RESERVE WIDTH

W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a

W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c

W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b

Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a

Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a

Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c

Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b

D = STREAM-SPECIFIC B-A

E = STREAM-SPECIFIC B-C

F = STREAM-SPECIFIC C-B

Y = (1-0.0345W)

GEOMETRIC DETAILS: MAJOR ROAD (ARM A) W = 6.3 (metres) W cr = 0 (metres) q a-b = 177 (pcu/hr) q a-c = 8 (pcu/hr) MAJOR ROAD (ARM C) W c-b = 3.0 (metres) Vr c-b = 30 (metres) q c-a = 2 (pcu/hr) q c-b = 25 (pcu/hr) MINOR ROAD (ARM B) W b-a = 5.8 (metres) W b-c = 5.8 (metres) Vi b-a = 70 (metres) Vr b-a = 48 (metres) Vr b-c = 48 (metres) q b-a = 59 (pcu/hr) q b-c = 2 (pcu/hr)	GEOMETRIC FACTORS : D = 1.0728365 E = 1.1269291 F = 0.8628491 Y = 0.783685 F for (Qb-ac) = 0.0327869	THE CAPACITY OF MOVEMENT : Q b-a = 637 Q b-c = 814 Q c-b = 597 Q b-ac = 641.6 Q b-c (O) = 795.2 TOTAL FLOW = 273 (PCU/HR)	COMPARISON OF DESIGN FLOW TO CAPACITY: DFC b-a = 0.0926 DFC b-c = 0.0025 DFC c-b = 0.0419 DFC b-ac = 0.0951 CRITICAL DFC = 0.10
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OZZO TECHNOLOGY (HK) LIMITED		PRIORITY JUNCTION CALCULATION		INITIALS	DATE
Proposed Temporary Open Storage of Vehicle with Ancillary Facilities for a Period of 3 Years Various Lots in D.D. 115 and D.D. 116 and Adjoining Government Land Au Tau, Yuen Long, New Territories		PROJECT NO.:	83242	PREPARED BY:	TC Jun-25
J1: Long Ho Road / Yau Tin West Road	2029 Des_PM	FILENAME :		CHECKED BY:	TC Jun-25
2029 Design PM Peak Hour Traffic Flows		J1_ Long Ho Road_Yau Tin West Road_P.xls	REVIEWED BY:	SC Jun-25	
		NOTES : (GEOMETRIC INPUT DATA) W = MAJOR ROAD WIDTH W cr = CENTRAL RESERVE WIDTH W b-a = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a W b-c = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c W c-b = LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b Vi b-a = VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a Vr b-a = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a Vr b-c = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c Vr c-b = VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b D = STREAM-SPECIFIC B-A E = STREAM-SPECIFIC B-C F = STREAM-SPECIFIC C-B Y = (1-0.0345W)			

Appendix IV

Tree Survey and Landscape Plan

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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1. Introduction	3
2. Summary of Existing Trees	4

Appendix:

- I. Tree Survey Plan
- II. Tree Survey Schedule
- III. Photo Records

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

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



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	<i>Mangifera indica</i>	芒果	7.0	141	3.0	Med	Fair	Fair	Fair	Low	
T3	<i>Mangifera indica</i>	芒果	7.0	120	2.5	Med	Fair	Fair	Fair	Low	
T4	<i>Mangifera indica</i>	芒果	7.0	135	3.0	Med	Fair	Fair	Fair	Low	
T5	<i>Mangifera indica</i>	芒果	6.0	140	3.0	Med	Fair	Fair	Fair	Low	
T6	<i>Michelia x alba</i>	白蘭	7.5	130	3.0	Low	Fair	Fair	Poor	Low	crooked trunk
T7	<i>Michelia x alba</i>	白蘭	8.0	145	3.0	Low	Fair	Fair	Poor	Low	co-dominant trunks, crooked trunk
T8	<i>Michelia x alba</i>	白蘭	7.5	149	3.0	Low	Fair	Fair	Poor	Low	co-dominant trunks, crooked trunk
T9	<i>Michelia x alba</i>	白蘭	8.0	130	3.0	Low	Fair	Fair	Poor	Low	crooked trunk
T14	<i>Mangifera indica</i>	芒果	7.5	155	6.0	Med	Fair	Fair	Fair	Low	crown conflict with fence
T15	<i>Bombax ceiba</i>	木棉	12.0	200	7.5	Low	Fair	Fair	Fair	Low	
T16	<i>Bombax ceiba</i>	木棉	10.0	400	5.5	Low	Fair	Fair	Fair	Low	
T17	<i>Bombax ceiba</i>	木棉	13.5	280	7.0	Low	Fair	Fair	Fair	Low	
T18	<i>Bombax ceiba</i>	木棉	13.0	380	7.5	Low	Fair	Fair	Fair	Low	
T19	<i>Dimocarpus longan</i>	龍眼	6.5	110	2.5	Med	Poor	Fair	Fair	Low	climber
T22	<i>Dimocarpus longan</i>	龍眼	8.0	230	5.5	Med	Fair	Fair	Fair	Low	
T28	<i>Mangifera indica</i>	芒果	5.0	95	4.0	Med	Poor	Fair	Fair	Low	climber
T29	<i>Mangifera indica</i>	芒果	5.0	100	3.0	Med	Poor	Fair	Fair	Low	climber
T30	<i>Dimocarpus longan</i>	龍眼	4.0	200	5.0	Med	Fair	Fair	Fair	Low	
T31	<i>Macaranga tanarius var. tomentosa</i>	血桐	3.5	134	4.0	Low	Fair	Fair	Poor	Low	co-dominant trunks
T32	<i>Ficus hispida</i>	對葉榕(牛乳樹)	3.5	100	5.0	Low	Fair	Fair	Poor	Low	multi-stems
T33	<i>Macaranga tanarius var. tomentosa</i>	血桐	5.0	100	2.5	Low	Fair	Fair	Poor	Low	leaning
T34	<i>Ficus microcarpa</i>	榕樹(細葉榕)	12.0	1200	12.0	Low	Fair	Fair	Poor	Low	multi-stems
T35	<i>Macaranga tanarius var. tomentosa</i>	血桐	5.0	120	3.5	Low	Fair	Fair	Poor	Low	leaning
T36	<i>Macaranga tanarius var. tomentosa</i>	血桐	5.0	110	4.0	Low	Fair	Fair	Poor	Low	leaning, multi-stems
T37	<i>Michelia x alba</i>	白蘭	8.0	390	5.5	Low	Poor	Poor	Poor	Low	cavity and wound on trunk
T38	<i>Macaranga tanarius var. tomentosa</i>	血桐	5.0	110	4.5	Low	Fair	Fair	Poor	Low	leaning
T39	<i>Macaranga tanarius var. tomentosa</i>	血桐	6.5	115	5.0	Low	Fair	Fair	Fair	Low	
T40	<i>Leucaena leucocephala</i>	銀合歡	4.5	100	6.5	Low	Poor	Poor	Poor	Low	cavity and decay at trunk, leaning
T42	<i>Dimocarpus longan</i>	龍眼	7.0	263	6.0	Med	Fair	Fair	Poor	Low	co-dominant trunks
T43	<i>Dimocarpus longan</i>	龍眼	8.5	320	6.5	Med	Fair	Fair	Poor	Low	co-dominant trunks
T44	<i>Dimocarpus longan</i>	龍眼	6.5	404	7.0	Med	Fair	Fair	Poor	Low	co-dominant trunks
T45	<i>Macaranga tanarius var. tomentosa</i>	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



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	<i>Mangifera indica</i>	芒果	4.5	200	5.5	Med	Fair	Fair	Fair	Low	
T47	<i>Ficus hispida</i>	對葉榕(牛乳樹)	4.5	240	6.0	Low	Fair	Fair	Fair	Low	
T48	<i>Psidium guajava</i>	番石榴	5.0	203	4.5	Med	Fair	Fair	Poor	Low	co-dominant trunks
T49	<i>Celtis sinensis</i>	朴樹	3.0	183	2.0	Low	Poor	Fair	Poor	Low	co-dominant trunks
T50	<i>Dimocarpus longan</i>	龍眼	6.0	272	7.0	Med	Fair	Fair	Poor	Low	co-dominant trunks
T51	<i>Dimocarpus longan</i>	龍眼	6.0	311	8.0	Med	Fair	Fair	Poor	Low	trunk conflict of co-dominant trunks
T52	<i>Dimocarpus longan</i>	龍眼	3.5	190	4.0	Med	Fair	Fair	Fair	Low	
T53	<i>Mangifera indica</i>	芒果	5.0	110	3.5	Med	Fair	Fair	Poor	Low	leaning
T54	<i>Mangifera indica</i>	芒果	6.0	100	3.0	Med	Fair	Fair	Poor	Low	leaning
T55	<i>Mangifera indica</i>	芒果	6.5	120	3.0	Med	Fair	Fair	Poor	Low	crooked trunk
T56	<i>Mangifera indica</i>	芒果	6.0	110	2.5	Med	Fair	Fair	Poor	Low	crooked trunk
T57	<i>Mangifera indica</i>	芒果	3.0	130	0.5	-	-	Dead	-	-	dead tree
T58	<i>Mangifera indica</i>	芒果	6.0	100	2.0	Med	Fair	Fair	Poor	Low	crooked trunk
T59	<i>Mangifera indica</i>	芒果	5.0	143	3.5	Med	Fair	Fair	Poor	Low	co-dominant trunks
T60	<i>Mangifera indica</i>	芒果	6.5	120	3.0	Med	Fair	Fair	Fair	Low	
T61	<i>Mangifera indica</i>	芒果	2.5	120	1.0	Med	Poor	Fair	Fair	Low	climber
T62	<i>Mangifera indica</i>	芒果	7.5	130	5.0	Med	Poor	Fair	Fair	Low	dropping branch
T63	<i>Mangifera indica</i>	芒果	2.5	120	1.5	Med	Poor	Fair	Fair	Low	climber
T64	<i>Mangifera indica</i>	芒果	7.0	120	3.0	Med	Poor	Fair	Fair	Low	climber
T65	<i>Mangifera indica</i>	芒果	7.0	142	3.0	Med	Poor	Fair	Poor	Low	climber
T66	<i>Litchi chinensis</i>	荔枝	6.0	120	2.5	Med	Poor	Poor	Poor	Low	climber
T67	<i>Celtis sinensis</i>	朴樹	8.5	220	6.0	Low	Poor	Fair	Fair	Low	climber
T68	<i>Celtis sinensis</i>	朴樹	5.5	300	4.0	Low	Fair	Fair	Poor	Low	leaning
T69	<i>Dimocarpus longan</i>	龍眼	7.0	110	4.5	Med	Fair	Fair	Fair	Low	
T70	<i>Melia azedarach</i>	楝(苦楝)	12.0	270	5.5	Low	Poor	Fair	Poor	Low	leaning
T71	<i>Macaranga tanarius var. tomentosa</i>	血桐	4.5	100	5.0	Low	Poor	Fair	Fair	Low	climber
T72	<i>Ficus hispida</i>	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

