

From: [REDACTED]
Sent: 2025-12-19 星期五 11:58:33
To: [REDACTED]
Subject: Re: Submission of Further Information for Application No. A/YL-PH/1087
Attachment: A_YL-PH_1087 排水建議.pdf

現就相關規劃申請提交渠務署已接受的排水建議，請查閱附件，謝謝。
另特此承諾，本人將在規劃申請獲批後即時申請短期豁免書。

申請人 夏佩娟
2025 年 12 月 19 日

致 城規會及相關部門

申請地點：新界元朗八鄉橫台山丈量約份第111約地段編號第2808(部份) ，2811
餘段(部份)，2812(部份)，2813(部份)，2814(部份)，2815(部份)
規劃編號：A/YL-PH/1087

提議渠務報告 (Proposed)

1. 回覆 2025 年 10 月 15 日信函（簡介）
2.
 - a. 申請人提議的渠管道建造是由申請人自費的。
 - b. 申請人提議的渠管道日後維修保養是申請人的責任。
 - c. 申請人提議的渠管道，也明白地權是政府/私人的。
 - d. 申請人承諾會得到政府部門同意/私人地段同意才會建設渠道工程。
 - e. 申請人聘任了 PERRY LEE BUILDING CONSULTANCY COMPANY
公司作此次渠務顧問。

申請人聯絡方式

電話： [REDACTED]

Email： [REDACTED]

地址： [REDACTED]

渠務顧問聯絡方式

電話： [REDACTED]

Email： [REDACTED]

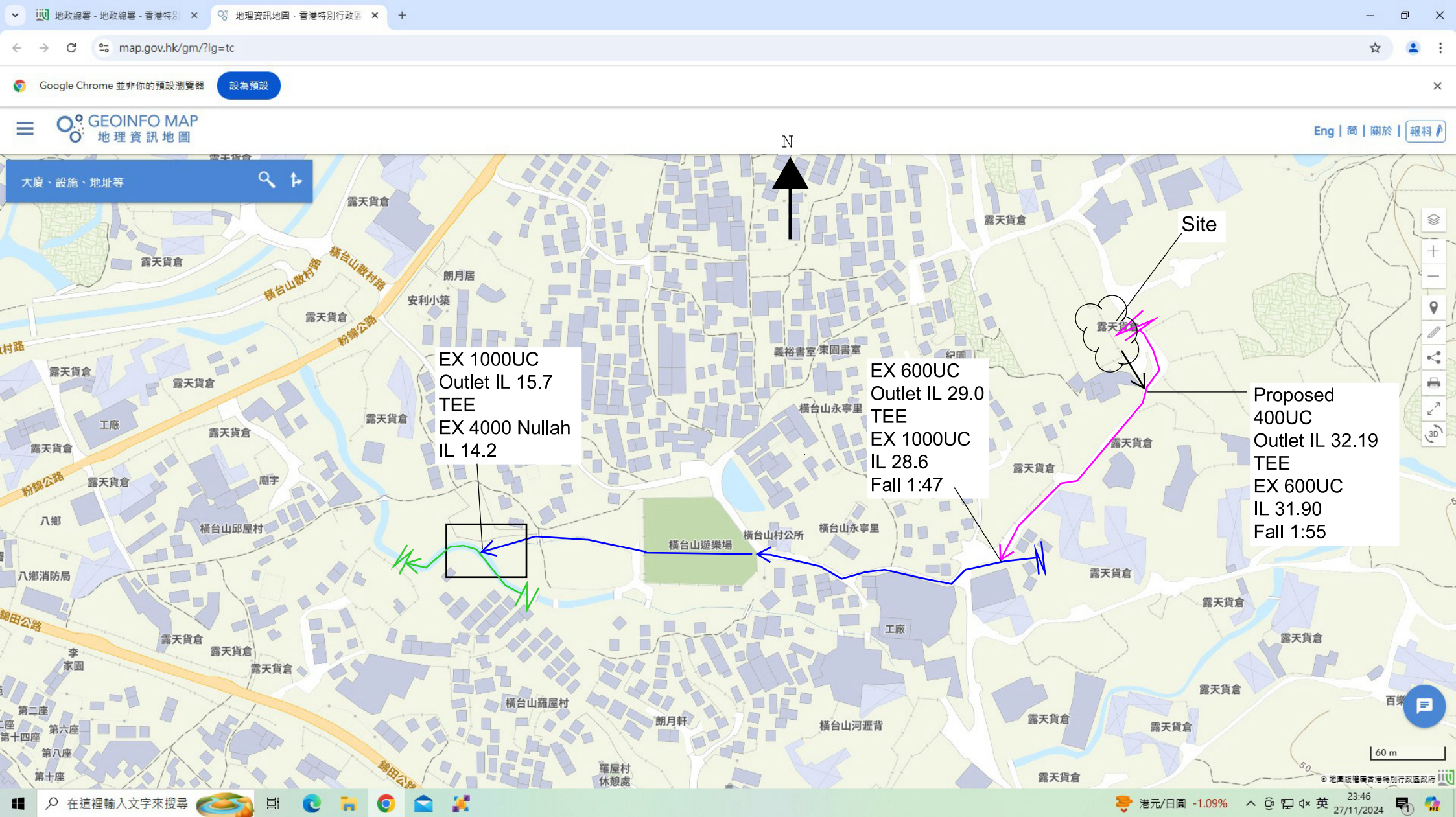
地址： [REDACTED]

