R-Riches
Property Consultants Ltd.

顧問有限公司 盈卓物業

Our Ref.: DD117 Lot 1483 & VL
Your Ref.: TPB/A/YL-TT/635

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

<u>**By Email**</u>

10 May 2024

Dear Sir,

<p align="center">**1ˢᵗ Further Information**</p>

<p align="center">**Proposed Temporary Warehouse (Excluding Dangerous Goods Godown)
with Ancillary Facilities for a Period of 3 Years in "Open Storage" and "Recreation" Zones,
<u>Various Lots in D.D. 117 and Adjoining Government Land, Tai Tong, Yuen Long, New Territories</u>**</p>

<p align="center">**(S.16 Planning Application No. A/YL-TT/635)**</p>

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

Should you require more information regarding the application, please contact our Ms. Ron LEUNG at ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓ or the undersigned at your convenience. Thank you for your kind attention.

Yours faithfully,

For and on behalf of
R-riches Property Consultants Limited

Louis TSE
Town Planner

cc DPO/TMYLW, PlanD　　(Attn.: Ms. Eva TAM　　email: ekytam@pland.gov.hk　　)
　　　　　　　　　　　　(Attn.: Mr. Bosco YUNG　　email: btkyung@pland.gov.hk　　)

香港新界錦田吉慶圍 236 號盈匯坊 D 座
Block D, The Richfield, 236 Kat Hing Wai, Kam Tin, NT, HK

Responses-to-Comments

**Proposed Temporary Warehouse (Excluding Dangerous Goods Godown)
with Ancillary Facilities for a Period of 3 Years in "Open Storage" and "Recreation" Zones,
Various Lots in D.D. 117 and Adjoining Government Land, Tai Tong, Yuen Long, New Territories**

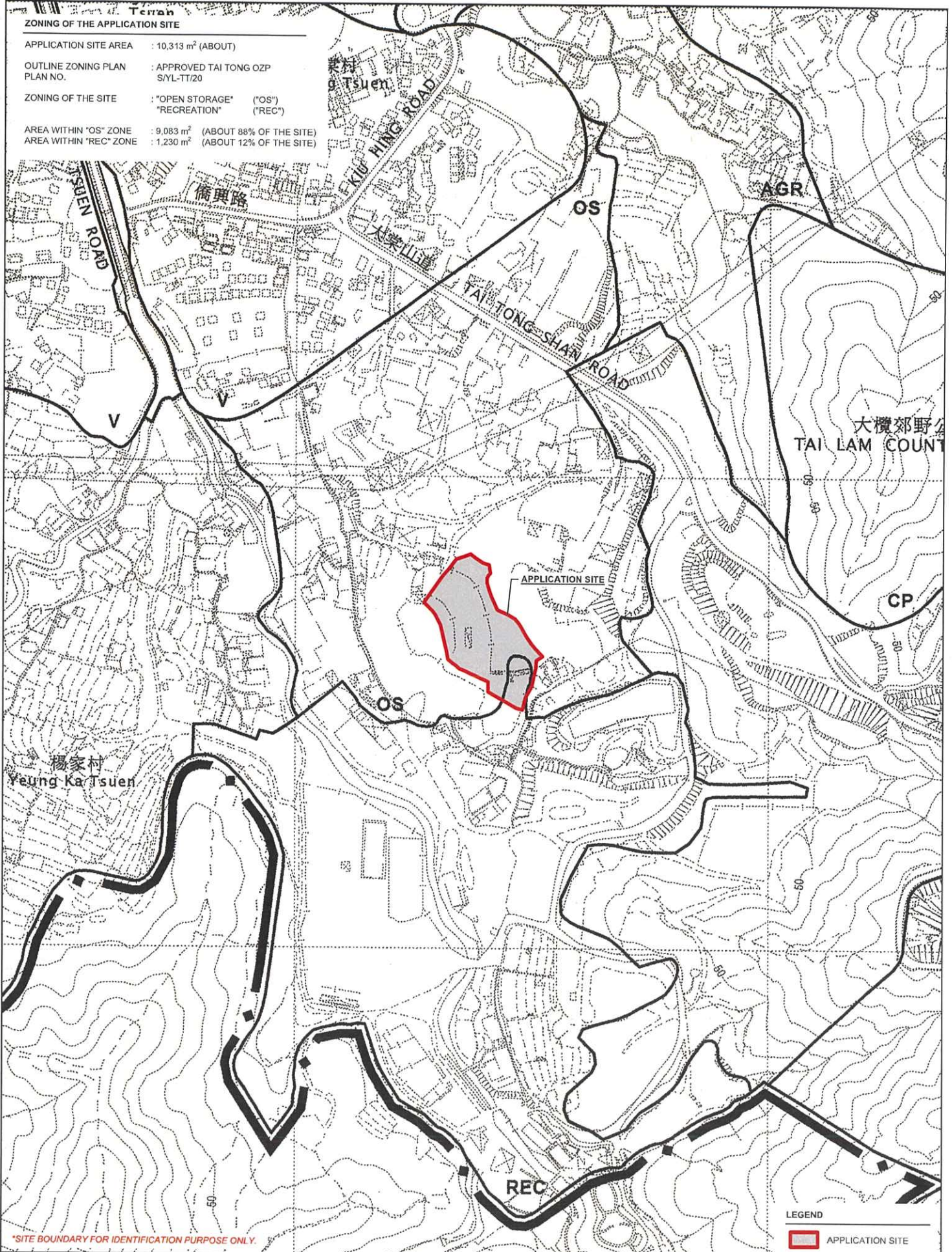**(S.16 Planning Application No. A/YL-TT/635)**

(i)   A RtoC Table:

Departmental Comments			Applicant's Responses
1.	**Comments of District Lands Officer/Yuen Long, Lands Department (DLO/YL, LandsD)**		
	(Contact Person: Ms. CHENG; Tel: 2443 1072)		
(a)	The application site comprises Government Land (GL) and Old Schedule Agricultural Lot Nos. 1477 S.A ss.1, 1481, 1483, 1484 S.B, 1484 S.C, 1484 S.D, 1484 S.E, 1484 S.F, 1484 S.G, 1485 and 1486 all in D.D. 117 held under the Block Government Lease which contains The restrictions that no structures are allowed to be erected without the prior approval of the Government.		Noted. The applicant will submit Short Term Waiver (STW) and Short Term Tenancy (STT) applications to rectify the applied use erected on the concerned lots and Government Land after planning approval has been obtained from the Board. The unauthorised structures erected on the concerned lots and GL will be demolished by the applicant after planning approval has been obtained from the Board to facilitate the proposed scheme.
(b)	Within the application site, the following private lots and portion of GL are currently covered by Short Term Waivers (STWs) and Short Term Tenancy (STT), details of which are listed below:		Noted.
	Lot No. GL in D.D.117	STW / STT No.	Permitted Use	
	1483, 1484 S.A, 1484 S.D and 1484 S.E	5474	Temporary Wholesale Trade with Ancillary Office	
	1484 S.B and 1484 S.G	5475		
	1484 S.C and 1484 S.F	5476		
	GL in D.D.117	STTYL0186		

(c)	I must point out that the following irregularities covered by the subject planning application have been detected by this office: <u>Unauthorised structure(s) within the said private lot(s) covered by the planning application</u>	Noted. The applicant will apply for relevant approval to rectify the applied use accordingly.
	LandsD has reservation on the planning application since there are unauthorised structure(s) and/or uses on Lot 1477 S.A ss.1 and 1485 both in D.D. 117 which is already subject to lease enforcement actions according to case priority. The lot owner(s) should rectify/apply for regularization on the lease breaches as demanded by LandsD.	
	<u>Unlawful occupation of Government land adjoining the said private lot(s) with unauthorised structure(s) covered by the planning application</u>	
	The Government land within the application site (about 1,794m² as mentioned in the application form) has been fenced off and unlawfully occupied with unauthorised structure(s) without any permission. Any occupation of GL without Government's prior approval is an offence under Cap.28. This office reserves the rights to take necessary land control action against the unlawful occupation of Government land without further notice.	

2.	**Comments of Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD) (Contact Person: Mr. TSE; Tel: 2300 1627)**	
(a)	Drainage Impact Assessment is required for this application.	The applicant has submitted a drainage impact assessment to mitigate the potential drainage impact caused by the proposed development, in order to support the application (**Annex I**).

3.	**Comments of District Planning Officer, Tuen Mun and Yuen Long West, Planning Department (DPO/TMYLW, PlanD)**	
(a)	Please clarify the portion of "OS" zone and "REC" zone.	Majority of the Site (i.e. 9,083m², about 88% of the Site) falls within an area zoned as

R-Riches Property Consultants Ltd.	"Open Storage" zone and the remaining portion of the Site (i.e. 1,230m², about 12% of the Site) falls within "Recreation" zone (**Plan 1**).

ZONING OF THE APPLICATION SITE

APPLICATION SITE AREA : 10,313 m² (ABOUT)

OUTLINE ZONING PLAN : APPROVED TAI TONG OZP
PLAN NO. : S/YL-TT/20

ZONING OF THE SITE : "OPEN STORAGE" ("OS")
"RECREATION" ("REC")

AREA WITHIN "OS" ZONE : 9,083 m² (ABOUT 88% OF THE SITE)
AREA WITHIN "REC" ZONE : 1,230 m² (ABOUT 12% OF THE SITE)

APPLICATION SITE

LEGEND

APPLICATION SITE

PLANNING CONSULTANT	PROJECT	ADDRESS	SCALE		TITLE	
R-Riches Property Consultants Ltd.	PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) WITH ANCILLARY FACILITIES FOR A PERIOD OF 3 YEARS	VARIOUS LOTS IN D.D. 117 AND ADJOINING GOVERNMENT LAND, TAI TONG, YUEN LONG, NEW TERRITORIES	1 : 5000 @ A4		ZONING PLAN	
			DRAWN BY MN	DATE 8.1.2024		
			REVISED BY LT	DATE 8.5.2024	DWG NO. PLAN 1	VER. 001

Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years

At Various Lots in D.D. 117 and Adjoining Government Land, Tai Tong, Yuen Long, New Territories

Drainage Assessment Report

May 2024

Drainage Consultant:
C & H Consulting Co. Ltd

Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years at various Lots in D.D. 117 and Adjoining Government Land, Tai Tong, Yuen Long, New Territories (A/YL-TT/635)

DRAINAGE IMPACT ASSESSMENT

CONTENT

Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years at various Lots in D.D. 117 and Adjoining Government Land, Tai Tong, Yuen Long, New Territories (A/YL-TT/635)

1. Introduction

Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years at various Lots in D.D. 117 and Adjoining Government Land, Tai Tong, Yuen Long, New Territories (A/YL-TT/635), is applied for planning permission. This report is a Drainage Assessment Report to support the submission.

2. Site Description

The site is located on the left in western side of Tai Tong Shan Road. The site has a higher level on the northern side and lower level on the southern side. The site has partly developed, and the open storage has been constructed at the site. The topography level of the site is lower than the eastern side of site and higher than the western side of the site. Site Area is about 10,313 sq. m (Includes Government Land of about 1,794 sq. m) (Appendix A shows the Location Plan) The ground profile in the further west is sloping downward towards the west direction.

There are some existing drainage facilities that existing Stream (5m width x 5 m depth) along northern side of the site connected to existing open channel Wong Tong Stream with critical size 13m width x 6m depth along western side of the site. Existing Stream is natural-stream channels (conservatively take n=0.04). and the open channel is made of concrete (conservatively take n=0.018). The final discharge is managed by DSD.

3. Drainage Assessment

Peripheral channel is designed to collect the runoff generated from and passed through the site (Appendix B shows the Outside Catchment Area Plan). The final discharge point is the existing 13m width x 6m depth open channel in the western side of the site. The runoff intensity is 180mm/hr. The runoff coefficient

Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a
Period of 3 Years at various Lots in D.D. 117 and Adjoining Government Land, Tai Tong, Yuen Long,
New Territories (A/YL-TT/635)

of the site to be 0.95, while that of the part of outside catchment area is 0.95 and part of area is 0.40. (Appendix C shows the Drainage Layout Plan of the site).

