寄件者: Louis Tse

**寄件日期:** 2025年10月17日星期五 16:53

收件者: tpbpd/PLAND

副本: Andrea Wing Yin YAN/PLAND; Ivan Sze Yuet FUNG/PLAND; Bon

Tang; Matthew Ng; Christian Chim; Danny Ng; Grace Wong; Kevin

Lam

主旨: [Supersede][FI] S.16 Application No. A/YL-KTN/1145 - FI to provide

clarificaitons

附件: FI1 for A\_YL-KTN\_1145 (20251017).pdf

類別: Internet Email

Dear Sir,

Attached herewith the further information to <u>supersede</u> our previous submission dated <u>14/10/2025</u> (*below email*) to address departmental comments on the subject application.

Should you require more information, please do not hesitate to contact me. Thank you for your kind attention.

Kind Regards,

Louis TSE | Town Planner R-riches Group (HK) Limited

R-riches Property Consultants Limited | R-riches Planning Limited | R-riches Construction Limited

寄件者: Louis Tse

**寄件日期:** 2025 年 10 月 14 日 下午 03:36

收件者: Town Planning Board <tpbpd@pland.gov.hk>

主旨: [FI] S.16 Application No. A/YL-KTN/1145 - FI to address departmental comments

Dear Sir,

Attached herewith the further information to address departmental comments of the subject application.

Should you require more information, please do not hesitate to contact me. Thank you for your kind attention.

Kind Regards,

Louis TSE | Town Planner

□Urgent □Return receipt □	□Expand Group	□Restricted	□Prevent Copy	□Confidential
R-riches Group (HK) Limited				
R-riches Property Consultants Lin	mited   R-riches Pla	nning Limited	R-riches Construct	tion Limited



Our Ref. : DD107 Lot 824 S.A & VL Your Ref. : TPB/A/YL-KTN/1145



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

By Email

17 October 2025

Dear Sir,

#### 1<sup>st</sup> Further Information

Proposed Temporary Open Storage of Construction Materials and Machinery and Associated Filling of Land and Pond for a Period of 3 Years in "Agriculture" Zone,

<u>Various Lots in D.D. 107, Kam Tin, Yuen Long, New Territories</u>

(S.16 Planning Application No. A/YL-KTN/1145)

We are writing to submit further information to address departmental comments of the subject application (**Appendix I**).

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

Yours faithfully,

For and on behalf of

**R-riches Planning Limited** 

Louis TSE

Town Planner

cc DPO/FSYLE, PlanD

(Attn.: Ms. Andrea YAN

email: awyyan@pland.gov.hk

(Attn.: Mr. Ivan FUNG

email: isyfung@pland.gov.hk

#### **Response to Comment**

## Proposed Temporary Open Storage of Construction Materials and Machinery and Associated Filling of Land and Pond for a Period of 3 Years in "Agriculture" Zone, Various Lots in D.D. 107, Kam Tin, Yuen Long, New Territories

(Application No. A/YL-KTN/1145)

- (i) Replacement page of application form is provided (Annex I).
- (ii) Majority of the application site (the Site) (i.e. about 5,748 m<sup>2</sup>) is proposed to be filled within concrete to a depth of not more than 2.5 m for open storage area, loading/unloading and circulation spaces. The remaining area (i.e. about 22m<sup>2</sup>) will be reserved as landscaping area for healthy tree growth (Annex I and Plan 1).
- (iii) A RtoC Table:

#### **Departmental Comments**

#### **Applicant's Responses**

 Comments of the Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD)

(Contact Person: Ms. Jessica KWAN; Tel: 2300 1444)

(a) After reviewing the applicant's submission, it is noted there is no drainage proposal to demonstrate how potential drainage impact to the adjacent area could be managed under the proposed development.

In addition, since the existing pond within application site function as retention areas for collecting surface runoff from the vicinity during rainfall, the applicant is required to submit Drainage Impact Assessment (DIA) to show whether there would be any significant drainage impact to existing natural streams, drainage system, village drains, ditches, the adjacent area and etc due to the proposed development and how the impact could be properly mitigated.

Therefore, I have reservation on the proposed application from drainage point of view.

A drainage impact assessment (DIA) is provided by the applicant (Annex II). During the operation of the proposed development, surface run-off arising from the Site will be collected by the peripheral U-channels then diverted to Kam Tin River. The DIA reviews that no unacceptable drainage impact is anticipated from the proposed development.



### Comments of the Director of Agriculture, Fisheries and Conservation (DAFC) (Contact Person: Ms. WONG Cheuk-ling; Tel: 2150 6933)

(a) We have no objection to filling the pond with soil or similar materials for alternative use, provided that the land can be easily restored. However, filling the pond with concrete is not recommended from fisheries perspective.

Although the proposed development involves filling of pond, the existing artificial dried ponds have been abandoned for decades, which are not fishponds, there is no active fishing culture operation and other amenity value has been found within the Site. As heavy loading of vehicles and construction materials and machinery would compact the existing soiled ground and weaken the ground surface, concrete site formation is required to meet the operational needs and that has been kept to minimal for the operation of the proposed development. The applicant will reinstate the Site to an amenity area after the planning approval period.

## 3. Comments of the Chief Town Planner/Urban Design and Landscape, Planning Department (CTP/UD&L, PlanD)

(Contact Person: Mr. Samuel HUI; Tel: 3565 3957)

(a) According to our site photos, the Site is mainly vacant with some temporary structures and vegetation observed within the site boundary. No tree information, proposed tree treatment and mitigation measures(s) has been provided in the application. The applicant is requested to supplement such information.

The tree survey and landscape proposal are provided by the applicant in support of the current application (Annexes III to IV). A total of 4 nos. of trees were recorded within the Site, within which no Old and Valuable Trees (OVT) or protected species have been identified. Due to the proposed hard paving works for open storage activities and circulation purposes, all the existing trees will be affected, and it is not proposed to retain any of the existing trees within the Site. Due to the proposed tree felling, a total of 4 new trees, with compensation ratio of 1:1, are proposed to be planted along the peripheral boundary of the Site to mitigate the landscape impact of the proposed development (Annex IV). All the new trees will be well maintained by the applicant during the planning approval period.



Proposed Temporary Open Storage of Construction Materials and Machinery and Associated Filling of Land and Pond for a Period of 3 Years in "Agriculture" Zone, Various Lots in D.D. 107, Kam Tin, Yuen Long, New Territories										
Annex I										
Revised Application Form										

_	osed operating hours # nday to Saturday from		00. No operation on Sunday and public holidays
(d)	Any vehicular acce the site/subject buildi 是否有車路通往地 有關建築物?	ing?	<ul> <li>✓ 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))</li> <li>Accessible from San Tam Road via a local access</li> <li>□ 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)</li> </ul>
		No 否	
(e)	(If necessary, please t	use separate shee for not providin	E議發展計劃的影響 ets to indicate the proposed measures to minimise possible adverse impacts or give ng 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
(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 □ No 否 ✓	Please provide details 請提供詳情
(ii)	Does the development proposal involve the operation on the right? 擬議發展是否涉及右列的工程?		(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
(iii)	Would the development proposal cause any adverse impacts? 擬議發展計劃會否造成不良影響?	On environmen On traffic 對交 On water suppl On drainage 對 On slopes 對余 Affected by slo Landscape Imp Tree Felling Visual Impact	交通       Yes 會 □       No 不會 ☑         ly 對供水       Yes 會 □       No 不會 ☑         対排水       Yes 會 □       No 不會 ☑         対坡       Yes 會 □       No 不會 ☑         ppes 受斜坡影響       Yes 會 □       No 不會 ☑         cact 構成景觀影響       Yes 會 □       No 不會 ☑         砍伐樹木       Yes 會 □       No 不會 ☑

.043 L063 III D.D. 10	7, Kam Tin, Yue	n Long, New	od of 3 Years i Territories			 
			Anne	c II		
		Drair	nage Impact	Assessmer	nt	
		Drair	nage Impact	: Assessmer	nt	
		Drair	nage Impact	: Assessmer	t	
		Drair	nage Impact	: Assessmer	nt	
		Drair	nage Impact	Assessmer	nt	
		Drair	nage Impact	: Assessmer	nt	
		Drair	nage Impact	: Assessmer	nt	
		Drair	nage Impact	Assessmer	nt	
		Drair	nage Impact	: Assessmer	nt	
		Drair	nage Impact	: Assessmer	nt	
		Drair	nage Impact	Assessmer	it	
		Drair	nage Impact	: Assessmer	ıt.	
		Drair	nage Impact	Assessmer	ıt.	
		Drair	nage Impact	Assessmer	nt .	
		Drair	nage Impact	Assessmer	ot .	

PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND MACHINERY AND ASSOCIATED FILLING OF LAND AND POND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN D.D. 107, KAM TIN, YUEN LONG, NEW TERRITORIES

**Drainage Impact Assessment** 

Oct 2025

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



## **Table of Contents**

1	Intro	duction """"""""""""""""""""""""""""""""""""	
	1.1	Background """"""""""""""""""""""""""""""""""""	
		Application Site """"""""""""""""""""""""""""""""""""	
2		lopment Proposal''''''''''''''''''''''''''''''''''''	
	2.1	The Proposed Development """"""""""""""""""""""""""""""""""""	"2
3		ssment Criteria"	
4		osed Drainage System """"""""""""""""""""""""""""""""""""	
		Proposed Channels """"""""""""""""""""""""""""""""""""	
5	Conc	lusion''''''	"5

## **List of Table**

Table 1 - Key Development Parameters
Table 2— Design Return Periods under SDM

2

## **List of Figure**

Figure 1 – Site Location Plan

Figure 2 - Existing Drainage Plan

Figure 3-1 – Proposed Drainage System

Figure 3-2 - Drainage Schedule

Figure 4 – Catchment Plan

Figure 5 - Sections

## **List of Appendix**

Appendix A – Design Calculation

Appendix B - Reference Drawings

Appendix C - As built Survey Record of Existing 1500 mm Dia. Pipe

## 1 Introduction

## 1.1 Background

- 1.1.1 The applicant seeks planning permission from the Town Planning Board (the Board) to use Lots 824 and various lots in D.D. 107, Kam Tin, Yuen Long, New Territories (the Site) for 'Proposed Temporary Open Storage of Construction Materials and Machinery and Associated Filling of Land and Pond for a Period of 3 Years'
- 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 at Fung Kat Heung at the west of San Tam Road. It has an area of approx. 5,770 m<sup>2</sup>. The site location is shown in **Figure 1**.
- 1.2.2 The existing site is mostly unpaved. The existing site levels are approx. + 3.5 to 4 mPD. In order to match with the nearby existing access level, the site is proposed to form to +5.6 mPD.
- 1.2.3 There are existing 1500mm pipes constructed by the applicant. One end of the pipes is in close proximity to the application site, the other end would eventually discharge to Kam Tin River. **Figure 2** indicates the existing drainage system of the area.

## 2 Development Proposal

## 2.1 The Proposed Development

2.1.1 The total site area is approximately 5,770 m<sup>2</sup>. The catchment plan is shown in **Figure 4**.

Proposed Development Area (Approx.)	
Total Site Area (m²)	5,770
Paved Area after Development (m²)	5,748

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 50 years return period is adopted for drainage design.

\_\_\_\_\_\_

PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND MACHINERY AND ASSOCIATED FILLING OF LAND AND POND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN D.D. 107, KAM TIN, YUEN LONG, NEW TERRITORIES

**Drainage Proposal** 

- 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 50 years return period, the following values are adopted.

a = 
$$505.5$$
  
b =  $3.29$   
c =  $0.355$ 

(Corrigendum No.1/2024)

The development is proposed for temporary use for a period of 3 years. 11.1% rainfall increase due to climate change is considered.

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:
  - Paved Area: C = 0.95
     Unpaved Area: C = 0.35

Oct-25 3

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<sub>f</sub> = 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: 
$$\underline{v} = -\sqrt{32gRS} \log \log \left(\frac{k_s}{14.8R} + \frac{1.255v}{R\sqrt{32gRS_f}}\right)$$

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)

Oct-25 4

PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND MACHINERY AND ASSOCIATED FILLING OF LAND AND POND FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN D.D. 107, KAM TIN, YUEN LONG, NEW TERRITORIES

**Drainage Proposal** 

## 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 existing 1500mm drains which eventually discharge to Kam Tin River. The utilization of the existing 1500mm drains is not more than 24.5% according to checking in Appendix A.
- 4.1.2 The design calculations of proposed UChannel are shown in **Appendix A**.
- 4.1.3 The alignment, size, gradient and details of the proposed drains are shown in **Figure 3**. The catchment plan is shown in **Figure 4**.
- 4.1.4 There are 3 artificial dried ponds proposed to be filled by the proposed development. As the existing drains (including the dried ponds) would be replaced by proposed drainage system and the internal and external runoff would all be collected to a large size 1500mm pipe, no adverse effect is anticipated.
- 4.1.5 Reference Drawings are shown in **Appendix C** for reference.

