

寄件者: D.S. Motor Services [REDACTED]
寄件日期: 2026年08月25日星期二 18:20
收件者: Jason Sek Hei WONG/PLAND
副本: Jeff Chi Wai TSE/MND/DSD
主旨: New s.16 Planning Application No. A/YL-SK/463- Revised Drawings & Drainage
Impact Assessments Report
附件: Drawings_v4.pdf; Report_v4.pdf

郵件標幟: 待處理
標幟狀態: 已標幟

類別: Internet Email

Dear Mr. Wong,

As spoken, please find the attachment

D.S. Motor Services
Ms. Lam



DRAINAGE IMPACT ASSESSMENTS REPORT

For Planning Application A/YL/-SK/463

Revision C

1. Introduction

The aim of this Drainage Impact Assessment (DIA) Report is to estimate the runoff and drainage impacts associated with the Site and to propose drainage mitigation to facilitate the Planning Application.

2. Project Outline and Description

Project Title:	Planning application A/YL-SK/463
Nature and Description:	The Site would be developed into a temporary open storage area of vehicles and vehicle parts and vehicle repair workshop for a period of 3 years.
Location:	At land lot 1069 S.A RP in D.D. 106 adjacent to Kam Shui South Road, Shek Kong, Yuen Long.
Site Area:	About 531m ²

3. Methodology

3.1. Design Assumptions and Parameters

The drainage impacts arising from the Site is assessed with reference to the Stormwater Drainage Manual (SDM), fifth edition with its corrigendum up to No. 2/2024.

The following parameters are adopted for hydraulic calculations in this report:

- Runoff coefficients = 1 for paved and 0.35 for unpaved surface.
- Return period = 50 years for Main Rural Catchment Drainage Channels
- Increase of rainfall due to climate change = 11.1% for mid-21st century
- Time of concentration = 5 mins (Assumed)
- Roughness for existing concrete pipe in poor condition = 0.6mm
- Manning number for concrete U-channel = 0.016

4. Drainage Impact Assessments

4.1. Existing Development

The Site is located at land lot 1069 S.A RP in D.D. 106 adjacent to Kam Shui South Road and it is currently a paved concrete land without internal drainage facilities.

4.2. Existing Drainage Facilities

The existing drainage network and photo of existing drainage facilities are shown in **Appendix A**.

At the south of the Site, there is an existing catchpit SCH1028262 with upstream 450mm and 525mm U-channel on the left- and right-hand side respectively

connecting to it. The outlet pipe of the existing catchpit SCH1028262 is a 750mm dia. pipe and it connects to the existing manhole with another 600mm dia. inlet pipe collecting runoff from the carriageway of Kam Shui South Road. Further downstream of the manhole is a 750mm dia. pipe connecting to the existing 20m width trapezoidal channel.

4.3. Drainage Flow Estimation

4.3.1. Runoff Generation from Existing Site

No drainage facility is within the existing Site; the surface runoff is discharging to the existing 450mm and 525mm U-channel at the south of the Site (overland flow).

4.3.2. Runoff Estimation from the Proposed Site

For conservative purposes, 1 in 50 years return period of rainfall is adopted in the runoff calculations. **Table 4.1** shows the runoff estimated from the Site and the land north of the Site. The runoff generated from the northern land is also estimated for checking of the proposed drainage system since no drainage system exists within that land. 100mm high slot at the bottom of hoardings is added to allow interception of the existing overland flow passing through the site. A typical detail is attached in **Appendix C**. The runoff calculations refer to **Appendix B**.

Table 4.1: Runoff Estimates from the Site

Location	Catchment	Catchment Area (m ²)	Runoff Coefficient	Peak Runoff (m ³ /s)
The Site (left)	C1	340	1	0.025
The Site (right)	C2	233	1	0.017
Land north of the Site (left)	D1	520	1	0.038
Land north of the Site (right)	D2	495	1	0.036

4.4. Drainage Impact and Discharge

The surface runoff from the Site is proposed to be discharged into the existing catchpit SCH1028262 through 300mm U-channels and 375mm dia. concrete pipe surrounding the Site. The proposed drainage layout plan and associated details are shown in **Drawing Nos. DIA/001, 002 and 003**.

The capacities of the proposed channels and pipe are checked in **Appendix B** and summarized in **Table 4.2** below.

Table 4.2: Drainage Capacity Check of Proposed U-Channels

U/S Catchpit	D/S Catchpit	Channel Size (mm)	Min. Gradient	Capacity (m3/s)	Catchment	Peak Flow (m3/s)	Utilization Ratio in %
CP-01	TCP-04	300	1 in 200	0.079	C1, D1	0.063	81%
CP-05a	TCP-04	300	1 in 200	0.079	C2, D2	0.054	68%

Table 4.2A: Drainage Capacity Check of Proposed Pipe

U/S Catchpit	D/S Manhole	Pipe Size (mm)	Min. Gradient	Capacity (m3/s)	Catchment	Peak Flow (m3/s)	Utilization Ratio in %
TCP-04	SMH1047780	375	1 in 200	0.141	C1, C2, D1, D2	0.117	83%

The capacity of the 750mm dia. drain connecting to the trapezoidal channel is also checked in **Appendix B** and summarized in **Table 4.3** below.

Table 4.3: Drainage Capacity Check of Existing 750mm dia. Pipe

U/S Manhole	D/S Manhole	Pipe Size (mm)	Gradient	Capacity (m3/s)	Catchment	Peak Flow (m3/s)	Utilization Ratio in %
SMH1047780	Ex. 20m(W) trapezoidal channel	750	1 in 100	1.24	A, B, C1, C2, D1, D2, E, F, G	0.71	58%

According to the calculations above, there is **no adverse impact to the existing drainage network** arising from the Site.

5. Construction, Operation and Maintenance of New Drainage Facilities

The proposed drainage works within the Site, and the connection to the public drainage system would be constructed, operated and maintained by the Applicant. The construction of the drainage connection from the proposed terminal manhole/catchpit within the Site to the existing public drainage system will also be undertaken by the Applicant. Form HBP1 would be submitted for the proposed connection works.

The drain downstream of the terminal manhole/catchpit will be handed over to DSD upon the completion of the proposed drainage works for future maintenance as part of the public drainage network.