The overall catchment area for the existing 1m(W) x 1m (H), 5m(W)x5m(H) and 13m(W) x 6m(H) open channels is presented in Appendix D. The total area including the site is 614641.84q.m The runoff intensity is 180mm/hr. It is conservatively assumed that site area to be hard paved (C=0.95) and adjacent area to be grass land, steep slope and heavy soil (C=0.4).

For the site itself, the runoff including the site and the outside catchment area is collected by existing 1m (W) x 1m (H) channel and finally discharge to the existing 13m(W)x6m(H) open channel Wong Tong Stream via the existing 1m dia. Underground pipe, 900mm width stepped channel and 5m (W) x 5m (H) channel. For checking the existing 13m(W)x6m(H) open channel, since the site is currently developed and become hard-paved, in drainage point of view, the runoff coefficient is 0.95. It is found that the 13m(W)x6m(H) open channel is adequate to cater the extra runoff due the proposed development. Detailed calculation is presented in Appendix E. Also, all proposed drainage facility and existing drainage system has been checked

It is found that the existing open channel is capable to cater the runoff without flooding risk.

4. Conclusion

Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years at various Lots in D.D. 117 and Adjoining Government Land, Tai Tong, Yuen Long, New Territories (A/YL-TT/635), is applied for planning permission. The runoff generated from the site is collected and discharged to the existing open channel in the south that finally discharges to Existing open channel Wong Tong Stream (SCP1011280) maintained by DSD. The overall catchment of the existing open channel and the corresponding runoff is

investigated and found that it is capable of catering to the extra runoff from the proposed development. (Appendix E shows the detailed calculation) There is no flooding risk for the proposed development.
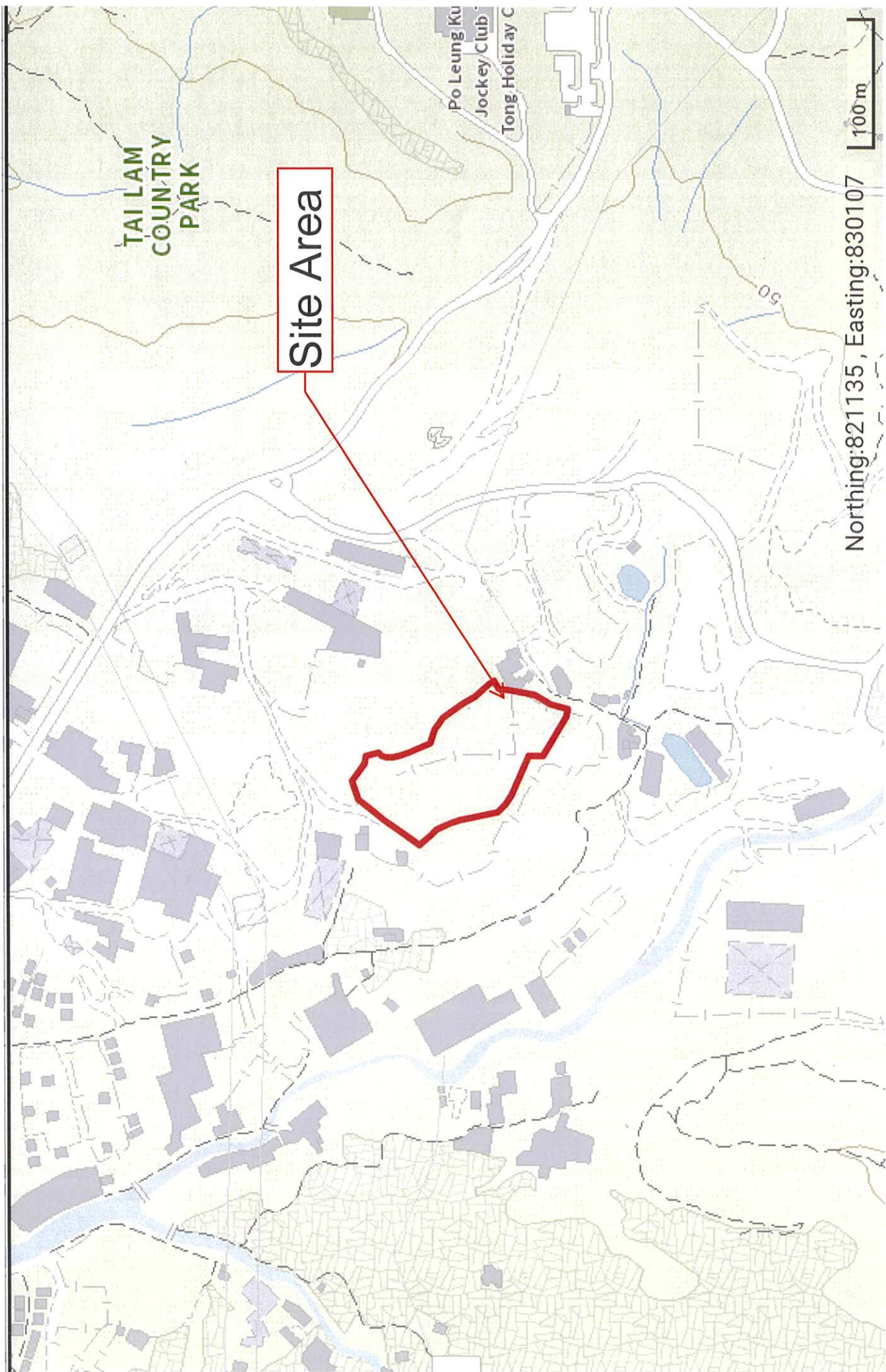
Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years at various Lots in D.D. 117 and Adjoining Government Land, Tai Tong, Yuen Long, New Territories (A/YL-TT/635)

Appendix A: Site Location Plan

TAI LAM COUNTRY PARK

Po Leung Ku
Jockey Club
Tong Holiday C

Site Area

Northing:821135 , Easting:830107

50

100 m

Site Area

Appendix B: Outside Catchment Plan

TAI LAM COUNTRY PARK

Po Leung Kuk Jockey Club Tai Tong Holiday Camp

38338 m²
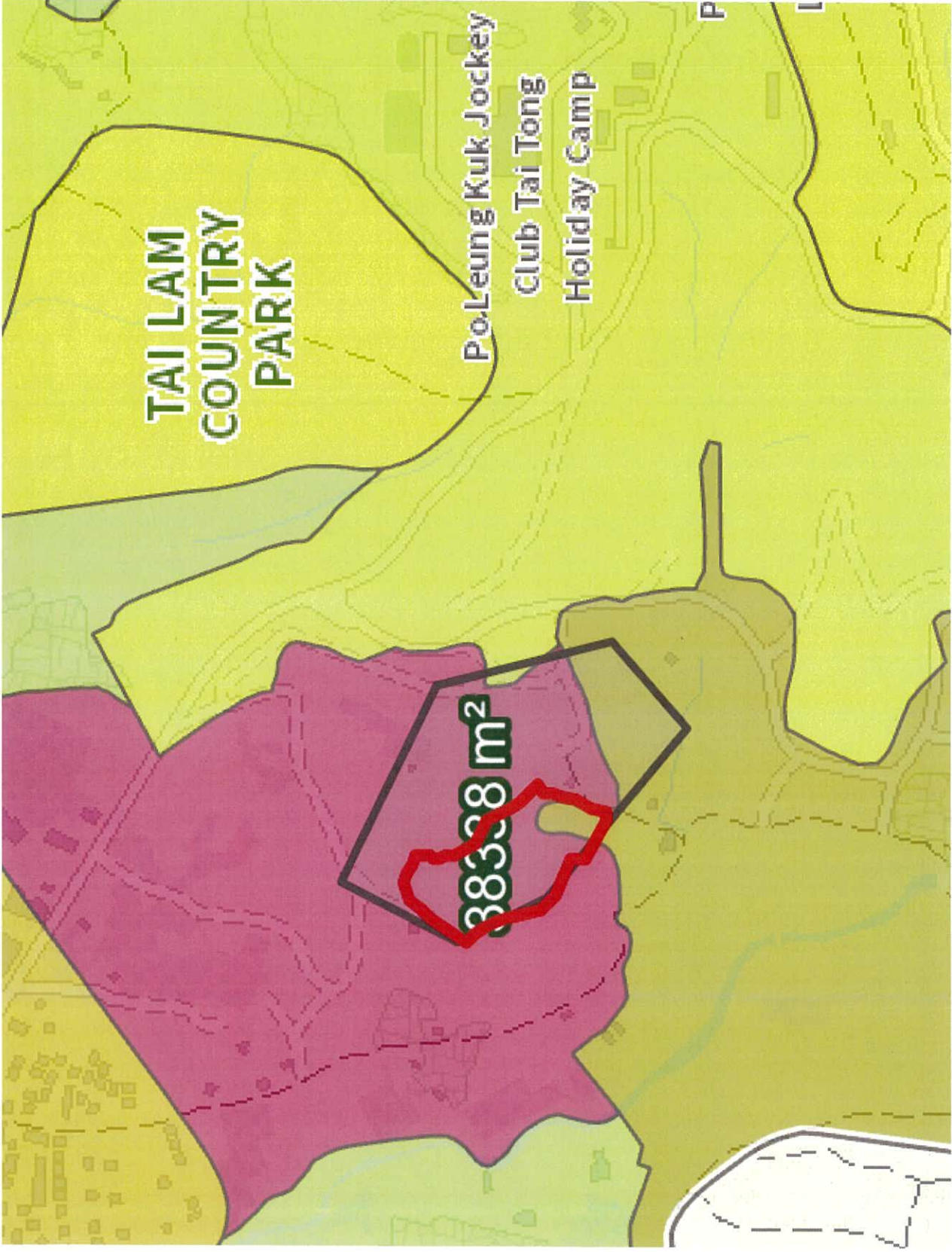
Site Catchment Area = 10,313 m2 (Surface runoff coefficient = 0.95)
Outside Catchment Area = 28,025 m2 (Surface runoff coefficient = 0.4)

Appendix C:
Drainage layout plan

Note:

1. Catchpit (CP13) with desilting facility shall follow CEDD standard drawing No. C2406I.

2. Proposed Catchpit and UC follows Typical Details of Geotechnical Manual for Slope Fig.8.10 and Fig.8.11 respectively.

3. The inverted level of the connection point shall be verified on site prior the commencement of work

Legend:

→ Proposed UC (Gradient) with cast iron cover

⇉ Existing Drain

☐ Proposed Catchpit

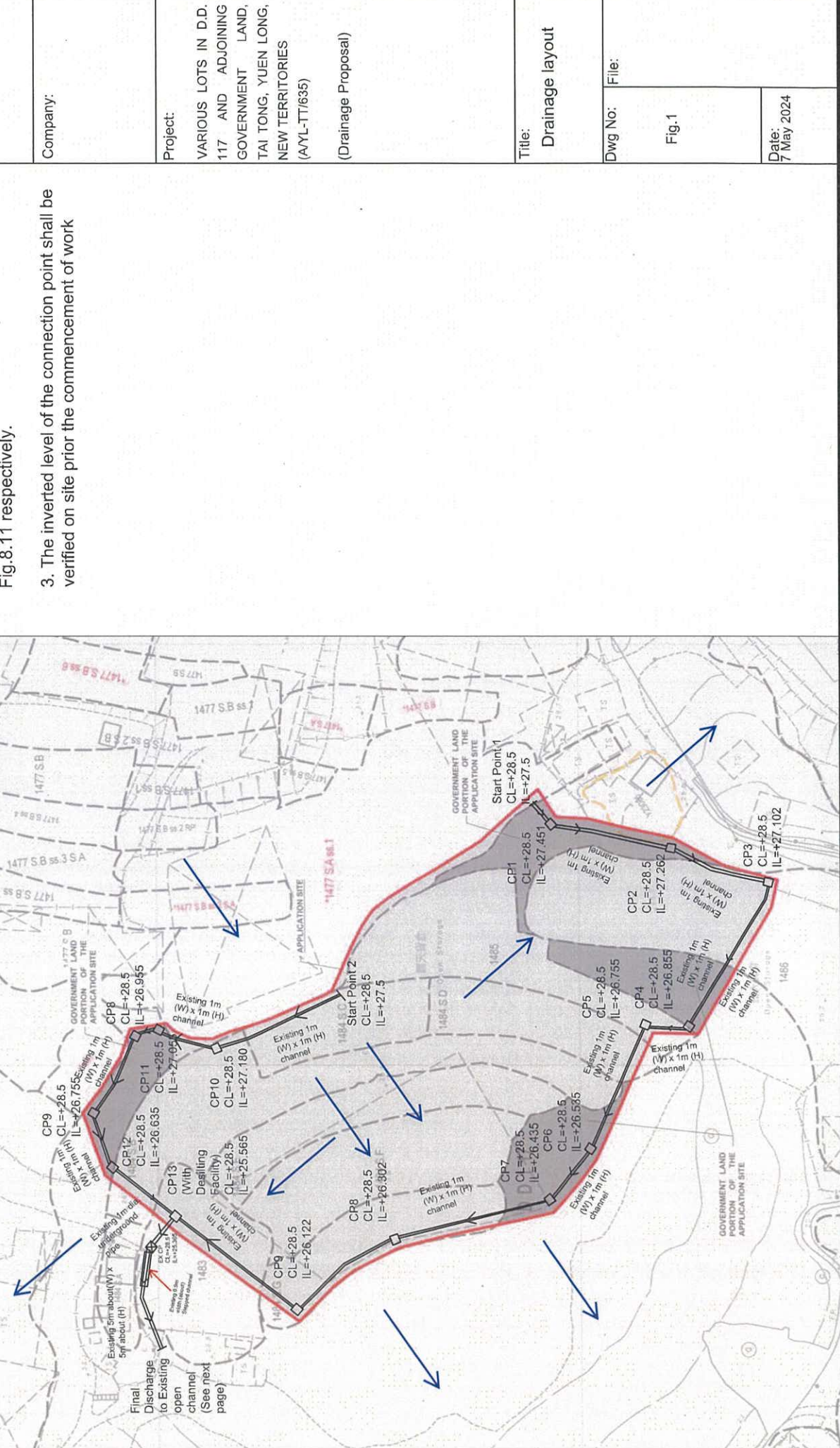**Company:**

Project:
VARIOUS LOTS IN D.D. 117 AND ADJOINING GOVERNMENT LAND, TAI TONG, YUEN LONG, NEW TERRITORIES (A/YL-TT/635)

(Drainage Proposal)

Title:
Drainage layout

Dwg No:
Fig.1

File:

Date:
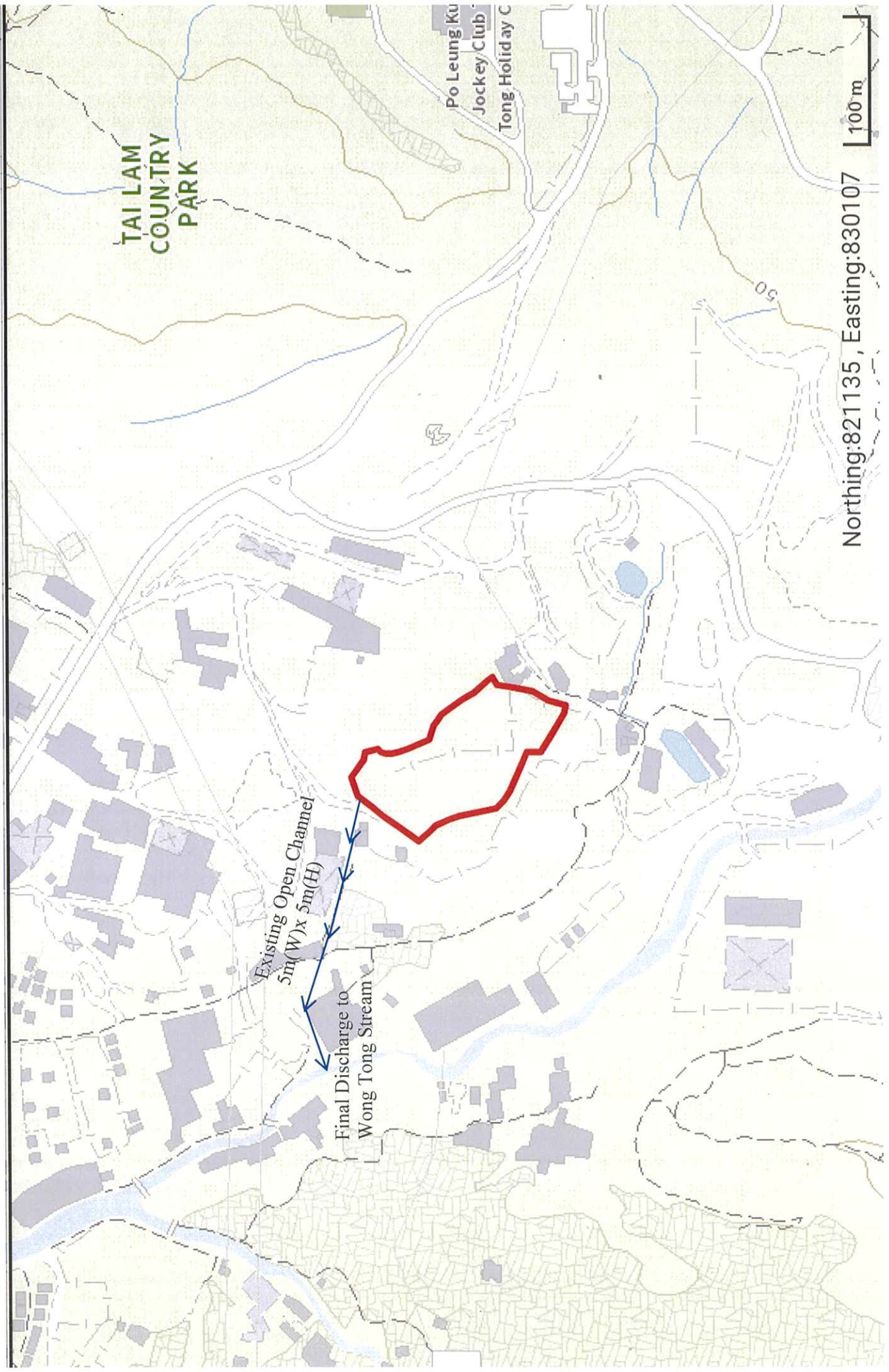7 May 2024

LAND STATUS OF THE APPLICATION SITE

APPLICATION SITE AREA   10,313 m² (ABOUT)

AREA OF PRIVATE LAND   8,519 m² (ABOUT)
AREA OF GOVERNMENT LAND   1,794 m² (ABOUT)

Start Point 1
CL=+28.5
IL=+27.5

CP1
CL=+28.5
IL=+27.451

CP2
CL=+28.5
IL=+27.262

CP3
CL=+28.5
IL=+27.102

CP4
CL=+28.5
IL=+26.855

CP5
CL=+28.5
IL=+26.755

Start Point 2
CL=+28.5
IL=+27.5

CP6
CL=+28.5
IL=+26.535

CP7
CL=+28.5
IL=+26.435

CP8
CL=+28.5
IL=+26.302

CP9
CL=+28.5
IL=+26.122

CP10
CL=+28.5
IL=+27.180

CP11
CL=+28.5
IL=+27.05

CP12
CL=+28.5
IL=+26.635

CP13 (With Desilting Facility)
CL=+28.5
IL=+25.565

CP8
CL=+28.5
IL=+26.955

CP9
CL=+28.5
IL=+26.755

EX CP
CL=+28.5
IL=+25.565

Existing 1m (W) x 1m (H) channel

Existing 1m dia. underground pipe

Existing 5m about (W) x 5m about (H)

Final Discharge to Existing open channel (See next page)

TAI LAM COUNTRY PARK

Po Leung Ku
Jockey Club
Tong Holiday C

Existing Open Channel
5m(W)x 5m(H)

Final Discharge to
Wong Tong Stream

Northing:821135 , Easting:830107

100 m

Appendix D: Overall Catchment Area for Existing Channel

Appendix D1: Overall Catchment Area for Existing 5m (W) x 5m (H) Channel
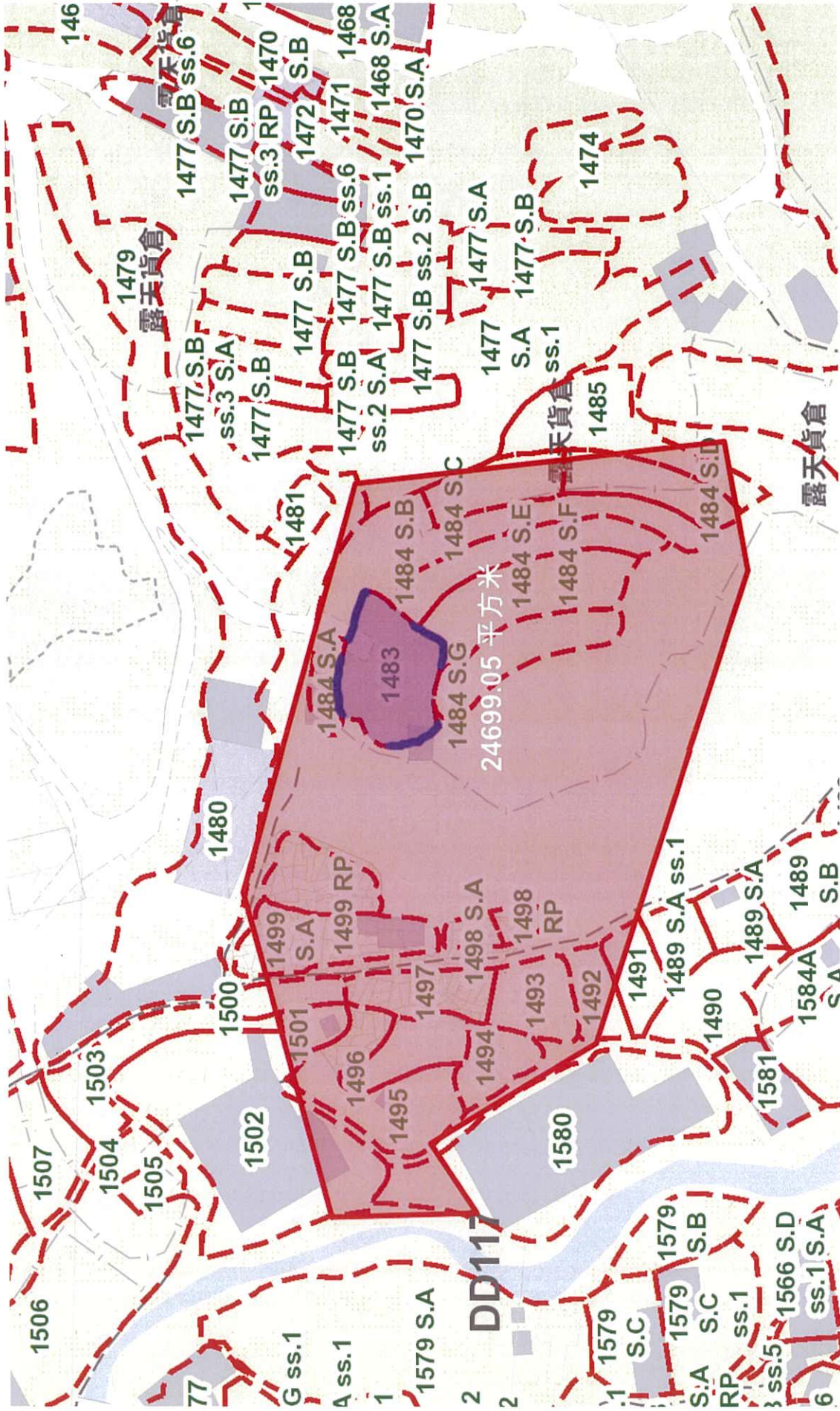
Catchment Area = 24699.05m2
Coefficient of surface runoff =0.25