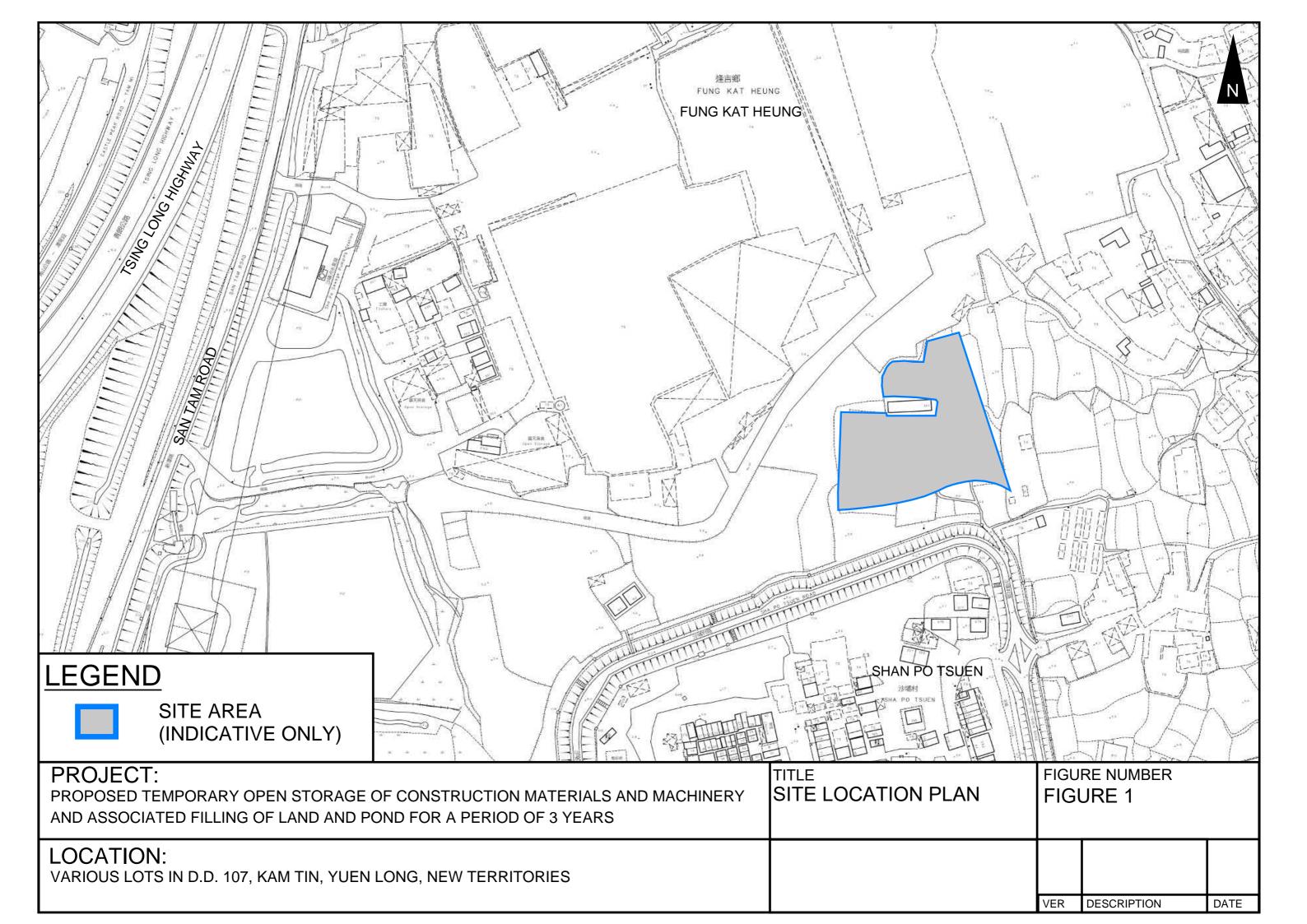
## 5 Conclusion

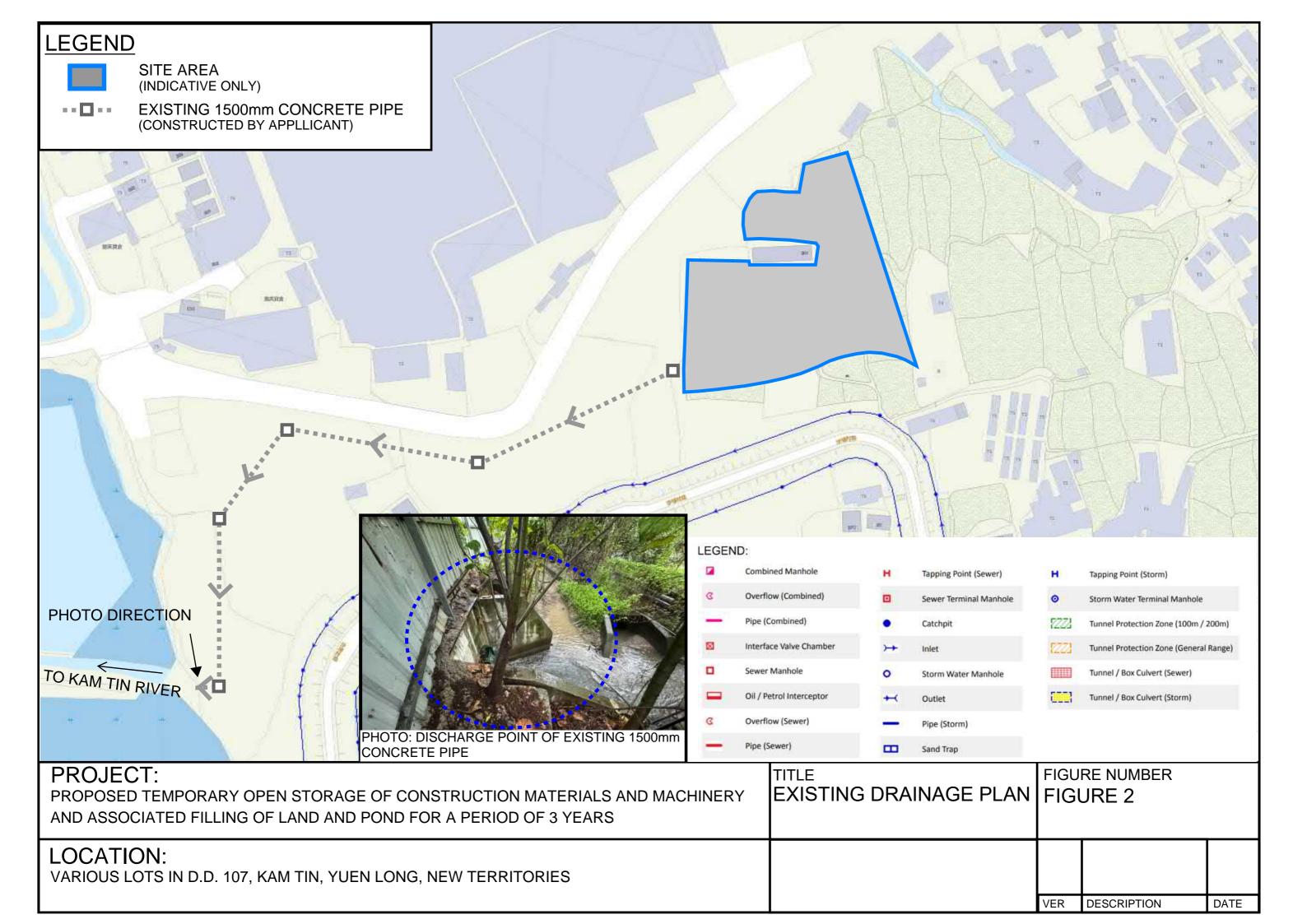
- 4.1.1 Drainage review has been conducted for the Proposed Development. The surface runoff will be collected by the proposed drains and discharged to existing drainage system.
- 4.1.2 With implementation of the above drainage system, no unacceptable drainage impact is anticipated.

