This document is received on - 2 FEB 2024

The Town Planning Board will formally acknowledge the date of receipt of the application only upon receipt of all the required information and documents.

Form No. S16-III 表格第 S16-III 號

# APPLICATION FOR PERMISSION UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE (CAP. 131)

根據《城市規劃條例》(第131章) 第16條遞交的許可申請

Applicable to Proposal Only Involving Temporary Use/Development of Land and/or Building Not Exceeding 3 Years in Rural Areas or Regulated Areas, or Renewal of Permission for such Temporary Use or Development\*

適用於祇涉及位於鄉郊地區或受規管地區土地上及/或建築物內進行 為期不超過三年的臨時用途/發展或該等臨時用途/發展的許可續期的建議\*

\*Form No. S16-I should be used for other Temporary Use/Development of Land and/or Building (e.g. temporary use/developments in the Urban Area) and Renewal of Permission for such Temporary Use or Development.

\*其他土地上及/或建築物內的臨時用途/發展 (例如位於市區內的臨時用途或發展)及有關該等臨時用途/發展的許可續期,應使用表格第S16-I 號。

Applicant who would like to publish the <u>notice of application</u> in local newspapers to meet one of the Town Planning Board's requirements of taking reasonable steps to obtain consent of or give notification to the current land owner, please refer to the following link regarding publishing the notice in the designated newspapers: <a href="https://www.tpb.gov.hk/en/plan">https://www.tpb.gov.hk/en/plan</a> application/apply.html

中請人如欲在本地報章刊登<u>申請通知</u>,以採取城市規劃委員會就取得現行上地擁有人的同意或通知現行土地擁有人所指定的其中一項合理步驟,請瀏覽以下網址有關在指定的報章刊登通知: https://www.tpb.gov.hk/tc/plan\_application/apply.html

# General Note and Annotation for the Form 填寫表格的一般指引及註解

- "Current land owner" means any person whose name is registered in the Land Registry as that of an owner of the land to which the application relates, as at 6 weeks before the application is made
  - 「現行上地擁有人」指在提出申請前六星期,其姓名或名稱已在土地註冊處註冊為該申請所關手的 土地的擁有人的人
- 《 Please attach documentary proof 請夾附證明文件
- ^ Please insert number where appropriate 請在適當地方註明編號

Please fill "NA" for inapplicable item 請在下適用的項目填寫「下適用」

Please use separate sheets if the space provided is insufficient 如所提供的空間不足,請另頁認明 Please insert a \_ r\_ at the appropriate box \_ 請在適當的方格內上加上了 \_ r\_ 號

For Official Use Only	Application No. 申請編號	A/YLKTN/989	
For Official Use Only 請勿填寫此欄	Date Received 收到日期	- 2 FEB 2024	

- 1. The completed form and supporting documents (if any) should be sent to the Secretary, Town Planning Board (the Board), 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong. 申請人須把填妥的申請表格及其他支持申請的文件(倘有),送交香港北角渣華道 333 號北角政府合署 15 樓城市規劃委員會(下稱「委員會」)秘書收。
- 2. Please read the "Guidance Notes" carefully before you fill in this form. The document can be downloaded from the Board's website at <a href="http://www.tpb.gov.hk/">http://www.tpb.gov.hk/</a>. It can also be obtained from the Secretariat of the Board at 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong (Tel: 2231 4810 or 2231 4835), and the Planning Enquiry Counters of the Planning Department (Hotline: 2231 5000) (17/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong and 14/F, Sha Tin Government Offices, 1 Sheung Wo Che Road, Sha Tin, New Territories). 請先細閱《申請須知》的資料單張,然後填寫此表格。該份文件可從委員會的網頁下載(網址: <a href="http://www.tpb.gov.hk/">http://www.tpb.gov.hk/</a>),亦可向委員會秘書處(香港北角渣華道 333 號北角政府合署 15 樓 電話: 2231 4810 或 2231 4835)及規劃資料查詢處(熱線: 2231 5000) (香港北角渣華道 333 號北角政府合署 17 樓及新界沙田上禾養路 1 號沙田政府合署 14 樓)索取。
- 3. This form can be downloaded from the Board's website, and obtained from the Secretariat of the Board and the Planning Enquiry Counters of the Planning Department. The form should be typed or completed in block letters. The processing of the application may be refused if the required information or the required copies are incomplete. 此表格可從委員會的網頁下載,亦可向委員會秘書處及規劃署的規劃資料查詢處索取。申請人須以打印方式或以正楷填寫表格。如果申請人所提交的資料或文件副本不齊全,委員會可拒絕處理有關申請。

1.	Name of Applicant	申請人姓名/名和	£
A.	Name of Applicant	中明八年一一一	4

(☑Mr. 先生 /□Mrs. 夫人 /□Miss 小姐 /□Ms. 女士 /□Company 公司 /□Organisation 機構 )

TANG Tsz Ki 鄧子其

,	Name of Authorised A	Agent (if annlicable)	獲將繼代理人	此夕/夕稲	(如適用)
۷.	Name of Authorised A	Agent (II applicable)	1度1又作11年八	姓口/口得	

(□Mr. 先生 /□Mrs. 夫人 /□Miss 小姐 /□Ms. 女士 /□Company 公司 /□Organisation 機構 )

NA 不適用

3.	Application Site 申請地點	
(a)	Full address / location / demarcation district and lot number (if applicable) 詳細地址/地點/丈量約份及地段號碼(如適用)	Lots 1051RP (Part), 1052 and 1057 in D.D. 109, Kam Tin, Yuen Long 新界元朗錦田丈量約份第109約地段第1051號餘段(部分)、第 1052號及第1057號
(b)	Site area and/or gross floor area involved 涉及的地盤面積及/或總樓面面 積	②Site area 地盤面積 2,899.2 sq.m 平方米☑Aboút 約 ☑Gross floor area 總樓面面積 757.9 sq.m 平方米☑About 約
(c)	Area of Government land included (if any) 所包括的政府土地面積(倘有)	NA 不適用 sq.m 平方米 □About 約

(d)	Name and no statutory plan 有關法定圖則	(s)		APPR	北分區: ROVED I S/YL-KT	KAM TI					/11 NG PLAN	1	
(e)	Land use zone 涉及的上地自	STATE OF STATE OF STATE OF	ed				"Agric						
(f)	Current use(s 現時用途			plan at	nd specify	the use a	ind gross	ant stitution	ea)			olease illustrate c 途及總樓面面積	
4.	"Current L	and Ow	ner" of A	pplica	tion Si	te 申詢	青地黑	占的「	現行	土地	摊有人		
The	applicant 申請	人 -											
-	is the sole "cur 是唯一的「現	rent land ( 行土地擁	owner"** (ple 有人』** (評	ease pro 青繼續均	oceed to 真寫第 6	Part 6 ar 部分,	d attach 位夾附粪	docum 挨權證明	ientary p 月文件)	proof o	of ownersh	nip).	
	is one of the "c 是其中一名「	urrent lan 現行土地	d owners``"& 擁有人」*&	(please (請夾附	attach d 付業權證	ocumen 明文件)	ary pro	ofofov	vnership	).			
~	is not a "currer 並不是「現行												
	The applicatio 申請地點完全						oceed to	Part 6	).				
5.	Statement (	ran ili oro				502	-d- \-D-						
	就土地擁												_
(a)	involves a tota 根據上地註冊	ll of   處截至		current l	and own	er(s) "".						this applicatio 這宗申請共對	
(b)	The applicant	申請人 -											
			nt(s) of		"current	land ow	ner(s)"						
			名「									4	
	Details	of consent	of "current l	land ow	ner(s)" =	obtained	取得	「現行	土地推	有人	"同意的	計計	
	Land Ov	土地擁有	Lot number/ Registry wh 根據土地註	nere con	sent(s) ha	s have b	een obta	ined		and .	Date of co (DD/MM 取得同意 (日 月/年	的日期	
	(Please us	e separate s	heets if the spa	pace of ar	ıy box abo	ove is ins	ufficient.	如上的	任何方	各的空	"閒下足。"	消另頁說明)	_

	Details	of the "cur	rent land owner(s	)" " notified	已獲通知	現行上地拉	唯有人"	的詳細資料
	Land C	'Current wner(s)' 于土地擁 數目	Lot number/addi Land Registry w 根據土地註冊處	here notificat	tion(s) has/ha	ave been giv	en	Date of notification given (DD/MM/YYYY) 通知日期(日/月/年)
				.77		•		
	(Please u	se separate s	heets if the space of	any box above	e is insufficier	nt. 如上列任	可方格的空	E間不足,請另頁說明)
<b>V</b>			e steps to obtain c 取得土地擁有人					
	Reasona	ble Steps to	Obtain Consent	of Owner(s)	取得土地拉	確有人的同意	意所採取的	的合理步驟
	□ sen	t request fo	or consent to the "c	current land o 年)向每一名	owner(s)" on 「現行土地	擁有人」"郵	『遞要求同	(DD/MM/YYYY) <sup>#8</sup> 引意書 <sup>&amp;</sup>
	Reasona	ble Steps to	Give Notification	n to Owner(s	) 向土地接	有人發出建	角知所採耳	2的合理步骤
			ces in local newsp					YY). <sup>&amp;</sup>
			in a prominent pos		ear application	on site/prem	ises on	
	疗令	05/01/202	4 (日/月/	年)在申請地	點/申請處	所或附近的	顧明位置	贴出關於該申請的通
	off	t notice to ice(s) or ru 05/01/202	ral committee on	05/01/2024	(I	DD/MM/YY	YY)&	committee(s)/manage
			的鄉事委員會&	子力し趣から	0 IT (0)001135	K I II IK / A		, NE LINANE A
	Others	其他						
-		ers (please 也(請指明	1000					
	***********							

	LL John Street Half		
6. Type(s) of Applicatio	n 申請類別		
Regulated Areas 位於鄉郊地區或受規管 (For Renewal of Permiss proceed to Part (B))	地區土地上及/或建築物內遊	ilding Not Exceeding 3 Year 進行為期不超過三年的臨時用 velopment in Rural Areas or Ro 午可續期,請填寫(B)部分)	途/發展
(a) Proposed use(s)/development 擬議用途/發展	with Ancillary Facilities f 擬議臨時貨倉(危險品	rehouse (excluding Dangerous Goo for a Period of 3 Years and Filling o 倉庫除外)連附屬設施(為期3年 proposal on a layout plan) (請用平面)	of Land )及填土工程
(b) Effective period of permission applied for 申請的許可有效期	☑ year(s) 年 □ month(s) 個月	3	
(c) Development Schedule 發展經	细節表		
Proposed uncovered land area	1 擬議露天土地面積	757 9	sq.m ☑About 約
Proposed covered land area 找			sq.m 🛮 About 約
Proposed number of buildings	s/structures 擬議建築物/構築物	勿數目	
Proposed domestic floor area	擬議住用樓面面積	NA 不適用	sq.m □About 約
Proposed non-domestic floor	area 擬議非住用樓面面積	757.9	sq.m 🛭 About 約
Proposed gross floor area 擬語	義總樓面面積	757.9	sq.m ☑About 禁
	e separate sheets if the space belo	res (if applicable) 建築物/構築物的 ow is insufficient) (如以下空間不	足,請另頁說明)
Proposed number of car parking	spaces by types 不同種類停車位	立的擬議數目	
Private Car Parking Spaces 私家		2	
Motorcycle Parking Spaces 電單			***************************************
Light Goods Vehicle Parking Spa Medium Goods Vehicle Parking			
Heavy Goods Vehicle Parking Sp			
Others (Please Specify) 其他 (言		***************************************	***************************************
	14 - 4 may 0		
Proposed number of loading unlo	pading spaces 上落客貨車位的模	<b>延議數</b> 目	
Taxi Spaces 的上車位	The second of the second	8	
Coach Spaces 旅遊巴車位		***************************************	
Light Goods Vehicle Spaces 輕力	型貨車車位	2	
Medium Goods Vehicle Spaces		NAMES AND ADDRESS OF THE PARTY OF	
Heavy Goods Vehicle Spaces		***************************************	************
Others (Please Specify) 其他 (言	青夕[15月]		

9:0		Mondays to Sa	turdays with no operation on Sundays and public holidays. 日及公眾假期休息。
(d)	Any vehicular accest the site/subject buildi 是否有車路通往地有關建築物?	ng?	▼ 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)) Kong Tai Road, turn to local track. 江大路,轉到郊區小徑。  □ There is a proposed access. (please illustrate on plan and specify the width) 有一條擬議車路。(請在圖則顯示,並註明車路的闊度)
′	**	No 否	
(e)	(If necessary, please u	se separate shee for not providin	議發展計劃的影響 ts to indicate the proposed measures to minimise possible adverse impacts or give g 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	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?	No 否	Please indicate on site plan the boundary of concerned land/pond(s), and particulars of stream liversion, the extent of filling of land/pond(s) and/or excavation of land)  請用地盤平而圖顯示有關土地/池塘界線、以及河道改道、填地、填土及/或挖土的細節及/或範圍)  Diversion of stream 河道改道  Filling of pond 填塘  Area of filling 填塘深度
(iii)	Would the development proposal cause any adverse impacts? 擬議發展計劃會否造成不良影響?	Landscape Imp Tree Felling Visual Impact	E通       Yes 會 □       No 不會 ☑         ly 對供水       Yes 會 □       No 不會 ☑         対排水       Yes 會 □       No 不會 ☑         以收       Yes 會 □       No 不會 ☑         popes 受斜坡影響       Yes 會 □       No 不會 ☑         pact 構成景觀影響       Yes 會 □       No 不會 ☑

diamet 請註明 幹直徑 (B) Renewal of Permission fo	state measure(s) to minimise the impact(s). For tree felling, please state the number, er at breast height and species of the affected trees (if possible) 温盡量減少影響的措施。如涉及砍伐樹木、請說明受影響樹木的數目、及胸高度的樹及品種(倘可)  Temporary Use or Development in Rural Areas or Regulated Areas 區臨時用途/發展的許可續期
(a) Application number to which the permission relates 與許可有關的申請編號	A//
(b) Date of approval 獲批給許可的日期	(DD 日/MM 月/YYYY 年)
(c) Date of expiry 許可屆滿日期	(DD 日/MM 月/YYYY 年)
(d) Approved use development 已批給許可的用途/發展	
(e) Approval conditions 附帶條件	The permission does not have any approval condition 許可並沒有任何附帶條件 Applicant has complied with all the approval conditions 申請人已履行全部附帶條件 Applicant has not yet complied with the following approval condition(s): 申請人仍未履行下例附帶條件:  Reason(s) for non-compliance: 仍未履行的原因:
(f) Renewal period sought 要求的衛河即出	year(s) 年  month(s) 個月

7. Justifications 理由	
The applicant is invited to provide justifications in support of the application. Use separate sheets if necessary. 現請申請人提供申請理由及支持其申請的資料。如有需要,請另頁說明)	
Please refer to the Justification Document.	
**************************************	
	,
	104040
	cre
	***
***************************************	
	191
***************************************	• • •
	* * *
	****

		Form No. S16-III 表格第 S16-III 號
8. Declaration 聲明		
I hereby declare that the particu 本人謹此聲明,本人就這宗日		on are correct and true to the best of my knowledge and belief. 新知及所信,均屬真實無誤。
to the Board's website for brow	sing and downloading by t	terials submitted in this application and/or to upload such materials he public free-of-charge at the Board's discretion. 資料複製及 或上載至委員會網站,供公眾免費瀏覽或下載
Signature 簽署	2	☑ Applicant 申請人 / □ Authorised Agent 獲授權代理人
	<b>鄧子</b> 其	NA 不適用
	e in Block Letters (請以正楷填寫)	Position (if applicable) 職位 (如適用)
Professional Qualification(s) 專業資格	<ul><li>☐ HKIS 香港測量師</li><li>☐ HKILA 香港園境</li><li>☐ RPP 註冊專業規劃的</li></ul>	市學會/ ☐ HKIA 香港建築師學會/ 「學會/ ☐ HKIE 香港工程師學會/ 師學會/ ☐ HKIUD 香港城市設計學會
on behalf of 代表	***************************************	
Company 公司	Organisation Nam	ne and Chop (if applicable) 機構名稱及蓋章(如適用)
Date 日期 19/01/2		(DD/MM/YYYY 日/月/年)
	Rei	mark 備註
cooks II on a Mar word		
		d's decision on the application would be disclosed to the public.
		會對申請所作的決定 在委員會認為台適的情况下,有關申請
	Wa	rning 警告

Any person who knowingly or wilfully makes any statement or furnish any information in connection with this application, which is false in any material particular, shall be liable to an offence under the Crimes Ordinance. 任何人在明知或故意的情况下,就這宗申請提出在任何要項上是虛假的陳述或資料,即屬違反《刑事罪行條例》

### Statement on Personal Data 個人資料的聲明

1. The personal data submitted to the Board in this application will be used by the Secretary of the Board and Government departments for the following purposes: 委員會就這宗申請所收到的個人資料會交給委員會秘書及政府部門,以根據《城市規劃條例》及相關的城市規

劃委員會規劃指引的規定作以下用途:

1

- (a) the processing of this application which includes making available the name of the applicant for public inspection when making available this application for public inspection; and 處理這宗申請,包括公布這宗申請供公眾查閱,同時公布申請人的姓名供公眾查閱:以及
- (b) facilitating communication between the applicant and the Secretary of the Board Government departments. 方便申請人與委員會秘書及政府部門之間進行聯絡
- 2. The personal data provided by the applicant in this application may also be disclosed to other persons for the purposes mentioned in paragraph 1 above.
  申請人就追宗申請提供的個人資料,或亦會向其他人上披露,以作上她第 1 段提及的用途。
- 3 An applicant has a right of access and correction with respect to his her personal data as provided under the Personal Data (Privacy) Ordinance (Cap. 486). Request for personal data access and correction should be addressed to the Secretary of the Board at 15 F. North Point Government Offices, 333 Java Road, North Point, Hong Kong. 根據 (個人資料(私隱)條例) (第 486 章)的規定,申請人有權查閱及更正其個人資料。如欲查閱及更正個人資料。應向委員會秘書提出有關要求,其地址為香港之角清華道 333 號北角政府合署 15 樓

# Gist of Application 申請摘要 (Please provide details in both English and Chinese as far as possible. This part will be circulated to relevant consultees, uploaded to the Town Planning Board's Website for browsing and free downloading by the public and available at the Planning Enquiry Counters of the Planning Department for general information.) (請盡量以英文及中文填寫。此部分將會發送于相關諮詢人士、上載至城市規劃委員會網頁供公眾免費瀏覽及下載及於規劃署規劃資料查詢處供一般參閱。) (For Official Use Only) (請勿填寫此欄) Application No. 申請編號 Location/address Lots 1051RP (Part), 1052 and 1057 in D.D. 109, Kam Tin, Yuen Long 位置/地址 新界元朗錦田丈量約份第109約地段第1051號餘段(部分),第1052號及 第1057號 Site area 2,899.2 sq. m 平方米 ☑ About 约 地盤面積 (includes Government land of 包括政府土地 NA 不適用 sq. m 平方米 口 About 約) Plan 錦田北分區計劃大網核准圖編號 S/YL-KTN/11 圖則 APPROVED KAM TIN NORTH OUTLINE ZONING PLAN NO. S/YL-KTN/11 Zoning 地帶 「農業」 "Agriculture" Type of Temporary Use/Development in Rural Areas or Regulated Areas for a Period of Application 位於鄉郊地區或受規管地區的臨時用途/發展為期 申請類別 ☑ Year(s) 年 □ Month(s) 月 Renewal of Planning Approval for Temporary Use/Development in Rural Areas or Regulated Areas for a Period of 位於鄉郊地區或受規管地區臨時用途/發展的規劃許可續期為期 $\square$ Month(s) $\exists$ □ Year(s) 年 Applied use/

with Ancillary Facilities for a Period of 3 Years and Filling of Land 擬議臨時貨倉 (危險品倉庫除外)連附屬設施 (為期3年)及填土工程

Proposed Temporary Warehouse (excluding Dangerous Goods Godown)

development 申請用途/發展

Gross floor area sq.m 平方米 Plot Ratio 地積比率 and/or plot ratio Domestic ☐ About 約 □About ≝1 總樓面面積及/或 住用 NA不適用 ☐ Not more than NA不適用 □Not more than 地積比率 下多於 不多於 ☑About ⅔ Non-domestic About #1 0.26 非件用 757.9 ☐ Not more than □Not more than 不多於 不多於 No. of blocks Domestic 幢數 住用 NA不適用 Non-domestic 非住用 6 (iii) Building height/No. Domestic m米 of storeys 住用 NA不適用 □ (Not more than 不多於) 建築物高度/層數 Storeys(s) 層 NA不適用 □ (Not more than 不多於) Non-domestic m米 非住用 8 ☑ (Not more than 不多於) Storeys(s) 層 □ (Not more than 不多於) Site coverage 上蓋面積 9/0 ☑ About 約 No. of parking Total no. of vehicle parking spaces 停車位總數 spaces and loading / unloading spaces PC: 2 Private Car Parking Spaces 私家車車位 停車位及上落客貨 Motorcycle Parking Spaces 電單車車位 車位數目 Light Goods Vehicle Parking Spaces 輕型貨車泊車位 LGV: 3 Medium Goods Vehicle Parking Spaces 中型货車汽車位 Heavy Goods Vehicle Parking Spaces 重型貨車泊車位 Others (Please Specify) 其他 (請列明) Total no. of vehicle loading/unloading bays/lay-bys 上落客貨車位/停車處總數 Taxi Spaces 的士車位 Coach Spaces 旅遊巴車位 LGV: 2 Light Goods Vehicle Spaces 輕型貨車車位 Medium Goods Vehicle Spaces 中型貨車位 Heavy Goods Vehicle Spaces 重型貨車車位 Others (Please Specify) 其他 (請列明)