2025 年 10 月 21 日

簡介 A_YL-PH_1087 回復 20251015 Comment

Comment	回復
1. I have the following comments on the drainage proposal: -	
(a) Please refer to the Stormwater Drainage Manual Corrigendum No. 1/2024 (26 March 2024) for the design calculations.	已修改 在b3-1 中示
(b) Please refer to the Stormwater Drainage Manual Corrigendum No. 1/2022 and take into account the rainfall increase due to climate change for the design calculations.	已修改 在b3-1 中示
(c) According to section 6.6.1 of the Stormwater Drainage Manual, the impact of a 50-year event should be assessed in the planning and design of village system to check whether a higher standard than 10 years is justified.	已修改 在b3-1 中示
(d) Please show the equation and coefficient for calculation of Q(m discharge of open channel) in the submission.	已修改 在b3-1 中示
(e) Please confirm whether the 400UC after the proposed CP6 is proposed under this application.	已修改 在b2-1 中示
(f) Please show the catchment of the above 400UC and take into account of the relevant surface runoff for the design calculation.	已修改 在b2-1, b3-1 中示
(g) Please show the catchment of the existing 600UC and take into account of the relevant surface runoff for the design calculation.	已修改 在b1-1 & b3-1 中示
(h) 400UC is proposed for the development site. However, the calculation is for 300UC. Please check and clarify.	已修改 在b2-1 中示
(i) Please show runoff coefficients in the submission.	在b3-1 中示
(j) The development should neither obstruct overland flow nor adversely affect existing natural streams, village drains, ditches and the adjacent areas, etc.	知道和明白
(k) Where walls or hoarding are erected or laid along the site boundary, adequate opening should be provided to intercept the existing overland flow passing through the site.	知道和明白
(l) The applicant shall resolve any conflict/disagreement with relevant lot owner(s) and seek 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.	知道和明白

2. Please note that the above comments are provided from drainage point of view. Since the site formation levels and any associated works proposed by the applicant may affect adjacent land and cause other impacts and/or other issues to public, please consider to require the applicant to submit technical assessment(s) in other aspect(s) and seek comment from relevant departments as necessary.	知道和明白
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→ =Proposed 400UC & Fall

→ =EX 4000 Nullah & Fall

→ =EX 1000UC & Fall

→ =EX 600UC / 600UCC & Fall

EX Drainage Location

b1-1

Rational method

$$Q = C i A$$

i = rainfall intensity

$$t_0 = \frac{0.14465L}{H^{0.2}A^{0.1}}$$

PH-1087

Proposed 400UC

Cross Fall	L =	0.14465		L =	0.14465	
	H =	124.7		H =	124.7	m
	A =	0.3		A =	0.3	m
		849	Concrete		849	m ²
						t ₀ = 11.69 min

50 Year Rainwater Intensity	intensity	190	m/hr			16%
		0.19	/	3600	*	1.16
	intensity =	6.12222E-05 m/s				

$$Q_p = C \times i \times A$$

C =	0.95	
i =	6.12E-05	m/s
A =	849	m ²

$$Q_p = 0.049379 \text{ m}^3/\text{s}$$

PH-1087

Q(m discharge of open channel) 0.2020272 m³/s



Area	=	0.4 * 0.4	0.16
P	=	0.4 * 2 + 0.4	1.2
R _h	=		0.1333333
n	=		0.016 Concrete
S ₀ = H/L	0.006	1	0.006



PH-1087

$$Q(\text{m}^3/\text{s}) = 0.202027 \text{ m}^3/\text{s}$$

* Steady Uniform flow

* Momentum equation becomes the Manning Equation

PH-1087

$$Q(\text{m}^3/\text{s}) = 0.2020272 \text{ m}^3/\text{s}$$

50 Year Rainwater Intensity 400mm channel

$$\text{Concrete } Q(\text{m}^3/\text{s}) = 0.0493788 \text{ m}^3/\text{s}$$

$$Q(\text{m}^3/\text{s}) = \frac{A}{n} R_h^{2/3} S_0^{1/2}$$

* where R_h=hydraulic radius = A/P,
P=wetted perimeter, S₀=bottom
slope, n=Mannings roughness
coefficient.

PH-1087

Concrete	% =	0.2020272	
	% =	0.0493788	Soil 0.0104545 Conc + Soil = 0.059833
	Q(m ³ /s) =	29.6	% OK

Drainage Impact assessment report of 400 mm channel is Acceptable

b3-1

Rational method

$$Q = C i A$$

i = rainfall intensity

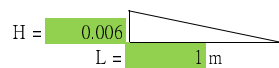
$$t_o = \frac{0.14465L}{H^{0.2} A^{0.1}}$$

PH-1087 Proposed 400UC					
L =	0.14465		L =	0.14465	
H =	124.7		H =	124.7 m	
A =	0.3		A =	0.3 m	
	515	Soil		515 m ²	
			t _o =	12.29 min	
50 Year Rainwater Intensity		intensity	180 mm/hr		16%
			0.18 /	3600	*
		intensity =	0.000058 m/s		
Q _p = C x I x A		C =	0.35		
		i =	0.000058 m/s		
		A =	515 m ²		
		Q _p =	0.010455 m ³ /s		

b3-1

PH-1087

Q(m discharge of open channel) 0.202027 m³/s



Area	=	0.4 * 0.4	0.16
P	=	0.4*2+0.4	1.2
R _h	=		0.133333
n	=		0.016 Concrete
S _o = H/L		0.006	1 0.006



PH-1087

Q(m³/s) = 0.202027 m³/s

* Steady Uniform flow

* Momentum equation becomes the Manning Equation

PH-1087

Q(m³/s) = 0.202027 m³/s

50 Year Rainwater Intensity 400mm channel

Concrete Q(m³/s) = 0.010455 m³/s

$$Q(m^3/s) = \frac{A}{n} R_h^{2/3} S_o^{1/2}$$

- where R_h=hydraulic radius = A/P, P=wetted perimeter, S_o=bottom slope, n=Mannings roughness coefficient.