6. Conclusion

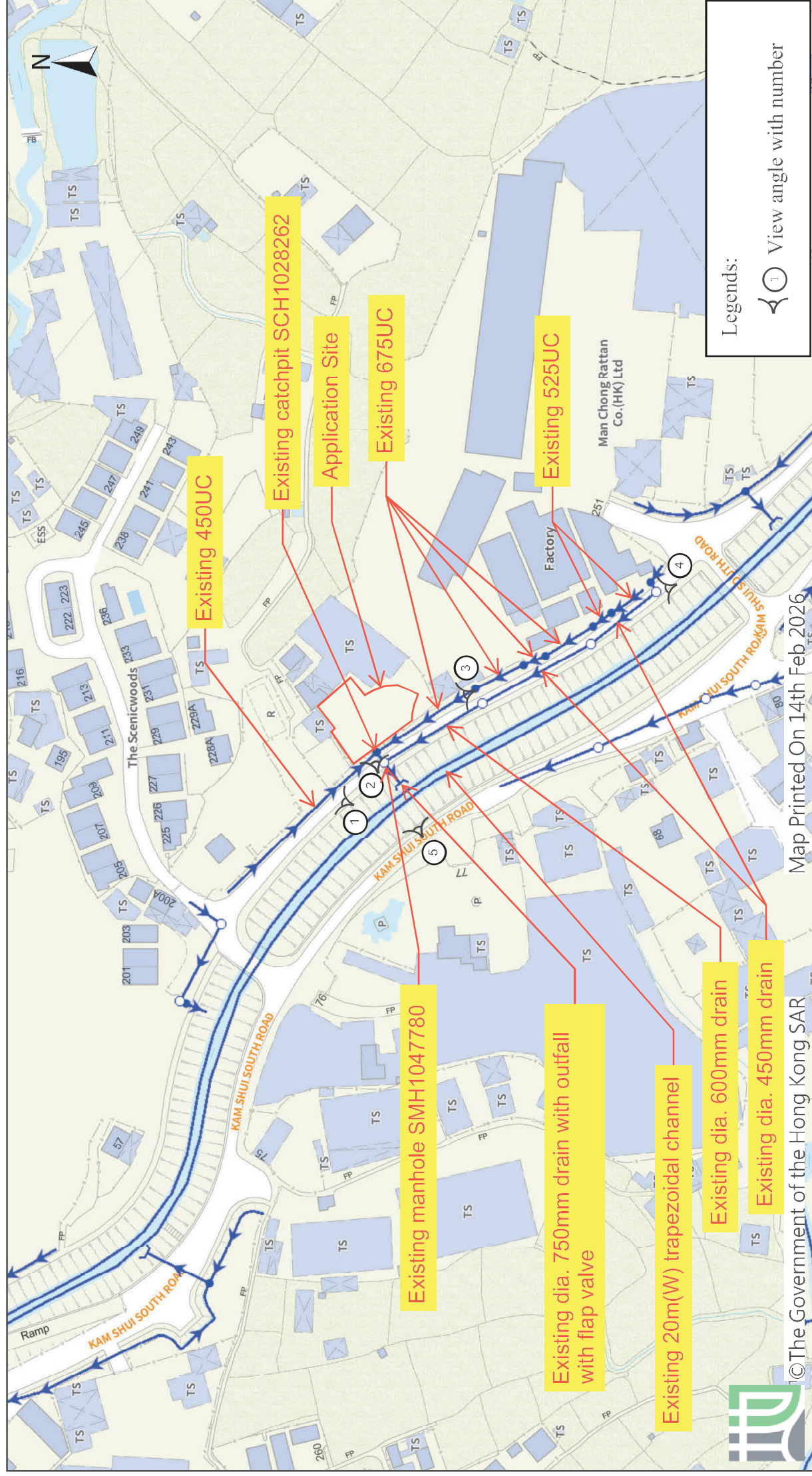
In conclusion, the proposed 300mm U-channel surrounding the Site, shown in **Drawing No. DIA/001** is adequate to convey surface runoffs generated from the Site and land north of the Site, based on rainfall return period 50 years, which is a conservative assumption for drainage system in rural area. The existing dia. 750mm drain is also checked adequate to convey upstream surface runoffs to the existing 20m trapezoidal channel.

The proposed drainage works within the Site would be constructed, operated and maintained by the Applicant. Connection to the public drainage system is also undertaken by the Applicant. The drain downstream of the terminal manhole/catchpit will be handed over to DSD upon the completion of the proposed drainage works for future maintenance as part of the public drainage network.