Plans and Drawings 圖則及繪圖 Master layout plan(s)/Layout plan(s) 總綱發展藍圖/布局設計圖 Block plan(s) 楼宇位置圖 Floor plan(s) 楼宇平面圖 Sectional plan(s) 截視圖 Elevation(s) 立視圖 Photomontage(s) showing the proposed development 顯示擬議發展的合成照片 Master landscape plan(s)/Landscape plan(s) 園境設計圖 Others (please specify) 其他 (請註明) Location Plan, Existing Vehicular Access, Paved Area    Reports 報告書   Planning Statement/Justifications 規劃綱領/理據   Environmental assessment (noise, air and/or water pollutions) 環境評估(噪音、空氣及/或水的污染) Traffic impact assessment (on vehicles) 就車輛的交通影響評估   Chinese 中文 英文    Plans and Drawings   □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Master layout plan(s)/Layout plan(s) 總綱發展藍圖/布局設計圖  Block plan(s) 機宇位置圖  Floor plan(s) 樓宇平面圖  Sectional plan(s) 並視圖  Elevation(s) 立視圖  Photomontage(s) showing the proposed development 顯示擬議發展的合成照片  Master landscape plan(s)/Landscape plan(s)   園境設計總圖/園境設計圖  Others (please specify) 其他 (請註明)  Location Plan, Existing Vehicular Access, Paved Area    Reports 報告書  Planning Statement/Justifications 規劃綱領/理據  Environmental assessment (noise, air and/or water pollutions)  環境評估(噪音、空氣及/或水的污染)  Traffic impact assessment (on vehicles) 就車輛的交通影響評估    Traffic impact assessment (on pedestrians) 就行人的交通影響評估
Block plan(s) 樓宇位置圖 Floor plan(s) 樓宇平面圖 Sectional plan(s) 截視圖 Elevation(s) 立視圖 Photomontage(s) showing the proposed development 顯示擬議發展的合成照片 Master landscape plan(s)/Landscape plan(s) 園境設計圖 Others (please specify) 其他 (請註明) Location Plan, Existing Vehicular Access, Paved Area
Floor plan(s) 樓宇平面圖 Sectional plan(s) 截視圖 Elevation(s) 立視圖 Photomontage(s) showing the proposed development 顯示擬議發展的合成照片 Master landscape plan(s)/Landscape plan(s) 園境設計圖 Others (please specify) 其他 (請註明) Location Plan, Existing Vehicular Access, Paved Area    Reports 報告書   Planning Statement/Justifications 規劃綱領/理據 Environmental assessment (noise, air and/or water pollutions) 環境評估(噪音、空氣及/或水的污染) Traffic impact assessment (on vehicles) 就車輛的交通影響評估    Traffic impact assessment (on pedestrians) 就行人的交通影響評估
Floor plan(s) 樓宇平面圖 Sectional plan(s) 截視圖 Elevation(s) 立視圖 Photomontage(s) showing the proposed development 顯示擬議發展的合成照片 Master landscape plan(s)/Landscape plan(s) 園境設計圖 Others (please specify) 其他 (請註明) Location Plan, Existing Vehicular Access, Paved Area    Reports 報告書   Planning Statement/Justifications 規劃綱領/理據 Environmental assessment (noise, air and/or water pollutions) 環境評估(噪音、空氣及/或水的污染) Traffic impact assessment (on vehicles) 就車輛的交通影響評估    Traffic impact assessment (on pedestrians) 就行人的交通影響評估
Elevation(s) 立視圖 Photomontage(s) showing the proposed development 顯示擬議發展的合成照片 Master landscape plan(s)/Landscape plan(s) 園境設計總圖/園境設計圖 Others (please specify) 其他 (請註明) Location Plan, Existing Vehicular Access, Paved Area    Reports 報告書   Planning Statement/Justifications 規劃綱領/理據 Environmental assessment (noise, air and/or water pollutions) 環境評估(噪音、空氣及/或水的污染) Traffic impact assessment (on vehicles) 就車輛的交通影響評估    Traffic impact assessment (on pedestrians) 就行人的交通影響評估
Photomontage(s) showing the proposed development 顯示擬議發展的合成照片 Master landscape plan(s)/Landscape plan(s) 園境設計圖 □ Others (please specify) 其他 (請註明) □ Location Plan, Existing Vehicular Access, Paved Area    Reports 報告書
Master landscape plan(s)/Landscape plan(s) 園境設計圖 □ □ Others (please specify) 其他 (請註明) □ □ Location Plan, Existing Vehicular Access, Paved Area    Reports 報告書
Others (please specify) 其他 (請註明) Location Plan, Existing Vehicular Access, Paved Area    Reports 報告書
Location Plan, Existing Vehicular Access, Paved Area    Reports 報告書
Reports 報告書  Planning Statement/Justifications 規劃綱領/理據  Environmental assessment (noise, air and/or water pollutions) 環境評估(噪音、空氣及/或水的污染)  Traffic impact assessment (on vehicles) 就車輛的交通影響評估
Planning Statement/Justifications 規劃綱領/理據 Environmental assessment (noise, air and/or water pollutions) 環境評估(噪音、空氣及/或水的污染) Traffic impact assessment (on vehicles) 就車輛的交通影響評估 □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Planning Statement/Justifications 規劃綱領/理據 Environmental assessment (noise, air and/or water pollutions) 環境評估(噪音、空氣及/或水的污染) Traffic impact assessment (on vehicles) 就車輛的交通影響評估 □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Environmental assessment (noise, air and/or water pollutions) 環境評估(噪音、空氣及/或水的污染) Traffic impact assessment (on vehicles) 就車輛的交通影響評估  Traffic impact assessment (on pedestrians) 就行人的交通影響評估
環境評估(噪音、空氣及/或水的污染) Traffic impact assessment (on vehicles) 就車輛的交通影響評估  Traffic impact assessment (on pedestrians) 就行人的交通影響評估
Traffic impact assessment (on vehicles) 就車輛的交通影響評估 □ □ □ Traffic impact assessment (on pedestrians) 就行人的交通影響評估 □ □
Traffic impact assessment (on pedestrians) 就行人的交通影響評估 □ □
Traffic impact assessment (on pedestrians) 就行人的交通影響評估
Visual impact assessment 視覺影響評估
Visual impact assessment 視覺影響評估  Landscape impact assessment 景觀影響評估  Tree Survey 樹木調査
1100 00110 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Geotechnical impact assessment 土力影響評估
Drainage impact assessment 排水影響評估
Sewerage impact assessment 排污影響評估  Risk Assessment 風險評估
TOTAL TO SESSION TO THE TOTAL THE TOTAL TO T
Others (please specify) 其他 (請註明)
Note: May insert more than one「レ」. 註:可在多於一個方格內加上「レ」號

Note: The information in the Gist of Application above is provided by the applicant for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant. 

註: 上述申請摘要的資料是由申請人提供以方便市民大眾參考。對於所載資料在使用上的問題及文義上的歧異,城市規劃委員會概不負責。若有任何疑問,應查閱申請人提交的文件。

### 申請理由

1.4

根據城市規劃條例第 16 條作出規劃許可申請 擬在新界元朗錦田丈量約份第 109 約地段第 1051 RP (部分)、1052 及 1057 號 作為期三年的臨時貨倉 (危險品倉庫除外)連附屬設施及填土工程之用途

- ▶ 申請地點的面積約為 2,899.2 平方米,根據錦田北分區計劃大綱核准圖編號 S/YL-KTN/11,申請地點現時被規劃作「農業」地帶。
- ▶ 本擬議發展為臨時性質,因此不會影響申請地點長遠待規劃意向。根據租賃文件,該用地可作 農業用,在未首先獲得批准的情況下,該地段不允許用於其他土地用途。因此,"貨倉(危險 品倉庫除外)"開發申請仍然符合租約。
- ▶ 擬議申請的貨倉(危險品倉庫除外)在同一個「農業」地帶,城市規劃委員會曾批准相類似的 貨倉(危險品倉庫除外),申請包括: A/YL-KTN/940 (2023年8月25日獲批)、A/YL-KTN/938 (2023年8月25日獲批)及A/YL-KTN/920 (2023年7月28日獲批)。因此希望城市規劃委員會 對本申請作出相同的對待。
- ▶ 申請地段將設有6個擬議建築物,其中4個建築物為貨倉及附屬辦公室、1個為附屬辦公室及1個為電錶室。
- 臨時貨倉計劃放置例如建築工具(如水管等)、維修零件等貨物。不會用作存放危險品。
- ▶ 城市高速發展及土地資源稀少的情況下,有大量用作工業及貨倉的土地已改作其他發展或計劃用作其他發展、例如錦田北分區計劃大網核准圖編號 S/YL-KTN/11 內部份模範鄉至部份逢吉鄉由農業及工業用途外劃為住宅及政府、機構或社區」用途、洪水橋/厦村新發展區及鄰近元朗工業邨的棕地等。本人希望透過規劃申請,提供臨時土地收納及滿足需要搬遷的小型貨倉的巨大需求。
- ▶ 擬議用途的營業時間為星期一至星期六上午九時至下午七時,星期日及公眾假期休息。
- ▶ 申請地點會採用混凝土作平整物料,厚度不超過 0.2 米,與建貨倉上蓋範圍亦會採用混凝土作平整物料,總厚度不超過 0.3 米,申請期限結束後會將混凝土打碎並運走。
- 申請用途的用途、形式及佈局與周遭環境並沒有不協調,亦會顧及自然特色。

- 》 當場地發展後,附帶條件的美化環境建議能加強申請地點及周圍的綠化效果, 使整體視野變得 美觀更令人舒服。渠務建議計劃及舒緩環境措施,也能令附近地區受惠,有效地加強該地區及 附近範圍的環境保護,並能減少水浸可能。
- ▶ 根據以上各點,誠意懇求城市規劃委員會寬大批准新界元朗錦田丈量約份第 109 約地段第 1051 RP (部分)、1052 及 1057 號作為期三年的臨時貨倉(危險品倉庫除外)連附屬設施及填土工程的用途。



Legend:

Application Site 申請範圍

# Appendix 1

Location: DD 109 Lot 1051 RP (Part)

DD 109 Lot 1052

DD 109 Lot 1057

OZP: S/YL-KTN/11 District: Kam Tin North Zoning: Agriculture

Date: 17 January 2024

# Location 位置圖

擬議臨時貨倉(危險品倉庫除外) 連附屬設施(為期3年)及填土工程

Proposed Temporary Warehouse (excluding Dangerous Goods Godown) with Ancillary Facilities

for a Period of 3 Years and Filling of Land

# SCALE

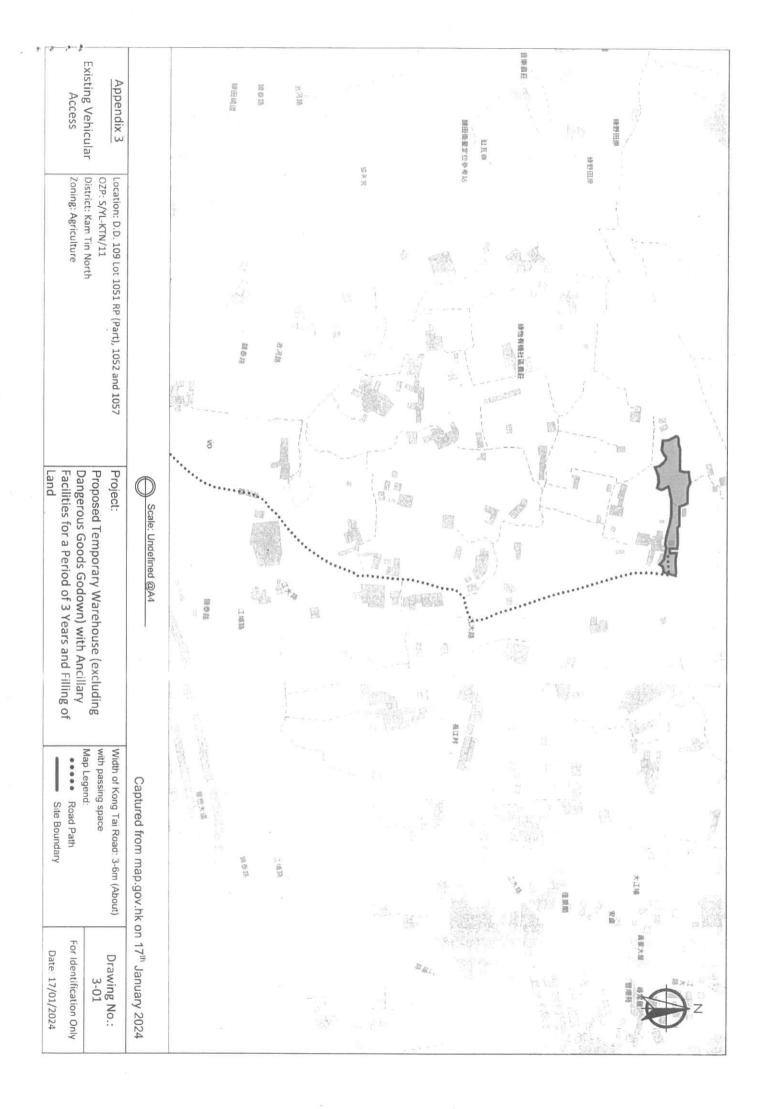
1:1000

@A4

For Identification Only

Drawing No.

								6	υ <sub>1</sub>	4	ω	2	-		
Appendix 2 Proposed Layout Plan				LGV Parking Space	LGV L/UL Space	Private Car Parking Space	Total	Warehouse (Excluding D.G.G.)	Ancillary Office	Electric Meter Room	Warehouse (Excluding D.G.G.)	Warehouse (Excluding D.G.G.)	Warehouse (Excluding D.G.G.)	Structures	P
Location: D.D. 109 Lot 1051 RP (Part), 1052 and 1057  OZP: S/YL-KTN/11 District: Kam Tin North Zoning: Agriculture				Unit(s): 3	Unit(s): 2	Unit(s): 2	About 757.9 m <sup>2</sup>	About $10m \times 7m = 70 \text{ m}^2$	About $6m \times 6m = 36 \text{ m}^2$	About 2.8m $\times$ 3m = 8.4 m <sup>2</sup>	About $25m \times 8.7m = 217.5 \text{ m}^2$	About $21m \times 10m = 210 \text{ m}^2$	About 18m x 12m = 216 m <sup>2</sup>	Gross Floor Area (GFA)	Proposed Structures Details
irt).	_	(2)				14		4m	3.5m	3.5m	8m	8m	8m	Height (Not Exceeding)	Details
擬議臨時負倉 連附屬設施( 為 Proposed Tempora Dangerous Goods F for a Period of 3			(a)					T.	1	1	1	-	1	No. of Storey	
擬議臨時貨倉(危險品倉庫除外) 連附屬設施(為期3年)及填土工程 Proposed Temporary Warehouse (excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years and Filling of Land	Scale: 1:750 @A4										total depth of filling of land.	depth of filling of land (Not including Warehouse area.)	*Whole Application Site will b	Uncovered Area: 2,141.3 m <sup>2</sup> (About)	Total Area: 2,899.2 m <sup>2</sup> (Abou
Legend:  Ingress/egress (About 5.5m)  Ohroposed Structures  Private Car Parking Space  LGV L/UL Space  LGV Parking Space											total depth of filling of land.	ncluding Warehouse area.)	*Whole Application Site will be covered by concrete with about 0.2 m	(About)	ut)
Drawing No.: 2-01 For Identification Only Date: 29/01/2024		E									*			)	►Z





Existing Site Level: +10.5 mPD (About)

Proposed Site Level: +10.7 mPD (About) Material of Filling: Concrete Depth of Filling: 0.2 m (About)

Existing Site Level: +10.7 mPD (About)

Proposed Site Level: +11.0 mPD (About) Material of Filling: Concrete Depth of Filling: 0.3 m (About)

Application Site

Depth of Filling: 0.3 m (About)

Existing Site Level: +10.5 mPD (About)

Proposed Site Level: +10.8 mPD (About) Material of Filling: Concrete Depth of Filling: 0.3 m (About) Existing Site Level: +10.7 mPD (About)
Proposed Site Level: +10.9 mPD (About)

Material of Filling: Concrete
Depth of Filling: 0.2 m (About)

Paved Area: About 2,899.2 m<sup>2</sup>

Legend:

Paved Area 平整範圍

Appendix 4

Location: DD 109 Lot 1051 RP (Part)

DD 109 Lot 1052 DD 109 Lot 1057

OZP: S/YL-KTN/11 District: Kam Tin North Zoning: Agriculture

Date: 17 January 2024

Paved Area 平整位置圖

擬議臨時貨倉(危險品倉庫除外)連附屬設施(為期3年)及填土工程

Proposed Temporary Warehouse (excluding Dangerous Goods Godown) with Ancillary Facilities

for a Period of 3 Years and Filling of Land

SCALE

1:1000

@A4

For Identification Only

Drawing No.: 4-01 古物古蹟辦事處及城市規劃委員會:

# 有關對古物古蹟辦事處 A/YL-KTN/989 的疑問

· 收悉古物古蹟辦事處對 A/YL-KTN/989 申請的疑問, 本人現書面回覆:

有見申請範圍的東面有部分座落在香港具考古研究價值的地點 - 大江 埔,現提供相關的資訊。

填土及平整方面,本申請之填土及平整的範圍請參考 Appendix 4。不會將整個申請範圍填到相同或相約的水平高度,會保留現有的水平高度,不會改變現有的地型。整個申請範圍將會使用混凝土填高及平整分別約 0.2-0.3 米,整個以混凝土平整的範圍約 2,899.2 平方米。申請結束後會根據規劃署的要求將鋪地的物料打碎並運走,回復適宜農業的用途,不會為該地造成長遠影響。

建築物方面,申請地點內的構築物計劃使用臨時物料興建,例如鐵、金屬支架及聚氨酯的隔熱鋅鐵興建,所有建築物會全部放在以混凝土平整的範圍內,全部建築物是臨時及方便移動,並放在已平整的地面,因此無需進行興建「地腳」等挖掘工程,不會影響地下結構。停車位方面,只會用作停車用途,不會有任何上蓋,因此無需進行興建「地腳」等挖掘工程,不會影響地下結構。

挖掘方面,申請地點不會進行任何挖掘工程,包括化糞池、滲水系統及 渠道,申請地點周圍會利用平整後的高度興建渠道,不會挖掘舊有的泥土,將 水收集並已連接下游渠道。因此不會影響土地,亦能保護地下具考古研究價值 的範圍,希望 貴處諒解。

希望此附加文件能釋除 貴處的隱憂,並支持本申請。

申請人鄧子其

城市規劃委員會:

# 有關城市規劃委員會對 A/YL-KTN/989 的查詢

收悉 貴委員會對 A/YL-KTN/989 申請的查詢,本人現書面回覆。

本申請只會用在存放用途,不會進行任何有關回收、清潔、修理、拆解 或其他工場作業。

申請地點內的露天空間會用作車輛轉動、停泊及提供通道出入申請地點及附近土地,不會作露天存放用途。

希望此附加文件能釋除 貴委員會的查詢,並支持本申請。

申請人鄧子其

二零二四年四月二十九日

運輸署及城市規劃委員會:

# 有關對運輸署 A/YL-KTN/989 的查詢

收悉 貴署對 A/YL-KTN/989 申請的意見,本人現書面回覆。

出入本申請地點主要使用水尾路,該道路為一條單線雙程的道路,並備 有避車處。

本人預計本申請地點的車流為以下:

時段	車輛數目(包括出/入)
00:00-01:00	0
01:00-02:00	0
02:00-03:00	0
03:00-04:00	0
04:00-05:00	0
05:00-06:00	0
06:00-07:00	0
07:00-08:00	0
08:00-09:00	0 - 5
09:00-10:00	2-7 .
10:00-11:00	2 - 7
11:00-12:00	2 - 7
12:00-13:00	2 - 7
13:00-14:00	2 - 7
14:00-15:00	2 - 7
15:00-16:00	2 - 7
16:00-17:00	2 - 7
17:00-18:00	2 - 7
18:00-19:00	2 - 7
19:00-20:00	0-5
20:00-21:00	0
21:00-22:00	0 .
22:00-23:00	0
23:00-00:00	0

以下為最近治河路大約的車流量^:

時段	車流量
00:00-01:00	2-5 輌
01:00-02:00	2-5 輔
02:00-03:00	2-5 輛
03:00-04:00	2-5 輌
04:00-05:00	2-5 輛
05:00-06:00	10-15 輛

06:00-07:00	15-20 輛
07:00-08:00	25-30 輛
08:00-09:00	25-30 輛
09:00-10:00	20-25 輛
10:00-11:00	20-25 輛
11:00-12:00	25-30 輛
12:00-13:00	25-30 輛
13:00-14:00	25-30 輛
14:00-15:00	25-30 輛
15:00-16:00	25-30 輛
16:00-17:00	25-30 輛
17:00-18:00	25-30 輛
18:00-19:00	25-30 輛
19:00-20:00	25-30 輛
20:00-21:00	20-25 輛
21:00-22:00	20-25 輛
22:00-23:00	15-20 輛
23:00-00:00	10-15 輛

<sup>^</sup>此數字在 2023 年 12 月 7 日統計。

出入本申請地點主要使用治河路,該道路為一條單線雙程的道路,並備有避車處。

治河路的設計容量為每小時可容納 100 輛車輛使用,根據上述統計數字,水尾路的使用數字低於設計容量,因此仍可容納本申請新增的車流量。

由於方便上落物料和方便員工駕車到本申請地點,現申請 2 個客貨車上落貨位置、3 個客貨車停車位及 2 個私家車停車位。本申請地點不會對公眾開放。因此上述的客貨車上落貨位置、客貨車停車位及私家車停車位已足夠此申請運作。

申請地點有道路連接,前往本申請地點途經治河路,再轉到郊區小徑到達申請地點。治河路沿途道路約有 3-6 米闊,並具有避車處。私家及客貨車有足夠的位置通過及進行調遣的動作。申請地點的出入口約 5.5 米闊。沿途道路相片請參考文件末端,而相片的觀看點請參考 Appendix 3。

連接本申請地點的郊區小徑為私人道路,本人已獲得有關地段的擁有人 及其持分者同意使用相關地段作出入通道,此通道亦會用作緊急用途。

在申請地點內有一個直徑超過 11 米及一個超過 12 米的圓形空間,足夠讓車輛進行調遣的動作,進入本申請地點的車輛不會在公用道路上讓車輛等候進入本申請地點,停泊在公用道路及以倒後形式進出本申請地點。參考文件末端的 Appendix 2。

本人明白及了解連接申請地點的道路不是由 貴署管理。

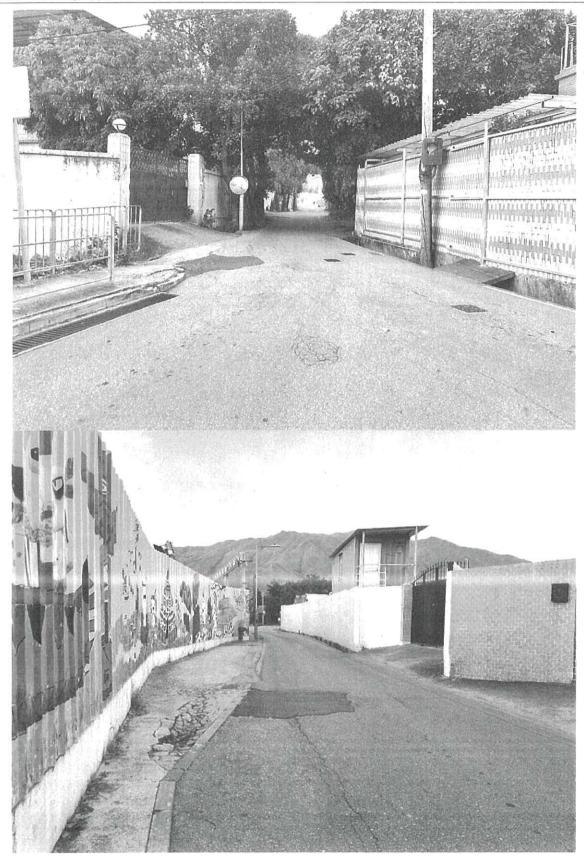
希望此附加文件能釋除 貴署的隱憂,並支持本申請。

申請人鄧子其

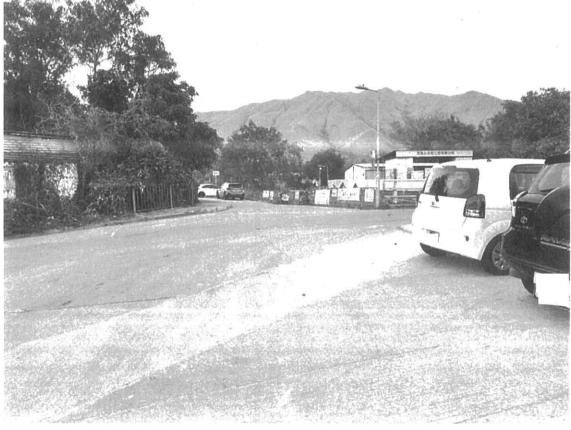
# 二零二四年四月二十九日

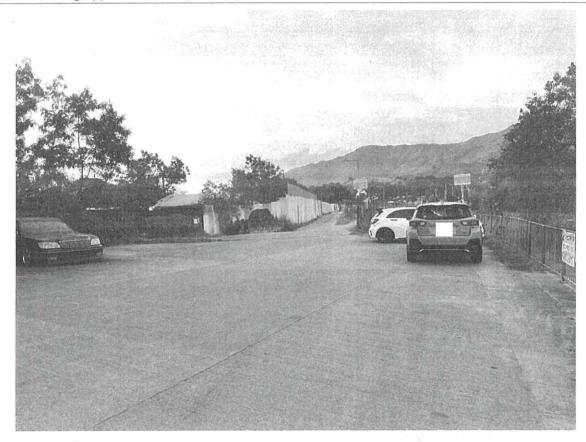
由治河路至申請地點的道路相片:











渠務署及城市規劃委員會:

# 有關渠務署對 A/YL-KTN/989 的查詢

收悉 貴署對 A/YL-KTN/989 申請的意見,現以書面回覆。

雖然填土範圍約 3,200 平方米,但填土的厚度只有 0.2 米及 0.3 米。根據地政總署在 2023 年 10 月 29 日的紀錄,申請地點北面的香港主水平基準為 +11.1。在平整後的申請範圍的香港主水平基準只有最高為+11.0,最低為 +10.7。填土詳情請參考 Appendix 4。因此,即使填土後亦不會阻礙附近水流。

再者,申請地點北面的土地已獲批作臨時康體文娛場所(休閒農莊)連 附屬設施(為期5年)及填土工程(申請編號為 A/YL-KTN/891),根據 A/YL-KTN/891申請人所提供的文件,會將土地的香港主水平基準升高至約+12.1。 在 A/YL-KTN/891 獲批後, 貴署亦加入了渠務相關的附加條件,相信該渠 道能有效地收集水流。

希望此附加文件能釋除 貴署的隱憂,並支持本申請。

申請人鄧子其

二零二四年四月二十九日

渠務署及城市規劃委員會:

# 有關 A/YL-KTN/989 的擬議渠務建議詳細

在申請地點北面是規劃申請編號 A/YL-KTN/891 的申請範圍,基準水平高本申請範圍約1米,並設有鐵絲網。申請地點東面是道路。申請地點南面為耕種用地,申請地點北面為金屬實心的圍板,沒有留有去水位,因此沒有流水從北、南及西面進入申請地點。

有見及此,本申請地點的集水區只有申請地點範圍的水流,集水面積約 3,188.5 平方米,集水區為混凝土作表面。

申請地點計劃舖設 300mmUC 引導及收集雨水及地面水,根據
STORMWATER DRAINAGE MANUAL - Seation 7.5.2 Rational Method 計算,現時的渠道有足夠的容量處理集水區內的水流量。

現場相片請參考文件尾端。

希望此附加文件能釋除 貴署的隱憂。

申請人鄧子其

二零二四年四月二十九日

### Calculation of Peak Runoff, Qp (Rational Method)

Rainfall Intensity, i

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

Where

i = extreme mean intensity in mm/hr,

 $t_d$  = duration in minutes (  $t_d \le 240$ ), and

a, b, c =storm constants given in Table 3 of SMD, as shown below

for 50 year Design Return Period (Using Table 3a – Storm Constants for Different Return Periods of HKO Headquarters on SDM)

a=	451.3	
b=	2.46	
c=	0.337	

The Rainfall Intensity of the site is around 71 mm/hr.