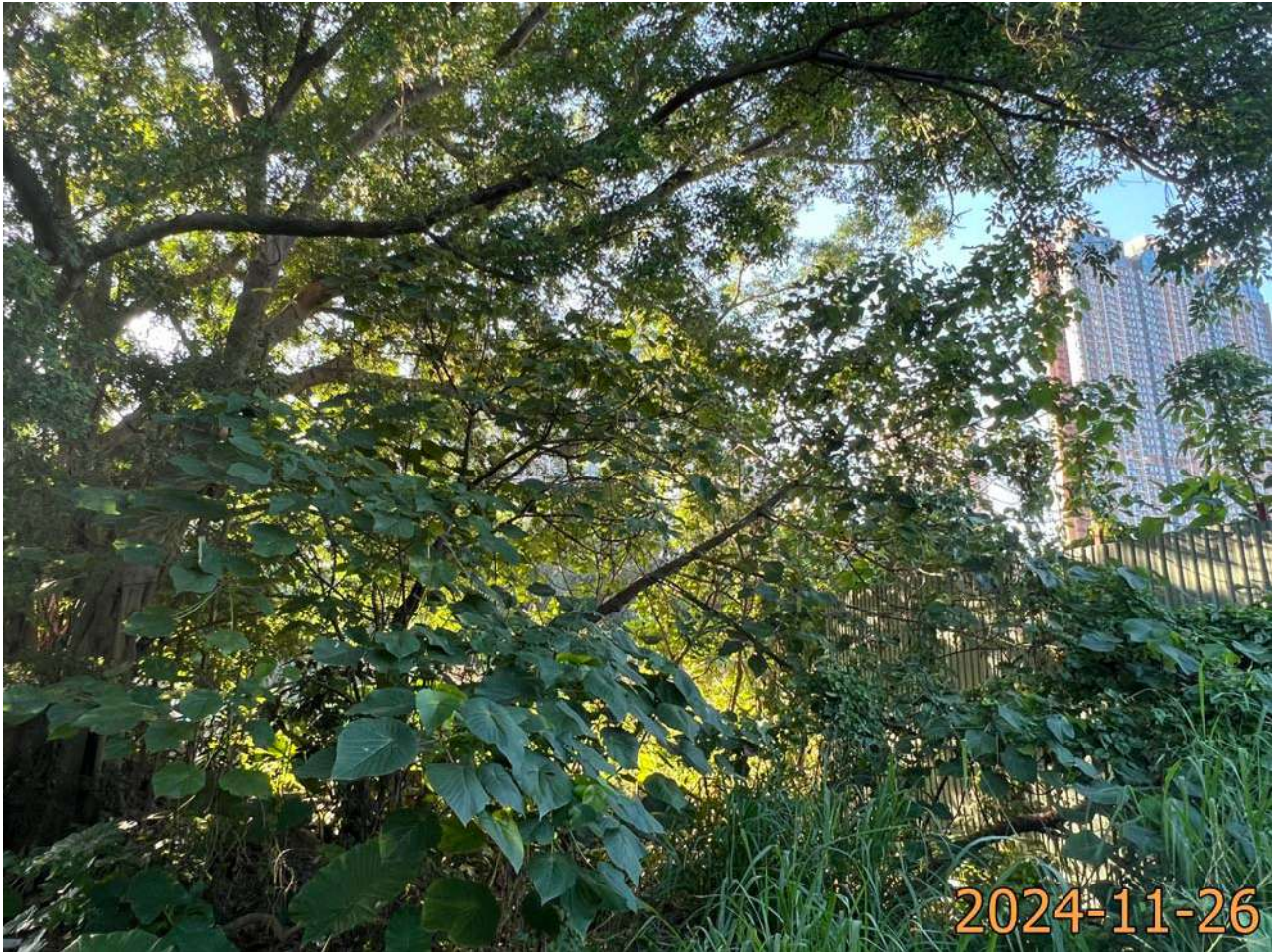


General view 11

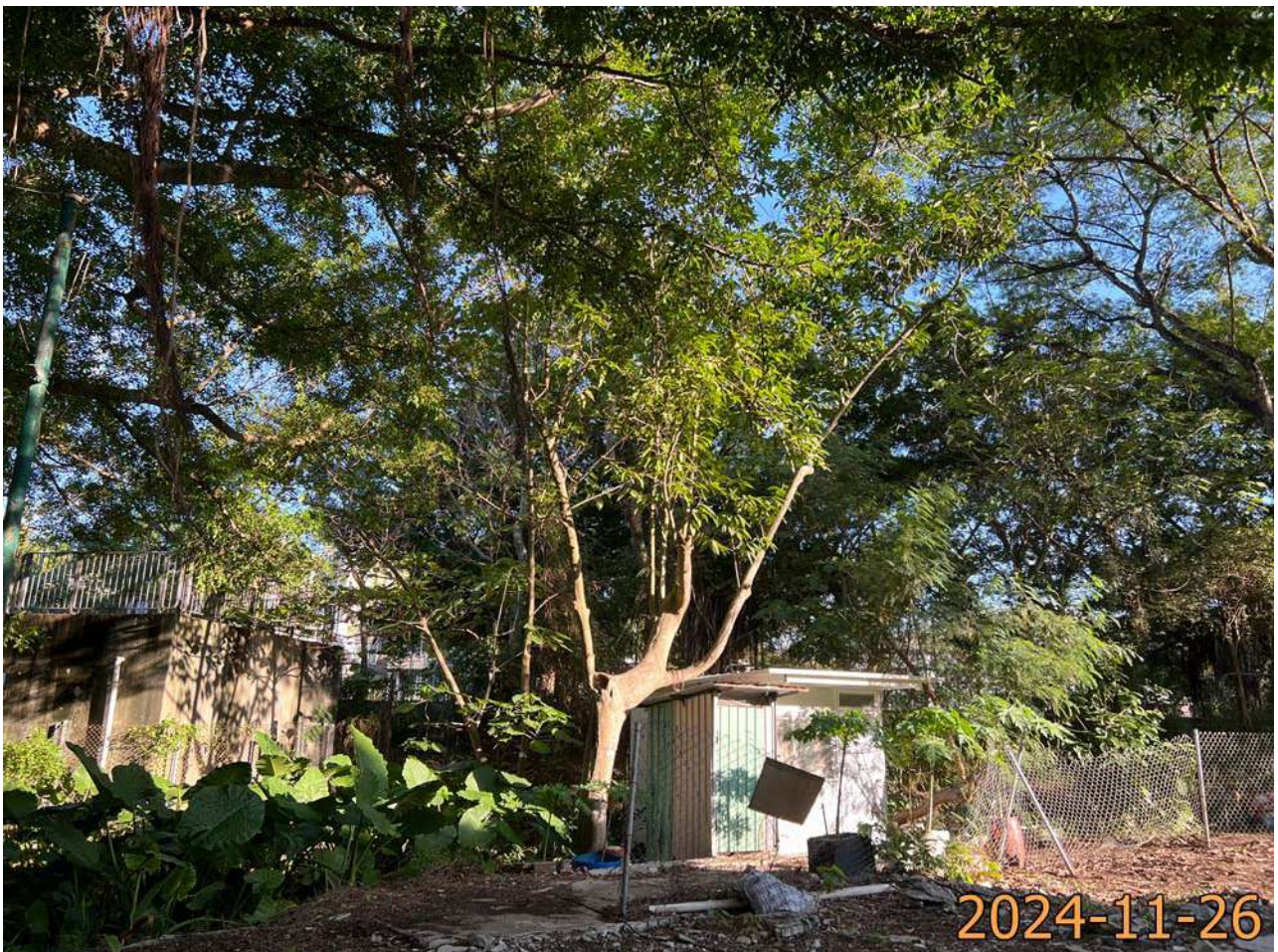


General view 12

General View

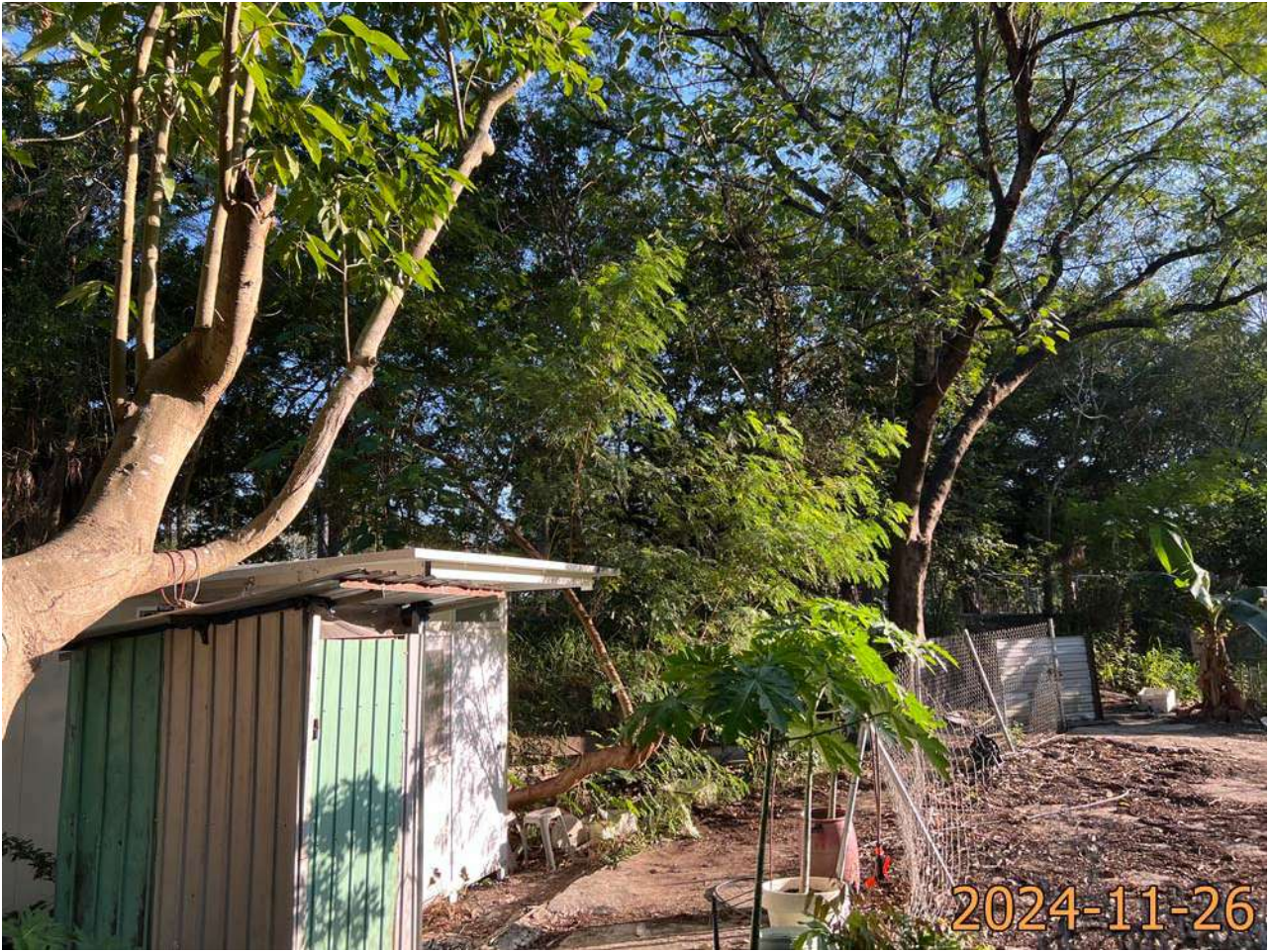


General view 13



General view 14

General View



General view 15

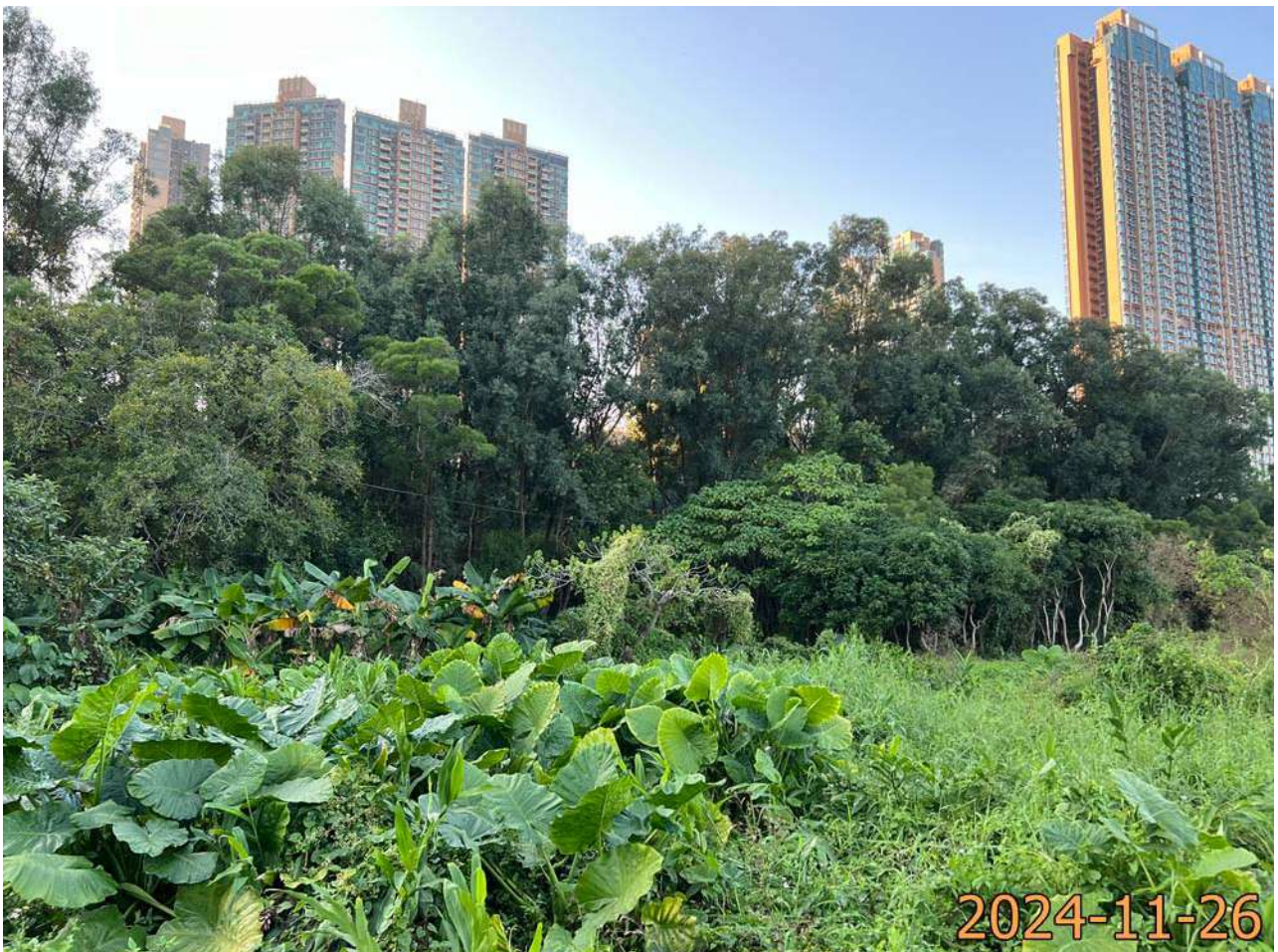


General view 16

General View



General view 17

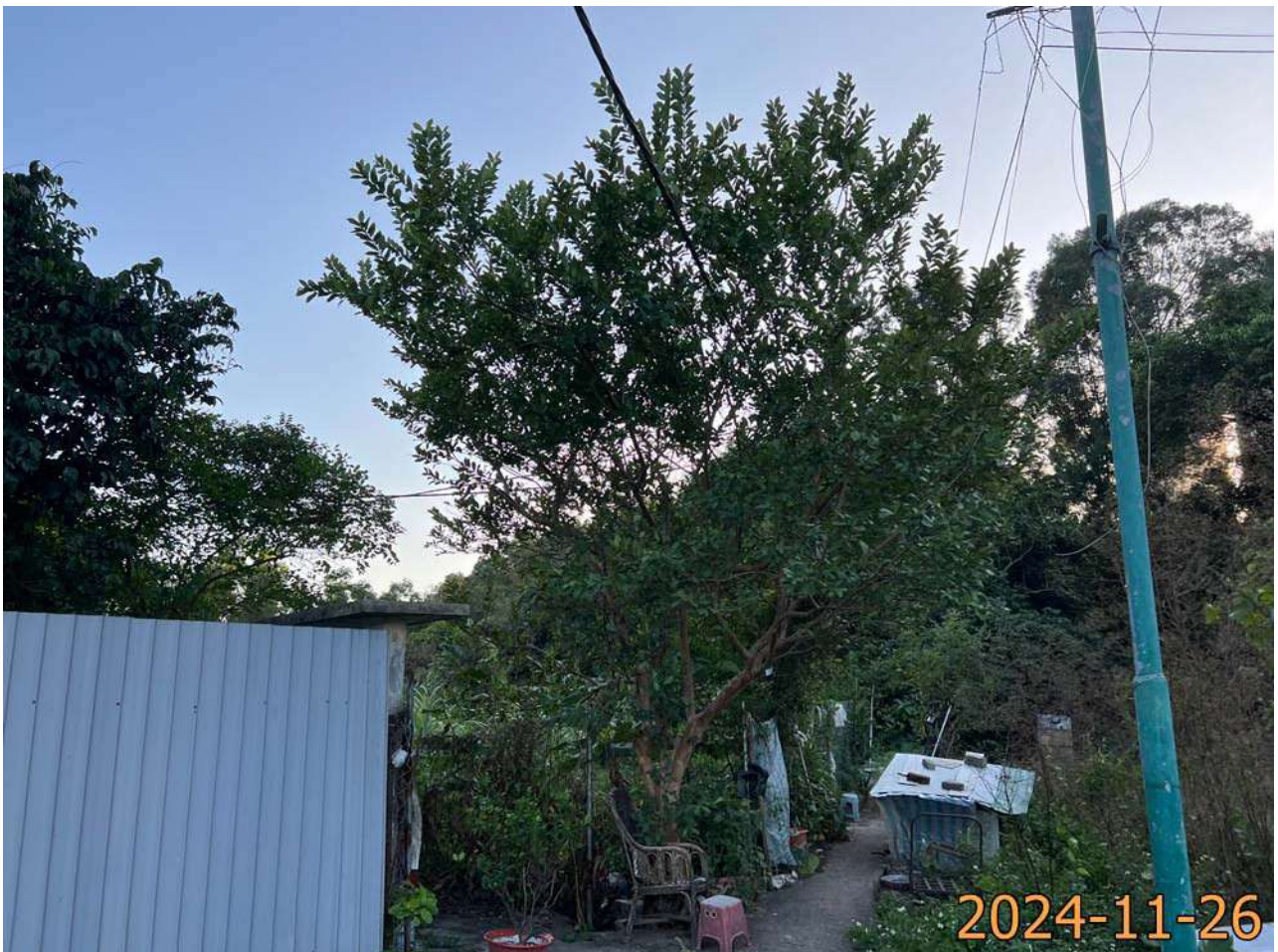


General view 18

General View

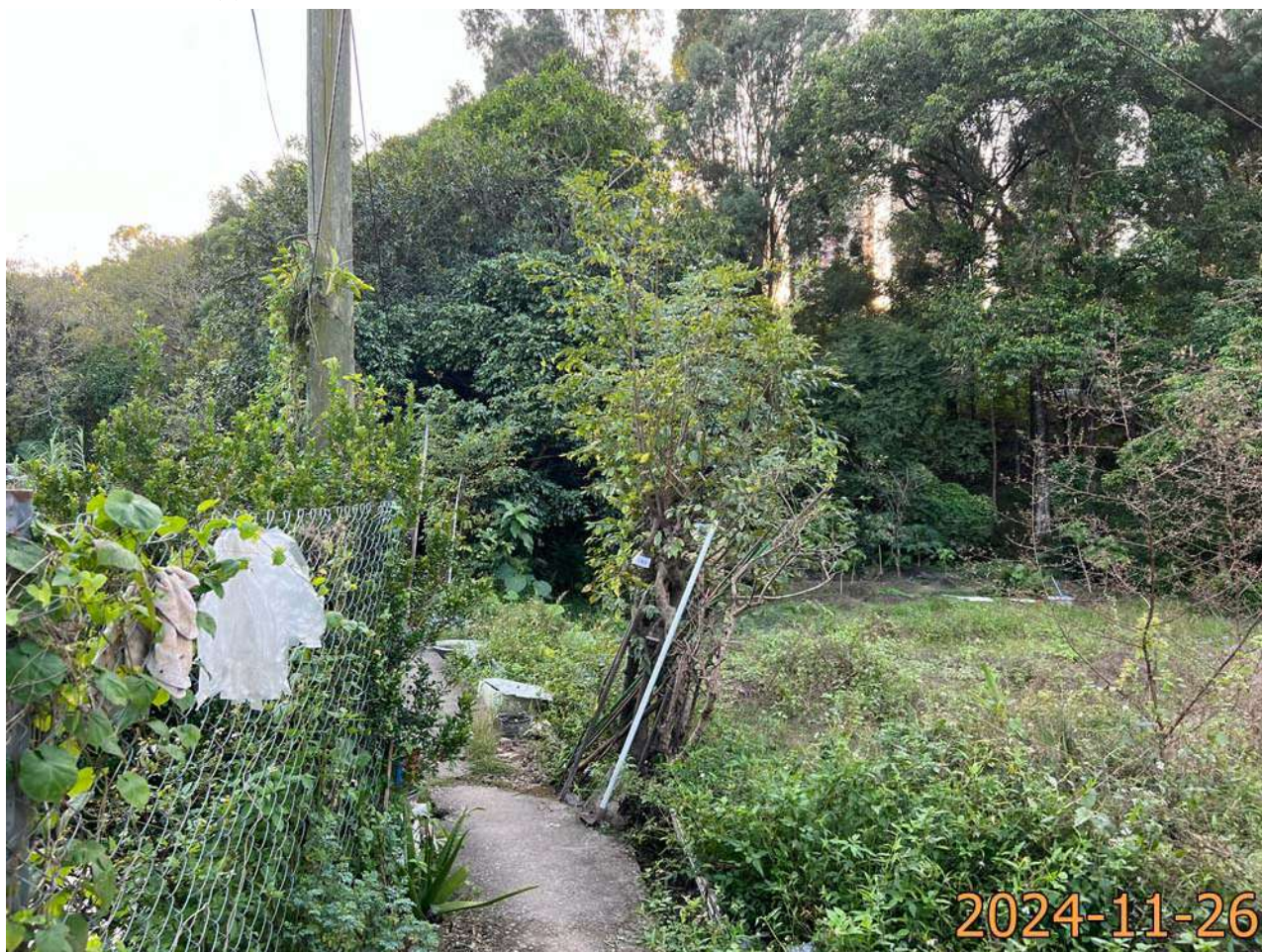


General view 19



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)

