

環境保護署及城市規劃委員會：

有關環境保護署對 A/YL-KTN/1016 的查詢

收悉 貴署對 A/YL-KTN/1016 申請的意見，現以書面回覆。

本申請只會接待狗隻。本申請在營業時間外(即從下午六時至上午八時)會有寵物在寄養所內過夜，全日不超過 25 隻寵物。在非營業時間，寵物不會到戶外，只留在寄養所內，以免影響周遭。

在非營業時間，寵物不會到戶外，所有寵物會留在寄養所內。申請範圍內的寄養所計劃安裝 24 小時通風系統及冷風機，例如抽氣扇等，提供良好的寄養空間。並使用隔音及隔熱的鋁板作為的牆身及頂部，鋁板與鋁板之間有聚氨酯，並以組合屋或以預製件組裝合成的方式興建，表面密度會至少 14 kg/m^2 下圖為物料參考圖：



由於寄養所已用上能夠隔音及隔熱的鋁板，現場會沿用舊有金屬實心物料「鋅鐵皮」，現已將申請地點圍起，進一步降低外來刺激刺激動物，以減少影響環境及附近居民。

本申請禁止使用哨子及任何擴音設備進行廣播，以免為附近環境產生不良影響。

現計劃在申請地點建造符合環境保護署所定下的 ProPECC PN 5/93 - Drainage Plans subject to Comment by the Environmental Protection Department 指引的化糞池來收集

寄養所內的污水。化糞池及滲水井的距離會遠離河道超過 15 米，由於申請地點附近溪流或河道不是用作飲用用途，此距離亦符合環境保護署所定下的 ProPECC PN 5/93 指引。有關化糞池及滲水井亦不會連接雨水渠，務求對附近的污染降至零污染，確保附近的水源及土地不會被此申請用途污染。

在營業時間時段內，動物會到戶外空間，在戶外的動物數量會因應員工人數調整，但同一時間不會超過 12 隻動物到戶外。到戶外時會使用輔助工具減少來自動物的嘈音，例如狗口罩等。在非營業時間，寵物不會到戶外，只留在寄養所內。

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

二零二四年六月五日

運輸署及城市規劃委員會：

有關對運輸署 A/YL-KTN/1016 的查詢

收悉 貴署對 A/YL-KTN/1016 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	0-3
09:00-10:00	2-4
10:00-11:00	2-4
11:00-12:00	2-4
12:00-13:00	2-4
13:00-14:00	2-4
14:00-15:00	2-4
15:00-16:00	2-4
16:00-17:00	2-4
17:00-18:00	2-4
18:00-19:00	2-4
19:00-20:00	0-3
20:00-21:00	0
21:00-22:00	0
22:00-23:00	0
23:00-00:00	0

以下為最近水尾路大約的車流量^：

時段	車流量
00:00-01:00	2-5 輛
01:00-02:00	2-5 輛
02:00-03:00	2-5 輛
03:00-04:00	2-5 輛
04:00-05:00	2-5 輛
05:00-06:00	2-5 輛

06:00-07:00	5-10 輛
07:00-08:00	10-15 輛
08:00-09:00	15-20 輛
09:00-10:00	15-20 輛
10:00-11:00	15-20 輛
11:00-12:00	15-20 輛
12:00-13:00	20-25 輛
13:00-14:00	20-25 輛
14:00-15:00	15-20 輛
15:00-16:00	15-20 輛
16:00-17:00	15-20 輛
17:00-18:00	20-25 輛
18:00-19:00	20-25 輛
19:00-20:00	20-25 輛
20:00-21:00	15-20 輛
21:00-22:00	15-20 輛
22:00-23:00	15-20 輛
23:00-00:00	10-15 輛

^此數字在 2024 年 3 月 19 日統計。

水尾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。

為了方便上落物料及寵物和方便員工駕車到本申請地點，現申請 1 個客貨車上落貨位置及 3 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水尾路，再轉到郊區小徑到達申請地點。水尾路沿途道路約有 3-4 米闊，並設有避車處。私家車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 6 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約 10 米長。