# Calculation of Peak Runoff, Qp (Rational Method)

According to Section 7.5.2(b) of the Stormwater Drainage Manual (SDM), Fifth Edition January 2018

Surface Characteristics	Runoff coefficient,						
Asphalt	0.70-0.95						
Concrete	0.80-0.95						
Brick	0.70-0.85						
Grassland (heavy soil)							
Flat	0.13-0.25						
Steep	0.25-0.35						
Grassland (sandy soil)	s el						
Flat	0.05-0.15						
Steep	0.15-0.20						

For catchment area of the site at the proposed development, the Concrete runoff coefficient is taken as 0.95, Grassland (heavy soil) with flat surface as 0.25 and Asphalt (small rock) as 0.95.

Peak Runoff, Qp

$$Q_P = 0.278 CiA$$

Where

 $Q_P$  = Peak runoff in km<sup>3</sup>/s

C = Runoff coefficient (dimensionless)

*i* = Rainfall intensity in mm/hr

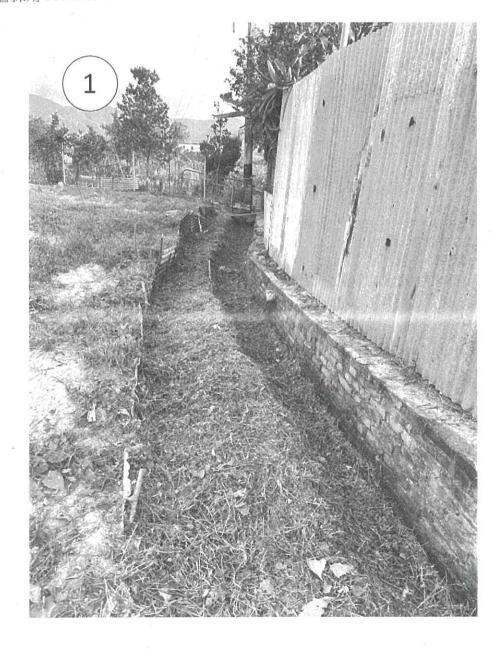
A = Catchment area in km<sup>2</sup>

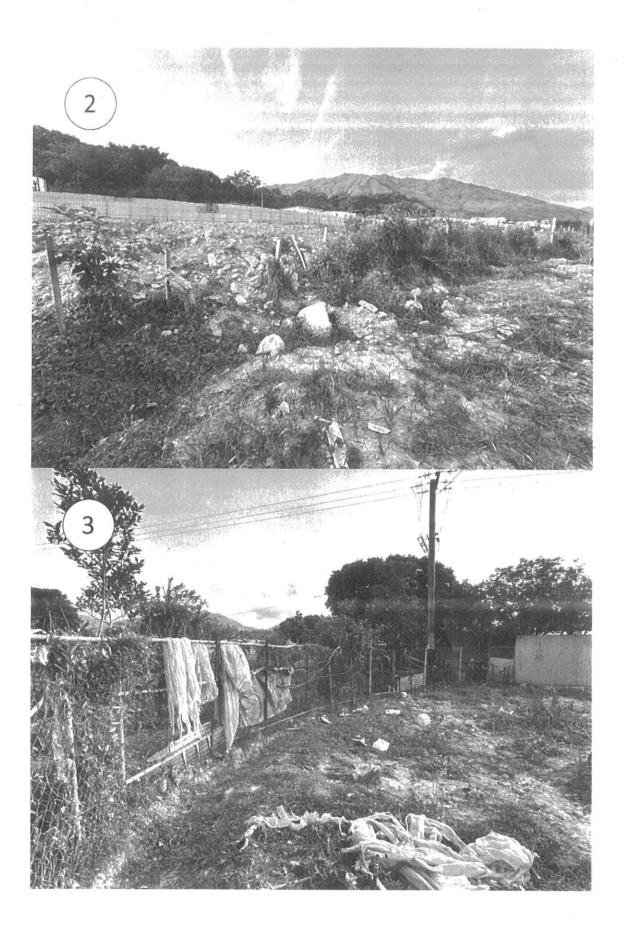
	The site	
C=	0.95	
i=	71	
A=	0.0031885	
$Q_P =$	0.060	

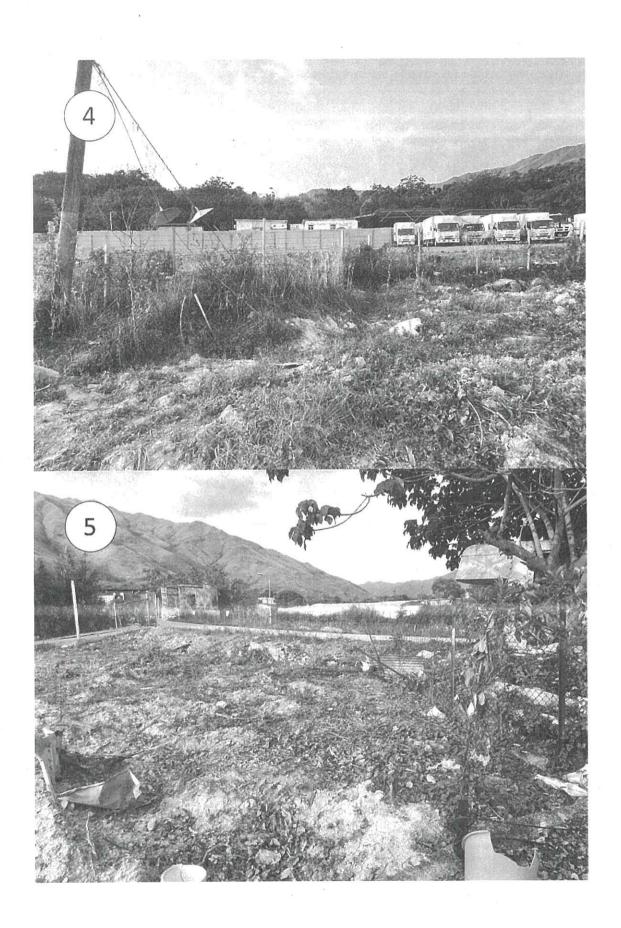
The total design runoff of the catchment area is 0.060 m³/s, which is around 3,587.3 liter/min.

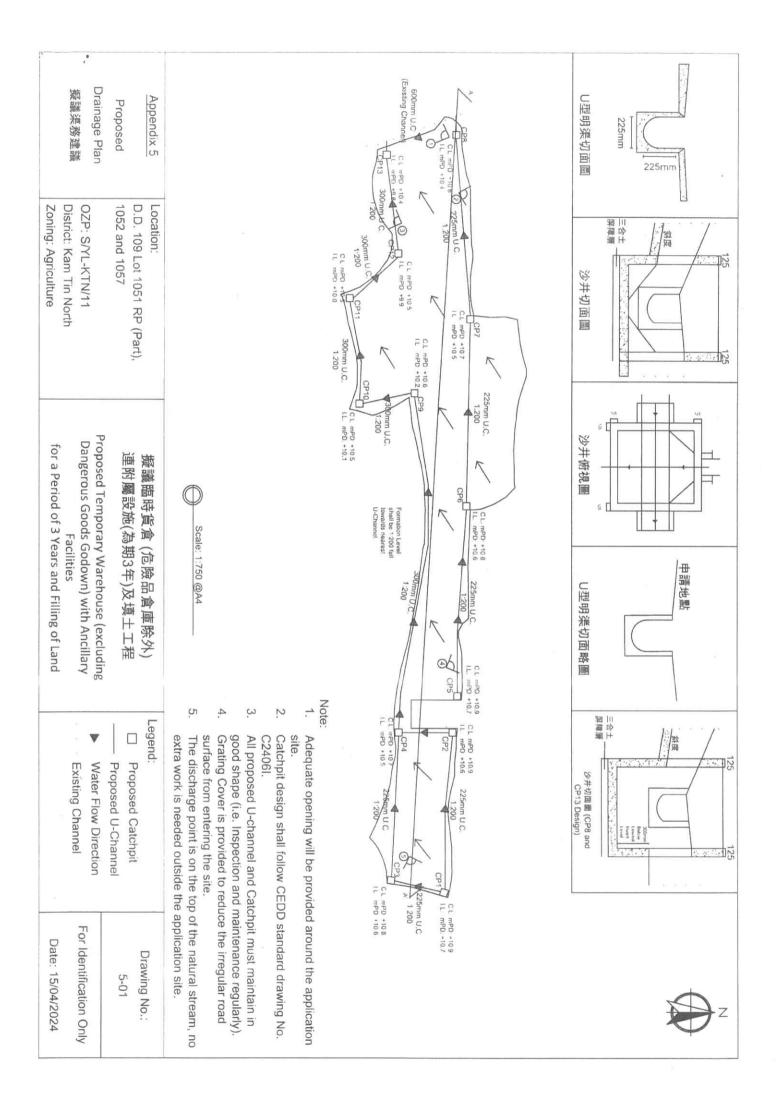
According to GEO Technical Guidance Note No. 43 (TGN 43), For gradient 1:200, a 300UC will be suitable.

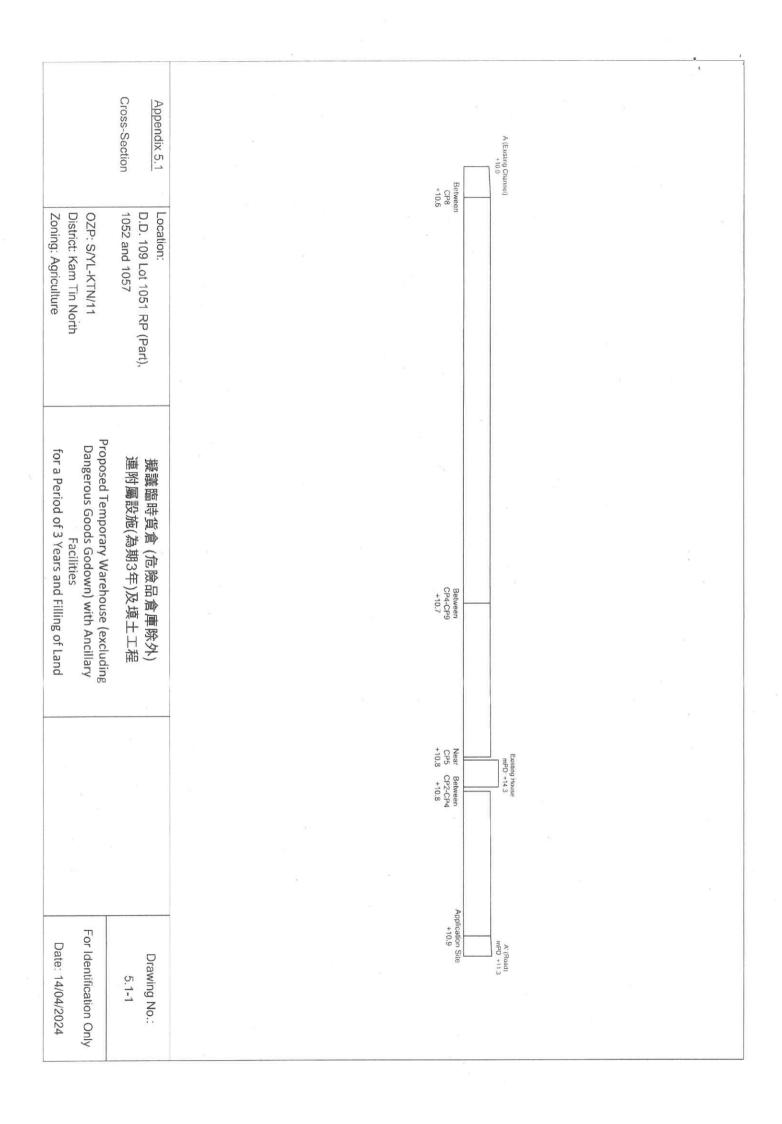
本申請會採用 300mmUC。

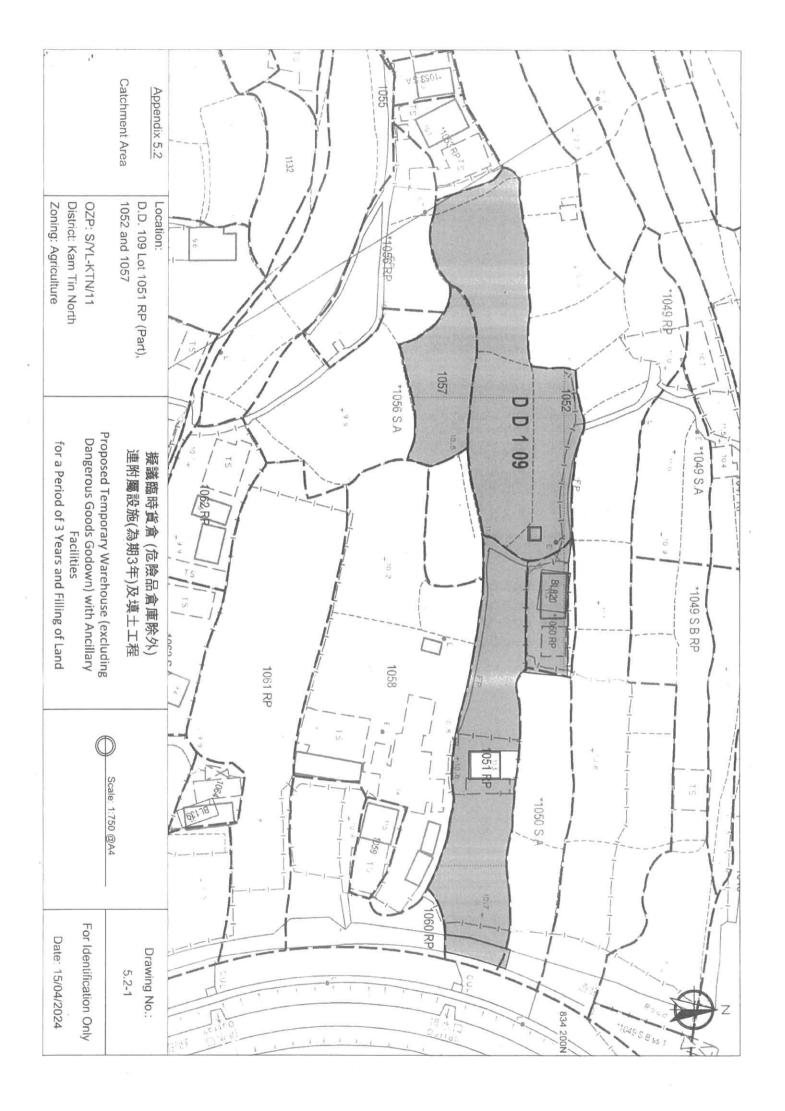












GEO Technical Guidance Note No. 43 (TGN 43) Guidelines on Hydraulic Design of U-shaped and Half-round Channels on Slopes

Date: 05.06.2014 Page: 3 of 3

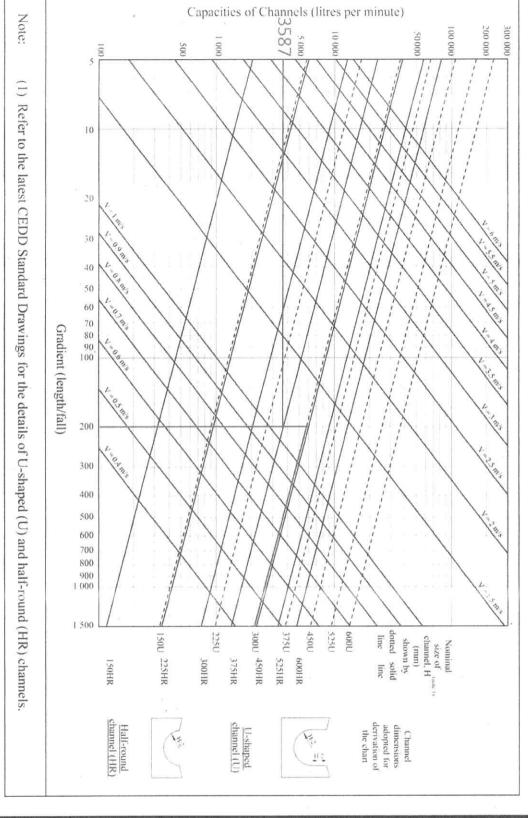


Figure 1 - Chart for the rapid design of U-shaped and half-round channels up to 600 mm

I :.oV sussI

Revision: -

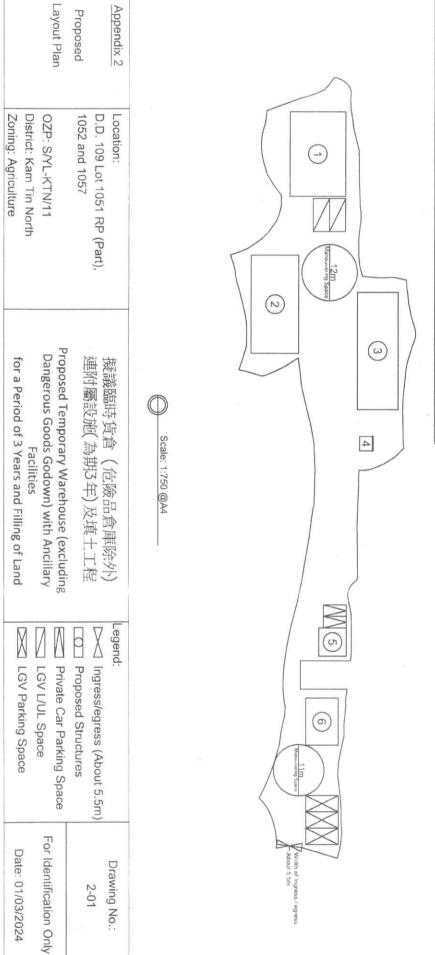
	P	Proposed Structures Details	Details	
	Structures	Gross Floor Area (GFA)	Height (Not Exceeding)	No. of Storey
-	Warehouse (Excluding D.G.G.)	About $18m \times 12m = 216 \text{ m}^2$	8m	-3
2	Warehouse (Excluding D G.G.)	About 21m x 10m = 210 m <sup>2</sup>	8m	7
ω	Warehouse (Excluding D.G.G.)	About $25m \times 8.7m = 217.5 \text{ m}^2$	8m	-
4	Electric Meter Room	About 2.8m $\times$ 3m = 8.4 m <sup>2</sup>	3.5m	_
C)	Ancillary Office	About 6m x 6m = 36 $m^2$	3.5m	_
6	Warehouse (Excluding D G.G.)	About $10m \times 7m = 70 \text{ m}^2$	4m	,
	Total	About 757.9 m <sup>2</sup>		
	Private Car Parking Space	Unit(s) 2		
	LGV L/UL Space	Unit(s): 2		
	. LGV Parking Space	Unit(s): 3		

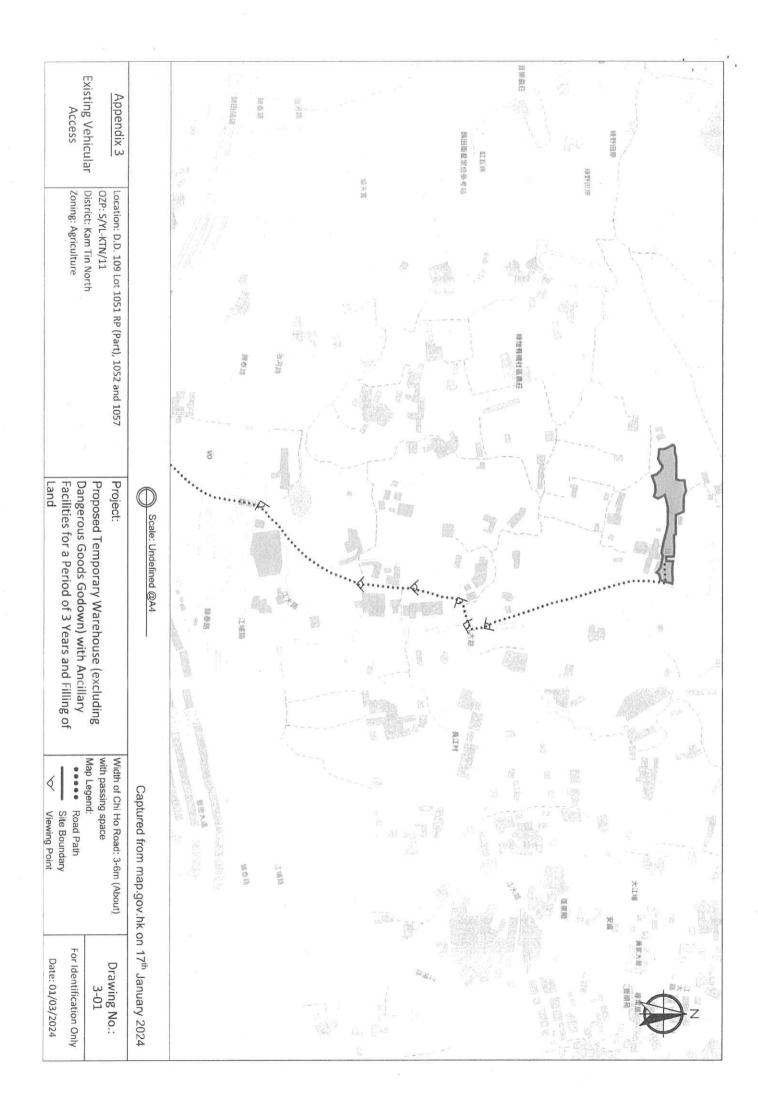
Total Area: 2,899.2 m<sup>2</sup> (About) Covered Area: 757.9 m<sup>2</sup> (About) Uncovered Area: 2,141.3 m<sup>2</sup> (About)

\*Whole Application Site will be covered by concrete with about 0.2 m depth of filling of land (Not including Warehouse area.)