24699.05 平方米

1483

DD117

1484 S.A
1484 S.B
1484 S.C
1484 S.E
1484 S.F
1484 S.D
1484 S.G

146
1468
1471
1468 S.A
1468 S.B
1470
1470 S.A
1472 S.B
1477 S.B ss.6
1477 S.B ss.1
1470 S.A
ss.3 RP
1477 S.B
1477 S.B ss.6
1477 S.B ss.2 S.B
1477 S.A
1477 S.B
1479
露天貨倉
1477 S.B
ss.3 S.A
1477 S.B
1477 S.B
1477 S.B
ss.2 S.A
1477 S.B
ss.2 S.A
1477
S.A
1477 S.B
1477
S.A ss.1
1481
1480
1474
1485
露天貨倉
露天貨倉

1499
S.A
1499 RP
1498 S.A
1498
RP
1489 S.A ss.1
1489
S.B
1489 S.A
1500
1501
1497
1493
1492
1491
1490
1489
1584A
S.A
1503
1496
1494
1495
1581
1504
1505
1502
1580
1506
1507
1579 S.A
1579
S.C
1579
S.C
1579
S.B
1566 S.D
1566 S.A
ss.1
77
G ss.1
A ss.1
1
2
2
S.A
RP
ss.5
6

Appendix D2: Overall Catchment Area for Existing 13m (W) x 6m (H) Channel
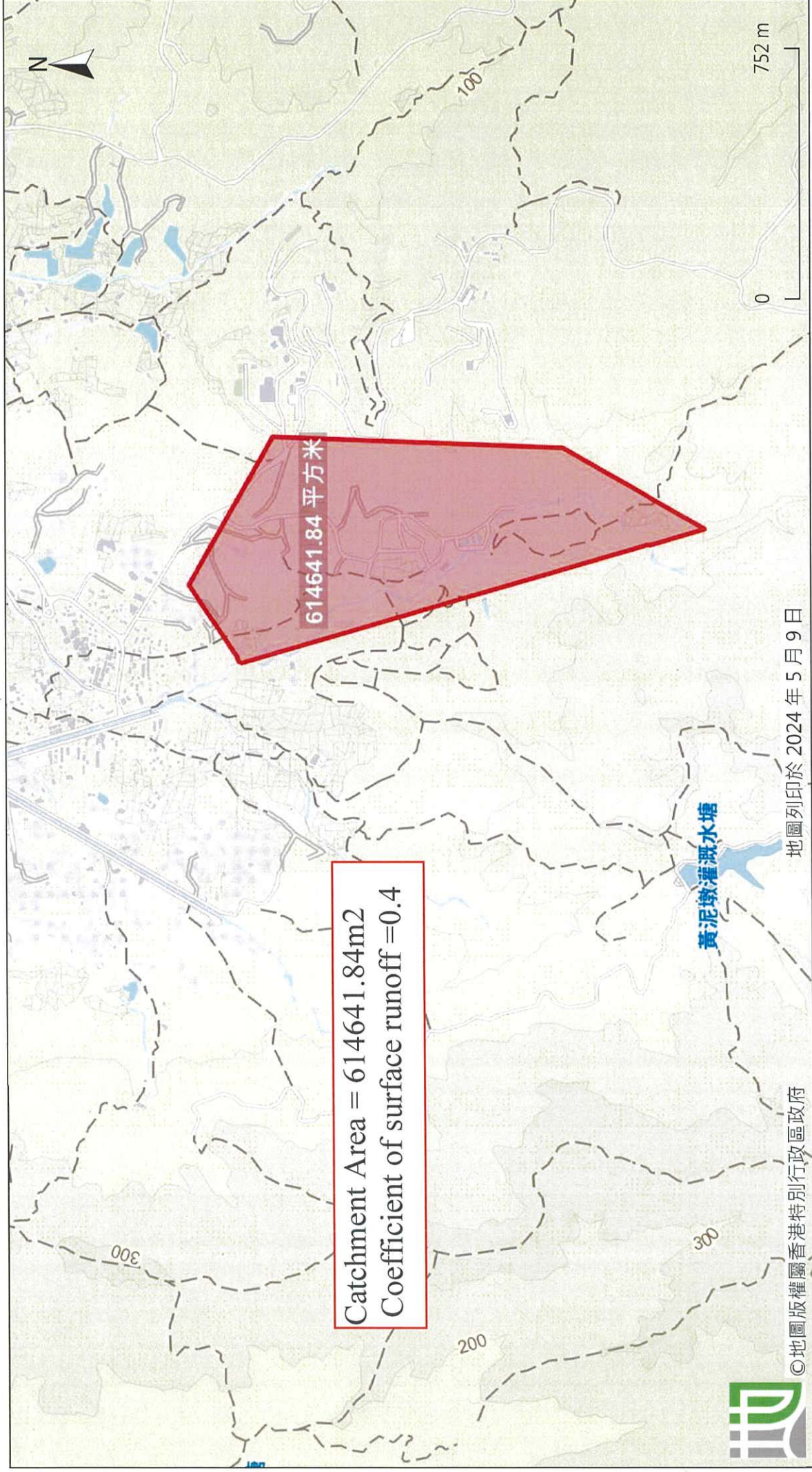
GEOINFO MAP
地理資訊地圖

前往地圖: https://www.map.gov.hk/gm/geo:22.4081,114.0166?z=18056

614641.84 平方米

Catchment Area = 614641.84m2
Coefficient of surface runoff = 0.4

黃泥墩灌溉水塘

N

752 m

0

100

200

300

地圖列印於 2024 年 5 月 9 日

由「地理資訊地圖」網站提供: https://www.map.gov.hk

©地圖版權屬香港特別行政區政府

注意: 使用此地圖受「地理資訊地圖」的使用條款及條件以及知識產權告示約束。

GEOINFO MAP
地理資訊地圖

前往地圖: https://www.map.gov.hk/gm/geo:22.4046,114.0032?z=36112

Catchment Area ＝ 614641.84m2
Coefficient of surface runoff ＝0.4

614641.84 平方米

大欖涌水塘

黃泥墩灌溉水塘

洪水坑灌溉水塘

藍地灌溉水塘

屯門

地圖列印於 2024 年 5 月 9 日

由「地理資訊地圖」網站提供: https://www.map.gov.hk

注意: 使用此地圖受「地理資訊地圖」的使用條款及條件以及知識產權告示約束。

0   1.5 km

Appendix E: Calculation

Appendix E1: Calculation of 1m x 1m channel and 1000mm dia. pipe and 900mm width stepped channel

Company:
Project :

Date: 9/5/2024

Site Area =   10313   m2   (C =0.95, hard-paved)
Outside Catchment Area =   28025   m2   (C=0.4, Grassland, heavy soil, Steep Slope)
Total Catchmnet Area=   38338   m2

$$t_o = \frac{0.14465L}{H^{0.2} A^{0.1}}$$

where t_o =   time of concentration of a natural catchment (min.)

         A   =   catchment area (m²)

         H   =   average slope (m per 100 m), measured along the line of
                  natural flow, from the summit of the catchment to the
                  point under consideration

         L   =   distance (on plan) measured on the line of natural flow
                  between the summit and the point under consideration
                  (m)

t= 0.14475*100/1.5^0.2/38338^0.1
  = 4.646   min

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

where   i   =   extreme mean intensity in mm/hr,
         t_d =   duration in minutes ($t_d \leq 240$), and
         a, b, c   =   storm constants given in Tables 3a, 3b, 3c and 3d.

Assume 10 yrs return period

         a = 1157.7
         b= 19.04
         c = 0.597

         i = 174.996504   mm/hr

Therefore,   take   i = 180   mm/hr

Company:
Project :

Date: 9/5/2024

Calculation for channels:

Catchment Area of site

Site Area
= 10313   m^2
= 0.010313 km^2

Peak runoff in m^3/s
= 0.278   x   0.95   x   180   mm/hr   x   0.010313   km^2
= 0.490259 m^3/s
= 29416   liter/min

Outside Area
= 28025   m^2
= 0.028025 km^2

Peak runoff in m^3/s
= 0.278   x   0.4   x   180   mm/hr   x   0.028025   km^2
= 0.560948 m^3/s
= 33657   liter/min

Total Peak Runoff for Site
= 1.051208 m^3/s   =   63072.46764   liter/min

By Manning's equation, (1m × 1m (depth) channel is adopted)

$$Q = \frac{1}{n} \frac{A^{\frac{5}{3}}}{P^{\frac{2}{3}}} S_0^{\frac{1}{2}}$$

where $n = 0.015$

$S_0 = 0.0015$

$A = 1 \times 1 = 1 m^2$

$P = 3 m$

$$= \frac{1}{0.015} \frac{(1)^{\frac{5}{3}}}{(3)^{\frac{2}{3}}} (0.0015)^{\frac{1}{2}}$$

$$= 1.24 \ m^3/hr$$

$> 1.05 \ m3/hr$

OK!

Existing 1m (W) x 1m (H) open channel (1:150) in the site can cater the surface runoff from proposed development

Geotechnical Engineering Office, Civil Engineering and Development Department
The Government of the Hong Kong Special Administrative Region

GEO Technical Guidance Note No. 27   (TGN 27)
Hydraulic Design of Stepped Channels on Slopes

| Issue No.: 1 | Revision: - | Date: 3.8.2006 | Page: 6 of 16 |

Figure 2 – Design Chart for Standard Sized Stepped Channels
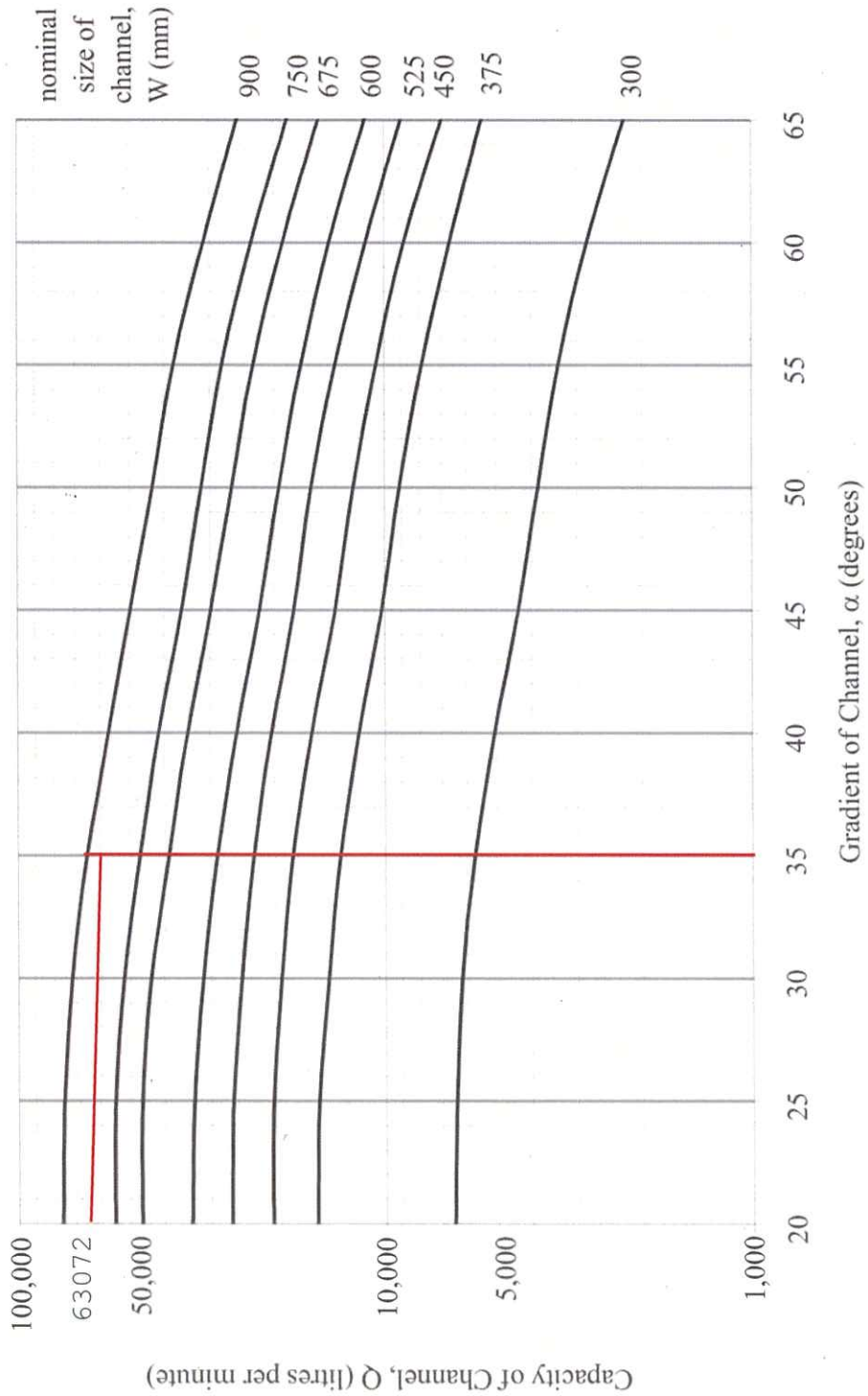
Existing stepped channel (35 degrees) in the site can cater the surface runoff from proposed development