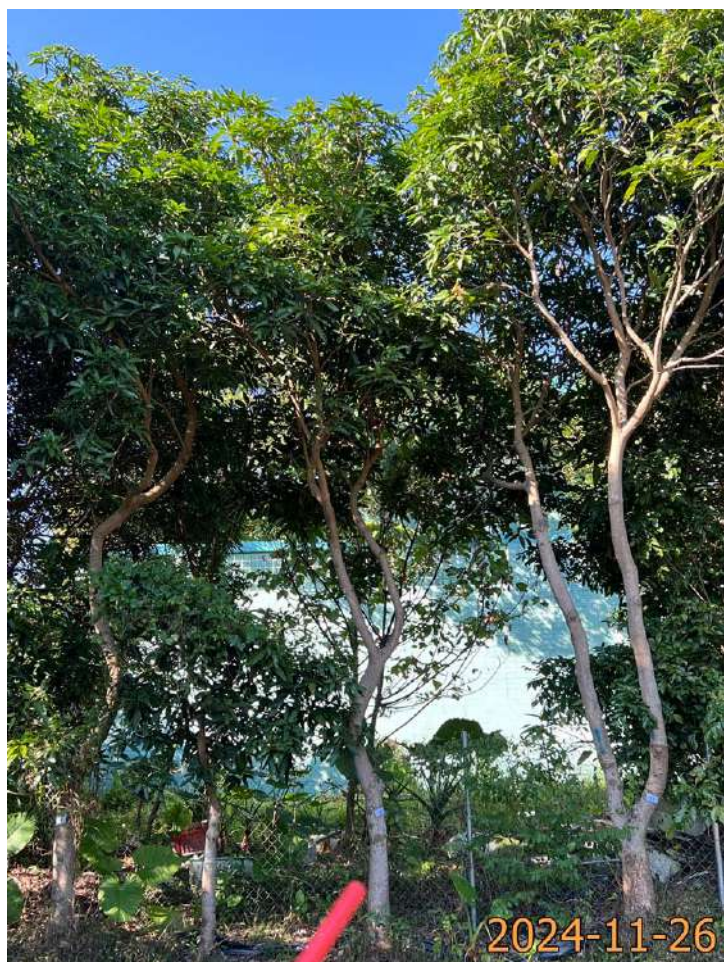
Photo Records



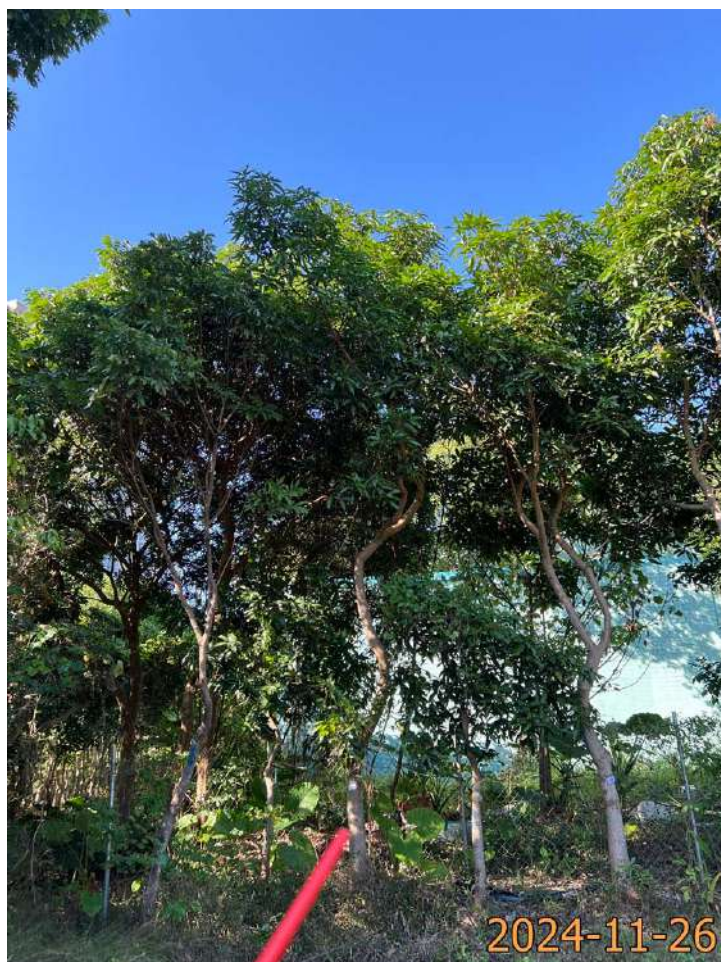
T6 (Overview)



T7 (Overview)



T8 (Overview)



T9 (Overview)

Photo Records



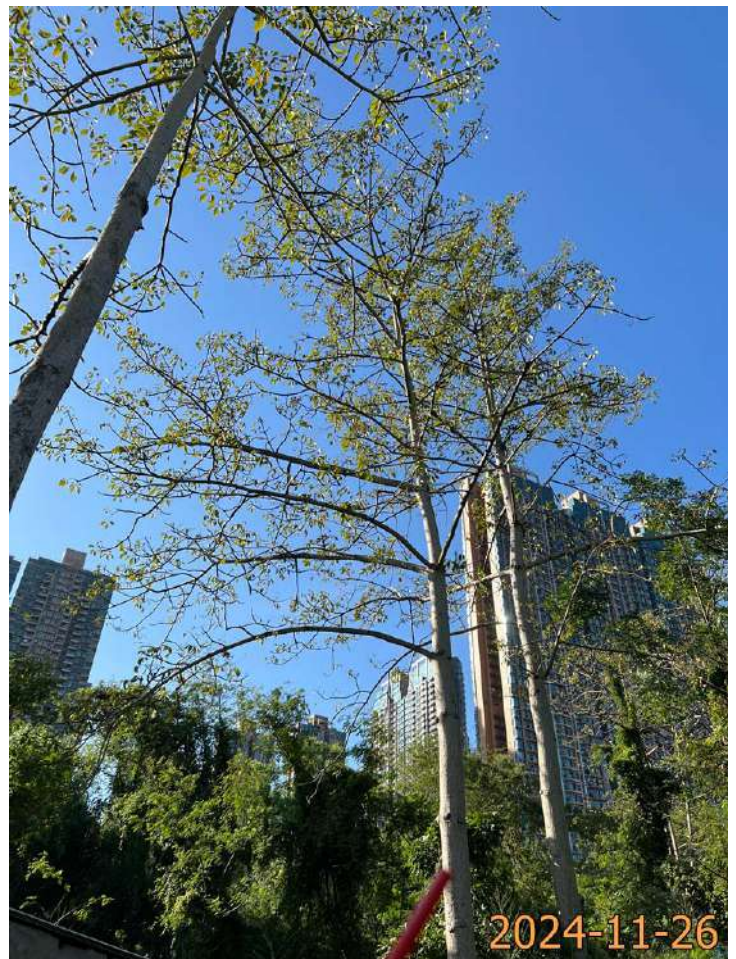
T14 (Overview)



T15 (Overview)



T16 (Overview)



T17 (Overview)

Photo Records



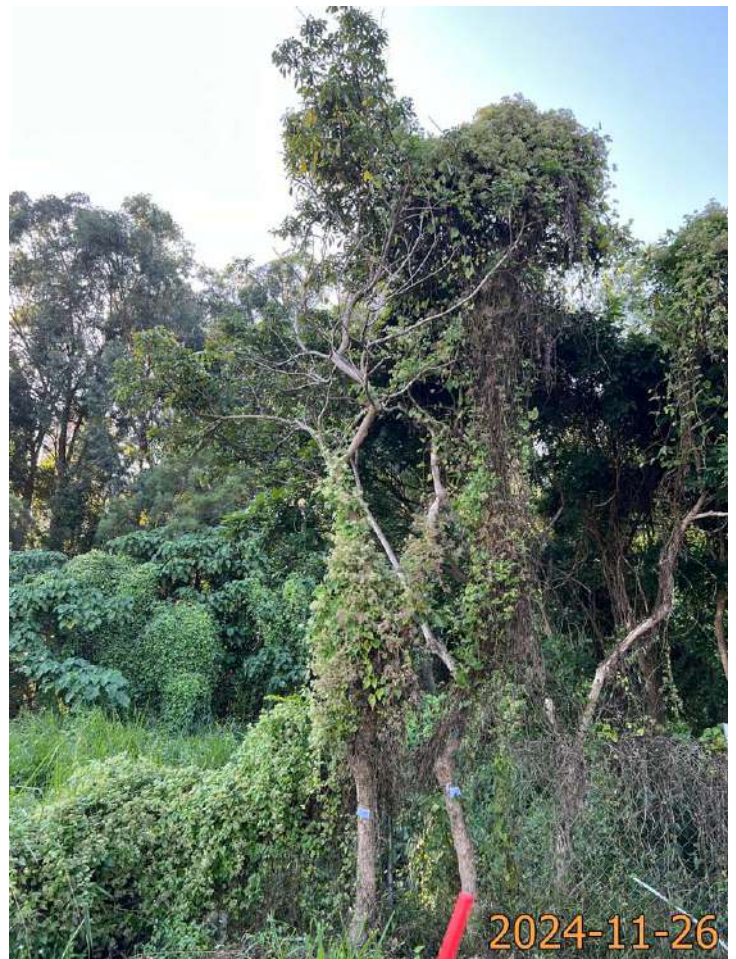
T18 (Overview)



T19 (Overview)



T22 (Overview)



T28 (Overview)

Photo Records



T29 (Overview)



T30 (Overview)



T31 (Overview)



T32 (Overview)