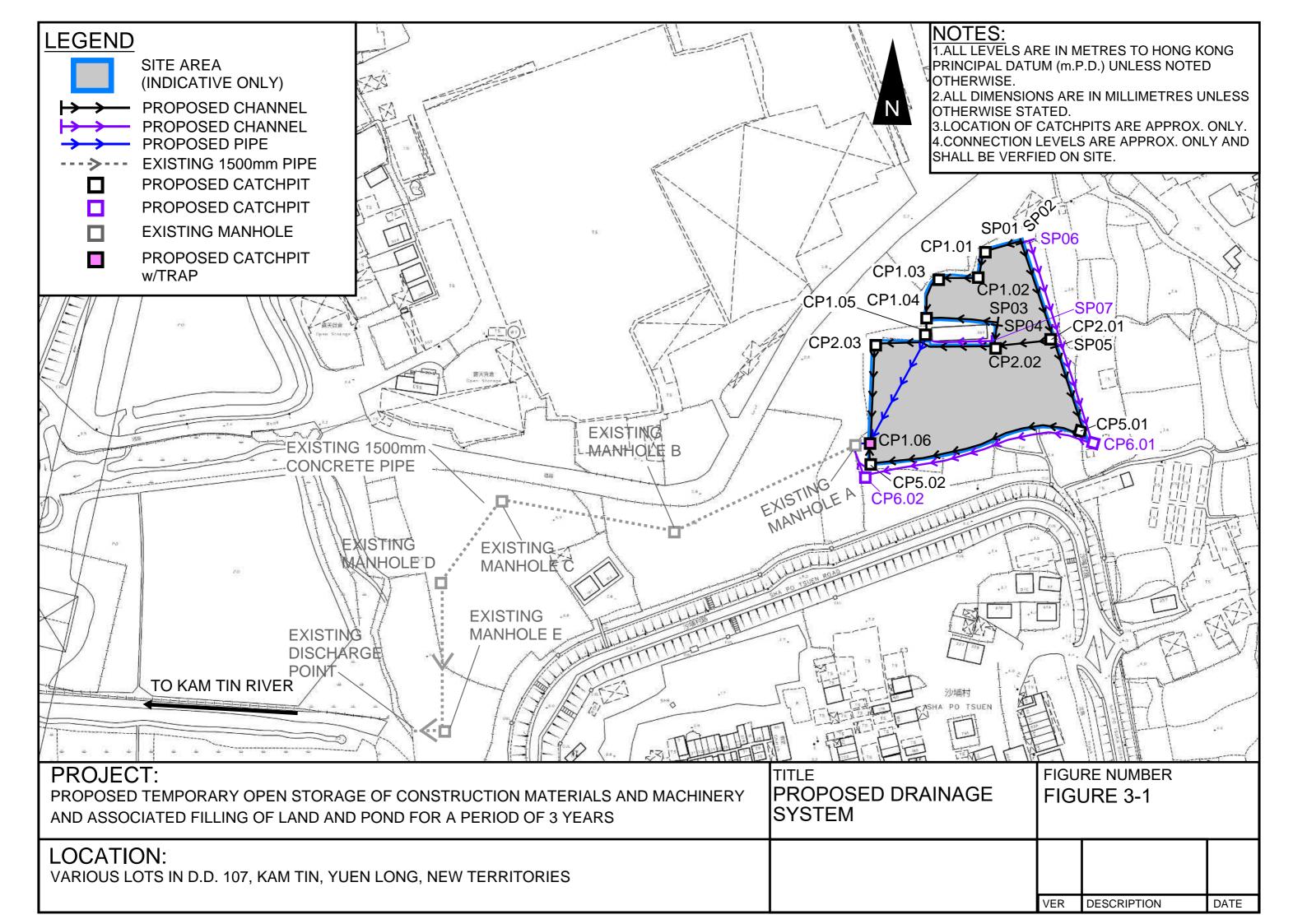
- End of Text -

5

## FIGURES

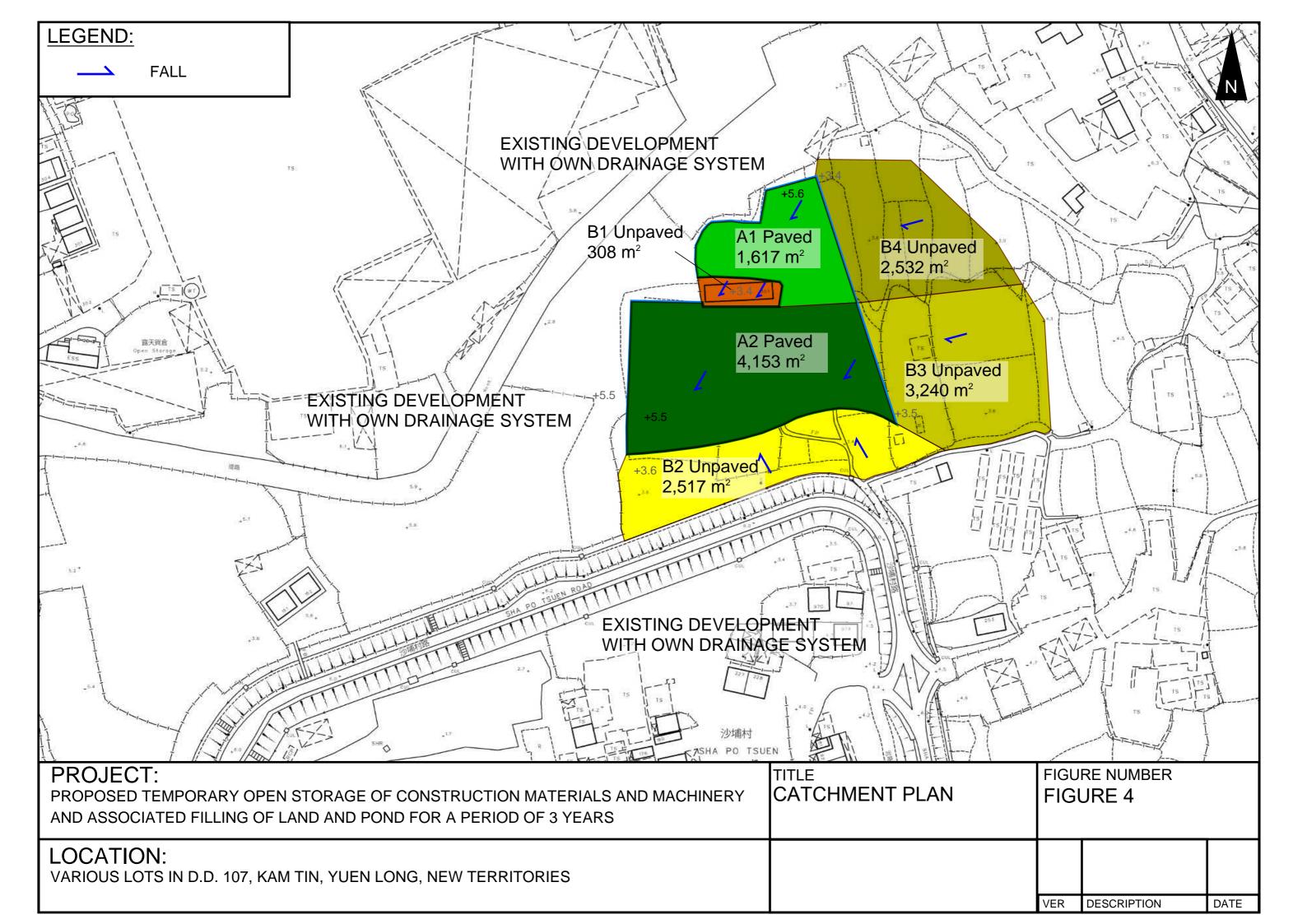


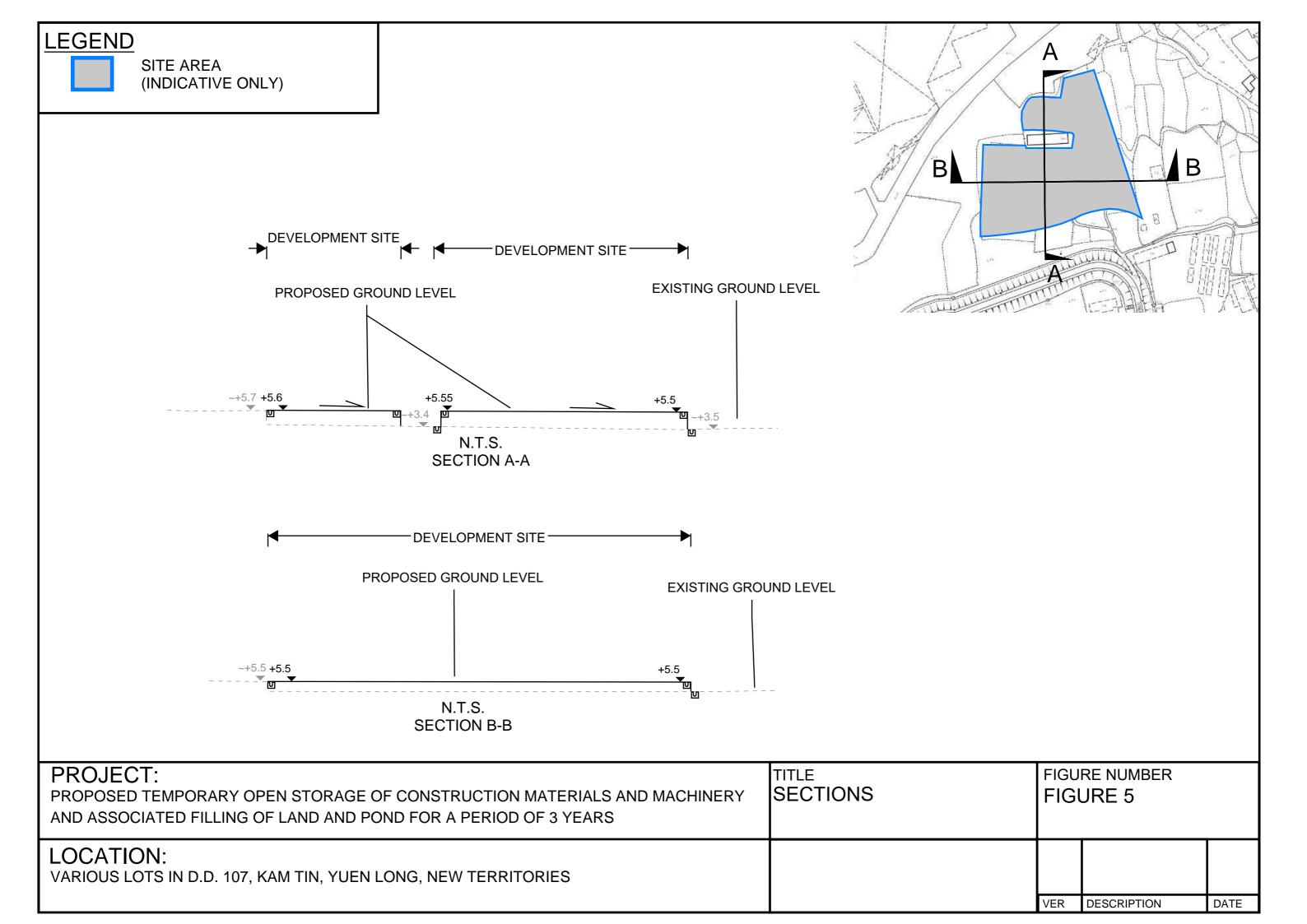




			DR	INAG	E SCH	IEDU	<u>LE</u>			
				Size	Gradient				U/S MH/PIT	
US MH/PIT	DS MH/PIT	USGL	DSGL	mm	1 in	Type	USIL	DSTL	TYPE	Remark
SP01	CP1.01	5.6	5.6	450	200	UC	5.15	5.06	SP	#SP: Start Point
CP1.01	CP1.02	5.6	5.6	450	200	UC	5.06	5.00	CP	
CP1.02	CP1.03	5.6	5.6	450	200	UC	5.00	4.91	CP	
CP1.03	CP1.04	5.6	5.6	450	200	UC	4.91	4.82	CP	
CP1.04	CP1.05	5.6	5.6	450	200	UC	4.82	4.78	CP	
CP1.05	CP1.06	5.6	5.6	450	200	PIPE	3.05	2.78	CP	
CP1.06	MANHOLE A	5.6	5.7	600	200	PIPE	2.78	2.77	CP	
SP02	CP2.01	5.6	5.6	450	300	UC	5.15	5.00	SP	
CP2.01	CP2.02	5.6	5.6	600	200	UC	5.00	4.87	CP	
CP2.02	CP2.03	5.6	5.6	600	200	UC	4.87	4.60	CP	
CP2.03	CP1.06	5.6	5.6	600	200	UC	4.60	4.39	CP	
SP03	CP1.04	5.6	5.6	450	200	UC	5.15	4.99	SP	
SP04	CP2.02	5.6	5.6	450	200	UC	5.15	5.10	SP	
SP05	CP5.01	5.6	5.6	525	200	UC	5.08	4.86	SP	
CP5.01	CP5.02	5.6	5.6	525	200	UC	4.86	4.37	CP	
CP5.02	CP1.06	5.6	5.6	525	200	UC	4.37	4.32	CP	
SP06	CP6.01	3.6	3.5	525	550	UC	3.08	2.90	SP	
CP6.01	CP6.02	3.5	3.5	525	450	UC	2.90	2.67	CP	
CP6.02	MANHOLE A	3.5	5.7	525	550	UC	2.67	2.65	CP	
SP07	CP1.05	3.5	5.6	300	200	UC	3.20	3.05	SP	