The Structures area will be covered by concrete with about 0.3 m in total depth of filling of land.









Existing Site Level: +10.5 mPD (About)

Proposed Site Level: +10.7 mPD (About) Material of Filling: Concrete Depth of Filling: 0.2 m (About)

Depth of Filling: 0.2 m (About)

Existing Site Level: +10.7 mPD (About)

Application Site

Application Site

Existing Site Level: +10.7 mPD (About)

Existing Site Level: +10.7 mPD (About)

Existing Site Level: +10.7 mPD (About)

Proposed Site Level: +10.7 mPD (About)

Proposed Site Level: +10.9 mPD (About)

Material of Filling: Connection

Material of Filling: Connection

Proposed Site Level: +10.9 mPD (About)

Proposed Site Level: +10.8 mPD (About) Material of Filling: Concrete Depth of Filling: 0.3 m (About) Material of Filling: Concrete
Depth of Filling: 0.2 m (About)

Paved Area: About 2,899.2 m<sup>2</sup>

Legend:

Paved Area 平整範圍

Appendix 4

Location: DD 109 Lot 1051 RP (Part)

DD 109 Lot 1052 DD 109 Lot 1057

OZP: S/YL-KTN/11 District: Kam Tin North Zoning: Agriculture

Date: 17 January 2024

Paved Area 平整位置圖

擬議臨時貨倉(危險品倉庫除外)連附屬設施(為期3年)及填土工程

Proposed Temporary Warehouse (excluding Dangerous Goods Godown) with Ancillary Facilities

for a Period of 3 Years and Filling of Land

SCALE

1:1000

@A4

For Identification Only

Drawing No.

4-01

# 地段索引圖 LOT INDEX PLAN

C 0

媒像供提別之用。資料是占其吸引器、包括序模模的多数与重要的形式。 免費說明:如因使用本的比赛利服,包括序模模的多数与重要的比据。通過,因 更成为更更为的数据的通知来或相关,更为数据更加的通知的。 Explanation notices this join shows the graphical bondanes of the monorary tool services.

Explanatory notes: This plan shows the graphical boundaries of offerent kinds of permanent and temporary land holdings with the topographic map in the backulop. The land holdings as shown may include private lots government land allocations short term tenancies and other permitted uses of land it must be noted that (1) the information shown on this plan is subject to update without prior holdication (2) there may be time lag between an update and the related changes taken place and (3) the graphical boundaries as shown are for identification purpose only and interpretation of their accuracy and stability requires the advice from professional land surveyor. Discitamer: The Government shall not be responsible for any loss or darriage howsover arising from the use of this plan or in reliance upon its correctness completeness, inneliness or accuracy.



地政總署測繪處

Survey and Mapping Office Lands Department

香港特別行政區政府 版權所有 © Copyright reserved — Hong Kong SAR Government

It 1) SCALE 1 1000

Lot Index Plan No :ags\_S00000119090\_0002

District Survey Office : Lands Information Center

Date :29-Oct-2023

Reference No 6-NE-7D,6-NE-7B

SMO-P02

20231029002557 10

A/YL-KTN/891 : 中請編號 Application No.: 此頁摘自申請人提交的文件 Step 1 This page is extracted from applicant's submitted documents. The site has been leveled off with soil at a depth of about 1m (from 11.1mPD to 12.1mPD) to prevent flooding. This provides a flat surface for cultivation Step 2 Unpaved area will remain unpaved for cultivation only Some area (unhatched portion) will be paved with concrete at a depth of 0.1m(from 12.1mPD to 12.2mPD) to provide a suitable level and waterproof surface for erection of structures and car parking LEGEND Area (about) Paved Area:  $2,761 \,\mathrm{m}^2 \,(40\%)$ Parking space for private cars  $(5m (L) \times 2.5(W))$ Unpaved Area: 4,070m<sup>2</sup> (60%) Parking space for light goods vehicles (For cultivation only)  $(7m (L) \times 3.5(W))$ Site Area: 6,831m<sup>2</sup> (100%) Vehicular Ingress / Egress Plan showing the area of site Goldrich Planners &

N.T.S

to be leveled off and paved

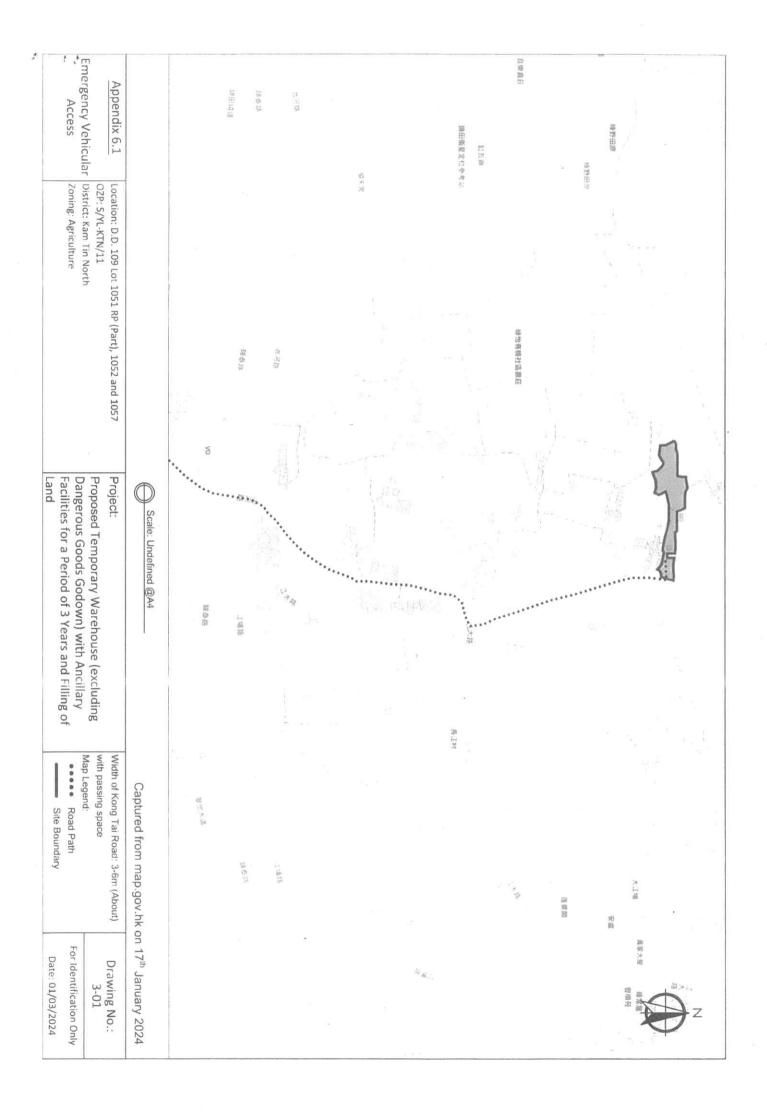
Lots 1047 RP, 1049 S.A and 1049 RP (part) in D.D. 109

Kam Tin, Yuen Long

Goldrich Planners
Surveyors Ltd.

Plan 4
(P 22096)

Pra	* F * A		а					6	5	4	ω	2			
Appendix 6 Proposed Fire Service 1 Installation Plan	II FSI (includes installation Emergency Vehicular II the enclosed structure			LGV Parking Space	LGV L/UL Space	Private Car Parking Space	Total	Warehouse (Excluding D G.G.)	Ancillary Office	Electric Meter Room	Warehouse (Excluding D.G.G.)	Warehouse (Excluding D.G.G.)	Warehouse (Excluding D.G.G.)	Structures	P
Location: D.D. 109 Lot 1051 RP (Part), 1052 and 1057  OZP: S/YL-KTN/11 District: Kam Tin North Zoning: Agriculture	*All FSI (includes installation/maintenance/modification/repair work) will be completed by RFSIC. For Emergency Vehicular Access, Please see Appendix 6.1 *All the enclosed structures are provided with access for emergency vehicles to reach within 30m			Unit(s): 3	Unit(s): 2	Unit(s): 2	About 757.9 m <sup>2</sup>	About $10m \times 7m = 70 \text{ m}^2$	About 6m x 6m = 36 m <sup>2</sup>	About 2.8m $\times$ 3m = 8.4 m <sup>2</sup>	About $25m \times 8.7m = 217.5 \text{ m}^2$	About $21m \times 10m = 210 \text{ m}^2$	About $18m \times 12m = 216 \text{ m}^2$	Gross Floor Area (GFA)	Proposed Structures Details
,i,	cation/repair w ndix 6.1 ess for emerger	(1)						4m	3.5m	3.5m	8m	8m	8m	Height (Not Exceeding)	)etails
擬議臨時貨倉(危險品倉) 連附屬設施(為期3年)及填 Proposed Temporary Warehouse Dangerous Goods Godown) with Facilities for a Period of 3 Years and Fillin	ork) will be comple							-34 7		-1	1	1	1	No. of Storey	
擬議臨時貨倉(危險品倉庫除外) 連附屬設施(為期3年)及填土工程 roposed Temporary Warehouse (excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years and Filling of Land	*All FSI (includes installation/maintenance/modification/repair work) will be completed by RFSIC. For Emergency Vehicular Access, Please see Appendix 6.1 *All the enclosed structures are provided with access for emergency vehicles to reach within 30m travel distance from the structures.		<b>4</b>		17						the FSD Circular Letter No. 4/2021)	(in accordance with BS 5266-1:	O 5 kg Portable Dry Po	••••• Emergency Vehicular Access Route	Legend:
Legend:    Compress/egress (About 5.5m)	from the structures.										tter No. 4/2021)	(in accordance with BS 5266-1:2016, BS EN 1838:2013 and	5 kg Portable Dry Powder Type Fire Extinguisher (6 in Total)	ar Access Route	
Drawing No.: 6-01 For Identification Only Date: 01/03/2024	Scale: 1:750 @A4											nd.	al)		, Z



渠務署及城市規劃委員會:

#### 有關 A/YL-KTN/989 的擬議渠務建議詳細

在申請地點北面是規劃申請編號 A/YL-KTN/891 的申請範圍,基準水平 高本申請範圍約 1 米,並設有鐵絲網。申請地點東面是道路。申請地點南面為 耕種用地,申請地點北面為金屬實心的圍板,沒有留有去水位,因此沒有流水 從北、南及西面進入申請地點。

總集水面積約 11,819 平方米,集水區主要分為兩部分:申請地點外上流的水流及申請地點內。集水區主要是由草地及混凝土作表面面層,請參考 Appendix 5.2。

申請地點計劃舖設 375mm 及 450mmUC 引導及收集雨水及地面水,根據 STORMWATER DRAINAGE MANUAL - Seation 7.5.2 Rational Method 計算,現時的渠道有足夠的容量處理集水區內的水流量。

現場相片請參考文件尾端。

#### R to C:

	渠務署意見	申請人回覆
(1)	The proposed UC appears to be undersized.	請參考本文件尾端,已修正該錯
	Please review the hydraulic calculations. Please	誤。
	clarify why rainfall intensity equals to 71.	м.
(2)	Please provide proposed catchment areas for	請參考 Appendix 5.2。
s	comment.	
(3)	Please submit calculation demonstrating the	請參考本文件尾端,已修正該錯
	downstream drainage system receiving the	誤。現場觀察點及現有自然溪流評
	discharge from the development has adequate	估位置請參考 Appendix 5.3。
	spare capacity to accommodate the runoff.	

(4)	The level difference of invert levels of catchpit	已依照 貴署的意見更改。
	are consistently to be 0.1m while the distance of	
	UC is varying which is not logically. Please review	*
	all catchpit invert levels accordingly.	* * * * * * * * * * * * * * * * * * *
(5)	Please indicate clearly the full alignment of the	請參考 Appendix 5 及 5.3。
	discharge path from the application site all the	
	way down to the ultimate discharge point (e.g. a	
	well-established stream course/public drainage	, and the second
	system).	
(6)	The existing drainage facilities, to which the	本人了解現有的渠道設施不是由
	stormwater of the development from the subject	貴署所興建及保護。如興建及接駁
	site would discharge, are not maintained by this	  到其他私人或其他有關政府部門的
	office. The applicant should identify the owner	   渠道,會向有關持分者或部分了解
	of the existing drainage facilities to which the	及取得同意後才會進行相關工程。
	proposed connection will be made. Also, DSD	及取得问息後才曾進1] 相關工程。
	noticed that the proposed drainage	
-	connection(s) to the surrounding/downstream	
	area(s) will run through other private lot(s). The	es " es
	applicant shall demonstrate that the proposed	
	drainage construction / improvement /	
	modification works and the operation of the	*
	drainage can be practicably implemented.	
(7)	Please justify the size of existing 600mm UC.	本人會在申請後安排清理及維護有
	Also, the existing 600mm UC is full of debris and	關渠道。
	leaves so the condition is considered not	, v ,
	acceptable.	ii
(8)	Please indicate clearly on plan that the proposed	請參考 Appendix 5。
	size of discharge outlets.	
(9)	Please clarify whether any walls or hoarding	申請地點未有圍封的地方將會以實
	would be erected along the site	心金屬板圍起,並會留有不少過
	boundary. Wherewalls or hoarding are erected	10cm 的空間讓水流通過。
	are laid along the site boundary, adequate	
	opening should be provided to intercept the	
	existing overland flow passing through the site.	, , , , , , , , , , , , , , , , , , ,

(10) Ple	lease provide more cross sections including	连 A X Annandiv E 1
	and provide the second	請參考 Appendix 5.1。
aa	djacent areas for reference. All proposed/	
ex	kisting drainage facilities should be indicated on	*
se.	ection drawings.	
(11) Th	ne development should neither obstruct	本申請不會影響水流。
ov	verland flow nor adversely affect existing	
na	atural streams, village drains, ditches and the	19
aa	djacent areas, etc.	
(12) Th	ne applicant(s) shall resolve any	如興建及接駁到其他私人或其他有
со	onflict/disagreement with relevant lot owner(s)	關政府部門的渠道,會向有關持分
an	nd seek LandsD's permission for laying new	者或部分了解及取得同意後才會進
dre	rains/channels and/or modifying/upgrading	
ex	risting ones in other private lots or on	行相關工程。
Go	overnment land (where required) outside the	
ар	pplication site(s).	
(14) Ac	ccording to our record, the drainage proposal	現已將相關的水流納入,請參考
of.	A/YL-KTN/891 has not been submitted and	Appendix 5.2 °
ар	pproved, so this application should also	
co	nsider all external catchment areas in the	
as	sessment as appropriate.	

希望此附加文件能釋除 貴署的隱憂。

二零二四年六月三日

#### Calculation of Peak Runoff, Qp (Rational Method)

Rainfall Intensity, i

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

Where

= extreme mean intensity in mm/hr,

= duration in minutes (t<sub>d</sub> ≤ 240), and

a, b, c = storm constants given in Table 3 of SMD, as shown below

for 50 year Design Return Period (Using Table 3a - Storm Constants for Different Return Periods of HKO Headquarters on SDM)

a=	451.3
b=	2.46
c=	0.337

#### Calculation of Peak Runoff, Qp (Rational Method)

According to Section 7.5.2(b) of the Stormwater Drainage Manual (SDM), Fifth Edition January 2018

Surface Characteristics	Runoff coefficient, C
Asphalt	0.70-0.95
Concrete	0.80-0.95
Brick	0.70-0.85
Grassland (heavy soil)	
Flat	0.13-0.25
Steep	0.25-0.35
Grassland (sandy soil)	
Flat	0.05-0.15
Steep	0.15-0.20

For catchment area of the site at the proposed development, the Concrete runoff coefficient is taken as 0.95, Grassland (heavy soil) with flat surface as 0.25 and Asphalt (small rock) as 0.95.

Peak Runoff, QP

 $Q_P = 0.278 CiA$ 

Where QP

= Runoff coefficient (dimensionless)

= Peak runoff in km<sup>3</sup>/s

= Rainfall intensity in mm/hr

Catchment area in km<sup>2</sup>

The total design runoff of the catchment area (upstream) is 0.261 m³/s, which is around 14,040 liter/min.

According to GEO Technical Guidance Note No. 43 (TGN 43), For gradient 1:200, a 450UC will be suitable.

The total design runoff of the catchment area (application) is  $0.121~\text{m}^3/\text{s}$ , which is around 7,260 liter/min.

According to GEO Technical Guidance Note No. 43 (TGN 43), For gradient 1:200, a 375UC will be suitable.

本申請會採用 375mm 及 450mmUC。

#### Check The Capacity of Existing Natural Stream

Manning Equation is used in hydraulic design and analysis. The cross-sectional mean velocity is given in the following expression:

$$V = \frac{R^{1/6}}{n} \sqrt{RS_f}$$

Where

R = hydraulic radius (m)

N = Manning coefficient (s/m1/3), refer Table 13 of SDM

Sf = friction gradient (dimensionless)

Using Manning's Equation

$$V = R^{2/3} * S_f^{0.5} / n$$

n = 
$$0.03775 \text{ s/m}^{1/3}$$
 (Table 13 of Stormwater Drainage Manual)

 $S_f = 0.013$ 

Therefor V = 
$$0.362^{2/3}*0.013^{0.5}/0.03775$$

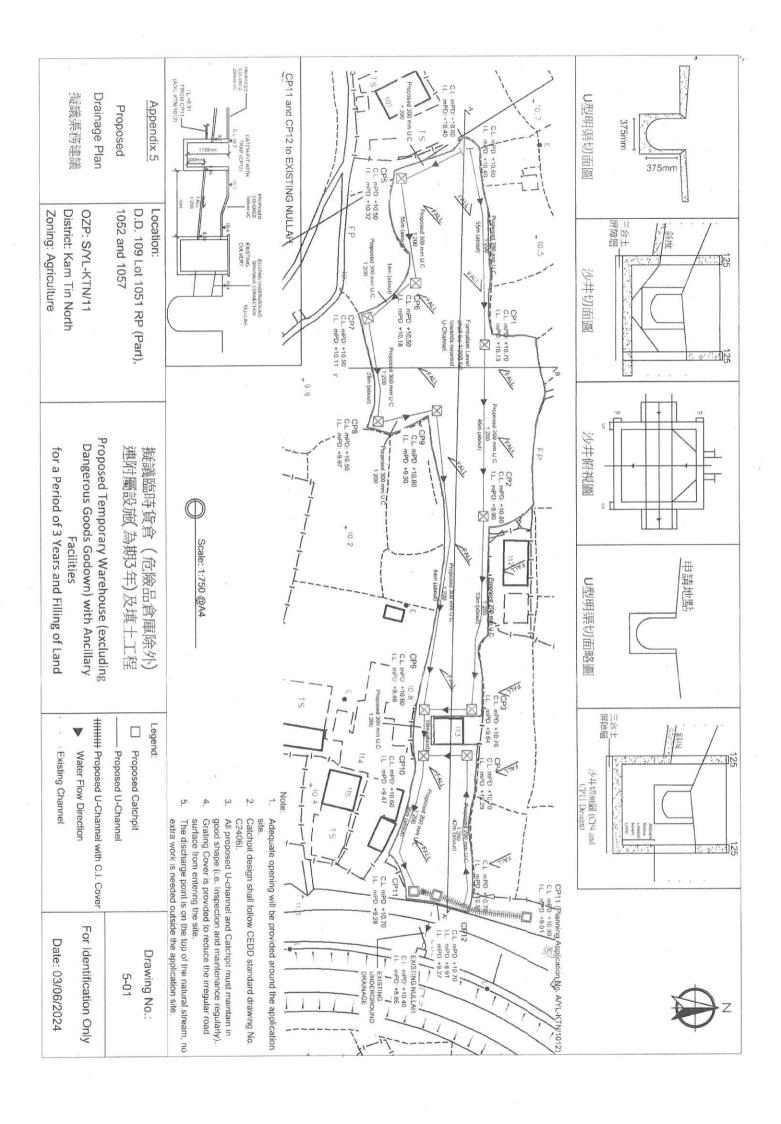
= 3.12 m/sec

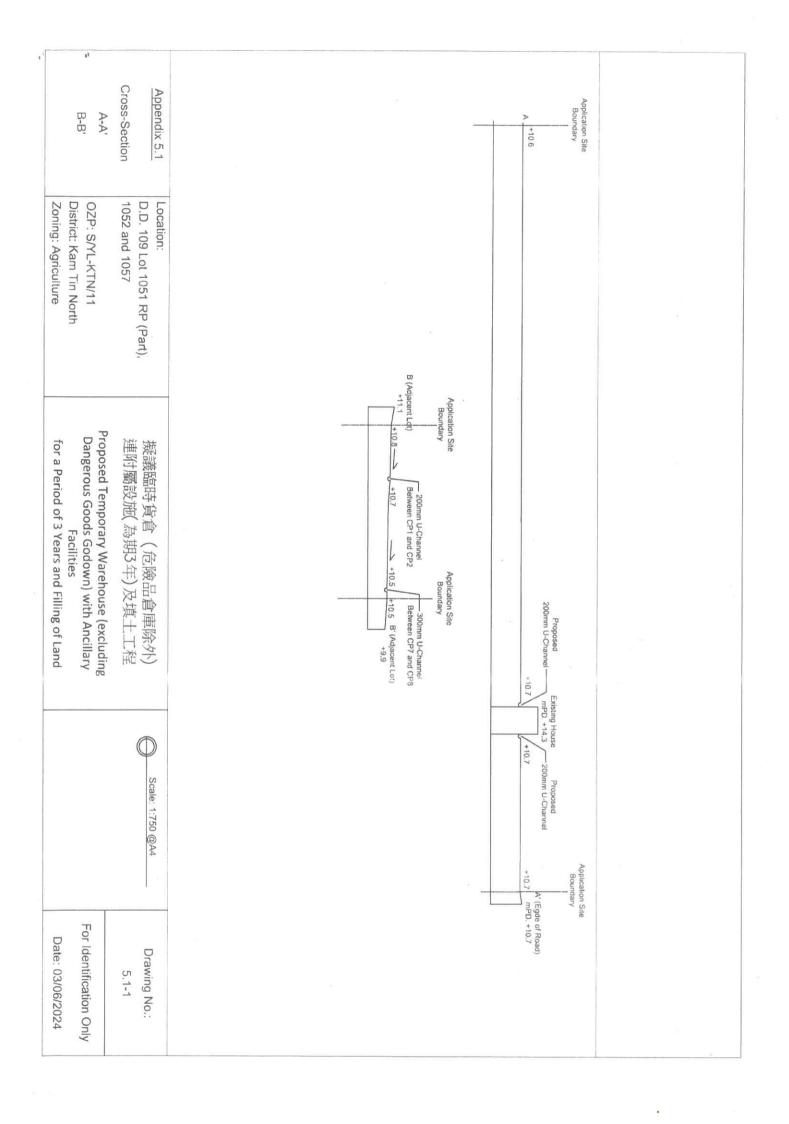
Maximum Capacity (Qmax)

