

GoldRich PLANNERS & SURVEYORS LTD.

金 潤 規 劃 測 量 師 行 有 限 公 司

Your Ref.: A/YL-KTS/1102

Our Ref.: P22068B/TL25388

14 November 2025

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

By E-mail
tpbpd@pland.gov.hk

Dear Sir,

Submission of Further Information (FI)

Temporary Shop and Services (Retail Shop for Hardware Groceries and Construction Materials) with Ancillary Facilities for a Period of 5 Years in “Residential (Group D)” Zone, Lots 681 RP (Part), 682 RP (Part) and 683 RP (Part) in D.D. 106 and Adjoining Government Land, Yuen Long, New Territories (Application No. A/YL-KTS/1102)

We write to submit FI in response to departmental comment(s) conveyed by the Planning Department for the captioned application.

Yours faithfully,
For and on behalf of
Goldrich Planners & Surveyors Ltd.



Francis Lau

Encl.

c.c.

DPO/FSYLE, PlanD (Attn.: Ms. Anna TONG)

Further Information for Planning Application No. A/YL-KTS/1102**Response-to-Comments****Comments from Environmental Protection Department**

Contact person: Mr. Kelvin WONG (Tel.: 2835 1117)

I.	Comments	Responses
1.	Please advise whether the proposed use would involve materials of dusty nature (e.g., cement, earth, pulverized fuel ash, aggregates, silt, stonefines, sand, debris, sawdust and wooden chips).	No materials of dusty nature will be involved at the site.

Comments from Drainage Services Department

Contact person: Mr. Kenneth CHAN (Tel.: 2300 1259)

II.	Comments	Responses
1.	We are unable to provide comment on drainage aspect of the application at this stage. Comment on drainage aspect will be provided when the drainage proposal as mentioned in paragraph 26 of the planning statement is received.	Please refer to the drainage proposal (Plans 5.1 and 5.2) and hydraulic calculations for details.
2.	In addition, the proposed development site is encroached onto existing streamcourses/channels. There is a potential increase flooding risk to the area if these streamcourses/channels are disturbed or affected by the operation of the applicant. Therefore, I would recommend the application site to exclude the streamcourses/channels and the adjoining areas 3m from the crest of the streamcourses/channels, in Government Land, from the captioned S.16 application.	The proposed development site is not encroached onto any existing streamcourses/channels.
3.	The applicant shall also be required to place all the proposed works 3m away from the top of the bank of the streamcourse/channel. All the proposed works in the vicinity of the streamcourse/channel should not create any adverse drainage impacts, both during and after construction.	Noted.

- END -

1 For Catchment Area A

Area, A = 1115 m²
 Average slope, H = 0.1 m per 100m
 Distance on the line of natural flow, L = 17 m

Time of concentration, t₀ = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (17) / (0.1^{0.2} × 1115^{0.1})
 = 1.9 min

SDM 7.5.2 (d)

2 For Existing UC in Catchment Area A

	From	To
Ground level (mPD)	7.80	7.80
Invert level (mPD)	7.30	6.89

Width of u-channel, w = 500 mm
 Length of u-channel, L_c = 81 m
 Depth of vertical part of u-channel, d = 660 mm
 Gradient of u-channel, S_f = (7.3-6.89)/81 = 0.005

Cross-Section Area, a = 0.5 π r² + w d = 0.5 × 3.14 × 250² + 500 × 660
 = 0.428 m²
 Wetted Perimeter, p = π r + 2 d = 3.14 × 250 + 2 × 660
 = 2.105 m
 Hydraulic radius, R = a / p
 = 0.203 m

SDM 8.2.1

3 Use Manning Equation for estimating velocity of stormwater

Take n = 0.016 for concrete lined channels:-
 Allowable velocity, v = R^{1/6} × (RS_f)^{1/2} / n = (0.203)^{1/6} × (0.203 × 0.005)^{1/2} / 0.016
 = 1.54 m/s
 Time of flow, t_f = 0.9 min

SDM Table 13
 SDM Table 12

4 Use "Rational Method" for calculation of design flow

Design intensity, i = a / (t₀ + t_f + b)^c
 = 505.5 / (1.9+0.9+3.29)^{0.355} for return period T = 50 years
 = 266

SDM 4.3.2
 Corrigendum 1/2024
 SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m ²)	C x A
Flat Glassland(heavy soil)	0.25	0.0	0.0
Concrete Paving	0.95	1115.0	1059.3
			SUM = 1059.3

SDM 7.5.2 (b)

Upstream flow, Q_u = 0 m³/s

Design flow, Q_d = 1.16 × 0.278i Σ C_fA_i + Q_u where A_i is in km²
 = 1.16 × 0.278 × 266 × 1059.25 / 1000000 + 0
 = 0.091 m³/s

SDM 7.5.2 (a)
 Corrigendum 1/2022

Allowable flow, Q_a = a × v
 = 0.428 × 1.54
 = 0.658 m³/s

> Q_d (O.K.)

