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Michael Chi Kin SO/PLAND

寄件者: fsyledpo_pd/PLAND
寄件日期: 2025年09月15日星期一 12:20
收件者: Woody Ka Wai LIN/PLAND; Michael Chi Kin SO/PLAND; Anna Ka Yan TONG/PLAND
主旨: Fw: [Departmental Comment] Planning Application No. A/YL-KTS/1077
附件: A_YL_KTS_1077.pdf; D.D. 113 Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317 S.H (Part) & 317 S.I RP Stormwater Drainage Proposal.pdf

From: tpbbpd/PLAND <tpbbpd@pland.gov.hk>
Sent: Monday, September 15, 2025 11:55 AM
To: fsyledpo_pd/PLAND <fsyledpo@pland.gov.hk>
Cc: Phoebe Hiu Ching TSUI/PLAND <phchtsui@pland.gov.hk>
Subject: Fw: [Departmental Comment] Planning Application No. A/YL-KTS/1077

From: pang hingyeun <[REDACTED]>
Sent: Monday, September 15, 2025 11:53 AM
To: tpbbpd/PLAND <tpbbpd@pland.gov.hk>
Subject: 轉寄: [Departmental Comment] Planning Application No. A/YL-KTS/1077

Dear Sir/Madam,

Please find the enclosed documents for replying to DSD' s comments.
Thank you !

Regards,
H.Y.Pang

從 [Outlook](#)傳送

寄件者: pang hingyeun <[REDACTED]>
寄件日期: 2025 年 9 月 13 日 11:34
收件者: Michael Chi Kin SO/PLAND <mckso@pland.gov.hk>; pang hingyeun <[REDACTED]>
主旨: 回覆: [Departmental Comment] Planning Application No. A/YL-KTS/1077

Dear Mr. So,

Please find the enclosed documents for replying to DSD' s comments.
Thank you !

Regards,

☐Urgent ☐Return receipt ☐Expand Group ☐Restricted ☐Prevent Copy

H.Y.Pang

從 [Outlook](#)傳送

寄件者: Michael Chi Kin SO/PLAND <mckso@pland.gov.hk>

寄件日期: 2025 年 8 月 13 日 15:37

收件者: [REDACTED] >

副本: Woody Ka Wai LIN/PLAND <wkulin@pland.gov.hk>; Anna Ka Yan TONG/PLAND <akytong@pland.gov.hk>

主旨: [Departmental Comment] Planning Application No. A/YL-KTS/1077

Dear Mr. Pang,

I refer to your drainage proposal submitted on 20.7.2025 for the captioned application, please find the departmental comments (**attached**) and make a response **on or before 22.8.2025 (Friday)**. Should you have any questions on the departmental comment, please contact Mr. Kenneth CHAN of Drainage Services Department at 2300 1259 directly. Many thanks!

[See attachment "20250813_Comments on Drainage Proposal.pdf.docx"]