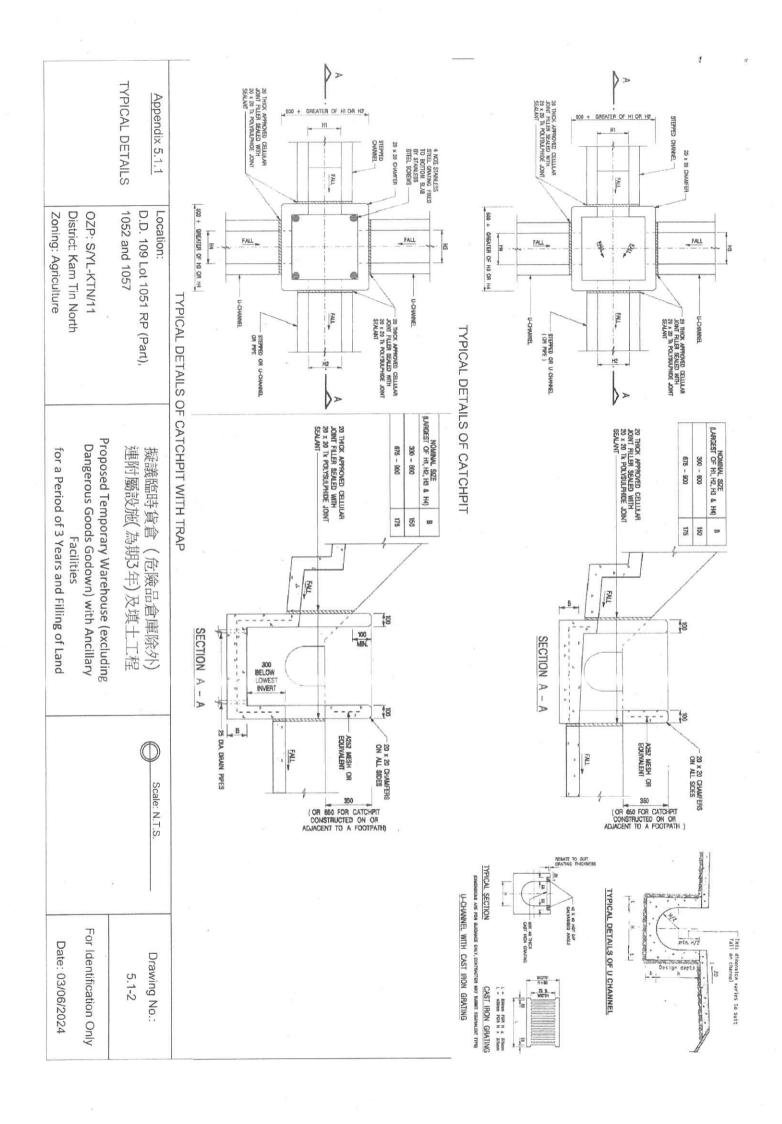
 $= 3.28 \text{ m}^3/\text{sec}$ 

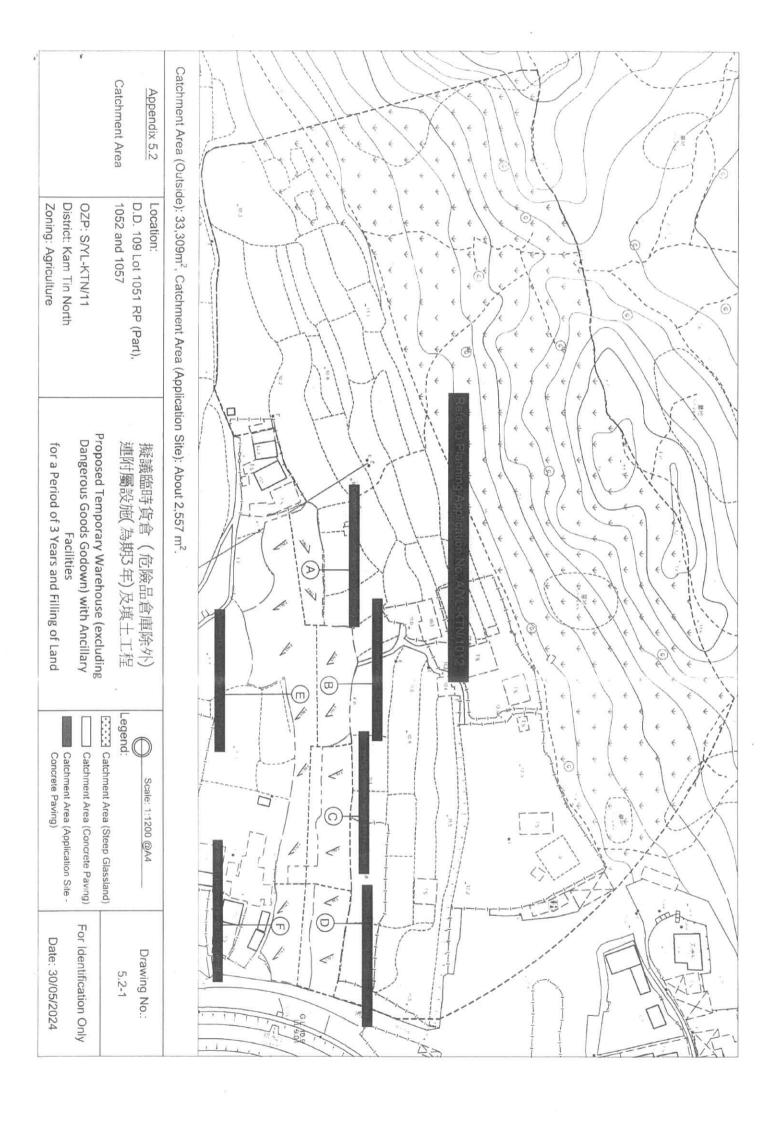
> Q total

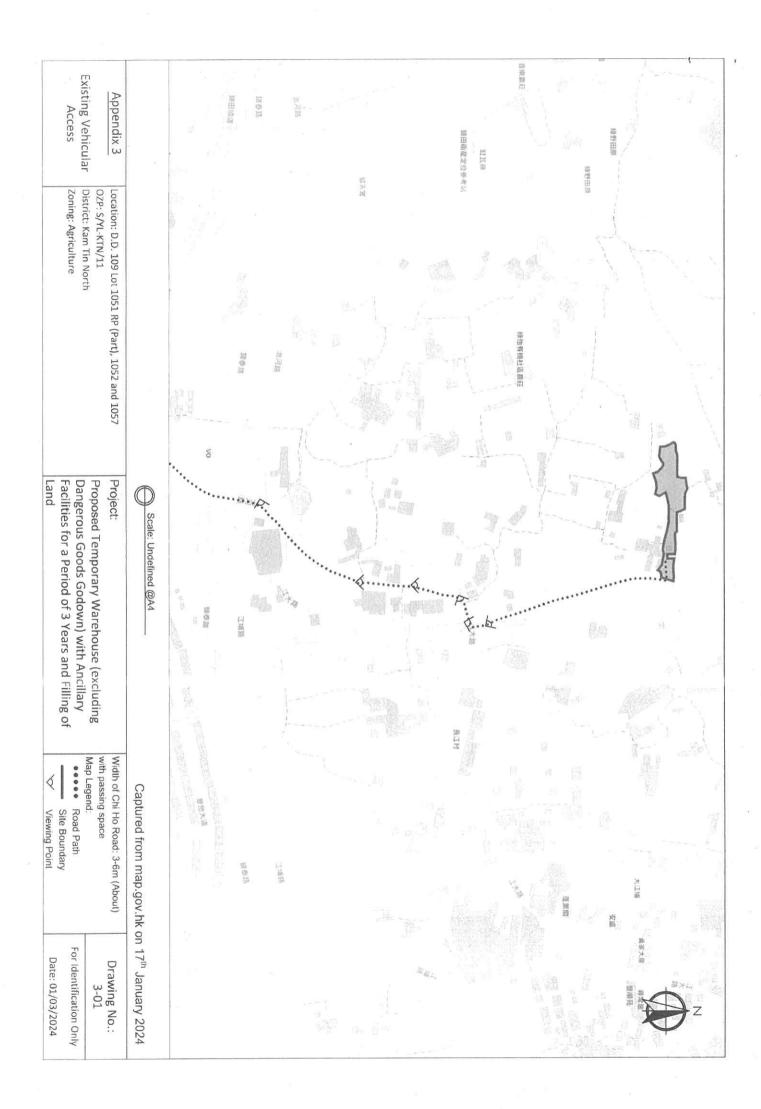
The Existing Natural Stream has enough capacity.

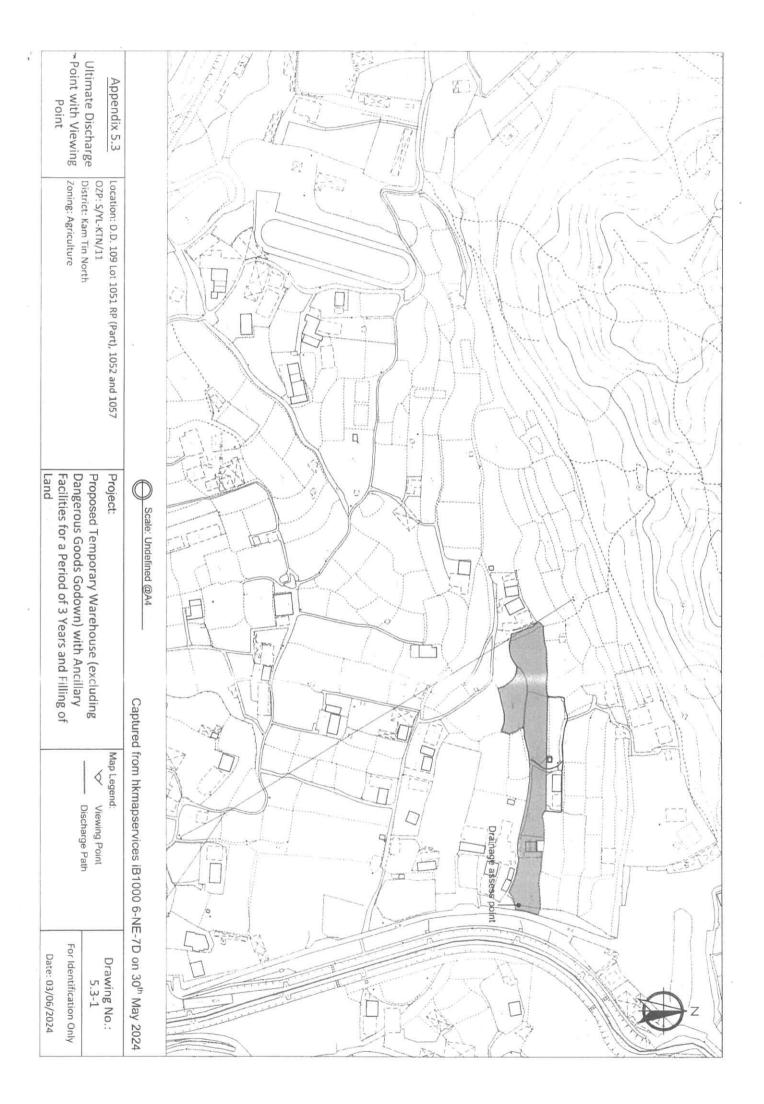


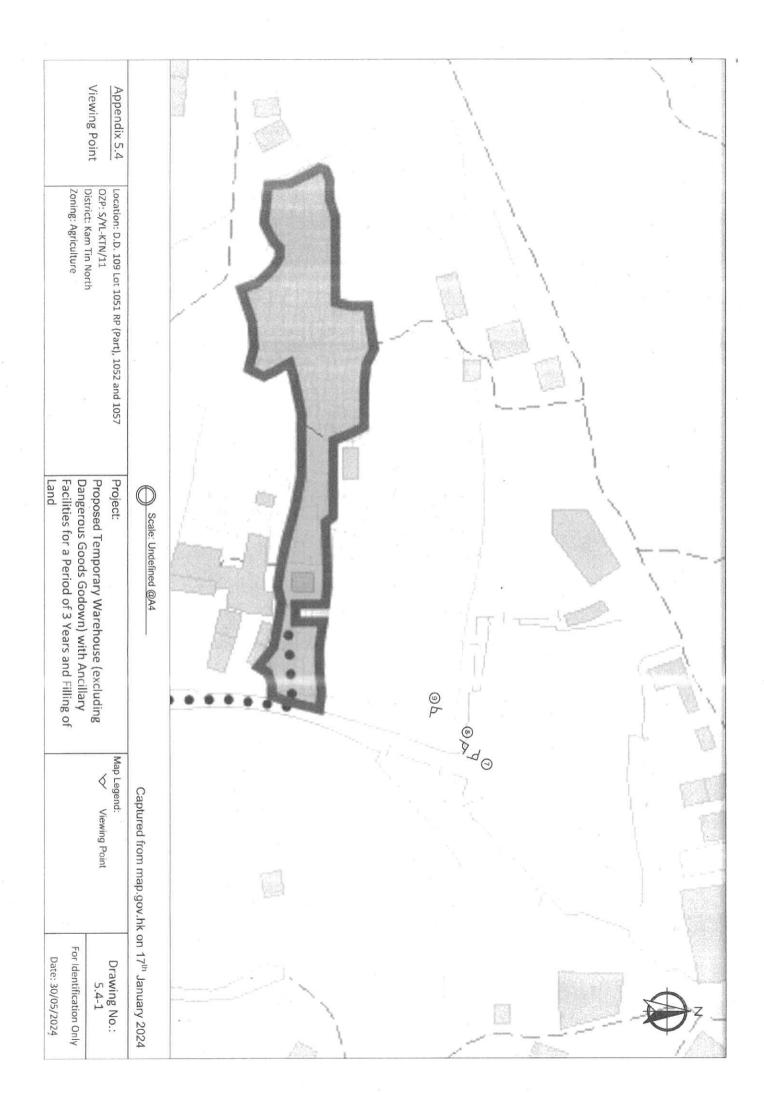














Existing Site Level: +10.5 mPD (About)

Proposed Site Level: +10.7 mPD (About) Material of Filling: Concrete Depth of Filling: 0.2 m (About)

Existing Site Level +10.7 mPD (About) Proposed Site Level: +11.0 mPD (About) Material of Filling: Concrete Depth of Filling: 0.3 m (About) Application Site Existing Site Level: +10.7 mPD (About) Existing Site Level: +10.5 mPD (About) Proposed Site Level: +10.9 mPD (About) Material of Filling: Concrete Depth of Filling: 0.2 m (About)

Proposed Site Level: +10.8 mPD (About) Material of Filling: Concrete Depth of Filling: 0.3 m (About)

Paved Area: About 2,899.2 m<sup>2</sup>

Legend:

1//

Paved Area 平整範圍

Appendix 4

Location: DD 109 Lot 1051 RP (Part)

DD 109 Lot 1052 DD 109 Lot 1057

OZP: S/YL-KTN/11 District: Kam Tin North Zoning: Agriculture

Date: 17 January 2024

Paved Area 平整位置圖

擬議臨時貨倉 (危險品倉庫除外) 連附屬設施(為期3年)及填土工程

Proposed Temporary Warehouse (excluding Dangerous Goods Godown) with Ancillary Facilities

for a Period of 3 Years and Filling of Land

SCALE

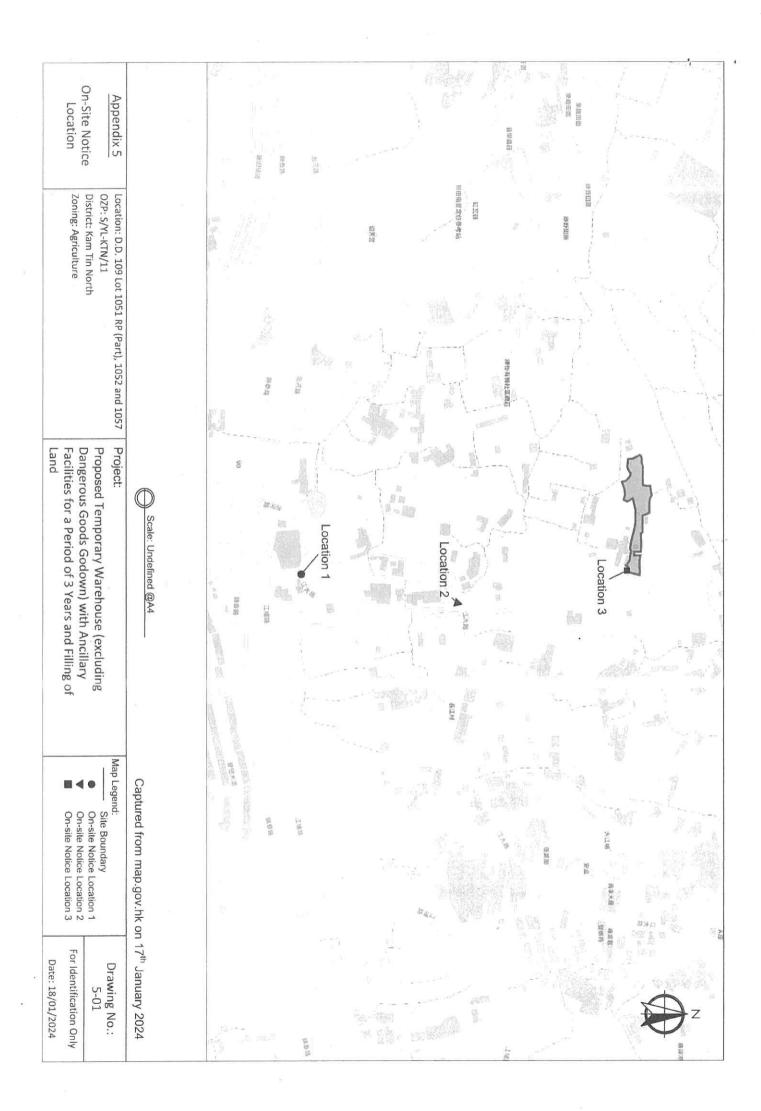
1:1000

@A4

For Identification Only

Drawing No

4-01



<b>*</b> 1	Pro	* Fo							6	5	4	ω	2			
Installation Plan	Appendix 6  Proposed Fire Service	II FSI (includes installati ir Emergency Vehicular II the enclosed structure			Lov raining space	LGV L/UL Space	Private Car Parking Space	Total	Warehouse (Excluding D.G.G.)	Ancillary Office	Electric Meter Room	Warehouse (Excluding D.G.G.)	Warehouse (Excluding D.G.G.)	Warehouse (Excluding D.G.G.)	Structures	ס
OZP: S/YL-KTN/11	Location: D.D. 109 Lot 1051 RP (Part), 1052 and 1057	*All FSI (includes installation/maintenance/modification/repair work) will be completed by RFSIC. For Emergency Vehicular Access, Please see Appendix 6.1 *All the enclosed structures are provided with access for emergency vehicles to reach within 30m tra-		(a)	Omi(s) 3	Unit(s): 2	Unit(s). 2	About 757 9 m <sup>2</sup>	About $10m \times 7m = 70 \text{ m}^2$	About 6m x 6m = 36 m <sup>2</sup>	About 2 8m $\times$ 3m = 8.4 m <sup>2</sup>	About $25m \times 8.7m = 217.5 \text{ m}^2$	About 21m $\times$ 10m = 210 m <sup>2</sup>	About $18m \times 12m = 216 \text{ m}^2$	Gross Floor Area (GFA)	Proposed Structures D
	т),	cation/repair w ndix 6.1 ess for emerge	(2)						4m	3.5m	3.5m	8m	8m	8m	Height (Not Exceeding)	Details
Proposed Tempo Dangerous Goo	擬議臨時貨倉 連附屬設施( )	ork) will be compl ncy vehicles to rea					•		1	1	Ü –	1		1	No. of Storey	
Proposed Temporary Warehouse (excluding Dangerous Goods Godown) with Ancillary	擬議臨時貨倉(危險品倉庫除外) 連附屬設施(為期3年)及填土工程	tra							29			the FSD Circular Letter No. 4/2021)	(in accordance with BS 5266-1:	O 5 kg Portable Dry Po	•••• Emergency Vehicular Access Route	Legend:
Private Car Parking Space	Legend: Ingress/egress (About 5.5m) Proposed Structures	vel distance from the structures.										tter No. 4/2021)	(in accordance with BS 5266-1:2016, BS EN 1838:2013 and	5 kg Portable Dry Powder Type Fire Extinguisher (6 in Total)	ar Access Route	
For Identification On	Drawing No.: 6-01	Scale: 1:750 @A4											d	al)		Z