Check 1000mm dia. Pipe by Colebrook-White Equation

$$V = -\sqrt{(8gDs)}\ \log\left(\frac{ks}{3.7D} + \frac{2.51v}{D\sqrt{(2gDs)}}\right)$$

where :

V	=			mean velocity (m/s)
g	=	9.81	m/s2	gravitational acceleration (m/s2)
D	=	1	m	internal pipe diameter (m)
ks	=	0.000003	m	hydraulic pipeline roughness (m)
v	=	1.14E-06	m2/s	kinematic viscosity of fluid (m2/s)
s	=	0.01		hydraulic gradient

(Table 5, from DSD Sewerage Manual, uPVC)

Therefore,	=	4.5521	m/s	>	Design velocity = 0.9286 m3/s 1^2 * pi/4
design V of					from catchment area = 1.1823302 m/s ==>O.K.

Existing 1000mm dia. pipe can cater the surface runoff from
proposed development

Appendix E2: Calculation of 5m(W) x 5m (H) Existing channel

Company:
Project :

Date: 9/5/2024

Site Area =   10313   m2   (C =0.95, hard-paved)
Outside Catchment Area = 24699   m2   (C=0.25, Grassland)
Total Catchmnet Area=   35012   m2

$$t_o = \frac{0.14465 L}{H^{0.2} A^{0.1}}$$

where t_o =   time of concentration of a natural catchment (min.)

         A   =   catchment area (m²)

         H   =   average slope (m per 100 m), measured along the line of
                    natural flow, from the summit of the catchment to the
                    point under consideration

         L   =   distance (on plan) measured on the line of natural flow
                    between the summit and the point under consideration
                    (m)

         t=
         = 4.854   min

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

where   i   =   extreme mean intensity in mm/hr,
         t_d =   duration in minutes ($t_d \leq 240$), and
         a, b, c =   storm constants given in Tables 3a, 3b, 3c and 3d.

Assume 10 yrs return period

                a = 1157.7
                b= 19.04
                c = 0.597

         i = 174.081904   mm/hr

Therefore,   take   i = 180   mm/hr

Company:
Project :

Date: 9/5/2024

Calculation for channels:

Catchment Area of site

Site Area
= 10313 m^2
= 0.010313 km^2

Peak runoff in m^3/s
= 0.278 x 0.95 x 180 mm/hr x 0.010313 km^2
= 0.4902259 m^3/s
= 29416 liter/min

Outside Area
= 24699 m^2
= 0.024699 km^2

Peak runoff in m^3/s
= 0.278 x 0.25 x 180 mm/hr x 0.024699 km^2
= 0.308984 m^3/s
= 18539 liter/min

Total Peak Runoff for Site
= 0.799244 m^3/s = 47954.63304 liter/min

By Manning's equation, (5m x 5m (depth) channel is adopted)

$$Q = \frac{1}{n} \frac{A^{\frac{5}{3}}}{P^{\frac{2}{3}}} S_0^{\frac{1}{2}}$$

where $n =$ 0.04

$S_0 = 0.001$

A = 5 x5 = 25m2
P = 5 + 5 +5 = 15m

$$= \frac{1}{0.04} \frac{(25)^{\frac{5}{3}}}{(15)^{\frac{2}{3}}} (0.0015)^{\frac{1}{2}}$$

$= 22.6 \quad m^3/hr$

> 0.799 m3/hr

OK!

Existing 5m (W) x 5m (H) open channel (1:150) in the site can cater the surface runoff from proposed development

Appendix E3: Calculation of 13m(W) x 6m (H) Existing channel

Company:
Project :

Date: 9/5/2024

Site Area =   10313   m2   (C =0.95, hard-paved)
Outside Catchment Area = 614642   m2   (C=0.25, Grassland)
Total Catchmnet Area=   624955   m2

$$t_o = \frac{0.14465L}{H^{0.2} A^{0.1}}$$

where t_o =   time of concentration of a natural catchment (min.)

        A   =   catchment area (m^2)

        H   =   average slope (m per 100 m), measured along the line of
                 natural flow, from the summit of the catchment to the
                 point under consideration

        L   =   distance (on plan) measured on the line of natural flow
                 between the summit and the point under consideration
                 (m)

t= 0.14475*100/1.5^0.2/624955^0.1
= 3.514   min

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

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 Tables 3a, 3b, 3c and 3d.

Assume 10 yrs return period

        a = 1157.7
        b= 19.04
        c = 0.597

        i = 180.185685   mm/hr

Therefore,   take   i = 190   mm/hr

Company:
Project :

Date: 9/5/2024

Calculation for channels:

Catchment Area of site

Site Area

=	10313	m^2	
=	0.010313	km^2	

Peak runoff in m^3/s

=	0.278	x	0.95	x	190	mm/hr	x	0.010313	km^2
=	0.517496	m^3/s							
=	31050	liter/min							

Outside Area

=	624955	m^2	
=	0.624955	km^2	

Peak runoff in m^3/s

=	0.278	x	0.4	x	190	mm/hr	x	0.624955	km^2
=	13.20405	m^3/s							
=	792243	liter/min							

Total Peak Runoff for Site

=	13.72155	m^3/s	=	823292.716	liter/min

By Manning's equation, (13m x 6m (depth) channel (is adopted))

$$Q = \frac{1}{n} \frac{A^{\frac{5}{3}}}{P^{\frac{2}{3}}} S_0^{\frac{1}{2}}$$

where $n = 0.018$

$S_0 = 0.001$

A = 13 x6 = 78m2
P = 13 + 6 +6= 25m

$$= \frac{1}{0.018} \frac{(75)^{\frac{5}{3}}}{(25)^{\frac{2}{3}}} (0.0015)^{\frac{1}{2}}$$

$$= 336 \quad m^3/hr$$

$> 13.7 \ m3/hr$ OK!

Existing 13m (W) x 6m (H) open channel (1:150) in the site can cater the surface runoff from proposed development

Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years at various Lots in D.D. 117 and Adjoining Government Land, Tai Tong, Yuen Long, New Territories (A/YL-TT/635)
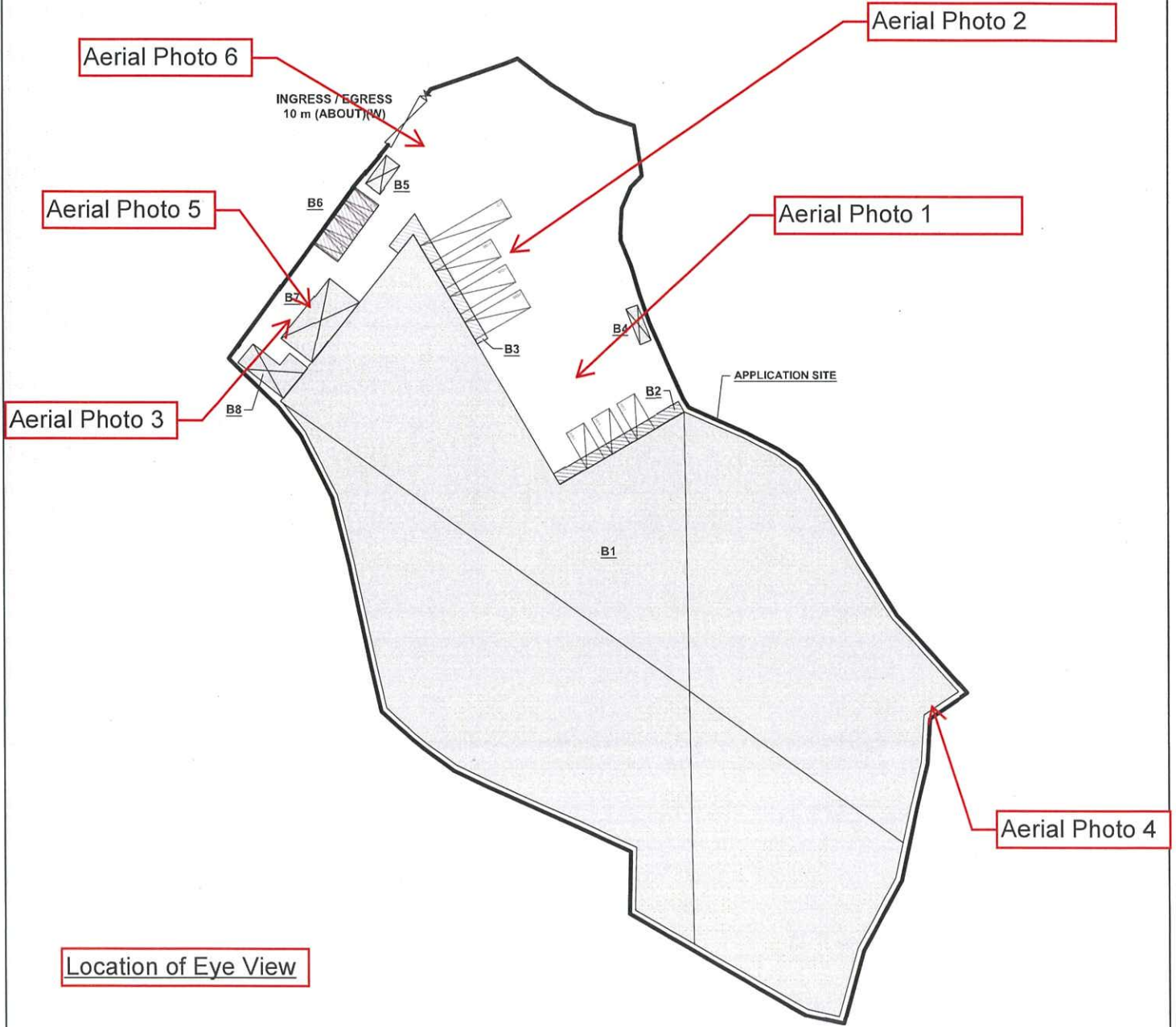
Appendix F: Site Photo

DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 10,313 m²	(ABOUT)
COVERED AREA	: 7,730 m²	(ABOUT)
UNCOVERED AREA	: 2,583 m²	(ABOUT)
PLOT RATIO	: 1.47	(ABOUT)
SITE COVERAGE	: 75 %	(ABOUT)
NO. OF STRUCTURE	: 8	
DOMESTIC GFA	: NOT APPLICABLE	
NON-DOMESTIC GFA	: 15,211 m²	(ABOUT)
TOTAL GFA	: 15,211 m²	(ABOUT)
BUILDING HEIGHT	: 3 m - 13 m	(ABOUT)
NO. OF STOREY	: 1 - 2	