Best Regards,

Michael SO

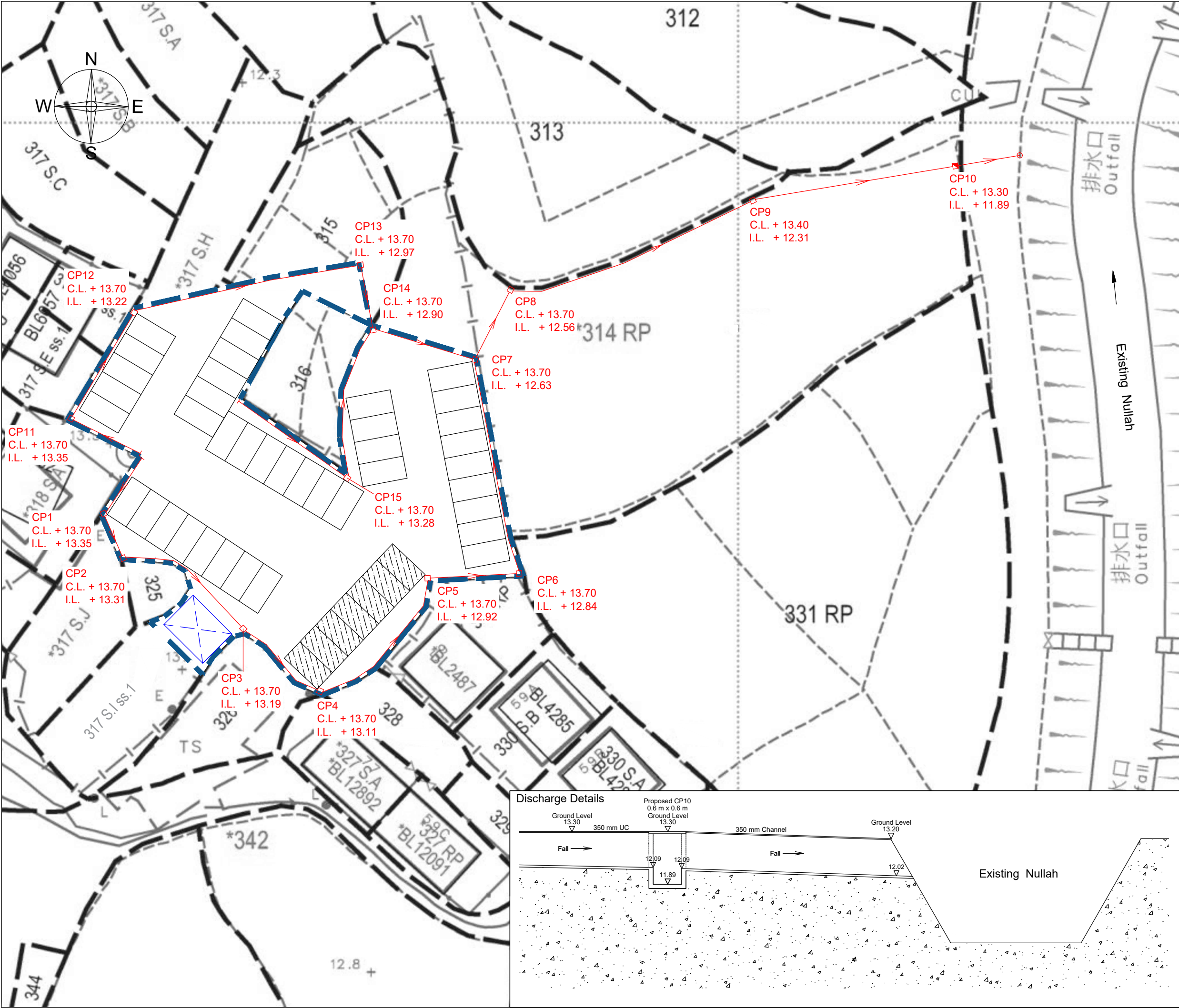
FS&YLE DPO, PlanD

Tel: 3907 0963

Section 16 Planning Application No. A/YL-KTS/1077

We reply to DSD's comments.

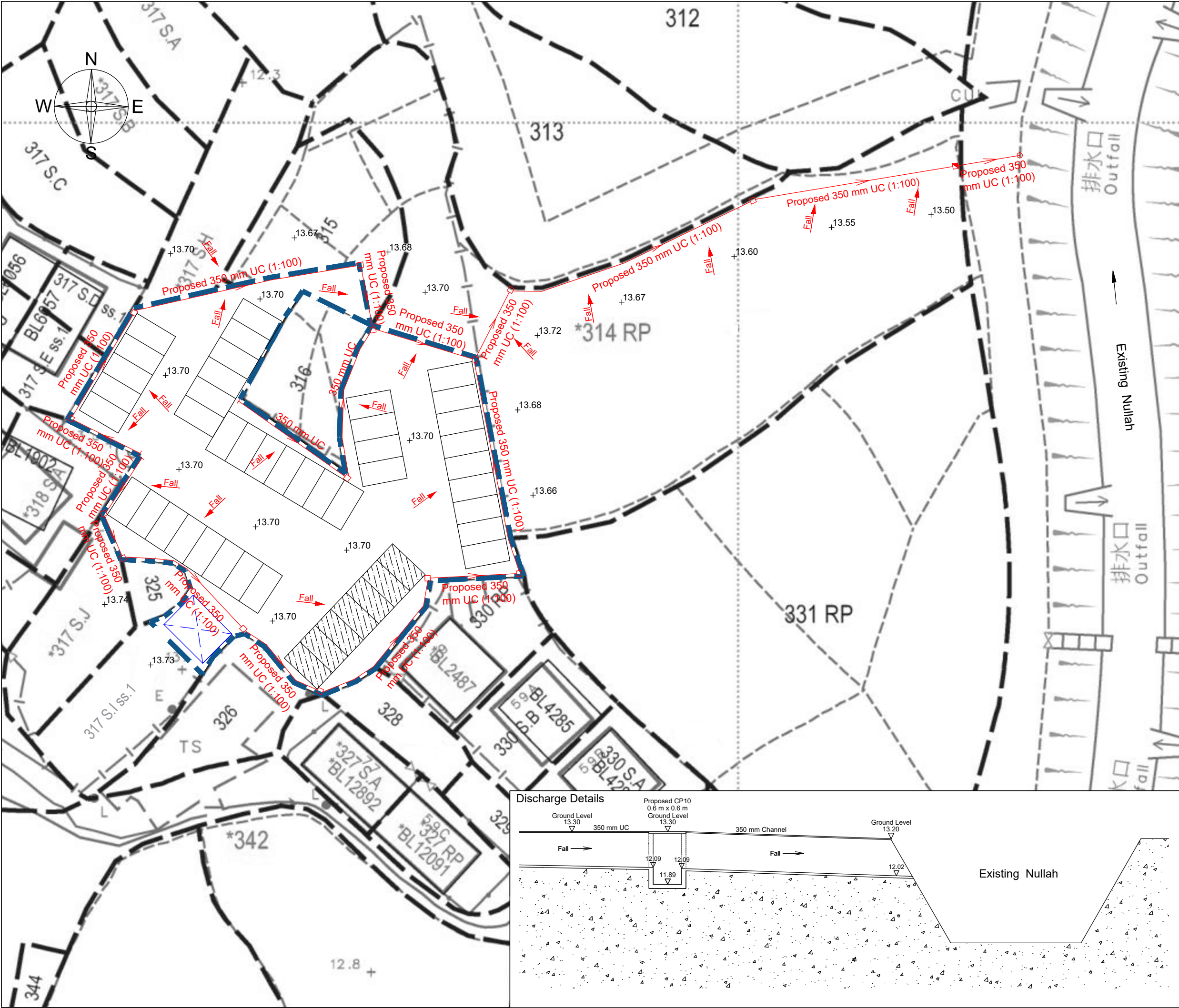
- a. We noted with thanks.
- b. We ensure that the design and installation of the drainage system will not impact the drainage channels on the site or the adjacent land.
- c. We ensure that the land filling works will not affect the overland flow from the adjacent lands.
- d. Please refer to the Drainage Plan.
- e. Please refer to the hydraulic calculations.
- f. Please refer to the Drainage Schedule.
- g. We noted with thanks.
- h. If we install a wall or hoarding at the boundary, we will provide adequate openings to intercept the existing overland flow passing through the site.
- i. Please refer to the Cross Sections Plan.
- j. Please refer to the Catchpit and U-Channel Details.
- k. We ensure that the development will not obstruct overland flow nor adversely affect existing natural streams, village drains, ditches and the adjacent areas, etc.
- l. We will resolve any conflict/disagreement with relevant lot owner(s) and will seek with LandsD's permission for laying new drains/channels and/or modifying/upgrading existing ones in other private lots or on Government Land outside the application site.
- m. We will submit from HBP1 to your department for technical audit.
- n. Please refer to the discharge details.
- o. Please refer to the photos to show the existing drainage facilities.