Zoning: Agriculture

OZP: S/YL-KTN/11

District: Kam Tin North

Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years and Filling of Land

LGV L/UL Space

For Identification Only

Date: 01/03/2024

	For Catchment Area A						Ref.
							0.00000000
	Area,		=	243			
	Average slope, Distance on the line of natural flow,		=	0.1 per 100 32 m	m		
	Time of concentraction,	i		0.14465L/(H <sup>0.2</sup> A <sup>0.2</sup>	= 0 1441	65(32) / (0.1^0.2*243^0.1)	SDM 7.5.2 (d)
	Time of concentraction,	*0	=	4.2 min	- 0,1440	0.02/7 (0.1 0.2 243 0.1)	OBW 7.5.2 (6)
				-01-46			1
2	For Proposed U-Channel in catch	nmen	t area A				1
			From	То			
	Ground level (mPD)		10.60	10.70			
	Invert level (mPD)		10.40	10.13			
	Width of u-channel,		=	200 mm			
	Radius of u-channel,		=	100 mm			
	Length of u-channel,		=	55 m			1
	Depth of vertical part of u-channel,		=	200 mm			
	Gradient of u-channel,	S	=	(10.40-10.13)/55	=	0.005	
	Cross-Section Area,	2	=	$0.5  \pi r^2 + w  d$	=	0.5 x 3.14 x 100^2 + 200 x 200	
	Cross-Section Area,	a	=	0.056 m <sup>2</sup>	-	0.0 x 3.14 x 100 2 + 200 x 200	1
	Wetted Perimeter,	n	=	πr+2d	=	3.14 x 100 + 2 x 200	
	Wetted Femilieter,	P		0.714 m		5.14 × 100 · 2 × 200	
	Hydralic radius,	R	=	a/p			SDM 8.2.1
	.,,	28	=	0.078 m			SEAS NEWS
	U - Manada - Farada - faranda-	AT					
3	Use Manning Equation for estima	iting	velocity	or stormwater			1
	Take		=	0.016	for conc	rete lined channels:-	SDM Table 13
	Allowable velcoity,	V	=	R <sup>1/6</sup> x (RS <sub>1</sub> ) <sup>1/2</sup> /n	=	0.078^1/6 x (0.078 x 0.005)^1/2 / 0.016	SDM Table 12
	The second secon		=	0.80 m/s		The same of the sa	
	Time of flow,	$t_{t}$	=	0.9 min			
4	Use "Rational Method" for calcul-	ation	of doe	an flow			
		BUILDIN					
4				3			
4	Design intensity,	1	=	$a / (t_0 + t_1 + b)^c$			SDM 4.3.2
4		1		7	6)^9.337	for return period T = 50 years	SDM 4.3.2 SDM Table 3(a)
4		1	=	$a / (t_0 + t_1 + b)^c$	6)^9.337	and the second s	
4	Design intensity,		= = =	a / (t <sub>o</sub> + t <sub>t</sub> + b) <sup>c</sup> 451.3 / (4.2+0+2.4) 228		s	SDM Table 3(a)
4	Design intensity,  Type of surface		= = = Coeffic	a / (t <sub>o</sub> + t <sub>t</sub> + b) <sup>c</sup> 451.3 / (4.2+0+2.4) 228	hment Are	s a A (m2)	
4	Design intensity,  Type of surface Report Steep Grassland (heavy soil)		= = = Coeffic 0.35	a / (t <sub>o</sub> + t <sub>t</sub> + b) <sup>c</sup> 451.3 / (4.2+0+2.4) 228	hment Are 0.0	s S <u>CxA</u> 0	SDM Table 3(a)
4	Design intensity,  Type of surface		= = = Coeffic	a / (t <sub>o</sub> + t <sub>t</sub> + b) <sup>c</sup> 451.3 / (4.2+0+2.4) 228	hment Are	s a A (m2)	SDM Table 3(a)
4	Design intensity,  Type of surface Report Steep Grassland (heavy soil)		= = = Coeffic 0.35	a / (t <sub>o</sub> + t <sub>t</sub> + b) <sup>c</sup> 451.3 / (4.2+0+2.4) 228	hment Are 0.0	s S <u>CxA</u> 0	SDM Table 3(a)
4	Design intensity,  Type of surface Report Steep Grassland (heavy soil)	lunof	= = = Coeffic 0.35	a / (t <sub>o</sub> + t <sub>t</sub> + b) <sup>c</sup> 451.3 / (4.2+0+2.4) 228	hment Are 0.0	s a A (m2)	SDM Table 3(a)
4	Design intensity,  Type of surface Responded (heavy soil)  Concrete Paving  Upstream flow,	Lunof Q <sub>u</sub>	= = = = = = = = = = = = = = = = = = =	$a / (l_o + l_f + b)^c$ $451.3 / (4.2+0+2.4)$ $228$ iient C Catc	0.0 243.0	S SUM= S SUM= S S SUM=	SDM Table 3(a)
4	Type of surface Steep Grassland (heavy soil) Concrete Paving	Lunof Q <sub>u</sub>	= = = = = = = = = = = = = = = = = = =	a / $(I_o + I_f + b)^c$ 451.3 / $(4.2+0+2.4)^c$ 228 ient C Catc 0 m³/s 0.278i $\Sigma C_f A_f + Q_u$	hment Are 0.0 243.0 where A	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SDM Table 3(a)
4	Design intensity,  Type of surface Responded (heavy soil)  Concrete Paving  Upstream flow,	Lunof Q <sub>u</sub>	= = = = = = = = = = = = = = = = = = =	a / $(I_o + I_f + b)^c$ 451.3 / $(4.2+0+2.4)^c$ 228 ient C Catc 0 m³/s 0.278i $\Sigma C_f A_f + Q_u$ 0.278 × 228 × 230	hment Are 0.0 243.0 where A	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SDM Table 3(a)
4	Design intensity,  Type of surface Responded (heavy soil)  Concrete Paving  Upstream flow,	Lunof Q <sub>u</sub>	= = = = = = = = = = = = = = = = = = =	a / $(I_o + I_f + b)^c$ 451.3 / $(4.2+0+2.4)^c$ 228 ient C Catc 0 m³/s 0.278i $\Sigma C_f A_f + Q_u$	hment Are 0.0 243.0 where A	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SDM Table 3(a)
4	Design intensity,  Type of surface R Steep Grassland (heavy soil) Concrete Paving  Upstream flow, Design flow,	Q <sub>u</sub>	= = = = = = = = = = = = = = = = = = =	a / (t <sub>o</sub> + t <sub>i</sub> + b) <sup>c</sup> 451.3 / (4.2+0+2.4) 228 ient C Catc  0 m³/s 0.278i ΣC <sub>1</sub> A <sub>3</sub> + Q <sub>u</sub> 0.278 x 228 x 230 0.015 m³/s	hment Are 0.0 243.0 where A	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SDM Table 3(a)
4	Design intensity,  Type of surface Responded (heavy soil)  Concrete Paving  Upstream flow,	Q <sub>u</sub>	= = = = = = = = = = = = = = = = = = =	a / (t <sub>o</sub> + t <sub>i</sub> + b) <sup>c</sup> 451.3 / (4.2+0+2.4) 228 ient C Catc  0 m³/s 0.278i ΣC <sub>i</sub> A <sub>j</sub> + Q <sub>u</sub> 0.278 x 228 x 230 0.015 m³/s	hment Are 0.0 243.0 where A	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SDM Table 3(a)
2	Design intensity,  Type of surface R Steep Grassland (heavy soil) Concrete Paving  Upstream flow, Design flow,	Q <sub>u</sub>	= = = = = = = = = = = = = = = = = = =	a / (t <sub>o</sub> + t <sub>i</sub> + b) <sup>c</sup> 451.3 / (4.2+0+2.4) 228  ient C	hment Are 0.0 243.0 where A	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SDM Table 3(a)
	Design intensity,  Type of surface R Steep Grassland (heavy soil) Concrete Paving  Upstream flow, Design flow,	Q <sub>u</sub>	= = = = = = = = = = = = = = = = = = =	a / (t <sub>o</sub> + t <sub>i</sub> + b) <sup>c</sup> 451.3 / (4.2+0+2.4) 228 ient C Catc  0 m³/s 0.278i ΣC <sub>i</sub> A <sub>j</sub> + Q <sub>u</sub> 0.278 x 228 x 230 0.015 m³/s	hment Are 0.0 243.0 where A	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SDM Table 3(a)
4.	Design intensity,  Type of surface R Steep Grassland (heavy soil) Concrete Paving  Upstream flow, Design flow,	Q <sub>u</sub>	= = = = = = = = = = = = = = = = = = =	a / (t <sub>o</sub> + t <sub>i</sub> + b) <sup>c</sup> 451.3 / (4.2+0+2.4) 228  ient C	hment Are 0.0 243.0 where A	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SDM Table 3(a)
3. see	Design intensity,  Type of surface R Steep Grassland (heavy soil) Concrete Paving  Upstream flow, Design flow,	$Q_u$ $Q_\sigma$ $Q_s$	= = = = = = = = = = = = = = = = = = =	$\begin{array}{ccc} a  /  (l_o + l_f + b)^c \\ 451.3  /  (4.2 + 0 + 2.4 \\ 228 \\ \\ \underline{ient \ C} & \underline{Catc} \\ \\ 0 & m^3 / s \\ \\ 0.278i \ \Sigma C_f A_j + Q_u \\ 0.278 \times 228 \times 230 \\ 0.015 & m^3 / s \\ \\ a \ x \lor \\ 0.06 \times 0.80 \\ 0.045 & m^3 / s \\ \\ Q_d \end{array}$	where A	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SDM Table 3(a)
4	Design intensity,  Type of surface R Steep Grassland (heavy soil) Concrete Paving  Upstream flow, Design flow,  Allowable flow,	$Q_u$ $Q_\sigma$ $Q_s$	= = = = = = = = = = = = = = = = = = =	a / (t <sub>o</sub> + t <sub>i</sub> + b) <sup>c</sup> 451.3 / (4.2+0+2.4) 228  ient C Catc  0 m³/s  0.278 i ΣC <sub>i</sub> A <sub>j</sub> + Q <sub>u</sub> 0.278 × 228 × 230 0.015 m³/s  a x v 0.06 × 0.80 0.045 m³/s  Q <sub>c</sub> anual (SDM) by DSD	where A 85 /100000	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SDM Table 3(a) SDM 7.5.2 (d)
4	Design intensity,  Type of surface R Steep Grassland (heavy soil) Concrete Paving  Upstream flow, Design flow,  Allowable flow,	$Q_u$ $Q_\sigma$ $Q_s$	= = = = = = = = = = = D	$\begin{array}{ccc} a  /  (l_o + l_f + b)^c \\ 451.3  /  (4.2 + 0 + 2.4 \\ 228 \\ \\ \underline{ient \ C} & \underline{Catc} \\ \\ 0 & m^3 / s \\ \\ 0.278i \ \Sigma C_f A_j + Q_u \\ 0.278 \times 228 \times 230 \\ 0.015 & m^3 / s \\ \\ a \ x \lor \\ 0.06 \times 0.80 \\ 0.045 & m^3 / s \\ \\ Q_d \end{array}$	where A 85 /100000	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SDM Table 3(a) SDM 7.5.2 (d)

## ## ## ## ## ## ## ## ## ## ## ## ##	1	For Catchment Area B							Ref.
Distance on the line of natural flow,   L   =   35 m     Time of concentraction,   L   =   0.14465Lit H <sup>1/4</sup> /A <sup>2/3</sup>   = 0.14465(35) / (0.120.213470.1)     E		Area	. A	= 1	347				
Distance on the line of natural flow,   L   =   35 m     Time of concentraction,   L   =   0.14465L(H)^{4/4}V^{2}) = 0.14465(35) / (0.140.2*347*0.1)     2   For Proposed U-Channel in catchment area B     From   To   Ground level (mPD)   10.70   10.80     Invert level (mPD)   10.70   10.80     Width of u-channel,   w   =   200 mm     Radius of u-channel,   v   =   100 mm     Length of u-channel,   Le   =   46 m     Depth of vertical part of u-channel,   d   =   200 mm     Gradient of u-channel,   S <sub>1</sub>   =   (10.13.9.90)46   =   0.005     Cross-Section Area,   a   =   0.5 m² + w   d   =   0.5 x 3.14 x 100/2 + 200 x 200     Wetted Perimeter,   p   =   m* + 2d   =   3.14 x 100/2 + 200 x 200     Wetted Perimeter,   p   =   10.78 m     Hydralic radius,   R   =   0.78 m     0.078 m     3   Use Manning Equation for estimating velocity of stormwater    Take   n   =   0.016   for concrete lined channels -     Allowable velocity,   v   =   R** x (RS)** of   n   =   0.078** 1/6 x (0.078 x 0.005)** 1/2 / 0.016   SDM Table     Time of flow,   I <sub>1</sub>   =   1.1 min     4   Use "Rational Method" for calculation of design flow    Design intensity,   i   =   a / (I <sub>2</sub> + I <sub>2</sub> + I <sub>2</sub> )*			TO THE REAL PROPERTY.	= 0		n			
## 4.5 min   ## 4.5 min   ## 2.5 min   ## 2.		Distance on the line of natural flow	, L	=					
## 4.5 min    For Proposed U-Channel in catchment area B		Time of concentraction.	. 1.	2	0.14465L/(H <sup>0.2</sup> A <sup>0.2</sup> )	= 0.1446	5(35) / (0.1	0.2*347^0.1)	SDM 7.5.2 (d)
Ground level (mPD) 10,70 10,80   Invert level (mPD) 10,70 10,80   Invert level (mPD) 10,13 9,90    Width of u-channel, w = 200 mm   Radius of u-channel, r = 100 mm   Length of u-channel, d = 200 mm   Gradient of u-channel, d = 200 mm   Gradient of u-channel, S <sub>1</sub> = (10.13,9.90)46 = 0.005    Cross-Section Area, a = 0.5 m² + w d = 0.5 x 3,14 x 100^2 + 200 x 200   = 0.056 m²   Wetted Perimeter, p = 11/2d = 3.14 x 100 + 2 x 200   Hydralic radius, R = 16,74 m   Hydralic radius, R = 16,74 m   Hydralic radius, R = 10,016   Allowable velocity, v = R <sup>1M</sup> x (RS <sub>1</sub> ) <sup>12</sup> /n = 0.078*16 x (0.078 x 0.005)*1/2 / 0.016   SDM Table Time of flow, l <sub>1</sub> = 1,1 min    Use "Rational Method" for calculation of design flow  Design intensity, i = 1 a / (l <sub>1</sub> +1 b) <sup>5</sup> = 451.3 / (4.5+1+2.46)*1.337   SDM Table Steep Grassland (heavy soil) 0.35   Concrete Paving   Design flow, Q <sub>4</sub> = 0.278 \(\frac{12}{3}\) \(\				=			0(00). (0	0.17	0011111012 (0)
Ground level (mPD) 10,70 10,80 10,13 9,90 10,13 9,90 10,13 9,90 10,13 9,90 10,13 9,90 10,13 9,90 10,13 9,90 10,13 9,90 10,13 9,90 10,13 9,90 10,13 9,90 10,13 9,90 10,13 10,13 9,90 10,13									
Ground level (mPD)   10.70   10.80	2	For Proposed U-Channel in cate	hmer	nt area B	B :-				
Invert level (mPD)				From	То				
Width of u-channel, w = 200 mm   Radius of u-channel, r = 100 mm   Length of u-channel, t = 46 m   Depth of vertical part of u-channel, t = 200 mm   Gradient of u-channel, t = 10.5 m² + w d = 0.5 x 3.14 x 100 x 2 x 200		Ground level (mPD)							
Radius of u-channel, r = 100 mm Length of u-channel, d = 200 mm Gradient of u-channel, d = 200 mm Gradient of u-channel, d = 200 mm Gradient of u-channel, Sr = (10 13-9 90)/46 = 0.005  Cross-Section Area, a = 0.5 m² + w d = 0.5 x 3.14 x 100*2 + 200 x 200  Wetted Perimeter, p = 171*2d = 3.14 x 100 + 2 x 200  Hydralic radius, R = 0.06 m² = 0.714 m Hydralic radius, R = 0.078 m  3 Use Manning Equation for estimating velocity of stormwater  Take n = 0.016 for concrete lined channels - Allowable velocity, v = R** x (RSp)** 2n = 0.078*1/6 x (0.078 x 0.005)*1/2 / 0.016  Time of flow, l <sub>1</sub> = 1,1 min  4 Use "Rational Method" for calculation of design flow  Design intensity, i = a / (l <sub>a</sub> + l <sub>1</sub> + b)* = 224  Type of surface Steep Grassland (heavy soil) Concrete Paving  Design flow, Q <sub>a</sub> = 0.276 EC/A; + Q <sub>a</sub> where A is in km <sub>2</sub> = 0.278 x 224 x 329 65 /1000000 + 0.015  Design flow, Q <sub>a</sub> = 0.278 EC/A; + Q <sub>a</sub> where A is in km <sub>2</sub> = 0.06 x 0.81 = 0.06 x 0.81 = 0.045 m³/s				10.13	9.90				
Radius of u-channel, r = 100 mm Length of u-channel, d = 200 mm Gradient of u-channel, d = 0.5 m² + w d = 0.5 x 3.14 x 100*2 + 200 x 200    Wetted Perimeter, p = 1006 m² = 0.714 m   Hydralic radius, R = 0.066 m² = 0.714 m   Hydralic radius, R = 0.078 m    Wetted Perimeter, p = 10.714 m   Hydralic radius, R = 0.078 m    Wetted Perimeter, p = 10.714 m   Hydralic radius, R = 0.078 m    Wetted Perimeter, p = 10.714 m   Hydralic radius, R = 0.078 m    Wetted Perimeter, p = 10.714 m   Hydralic radius, R = 0.078 m    Wetted Perimeter, p = 10.714 m   Hydralic radius, R = 0.078 m    Wetted Perimeter, p = 10.714 m   Hydralic radius, R = 0.078 m    Wetted Perimeter, p = 10.714 m   Hydralic radius, R = 0.078 m    Wetted Perimeter, p = 10.714 m   Hydralic radius, R = 0.078 m    Wetted Perimeter, p = 10.714 m   Hydralic radius, R = 0.078 m    Wetted Perimeter, p = 10.714 m   Hydralic radius, R = 0.078 m    SDM 8.2    SDM 7.5.2 m   SDM Table   SDM T		(M) dib ofb			200				
Length of u-channel, L <sub>c</sub> = 46 m Depth of vertical part of u-channel, d = 200 mm Gradient of u-channel, S <sub>T</sub> = (10 13.9 90)/46 = 0.005  Cross-Section Area, a = 0.5 m² + w d = 0.5 x 3.14 x 100 x 2 x 200 = 0.056 m² Wetted Perimeter, p = mrt 2d = 3.14 x 100 x 2 x 200 = 0.714 m Hydralic radius, R = a / p = 0.078 m  3 Use Manning Equation for estimating velocity of stormwater  Take n = 0.016 for concrete lined channels - Allowable velocity, v = R <sup>16</sup> x (RS <sub>1</sub> ) <sup>1/2</sup> /n = 0.078 x 0.005) x 1/2 / 0.016  Allowable velocity, v = R <sup>16</sup> x (RS <sub>1</sub> ) <sup>1/2</sup> /n = 0.078 x 0.005) x 1/2 / 0.016  Use "Rational Method" for calculation of design flow  Design intensity, i = a / (t <sub>0</sub> + t <sub>1</sub> + b) <sup>c</sup> = 451.3 / (4.5 + 1 + 2.46) x 1.337 for return period T = 50 years = 24  Type of surface Runoff Coefficient C Sice p Grassland (heavy soil) Concrete Paving 0.95 347.0 329.65  Upstream flow, Q <sub>a</sub> = 0.278 i Cc/A; + Q <sub>a</sub> where A is in km <sub>2</sub> = 0.278 x 224 x 329.65 / 1000000 + 0.015 = 0.036 m³/s  Allowable flow, Q <sub>a</sub> = a x v = 0.06 x 0.81 = 0.045 m³/s									10
Depth of vertical part of u-channel, d = 200 mm  Gradient of u-channel, S <sub>1</sub> = (10 13.9 90)/46 = 0.005  Cross-Section Area, a = 0.5 m² + w d = 0.5 x 3.14 x 100^2 + 200 x 200  Wetted Perimeter, p = 11+2d = 3.14 x 100 + 2 x 200  Hydralic radius, R = 0.714 m  Hydralic radius, R = 0.714 m  Hydralic radius, R = 0.018 for concrete lined channels  Take n = 0.018 for concrete lined channels  Allowable velocity, v = R <sup>186</sup> x (RS <sub>2</sub> ) <sup>12</sup> /n = 0.078^4 1/6 x (0.078 x 0.005)^4 1/2 / 0.016  SDM Table  SDM Table  SDM Table  SDM Table  SDM Table  1.1 min  4 Use "Rational Method" for calculation of design flow  Design intensity, i = a / (l <sub>2</sub> + l <sub>1</sub> + b) <sup>5</sup> = 451.3 / (4.5+1+2.46)^4 1.337 for return period T = 50 years  224  Type of surface Steep Grassland (heavy soil) 0.35 Concrete Paving  Design flow, Q <sub>a</sub> = 0.278 i EC/A <sub>3</sub> + Q <sub>a</sub> where A <sub>3</sub> is in km <sub>2</sub> = 0.278 x 224 x 329 65 /1000000 + 0.015  Upstream flow, Q <sub>a</sub> = 0.278 i EC/A <sub>3</sub> + Q <sub>a</sub> where A <sub>3</sub> is in km <sub>2</sub> = 0.278 x 224 x 329 65 /1000000 + 0.015  Allowable flow, Q <sub>a</sub> = a x v = 0.086 x 0.81 = 0.045 m <sup>3</sup> /s									
Gradient of u-channel. S <sub>1</sub> = (10 13-9 90)/46 = 0.005  Cross-Section Area, a = 0.5 m² + w d = 0.5 x 3.14 x 100^2 + 200 x 200  Wetted Perimeter, p = 0.056 m²  Wetted Perimeter, p = 11+2d = 3.14 x 100 + 2 x 200  Hydralic radius, R = a / p 0.078 m  3 Use Manning Equation for estimating velocity of stormwater  Take n = 0.016 for concrete lined channels - Allowable velocity, v = R (10 x									
Cross-Section Area, $a = 0.5 \text{ m}^2 + \text{w}  d = 0.5 \times 3.14 \times 100^4 + 200 \times 200$ $= 0.056  \text{m}^2$ Wetted Perimeter, $p = \frac{\pi t + 2d}{2} = 3.14 \times 100 + 2 \times 200$ $= 0.714  \text{m}$ Hydralic radius, $R = 0.078  \text{m}$ $= 0.078  \text{m}$ 3 Use Manning Equation for estimating velocity of stormwater  Take $n = 0.016$ for concrete lined channels - Allowable velocity, $v = R^{108} \times (RS_0)^{1/2}/n = 0.078^4 \cdot 1/6 \times (0.078 \times 0.005)^4 \cdot 1/2 / 0.016$ SDM Table SDM Table  Time of flow, $l_1 = 1.1  \text{min}$ 4 Use "Rational Method" for calculation of design flow  Design intensity, $i = a / (l_0 + l_1 + b)^c = 23.1  \text{m} \cdot 1/4  \text{m}$							0.005		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		Gradient of u-channel	, 51	=	(10.13-9.90)/46	=	0.005		
Wetted Perimeter, $p = 0.714 \text{ m}$ $= 0.714 \text{ m}$ $= 0.714 \text{ m}$ $= 0.714 \text{ m}$ $= 0.078 \text{ m}$ $= 0.078 \text{ m}$ $= 0.078 \text{ m}$ $= 0.078 \text{ m}$ SDM 8.2  3 Use Manning Equation for estimating velocity of stormwater  Take $n = 0.016$ for concrete lined channels - $0.016$ Allowable velocity, $v = R^{1/6}x (RS_1)^{1/2}/n = 0.078^{41/6} \times (0.078 \times 0.005)^{41/2} / 0.016$ SDM Table SDM		Cross-Section Area,	а	=	$0.5  \text{Tr}^2 + \text{w d}$	=	0.5 x 3.14	x 100^2 + 200 x 200	
Hydralic radius, R   = 0.714 m   a / p   = 0.078 m				=	0 056 m <sup>2</sup>				
SDM 8.2   SDM 8.2		Wetted Perimeter,	, p	===	πr+2d	=	3.14 x 100	0 + 2 x 200	
= 0.078 m  3 Use Manning Equation for estimating velocity of stormwater  Take n = 0.016 for concrete lined channels- Allowable velocity, v = R <sup>1/8</sup> x (RS <sub>2</sub> ) <sup>1/2</sup> /n = 0.078 <sup>4</sup> 1/6 x (0.078 x 0.005) <sup>4</sup> 1/2 / 0.016  SDM Table  1 Use "Rational Method" for calculation of design flow  Design intensity. i = a / (I <sub>2</sub> + I <sub>1</sub> + b) <sup>c</sup> = 451.3 / (4.5+1+2.46) <sup>4</sup> 1.337 for return period T = 50 years = 224  Type of surface Steep Grassland (heavy soil) Concrete Paving  Design flow, Q <sub>a</sub> = 0.015 m <sup>3</sup> /s  Design flow, Q <sub>d</sub> = 0.278 i ΣC <sub>1</sub> A <sub>1</sub> + Q <sub>a</sub> where A <sub>i</sub> is in km <sub>2</sub> = 0.278 x 224 x 329 65 /1000000 + 0.015 = 0.036 m <sup>3</sup> /s  Allowable flow, Q <sub>a</sub> = a x v = 0.06 x 0.81 = 0.045 m <sup>3</sup> /s				=					
Take   n   =   0.016   for concrete lined channels -		Hydralic radius,	, R						SDM 8.2.1
Take n = 0.016 for concrete lined channels - Allowable velcoity, v = $R^{1/8}x$ ( $RS_1$ ) <sup>1/2</sup> /n = 0.078^1/6 x (0.078 x 0.005)^1/2 / 0.016 SDM Table SDM Table 1.1 min  4 Use "Rational Method" for calculation of design flow  Design intensity, i = $a/(l_o + l_f + b)^c$ = 451.3 / (4.5+1+2.46)^1.337 for return period T = 50 years = 224  Type of surface Runoff Coefficient C Catchment Area A (m2) CxA Steep Grassland (heavy soil) 0.35 0.0 0 0 0 Concrete Paving 0.95 347.0 329.65  Upstream flow, $Q_a = 0.278i \Sigma C_f A_f + Q_a$ where $A_f$ is in km <sub>2</sub> = 0.278 x 224 x 329 65 /1000000 + 0.015 = 0.036 m <sup>3</sup> /s  Allowable flow, $Q_a = a x v = 0.06 \times 0.81 = 0.045 \text{ m}^3/\text{s}$				=	0.078 m				
Allowable velcoity, $v = R^{186}x (RS_0)^{1/2}/n = 0.078^{4}/6 \times (0.078 \times 0.005)^{4}/2 / 0.016$ $= 0.81 \text{ m/s}$ Time of flow, $t_1 = 1.1 \text{ min}$ 4 Use "Rational Method" for calculation of design flow  Design intensity, $i = a / (t_0 + t_1 + b)^c$ $= 451.3 / (4.5 + 1 + 2.46)^{4} 1.337 \text{ for return period } T = 50 \text{ years}$ $= 224$ Type of surface Steep Grassland (heavy soil) Concrete Paving  SDM 4.3  SDM 7.5.2	3	Use Manning Equation for estim	ating	velocity	of stormwater			e .	
Allowable velcoity, $v = R^{186}x (RS_f)^{1/2}/n = 0.078^{4}1/6 \times (0.078 \times 0.005)^{4}1/2 / 0.016$ $= 0.81 \text{ m/s}$ Time of flow, $t_1 = 1.1 \text{ min}$ 4 Use "Rational Method" for calculation of design flow  Design intensity, $i = a / (t_0 + t_1 + b)^c = 451.3 / (4.5 + 1 + 2.46)^4 1.337$ for return period $T = 50$ years $= 224$ SolM 1.33 for return period $T = 50$ years $= 224$ Solm Table  Solm 4.3 Solm Table  Solm 7.5.2  Allowable flow, $Q_a = 0.278i \Sigma C_1A_1 + Q_a$ where $A_1$ is in $A_2$ where $A_2$ is in $A_3$ solve $A_4$ is in $A_4$ solve $A_4$ so		Take	n	8=	0.016	for concre	ete lined ch	annels -	SDM Table 13
		Allowable velcoity,	. v	=	R <sup>1/6</sup> x (RS <sub>t</sub> ) <sup>1/2</sup> /n				SDM Table 12
Time of flow, 1, = 1.1 min  4 Use "Rational Method" for calculation of design flow  Design intensity, i = a / (t <sub>o</sub> + t <sub>t</sub> + b) <sup>c</sup>		ionimes management out to be a	W 1155	=				. (	
Design intensity, $i = a / (t_0 + t_1 + b)^c$ $= 451.3 / (4.5 + 1 + 2.46)^A 1.337$ for return period T = 50 years SDM Table SDM Table SDM Table Steep Grassland (heavy soil) 0.35 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Time of flow,	, t,	=					
	4	Use "Rational Method" for calcu	lation	n of desi	gn flow				
		D			- / // 6.15				
		Design intensity,	, 1			0144 007	2		The state of the s
						5)^1.33/	for return	period 1 = 50 years	SDM Table 3(a)
Steep Grassland (heavy soil) 0.35 0.0 0 329.65 SUM= 3								\$	
Concrete Paving 0.95 347.0 329.65 SUM= 32			Runof		ient C Cato		A (m2)		SDM 7.5.2 (d)
$SUM = 329.65$ $Upstream flow, Q_u = 0.015   m^3/s$ $Design flow, Q_d = 0.278i   \Sigma C_1 A_1 + Q_u   where   A_1   is in km_2$ $= 0.278   \times 224   \times 329.65 / 1000000 + 0.015$ $= 0.036   m^3/s$ $Allowable flow, Q_a = a   x   v$ $= 0.06   x   0.81$ $= 0.045   m^3/s$									
Upstream flow, $Q_u = 0.015 \text{ m}^3/\text{s}$ Design flow, $Q_d = 0.278i \Sigma C_i A_i + Q_u \text{ where } A_i \text{ is in km}_2$ $= 0.278 \times 224 \times 329.65 / 1000000 + 0.015$ $= 0.036 \text{ m}^3/\text{s}$ Allowable flow, $Q_a = a \times v = 0.06 \times 0.81$ $= 0.045 \text{ m}^3/\text{s}$		Concrete Paving		0.95		347.0	SUM=		
Design flow, $Q_d = 0.278i \Sigma C_1 A_1 + Q_u$ where $A_1$ is in $km_2 = 0.278 \times 224 \times 329 65 / 1000000 + 0.015 = 0.036 m3/s$ Allowable flow, $Q_n = a \times v = 0.06 \times 0.81 = 0.045 m3/s$							30W-	329.03	
$= 0.278 \times 224 \times 329 65 / 1000000 + 0.015$ $= 0.036 \text{ m}^3/\text{s}$ Allowable flow, $Q_n = a \times v$ $= 0.06 \times 0.81$ $= 0.045 \text{ m}^3/\text{s}$		Upstream flow,	, Q <sub>u</sub>	=	0.015 m <sup>3</sup> /s				
$= 0.278 \times 224 \times 329 65 / 1000000 + 0.015$ $= 0.036 \text{ m}^3/\text{s}$ Allowable flow, $Q_n = a \times v$ $= 0.06 \times 0.81$ $= 0.045 \text{ m}^3/\text{s}$		Design flow	0	-	0.278i ΣC.A.+ Ω	where A	is in km		SDM 7 5 2 /5\
$ = 0.036 \text{ m}^{3}/\text{s} $ Allowable flow, $Q_{a} = a \times v $ $ = 0.06 \times 0.81 $ $ = 0.045 \text{ m}^{3}/\text{s} $		Dealgh now,	. ~0						ODW 7.5.2 (d)
Allowable flow, $Q_n = a \times v$ = 0.06 x 0.81 = 0.045 m <sup>3</sup> /s						55 / 1000001	0 + 0 0 15		
$ = 0.06 \times 0.81 $ $ = 0.045 \text{ m}^3/\text{s} $					0.000 11175				
= 0.045 m <sup>3</sup> /s		Allowable flow,	, Q <sub>n</sub>	=	axv				
*****				=	0.06 x 0.81				
> Q <sub>n</sub>				=	$0.045 \text{ m}^3/\text{s}$				
> Q <sub>f</sub>									
				>	$Q_d$				1
Reference was made to Stormwater Drainage Manual (SDM) by DSD		Reference was made to Stormwate	er Dra	iinage Mi	anual (SDM) by DSE	)			
Scale: N/A Drainage Calculation		Scale: N/A		Di	rainage Calculation	ı			
D.D. 109 Lot 1051 RP (Parl), Page 2								Page 2	
Aug-24 1052 and 1057		Aug-24			1052 and 1057	0			