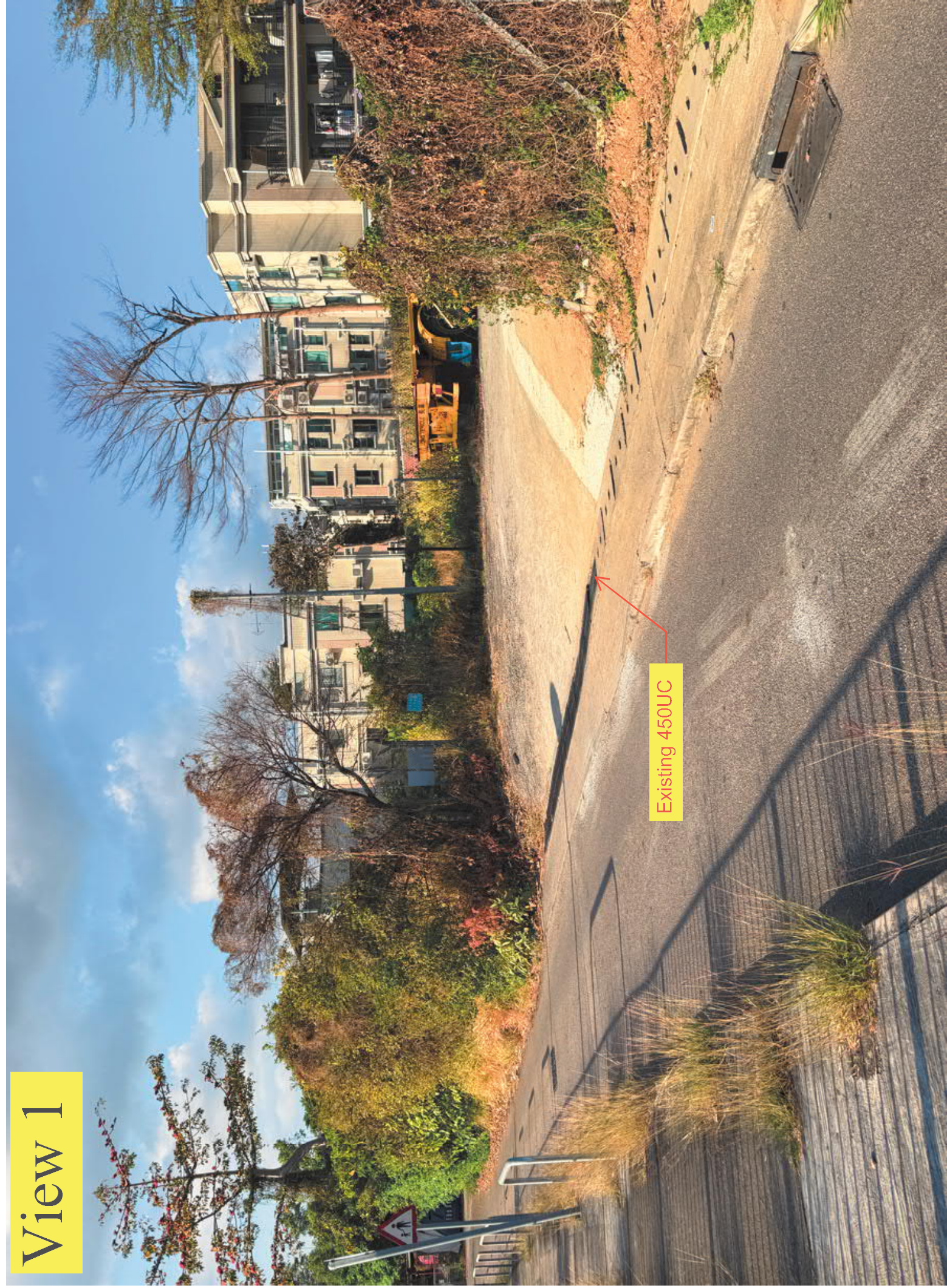
Drawings

Appendix A - Existing drainage network and photo of existing drainage facilities

Appendix A - Existing Drainage Network and Site Photos



View 1



View 2

Existing stormwater manhole SMH1047780

Existing catchpit SCH1028262

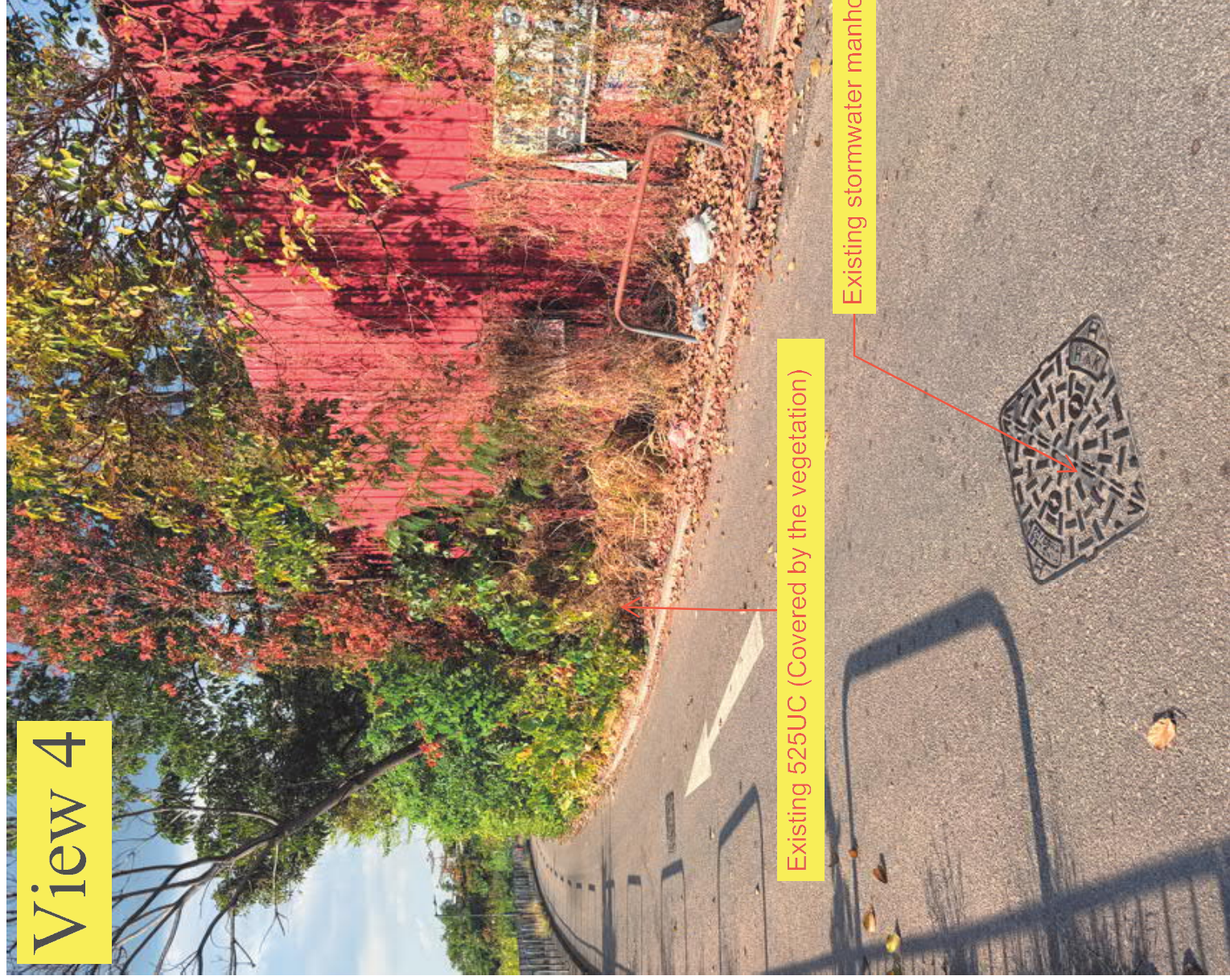


View 3

Existing 675UC



View 4



Existing 525UC (Covered by the vegetation)