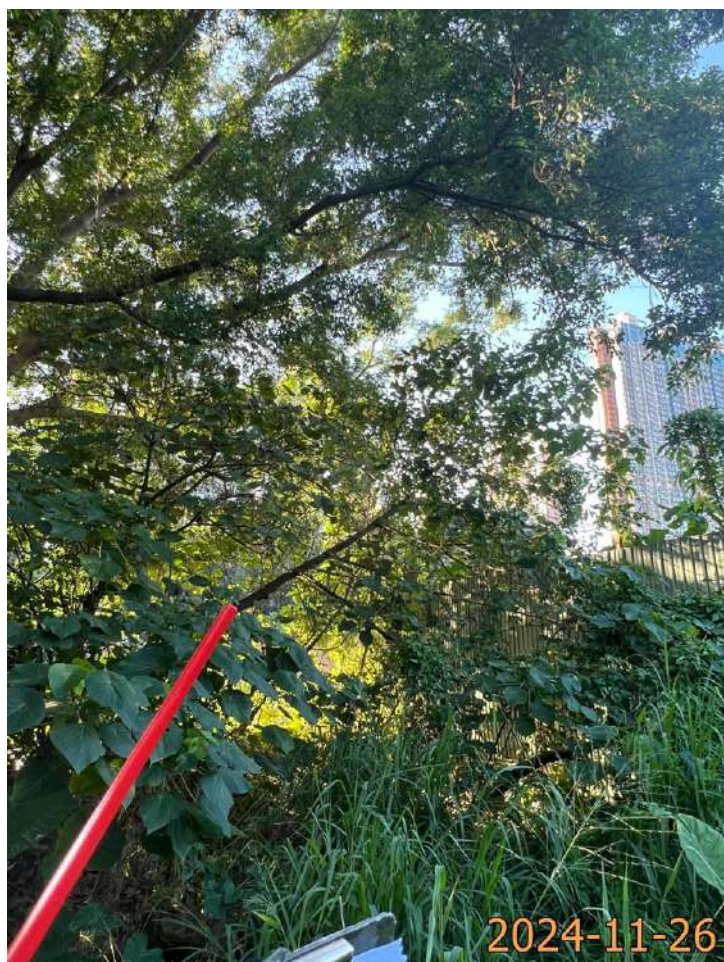
Photo Records



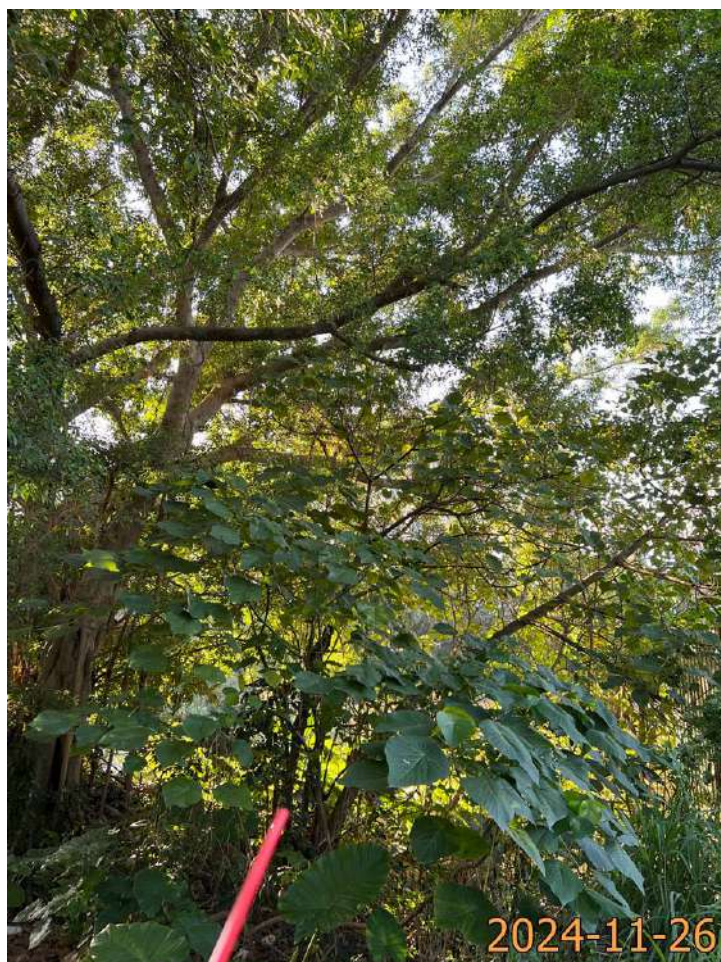
T33 (Overview)



T34 (Overview)

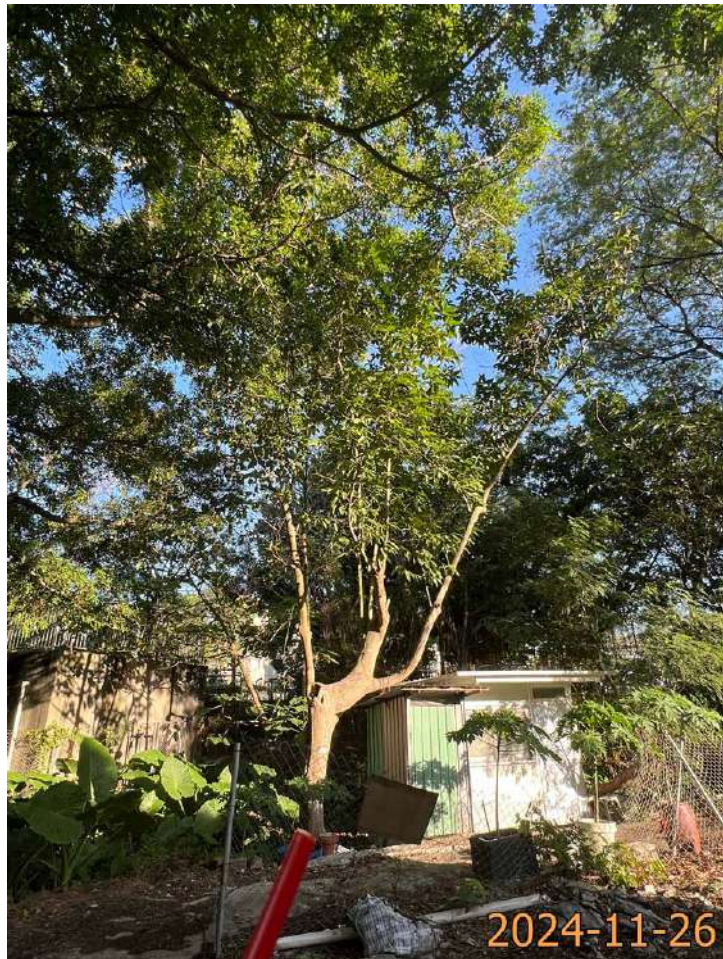


T35 (Overview)



T36 (Overview)

Photo Records



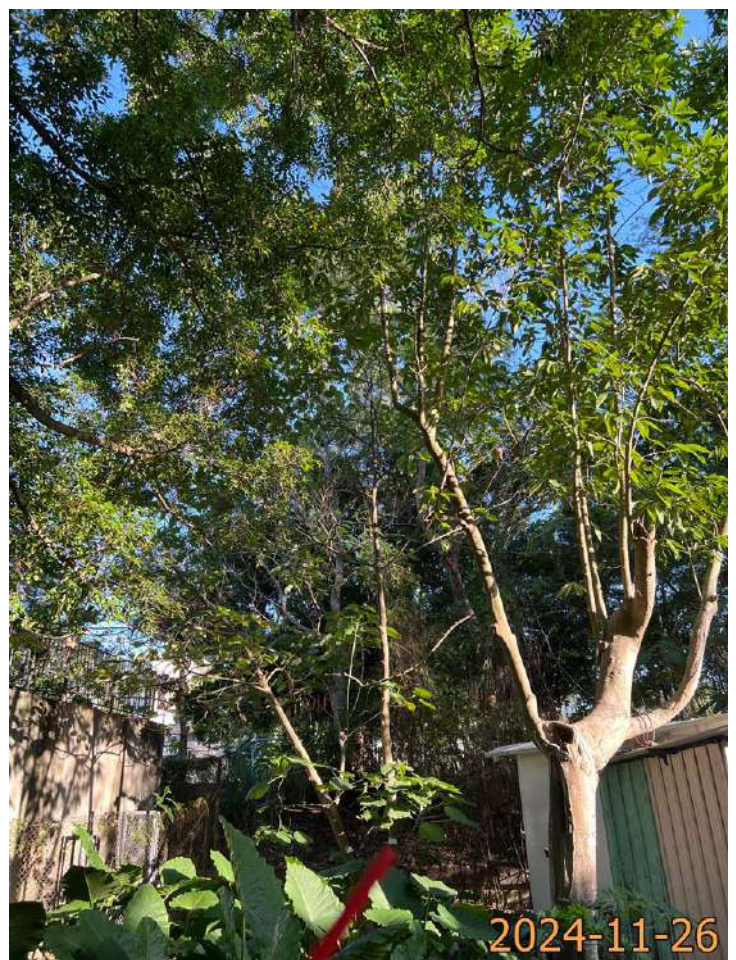
T37 (Overview)



T37 Cavity and wound on trunk



T38 (Overview)



T39 (Overview)

Photo Records



T40 (Overview)



T40 Cavity and decay at trunk



T42 (Overview)

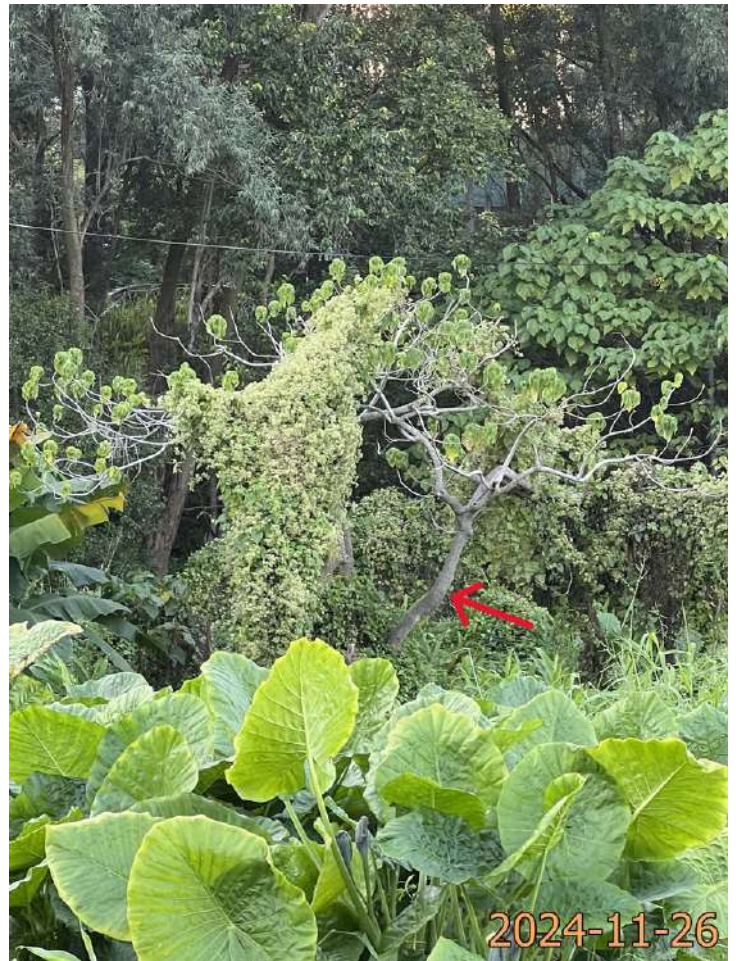


T43 (Overview)

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)

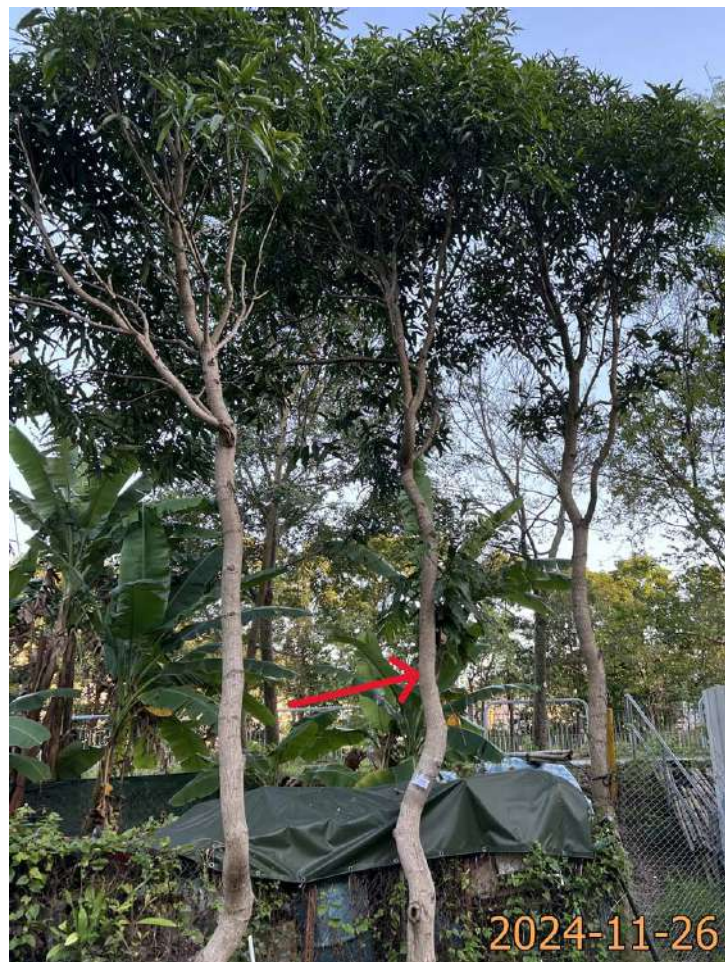


T53 (Overview)



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)

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	- <i>Mangifera indica</i>
	T19, T22, T30, T42-T44, T50-T52 & T69	- <i>Dimocarpus longan</i>
	T31, T33, T35-T36, T38-T39, T45 & T71	- <i>Macaranga tanarius var. tomentosa</i>
	T6-T9 & T37	- <i>Michelia x alba</i>
	T32, T47 & T72	- <i>Ficus hispida</i>
	T34	- <i>Ficus microcarpa</i>
	T40	- <i>Leucaena leucocephala</i>
	T48	- <i>Psidium guajava</i>
	T66	- <i>Litchi chinensis</i>
	T70	- <i>Melia azedarach</i>
NOS. OF TREE TO BE FELLED	: 59	

LEGEND

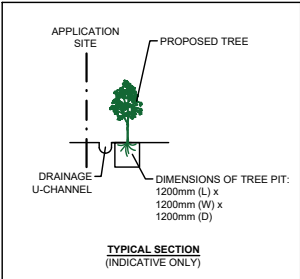
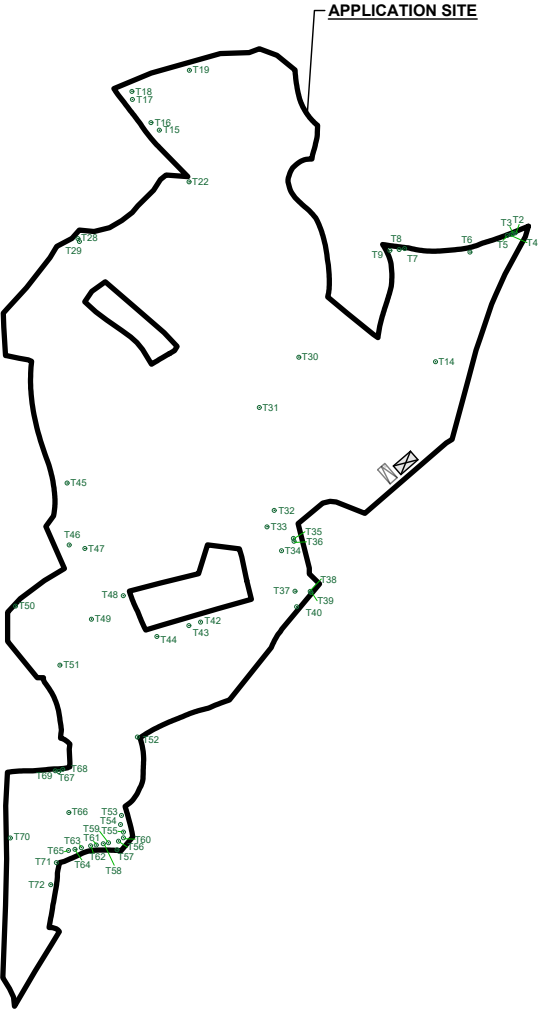
APPLICATION SITE