STRUCTURE	USE	COVERED AREA	GFA	BUILDING HEIGHT
B1	WAREHOUSE (EXCL D.G.G.)*	7,393 m² (ABOUT)	14,786 m² (ABOUT)	13 m (ABOUT)(2-STOREY)
B2	COVERED L/UL AREA	50 m² (ABOUT)	50 m² (ABOUT)	7 m (ABOUT)(1-STOREY)
B3	COVERED L/UL AREA	58 m² (ABOUT)	58 m² (ABOUT)	7 m (ABOUT)(1-STOREY)
B4	METER ROOM	13 m² (ABOUT)	13 m² (ABOUT)	3 m (ABOUT)(1-STOREY)
B5	GUARDROOM	18 m² (ABOUT)	18 m² (ABOUT)	3 m (ABOUT)(1-STOREY)
B6	COVERED PARKING SPACES	60 m² (ABOUT)	60 m² (ABOUT)	3.5 m (ABOUT)(1-STOREY)
B7	SITE OFFICE AND WASHROOM	88 m² (ABOUT)	176 m² (ABOUT)	7 m (ABOUT)(1-STOREY)
B8	SITE OFFICE AND STORE ROOM	50 m² (ABOUT)	50 m² (ABOUT)	3.5 m (ABOUT)(1-STOREY)
	TOTAL	7,730 m² (ABOUT)	15,211 m² (ABOUT)	

*WAREHOUSE (EXCL. D.G.G.) - WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN)

Aerial Photo 2

Aerial Photo 6

Aerial Photo 5

Aerial Photo 1

INGRESS / EGRESS
10 m (ABOUT)(W)

B5

B6

B3

B4

APPLICATION SITE

Aerial Photo 3

B7

B8

B2

B1

Aerial Photo 4

Location of Eye View

PARKING AND LOADING / UNLOADING PROVISIONS

NO. OF PRIVATE CAR PARKING SPACE	: 4	
DIMENSION OF L/UL SPACE	: 5 m (L) x 2.5 m (W)	
NO. OF L/UL SPACE FOR LIGHT GOODS VEHICLE	: 3	
DIMENSION OF L/UL SPACE	: 7 m (L) x 3.5 m (W)	
NO. OF L/UL SPACE FOR MEDIUM GOODS VEHICLE	: 3	
DIMENSION OF L/UL SPACE	: 11 m (L) x 3.5 m (W)	
NO. OF L/UL SPACE FOR CONTAINER VEHICLE	: 1	
DIMENSION OF L/UL SPACE	: 16 m (L) x 3.5 m (W)	

LEGEND

- APPLICATION SITE
- STRUCTURE (ENCLOSED)
- STRUCTURE (CANOPY)
- PRIVATE CAR PARKING SPACE
- LOADING / UNLOADING SPACE FOR LGV
- LOADING / UNLOADING SPACE FOR MGV
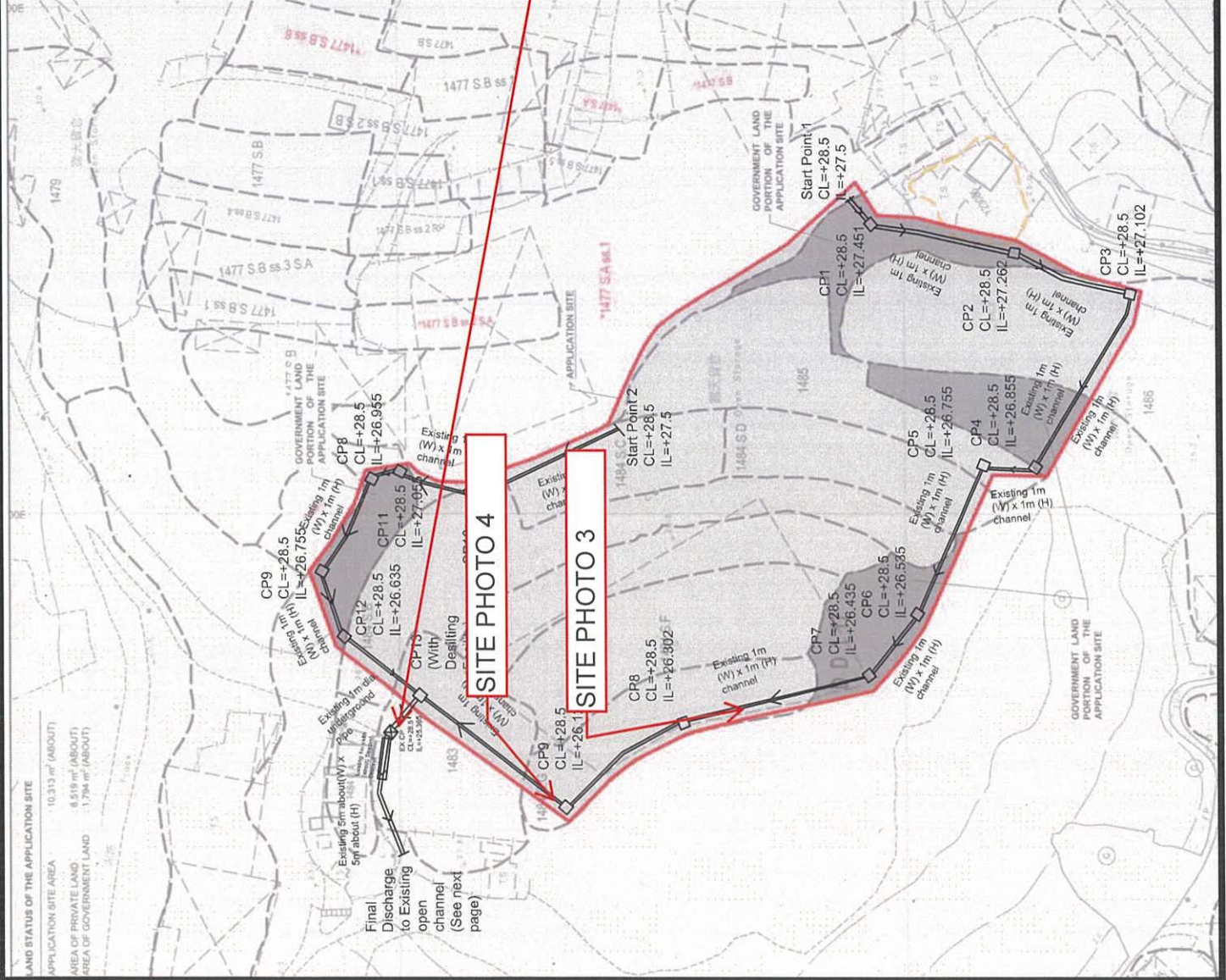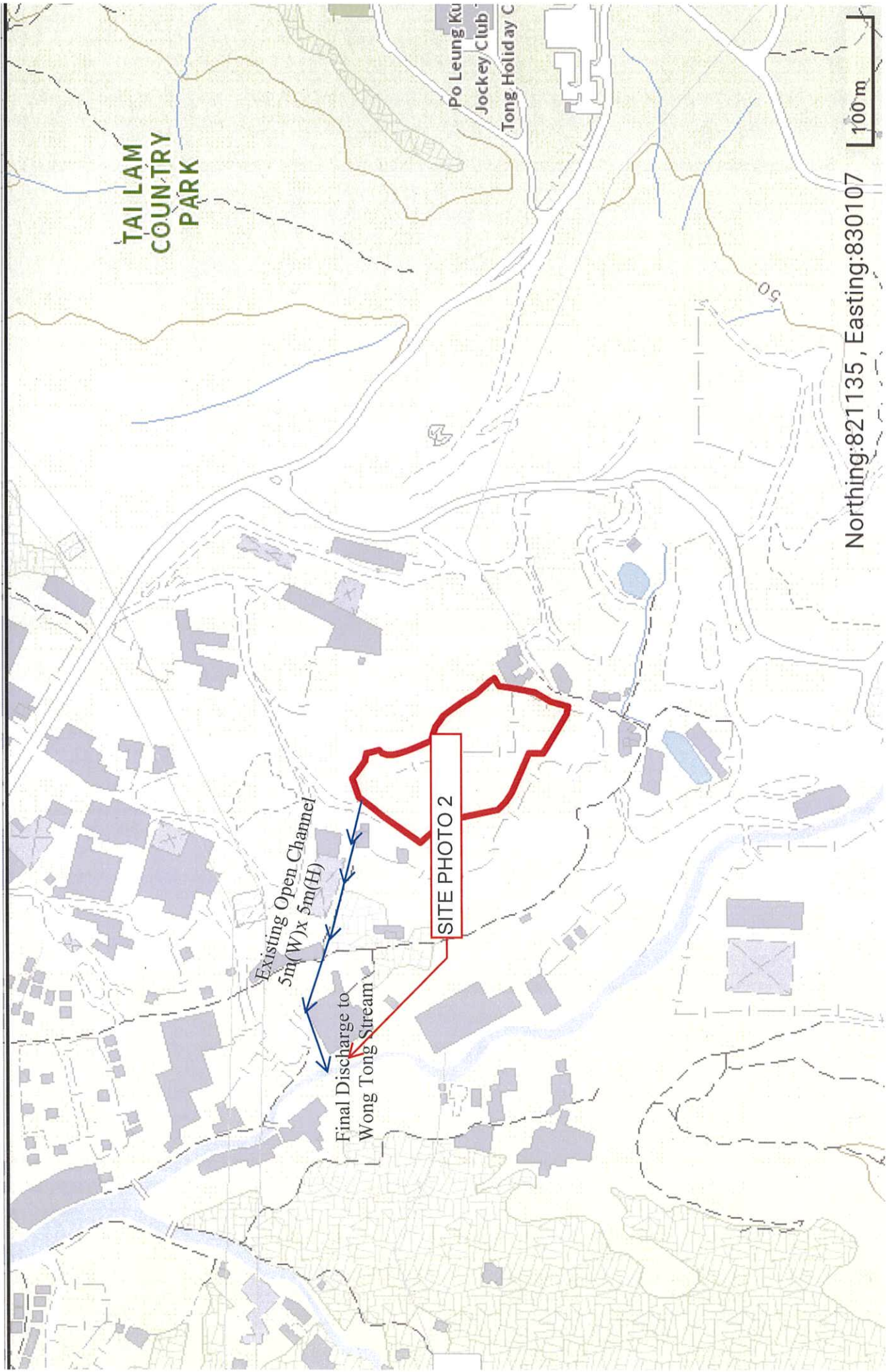- LOADING / UNLOADING SPACE FOR CV
- INGRESS / EGRESS

Legend:

→ Proposed UC
(Gradient) with cast iron cover

⇒ Existing Drain

☐ Proposed Catchpit

Company:

Project:

VARIOUS LOTS IN D.D. 117 AND ADJOINING GOVERNMENT LAND, TAI TONG, YUEN LONG, NEW TERRITORIES (A/YL-TT/635)

(Drainage Proposal)

Title:

EYE LOCATION PLAN

Dwg No: File:

Date:
7 May 2024

Note:

1. Catchpit (CP13) with desilting facility shall follow CEDD standard drawing No. C2406I.

2. Proposed Catchpit and UC follows Typical Details of Geotechnical Manual for Slope Fig.8.10 and Fig.8.11 respectively.

3. The inverted level of the connection point shall be verified on site prior the commencement of work

SITE PHOTO 1

SITE PHOTO 4

SITE PHOTO 3

LAND STATUS OF THE APPLICATION SITE

APPLICATION SITE AREA   10,313 m² (ABOUT)

AREA OF PRIVATE LAND   8,519 m² (ABOUT)
AREA OF GOVERNMENT LAND   1,794 m² (ABOUT)

TAI LAM COUNTRY PARK

Po Leung Ku
Jockey Club

Tong Holiday C

Existing Open Channel
5m(W) x 5m(H)

Final Discharge to
Wong Tong Stream

SITE PHOTO 2

Northing:821135 , Easting:830107

100 m

Aerial Photo: Overview of the Site

Aerial Photo 1: Shortage

Aerial Photo 2: Shortage

Aerial Photo 3: Site View

Aerial Photo 4: Site View

Aerial Photo 5: Site View

Aerial Photo 6: Site Entrance

Site Photo 1: Stepped Channel and Existing Stream (5m (W) x5m(H))