PH-1087

% = 0.202027

% = 0.010455

Q(m³/s) = 5.2 % OK

Drainage Impact assessment report of 400 mm channel is small

b3-1

PH-1087

Q(m discharge of open channel) 0.2020272 m³/s

$$H = 0.006$$

$$L = 1 \text{ m}$$

Area	=	0.4 * 0.4	0.16
P	=	0.4 * 2 + 0.4	1.2
R _h	=		0.1333333
n	=		0.016 Concrete
S ₀ = H/L		0.006	1 0.006



PH-1087

Q(m³/s) = 0.202027 m³/s

* Steady Uniform flow

* Momentum equation becomes the Manning Equation

PH-1087

Q(m³/s) = 0.2020272 m³/s

50 Year Rainwater Intensity 400mm channel

Concrete Q(m³/s) = 0.0493788 m³/s

$$Q(\text{m}^3/\text{s}) = \frac{A}{n} R_h^{2/3} S_0^{1/2}$$

* where R_h=hydraulic radius = A/P, P=wetted perimeter, S₀=bottom slope, n=Mannings roughness coefficient.

PH-1087

% = 0.2020272

Concrete

% = 0.0493788

Soil

0.0104545

Conc + Soil = 0.059833

Q(m³/s) = 29.6 % OK

Drainage Impact assessment report of 400 mm channel is Acceptable

b3-1

EX 600 UC

Q(m discharge of open channel) 1.2436147 m³/s



Area	=	0.6 * 0.7	0.42
P	=	0.7 * 2 + 0.6	2
R _h	=		0.21
n	=		0.016 Concrete
S ₀ = H/L		0.018	1 0.018



EX 600 UC

Q(m³/s) = 1.243615 m³/s

* Steady Uniform flow

* Momentum equation becomes the Manning Equation

EX 600 UC

Q(m³/s) = 1.2436147 m³/s

50 Year Rainwater Intensity

Soil Q(m³/s) = 0.010455 m³/s

Concrete Q(m³/s) = 0.0493788 m³/s

PH 1087 to EX (600mm UC)

% = 1.2436147

% = 0.059833

Q(m³/s) = 4.8 % OK

$$Q(\text{m}^3/\text{s}) = \frac{A}{n} R_h^{2/3} S_0^{1/2}$$

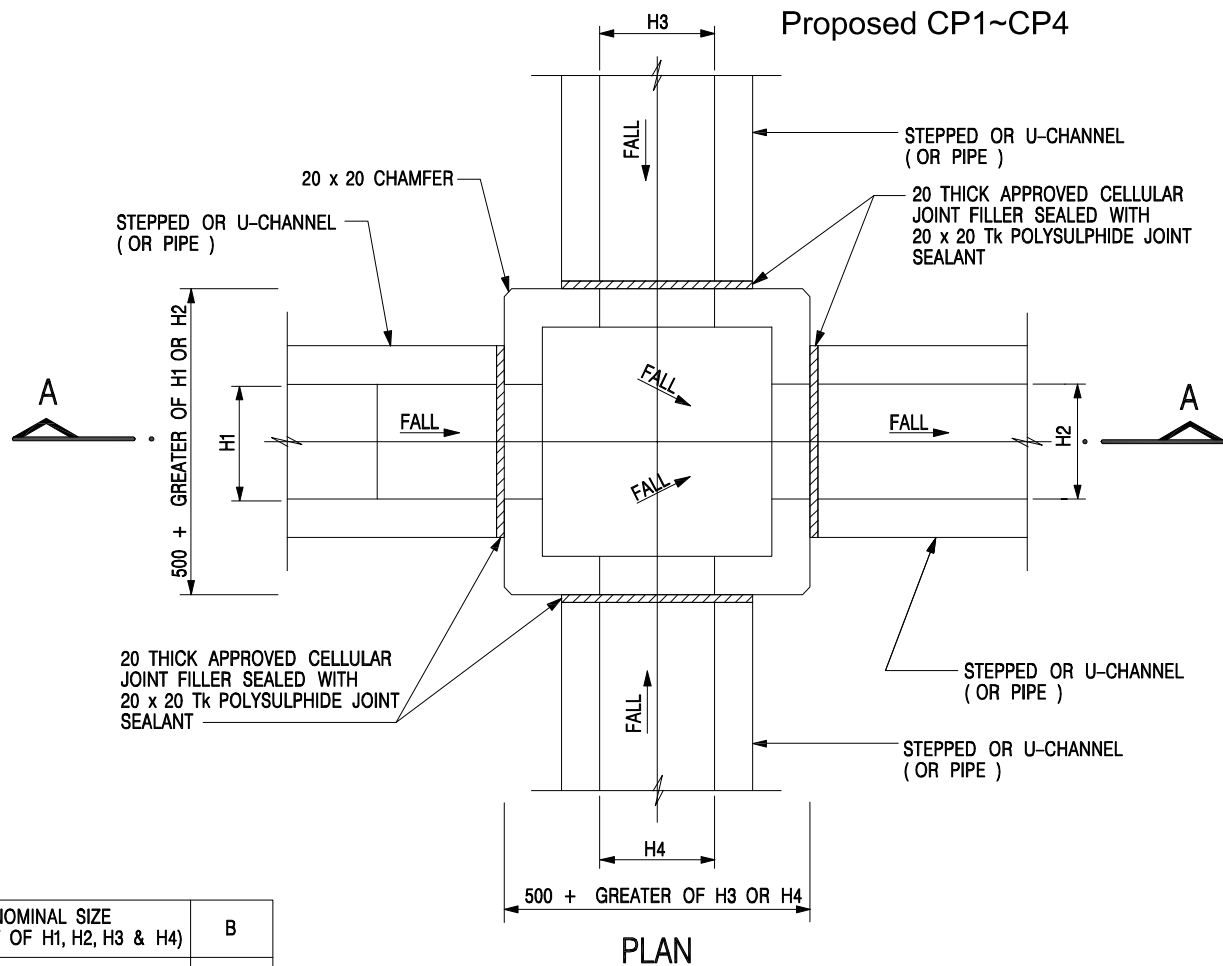
- where R_h=hydraulic radius = A/P, P=wetted perimeter, S₀=bottom slope, n=Mannings roughness coefficient.