LEGEND :

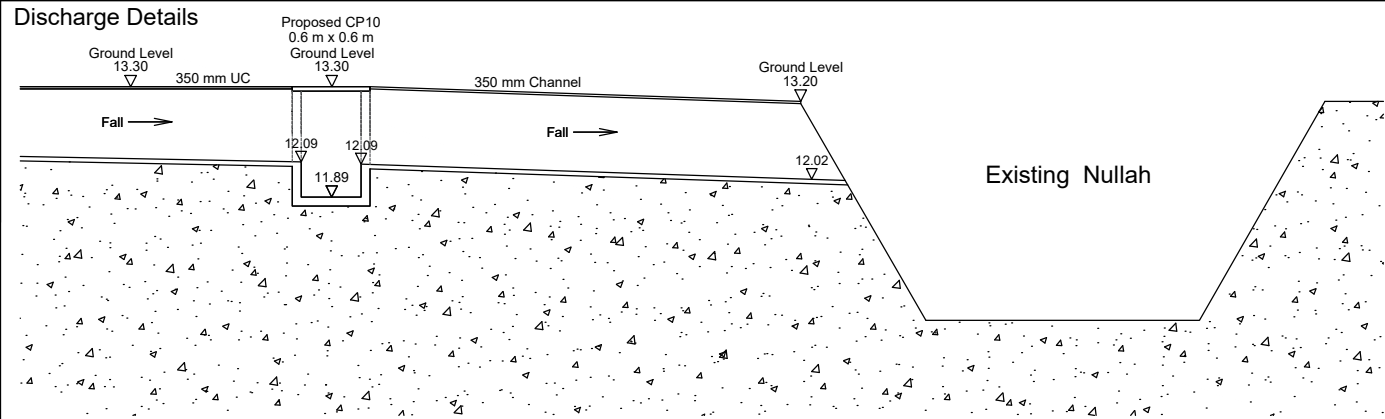
- Application Site
- Proposed 350 mm UC (1:100) with cast iron grating
- Proposed Catchpit with trap and with concrete cover
- Fall
- Catchpit with sand trap and with concrete cover
- Existing Nullah
- Existing Catchpit
- Existing Spot Level
- Stormwater Fall Direction
- Parking space for Private Car (5m x 2.5m) for each
- Parking space for Light Goods Vehicle (5m x 2.5m) for each
- 1 Storey Container use for office (L6.1m x W4.6m x H2.6m)

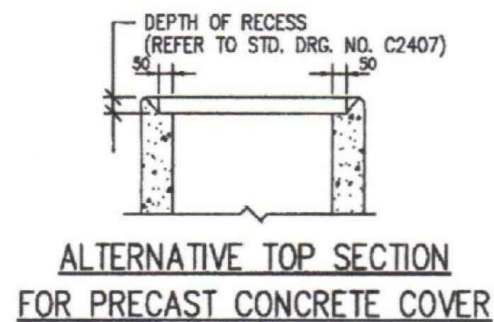
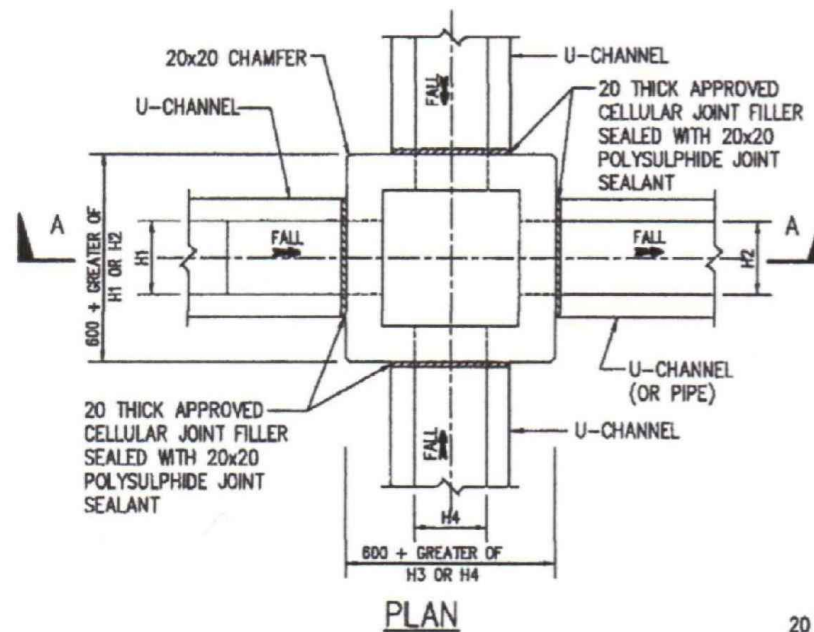
Drawn	P.Y.KONG
Checked	H.Y.PANG
Project Title : Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317 S.H (Part) & 317 S.I RP in D.D. 113, Ma On Kong, Pat Heung,	
Plan Title : Proposed Stormwater Drainage Plan	
Plan No. : CW/DN/113/317/DP/01(a)	Scale : 1 : 400 Date : 08-09-2025
卓 弘 測 量 服 務 公 司 CHUO WANG SURVEY SERVICES COMPANY	