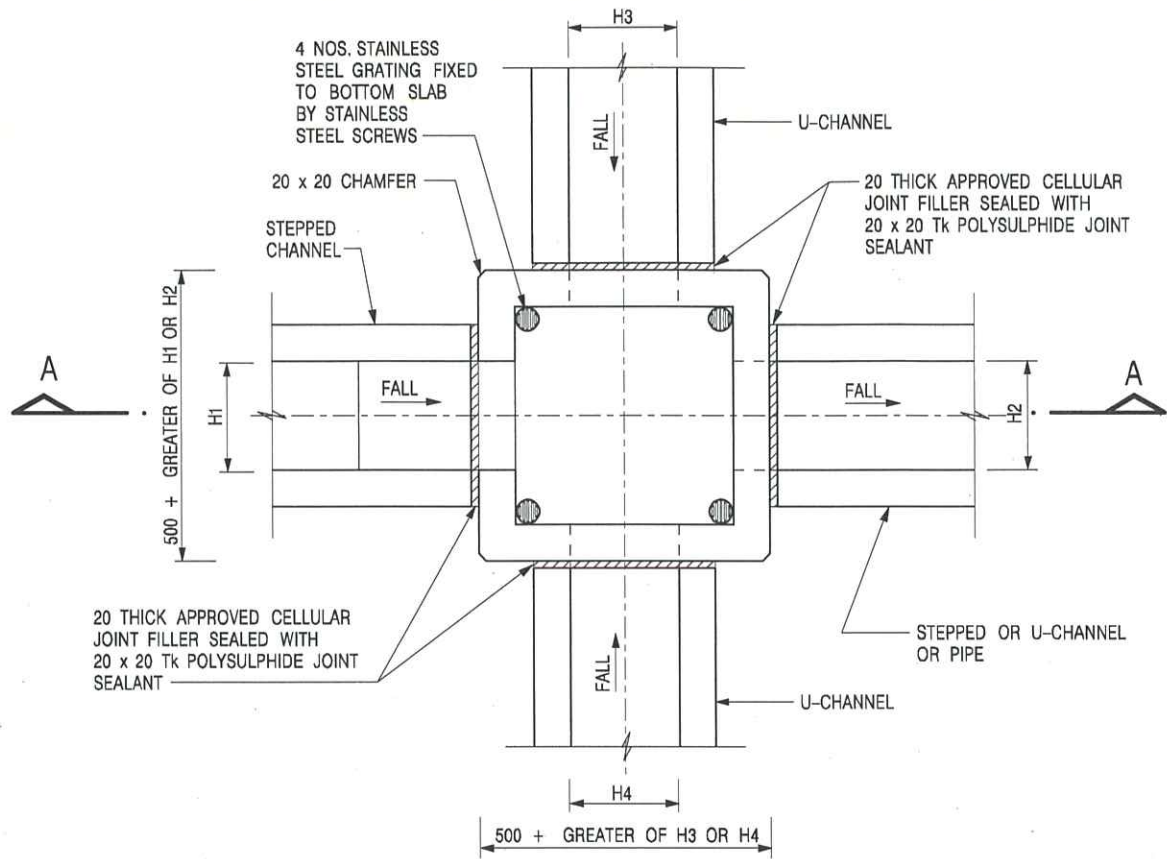Site Photo 2: Final Discharge to Wong Tong Stream (Maintained by DSD)

Site Photo 3: Existing 1m (W) x 1m (H) in the site

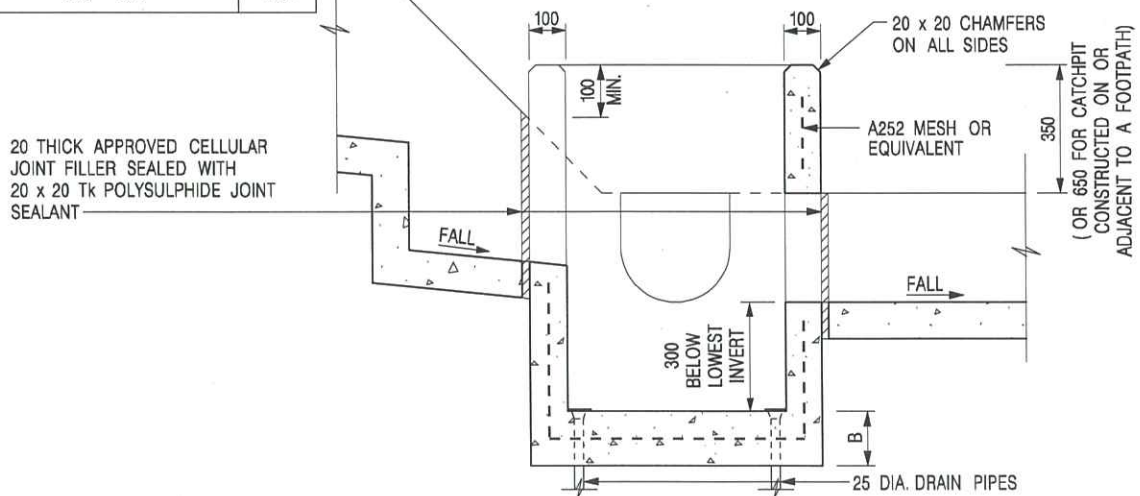Site Photo 4: Existing 1m (W) x 1m (H) in the site

Appendix G: Standard Drawing

H3

4 NOS. STAINLESS STEEL GRATING FIXED TO BOTTOM SLAB BY STAINLESS STEEL SCREWS

FALL

U-CHANNEL

20 × 20 CHAMFER

20 THICK APPROVED CELLULAR JOINT FILLER SEALED WITH 20 × 20 Tk POLYSULPHIDE JOINT SEALANT

STEPPED CHANNEL

500 + GREATER OF H1 OR H2

H1

FALL

FALL

H2

A

A

20 THICK APPROVED CELLULAR JOINT FILLER SEALED WITH 20 × 20 Tk POLYSULPHIDE JOINT SEALANT

FALL

STEPPED OR U-CHANNEL OR PIPE

U-CHANNEL

H4

500 + GREATER OF H3 OR H4

PLAN

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

20 THICK APPROVED CELLULAR JOINT FILLER SEALED WITH 20 × 20 Tk POLYSULPHIDE JOINT SEALANT

100

100

100 MIN.

20 × 20 CHAMFERS ON ALL SIDES

A252 MESH OR EQUIVALENT

350

(OR 650 FOR CATCHPIT CONSTRUCTED ON OR ADJACENT TO A FOOTPATH)

FALL

FALL

300 BELOW LOWEST INVERT

B

25 DIA. DRAIN PIPES

SECTION A – A

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.

2. REFER TO SHEET 2 FOR OTHER NOTES.

DEPTH OF RECESS AND DETAILS OF
PRECAST CONCRETE COVERS
(SEE STD. DRG. NO. C2407)

50   50   60 FOR
             STEEL GRATINGS

ALTERNATIVE TOP SECTION
FOR PRECAST CONCRETE COVERS / GRATINGS

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.

2. ALL CONCRETE SHALL BE GRADE 20 /20.

3. CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.

4. FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.

5. CONCRETE TO BE COLOURED AS SPECIFIED.

6. UNLESS REQUESTED BY THE MAINTENANCE PARTY AND AS DIRECTED BY
   THE ENGINEER, CATCHPIT WITH TRAP IS NORMALLY NOT PREFERRED
   DUE TO PONDING PROBLEM.

7. UPON THE REQUEST FROM MAINTENANCE PARTY, DRAIN PIPES AT CATCHPIT
   BASE CAN BE USED BUT THIS IS FOR CATCHPITS LOCATED AT SLOPE TOE
   ONLY AND AS DIRECTED BY THE ENGINEER.

8. FOR CATCHPITS CONSTRUCTED ON OR ADJACENT TO A FOOTPATH,
   STEEL GRATINGS (SEE DETAIL 'A' ON STD. DRG. NO. C2405) OR
   CONCRETE COVERS (SEE STD. DRG. NO. C2407) SHALL BE PROVIDED
   AS DIRECTED BY THE ENGINEER.

9. IF INSTRUCTED BY THE ENGINEER, HANDRAILING (SEE DETAIL 'G'
   ON STD. DRG. NO. C2405; EXCEPT, ON THE UPSLOPE SIDE) IN LIEU OF
   STEEL GRATINGS OR CONCRETE COVERS CAN BE ACCEPTED AS AN ALTERNATIVE
   SAFETY MEASURE FOR CATCHPITS NOT ON A FOOTPATH NOR ADJACENT TO IT.
   TOP OF THE HANDRAILING SHALL BE 1 000 mm MIN. MEASURED FROM THE
   ADJACENT GROUND LEVEL.

10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1 000 mm FOR CATCHPITS
    WITH A HEIGHT EXCEEDING 1 000 mm MEASURED FROM THE INVERT LEVEL
    TO THE ADJACENT GROUND LEVEL. AND, STEP IRONS (SEE DSD STD. DRG.
    NO. DS1043) AT 300 c/c STAGGERED SHALL BE PROVIDED.
    THICKNESS OF CATCHPIT WALL FOR INSTALLATION OF STEP IRONS SHALL
    BE INCREASED TO 150 mm.

11. FOR RETROFITTING AN EXISTING CATCHPIT WITH STEEL GRATING,
    SEE DETAIL 'F' ON STD. DRG. NO. C2405.

12. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS
    CAN ALSO BE USED AS COVERS / GRATINGS.

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

CATCHPIT WITH TRAP

(SHEET 2 OF 2)