Drainage Impact assessment report of 600mm U-channel is Acceptable

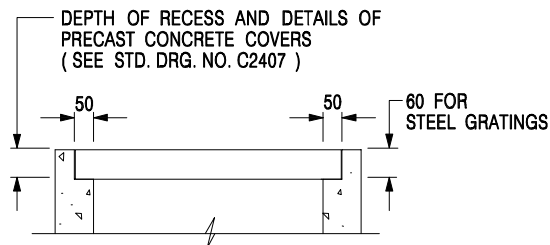
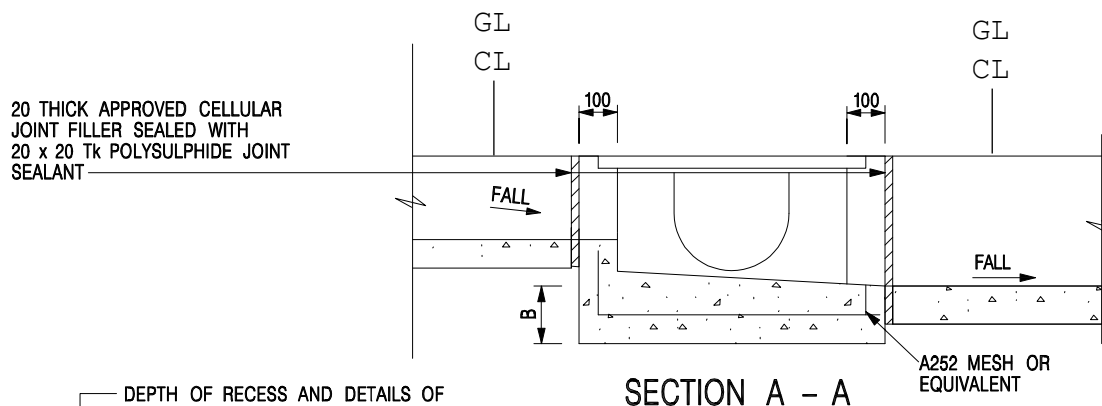
b3-1

1087 MH schedule							
TYPE / DRAWING	MH no	GL	CL	A I.L	X I.L	TO MH / Existing	% Fall
C2406/1	CP1	33.50	33.50	A1 33.08-400UC	X1 33.07-400UC	CP3	1 : 150
C2406/1	CP2	33.50	33.50	A1 33.08-400UC	X1 33.07-400UC	CP4	1 : 150
C2406/1	CP3	33.35	33.35	A1 32.92-400UC	X1 32.91-400UC	CP5	1 : 150
C2406/1	CP4	33.15	33.15	A1 32.74-400UC	X1 32.73-400UC	CP5	1 : 150
C2406/1	CP5 尾井	33.15	33.15	A1 32.65-400UC A2 32.65-400UC	X1 32.64-400UC	CP6	1 : 150
C2406/1	CP6	32.60	3.26	A1 32.2-400UC	X1 32.19-400UC	EX 600UC IL31.90	1 : 150
ic2412e	CP1 - CP2 UC	33.50	33.50		X1 33.10-400UC		1 : 150
ic2412e	CP1 - CP3 UC	33.50-33.35	33.50-33.35		X1 33.07-400UC		1 : 150
ic2412e	CP2 - CP4 UC	33.50 - 33.15	33.50 - 33.15		X1 33.07-400UC		1 : 150
ic2412e	CP3 - CP5	33.35 - 33.15	33.35 - 33.15		X1 32.91-400UC		1 : 150
ic2412e	CP4 -CP5 UC	33.15	33.15		X1 32.74-400UC		1 : 150

b4-1



NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
225 - 600	150
675 - 900	175