	For Catchment Area C						Ref.
	Area, A	=	495				
	Average slope, H	=	0.2 per 100r	m			
	Distance on the line of natural flow, L	=	42 m				
	Time of concentraction, to	=	0.14465L/(H <sup>0.2</sup> A <sup>0.2</sup> )	) = 0.14465	(42) / (0.2/	0.2*495^0.1)	SDM 7.5.2 (d)
	Time of concentraction, 19	=	4.5 min	0.11100	(12)/(012	0.2.00 0.17	00 1.012 (0)
2	For Proposed U-Channel in catchme	ent area C					
		From	To				1
	Ground level (mPD)	10.80	10.70				
	Invert level (mPD)	9.90	9.64				
	Width of u-channel, w	=	200 mm				
	Radius of u-channel, r		100 mm				
			53 m				
	Length of u-channel, L.						
	Depth of vertical part of u-channel, d		400 mm	=	0.005		
	Gradient of u-channel, S <sub>1</sub>	=	(9.90-9.64)/53	-	0.005		
	Cross-Section Area, a	=	$0.5  \text{mr}^2 + \text{w d}$	=	0.5 x 3.14	x 100^2 + 200 x 400	1
		=	0.096 m <sup>2</sup>				1
	Wetted Perimeter, p	=	πr+2d	=	3.14 x 100	+ 2 x 400	1
		=	1.114 m				
	Hydralic radius, R	=	a/p				SDM 8.2.1
	William Control of the Control of th	=	0.086 m				
3	Use Manning Equation for estimatin	a velocit	of stormwater				1
	Take n		0.016	for concret			SDM Table 13
	Allowable velcoity, v		$R^{1/6}x (RS_1)^{1/2}/n$	=	0.086^1/6	x (0.086 x 0.005)^1/2 / 0.016	SDM Table 12
		=	0.85 m/s				1
	Time of flow, t <sub>f</sub>	=	1.0 min	*:			1
							1
4	Use "Rational Method" for calculation	on of desi	gn flow				1
4							SDM 4.3.2
4	Use "Rational Method" for calculation  Design intensity, i	=	$a / (t_o + t_f + b)^c$	6\A0.227	for notion :	assist T = 50 years	SDM 4.3.2
4		=	a / (l <sub>o</sub> + t <sub>f</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4)	6)^0.337	for return	period T = 50 years	SDM 4.3.2 SDM Table 3(a
4		=	a / (l <sub>o</sub> + t <sub>f</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4) 225			period T = 50 years	
4	Design intensity, i	= = = off Coeffic	a / (l <sub>o</sub> + t <sub>f</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4) 225	hment Area		s <u>CxA</u>	SDM Table 3(
4	Design intensity, i  Type of surface Run  Steep Grassland (heavy soil)	= = = off Coeffic 0.35	a / (l <sub>o</sub> + t <sub>f</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4) 225	hment Area /		s CxA 0	SDM Table 3(a
4	Design intensity, i	= = = off Coeffic	a / (l <sub>o</sub> + t <sub>f</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4) 225	hment Area	A (m2)	\$ <u>CxA</u> 0 470.25	SDM Table 3(a
4	Design intensity, i  Type of surface Run  Steep Grassland (heavy soil)	= = = off Coeffic 0.35	a / (l <sub>o</sub> + t <sub>f</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4) 225	hment Area /		s CxA 0	SDM Table 3(a
4	Design intensity, i  Type of surface Run  Steep Grassland (heavy soil)  Concrete Paving	= = = off Coeffic 0.35 0.95	a / (l <sub>o</sub> + t <sub>f</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4) 225 sient C Catc	hment Area /	A (m2)	\$ <u>CxA</u> 0 470.25	SDM Table 3(a
4	Design intensity, i  Type of surface Run  Steep Grassland (heavy soil)	= = = off Coeffic 0.35 0.95	a / (l <sub>o</sub> + t <sub>f</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4) 225	hment Area /	A (m2)	\$ <u>CxA</u> 0 470.25	
4	Design intensity, i $\frac{\text{Type of surface}}{\text{Steep Grassland (heavy soil)}}$ Concrete Paving $\text{Upstream flow, } Q_{\text{u}}$	= = = 00ff Coeffic 0.35 0.95	a / (l <sub>o</sub> + t <sub>f</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4) 225 sient C Catc	hment Area / 0.0 495.0	A (m2) SUM=	\$ <u>CxA</u> 0 470.25	SDM Table 3(a
4	Design intensity, i  Type of surface Run  Steep Grassland (heavy soil)  Concrete Paving	= = = 00ff Coeffic 0.35 0.95	a / $(I_o + I_f + b)^c$ 451.3 / $(4.5+1+2.4)^c$ 225 iient C Catc 0.036 m <sup>3</sup> /s 0.278i $\Sigma C_j A_j + Q_u$	o.0 495.0 where A <sub>j</sub> is	SUM=	\$ <u>CxA</u> 0 470.25	SDM Table 3(i
4	Design intensity, i $\frac{\text{Type of surface}}{\text{Steep Grassland (heavy soil)}}$ Concrete Paving $\text{Upstream flow, } Q_{\text{u}}$	= = = 0.35 0.95	a / (l <sub>o</sub> + t <sub>f</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4) 225  ient C Catc  0.036 m <sup>3</sup> /s	o.0 495.0 where A <sub>j</sub> is	SUM=	\$ <u>CxA</u> 0 470.25	SDM Table 3( SDM 7.5.2 (d
4	Design intensity, i $\frac{Type\ of\ surface}{Steep\ Grassland\ (heavy\ soil)} \frac{Run}{Concrete\ Paving}$ Upstream flow, $Q_o$	= = = = = = = = = = = = = = = = = = =	$a / (l_o + t_i + b)^c$ $451.3 / (4.5+1+2.4t_{225})$ $6 = 10 \cdot 10^{-3}$ $6 = 10 \cdot 10^{-3$	o.0 495.0 where A <sub>j</sub> is	SUM=	\$ <u>CxA</u> 0 470.25	SDM Table 3(
4	Design intensity, i $\frac{\text{Type of surface}}{\text{Steep Grassland (heavy soil)}}$ Concrete Paving $\text{Upstream flow, } Q_{\text{u}}$	= = = = = = = = = = = = = = = = = = =	a / (I <sub>o</sub> + I <sub>f</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4) 225  iient C	o.0 495.0 where A <sub>j</sub> is	SUM=	\$ <u>CxA</u> 0 470.25	SDM Table 3(
4	Design intensity, i $\frac{Type\ of\ surface}{Steep\ Grassland\ (heavy\ soil)} \frac{Run}{Concrete\ Paving}$ Upstream flow, $Q_o$	= = = = = = = = = = = = = = = = = = =	a / (I <sub>o</sub> + I <sub>f</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4) 225  ient C Catc  0.036 m <sup>3</sup> /s  0.278 i ΣC <sub>i</sub> A <sub>j</sub> + Q <sub>u</sub> 0.278 × 225 × 470 0.065 m <sup>3</sup> /s  a × v 0.10 × 0.85	o.0 495.0 where A <sub>j</sub> is	SUM=	\$ <u>CxA</u> 0 470.25	SDM Table 3(
4	Design intensity, i $\frac{Type\ of\ surface}{Steep\ Grassland\ (heavy\ soil)} \frac{Run}{Concrete\ Paving}$ Upstream flow, $Q_o$	= = = = = = = = = = = = = = = = = = =	a / (I <sub>o</sub> + I <sub>f</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4) 225  iient C	o.0 495.0 where A <sub>j</sub> is	SUM=	\$ <u>CxA</u> 0 470.25	SDM Table 3(
4	Design intensity, i $\frac{Type\ of\ surface}{Steep\ Grassland\ (heavy\ soil)} \frac{Run}{Concrete\ Paving}$ Upstream flow, $Q_o$	= = = = = = = = = = = = = = = = = = =	$a / (l_o + t_i + b)^c$ $451.3 / (4.5+1+2.4t_{225})$ Hent C Catc $0.036  ext{ m}^3/\text{s}$ $0.278i  ext{ }  e$	o.0 495.0 where A <sub>j</sub> is	SUM=	\$ <u>CxA</u> 0 470.25	SDM Table 3(
4	Design intensity, i $\frac{T_{VPe\ of\ surface}}{Steep\ Grassland\ (heavy\ soil)} = \frac{Run}{Concrete\ Paving}$ Upstream flow, $Q_o$ Design flow, $Q_o$	off Coeffic 0.35 0.95	$\begin{array}{c} a  /  (l_o + t_i + b)^c \\ 451.3  /  (4.5 + 1 + 2.4 t_{225}) \\ \\ \text{eient C} \qquad \qquad \\ 0.036  m^3 / s \\ \\ 0.278i \; \Sigma C_i A_j + Q_u \\ 0.278 \times 225 \times 470 \\ 0.065  m^3 / s \\ \\ a \; \times v \\ 0.10 \times 0.85 \\ 0.082  m^3 / s \\ \\ Q_d \end{array}$	where A <sub>j</sub> is	SUM=	\$ <u>CxA</u> 0 470.25	SDM Table 3(
4	Design intensity, i $\frac{Type\ of\ surface}{Steep\ Grassland\ (heavy\ soil)} \frac{Run}{Concrete\ Paving}$ Upstream flow, $Q_o$	off Coeffic 0.35 0.95	$\begin{array}{c} a  /  (l_o + t_i + b)^c \\ 451.3  /  (4.5 + 1 + 2.4 t_{225}) \\ \\ \text{eient C} \qquad \qquad \\ 0.036  m^3 / s \\ \\ 0.278i \; \Sigma C_i A_j + Q_u \\ 0.278 \times 225 \times 470 \\ 0.065  m^3 / s \\ \\ a \; \times v \\ 0.10 \times 0.85 \\ 0.082  m^3 / s \\ \\ Q_d \end{array}$	where A <sub>j</sub> is	SUM=	\$ <u>CxA</u> 0 470.25	SDM Table 3(
4	Design intensity, i $\frac{T_{VPe\ of\ surface}}{Steep\ Grassland\ (heavy\ soil)} = \frac{Run}{Concrete\ Paving}$ Upstream flow, $Q_o$ Design flow, $Q_o$	off Coeffic 0.35 0.95	a / (l <sub>o</sub> + t <sub>i</sub> + b) <sup>c</sup> 451.3 / (4.5+1+2.4) 225  iient C Catc  0.036 m³/s  0.278i ΣC <sub>i</sub> A <sub>j</sub> + Q <sub>u</sub> 0.278 × 225 × 470 0.065 m³/s  a × ν 0.10 × 0.85 0.082 m³/s  Q <sub>d</sub> anual (SDM) by DSI	where A <sub>j</sub> is 25 /1000000	SUM=	\$ <u>CxA</u> 0 470.25	SDM Table 3(i
4	Design intensity, i $\frac{T_{VPe\ of\ surface}}{Steep\ Grassland\ (heavy\ soil)} = \frac{Run}{Concrete\ Paving}$ Upstream flow, $Q_o$ Design flow, $Q_o$ Allowable flow, $Q_a$	off Coeffic 0.35 0.95	$\begin{array}{c} a  /  (l_o + t_i + b)^c \\ 451.3  /  (4.5 + 1 + 2.4 t_{225}) \\ \\ \text{eient C} \qquad \qquad \\ 0.036  m^3 / s \\ \\ 0.278i \; \Sigma C_i A_j + Q_u \\ 0.278 \times 225 \times 470 \\ 0.065  m^3 / s \\ \\ a \; \times v \\ 0.10 \times 0.85 \\ 0.082  m^3 / s \\ \\ Q_d \end{array}$	where A <sub>j</sub> is 25 / 1000000	SUM=	\$ <u>CxA</u> 0 470.25	SDM Table 3(i

For Catchment Area D Ref. Area, A Average slope, H 0.1 per 100m Distance on the line of natural flow, L.  $0.14465L/(H^{0.2}A^{0.2}) = 0.14465(31) / (0.1^{\circ}0.2^{*}362^{\circ}0.1)$ Time of concentraction, to SDM 7.5.2 (d) 3.9 min For Proposed U-Channel in catchment area D From To Ground level (mPD) 10.70 10.70 Invert level (mPD) 10.50 10.29 Width of u-channel, w 200 mm Radius of u-channel, r 100 mm Length of u-channel, Lo 42 m Depth of vertical part of u-channel, d = 200 mm = (10 50-10 29)/42 Gradient of u-channel, St 0.005  $0.5 \, \pi r^2 + w \, d$ Cross-Section Area, a 0.5 x 3.14 x 100^2 + 200 x 200 0.056 m<sup>2</sup> πr+2d -Wetted Perimeter, p. 3.14 x 100 + 2 x 200 0.714 m Hydralic radius, R a/p SDM 8.2.1 0.078 m Use Manning Equation for estimating velocity of stormwater 0.016 for concrete lined channels:-SDM Table 13 Take n R1/6x (RS<sub>t</sub>)1/2/n Allowable velcoity, v = 0.078^1/6 x (0.078 x 0.005)^1/2 / 0.016 SDM Table 12 0.81 m/s Time of flow, t<sub>f</sub> 1.2 min Use "Rational Method" for calculation of design flow  $a/(t_{o} + t_{f} + b)^{c}$ Design intensity, i SDM 4.3.2 451.3 / (3.9+1+2.46)^2.337 for return period T = 50 years SDM Table 3(a) 228 Type of surface Runoff Coefficient C Catchment Area A (m2) CxA SDM 7.5.2 (d) Steep Grassland (heavy soil) Concrete Paving 0.35 0.0 0 362.0 0.95 343 9 SUM= 343 9  $0 m^3/s$ Upstream flow, Qu 0.278i ΣC<sub>1</sub>A<sub>1</sub> + Q<sub>u</sub> where A<sub>1</sub> is in km<sub>2</sub> SDM 7.5.2 (a) Design flow, Q<sub>d</sub> 0 278 × 228 × 343 9 /1000000 + 0  $0.022 \, \text{m}^3/\text{s}$ Allowable flow, Qa axv  $0.06 \times 0.81$  $0.045 \text{ m}^3/\text{s}$ Reference was made to Stormwater Drainage Manual (SDM) by DSD Page 4

Scale: N/A	Drainage Calculation	
	D.D. 109 Lot 1051 RP (Part).	
Aug-24	1052 and 1057	