在申請地點內有一個直徑超過 14 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

二零二四年六月五日

由水尾路至申請地點的道路相片：









Proposed Structures Detail

Animal Boarding Establishment

Non-Domestic GFA: About 15 m x 14.5 m = 217.5 m²

Height: Not Exceeding 4m

Storey: 1

Unit(s): 1



Dog Function Room

Non-Domestic GFA: About 15 m x 14.5 m = 217.5 m²

Height: Not Exceeding 4m

Storey: 1

Unit(s): 1

Private Car Parking Space

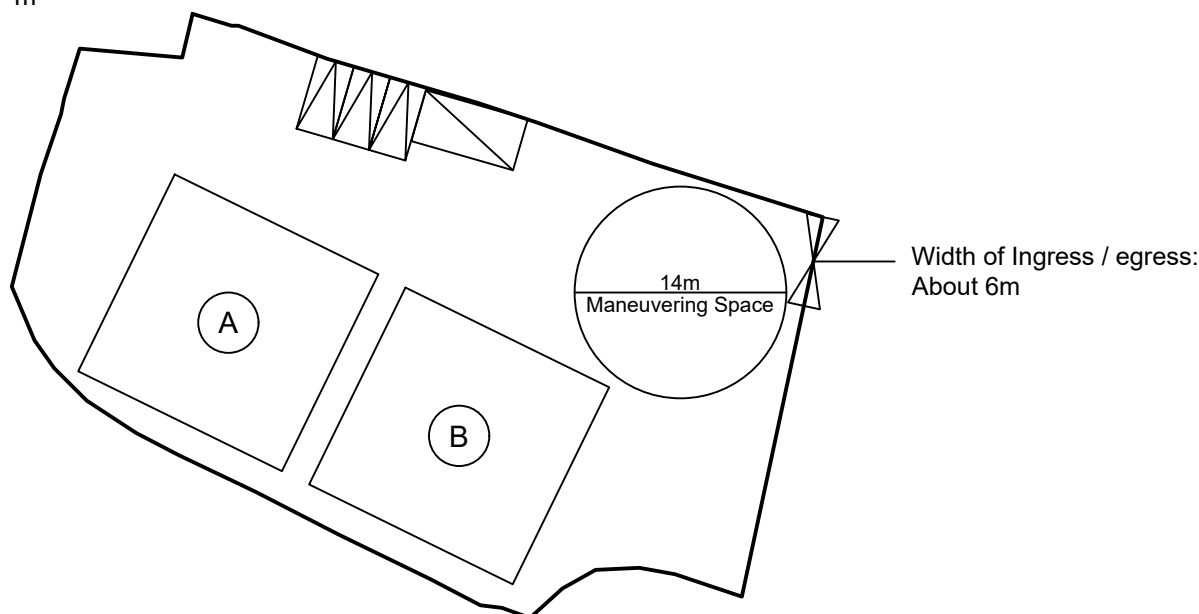
Dimension: 2.5 m x 5 m

Unit(s): 3

Light-Goods Vehicle L/UL Space

Dimension: 3.5 m x 7 m

Unit(s): 1



Legend:

- ⊘ Ingress/egress (Width: About 6m)
- Proposed Structures
- ▨ Private Car Parking Space
- ▨ LGV L/UL Space
- Ⓐ Animal Boarding Establishment
- Ⓑ Dog Function Room

Total Area: 1,411.7 m² (About)
 Covered Area: 435 m² (About)
 Uncovered Area: 976.7 m² (About)
 Non-Domestic GFA: 435 m² (About)
 Nos. of Proposed Structures: 2

Appendix 2

Location: DD 109 Lot 9 (Part)
DD 109 Lot 10 (Part)

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

Date: 20 May 2024

Proposed Layout Plan

擬議佈局平面圖

擬議臨時動物寄養所連附屬設施
(為期5年)及填土工程

Proposed Temporary Animal Boarding
Establishment with Ancillary Facilities
For a Period of 5 Years and Filling of Land

SCALE

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For Identification Only

Drawing No.:

2-01



Scale: Undefined @A4

Captured from map.gov.hk on 25th January 2024

<p>Appendix 3</p> <p>Existing Vehicular Access</p>	<p>Location: D.D. 109 Lot 9 (Part), D.D. 109 Lot 10 (Part)</p> <p>OZP: S/YL-KTN/11</p> <p>District: Kam Tin North</p> <p>Zoning: Agriculture</p>	<p>Project:</p> <p>Proposed Temporary Animal Boarding Establishment with Ancillary Facilities for a Period of 5 Years and Filling of Land</p>	<p>Width of Shui Mei Road: 3-4m (About) with passing space</p> <p>Map Legend:</p> <ul style="list-style-type: none"> ●●●● Road Path — Site Boundary ▽ Viewing Point 	<p>Drawing No.:</p> <p>3-01</p> <hr/> <p>For Identification Only</p> <p>Date: 20/05/2024</p>
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渠務署及城市規劃委員會：

A/YL-KTN/1016 的擬議渠務建議詳細

在申請地點的四周都比申請地點低，本申請範圍將會使用實心金屬板圍起，並會設有約 10cm 離地空間，確保無阻水流。

總集水面積約 1,412 平方米，集水區主要是混凝土作表面面層，請參考 Appendix 5.2。

申請地點計劃鋪設 300mmUC 引導及收集雨水及地面水，根據 STORMWATER DRAINAGE MANUAL – Section 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

二零二四年六月五日

Calculation of Peak Runoff, Q_p (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 ($t_d \leq 240$), 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, Q_p (Rational Method)

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

<u>Surface Characteristics</u>	<u>Runoff coefficient, C</u>
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, Q_p

$$Q_p = 0.278 C i A$$

Where Q_p = Peak runoff in km^3/s
 C = Runoff coefficient (dimensionless)
 i = Rainfall intensity in mm/hr
 A = Catchment area in km^2

The total design runoff of the catchment area (application) is $0.09 \text{ m}^3/\text{s}$, which is around 5,400 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。

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/m^{1/3}), refer Table 13 of SDM
Sf = friction gradient (dimensionless)

Using Manning's Equation

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

Where R = A/P = 0.376 m A = 1.57 m²
P = 4.17 m
n = 0.015 s/m^{1/3} (Table 13 of Stormwater Drainage Manual)
Sf = 0.01

Therefore V = 0.376^{2/3} * 0.01^{0.5} / 0.015
= 3.48 m/sec

Maximum Capacity (Qmax)
= V * A
= 5.46 m³/sec
> Q_{total}

The Existing Natural Stream has enough capacity.

Capacity Flows Estimation for Propose Catchments and Drainage System with 50 Year Return Period

A1. Calculation of On-Site Runoff

Catchment ID	Surface Type	Catchment Area (A), m ²	Catchment Area (A), km ²	Average slope (H), m/100m	Flow path length (L), m	Inlet time (t ₀), min	Time of Concentration (t _c), min	Duration (t _d), min	a (50 year return period)	b (50 year return period)	c (50 year return period)	Runoff intensity (i) mm/hr	Runoff coefficient (C)	C x A	Peak runoff (Q _p), m ³ /s
Application Site	100% Concrete	1,411.7	0.001412	0.74	54	4.02	4.02	4.02	451.3	2.46	0.337	240	0.95	0.00013414	0.09
Total														0.09	

Note:

Runoff is calculated in accordance with DSD's "Stormwater Drainage Manual – Planning, Design and Management" (SDM), fifth edition, January 2018.

Equation used: $t_0 = \frac{0.14465L}{H^{0.2}A^{0.1}}$ $t_c = t_0 + t_f$ $i = \frac{a}{(t_d+b)^c}$ $Q_p = 0.278 C i A$

B. Adequacy Check for Existing Natural Stream Capacity

Channel Type	Width, m	Depth, m	Slope	Length, m	Manning's Roughness Coefficient	Cross Section Area, m ²	Wetted Perimeter, m	Hydraulic radius, m	Mean Velocity, m/s	Capacity flow, m ³ /s	Catchment Served, km ²	Runoff, m ³ /s	% of capacity flow	Sufficient Capacity (Y/N)
Concrete Channel	.99	1.59	0.01	175	0.015	1.57	4.17	0.376	3.48	5.46	0.012103	0.202	4%	Y

Time of Concentration of the whole catchment is taken as 11.2 min, the runoff intensity of the whole catchment is 187 mm/hr.

The whole catchment of the Concrete Channel are around 10% concrete and 90% grassland (heavy soil) with flat surface, the runoff coefficient is taken as 0.32.