Reference was made to Stormwater Drainage Manual (SDM) by DSD

Scale: NA

Hydraulic Calculation

Goldrich Planners &
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November 2025

Lots 681 RP (Part), 682 RP (Part) and 683 RP (Part) in D.D. 106 and
 Adjoining Government Land, Yuen Long, New Territories

Page 1
 (P22068B)

1 For Catchment Area B

Area, A = 1143 m²
 Average slope, H = 0.1 m per 100m
 Distance on the line of natural flow, L = 16 m

Time of concentration, $t_0 = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (16) / (0.1^{0.2} \times 1143^{0.1})$
 = 1.8 min

SDM 7.5.2 (d)

2 For Existing UC in Catchment Area B

	From	To
Ground level (mPD)	7.80	7.80
Invert level (mPD)	7.30	6.89

Width of u-channel, w = 500 mm
 Length of u-channel, $L_c = 81.6$ m
 Depth of vertical part of u-channel, d = 660 mm
 Gradient of u-channel, $S_f = (7.3-6.89)/81.6 = 0.005$

Cross-Section Area, $a = 0.5 \pi r^2 + w d = 0.5 \times 3.14 \times 250^2 + 500 \times 660$
 = 0.428 m²
 Wetted Perimeter, $p = \pi r + 2 d = 3.14 \times 250 + 2 \times 660$
 = 2.105 m
 Hydraulic radius, $R = a / p = 0.203$ m

SDM 8.2.1

3 Use Manning Equation for estimating velocity of stormwater

Take n = 0.016 for concrete lined channels:-
 Allowable velocity, $v = R^{1/6} \times (RS_f)^{1/2} / n = (0.203)^{1/6} \times (0.203 \times 0.005)^{1/2} / 0.016$
 = 1.53 m/s
 Time of flow, $t_f = 0.9$ min

SDM Table 13
 SDM Table 12

4 Use "Rational Method" for calculation of design flow

Design intensity, $i = a / (t_0 + t_f + b)^c$
 = $505.5 / (1.8+0.9+3.29)^{0.355}$ for return period T = 50 years
 = 268

SDM 4.3.2
 Corrigendum 1/2024
 SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m ²)	C x A
Flat Glassland(heavy soil)	0.25	0.0	0.0
Concrete Paving	0.95	1143.0	1085.9
SUM =			1085.9

SDM 7.5.2 (b)

Upstream flow, $Q_u = 0$ m³/s

Design flow, $Q_d = 1.16 \times 0.278i \sum C_i A_i + Q_u$ where A_i is in km²
 = $1.16 \times 0.278 \times 268 \times 1085.85 / 1000000 + 0$
 = 0.094 m³/s

SDM 7.5.2 (a)
 Corrigendum 1/2022

Allowable flow, $Q_a = a \times v$
 = 0.428×1.53
 = 0.656 m³/s

> Q_d (O.K.)

Reference was made to Stormwater Drainage Manual (SDM) by DSD

Scale: NA

Hydraulic Calculation

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Page 2
 (P22068B)

1 For Connection between CP3 to Existing Public Catchpit

Area, A = 0 m²
 Average slope, H = 0.1 m per 100m
 Distance on the line of natural flow, L = 0 m

Time of concentration, t₀ = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (0) / (0.1^{0.2} × 0^{0.1})
 = 0.0 min

Ref.