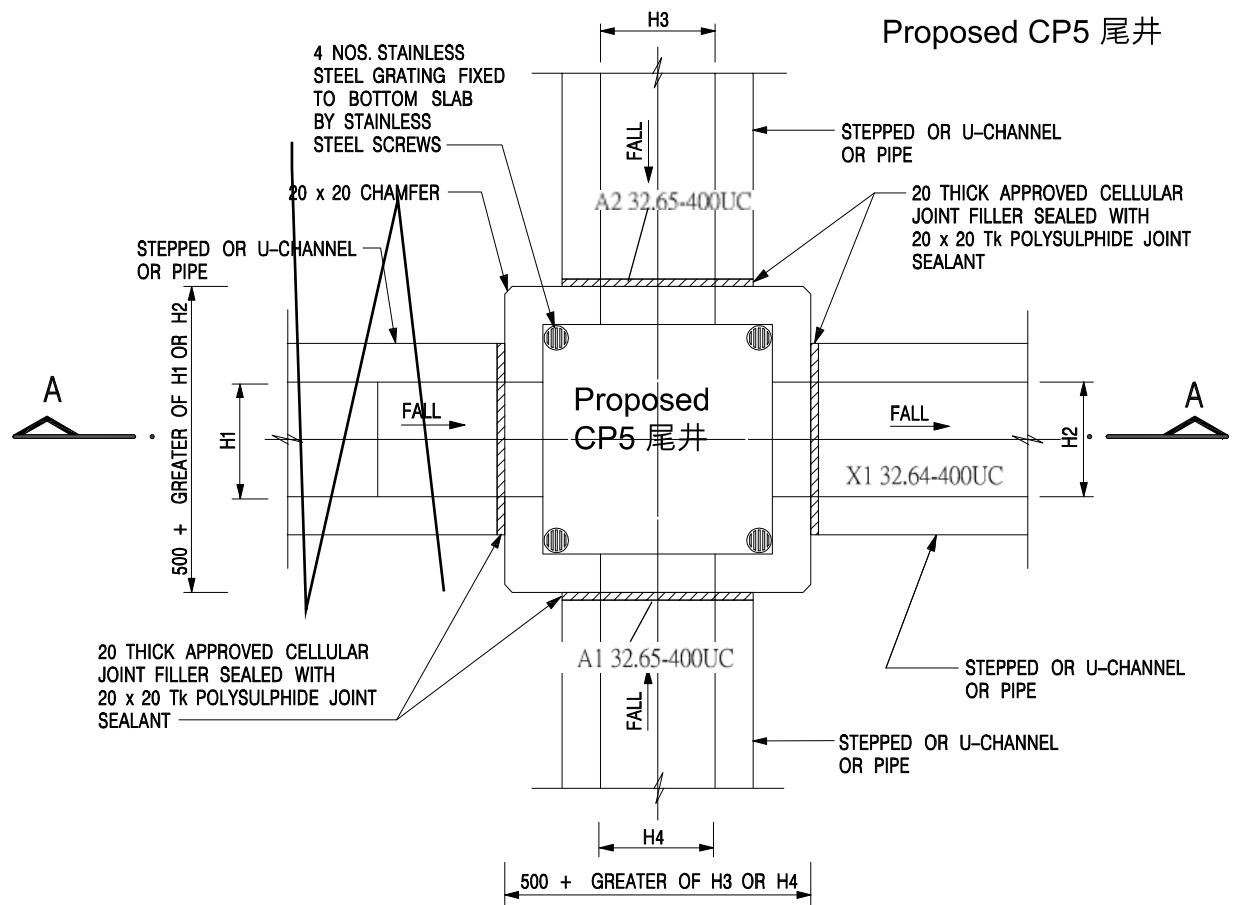
- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETRES.
 2. REFER TO SHEET 5 FOR OTHER NOTES.