Equation used:

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

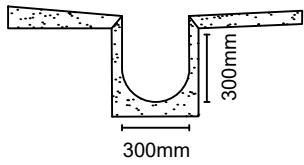




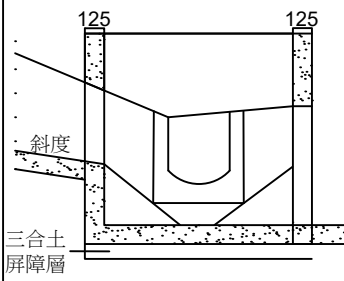




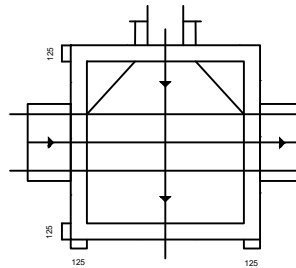




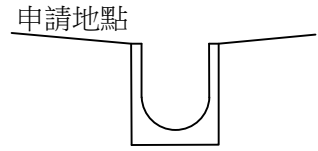
U型明渠切面圖



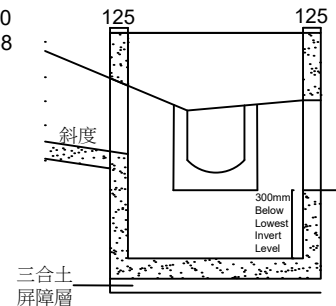
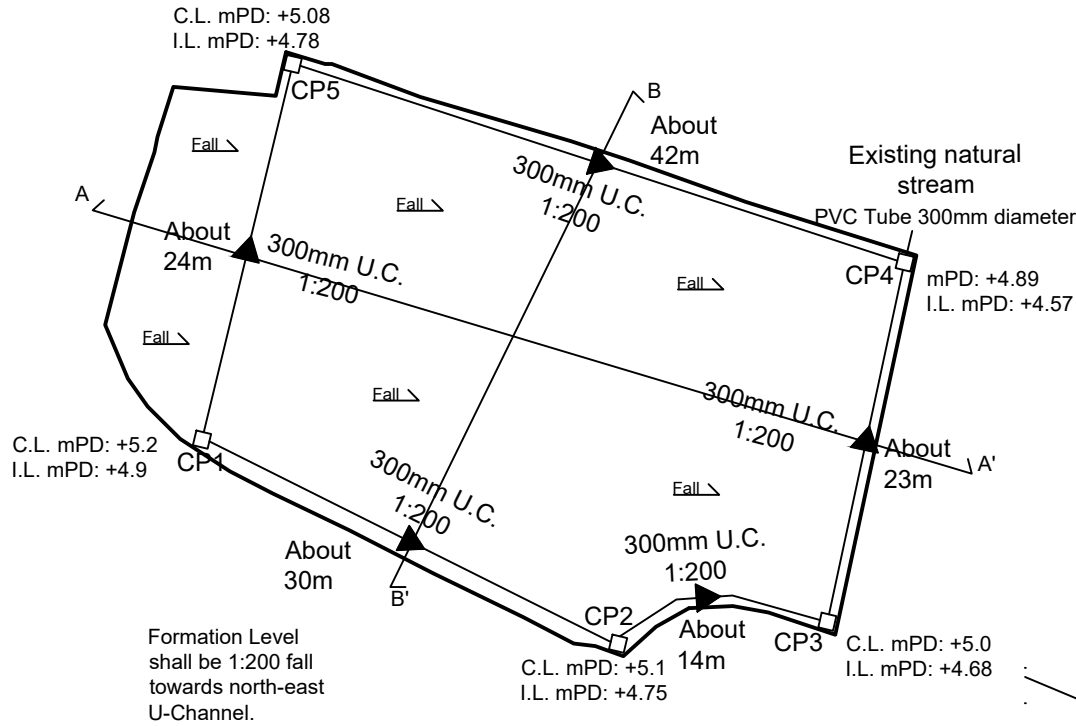
沙井切面圖



沙井俯視圖



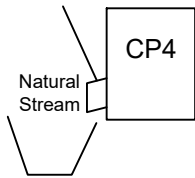
U型明渠切面略圖



沙井切面圖 (CP4 Design)

CP4 to Natural Stream

Flow discharged via a PVC tube



Legend:

- Proposed Catchpit
- Proposed U-Channel
- ▶ Water Flow

Note:

1. Adequate opening will be provided around the application site.
2. Catchpit design shall follow CEDD standard drawing No. C2406I.
3. All proposed U-channel and Catchpit must maintain in good shape (i.e. Inspection and maintenance regularly).
4. Grating Cover is provided to reduce the irregular road surface from entering the site.
5. The owner of the various lots has agreed to connect between the drainage system.