PROJECT: PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND MACHINERY AND ASSOCIATED FILLING OF LAND AND POND FOR A PERIOD OF 3 YEARS	TITLE FIGURE NUMBER PRAINAGE SCHEDULE FIGURE 3-2					
LOCATION: VARIOUS LOTS IN D.D. 107, KAM TIN, YUEN LONG, NEW TERRITORIES		VER	DESCRIPTION	DATE		





## **APPENDIX**

## Appendix A: Design Calculation

Zone							n	0.014				НКО а	505.5			
Н	IKO		Return Period	1 in	50	years	Ks	0.15		Storm Constant		HKO b	3.29			
		-				•	Viscosity	0.000001				НКО с	0.355			
Catchment Area Ta	able (Area in m²)							•	•		•			-•'		
Catchment	A1	A2	B1	B2	В3	B4										
Total Area	1617	4153	308	2517	3240	2532										
Hard Paved Area	1617	4153	308	0	0	0										
Unpaved Area	0	0	0	2517	3240	2532										
Equival. Area	1536.15	3945.35	292.6	880.95	1134	886.2										

Pavement Type	Hard Paved	Unpaved
Runoff Coefficient	0.95	0.35

Calculation Table of Drainage System

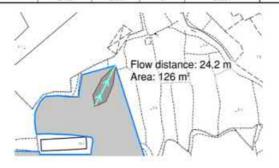
US MH/PIT	DS MH/PIT	US GL	DS GL	Size	Gradient	Type	US IL	DS IL	U/S MH/PIT	Length	V	Capacity	Catchments	Total Equivalent Area	ToC	Intensity		Utilitizatio	Remar
				mm	1 in				TYPE	m	m/s**	m³/s		m <sup>2</sup>	min	mm/hr#	Discharge m³/s	n	
SP01	CP1.01	5.60	5.60	450	200	UC	5.15	5.06	SP	17.4	1.47	0.26	A1	1536.15	3.00	292	0.12	47.1%	
CP1.01	CP1.02	5.60	5.60	450	200	UC	5.06	5.00	CP	11.9	1.47	0.26	A1	1536.15	3.20	289	0.12	46.6%	
CP1.02	CP1.03	5.60	5.60	450	200	UC	5.00	4.91	CP	18.2	1.47	0.26	A1	1536.15	3.33	287	0.12	46.3%	
CP1.03	CP1.04	5.60	5.60	450	200	UC	4.91	4.82	CP	19.4	1.47	0.26	A1	1536.15	3.54	284	0.12	45.8%	
CP1.04	CP1.05	5.60	5.60	450	200	UC	4.82	4.78	CP	7.5	1.47	0.26	A1,B1	1828.75	3.76	281	0.14	53.9%	
CP1.05	CP1.06	5.60	5.60	450	200	PIPE	3.05	2.78	CP	53.9	1.65	0.26	A1,B1	1828.75	3.85	280	0.14	54.1%	
CP1.06	MANHOLEA	5.60	5.70	600	200	PIPE	2.78	2.77	CP	3.4	1.98	0.56	A1,A2,B1	5774.10	4.79	268	0.43	76.9%	
SP02	CP2.01	5.60	5.60	450	300	UC	5.15	5.00	SP	45.6	1.20	0.22	A1	1536.15	3.00	292	0.12	57.7%	
CP2.01	CP2.02	5.60	5.60	600	200	UC	5.00	4.87	CP	26.5	1.78	0.57	A1,A2	5481.50	3.64	283	0.43	75.5%	
CP2.02	CP2.03	5.60	5.60	600	200	UC	4.87	4.60	CP	53.9	1.78	0.57	A1,A2	5481.50	3.88	279	0.43	74.5%	
CP2.03	CP1.06	5.60	5.60	600	200	UC	4.60	4.39	CP	42.2	1.78	0.57	A1,A2	5481.50	4.39	272	0.42	72.8%	
SP03	CP1.04	5.60	5.60	450	200	UC	5.15	4.99	SP	31.9	1.47	0.26	A1	1536.15	3.00	292	0.12	47.1%	
SP04	CP2.02	5.60	5.60	450	200	UC	5.15	5.10	SP	9.5	1.47	0.26	A1	1536.15	3.00	292	0.12	47.1%	
SP05	CP5.01	5.60	5.60	525	200	UC	5.08	4.86	SP	42.2	1.62	0.40	A2	3945.35	3.00	292	0.32	80.3%	
CP5.01	CP5.02	5.60	5.60	525	200	UC	4.86	4.37	CP	99.3	1.62	0.40	A2	3945.35	3.43	286	0.31	78.4%	
CP5.02	CP1.06	5.60	5.60	525	200	UC	4.37	4.32	CP	9	1.62	0.40	A2	3945.35	4.45	272	0.30	74.5%	
SP06	CP6.01	3.60	3.50	525	550	UC	3.08	2.90	SP	95	0.98	0.24	B3,B4	2020.20	3.00	292	0.16	68.1%	
CP6.01	CP6.02	3.50	3.50	525	450	UC	2.90	2.67	CP	105.2	1.08	0.27	B2,B3,B4	2901.15	4.62	270	0.22	81.6%	
CP6.02	MANHOLEA	3.50	5.70	525	550	UC	2.67	2.65	CP	11.6	0.98	0.24	B2,B3,B4	2901.15	6.24	252	0.20	84.5%	
SP07	CP1.05	3.50	5.60	300	200	UC	3.20	3.05	SP	29.2	1.12	0.09	B1	292.60	3.00	292	0.02	26.5%	
xisting 1500mm	n Pipe																		
Manhole A	Manhole B	5.70	5.78	1500	1142	PIPE	2.64	2.56	Existing	91.37	1.42	2.51	A1,A2,B1,B2,B3,B4	8675.25	6.43	250	0.60	24.1%	Existin
Manhole B	Manhole C	5.78	5.53	1500	1087	PIPE	2.56	2.49	Existing	76.09	1.46	2.58	A1,A2,B1,B2,B3,B4	8675.25	7.51	241	0.58	22.6%	Existi
Manhole C	Manhole D	5.53	5.11	1500	772	PIPE	2.49	2.42	Existing	54.05	1.74	3.07	A1,A2,B1,B2,B3,B4	8675.25	8.38	235	0.57	18.4%	Existi
Manhole D	Manhole E	5.11	5.01	1500	1300	PIPE	2.42	2.37	Existing	65.02	1.33	2.35	A1,A2,B1,B2,B3,B4	8675.25	8.89	231	0.56	23.7%	Existi
Manhole E	Existing Discharge Point	5.01	5.01	1500	267	PIPE	2.37	2.34	Existing	8	2.99	5.28	A1,A2,B1,B2,B3,B4	8675.25	9.71	226	0.54	10.3%	Existi

#SP: Start Point ##: With 11.1% rainfall increase as per Table 28 of SDM Corrigendum No. 1/2022.

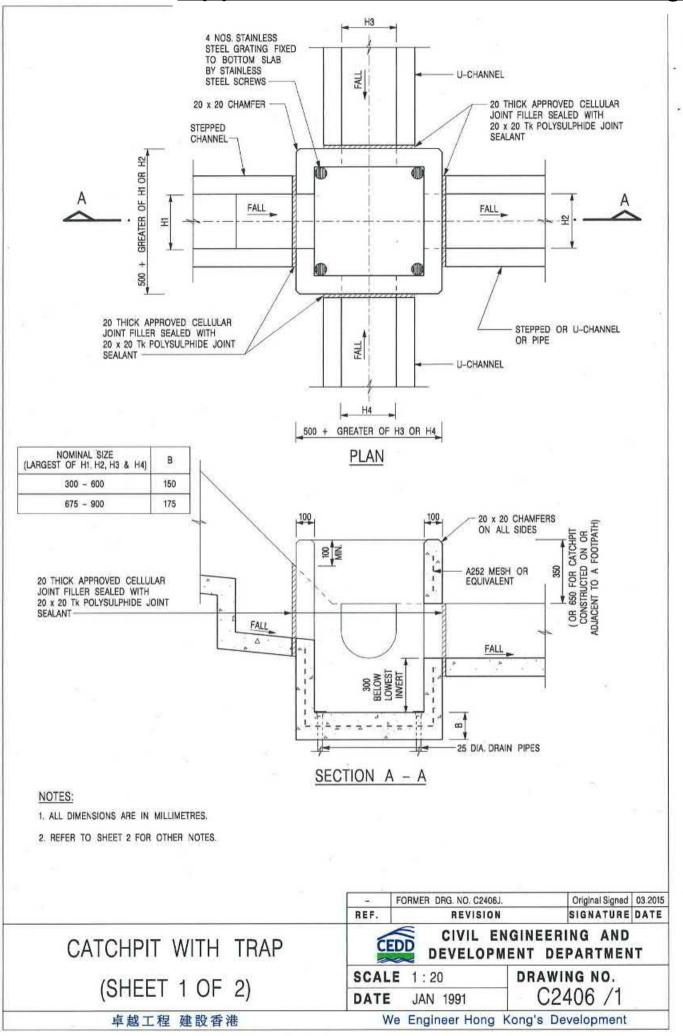
Existing 1500mm Pipes have enough capacity