**ALTERNATIVE TOP SECTION FOR
PRECAST CONCRETE COVERS / GRATINGS**

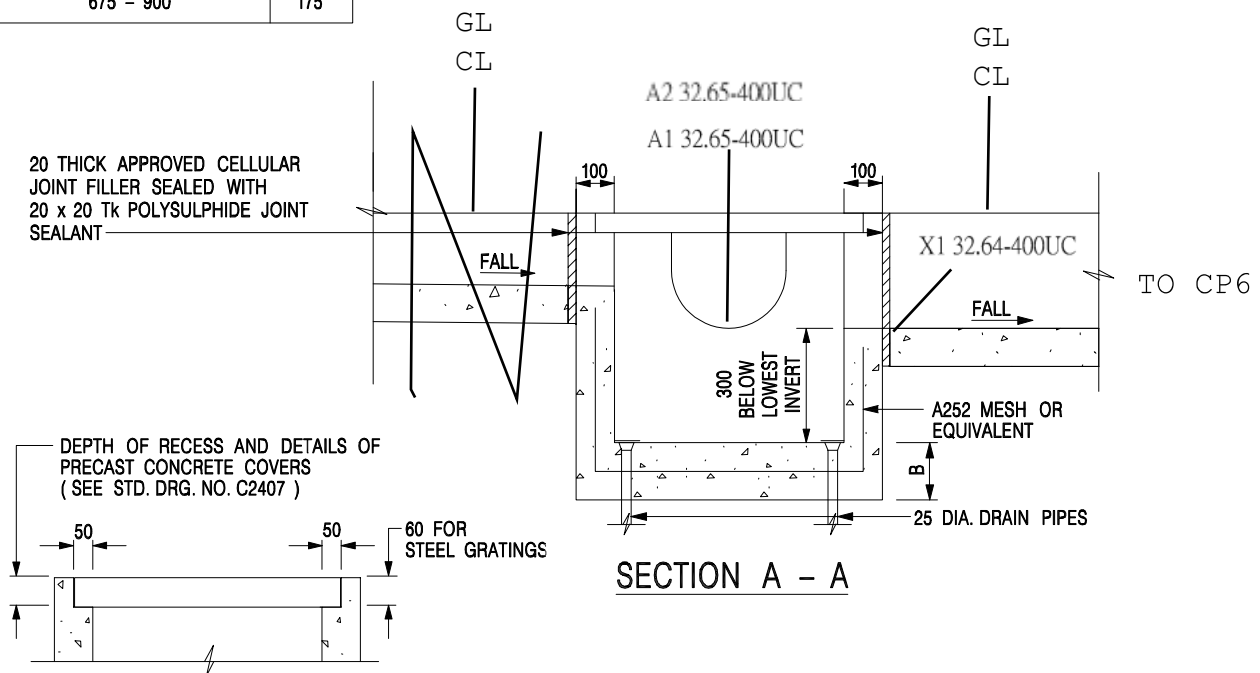
b5-1

-		Original Signed	
REF.	REVISION	SIGNATURE	
SCALE 1 : 20		DRAWING NO. C2405 /1	

**STANDARD CATCHPIT DETAILS
(SHEET 1)**



NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
225 - 600	150
675 - 900	175



NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES.
- REFER TO SHEET 2 FOR OTHER NOTES.

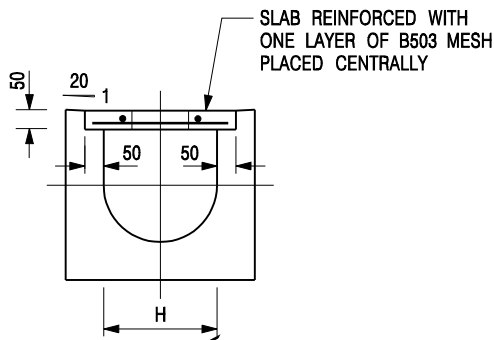
b6-1

REF.	REVISION	Original Signed	DATE
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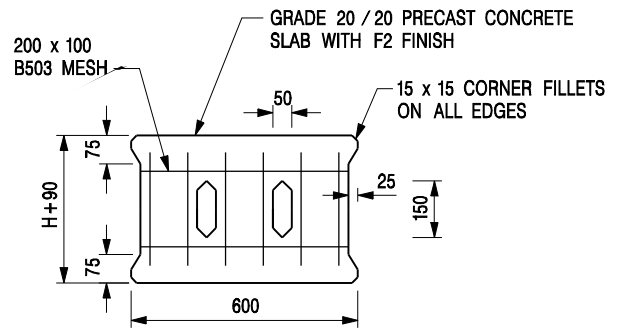
CATCHPIT WITH TRAP
(SHEET 1)

SCALE 1 : 20
DATE

DRAWING NO.
C2406 /1



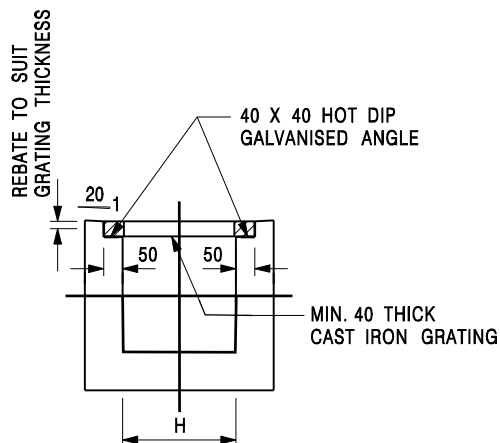
TYPICAL SECTION



PLAN OF SLAB

U-CHANNELS WITH PRECAST CONCRETE SLABS

(UP TO H OF 525)

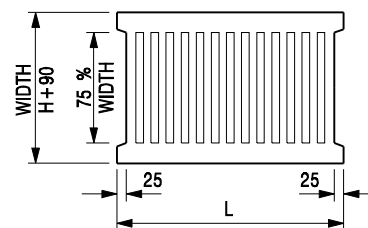


TYPICAL SECTION

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

U-CHANNEL WITH CAST IRON GRATING

(UP TO H OF 525)



L = 600mm FOR H ≤ 375mm
L = 400mm FOR H > 375mm

CAST IRON GRATING

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES.
- H=NOMINAL CHANNEL SIZE.
- ALL CAST IRON FOR GRATINGS SHALL BE GRADE EN-GJL-150 COMPLYING WITH BS EN 1561.
- FOR COVERED CHANNELS TO BE HANDED OVER TO HIGHWAYS DEPARTMENT FOR MAINTENANCE, THE GRATING DETAILS SHALL FOLLOW THOSE AS SHOWN ON HyD STD. DRG. NO. H3156.

b7-1

E	NOTES 3 & 4 AMENDED.	Original Signed	12.2014
D	NOTE 4 ADDED.	Original Signed	06.2008
C	MINOR AMENDMENT. NOTE 3 ADDED.	Original Signed	12.2005
B	NAME OF DEPARTMENT AMENDED.	Original Signed	01.2005
A	CAST IRON GRATING AMENDED.	Original Signed	12.2002
REF.	REVISION	SIGNATURE	DATE

**COVER SLAB AND CAST IRON
GRATING FOR CHANNELS**



**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

DATE JAN 1991

DRAWING NO.