1000

1	For Catchment Area E							Ref.
	Area.	Α	=	1017				1
	Average slope, Distance on the line of natural flow,		=	0.2 per 100m 105 m	1			
				0.14465L/(H <sup>0.2</sup> A <sup>0.2</sup> )	0.4440		010 01101710 11	
	Time of concentraction,	L <sub>O</sub>	=	10.5 min	= 0.1446	5(105) / (0	2/0.2/1017/0.1)	SDM 7.5.2 (d)
2	For Proposed U-Channel in catch	amer	nt area F	0) I				
2	To Proposed d-Ghainer in Cato	mici	it area L					
	Ground level (mPD) Invert level (mPD)		From 10.60 10.40	To 10.60 9.47				
	Width of u-channel,	w	=	300 mm				
	Radius of u-channel,		=	150 mm				
	Length of u-channel,	Lc	=	211 m				
	Depth of vertical part of u-channel,	d	=	300 mm				
	Gradient of u-channel,	S	=	(10.40-9.47)/211	=	0.004		
	Cross-Section Area,	а	=	$0.5 \text{ m/}^2 + \text{ w d}$	=	0.5 x 3.14	x 150^2 + 300 x 300	
			=	0.125 m <sup>2</sup>				
	Wetted Perimeter,	p	=	πr+2d	=	3.14 x 150	0 + 2 × 300	
		-	=	1.071 m				6011001
	Hydralic radius,	R	=	a/p 0.117 m				SDM 8.2.1
				0.500.000.000				
3	Use Manning Equation for estima	ating	velocity	of stormwater				
	Take	n	=	0.016	for concr	ete lined ch	annels:-	SDM Table 13
	Allowable velcoity,	٧	=	R <sup>1/6</sup> x (RS <sub>I</sub> ) <sup>1/2</sup> /n	=	0.117^1/6	x (0.117 x 0.004)^1/2 / 0.016	SDM Table 12
			=	0.99 m/s				
	Time of flow,	$t_{\rm f}$	=	0.3 min				1 1
4	Use "Rational Method" for calcul	ation	of desi	gn flow				
	Design intensity,	4	=	$a/(t_o + t_i + b)^c$				SDM 4.3.2
	Design intensity,	3	=	451.3 / (10.5+0+2.4	6143 337	for return	period T = 50 years	SDM Table 3(a
			=	189	0) 0.007	ior return	period 1 - 50 years	ODIW Table o(a
	Type of surface F	Runof	f Coeffic	ient C Catch	ment Area	A (m2)	S CxA	SDM 7.5.2 (d)
	Steep Grassland (heavy soil)		0.35		0.0		0	
	Concrete Paving		0.95		1017.0	01111	966.15	
						SUM=	966.15	1
	Upstream flow,	Qu	=	0.065 m <sup>3</sup> /s				1
	\$1.00 P44 675 675 675 675 675 675 675 675 675 675				andra A	In In It-		001/250
	Design flow,	₩ <sub>a</sub>	=	0.278i ΣC <sub>i</sub> A <sub>j</sub> + Q <sub>ii</sub>				SDM 7.5.2 (a)
			=	0.278 x 189 x 966.1	5 /100000	0 + 0.065		
			=	0.116 m <sup>3</sup> /s				
	Allowable flow,	$Q_a$	=	axv				1
			=	0.13 x 0.99				
			=	0.124 m <sup>3</sup> /s				
				2				
			>	Q <sub>d</sub>				
	Reference was made to Stormwate	r Dra	inage M	anual (SDM) by DSD				
	Scale: N/A		D	rainage Calculation			l	
	Scale, IN/A				200		1-0/	
	Aug-24			109 Lot 1051 RP (Pa 1052 and 1057	ırt),		Page 5	

1	For Catchment Area F							Ref.
	Area	A	124	267				
	Average slope		=	0.1 per 100n	n			
	Distance on the line of natural flow,		Ξ	29 m				
	Time of concentraction,	Ł	9	0.14465L/(H <sup>U 2</sup> A <sup>U 2</sup> )	= 0.1446	5(29) / (0.1)	^0 2*267^0 1)	SDM 7.5.2 (d)
			=	3.8 min	0.1440	5(25)1(0	0.2.201 0.11	0.5107 7.5.2 (0)
_	F P			=:				
2	For Proposed U-Channel in catc	nme	nt area h					
			From	То				
	Ground level (mPD)		10.60	10.90				
	Invert level (mPD)		9.47	9 28				
	Width of u-channel,	w	=	300 mm				
	Radius of u-channel		=	150 mm				
	Length of u-channel		=	41 m				
	Depth of vertical part of u-channel,		=	400 mm				
	Gradient of u-channel		=		-	0.005		
	Gradient of d-charmer	31	-	(9.47-9.28)/41	=	0.005		
	Cross-Section Area	а	=	$0.5 \text{ mr}^2 + \text{ w d}$	=	0.5 x 3.14	x 150^2 + 300 x 400	
			=	0.155 m <sup>2</sup>				
	Wetted Perimeter,	р	=	πr+2d	=	3.14 x 150	0 + 2 × 400	1
		365	=	1.271 m				1
	Hydralic radius	R	=	a/p				SDM 8.2.1
	*************		=	0.122 m				SERVICE FACTOR
3	Use Manning Equation for estim	ating	velocit	y of stormwater				
	Take	n	=	0.016	for concr	ete lined ch	annels:-	SDM Table 13
	Allowable velcoity,	V	=	R1/6x (RS <sub>t</sub> )1/2/n	=		x (0.122 x 0.005)^1/2 / 0.016	SDM Table 12
	, morrable followity,		=	1.05 m/s		0.122 1/0	A (0.122 A 0.000) 112 / 0.010	ODIVITABLE 12
	Time of flow,	tr	=	1.5 min				
4	Use "Rational Method" for calcu	latio	n of des	ign flow				
	Waster to be a second			1.0				
	Design intensity,	. 1	=	$a/(t_o + t_f + b)^c$				SDM 4.3.2
			=	451.3 / (3.8+1+2.46	6)^5.337	for return	period T = 50 years	SDM Table 3(a)
			=	226				
	Tues of surface	D	u cu-	inal C Catal		A / (1)	\$	0011750
	Type of surface Steep Grassland (heavy soil)	Runo	ff Coeffic 0.35	catch	ment Area	(MZ)	CxA 0	SDM 7.5.2 (d)
	Concrete Paving		0.95		267.0		253.65	
	Concrete Paving		0.95		207.0	SUM=	253.65	
						30W-	255.65	
	Upstream flow,	Qu	=	0.138 m <sup>3</sup> /s				
	Design flow	Qo	=	$0.278i \Sigma C_i A_i + Q_u$				SDM 7.5.2 (a)
			=	0 278 x 226 x 253 6	5 /100000	0 + 0 138		
			=	$0.154   m^3/s$				
	Alleration	0						
	Allowable flow	$Q_a$	=	axv				
			=	0.16 x 1.05				
			=	0.163 m <sup>3</sup> /s				
			>	Q <sub>o</sub>				
	Reference was made to Stormwate	er Dra						
	Scale: N/A		D	rainage Calculation				
			D.D.	109 Lot 1051 RP (Pa	art),		Page 6	
	Aug-24			1052 and 1057				

Area, Average slope, a conthe line of natural flow, Time of concentraction, aroposed U-Channel between  Ground level (mPD)  Invert level (mPD)  Width of u-channel, Radius of u-channel, Length of u-channel, of vertical part of u-channel, and the control of u-channel, and the u-channel, and the control of u-channel, and the	H = L = CP12 and From 10.90 9.01	0.0 min Existing Culvert To 10.40	= 0.14465(0) / (0.1^0.2*0^0.1)	SDM 7.5.2 (d)
Average slope, to on the line of natural flow, Time of concentraction, to roposed U-Channel between  Ground level (mPD) Invert level (mPD)  Width of u-channel, Radius of u-channel, Length of u-channel, of vertical part of u-channel, and to u-channel, and u-channel, and u-channel, and u-channel, and u-channel, and u-c	H = L = CP12 and From 10.90 9.01	0.m 0.14465L/(H <sup>0.2</sup> A <sup>0.2</sup> ) 0.0 min Existing Culvert To 10.40		SDM 7.5.2 (d)
Time of concentraction, in the concentraction of under the concentraction, in the concentraction of under the concentraction, in the concentraction of under the concentraction, in the concentraction of under the concentraction, in the concentraction of under	CP12 and From 10.90 9.01	0.m 0.14465L/(H <sup>0.2</sup> A <sup>0.2</sup> ) 0.0 min Existing Culvert To 10.40		SDM 7.5.2 (d)
Ground level (mPD) Invert level (mPD) Width of u-channel, Radius of u-channel, Length of u-channel, of vertical part of u-channel,	From 10.90 9.01	0.0 min Existing Culvert To 10.40	= 0.14465(0) / (0.1^0.2^0^0.1)	SDM 7.5.2 (d)
Ground level (mPD) Invert level (mPD) Width of u-channel, Radius of u-channel, Length of u-channel, of vertical part of u-channel,	From 10.90 9.01	0.0 min Existing Culvert To 10.40	- 0.14403(0)1 (0.1 0.2 0 0.1)	35W 1.3.2 (0
Ground level (mPD) Invert level (mPD)  Width of u-channel, Radius of u-channel, Length of u-channel, of vertical part of u-channel,	From 10.90 9.01	Existing Culvert To 10.40		
Ground level (mPD) Invert level (mPD)  Width of u-channel, Radius of u-channel, Length of u-channel, of vertical part of u-channel,	From 10.90 9.01	To 10.40		
Invert level (mPD)  Width of u-channel, Radius of u-channel, Length of u-channel, I of vertical part of u-channel, and the second secon	10.90 9.01	10.40		1
Invert level (mPD)  Width of u-channel, Radius of u-channel, Length of u-channel, I of vertical part of u-channel, and the second secon	10.90 9.01	10.40		
Invert level (mPD)  Width of u-channel, Radius of u-channel, Length of u-channel, I of vertical part of u-channel, and the second secon		0.00		
Radius of u-channel, Length of u-channel, Length of vertical part of u-channel,		8.86		
Radius of u-channel, Length of u-channel, Length of vertical part of u-channel,				
Length of u-channel, Lof vertical part of u-channel,		700 mm		
of vertical part of u-channel,		350 mm		- 00
		30 m		
	d =	1190 mm		
Gradient of u-channel, \$	S <sub>1</sub> =	(9.01-8.86)/30	= 0.005	
Cross-Section Area,	a =	$0.5 \text{ Tr}^2 + \text{ w d}$	= 0.5 x 3.14 x 350^2 + 700 x 1190	
	=	1.025 m <sup>2</sup>		
Wetted Perimeter,	p =	πr+2d	= 3.14 x 350 + 2 x 1190	
2022 2 22 1	=	3.479 m		
Hydralic radius,	₹ =	a/p		SDM 8.2.1
	=	0.295 m		
lanning Equation for estimati	ing velocit	y of stormwater		
Take	n =	0.016	for concrete lined channels:-	SDM Table 1
Allowable velcoity,		R1/6x (RS <sub>I</sub> )1/2/n	= 0.295^1/6 x (0.295 x 0.005)^1/2 / 0.0	The state of the s
The Walle Tologity,	=	1.96 m/s		
Time of flow,		3.9 min		
Rational Method" for calculat		ion flow	*	
Rational Method Tol Calculat	ion or des	ign now		,
Design intensity,	i =	$a / (t_o + t_i + b)^c$		SDM 4.3.2
	=	451.3 / (0.0+3+2.46	)^9.337 for return period T = 50 years	SDM Table 3(a
	=	242		
of surface Ru	noff Coeffic	cient C Catch	ment Area A (m2) CxA	SDM 7.5.2 (d
Grassland (heavy soil)	0.35	<u>Jent o</u>	0.0 0	OBW 7.0.2 (0
ete Paving	0.95		0.0	
oto r army	0100		SUM= 0	
	, see	4 705 /fee - Fee -	CD44) + 0.154 (From page CD44)	
Upstream flow, C			(CP11) + 0.154 (From new CP11)	
Service and the service and th	=	1.939	FOR ADDITION A WAS INSIDE	
Design flow, G	77		where A <sub>j</sub> is in km <sub>2</sub>	SDM 7.5.2 (a
	120		00000 + 1 785 (from Existing CP11) + 0.154 (From Existing CP11)	m new CP11)
	=	1.939 m <sup>3</sup> /s		
Allowable flow, C	) <sub>a</sub> =	axv		
	=	1.03 x 1.96		
	=	2.007 m <sup>3</sup> /s		1
		70-		
	>	$Q_{\sigma}$		1
	Drainage N	Manual (SDM) by DSD		
ence was made to Stormwater				
	r	Prainage Calculation	1	
ence was made to Stormwater		Orainage Calculation . 109 Lot 1051 RP (Pa		3 7
				ce was made to Stormwater Drainage Manual (SDM) by DSD

### Similar s.16 Applications in the Vicinity of the Site within the same "AGR" Zone in the Past 5 Years

#### Approved Applications

	Application No.	Use/Development	Date of Consideration
1.	A/YL-KTN/925	Proposed Temporary Warehouse	11.8.2023
		(excluding Dangerous Goods Godown)	
		for a Period of 3 Years and Filling of Land	
2.	A/YL-KTN/928	Proposed Temporary Warehouse	11.8.2023
		(excluding Dangerous Goods Godown)	
	т.	with Ancillary Facilities for a Period of 3	
	=	Years and Filling of Land	
3.	A/YL-KTN/940	Proposed Temporary Warehouse	25.8.2023
		(excluding Dangerous Goods Godown)	
		with Ancillary Facilities for a Period of 3	
		Years and Filling of Land	
4.	A/YL-KTN/959	Proposed Temporary Warehouse	10.11.2023
		(excluding Dangerous Goods Godown)	*
	2	with Ancillary Office and Temporary	
	_	Open Storage for a Period of 3 Years and	
(4)		Filling of Land	
5.	A/YL-KTN/970	Proposed Temporary Warehouse	19.4.2024
		(excluding Dangerous Goods Godown)	
	>	with Ancillary Facilities for a Period of 3	
		Years and Filling of Land	
6.	A/YL-KTN/976	Proposed Temporary Warehouse	19.4.2024
	84	(excluding Dangerous Goods Godown)	
		with Ancillary Office for a Period of 3	
		Years and Filling of Land	

#### Government Departments' General Comments

#### 1. Land Administration

Comments of the District Lands Officer/Yuen Long, Lands Department:

- no adverse comment on the application; and
- the application site (the Site) comprises Old Schedule Agricultural Lot Nos. 1051 RP, 1052 and 1057 all in D.D. 109 held under the Block Government Lease which contains the restriction that no structures are allowed to be erected without the prior approval of the Government.

#### 2. Traffic

Comments of the Commissioner for Transport:

• no comment on the application from traffic engineering perspective.

Comments of the Chief Highway Engineer/New Territories West, Highways Department:

• no adverse comment on the application from highways maintenance perspective.

#### 3. Environment

Comments of the Director of Environmental Protection:

- no objection to the application; and
- there was no environmental complaint received against the Site in the past three years.

#### 4. Fire Safety

Comments of the Director of Fire Services:

- no objection in principle to the application subject to the fire service installations (FSIs) being provided to his satisfaction; and
- the FSIs proposal is considered acceptable.

#### 5. Building Matters

Comments of the Chief Building Surveyor/New Territories West, Buildings Department:

no objection to the application.

#### 6. Heritage Conservation

Comments of the Chief Heritage Executive (Antiquities and Monuments) of the Antiquities and Monuments Office:

no objection in principle to the application from archaeological perspective.

#### 7. District Officer's Comments

Comments of the District Officer (Yuen Long), Home Affairs Department:

 his office has not received any local's comment on the application and he has no particular comment on the application.

#### 8. Other Departments

The following government departments have no objection to/no adverse comment/no comment on the application:

- Project Manager (West), Civil Engineering and Development Department; and
- Chief Engineer/Construction, Water Supplies Department.

#### **Recommended Advisory Clauses**

- (a) to resolve any land issues relating to the proposed use with the concerned owner(s);
- (b) to note the comments of the District Lands Officer/Yuen Long, Lands Department (LandsD) that:
  - the lot owner(s) shall apply to his office for a Short Term Waiver (STW) to permit the structure(s) erected within the private lots. The application for STW will be considered by the Government in its capacity as a landlord and there is no guarantee that they will be approved. The STW, if approved, will be subject to such terms and conditions including the payment of waiver fee and administrative fee as considered appropriate by LandsD. Besides, given the proposed use is temporary in nature, only erection of temporary structure(s) will be considered;
- (c) to note the comments of the Chief Engineer/Mainland North, Drainage Services Department that:
  - he has the following comments on the drainage proposal submitted:
    - i. peripheral drains should be provided from CP1 to CP5 and CP4 to CP11 to collect overland flow;
    - ii. the invert level of CP6 upstream is with same level as CP6 which is not acceptable;
    - iii. there are part of u-channel fall within Lot 1050 S.A which is outside the application site (the Site) and not desirable. Please review the proposal;
    - iv. application site layout should be shown in all drawings;
    - v. base map should be provided in Drawing No. 5-01;
    - vi. please provide engineering drawing showing all details of connection discharge points;
  - vii. the external catchment areas are incorrect. It should be determined according to existing topographic levels;
  - viii. where the photo 6 was taken;
  - ix. please provide more photos along the proposed discharge path;
  - x. please provide photos for the existing natural stream adjacent to the Site (along CP4 and CP11); and
  - xi. the details of cross sections are not correct, such as the size of u-channels. Also, all ground levels included in the Site should be indicated.

- (d) to note the comments of the Chief Engineer/Construction, Water Supplies Department (WSD) that:
  - existing water mains will be affected and the cost of any necessary diversion shall be borne by the proposed use;
  - in case it is not feasible to divert the affected water mains, a waterworks reserve within 1.5 metres from the centre line of the water main shall be provided to WSD. No structure shall be built or materials stored within this waterworks reserve. Free access shall be made available at all times for staff of the Director of Water Supplies or their contractor to carry out construction, inspection, operation, maintenance and repair works;
  - no trees or shrubs with penetrating roots shall be planted within the waterworks reserve or in the vicinity of the water main; and
  - Government shall not be liable to any damage whatsoever and howsoever caused arising from burst or leakage of the public water mains within and in close vicinity of the Site;
- (e) to note the comments of the Commissioner for Transport that:
  - the Site is connected to the public road network via a section of a local access road which is not managed by the Transport Department. The land status of the local access road should be checked with LandsD. The management and maintenance responsibilities of the local access road should be clarified with the relevant lands and maintenance authorities accordingly. Sufficient manoeuvring space shall be provided within the Site. No vehicle is allowed to queue back to or reverse onto/ from public roads at any time during the planning approval period;
- (f) to note the comments of the Chief Highway Engineer/New Territories West, Highways Department (HyD) that:
  - the Site is adjoining to a local access connecting Kong Tai Road which is not maintained by HyD; and
  - adequate drainage measures should be provided to prevent surface water running from the Site to the nearby public roads and drains;
- (g) to note the comments of the Director of Environmental Protection (DEP) that:
  - the applicant is advised to follow the relevant mitigation measures and requirements in the revised 'Code of Practice on Handling the Environmental Aspects of Open Storage and Temporary Uses' issued by DEP;
- (h) to note the comments of the Chief Town Planner/Urban Design and Landscape, Planning Department that:
  - the applicant is advised that approval of the application does not imply approval of tree works, if any, such as pruning, transplanting and felling. The applicant is reminded to seek comments and approval for any proposed tree works from the relevant department prior to the commencement of the works;

- (i) to note the comments of the Director of Fire Services (D of FS) that:
  - the applicant is advised to the installation/maintenance/modification/repair work of FSIs shall be undertaken by a Registered Fire Service Installation Contractor (RFSIC). The RFSIC shall after completion of the installation/maintenance/ modification/repair work issue to the person on whose instruction the work was undertaken a certificate (F.S. 251) and forward a copy of the certificate to the D of FS;
- (j) to note the comments of the Chief Heritage Executive (Antiquities and Monuments) of the Antiquities and Monuments Office that:
  - the applicant is required to inform his office immediately when any antiquities or supposed antiquities under the Antiquities and Monuments Ordinance (Cap. 53) are discovered in the course of works; and
- (k) to note the comments of the Chief Building Surveyor/New Territories West, Buildings Department (BD) that:
  - the Site shall be provided with means of obtaining access thereto from a street and emergency vehicular access in accordance with Regulations 5 and 41D of the Building (Planning) Regulations (B(P)R) respectively;
  - the Site does not abut a specified street of not less than 4.5m wide and its permitted development intensity shall be determined under Regulation 19(3) of the B(P)R at the building plan submission stage;
  - if the existing structures (not being a New Territories Exempted House) are erected on leased land without the approval of the Building Authority (BA), they are unauthorised building works (UBWs) under the Buildings Ordinance (BO) and should not be designed for any proposed use under the application;
  - for UBW erected on leased land, enforcement action may be taken by BD to effect their removal in accordance with the prevailing enforcement policy against UBW as and when necessary. The granting of any planning approval should not be construed as an acceptance of any existing building works or UBW on the Site under the BO;
  - before any new building works (including containers/open sheds as temporary buildings, demolition and land filling, etc.) are to be carried out on the Site, prior approval and consent of the BA should be obtained, otherwise they are UBW under the BO. An Authorized Person should be appointed as the co-ordinator for the proposed building works in accordance with the BO;
  - any temporary shelters or converted containers for office, storage, washroom or other
    uses are considered as temporary buildings are subject to the control of Part VII of the
    B(P)R; and
  - detailed checking under the BO will be carried out at the building plan submission stage.

a \*\*

☐ Urgent ☐ Return Receipt Requested ☐ Sign ☐ Encrypt ☐ Mark Subject Restricted ☐ Expand personal&publi	
A/YL-KTN/989 DD 109 Kam Tin 29/02/2024 03:33	
From: To: "tpbpd" <tpbpd@pland.gov.hk> Sent by: tpbpd@pland.gov.hk File Ref:</tpbpd@pland.gov.hk>	
A/YL-KTN/989	
Lots 1051 RP (Part), 1052 and 1057 in D.D. 109, Kam Tin	
Site area: About 2,899.2sq.m	
Zoning: "Agriculture"	
Applied use: Warehouse / 7 Vehicle Parking / Filling of Land	
Dear TPB Members,	
Strong Objections. This is effectively extending brownfield operations further into farmland.	
TPB recently approved adjacent lots, Application 891, for Hobby Farm use indicating that there is potential for genuine farming activity in the district.	
The application should be rejected.	

Mary Mulvihill

☐ Urgent	☐ Return Receipt Requested ☐ Sign ☐ Encrypt ☐ Mark Subject Restricted	☐ Expand personal&publ
	KFBG's comments on two planning applications 01/03/2024 15:56	
From; To: Sent by: File Ref:	"tpbpd@pland.gov.hk" <tpbpd@pland.gov.hk> tpbpd@pland.gov.hk</tpbpd@pland.gov.hk>	
2 attachme	ents	
240301 s16 M	UP 200.pdf 240301 s16 KTN 989.pdf	

Dear Sir/ Madam,

Attached please see our comments regarding two applications. There are two pdf files attached to this email. If you cannot see/ download/ open these files, please notify us through email.

Please do not disclose our email address.

Thank You and Best Regards,

Ecological Advisory Programme Kadoorie Farm and Botanic Garden

#### Email Disclaimer:

The information contained in this e-mail (including any attachments) is confidential and is intended solely for the addressee. If you are not the intended recipient, please notify the sender immediately and delete this e-mail from your system. Any unauthorised use, disclosure, copying, printing, forwarding or dissemination of any part of this information is prohibited. KFBG does not accept responsibility and shall not be liable for the content of any e-mail transmitted by its staff for any reason other than bona fide official purposes. There is no warranty that this e-mail is error or virus free. You should not rely on any information that is not transmitted via secure technology.



#### 嘉道理農場暨植物園公司 Kadoorie Farm & Botanic Garden Corporation

The Secretary,
Town Planning Board,
15/F, North Point Government Offices,
333, Java Road, North Point,
Hong Kong.
(Email: tpbpd@pland.gov.hk)

1st March, 2024.

By email only

Dear Sir/ Madam,

## Proposed Temporary Warehouse (excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years and Filling of Land (A/YL-KTN/989)

- 1. We refer to the captioned.
- 2. We visited the site yesterday and we spotted that the area next to the site was still under active cultivation (Figure 1).
- 3. We urge the Board to seriously consider the potential cumulative impacts of approving this application on the environment there.
- 4. The proposed use is unlikely to be in line with the planning intention of the AGR zone and we urge the Board to reject this application.
- Thank you for your attention.

Ecological Advisory Programme Kadoorie Farm and Botanic Garden



#### 嘉道理農場暨植物園公司 Kadoorie Farm & Botanic Garden Corporation

Figure 1. On-site photo showing the site and its adjacent active farmland (behind the fence).