Existing stormwater manhole SMH1047784

View 5



Appendix B – Catchment Plan and Hydraulic Calculations

Appendix B

1. Catchment Plan (Upstream up existing 750mm dia. drain pipe)



Table 1 - Catchment Area and Peak Flow

Catchment No. (Use)	Area (m ²)	Runoff coefficient	C x A (km ²)	Peak Flow (m ³ /s)
A (Storage area)	713	1	0.00071	0.053
B (Storage area)	750	1	0.00075	0.055
C1 (Application Site)	340	1	0.00034	0.025
C2 (Application Site)	233	1	0.00023	0.017
D1 (Storage area)	520	1	0.00052	0.038
D2 (Storage area)	495	1	0.00050	0.036
E (Workshop area)	5070	1	0.00507	0.374
F (Carriageway)	565	1	0.00057	0.042
G (Carriageway)	1000	1	0.00100	0.074
Sum	9686		0.00969	0.714

https://www.dsd.gov.hk/EN/Files/Technical_Manual/dsd_guideline/Drainage_Submission.pdf

2. Calculation of Rainfall Intensity:

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

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

Table 3a for HKO Headquarter in SDM Corrigendum No. 1/2024 is adopted for the site, where
(Main Rural Catchment Drainage Channels)

Return Period = 50 years

a= 505.5

b= 3.29

c= 0.355

Time of Concentration (min) = 5 mins (assumed)

Rainfall Intensity i = 238.5801469 mm/hr

Rainfall increase due to climate change = 11.1 % (Mid-21st Century)

Rainfall Intensity i with climate change = 265.0625432 mm/hr

3. Calculation of Peak Flow by Rational Method:

Qp = 0.278 C i A

where Qp = peak runoff in m³/s
C = runoff coefficient (dimensionless)
i = rainfall intensity in mm/hr
A = catchment area in km²

Peak flows refer to Table 1.

4. Drainage Capacity Check of Proposed U-Channels

By using Manning's Equation, where

n= 0.016 (Concrete surface)
Gradient = 0.005 (1 in 200)
U-channel size = 300 mm
Velocity = 0.98 m/s
Capacity = 0.079 m³/s

U/S Catchpit	D/S Catchpit	Channel Size (mm)	Min. Gradient	Capacity (m³/s)	Catchment	Peak Flow (m³/s)	Utilization Ratio in %
CP-01	TCP-04	300	1 in 200	0.079	C1, D1	0.063	81%
CP-03a	TCP-04	300	1 in 200	0.079	C2, D2	0.054	68%

4a. Drainage Capacity Check of Proposed 375mm dia. Pipe

By using Colebrook-White Equation, where

ks = 0.6 mm (for concrete pipe poor condition)
v = 0.000001 m²/s

U/S Manhole	D/S Manhole	Pipe Size (mm)	U/S IL	D/S IL	Gradient	Velocity (m/s)	Capacity (m³/s)	Catchment	Peak Flow (m³/s)	Utilization Ratio in %
SMH1047780	Ex. 20m(W) trapezoidal channel	375	11.18	11.17	1 in 200	1.28	0.141	C1, C2, D1, D2	0.117	83%

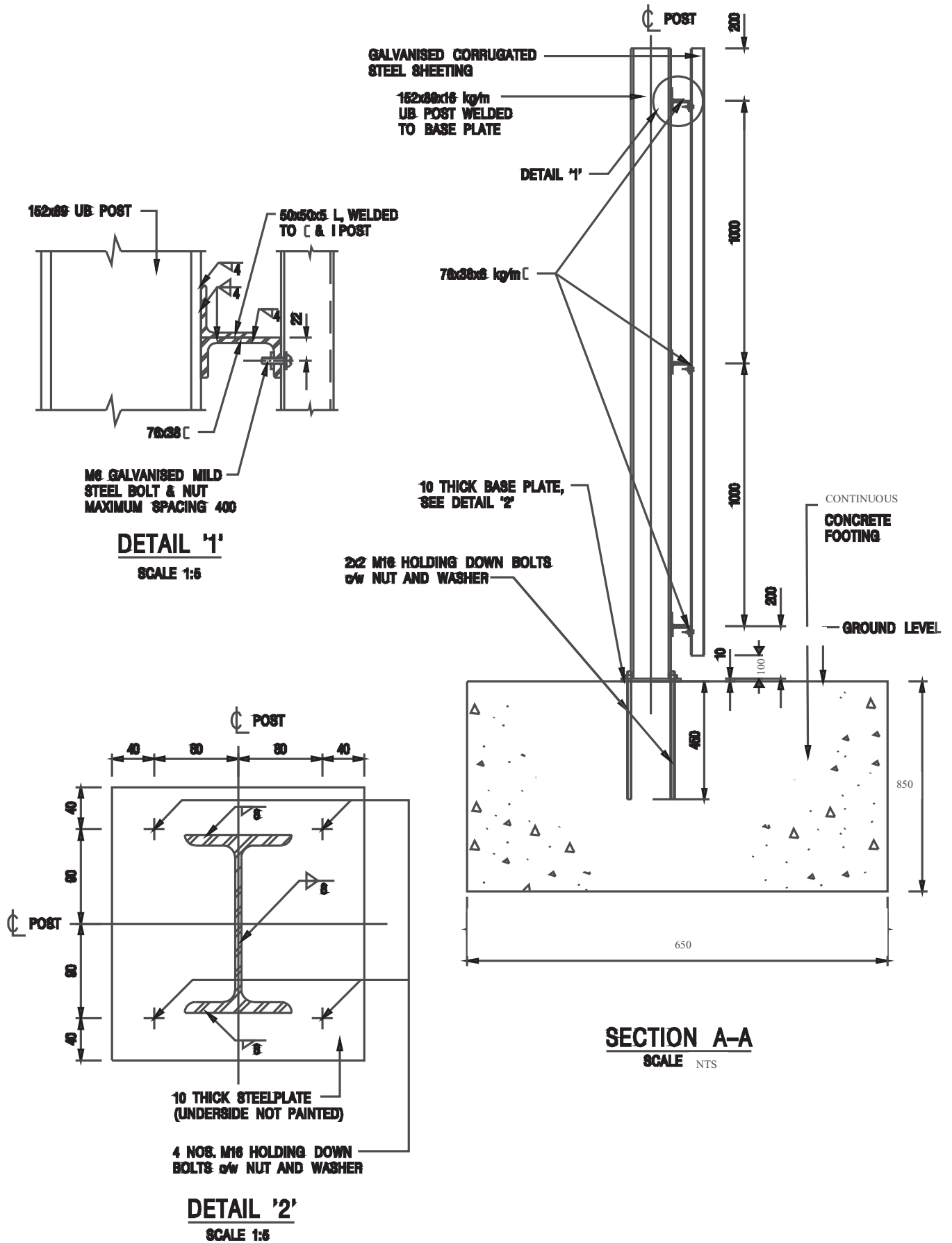
5. Drainage Capacity Check of Existing 750mm dia. Pipe