SDM 7.5.2 (d)

2 For Pipe after CP3

Size(Diameter) w = 400 mm
 Length of Pipe = 5.5 m
 Design the pipe to 9/10 full bore capacity, then
 Area of ventilated portion = 0.1 of pipe area
 $\frac{1}{2} r^2 \theta - \frac{1}{2} r^2 \sin(\theta) = 0.1 \pi r^2$
 $\theta - \sin(\theta) = 0.2 \pi$
 $\theta = 1.63 \text{ rad} = 93.4^\circ$ (By trial and error)

Area A = 0.9 π r²
 = 0.9 × 3.14 × 400²
 = 0.452 m²

Wetted Perimeter P = 2 π r - r θ = 1861 mm
 Hydraulic radius R = A/P = 242.9 mm

SDM 8.2.1

3 Use Manning Equation for estimating velocity of stormwater

Fall S = 1: 4
 Take n = 0.016 for concrete lined channels:-
 Allowable velocity, v = R^{1/6} × (RS_n)^{1/2} / n = (242.9)^{1/6} × (242.9/4)^{1/2} / 0.016
 = 11.66 m/s
 Time of flow, t_f = 0.01 min

SDM Table 13
 SDM Table 12

4 Use "Rational Method" for calculation of design flow

Design intensity, i = a / (t₀ + t_f + b)^c
 = 505.5 / (0.0 + 0.01 + 3.29)^{0.355} for return period T = 50 years
 = 331

SDM 4.3.2
 Corrigendum 1/2024
 SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m ²)	C x A
Flat Grassland (heavy soil)	0.25	0.0	0.0
Concrete Paving	0.95	0.0	0.0
Macadam Roadways	0.425	0.0	0.0
Wooded Areas	0.105	0.0	0.0
SUM =			0.0

SDM 7.5.2 (b)

Upstream flow, Q_u = 0.185 m³/s

Design flow, Q_d = 0.278i Σ C_iA_i + Q_u where A_i is in km²
 = 1.16 × 0.278 × 331 × 0 / 1000000 + 0.185
 = 0.185 m³/s

SDM 7.5.2 (a)
 Corrigendum 1/2022

Allowable flow, Q_a = a × v
 = 0.3974 × 1.35
 = 5.273 m³/s

> Q_d (O.K.)