Appendix 5

Location: DD 109 Lot 9 (Part)
DD 109 Lot 10 (Part)
App. No.: A/YL-KTN/1016

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

Date: 4 June 2024

Proposed Drainage Plan

擬議渠道計劃

擬議臨時動物寄養所連附屬設施
(為期5年)及填土工程

Proposed Temporary Animal Boarding
Establishment with Ancillary Facilities
For a Period of 5 Years and Filling of Land

SCALE

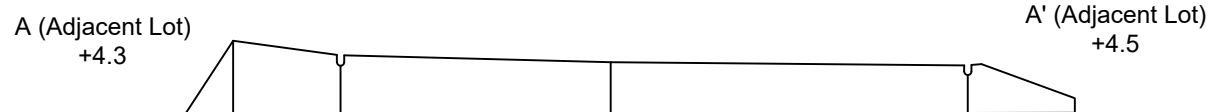
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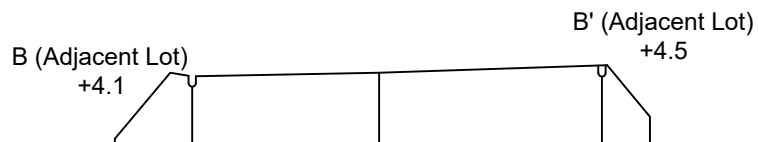
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Drawing No.:

5-01



Application Site Boundary +5.3 300mm U-Channel +5.1 Between CP1 and CP5 Cross Section +5.0 300mm U-Channel +4.95 Between CP3 and CP4



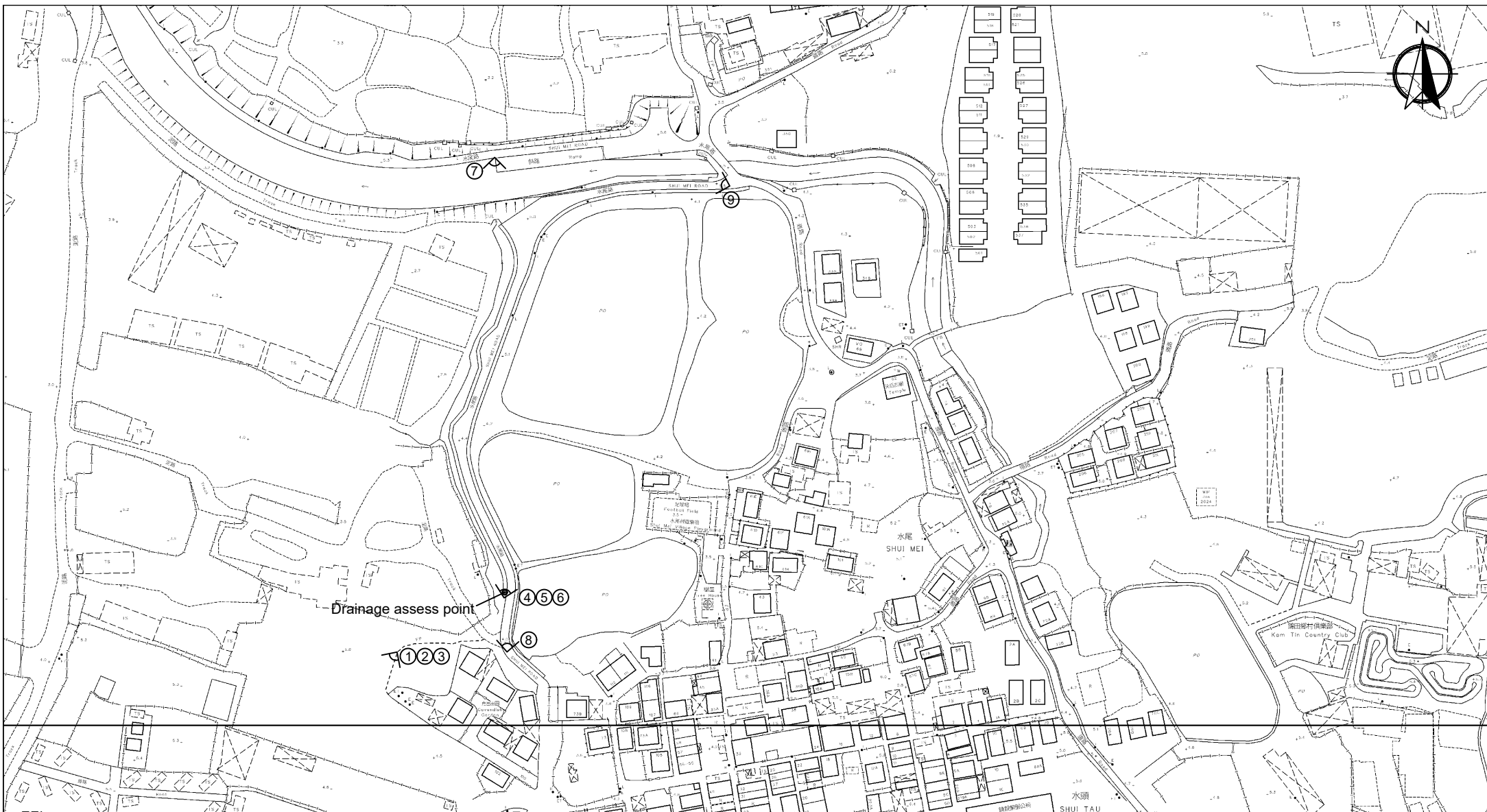
300mm U-Channel +4.95 Between CP4 and CP5 Cross Section +5.0 300mm U-Channel +5.1 Between CP1 and CP5