卓越工程 建設香港

CEDD

**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20	DRAWING NO.
DATE JAN 1991	C2406 /2

We Engineer Hong Kong's Development

Varies

125

125

Step irons to
be provided if
height of
catchpit
exceeds 1500

125 thick wall and
slab suitably
reinforced

Fall

Arrangement
of openings
to suit site
conditions

300

min.
1 in 50

Concrete
blinding

SECTION A-A

U-channel

Step channel

Concrete benching

125

250

Channel

A

A

Varies

250

125

125

125

Arrangement of
openings to suit
site conditions

Varies
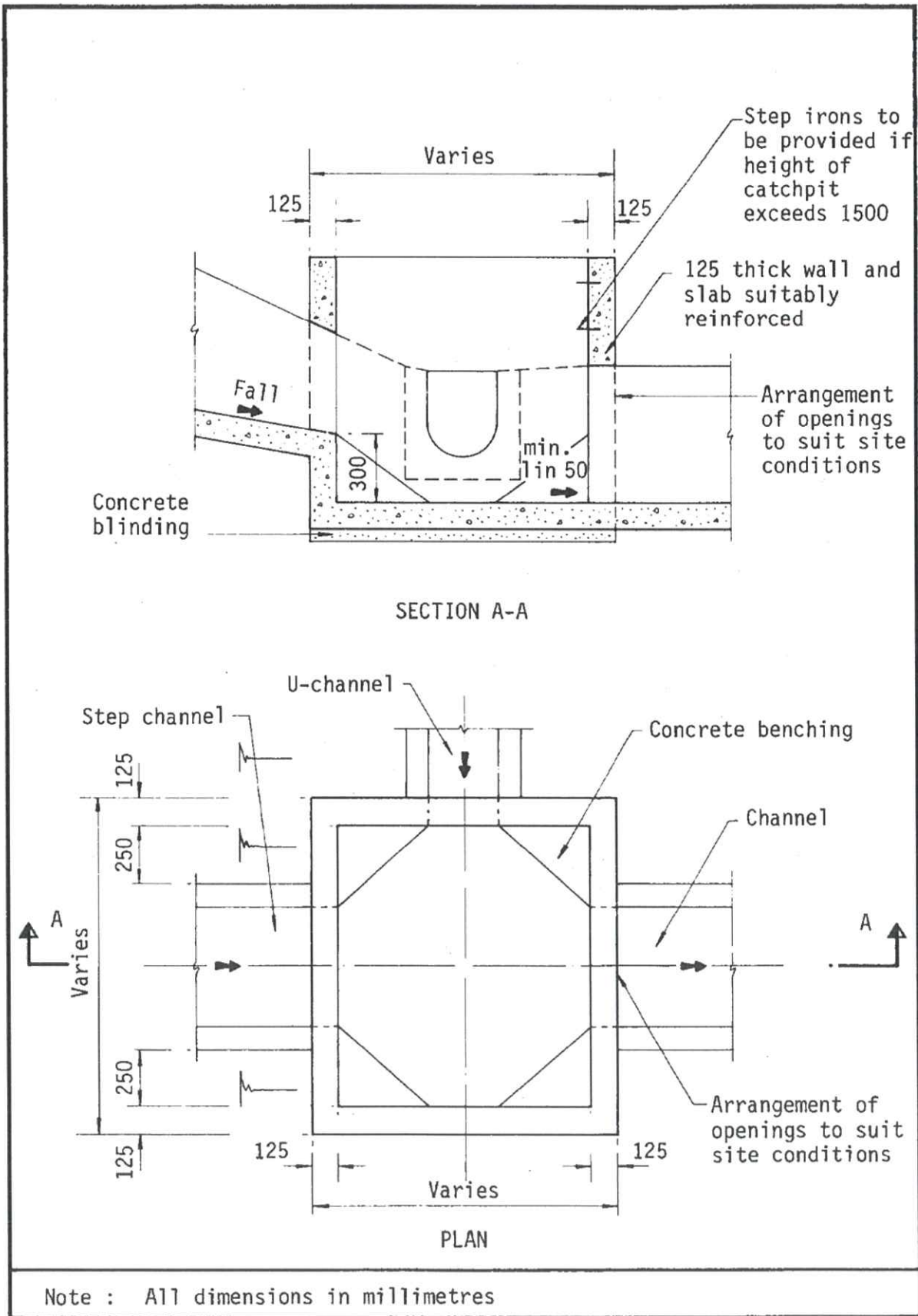
PLAN

Note :   All dimensions in millimetres

Figure 8.10 - Typical Details of Catchpits
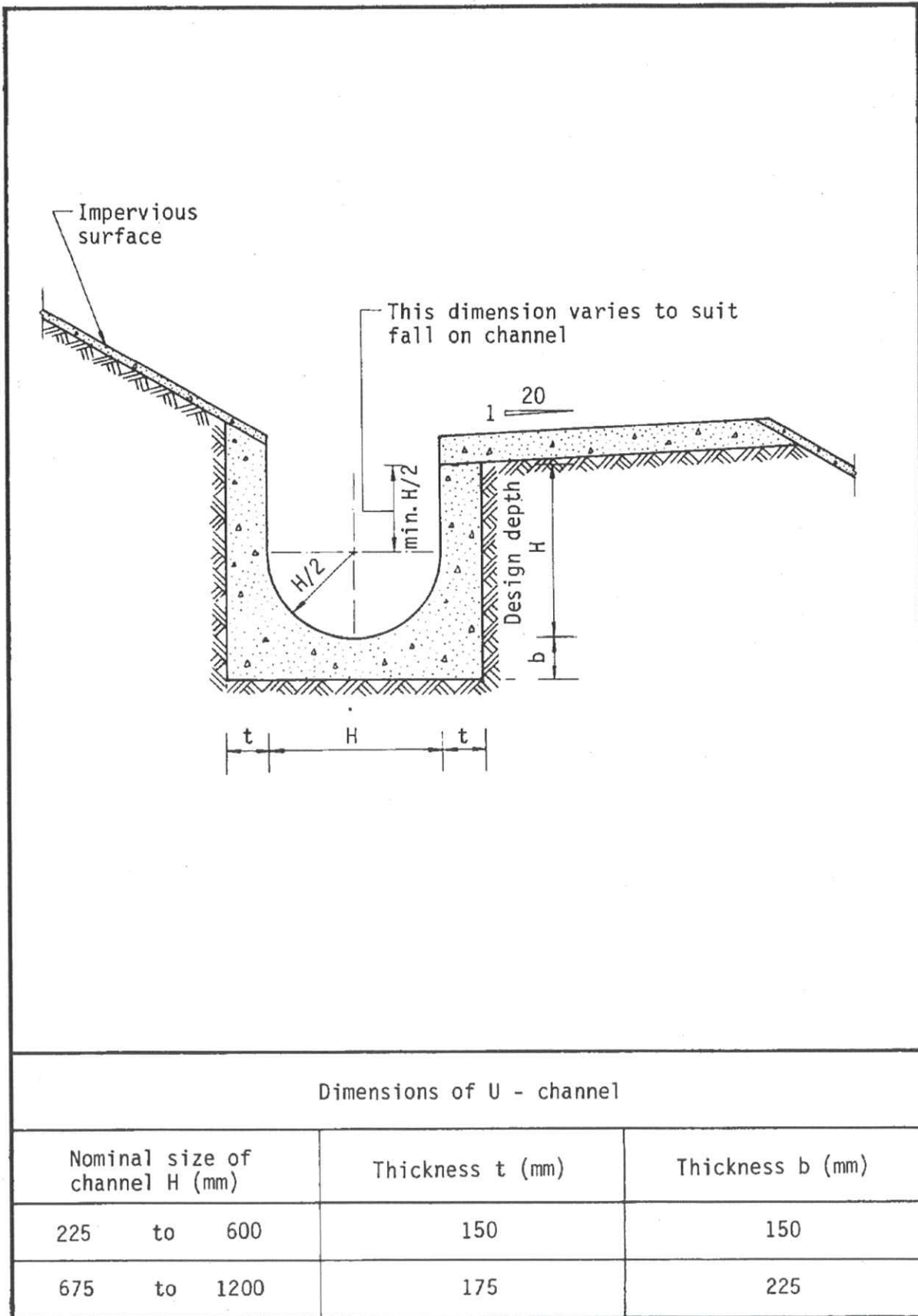
Figure 8.11 - Typical U-channel Details

TOP INNER EDGE OF CHANNEL

DESIGN CHANNEL DEPTH

FALL BETWEEN
1 : 10 AND 1 : 50

D

B

300 MAX.

B
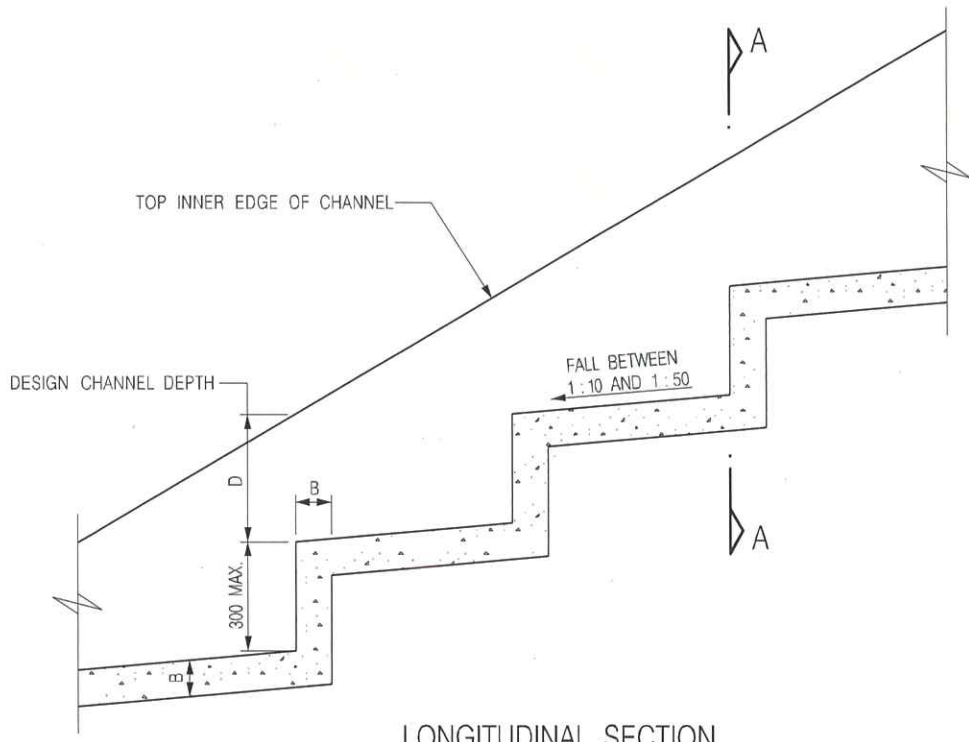
LONGITUDINAL SECTION

60 THICK MASONRY FACING ON 50 MIN. THICK
CEMENT MORTAR (SET IN 1 : 3 CEMENT / SAND)
OR 75 THICK CONCRETE APRON, AS SPECIFIED:
ALL TO BE OMITTED IF THIS AREA IS SPRAYED
CONCRETE

500

500

MIN. FALL
1 : 10

MIN. FALL
1 : 10

FINISHED
SLOPE PROFILE

50 MIN. THICK
CEMENT MORTAR

D

$H/2$

50 MIN. THICK
CEMENT MORTAR

300 MAX.

B

$H/2$

T

H

T
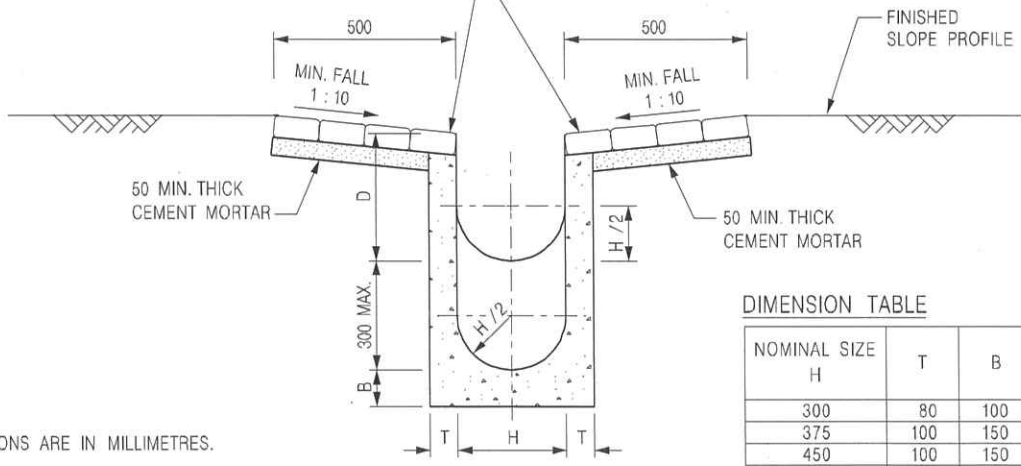
SECTION A – A

DIMENSION TABLE

NOMINAL SIZE H	T	B	D
300	80	100	350
375	100	150	540
450	100	150	575
525	100	150	615
600	100	150	650
675	125	175	740
750	125	175	775
900	125	175	850

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.

2. FOR DIMENSIONS OF CHANNELS SEE TABLE.

3. ALL CONCRETE SHALL BE GRADE 20 / 20.

4. CONCRETE SURFACE FINISH SHALL BE
   CLASS U2 OR F2 AS APPROPRIATE.

5. EXPANSION JOINTS SHALL BE PROVIDED AT
   A MAXIMUM SPACING OF 10 METRES WITH DETAILS
   AS SHOWN ON STD. DRG. NO. C2413.

6. 675 – 900 CHANNELS SHALL BE REINFORCED
   AS SHOWN ON STD. DRG. NO. C2410.

REF.	REVISION	SIGNATURE	DATE
G	GENERAL REVISION.	Original Signed	08.2006
F	NAME OF DEPARTMENT AMENDED.	Original Signed	01.2005
E	NOTE 6 AMENDED.	Original Signed	01.2004
D	GENERAL REVISION.	Original Signed	12.2002
C	MINOR AMENDMENT.	Original Signed	08.2001
B	MINOR AMENDMENT.	Original Signed	3.94
A	MINOR AMENDMENT.	Original Signed	11.92

DETAILS OF
STEPPED CHANNEL

CEDD CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO.
C2411G

興土木 利民生 齊拓展 創明天

We bring the best engineering to life