Reference was made to Stormwater Drainage Manual (SDM) by DSD

Scale: NA

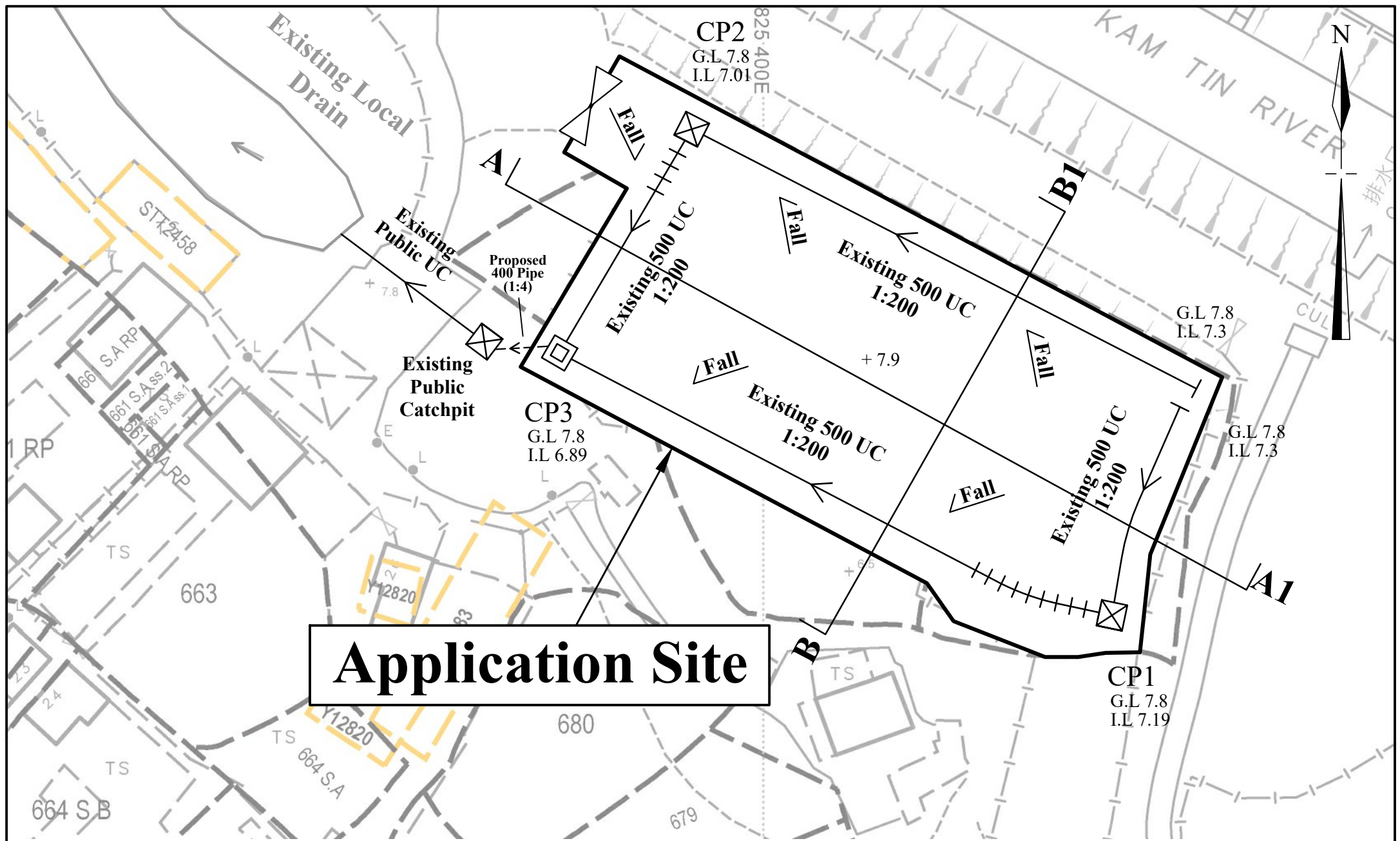
Hydraulic Calculation

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November 2025

Lots 681 RP (Part), 682 RP (Part) and 683 RP (Part) in D.D. 106 and
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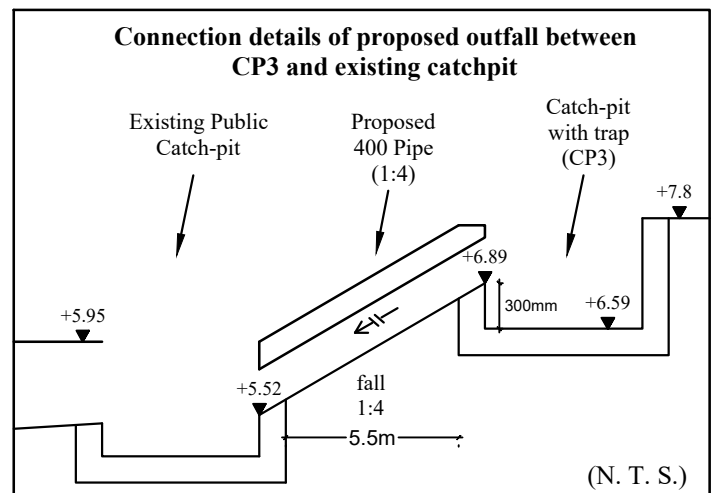
Page 3
 (P22068B)