<u>Appendix 5.1</u> Cross Section A-A' B-B'	Location: D.D. 109 Lot 9 (Part), 10 (Part) OZP: S/YL-KTN/11 District: Kam Tin North Zoning: Agriculture	Project: Proposed Temporary Animal Boarding Establishment with Ancillary Facilities For a Period of 5 Years and Filling of Land	Drawing No.: 5.1-1
			For Identification Only
			Date:05/06/2024




Captured from hkmappointments iB1000 6-NE-7A and iB1000 6-NE-7C on 4th June 2024

<p><u>Appendix 5.2</u> Catchment Area</p>	<p>Location: D.D. 109 Lot 9 (Part), 10 (Part) OZP: S/YL-KTN/11 District: Kam Tin North Zoning: Agriculture</p>	<p>Project: Proposed Temporary Animal Boarding Establishment with Ancillary Facilities For a Period of 5 Years and Filling of Land</p>	<p>Around 12,103 m²</p> <p>Scale: Undefined @A4</p>	<p>Drawing No.: 5.2-1</p> <p>For Identification Only</p> <p>Date: 04/06/2024</p>
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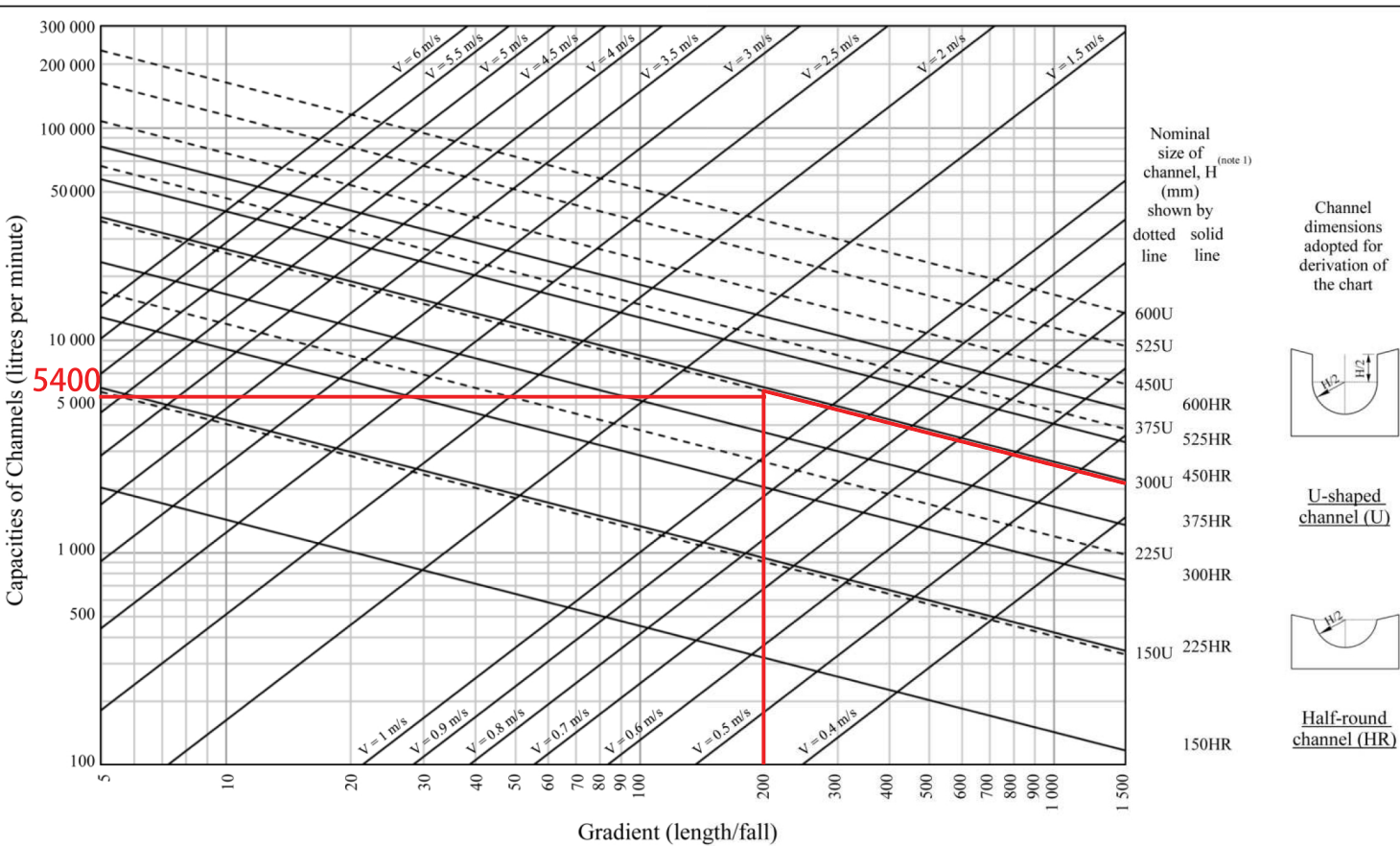
Captured from hkmapservices iB1000 6-NE-7A and iB1000 6-NE-7C on 4th June 2024

<p><u>Appendix 5.3</u></p> <p>Viewing Point</p>	<p>Location: D.D. 109 Lot 9 (Part), 10 (Part) OZP: S/YL-KTN/11 District: Kam Tin North Zoning: Agriculture</p>	<p>Project: Proposed Temporary Animal Boarding Establishment with Ancillary Facilities For a Period of 5 Years and Filling of Land</p>	<p>Map Legend:  Viewing Point</p>	<p>Drawing No.: 5.2-1</p> <p>For Identification Only</p> <p>Date: 04/06/2024</p>
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**GEO Technical Guidance Note No. 43 (TGN 43)
 Guidelines on Hydraulic Design of U-shaped and Half-round Channels on
 Slopes**

Issue No.: 1 | Revision: - | 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



Note: (1) Refer to the latest CEDD Standard Drawings for the details of U-shaped (U) and half-round (HR) channels.