C2412E

→ =Proposed 400UC & Fall → =EX 4000 Nullah & Fall
→ =EX 1000UC & Fall → =EX 600UC / 600UCC & Fall

1

Site

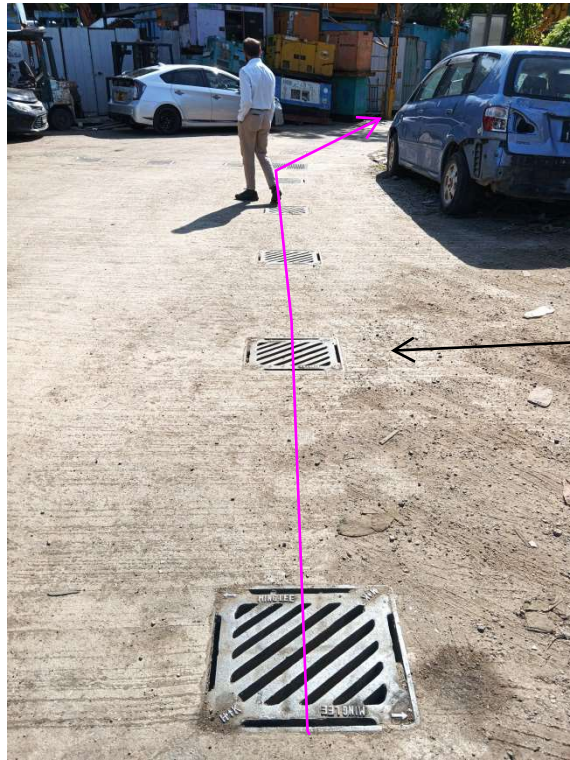


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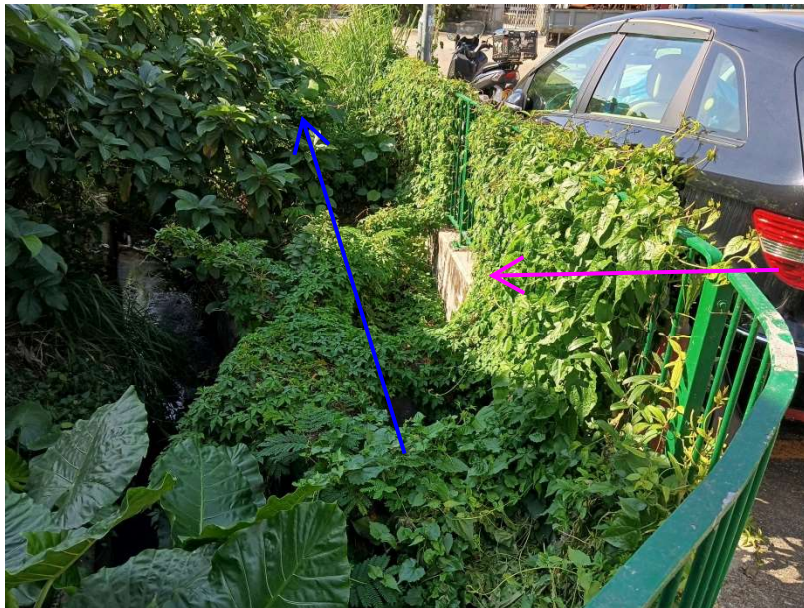
Site