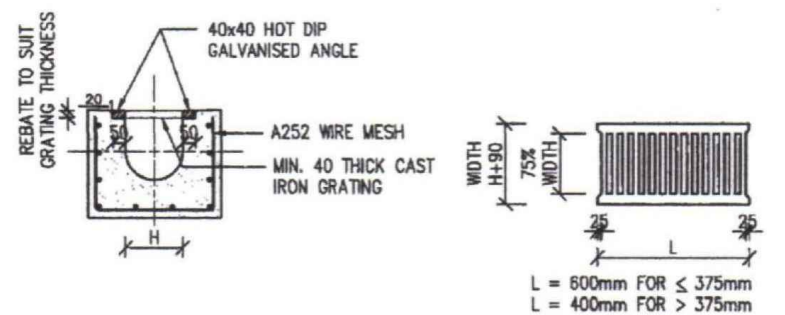
- LEGEND :**
- Application Site
 - Proposed 350 mm UC (1:100) with cast iron grating
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Drawn	P.Y.KONG
Checked	H.Y.PANG
Project Title :	
Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317 S.H (Part) & 317 S.I RP in D.D. 113, Ma On Kong, Pat Heung,	
Plan Title :	
Proposed Stormwater Drainage Plan	
Plan No. :	Scale : 1 : 400
CW/DN/113/317/DP/02(a)	Date : 08-09-2025
卓 弘 測 量 服 務 公 司	
CHUO WANG SURVEY SERVICES COMPANY	



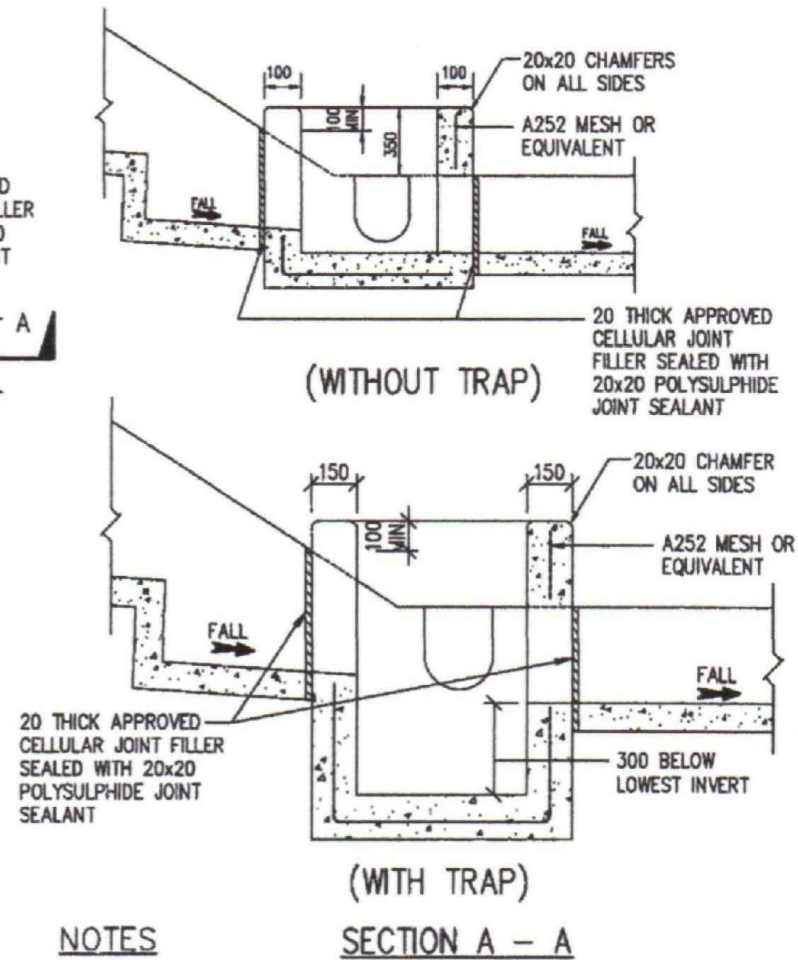


STANDARD CATCHPIT DETAILS
(ACCORDING TO CEDD'S DRAWING NO. C2405I & 2406I)



TYPICAL SECTION
(DIMENSIONS ARE FOR GUIDANCE ONLY, CONTRACTOR MAY SUBMIT EQUIVALENT TYPE)

U-CHANNEL WITH CAST IRON GRATING
(UP TO H OF 525)
(ACCORDING TO CEDD'S DRAWING NO. C2412E)



- NOTES**
- (1) ALL DIMENSIONS ARE IN MILLIMETRES.
 - (2) SIZE - DEPTH : $D \leq 750$
WIDTH : $W \geq 3B$
LENGTH : $L = 4.8D^{0.67} h^{0.5} F^{-0.5} > 4B$
 - (3) GRADED STONE FILTER SHALL BE CRUSHER RUN GRANITE AGGREGATE.
 - (4) THE SANDTRAP SHALL BE REGULARLY DESILTED TO AVOID BLOCKAGE.