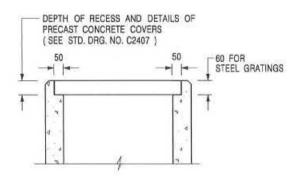
## Time of Concentration Checking

Catchment	Flow Distance	Highest Level	Launettauni	Gradient (per 100m) = (H1-H2)/L x 100	to (min) = 0.14465L/ (H <sup>0.3</sup> A <sup>0.1</sup> )	tc =
A	L	H1	H2			
(m2)	(m)	(mPD)	(mPD)		(min)	(min)
126	24.2	6.05	6	0.207	3.0	3.0



## Appendix B - Reference Drawings





## 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.
- UNLESS REQUESTED BY THE MAINTENANCE PARTY AND AS DIRECTED BY THE ENGINEER, CATCHPIT WITH TRAP IS NORMALLY NOT PREFERRED DUE TO PONDING PROBLEM.
- 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.
- 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.
- FOR RETROFITTING AN EXISTING CATCHPIT WITH STEEL GRATING, SEE DETAIL 'G' ON STD. DRG. NO. C2405 /4.
- 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) CEDD

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

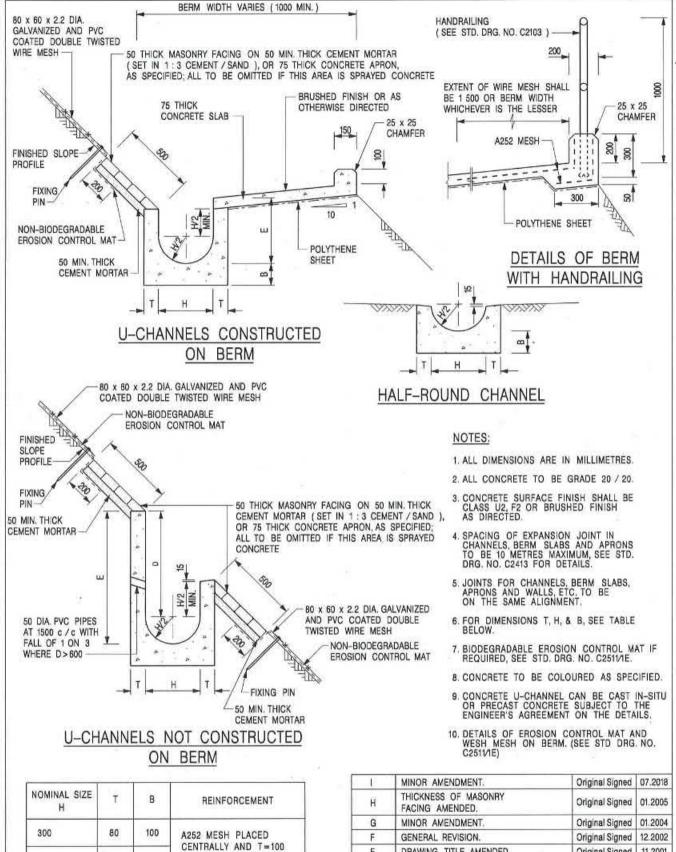
SCALE 1:20

JAN 1991

DATE

C2406 /2A

卓越工程 建設香港



ID	F-ROUN	HAL	OF	ILS	TAI	DE	
 Α	(TYPE	<b>IELS</b>	ANN	-CH	U-	AND	
)	APRON	NRY	ASOI	MA	TH	WI	

375 - 600

675 - 900

100

125

150

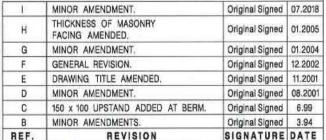
175

WHEN E > 650

CENTRALLY

A252 MESH PLACED

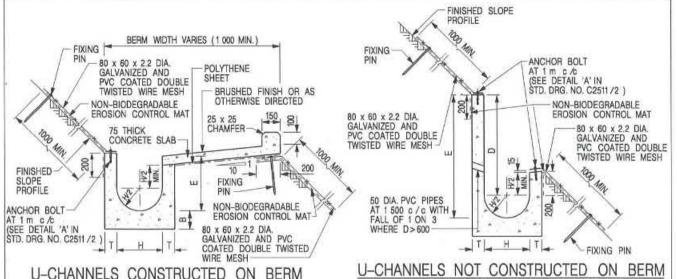
卓越工程 建設香港





### CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

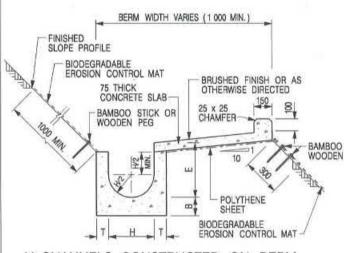
SCALE 1:25 DATE JAN 1991 DRAWING NO. C24091



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

WITH NON-BIODEGRADABLE EROSION CONTROL MAT

FINISHED SLOPE PROFILE



BIODEGRADABLE BAMBOO STICK OR WOODEN PEG EROSION CONTROL MAT BAMBOO STICK OR WOODEN PEG ш 50 DIA. PVC PIPES AT 1 500 c/c WITH FALL OF 1 ON 3 WHERE D>600 T TI Н BAMBOO STICK OR WOODEN PEG

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.
- CONCRETE SURFACE FINISH SHALL BE CLASS U2, F2 OR BRUSHED FINISH AS DIRECTED.
- SPACING OF EXPANSION JOINT IN CHANNELS, BERM SLABS AND APPONS 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.
- 10. THE FIXING DETAILS OF NON-BIODEGRADABLE AND BIODEGRADABLE EROSION CONTROL MATS ON EXISTING BERM SHALL REFER TO STD. DRG. NO. C251141.

Original Signed

Original Signed

Original Signed

Original Signed

Original Signed

07.2018

12.2017

01.2005

01.2004

12.2002

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

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

	ć	CIVIL ENGINEER DEVELOPMENT DE		IT
l	REF.	REVISION	SIGNATURE	DATE
	A	MINOR AMENDMENT.	Original Signed	10.92
	В	MINOR AMENDMENT.	Original Signed	3.94
	C	150 x 100 UPSTAND ADDED AT BERM.	Original Signed	6.99
	D	MINOR AMENDMENT.	Original Signed	08.2001

FIXING DETAILS OF BIODEGRADABLE

EROSION CONTROL MAT ADDED. DIMENSION TABLE AMENDED

MINOR AMENDMENT.

MINOR AMENDMENT

GENERAL REVISION.

Н

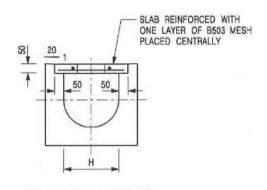
G

F

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

卓越工程 建設香港

DRAWING NO. SCALE DIAGRAMMATIC C24101 DATE JAN 1991



GRADE 20 / 20 PRECAST CONCRETE
SLAB WITH F2 FINISH

15 x 15 CORNER FILLETS
ON ALL EDGES

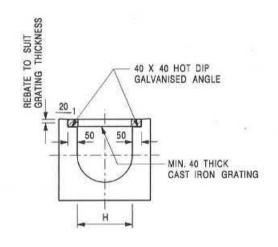
600

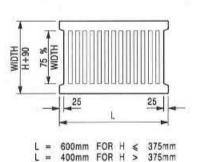
PLAN OF SLAB

### TYPICAL SECTION

## U-CHANNELS WITH PRECAST CONCRETE SLABS

(UP TO H OF 525)





#### TYPICAL SECTION

## 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.
- ALL CAST IRON FOR GRATINGS SHALL BE GRADE EN-GJL-150 COMPLYING WITH BS EN 1561.
- 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
A	CAST IRON GRATING AMENDED.	Original Signed	
В	NAME OF DEPARTMENT AMENDED.	Original Signed	01.2005
C	MINOR AMENDMENT, NOTE 3 ADDED.	Original Signed	
D	NOTE 4 ADDED.	Original Signed	
E	NOTES 3 & 4 AMENDED.	Original Signed	