By using Colebrook-White Equation, where

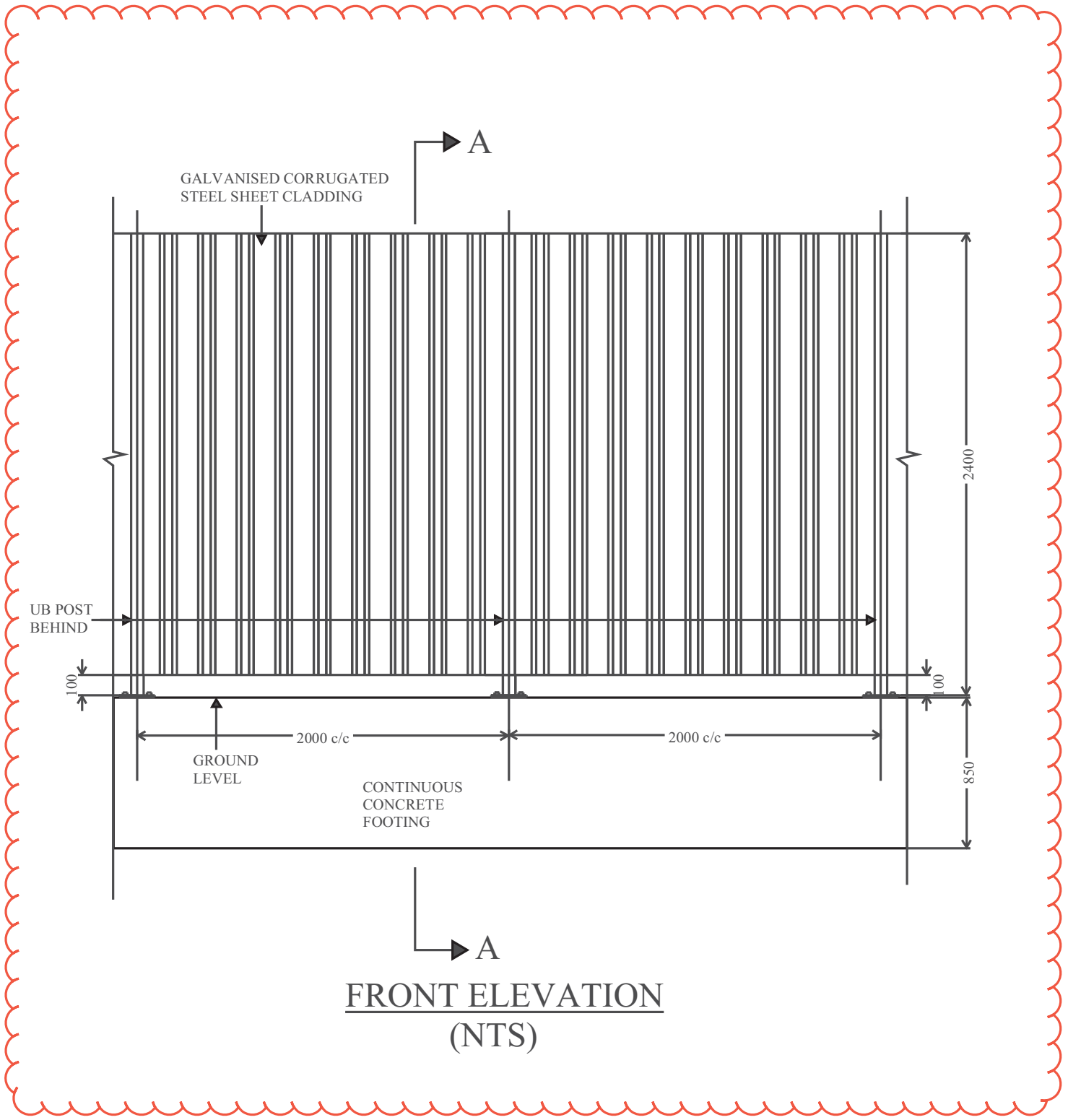
ks = 0.6 mm (for concrete pipe poor condition)
v = 0.000001 m²/s

U/S Manhole	D/S Manhole	Pipe Size (mm)	U/S IL	D/S IL	Gradient	Velocity (m/s)	Capacity (m³/s)	Catchment	Peak Flow (m³/s)	Utilization Ratio in %
SMH1047780	Ex. 20m(W) trapezoidal channel	750	9.81	9.80	1 in 100	2.80	1.236	A, B, C1, C2, D1, D2, E, F, G	0.714	58%

Appendix C – Typical Hoarding Details (For information)