NOMINAL SIZE (h)	T	B	REINFORCEMENT
225-300	80	100	A252 MESH PLACED CENTRALLY AND T=100 WHEN E>650
375-800	100	150	A252 MESH PLACED CENTRALLY
675-900	100	150	A252 MESH PLACED CENTRALLY

TYPICAL U-CHANNEL DETAILS
(ACCORDING TO CEDD'S DRAWING NO. C2410G)
N.T.S.

NOTES FOR U-CHANNEL

1. THE COVER OF PROPOSED U-CHANNEL SHALL BE FLUSH WITH THE PATH SURFACE AND ANY HOLE IN SUCH COVER SHALL NOT EXCEED 20mm IN ONE DIMENSION.
2. CAST IRON GRATINGS TO BE USED SHALL BE COMPLIANCE WITH BS 437:2008.

Drawn P.Y.KONG

Checked H.Y.PANG

Project Title :

Lot Nos. 314 RP (Part), 315 (Part),
317 S.F, 317 S.G (Part), 317 S.H
(Part) & 317 S.I RP in D.D. 113,
Ma On Kong, Pat Heung,

Plan Title :

Catchpit and U-Channel Details

Plan No. :

CW/DN/113/317/DP/03(a)

Scale :
Not To Scale

Date :
08-09-2025

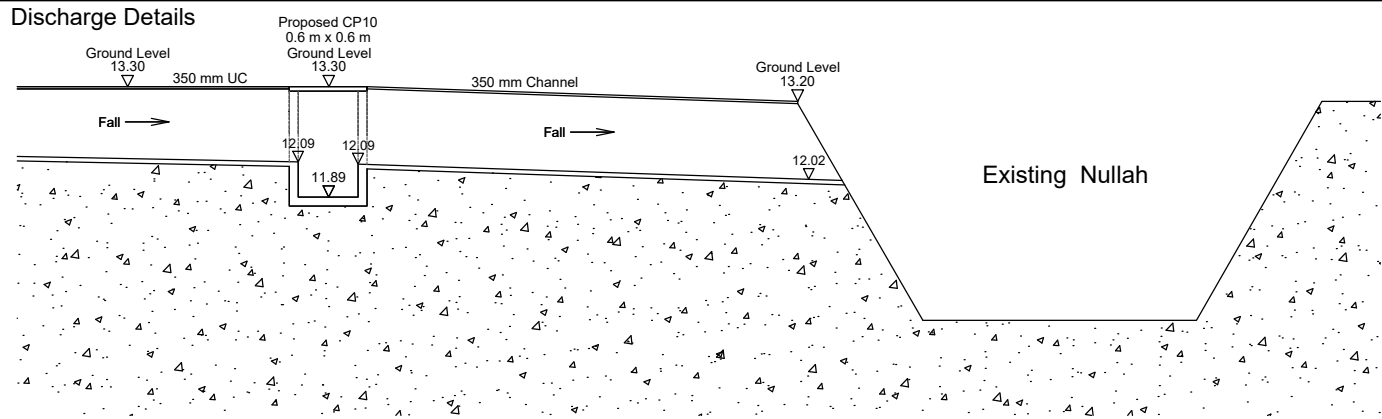
卓 弘 測 量 服 務 公 司
CHUO WANG SURVEY SERVICES COMPANY



LEGEND :

- Application Site
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- 1 Storey Container use for office (L6.1m x W4.6m x H2.6m)

Drawn	P.Y.KONG
Checked	H.Y.PANG
Project Title : Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317 S.H (Part) & 317 S.I RP in D.D. 113, Ma On Kong, Pat Heung,	
Plan Title : Existing Nullah	
Plan No. : CW/DN/113/317/DP/04(a)	Scale : 1 : 400
	Date : 08-09-2025
卓 弘 測 量 服 務 公 司 CHUO WANG SURVEY SERVICES COMPANY	



**Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317 S.H
(Part) & 317 S.I RP in D.D. 113, Ma On Kong, Pat Heung, Yuen Long, N.T.**

Proposed 350 mm UC Schedule

UC Between Catchpits	Size (mm)	Length (m) (Approx.)	Cover Level (m) (Approx.)	Upstream Level (m) (Approx.)	Downstream Level (m) (Approx.)
Start Point to CP1	350 mm	7	13.7	13.42	13.35
CP1 to CP2	350 mm	4	13.7	13.35	13.31
CP2 to CP3	350 mm	12	13.7	13.31	13.19
CP3 to CP4	350 mm	8	13.7	13.19	13.11
CP4 to CP5	350 mm	19	13.7	13.11	12.92
CP5 to CP6	350 mm	8	13.7	12.92	12.84
CP6 to CP7	350 mm	21	13.7	12.84	12.63
CP7 to CP8	350 mm	7	13.7	12.63	12.56
CP8 to CP9	350 mm	25	13.7 to 13.4	12.56	12.31
CP9 to CP10	350 mm	22	13.4 to 13.3	12.31	12.09
CP10 to Discharge	350 mm	7	13.3 to 13.2	12.09	12.02
Start Point to CP12	350 mm	7	13.7	13.42	13.35
CP12 to CP13	350 mm	13	13.7	13.35	13.22
CP13 to CP14	350 mm	26	13.7	13.22	12.96
CP14 to CP7	350 mm	12	13.7	12.96	12.63
Start Point to CP15	350 mm	14	13.7	13.42	13.28
CP15 to CP14	350 mm	17	13.7	13.28	12.96

Drawn P.Y.KONG

Checked H.Y.PANG

Project Title :
Lot Nos. 314 RP (Part), 315 (Part),
317 S.F, 317 S.G (Part), 317 S.H
(Part) & 317 S.I RP in D.D. 113,
Ma On Kong, Pat Heung,