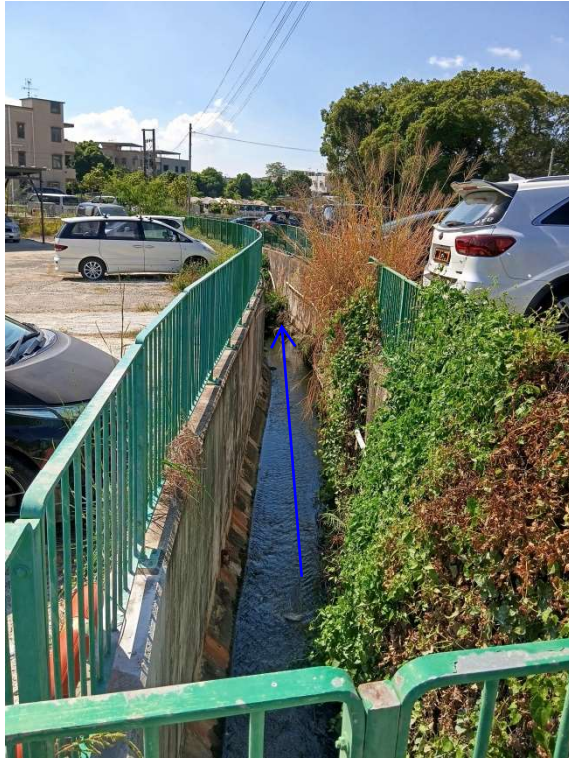
3



4



5



6





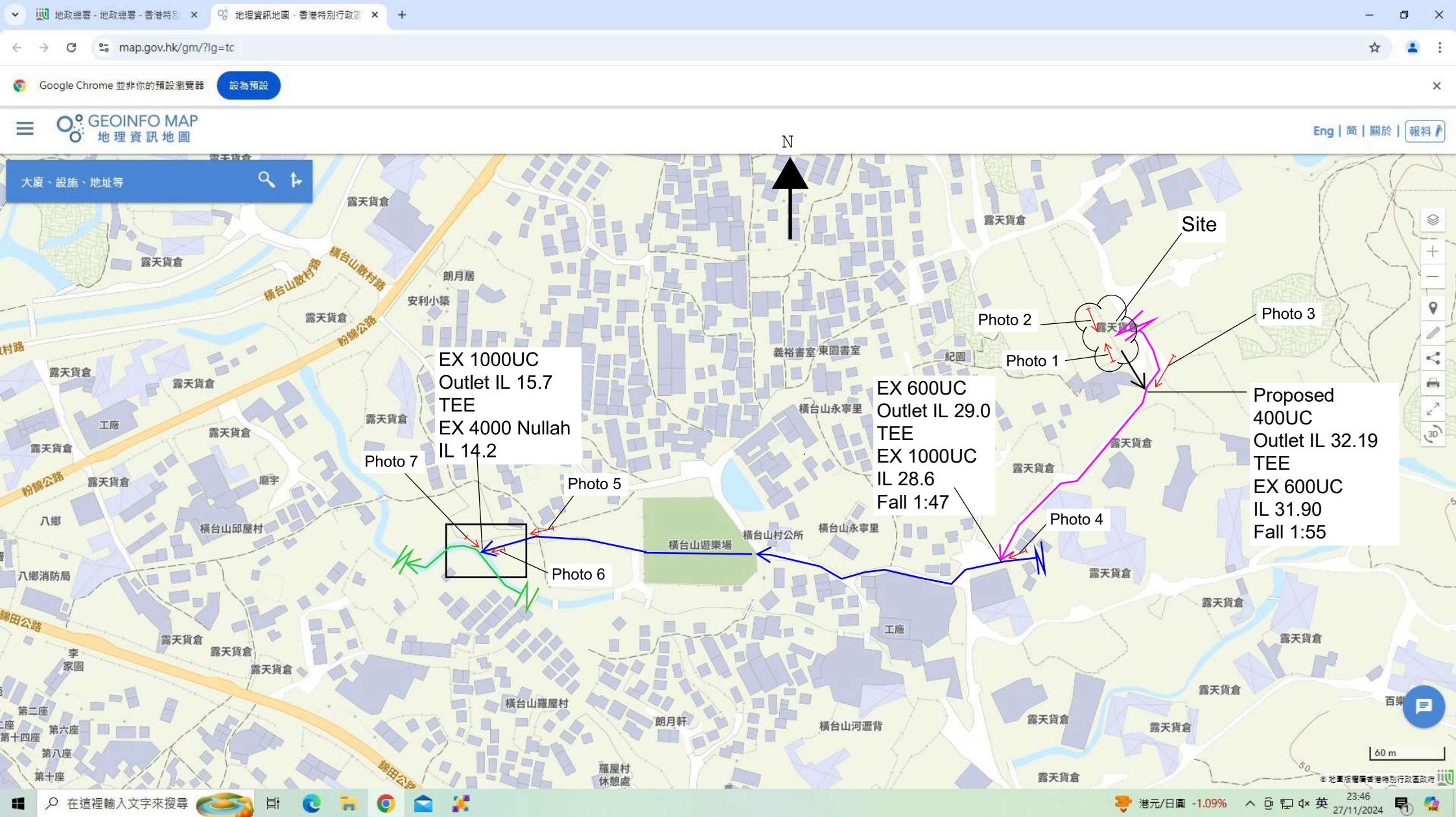
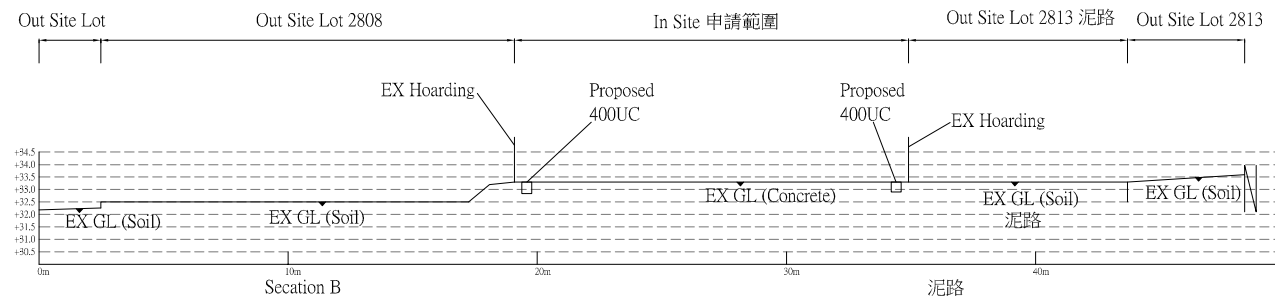
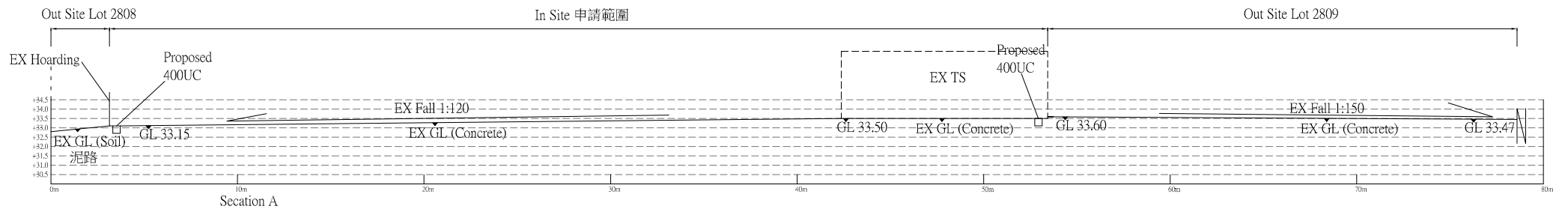


Photo Location Plan

c2-1



d1-1 Secation

Scale : 1:300 A4