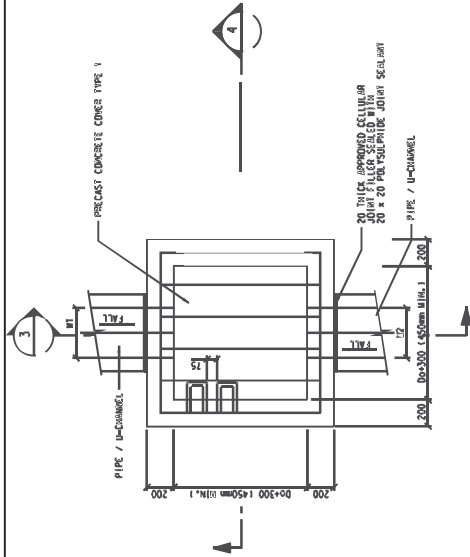
Typical details for hoarding



Typical details for hoarding

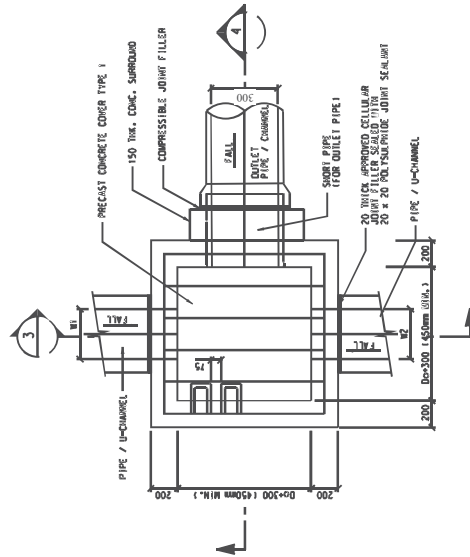
Notes:

1. All dimensions are in millimeters unless otherwise specified.
2. All levels are in meters above the principal datum.
3. Reinforced concrete to be grade 30D/20 and blinding concrete to be grade 20D/10 unless other specified.



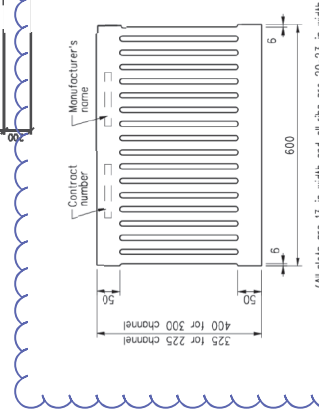
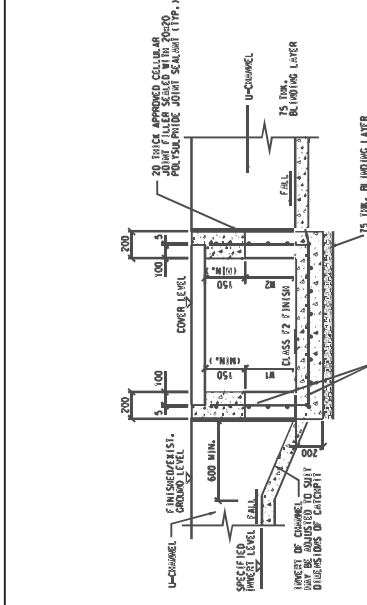
PLAN
CATCHPIT TYPE A DETAIL

TABLE 1. $W_2 = W_1 \gamma$



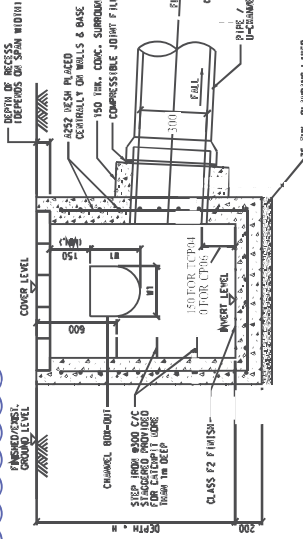
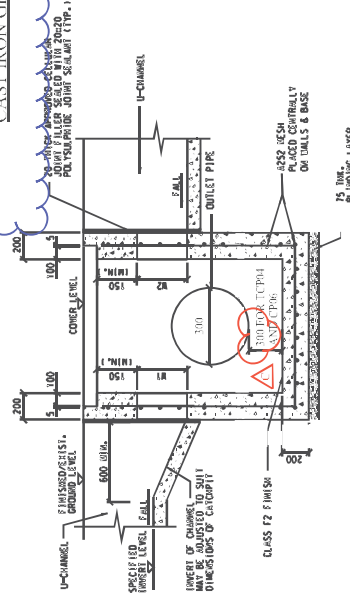
PLAN
CATCHPIIT TYPE B DETAIL

WHERE W1, W2 = WIDTH OF U-CHANNEL.



CAST IRON GRATING DETAILS

(All slots are 13 in width and all ribs are 20-23 in width.)



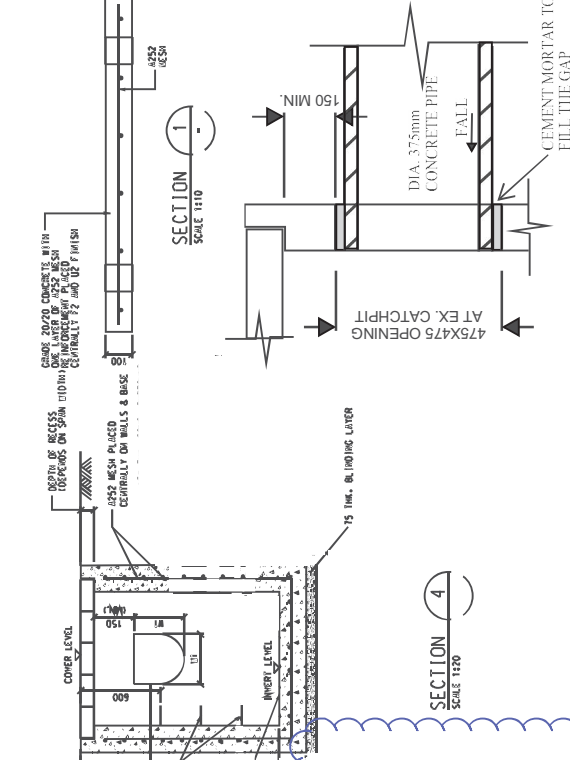
SECTION 3
SCALE 1:20

SECTION 4
SCALE 1:20

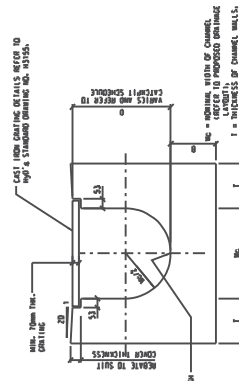


PLAN

PRECAST CONCRETE COVER TYPE 1 FOR CATCHPITS



CONNECTION DETAILS TO EXISTING CATCHPIT



TYPICAL SECTION OF U-CHANNEL

CHANNEL WIDTH OF CHANNEL, l_c	T	B	REFERENCE POINT B.S., 4403 MET.
4300	100	100	4254 MESH TO BE PLACED CENTRALLY ON EACH HIGH BEAM. 101 EXCEEDS 650mm