Plan Title :
U-Channel Schedule

Plan No. : CW/DN/113/317/DP/05(a)	Scale : Not To Scale
	Date : 08-09-2025

卓 弘 測 量 服 務 公 司
CHUO WANG SURVEY SERVICES COMPANY

**Design
For
350mm U-Channel**

Project:
D.D. 113 Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317S.H (Part) & 317 S.I RP
in D.D. 113
Ma On Kong, Pat Heung

卓 弘 測 量 服 務 公 司 CHUO WANG SURVEY SERVICES COMPANY	Project Title	Scale	Figure No.
	Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317 S.H (Part) & 317 S.I RP in D.D. 113, Ma On Kong, Pat Heung, Yuen Long, N.T.	--	HC-01
	Figure Title	Date	Revision
	HYDRAULIC CALCULATION	08-09-2025	--

Appendices

Appendix A – Design for 350mm U Channel

Appendix B – Reference Clause from Hong Kong Code

卓 弘 測 量 服 務 公 司 CHUO WANG SURVEY SERVICES COMPANY 	Project Title	Scale	Figure No.
	Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317 S.H (Part) & 317 S.I RP in D.D. 113, Ma On Kong, Pat Heung, Yuen Long, N.T.	--	HC-02
	Figure Title	Date	Revision
	HYDRAULIC CALCULATION	08-09-2025	--

Appendix A -
Design for 150 mm Drainage Pipe

卓 弘 測 量 服 務 公 司 CHUO WANG SURVEY SERVICES COMPANY	Project Title	Scale	Figure No.
	Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317 S.H (Part) & 317 S.I RP in D.D. 113, Ma On Kong, Pat Heung, Yuen Long, N.T.	--	HC-03
	Figure Title	Date	Revision
	HYDRAULIC CALCULATION	08-09-2025	--

Estimated Flow Capacity of the proposed 150mm dia. Open channel

According to Colebrook-White Equation in Table 12 of Stormwater Drainage Manual)

Length = 136.00 m

Inlet I.L. = 13.35 mPD

Outlet I.L. = 11.89 mPD

Gradient = 0.01074 (for conservative; fall is taken 1:100)

k_s = 14.0000 mm (Table 14 of Stormwater Drainage Mannual) normal classification

Colebrook-White

$$\bar{V} = -\sqrt{32gRS_f} \log \left[\frac{k_s}{14.8R} + \frac{1.255\nu}{R\sqrt{32gRS_f}} \right]$$

Drain Size Dia	Gradient S_f	Drain		Hydraulic. radius R (D/4 for circular pipe)	Coeff. $\sqrt{32gRS_f}$	Viscosity ν	Roughness k_s
		Capacity Area x $\bar{V}$	Velolcity $\bar{V}$				
(mm)		(m ³ /s)	(m/s)	(m)		(m ² /s)	(m)
350	0.01074	0.103	1.067	0.0875	0.54	1.14E-06	0.0140

Pipe capacity = 0.103 m³/s
= 6160 l/min



Design flow for Part A

Return Period : 200 Years

Assume flow velocity : (m/s) **1.5**

Return Period T (years)

Rainfall Intensity: $I = a / (T_c + b)^c$

200 (from Table 3 of DSD Practice Note No. 1/2017)

a **1074.8**

b **12.47**

c **0.523**

Rational Method:

$$T_o = 0.14465 \cdot L / (H^{0.2})(A^{0.1})$$

$$Q = 0.278 \cdot C \cdot I \cdot A$$

$$T_f = L/v$$

$$T_c = T_o + T_f$$

Catchment Area of Part A

Area(m ²)	1274.5	T _o =	15.88	min
C-value	0.8	T _f =	2.33	min
Max. Elev. (mPD)	13.7	T _c =	18.21	min
Min. Elev.(mPD)	13.5	I =	179.34	mm/hr
Max. flow path, L (m)	150	Q=	0.0508	m ³ /s
Gradient, H (m in 100m)	0.1	Q=	3050	(l/min)
Total Length of Channel, L (m)	210			

C:\Users\Pang Hing Yeun\OneDrive\ \\Design for 150mm pipe for D.D. 123 Lot 1120 S.A. & 1120 S.B.-5.jpg
Flow capacity checking

Design flow rate = 3050 l/min
Flow capacity of
proposed 350mm
open channel = **6160** l/min > 3050 l/min

OK

Appendix B -
Reference Clause from Hong Kong Code

卓 弘 測 量 服 務 公 司 CHUO WANG SURVEY SERVICES COMPANY	Project Title	Scale	Figure No.
	Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317 S.H (Part) & 317 S.I RP in D.D. 113, Ma On Kong, Pat Heung, Yuen Long, N.T.	--	HC-06
	Figure Title	Date	Revision
	HYDRAULIC CALCULATION	08-09-2025	--

routing through drainage channels. The same consideration shall also be applied when ground gradients vary greatly within the catchment.

(b) *Runoff Coefficient.* C is the least precisely known variable in the Rational Method. Proper selection of the runoff coefficient requires judgement and experience on the part of the designer. The value of C depends on the impermeability, slope and retention characteristics of the ground surface. It also depends on the characteristics and conditions of the soil, vegetation cover, the duration and intensity of rainfall, and the antecedent moisture conditions, etc. In Hong Kong, a value of C = 1.0 is commonly used in developed urban areas.