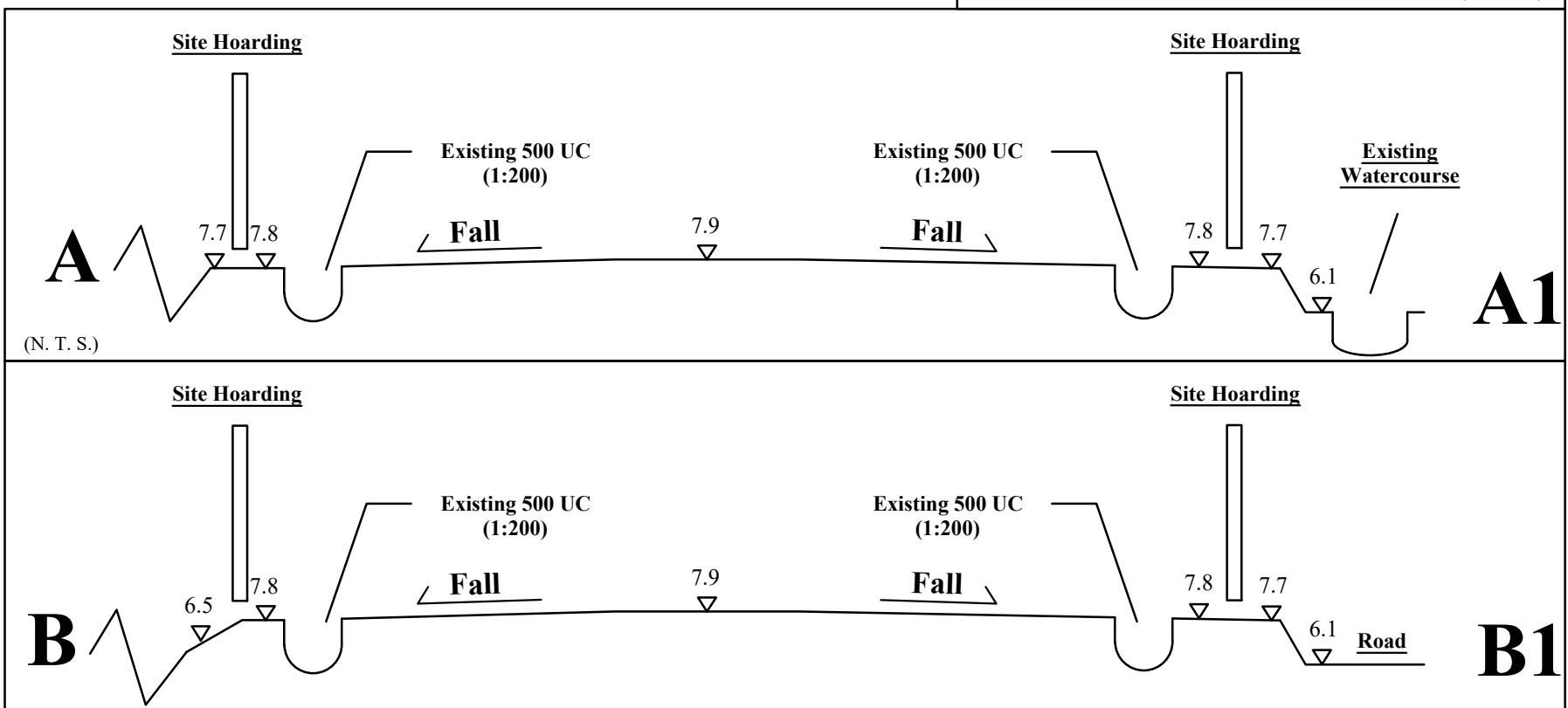
Application Site

Legend:

- Vehicular Ingress/ Egress
- Catch-pit
- Catch-pit with trap
- U-Channel
- U-Channel with C.I. cover
- Pipe



Site Area: 2,258m²



1:500 (A3)