STRUCTURE

PARKING SPACE (PC)

EXISTING TREES

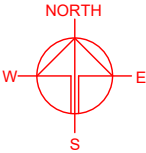
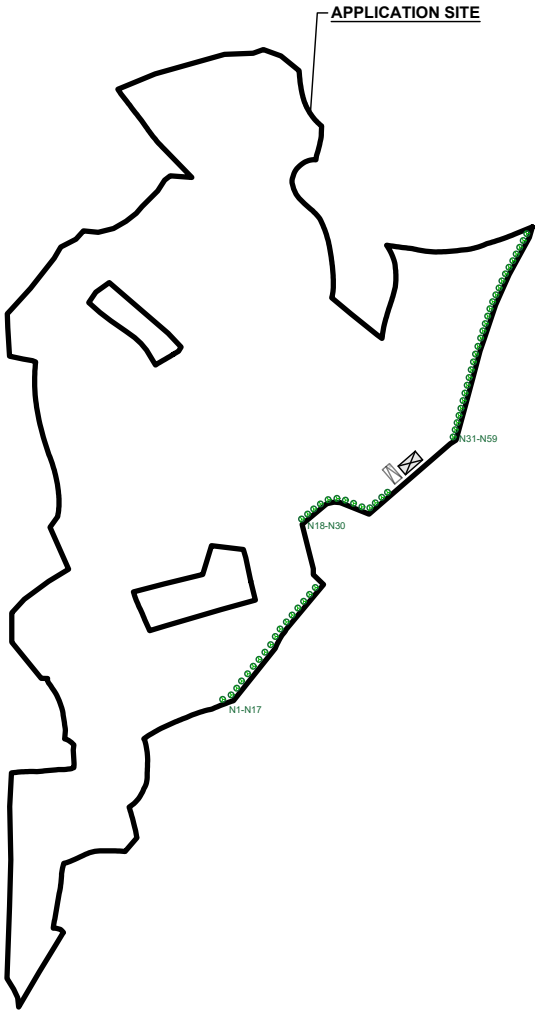
PROPOSED TREES



LANDSCAPE PLAN

APPLICATION SITE AREA	: 14,250 m ² (ABOUT)	
NOS. OF TREE TO BE PLANTED	: 59 (N1-N59)	
SPECIES OF NEW TREES	: <i>BAUHINIA x BLAKEANA</i>	
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.



PLANNING CONSULTANT

PROJECT

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

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

MN

DATE

2.7.2025

CHECKED BY

DATE

APPROVED BY

DATE

DWG. TITLE

LANDSCAPE PLAN

DWG NO.

APPENDIX IV

VER.

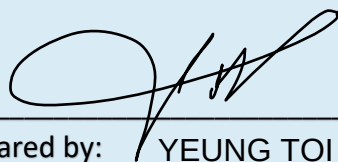
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Appendix V
Drainage Impact Assessment

Proposed Temporary Open Storage of Vehicle with Ancillary Facilities and Associated Filling of Land for a Period of 3 Years 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



Prepared by: YEUNG TOI TUNG RP0666920
Marvellous Construction & Design Company Limited



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Figure 3 – Proposed Drainage System
Figure 4 – Catchment Plan
Figure 5 – Sections

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Appendix A – Design Calculation
Appendix B – Development Layout Plan
Appendix C – Reference Drawings
Appendix D – Site Photos

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 m². 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 m². 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.

Drainage Impact Assessment

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:

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

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:

$$\text{Colebrook-White Equation: } \frac{1}{\sqrt{f}} = -\sqrt{32gRS} \log \log \left(\frac{k_s}{14.8R} + \frac{1.255v}{R\sqrt{32gRS}} \right)$$

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 Storage Tank

- 4.1.1 In order to mitigate the drainage impact due to the increase in paved area, storage tank is proposed to store the additional runoff generated from the development such that there is no drainage impact to the nearby area.
- 4.1.2 The storage tank is proposed to collect the additional runoff for a 1 in 10 year rainfall event for 4 hours. As per the design for volume of storage tank shown in **Appendix A2**, the total storage volume of the storage tank is not less than 1,481 m³.
- 4.1.3 The proposed location of the storage tank is shown in **Figure 3**.
- 4.1.4 During the rainfall event the additional rainwater would be stored in the tank. After the event, the additional rainwater would be pumped to the existing stream within 8 hours of the rainfall event. The rainwater to be emptied before the next rainwater event.

4.2. Proposed Channels

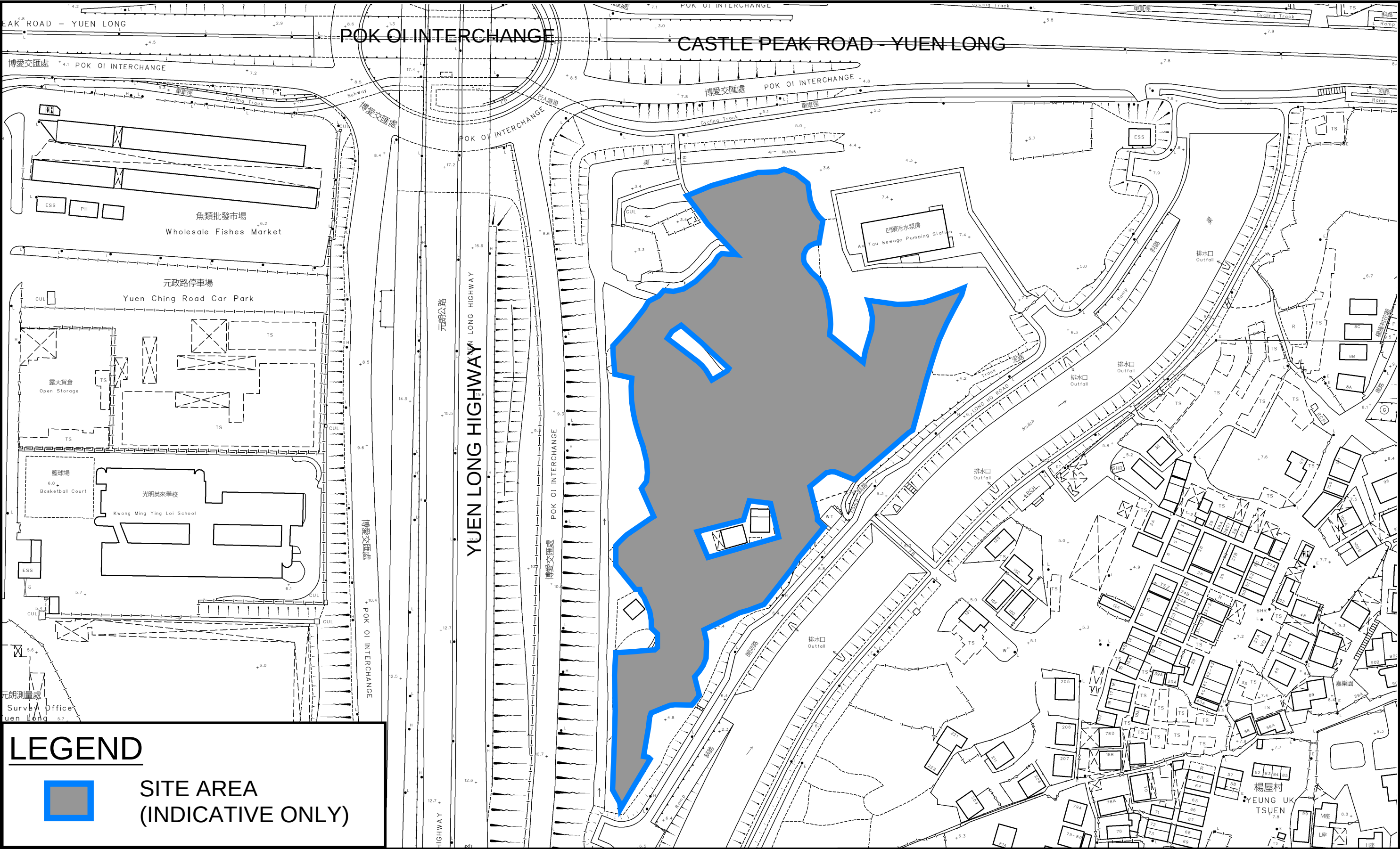
- 4.2.1 Proposed channels are designed for collection of runoff for internal and external catchment. They are proposed to connect to the storage tank for storage of additional runoff.
- 4.2.2 The design calculations of proposed UChannel are shown in **Appendix A1**.
- 4.2.3 The alignment, size, gradient and details of the proposed drains are shown in **Figure 3**.
- 4.2.4 The catchment plan is shown in **Figure 4**.
- 4.2.5 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 storage tank and proposed drainage system, no adverse drainage impact is anticipated.
- 5.1.2 With implementation of the above drainage system, the no unacceptable drainage impact is anticipated.

- End of Text -

FIGURES



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

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

TITLE
SITE LOCATION PLAN

FIGURE NUMBER
FIGURE 1



VER	DESCRIPTION	DATE

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

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

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 VERIFIED ON SITE.

MANHOLE/PIT SCHEDULE

PIT#	GROUND LEVEL (mPD)	INVERT LEVEL (mPD)
SP01	5.80	2.49
CP1.01	5.30	2.63
CP1.02	5.00	3.00
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	4.00	3.06
CP4.05	3.50	2.83
CP4.06	3.50	2.74
CP4.07	3.70	2.63
SP05	3.50	3.28
CP5.01	3.50	3.15
CP5.02	3.50	3.11
SP06	3.50	3.13
CP6.01	3.50	2.98
CP6.02	3.50	2.86
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

PROPOSED CHANNEL

- Proposed ChannelUC1, 225 mm, 1 in 150
- Proposed ChannelUC2, 300 mm, 1 in 150
- Proposed ChannelUC3, 675 mm, 1 in 150
- Proposed ChannelUC4, 225 mm, 1 in 150
- Proposed ChannelUC5, 225 mm, 1 in 150
- Proposed ChannelUC6, 225 mm, 1 in 150
- Proposed ChannelUC7, 600 mm, 1 in 250
- Proposed ChannelUC8, 675 mm, 1 in 300
- Proposed ChannelUC9, 225 mm, 1 in 200
- Proposed ChannelUC10, 375 mm, 1 in 250
- Proposed ChannelUC11, 375 mm, 1 in 150
- Proposed ChannelUC12, 450 mm, 1 in 150
- Proposed ChannelUC13, 600 mm, 1 in 150
- Proposed ChannelUC14, 600 mm, 1 in 250
- Proposed ChannelUC15, 225 mm, 1 in 150
- Proposed ChannelUC16, 300 mm, 1 in 150
- Proposed ChannelUC17, 375 mm, 1 in 100
- Proposed ChannelUC18, 300 mm, 1 in 150
- Proposed ChannelUC19, 750 mm, 1 in 150

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



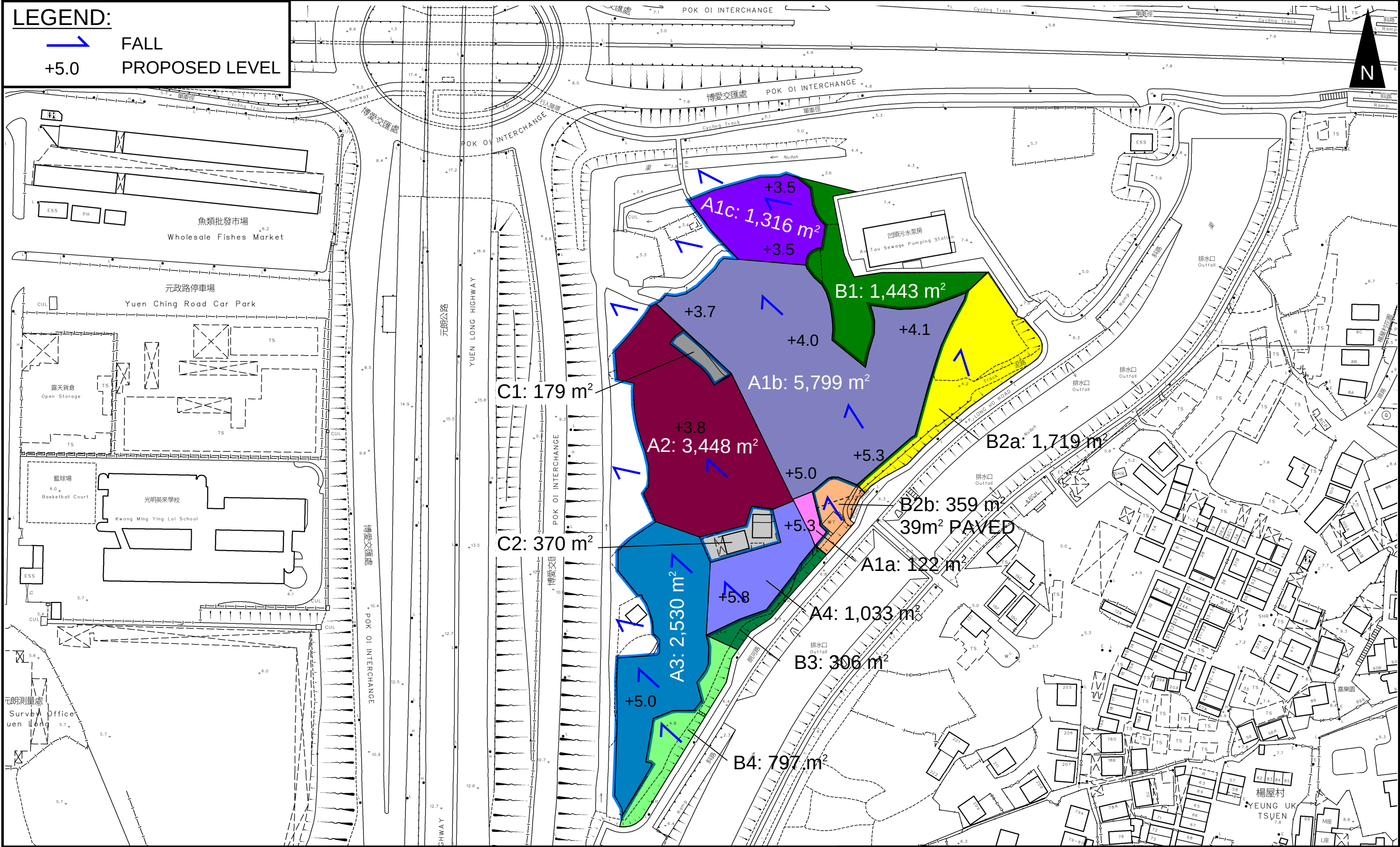
VER	DESCRIPTION	DATE
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LEGEND:

+5.0

FALL

PROPOSED LEVEL



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:

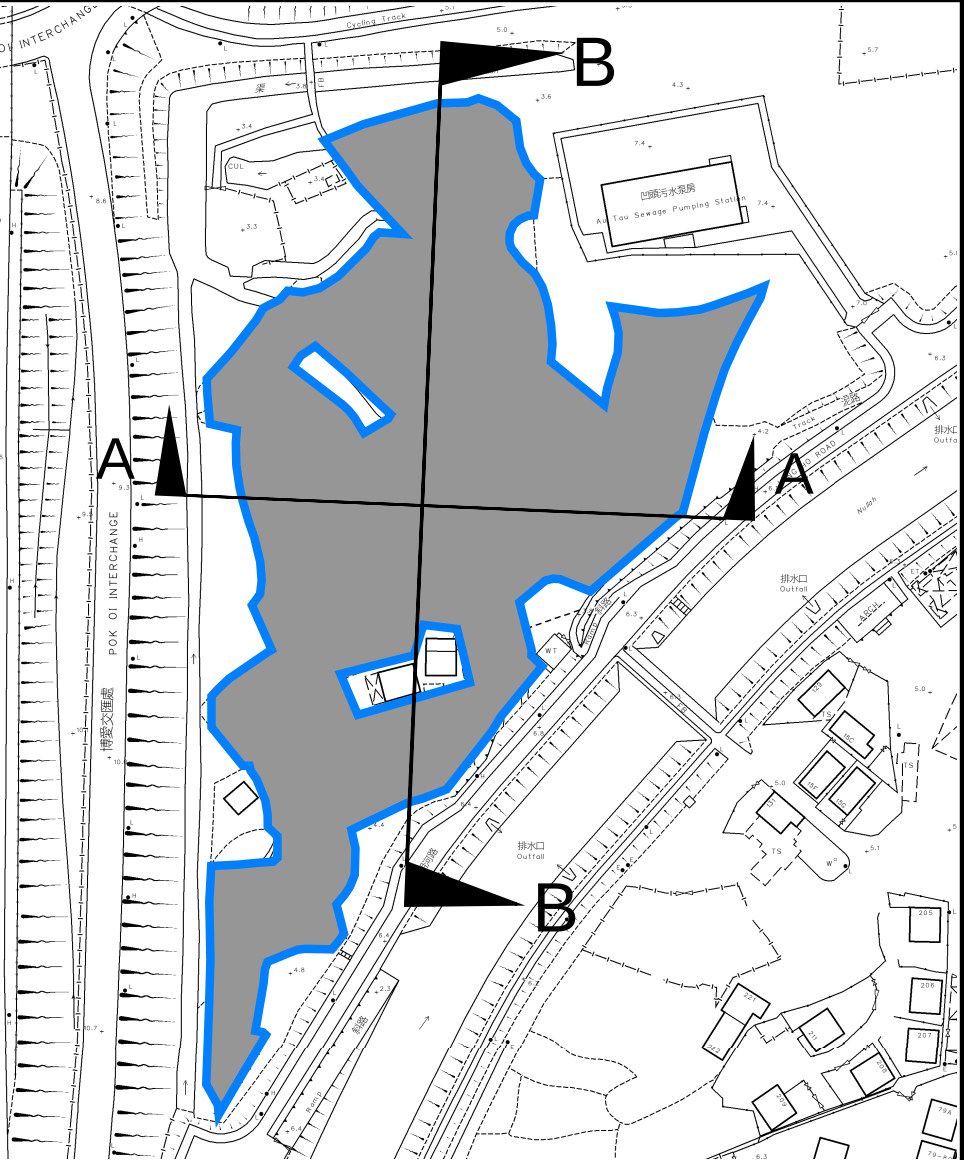
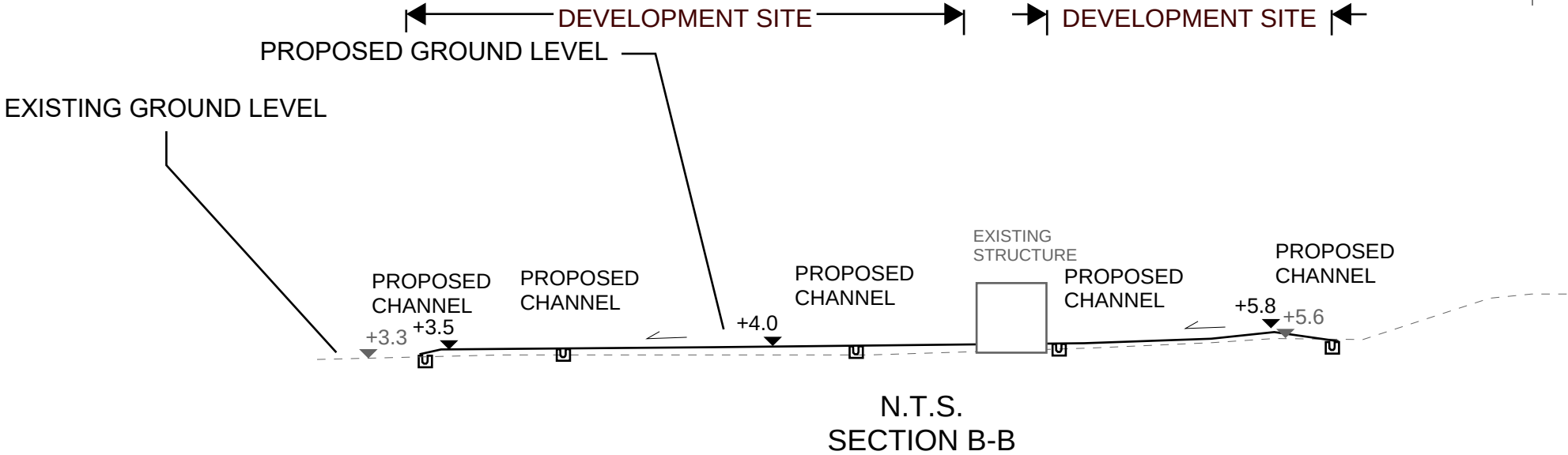
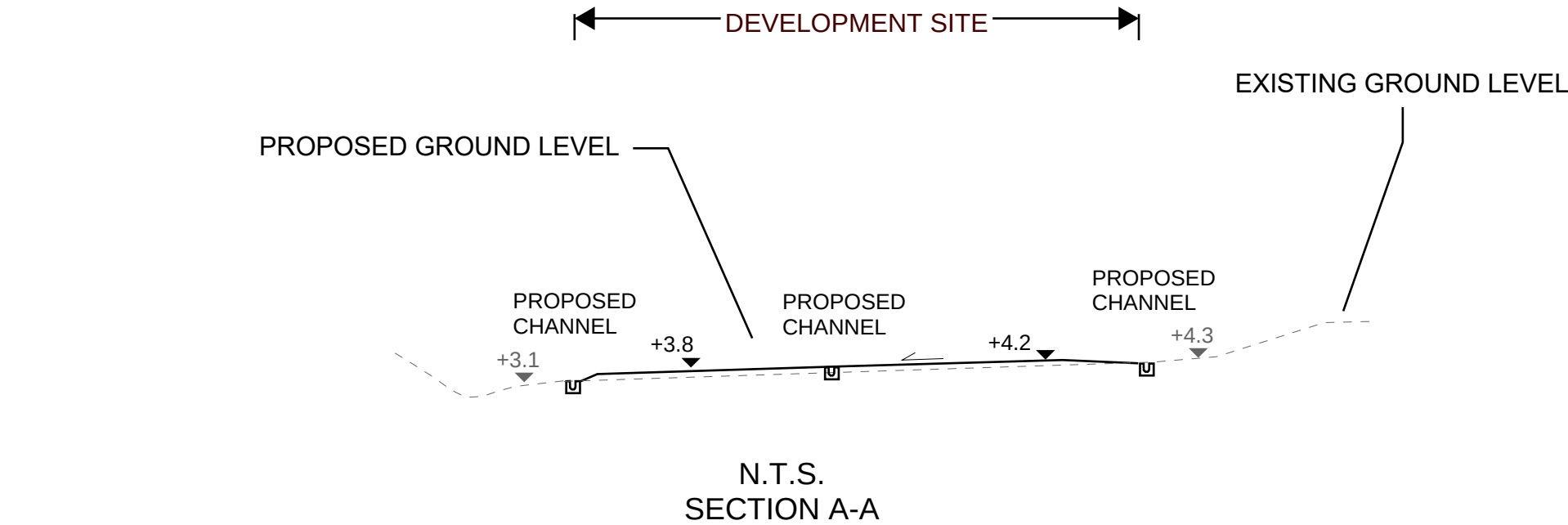
Various Lots in D.D. 115 and 116 and Adjoining Government Land, Au Tau, Yuen Long, New Territories



VER	DESCRIPTION	DATE
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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 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	Storm Constant	HKO a	485
						Ks	0.15		HKO b	3.11
						Viscosity	0.000001		HKO c	0.397

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,C1	6,033	2.80	239.56	0.402	600	150	2.05	0.66	61.0%	
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, C1	63	2.80	239.56	0.004	225	150	1.07	0.05	8.7%	
Design of Channel UC16 for Catchment, A4,C1	1,024	2.80	239.56	0.068	300	150	1.29	0.10	65.7%	
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

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

Appendix A2: Sizing of Storage Tank

HKO	Return Period	1 in	10	years	Duration	240	min	Rainfall Intensity, I	48.5	mm/hr
-----	---------------	------	----	-------	----------	-----	-----	-----------------------	------	-------

Site Area

14250	m ²
-------	----------------

	Pre-Development			Post-Development	
Hard Paved		970 m ²			14250 m ²
Green		14250 m ²			0 m ²
Total Equivalent Area	= 970 x 0.95 + 14250 x 0.35	5909 m ²		= 14250 x 0.95 + 0 x 0.35	13537.5 m ²
Design Flow Rate, Q	= 0.278 x 5909 x 48.5 / 1000000	0.080 m ³ /s		= 0.278 x 13537.5 x 48.5 / 1000000	0.183 m ³ /s
Volume of Runoff in 240 min	= 0.08 x 240 x 60	1147 m ³			2628 m ³

Runoff Coefficient
0.95
0.35

Storage Vol. Required = 2628 - 1147 = 1481 m³

Provide Rectangle Tank

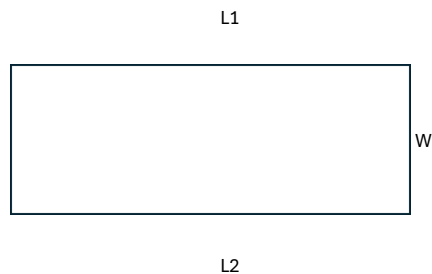
Tank Area

L1 =	52 m
L2 =	52 m
W =	22 m
A =	1144 m ²

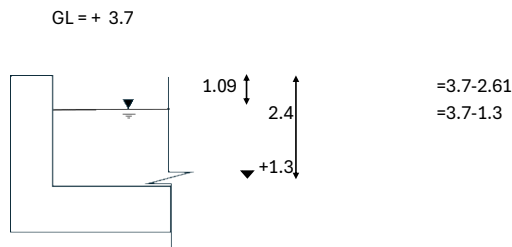
Water Depth

Assume Water Level is 1.09 m below GL and IL is 2.4m below GL.
Water Depth = 1.31 m