In less developed areas, the following C values may be used but it should be checked that the pertinent catchment area will not be changed to a developed area in the foreseeable future. Particular care should be taken when choosing a C value for unpaved surface as the uncertainties and variability of surface characteristics associated with this type of ground are known to be large. It is important for designer to investigate and ascertain the ground conditions before adopting an appropriate runoff coefficient. Designers may consider it appropriate to adopt a more conservative approach in estimation of C values for smaller catchments where any consequent increase in cost may not be significant. However, for larger catchments, the designers should exercise due care in the selection of appropriate C values in order to ensure that the design would be fully cost-effective.

<i>Surface Characteristics</i>	<i>Runoff coefficient, C*</i>
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 steep natural slopes or areas where a shallow soil surface is underlain by an impervious rock layer, a higher C value of 0.4 - 0.9 may be applicable.

** Heavy soil refers to fine grain soil composed largely of silt and clay

(c) *Rainfall intensity.* i is the average rainfall intensity selected on the basis of the design rainfall duration and return period. The design rainfall duration is taken as the time of concentration, t_c . The Intensity-Duration-Frequency Relationship is given in Section 4.3.2.

(d) *Time of concentration.* t_c is the time for a drop of water to flow from the remotest point in the catchment to its outlet. For an urban drainage system,

$$t_c = t_o + t_f \qquad t_f = \sum_{j=1}^n \frac{L_j}{V_j}$$

where t_o = inlet time (time taken for flow from the remotest point to reach the most upstream point of the urban drainage

卓 弘 測 量 服 務 公 司 CHUO WANG SURVEY SERVICES COMPANY	Project Title	Scale	Figure No.
	Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317 S.H (Part) & 317 S.I RP in D.D. 113, Ma On Kong, Pat Heung, Yuen Long, N.T.	--	HC-07
	Figure Title	Date	Revision
	HYDRAULIC CALCULATION	08-09-2025	--

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

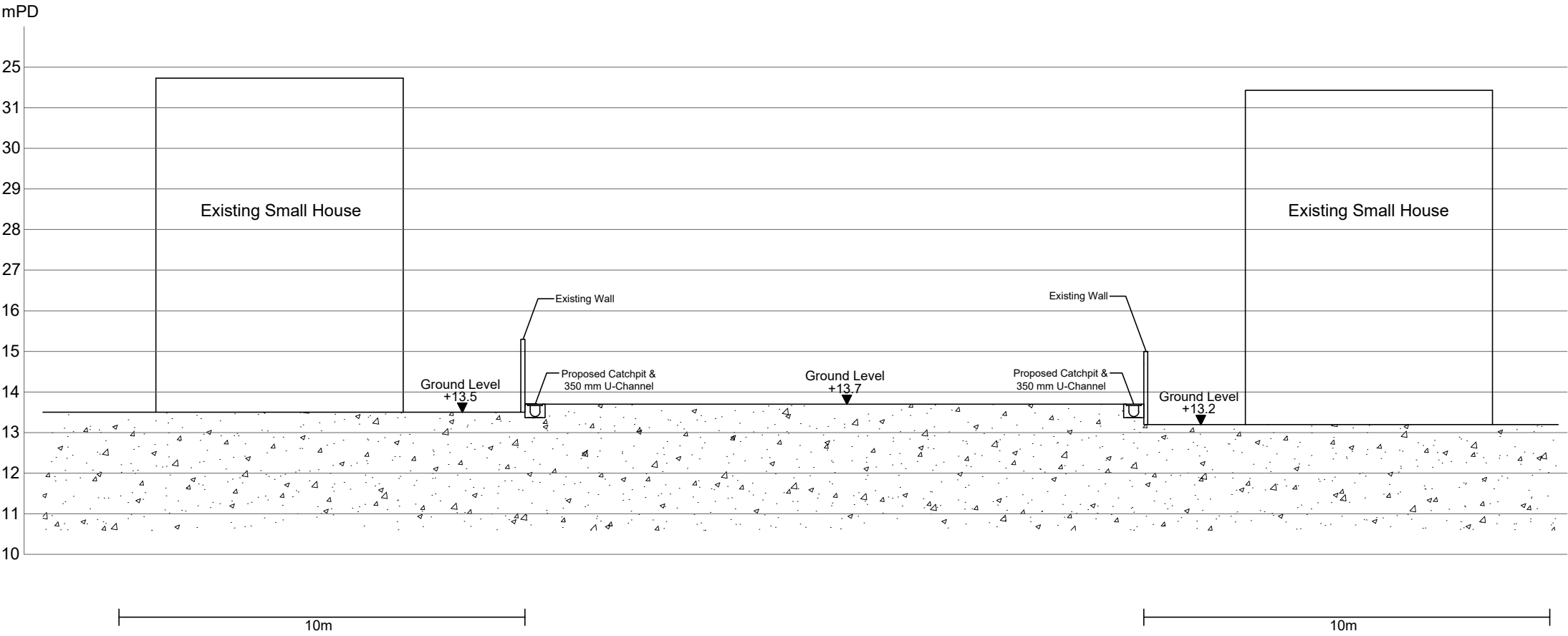
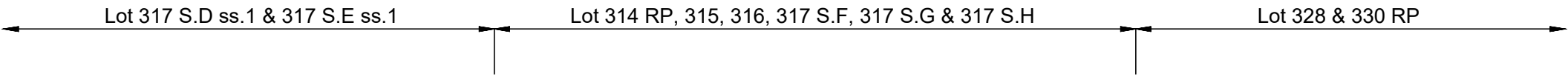
Return Period T (years)	2	5	10	20	50	100	200
a	1004.5	1112.2	1157.7	1178.6	1167.6	1131.2	1074.8
b	17.24	18.86	19.04	18.49	16.76	14.82	12.47
c	0.644	0.614	0.597	0.582	0.561	0.543	0.523