## COVER SLAB AND CAST IRON GRATING FOR CHANNELS

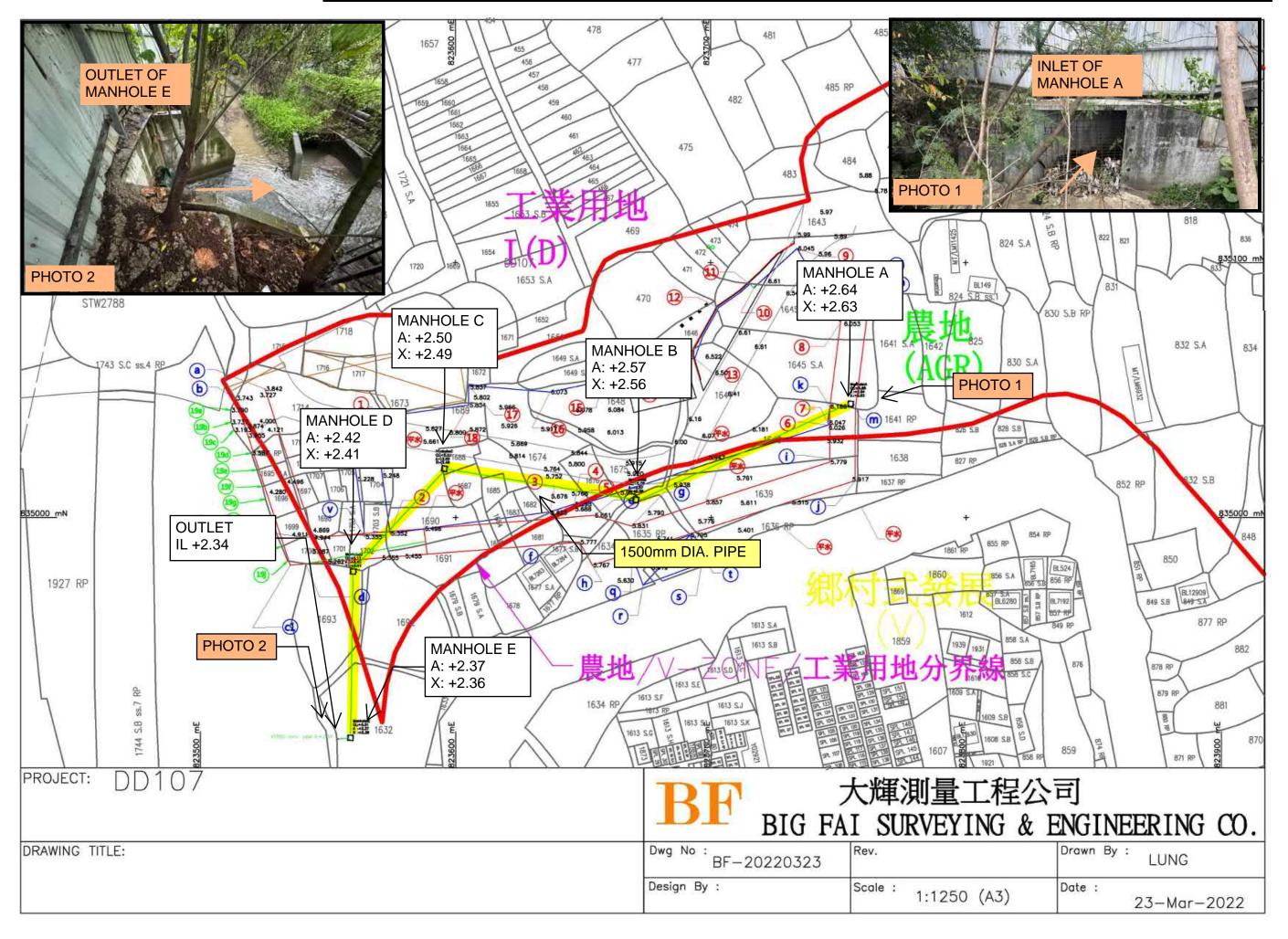


## CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE	1:20	DRAWING NO.
DATE	JAN 1991	C2412E

卓越工程 建設香港

## APPENDIX C -ASBUILT SURVEY RECORD OF EXISTING 1500mm DIA. PIPE



Proposed Temporary Open Storage of Construction Materials and Machinery and Associated Filling of Land and Pond for a Period of 3 Years in "Agriculture" Zone, Various Lots in D.D. 107, Kam Tin, Yuen Long, New Territories				
Annex III				
Tree Survey				
·				

# Tree Survey Report of Various Lots in D.D. 107, Kam Tin, Yuen Long, New Territories

Prepared by:

Wong Wai Chun AA- Technician Member

Report Date: 29th August 2025

## 1) INTRODUCTION

We are commissioned to prepare a tree survey report to record the health condition of the existing trees at the proposed survey area at Various Lots in D.D. 107, Kam Tin, Yuen Long, New Territories

#### 2) DATE OF INSPECTION

The inspections were conducted on 23th August 2025.

## 3) SITE ADDRESS AND LOCATIONS OF TREES

The inspected trees were located at the designated working area at Various Lots in D.D. 107, Kam Tin, Yuen Long, New Territories. Please find the Tree Location Plan in Appendix C.

## 4) METHODOLOGY OF TREE INSPECTION

The tree inspection basically adopted the Visual Tree Assessment (VTA) techniques. All vegetation present with a trunk diameter larger than 95mm when measured at a point 1300mm above ground level was considered as a 'tree'. These have been surveyed and identified with the information recorded on the following pages. The tree assessment is undertaken in accordance with the 'Development Bureau Technical Circular (Works) No. 4/2020 Tree preservation' and 'Guidelines for Tree Risk Assessment and Management Arrangement' (4/2020 9<sup>th</sup> Edition) from the Greening, Landscape and Tree Management Section of Development Bureau.

- (A) Tree ID No.: The individual trees have been tagged on site using weatherproof labels with the abbreviated number T- which correspond with those in survey plans.
- (B) Species: The botanical and Chinese names of the trees have been used

for ease of reference. The botanical name takes precedence wherever there is any ambiguity.

- (C) Tree Size:
  - (1) Overall height: Height measured in meters from ground level to the top of the tallest branch.
  - (2) Trunk Diameter: Diameter of the main trunk measured in millimeters at 1.3 m high above ground level.
  - (3) Crown Spread : Average diameter of the foliage canopy.
- (D) Form:
  - (1) Good Well-balanced crown and straight strong trunk(s);
  - (2) Fair Slightly unbalanced crown and non-straight trunk(s);
  - (3) Poor Misshapen or awkwardly forked trunk and/or unbalanced crown.
- (G) Health: The health condition of each tree shall be evaluated according to the following criteria (Webb 1991):
  - (1) Good Trees of good form, moderate to large size and in good health are classified as *good*;
  - (2) Fair Trees of reasonable form, with few or no visible defects or health problems are classified as being *fair*;
  - (3) Poor Trees that are of poor form, badly damaged or clearly suffering from decay, dying back or the effects of very heavy vine growth are classified as *poor*.

- (H) Amenity Value: The Amenity Value rating is the intrinsic value of each tree derived from the combination of the tree's health and form, cultural significance and the economic value contributed to the property owner/community. The following ratings are developed in conjunction with 'Development Bureau Technical Circular (Works) No.4/2020 Tree preservation'.
  - (1) High Trees included in the Register of Old and Valuable Trees
    (OVT) under the Works Branch of Development Bureau
    OR similar trees potentially registrable under the same
    criteria OR trees of particular value as specified under
    lease or property owner's consent
  - (2) Moderate Non-invasive, healthy trees with fair health and form which contribute to the local greenery and have a fair chance of surviving and growing if optimal conditions are favored
  - (3) Low Trees with poor health and form or with declining conditions OR invasive species which can potentially threaten other native species OR hazardous trees causing public safety concerns

Photographic record in JPEG format showing the overall view from the trunk base up to the canopy of each surveyed tree shall be attached at the end of the tree survey report.

All surveyed trees shall be marked on Tree Survey Plans with their tree ID.

The biographical information for the trees is as per attached Tree Assessment Schedule. Please refer to **Appendix A**.

The photographic record of individual trees are referred to **Appendix B**.

The location plan of surveyed trees is referred to **Appendix C.** 

## 5) FINDINGS

There was total 4 trees observed at the designated working area at Various Lots in D.D. 107, Kam Tin, Yuen Long, New Territories. No Old and Valuable Tree (OVT) or rare tree species could be found. No tree failure was observed.

Exposed root was found on T1. Overall condition was fair during the time of inspection.