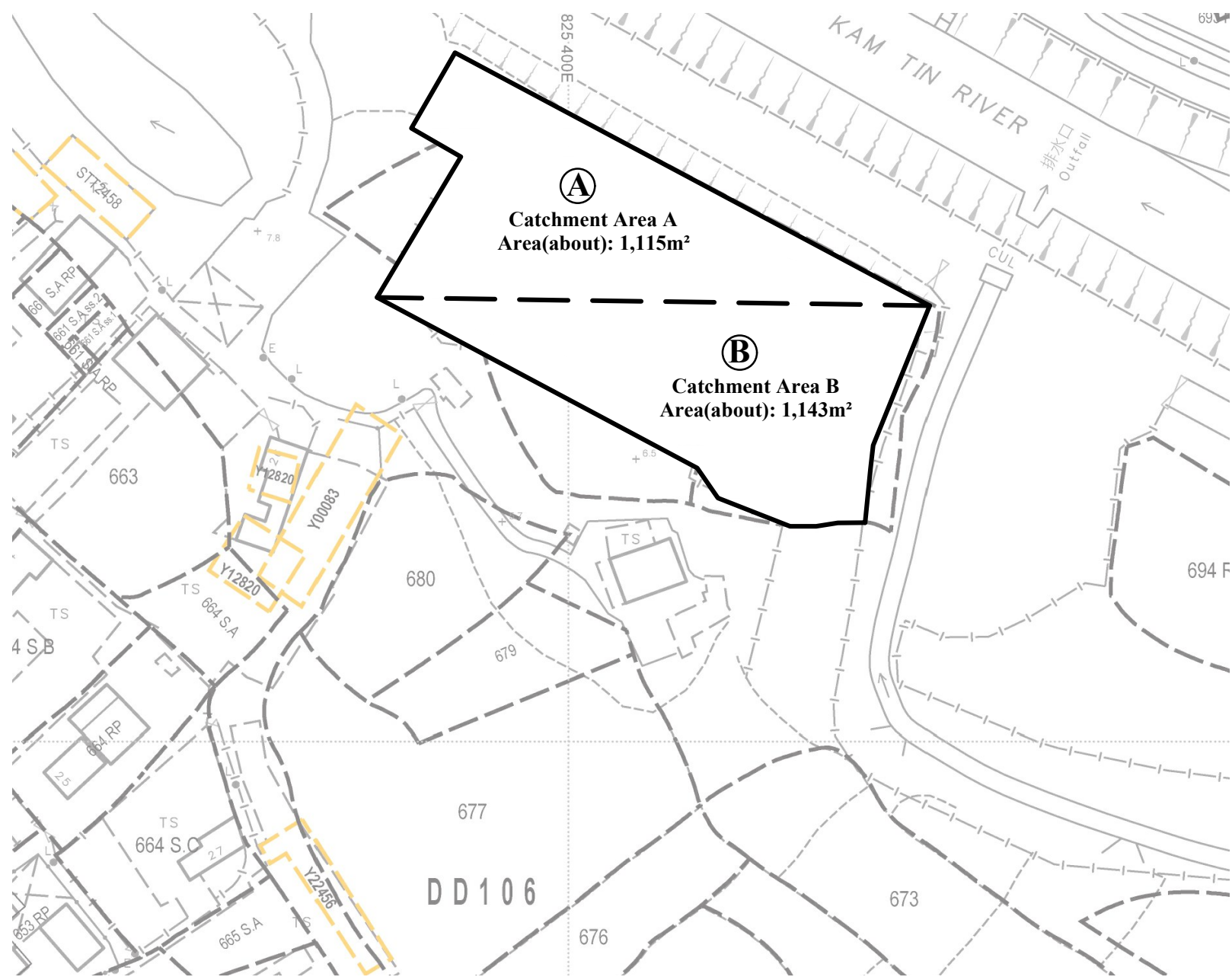
Drainage Proposal

Goldrich Planners & Surveyors Ltd.

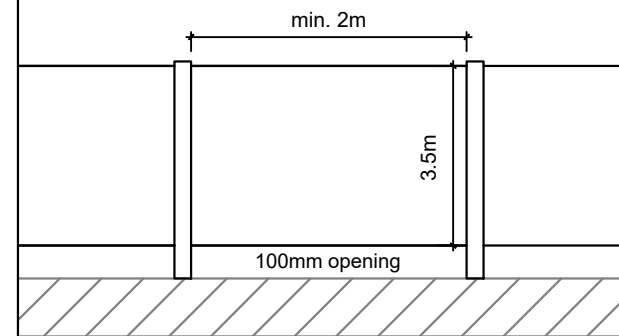
October 2025

Lots 681 RP(part), 682 RP(part) and 683 RP(part) in DD.106 and adjoining Government Land

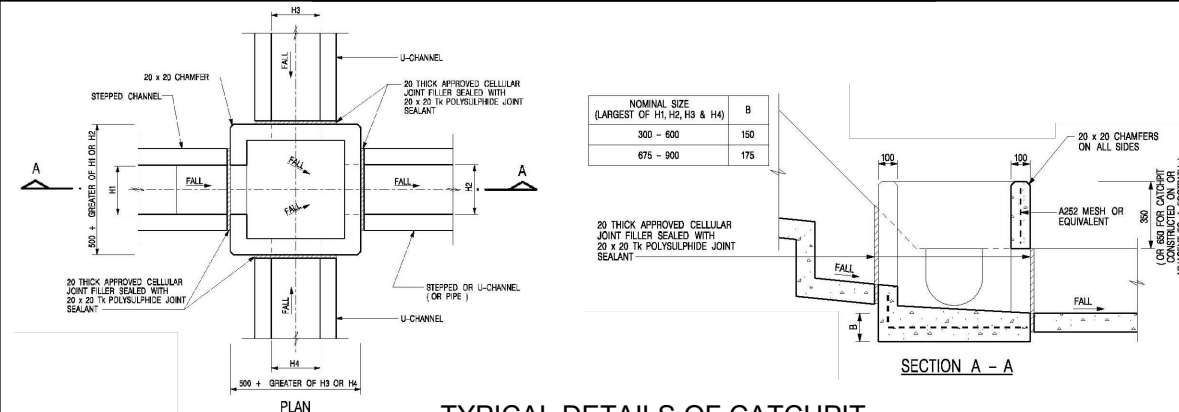
Plan 5.1 (P 22068B)