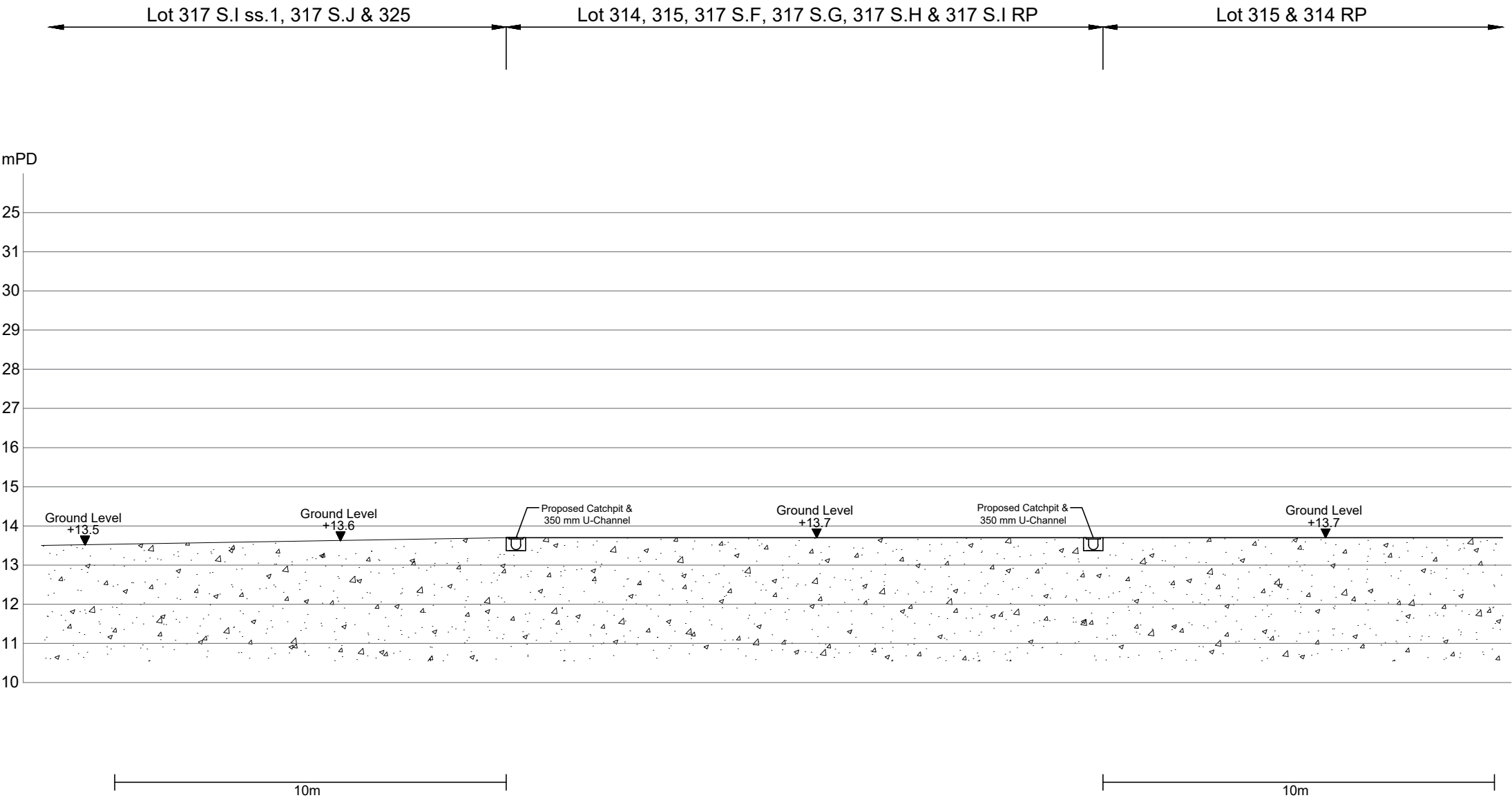
LEGEND :

Application Site

Drawn	P.Y.KONG
Checked	H.Y.PANG
Project Title : Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317 S.H (Part) & 317 S.I RP in D.D. 113, Ma On Kong, Pat Heung,	
Plan Title : Cross Section	
Plan No. : CW/DN/113/317/CS/01	Scale : 1 : 400 Date : 08-09-2025
卓 弘 測 量 服 務 公 司 CHUO WANG SURVEY SERVICES COMPANY 	



Drawn	P.Y.KONG
Checked	H.Y.PANG
Project Title : Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317 S.H (Part) & 317 S.I RP in D.D. 113, Ma On Kong, Pat Heung,	
Plan Title : Section A - A	
Plan No. : CW/DN/113/317/CS/02	Scale : Not To Scale Date : 08-09-2025
卓 弘 測 量 服 務 公 司 CHUO WANG SURVEY SERVICES COMPANY _____ _____ _____ _____	



Drawn	P.Y.KONG
Checked	H.Y.PANG
Project Title : Lot Nos. 314 RP (Part), 315 (Part), 317 S.F, 317 S.G (Part), 317 S.H (Part) & 317 S.I RP in D.D. 113, Ma On Kong, Pat Heung,	
Plan Title : Section B - B	
Plan No. : CW/DN/113/317/CS/03	Scale : Not To Scale Date : 08-09-2025
卓 弘 測 量 服 務 公 司 CHUO WANG SURVEY SERVICES COMPANY ██ ██ ██ ██	