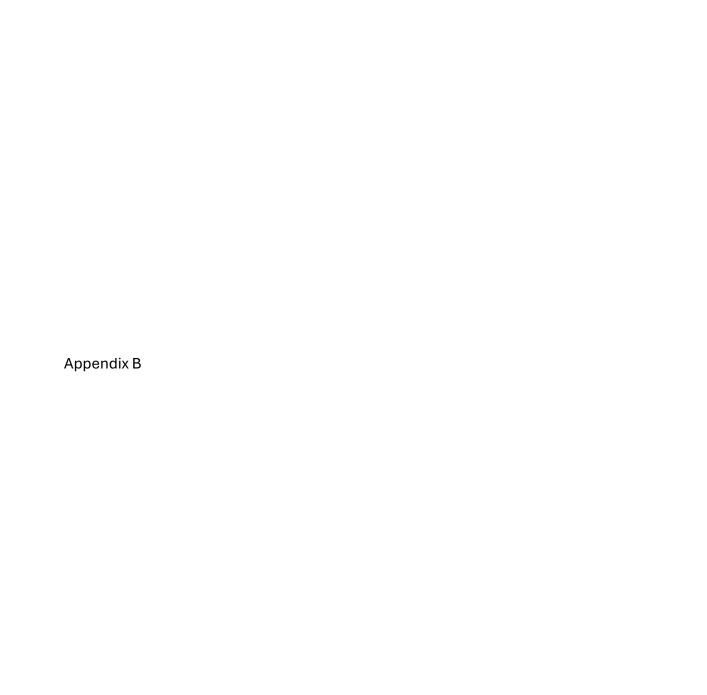


### Tree survey schedule

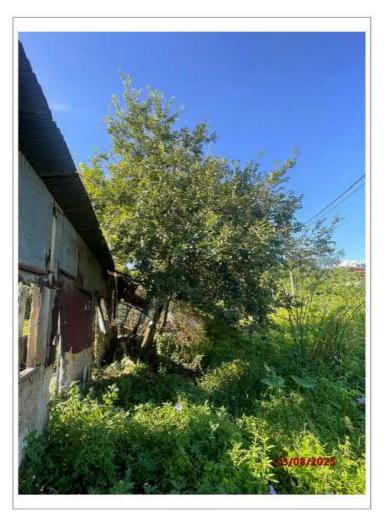
Location: Various Lots in D.D. 107, Kam Tin, Yuen Long, New Territories

Date: 23-Aug-25

		Size			Status					
Tree No.	Species:		Overall Height(m)	Diameter (mm)	Spread (m)	Health Condition (Good, Fair, Poor, Dead)	Form (Good, Fair, Poor)	Amenity Value (High, Medium, Low)	Observable Defects / Damages of Trees	Remarks:
T01	Celtis sinensis	朴	6	451	6	F	P	L	Co-dominant trunks, Wound, Restricted root, Exposed root	
T02	Bridelia tomentosa	土蜜樹	4	162	4	F	P	L	Co-dominant trubnks, Wound	
T03	Mangifera indica	芒果	5	247	4	F	F	M	Wound	
T04	Dimocarpus longan	龍眼	4	141	4	F	P	L	Co-dominant trunks	







T1 (1)





T1 (3)





T2 (1) T2 (2)





T2 (3)





T3 (1)





T3 (3)





T4 (1)

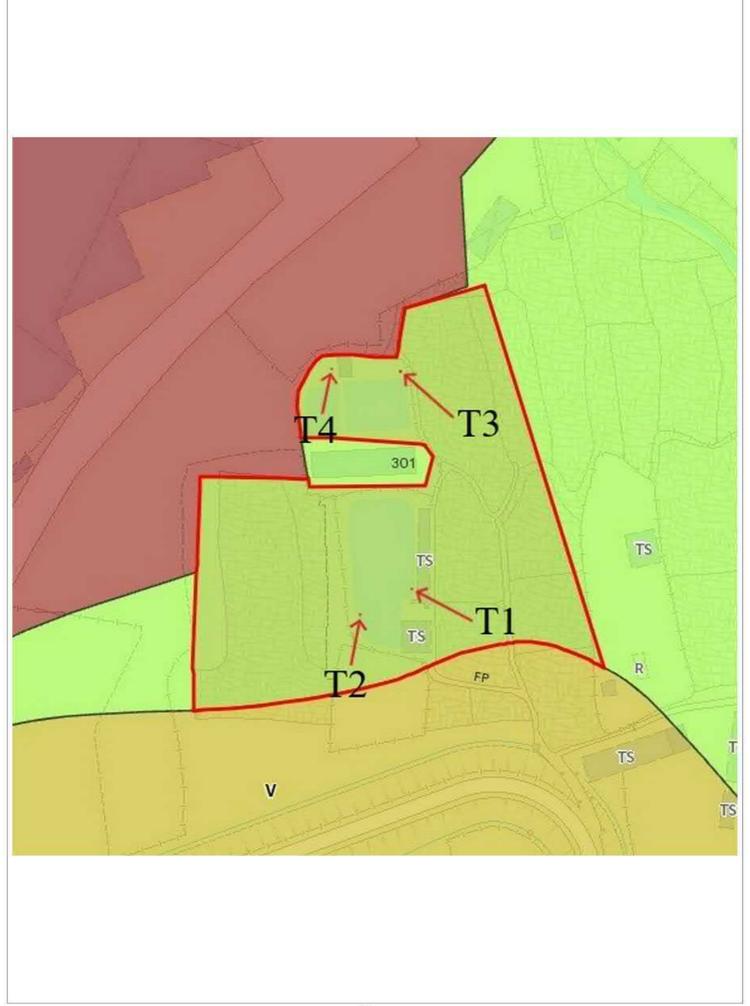




T4 (3)



## **Tree Location Plan**



n Tin, Yuen Long, I	ivew letritories		
	Annex IV		
	Landanana Duana	امما	
	Landscape Propo	sai	

#### LANDSCAPE PROPOSAL

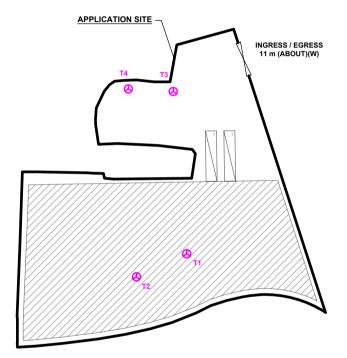
APPLICATION SITE AREA : 5,770 m² (ABOUT)

NO. OF EXISTING TREES : 4 (E1 TO E4)

SPECIES OF TREE : CELTIS SINENSIS (E1) : BRIDELIA TOMENTOSA (E2)

: BRIDELIA TOMENTOSA (E2) : MANGIFERA INDICA (E3) : DIMOCARPUS LONGAN (E4)

NO. OF TREES TO BE FELLED : 4 (E1 TO E4)



#### LANDSCAPE PROPOSAL

 APPLICATION SITE AREA
 : 5,770 m²
 (ABOUT)

 COVERED AREA
 : NOT APPLICABLE

 UNCOVERED AREA
 : 5,770 m²
 (ABOUT)

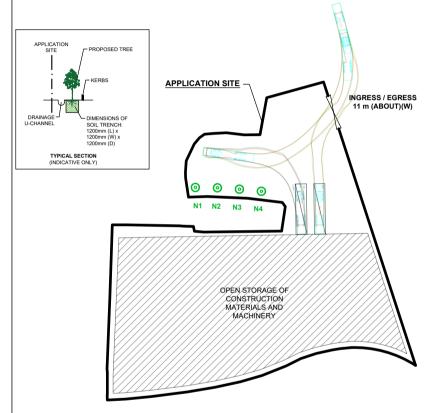
 NO. OF NEW TREES WILL BE PLANTED
 : 4 (N1 TO N4)

 SPECIES OF NEW TREES
 : \$\bar{POLYSPORA AXILLARIS}\$

 HEIGHT OF NEW TREES
 : NO LESS THAN 2.75 m

 SPACING OF NEW TREES
 : NOT LESS THAN 6 m

 DIMENSION OF SOIL TRENCH
 : 1.2 m (L) X 1.2 m (W) 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 CONSTRUCTION MATERIALS AND MACHINERY AND ASSOCIATED FILLING OF LAND AND POND FOR A PERIOD OF 3 YEARS

SITE LOCATIO

VARIOUS LOTS IN D.D. 107, KAM TIN, YUEN LONG, NEW TERRITORIES

APPLICATION SITE

L/UL SPACE (CV)

LEGEND

INGRESS / EGRESS

CONTAINER VEHICLE

SWEPT PATH OF VEHICLE

PROPOSED NEW TREES

LANDSCAPE PROPOSAL

DWG NO. VER.

ANNEX IV 001

LEGEND

APPLICATION SITE

EXISTING TREE

### **LIST OF PLANS**

Plan 1 Filling of Land