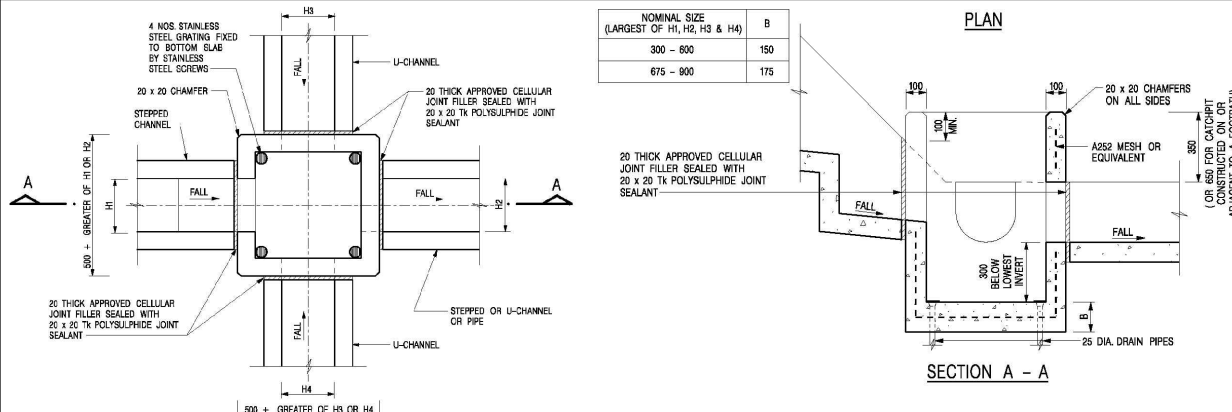
AREA OF CATCHMENT
(N.T.S)



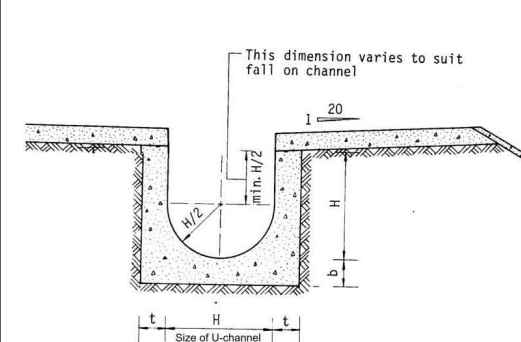
Details of hoarding with 100mm opening
(N. T. S.)



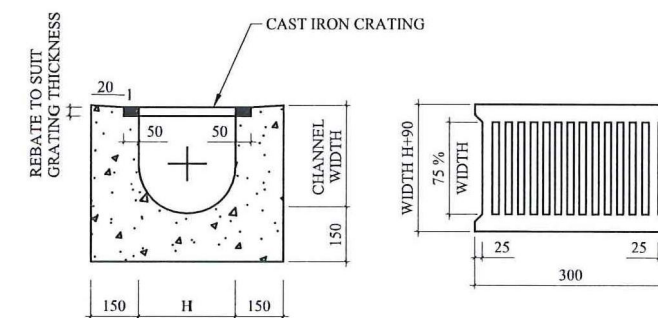
TYPICAL DETAILS OF CATCHPIT
(REFER TO CEDD'S STANDARD DWG. C2406/1)



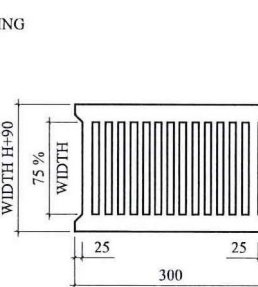
DETAILS OF CATCHPIT WITH TRAP
(REFER TO CEDD'S STANDARD DWG. C2406/1)



TYPICAL DETAILS OF U-CHANNEL
(Refer to DSD'S technical note to prepare a drainage submission)



TYPICAL SECTION OF U-CHANNEL WITH COVER
(N.T.S.)



CAST IRON CRATING (HEAVY DUTY)

N.T.S

October 2025

Drainage Proposal

Lots 681 RP(part), 682 RP(part) and 683 RP(part) in DD.106 and adjoining Government Land

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Plan 5.2 (P 22068B)