

申請編號：A/YL-SK/435

申請地點：新界元朗八鄉蓮花地丈量約份第 112 約地段編號第 377(部份)、378(部份)、380(部份)、387(部份)、388(部份)

聯絡電話：████████

通訊地址：████████████████████

**補充資料**

回應地政總署：

本人將在規劃申請獲批後，為相關地段上的構築物申請短期豁免書。

回應渠務署：

本人已聘請渠務顧問為申請地點作出排水設施建議報告。

申請人 夏佩娟  
2025 年 11 月 14 日

致：城規會

城規會編號：TPB/A/YL-SK/435

**提議雨水渠務報告 (Proposed)**

1. 提議雨水渠道（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 作此次渠務顧問。

**申請人聯絡方式**

電話：[REDACTED]

Email：[REDACTED]

地址：[REDACTED]  
[REDACTED]

**渠務顧問聯絡方式**

電話：[REDACTED]

Email：[REDACTED]

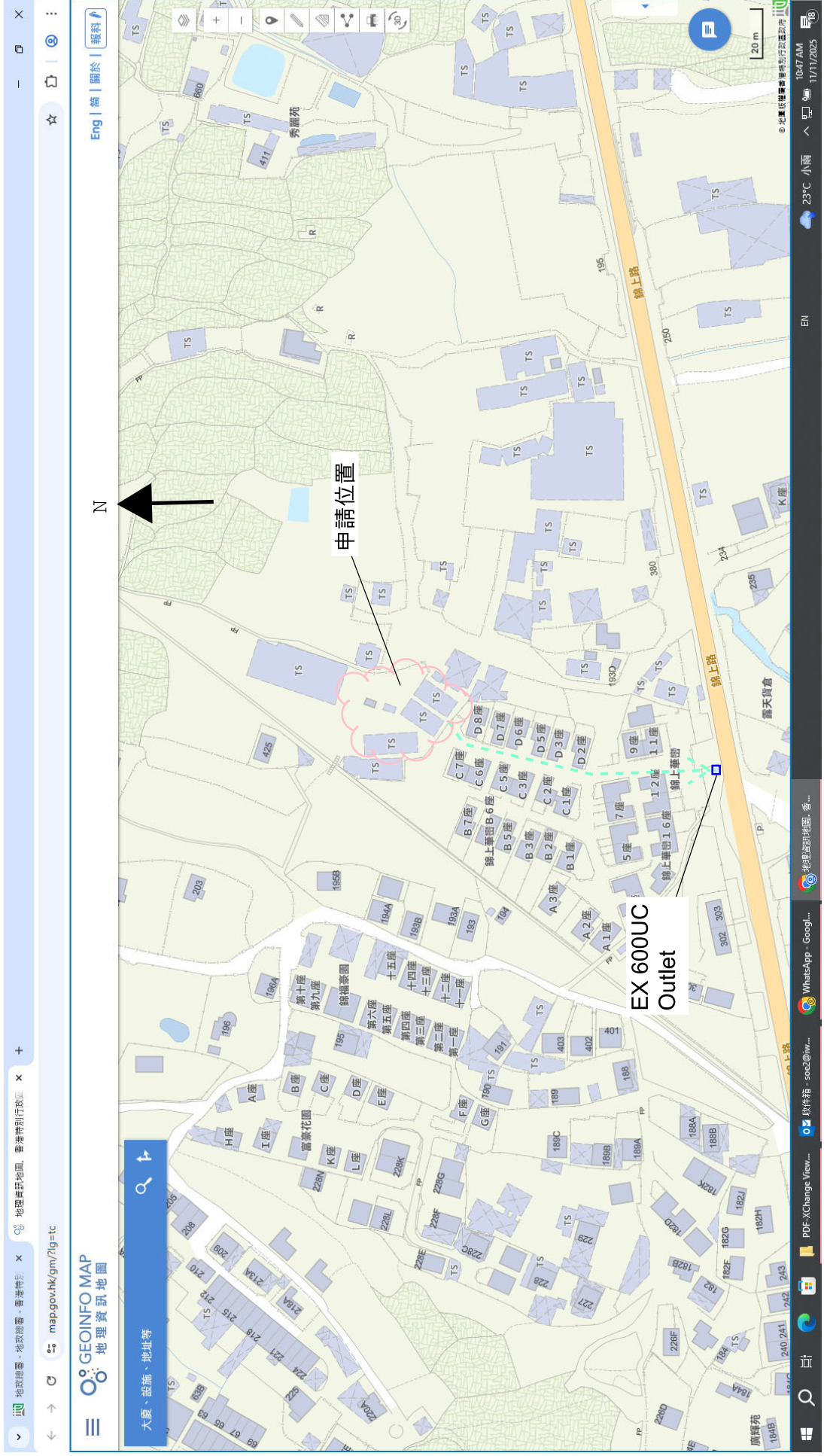
地址：[REDACTED]


2025 年 11 月 12 日

## 提議渠務報告(Proposed)

### 簡介

b1	EX Drainage Location
b2	Site Location, Catchmant, Proposed Drainage
b3	MH Schedule
b4	雨水計算
b5~b7	Proposed UC, Proposed MH
c1~c2	現場相片和拍照位置
d1	Section Plan