CATCHPIT SCHEDULE

Catchpit Ref.	Type	Cover Level (mPD)	Inlet Pipe/Channel			Outlet Pipe/Channel		
			Pipe/Channel No.	Size	Invert Level (mPD)	Size (mm)	Invert Level (mPD)	To Manhole/Catchpit
CP01	A	12.50	A1	300UC	11.95	300UC	11.95	CP02
CP02	A	12.50	A1	300UC	11.88	300UC	11.88	CP02A
CP02A	A	12.50	A1	300UC	11.84	300UC	11.84	CP02B
CP02B	A	12.50	A1	300UC	11.82	300UC	11.82	CP03
CP03	A	12.50	A1	300UC	11.77	300UC	11.77	TCP04
TCP04 (With 300mm Trap)	B	12.50	A1	300UC	11.73	Ø375 Pipe	11.18	Ex. SCH1028262
			A2	300UC	12.14			
			A3	Ø300 Pipe	11.18			
CP05a	A	12.30	A1	300UC	11.80	300UC	11.80	CP05
CP05	A	12.05	A1	300UC	11.50	300UC	11.50	CP06
CP06 (With 300mm Trap)	B	11.80	A1	300UC	11.25	Ø300 Pipe with Concrete Surround	11.25	TCP04

Notes:

Application Site Boundary

Existing Ground Level

Proposed Ground Level
+12.6 (+12.5)

 $+12.6(+12.5)$

New level (Ex. level)

GALVANISED CORRUGATED
STEEL SHEET CLADDING

UB POS
BEHNI

LEVEL

LEVEL
CONTINUOUS
CONCRETE
FOOTING

100mm(H) gap to be provided at the toe of the hoarding

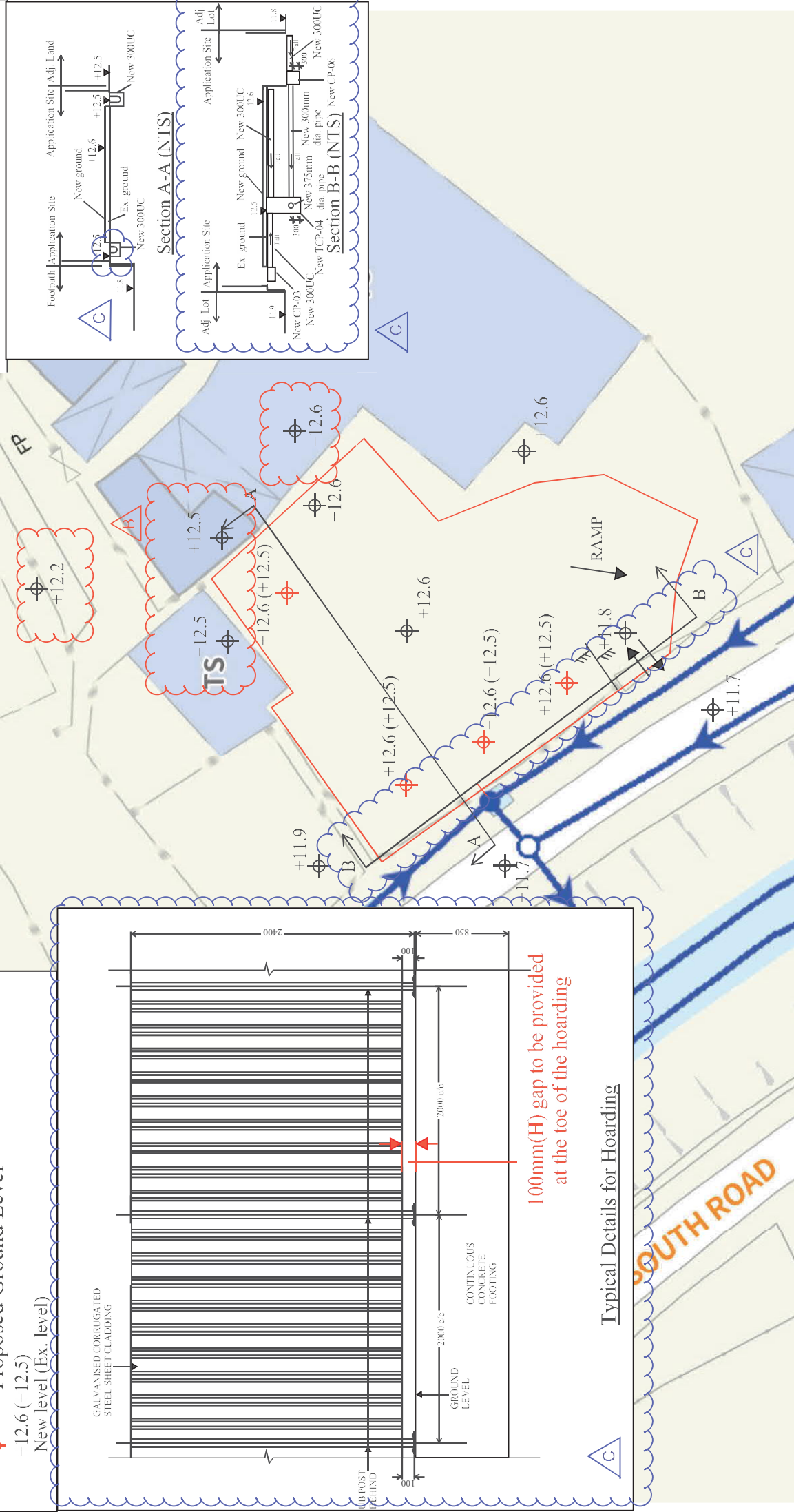
Typical Details for Hoarding

Notes:

1. All dimensions are in millimeters unless otherwise specified.

2. All levels are in meters above the principal datum

3. All lot boundaries, dimensions and levels are for indication only. Exact values to be verified on site.



Drawing No.: DIA/004 Rev. C

Title: Existing and Proposed Levels of the Site

寄件者: D.S. Motor Services [REDACTED]
寄件日期: 2026年08月26日星期三 18:24
收件者: Jason Sek Hei WONG/PLAND
主旨: Re: New s.16 Planning Application No. A/YL-SK/463- Revised Drawings & Drainage Impact Assessments Report
附件: 2026 回覆 (環境保護署意見).pdf

郵件標幟: 待處理
標幟狀態: 已標幟

類別: Internet Email

Dear Mr. Wong,

回覆環境保護署的意見，請見附件。

D.S. Motor Services
Ms. Lam

D.S. Motor Services [REDACTED] 於 2026 年 8 月 25 日週二下午 6:19 寫道：
Dear Mr. Wong,

As spoken, please find the attachment

D.S. Motor Services
Ms. Lam

日期: 2026 年 8 月 26 日

致規劃署,

就環境保護署的意見, 現回覆如下:-

- (a) whether the proposed use will involve dismantling of vehicles and material-breaking;

答: 擬議用途不會包含拆解車輛及材料拆解, 亦不涉及噴漆工作。

- (b) whether repair activities will be conducted within enclosed structures to control potential noise impact; and

答: 申請人會遵行《處理臨時用途及露天貯存地點的環境問題實務守則》, 使擬議用途對周邊環境的影響減到最低。

進行產生噪音的工作時, 應盡量遠離所有易受噪音影響的地方。此外, 盡可能採取下列措施以盡量減少噪音滋擾: i) 在封閉的建築物內進行; 及 ii) 在易受影響的時分 (即晚上十一時至早上七時) 不會進行任何高噪音的工作。

- (c) whether the area where repair activities will take place will be paved with concrete to prevent land contamination.

答: 申請地點有關用地的路面已妥善鋪設或使用堅硬物料重鋪, 特別是用地前面的空地及離通路閘口 5 米以外的地方, 以免當車輛行駛時揚起塵埃。

露天部分亦已鋪上石屎地台, 髹上防滲漏地台塗料, 並會裝設適當的去水設備。

存放在露天地地方而可能漏出油污或化學廢物的物料, 會放在防滑薄膜上, 然後用防水布妥善覆蓋, 以免污染泥土。

從申請地點排放的污水會導引至附近的公共污水渠。亦會設置化糞池及滲水井 (如有需要)。

在有關用地採取措施以減少廢物, 以及把污水循環再用。

設置排水道及隔油裝置，以減少由徑流帶來的污染物。

申請人會遵照「ProPECC PN 1/23 - 須由環境保護署提出意見的排水圖則」所載的規定。

現時申請地點，用途為露天存放車輛及汽車配件和闢設汽車修理工場，由 2025 年 3 月營運至今，都沒有收到附近居民或任何人士/部門/機構投訴。

同時 貴署亦可參考申請表的附件中的第(3)項。

額外資料:-

根據城市規劃委員會於 2023 年 4 月經修訂的規劃指引編號 13G 擴大了第 2 類地區的覆蓋範圍，將約 320 公頃土地從第 3 類及第 4 類重新分類為第 2 類地區。有關申請地點在指引中屬於重新分類而提升至第 2 類地區。

據了解申請地點附近近年均不斷有土地獲批准規劃許可作露天貯物，有部分土地更已作有關活動多時。而周邊環境更是休耕農地、臨時構築物、工廠、露天貯物場及空置/荒廢用地等用途。我們的申請即使獲批准規劃許可，對周邊環境不會產生重大的不利影響。

根據政府新聞網於 2023 年 4 月 14 日的標題為「修訂規劃指引 應付棕地作業遷移」的報導中提及：

“修訂後，約 320 公頃第三類和第四類土地重新分類為第二類地區，當中約 185 公頃現已被棕地和其他用途佔用，餘下 135 公頃目前未被佔用，可供棕地作業者搬遷業務。”；及

“城規會注意到政府的長遠目標是把棕地作業設置於多層現代產業大樓中。惟並非所有棕地作業都可以在多層大樓中營運。且該類大樓或尚未落成，故部分棕地用途仍需以露天場地形式經營。

城規會強調，重新分類並非縱容「先破壞、後建設」，會根據個別情況，參考規劃因素和申請人提交的技術評估，考慮每項規劃申請。”

申請人和土地使用人承諾假若日後有關部門要求恢復原狀，會積極配合將申請地點恢復原狀。

現附上有關報導。

修訂規劃指引 應付棕地作業遷移

2023年4月14日

城市規劃委員會宣布修訂規劃指引，以擴大鄉郊範圍第二類地區涵蓋的土地，應付未來數年新界區大規模發展而需要遷移的棕地作業。經修訂的規劃指引即時生效。

規劃指引把鄉郊範圍分為第一類至第四類，並詳列評審露天貯物/港口後勤用途規劃申請的準則。在第二類地區涵蓋的土地範圍內作露天貯物/港口後勤用途，可獲考慮批出規劃許可。

修訂後，約320公頃第三類和第四類土地重新分類為第二類地區，當中約185公頃現已被棕地和其他用途佔用，餘下135公頃目前未被佔用，可供棕地作業者搬遷業務。

城規會指，隨著新發展區和其他發展項目全面推進，被政府收回和清拆的棕地將從過去數年的30公頃，增至現在至2026年間的200公頃，涉及建造、物流、運輸、回收等行業，當中大部分均對本地經濟有積極貢獻。因此，該會認為擴大第二類地區的覆蓋範圍，將這些作業引導至適合棕地用途的地區，是符合公眾利益的安排。

此外，城規會注意到政府的長遠目標是把棕地作業設置於多層現代產業大樓中，惟並非所有棕地作業都可以在多層大樓中營運，且該類大樓或尚未落成，故部分棕地用途仍需以露天場地形式經營。

城規會強調，重新分類並非縱容「先破壞、後建設」，會根據個別情況，參考規劃因素和申請人提交的技術評估，考慮每項規劃申請。

為善用新發展區內有待發展的土地，城規會同意，無論先前是否已獲批規劃許可，若獲得政策支持，該會會從寬考慮涉及受政府發展項目影響而需要遷移的露天貯物/港口後勤用途，並打算搬遷至新發展區內指定為發展用途地點的規劃申請。