Table 3a – Storm Constants for Different Return Periods of HKO Headquarters

Return Period T (years)	2	5	10	20	50	100	200	500	1000
a	499.8	480.2	471.9	463.6	451.3	440.8	429.5	414.0	402.1
b	4.26	3.36	3.02	2.76	2.46	2.26	2.05	1.77	1.55
c	0.494	0.429	0.397	0.369	0.337	0.316	0.295	0.269	0.251

Table 3b – Storm Constants for Different Return Periods of Tai Mo Shan Area

Return Period T (years)	2	5	10	20	50	100	200
a	1743.9	2183.2	2251.3	2159.2	1740.1	1307.3	1005.0
b	22.12	27.12	27.46	25.79	19.78	12.85	7.01
c	0.694	0.682	0.661	0.633	0.570	0.501	0.434

Table 3c – Storm Constants for Different Return Periods of West Lantau Area

Return Period T (years)	2	5	10	20	50	100	200
a	2047.9	1994.1	1735.2	1445.6	1107.2	909.1	761.8
b	24.27	24.23	21.82	18.36	13.01	8.98	5.40
c	0.733	0.673	0.619	0.561	0.484	0.428	0.377

Table 3d – Storm Constants for Different Return Periods of North District Area

Return Period T (years)	2	5	10	20	50	100	200
a	1004.5	1112.2	1157.7	1178.6	1167.6	1131.2	1074.8
b	17.24	18.86	19.04	18.49	16.76	14.82	12.47
c	0.644	0.614	0.597	0.582	0.561	0.543	0.523

Table 13 - Values of n to be used with the Manning equation

Source: Brater, E.F. & King, H.W. (1976)

Surface	Best	Good	Fair	Bad
Uncoated cast-iron pipe	0.012	0.013	0.014	0.015
Coated cast-iron pipe	0.011	0.012*	0.013*	
Commercial wrought-iron pipe, black	0.012	0.013	0.014	0.015
Commercial wrought-iron pipe, galvanized	0.013	0.014	0.015	0.017
Smooth brass and glass pipe	0.009	0.010	0.011	0.013
Smooth lockbar and welded "OD" pipe	0.010	0.011*	0.013*	
Riveted and spiral steel pipe	0.013	0.015*	0.017*	
Vitrified sewer pipe	0.010	0.013*	0.015	0.017
Common clay drainage tile	0.011	0.012*	0.014*	0.017
Glazed brickwork	0.011	0.012	0.013*	0.015
Brick in cement mortar; brick sewers	0.012	0.013	0.015*	0.017
Neat cement surfaces	0.010	0.011	0.012	0.013
Cement mortar surfaces	0.011	0.012	0.013*	0.015
Concrete pipe	0.012	0.013	0.015*	0.016
Wood stave pipe	0.010	0.011	0.012	0.013
Plank flumes - Planed	0.010	0.012*	0.013	0.014
- Unplaned	0.011	0.013*	0.014	0.015
- With battens	0.012	0.015*	0.016	
Concrete-lined channels	0.012	0.014*	0.016*	0.018
Cement-rubble surface	0.017	0.020	0.025	0.030
Dry-rubble surface	0.025	0.030	0.033	0.035
Dressed-ashlar surface	0.013	0.014	0.015	0.017
Semicircular metal flumes, smooth	0.011	0.012	0.013	0.015
Semicircular metal flumes, corrugated	0.0225	0.025	0.0275	0.030
Canals and ditches				
1. Earth, straight and uniform	0.017	0.020	0.0225*	0.025
2. Rock cuts, smooth and uniform	0.025	0.030	0.033*	0.035
3. Rock cuts, jagged and irregular	0.035	0.040	0.045	
4. Winding sluggish canals	0.0225	0.025*	0.0275	0.030
5. Dredged-earth channels	0.025	0.0275*	0.030	0.033
6. Canals with rough stony beds, weeds on earth banks	0.025	0.030	0.035*	0.040
7. Earth bottom, rubble sides	0.028	0.030*	0.033*	0.035
Natural-stream channels				
1. Clean, straight bank, full stage, no rifts or deep pools	0.025	0.0275	0.030	0.033
2. Same as (1) but some weeds and stones	0.030	0.033	0.035	0.040
3. Winding some pools and shoals, clean	0.033	0.035	0.040	0.045
4. Same as (3), lower stages, more ineffective slope and sections	0.040	0.045	0.050	0.055

Table 13 (Cont'd)

Surface	Best	Good	Fair	Bad
5. Same as (3) some weeds and stones	0.035	0.040	0.045	0.050
6. Same as (4) stony sections	0.045	0.050	0.055	0.060
7. Sluggish river reach, rather weedy or with very deep pools	0.050	0.060	0.070	0.080
8. Very weedy reaches	0.075	0.100	0.125	0.150

Notes: *Values commonly used for design.