Therefore, the Provided Storage Volume is 1499 m³
> 1481 m³



PLAN



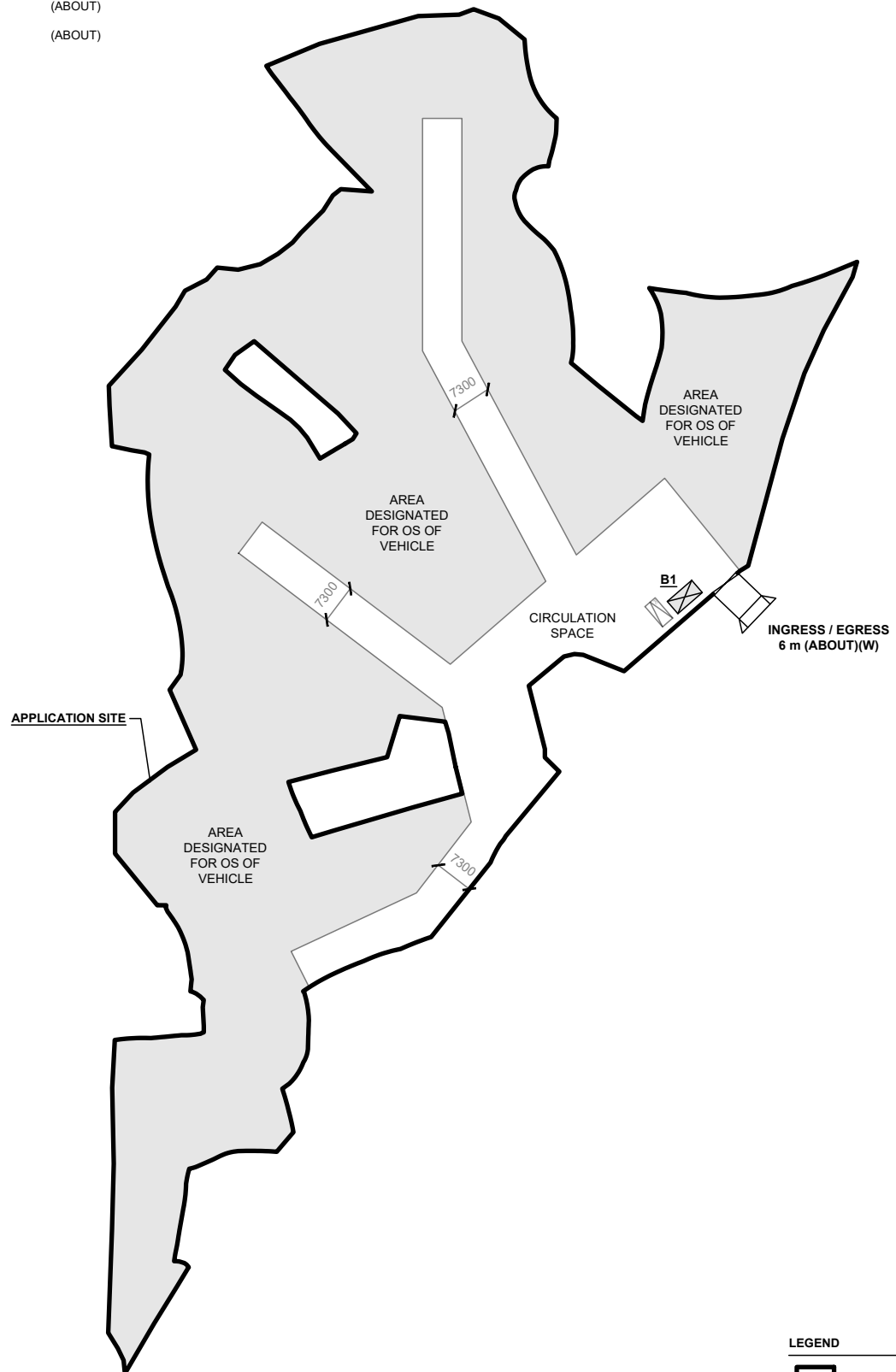
SECTION

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

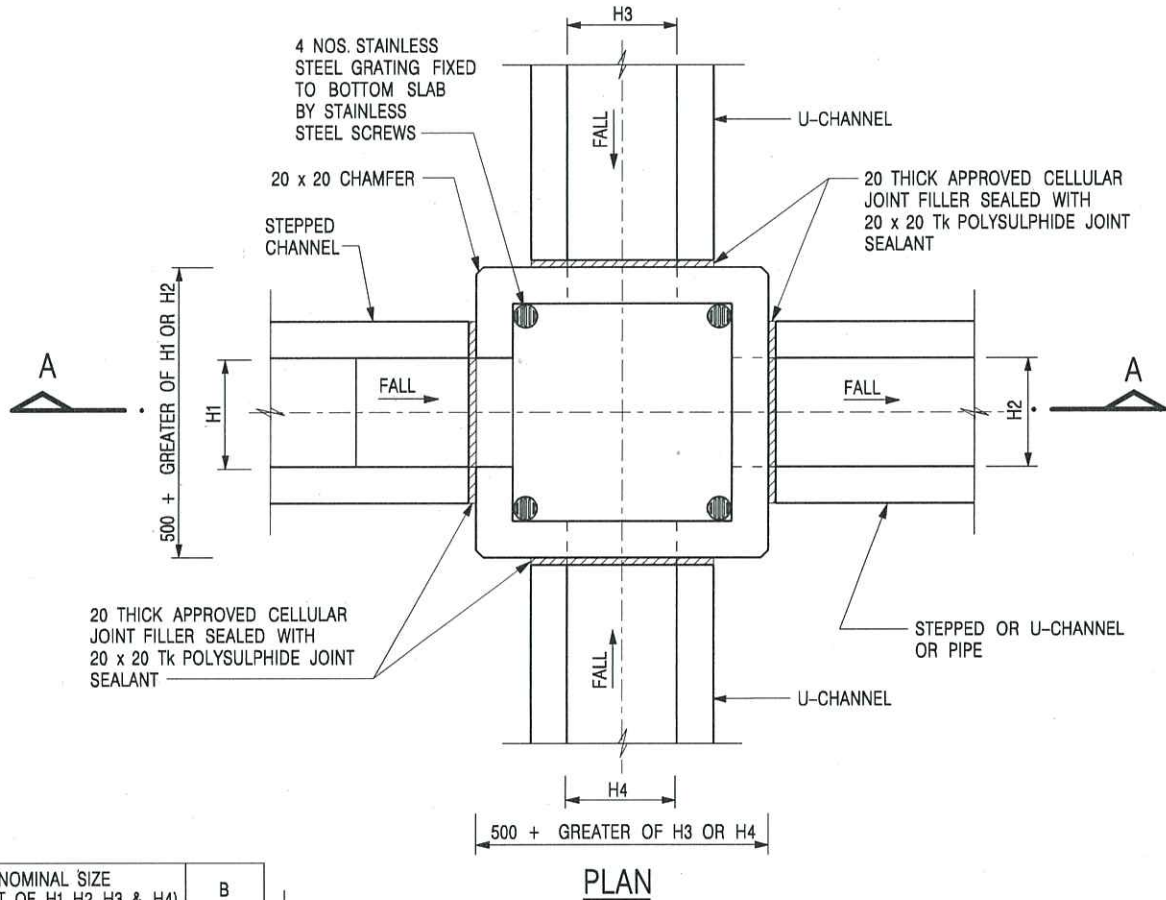
NO. OF PRIVATE CAR PARKING SPACE	: 1
DIMENSION OF PARKING SPACE	: 5 m (L) x 2.5 m (W)

LEGEND

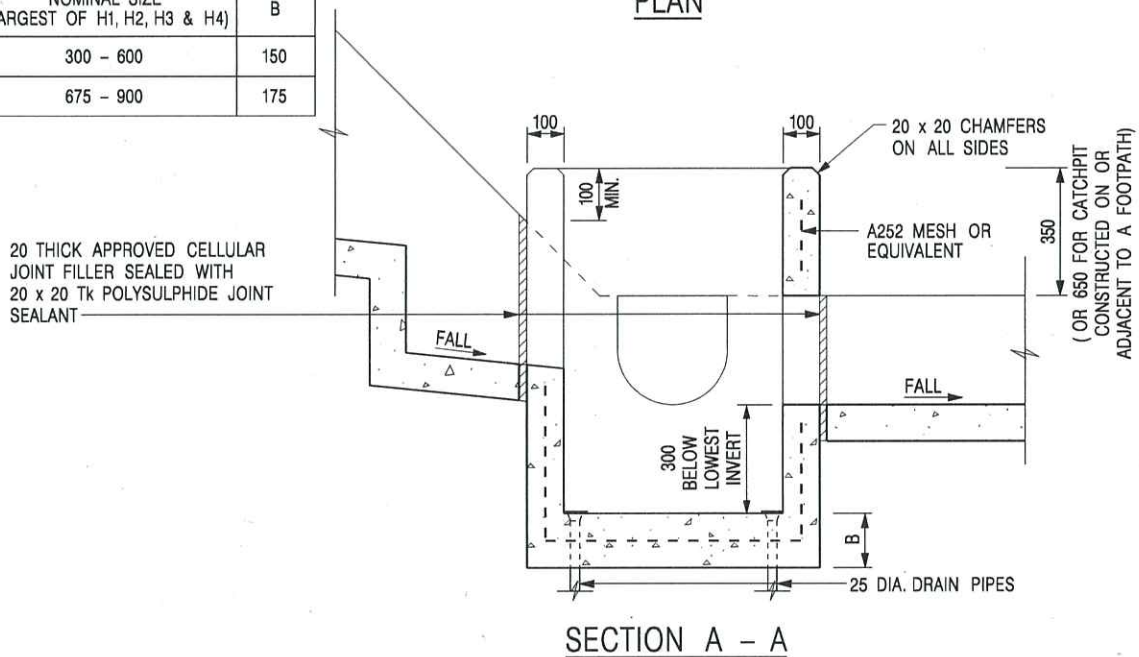
	APPLICATION SITE
	STRUCTURE
	OPEN STORAGE AREA
	PARKING SPACE (PC)
	INGRESS / EGRESS

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

Appendix C - Reference Drawings



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



NOTES:

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

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

CATCHPIT WITH TRAP
(SHEET 1 OF 2)



**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

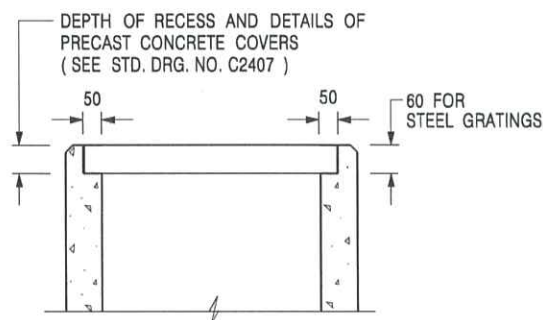
DATE	JAN 1991
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DRAFTING NO.

C2406 /1

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**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.

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

**CATCHPIT WITH TRAP
(SHEET 2 OF 2)**



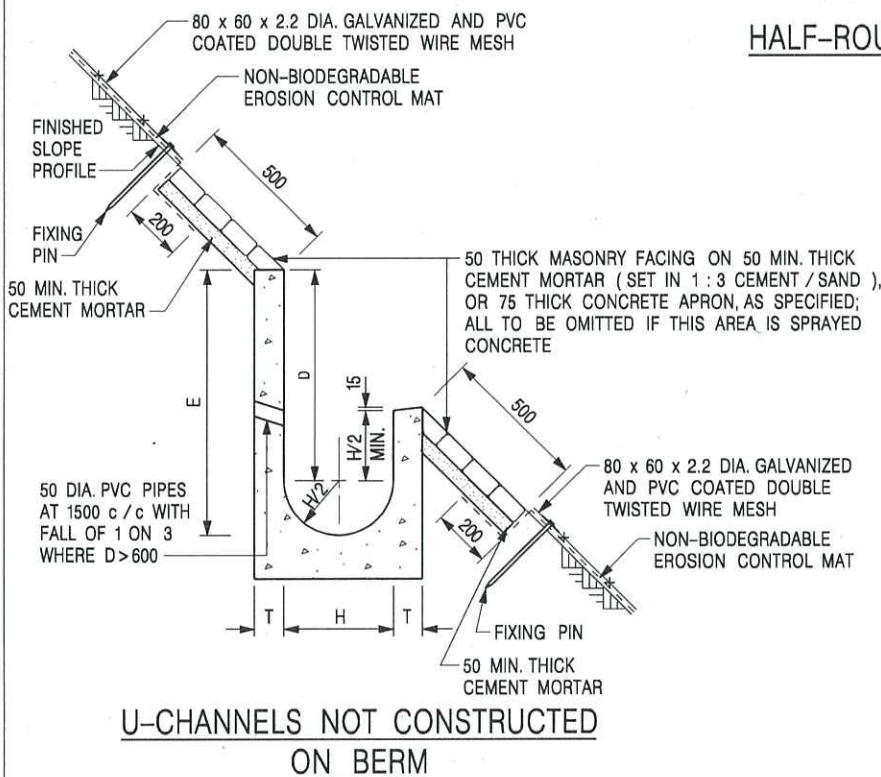
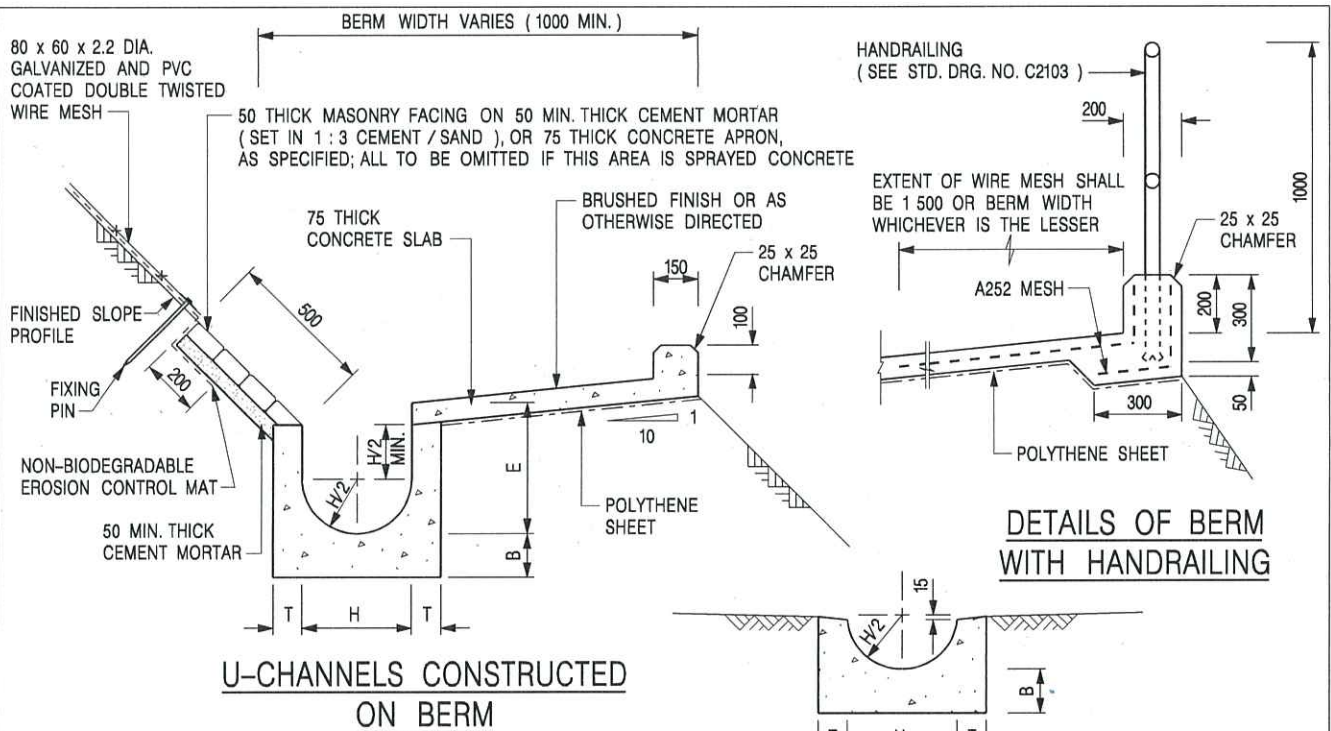
**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

DRAWING NO.

DATE JAN 1991

C2406 /2A



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/E.
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/E)

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

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
REF.	REVISION	SIGNATURE	DATE

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



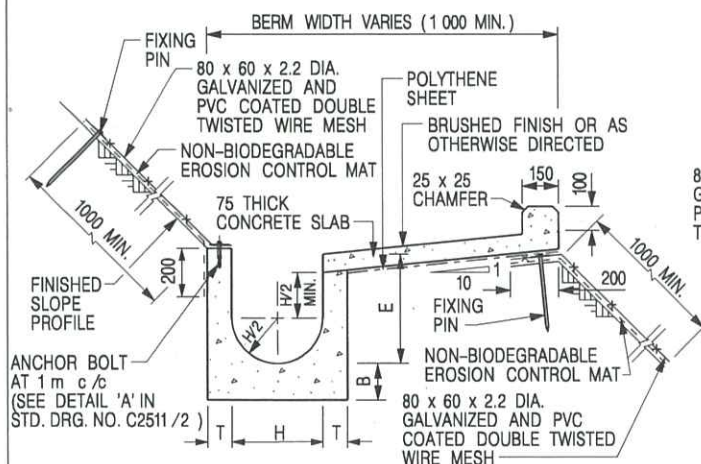
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 25

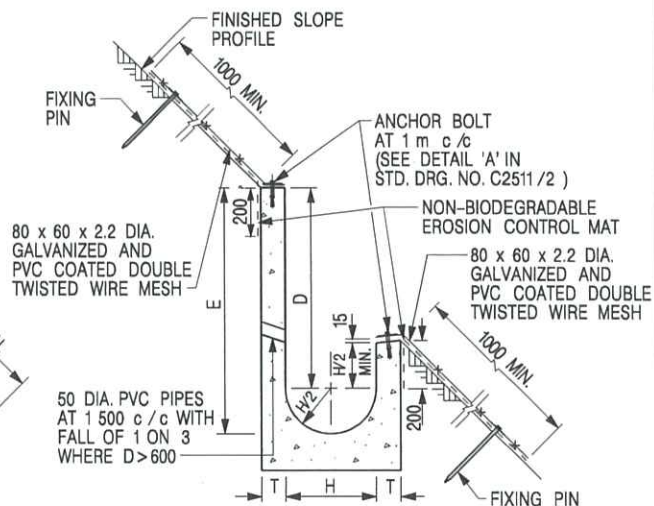
DRAWING NO.

DATE JAN 1991

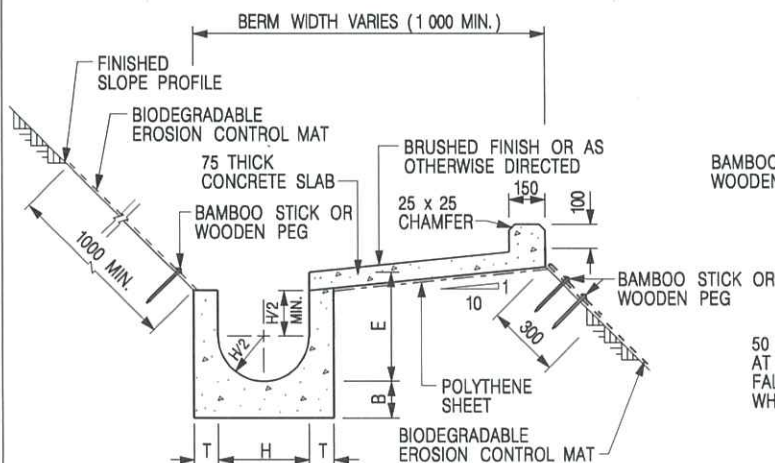
C2409I



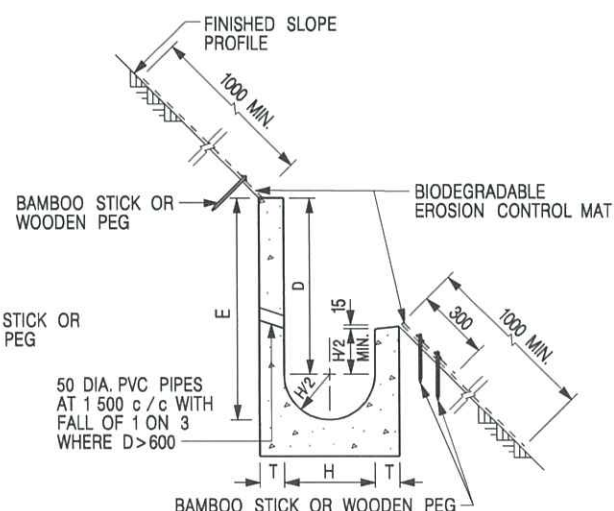
**U-CHANNELS CONSTRUCTED ON BERM
WITH NON-BIODEGRADABLE
EROSION CONTROL MAT**



**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:

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



**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE DIAGRAMMATIC

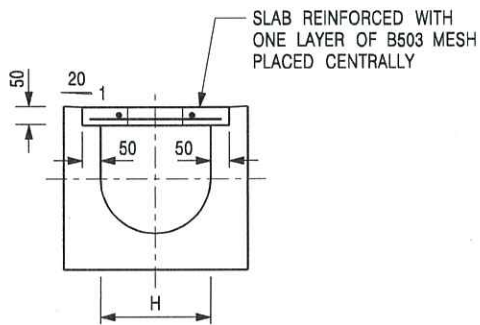
DRAWING NO.

DATE JAN 1991

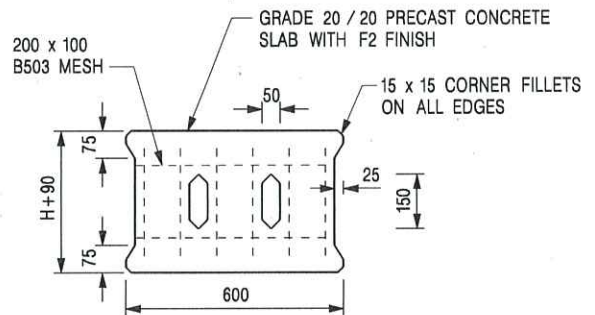
C24101

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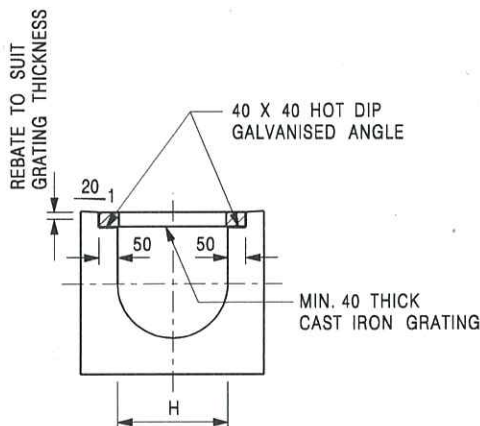
TYPICAL SECTION



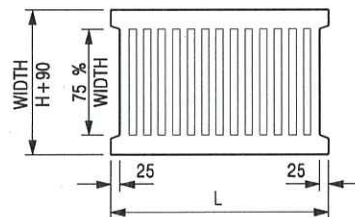
PLAN OF SLAB

U-CHANNELS WITH PRECAST CONCRETE SLABS

(UP TO H OF 525)



TYPICAL SECTION



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.

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
REF.	REVISION	SIGNATURE	DATE

COVER SLAB AND CAST IRON
GRATING FOR CHANNELS



**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

DATE JAN 1991

DRAWING NO.

C2412E



PHOTO 1



PHOTO 4



PHOTO 2



PHOTO 5



PHOTO 3



PHOTO 6

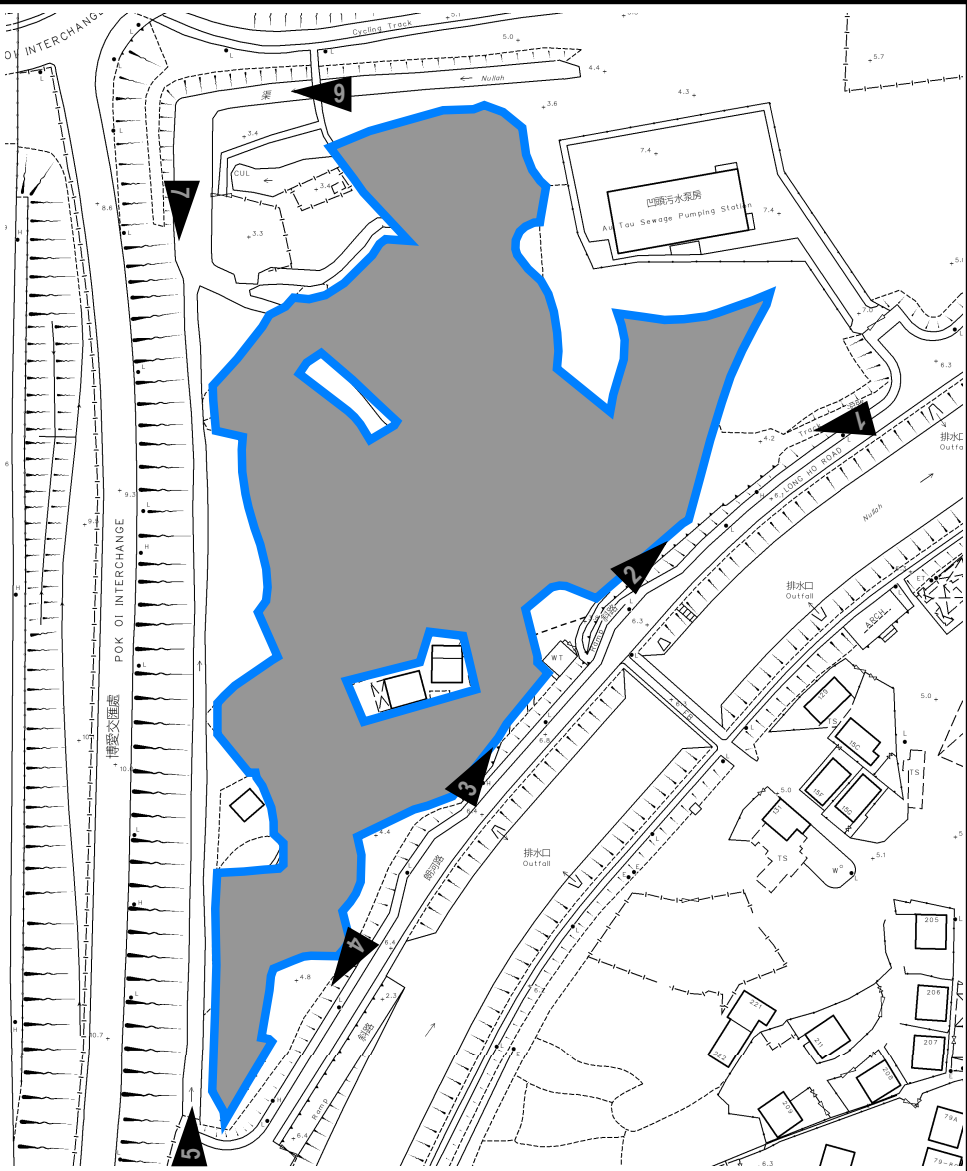


PHOTO 7

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

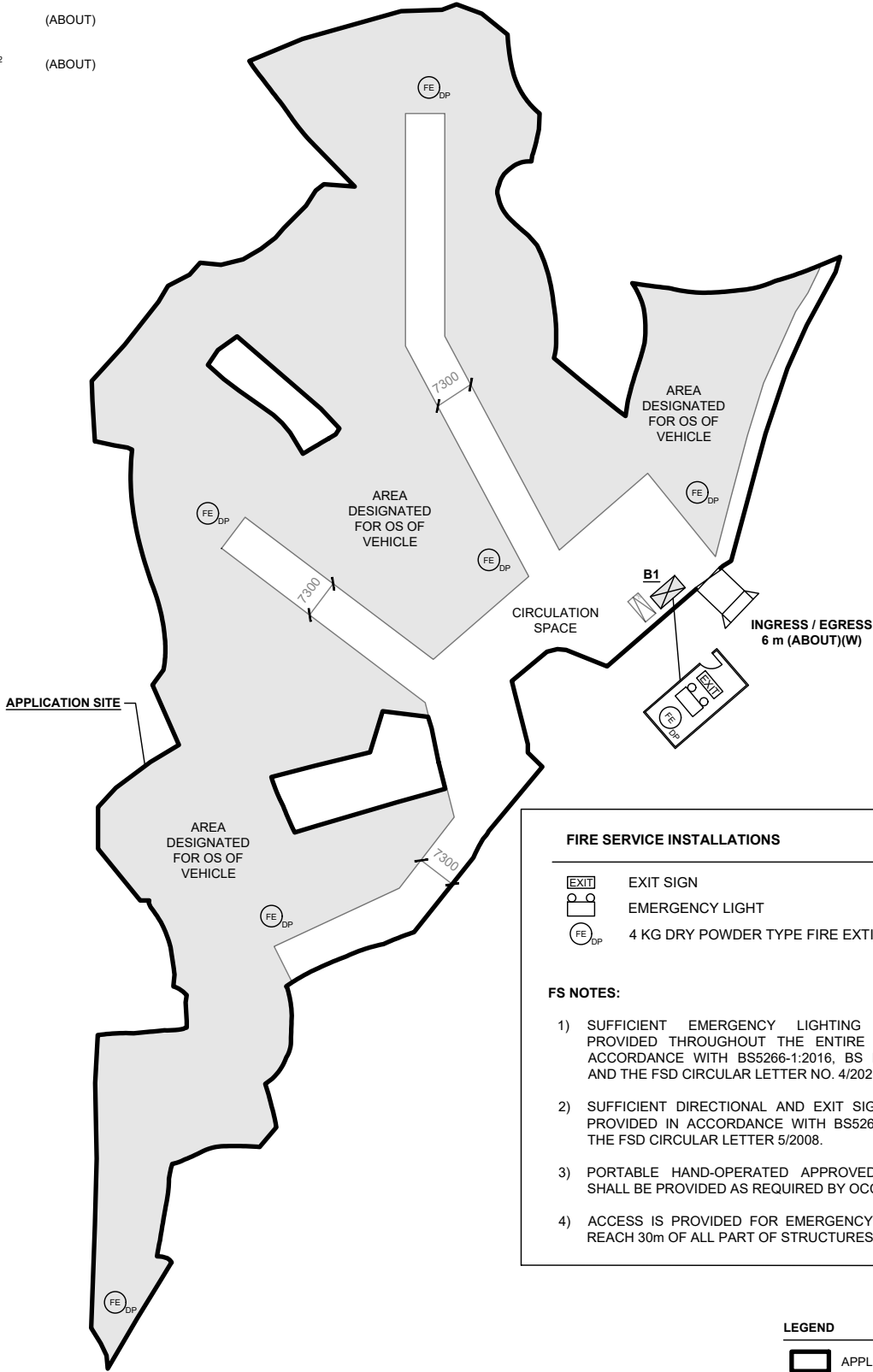
Appendix VI

Fire Service Installations Proposal

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)	



FIRE SERVICE INSTALLATIONS

EXIT	EXIT SIGN
EL	EMERGENCY LIGHT
FE _{DP}	4 KG DRY POWDER TYPE FIRE EXTINGUISHER

FS NOTES:

- 1) SUFFICIENT EMERGENCY LIGHTING SHALL BE PROVIDED THROUGHOUT THE ENTIRE BUILDING IN ACCORDANCE WITH BS5266-1:2016, BS EN 1838:2013 AND THE FSD CIRCULAR LETTER NO. 4/2021.
- 2) SUFFICIENT DIRECTIONAL AND EXIT SIGN SHALL BE PROVIDED IN ACCORDANCE WITH BS5266-1:2016 AND THE FSD CIRCULAR LETTER 5/2008.
- 3) PORTABLE HAND-OPERATED APPROVED APPLIANCE SHALL BE PROVIDED AS REQUIRED BY OCCUPANCY.
- 4) ACCESS IS PROVIDED FOR EMERGENCY VEHICLE TO REACH 30m OF ALL PARTS OF STRUCTURES.

LEGEND

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

PARKING PROVISIONS

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

PLANNING CONSULTANT



PROJECT

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

ADDRESS

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

SCALE

1 : 1200 @ A4

DRAWN BY

MN

DATE

2.7.2025

REVISED BY

DATE

TITLE

FSis PROPOSAL

DWG NO.

APP VI

VER.

001