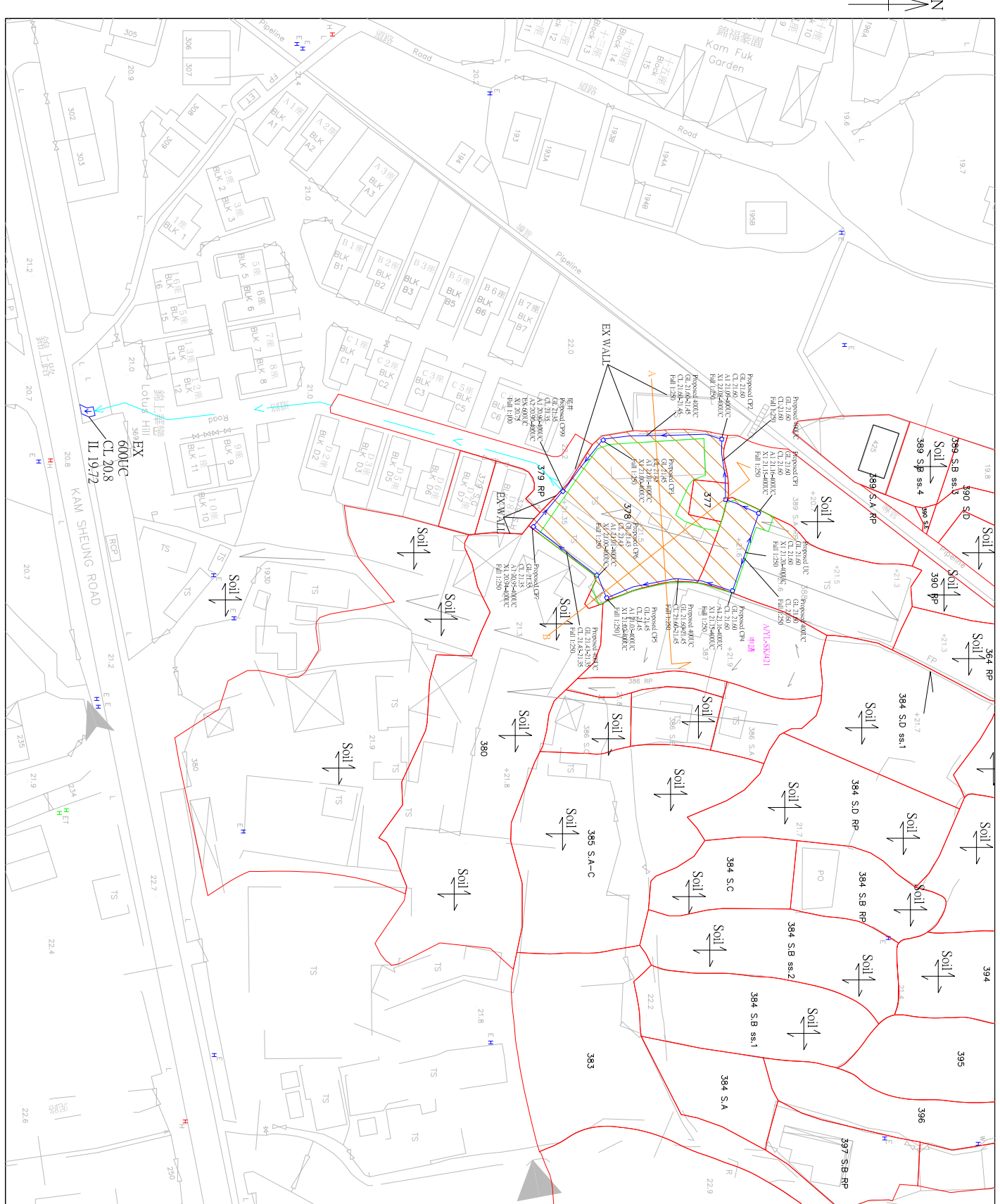


 = EX 600UC & Fall 1:100

Location & EX Drainage (雨水) Plan

b1





LEGEND:

EX 600UC:

Lot Boundary:

Cross Fall:

Fall:

Fall:

Section Line:

Site Boundary 申請範圍  
EX Ground Level+21.60 ~ +21.35:

Catchment Area 1368 sqm:

Proposed 400UC:

Proposed CP99 尾井:

Proposed CP1-CP7:

Proposed drainage plan

LOCATION:

AYL-SK/435

Scale: N.T.S.

Date: 2025-11-11

Drawing number: b2

Drawing: A4

A/YL-SK/435 MH schedule							
TYPE / DRAWING	MH no	GL	CL	A I.L	X I.L	TO MH / Existing	% Fall
C2405/1	CP1	21.60	21.60	A1 21.16-400UC	X1 21.15-400UC	CP2	1 : 250
C2405/1	CP2	21.60	21.60	A1 21.09-400UC	X1 21.08-400UC	CP3	1 : 250
C2405/1	CP3	21.45	21.45	A1 21.01-400UC	X1 21.00-400UC	CP99 尾井	1 : 250
C2405/1	CP4	21.60	21.60	A1 21.16-400UC	X1 21.15-400UC	CP5	1 : 250
C2405/1	CP5	21.45	21.45	A1 21.03-400UC	X1 21.02-400UC	CP6	1 : 250
C2405/1	CP6	21.43	21.43	A1 20.01-400UC	X1 20.00-400UC	CP7	1 : 250
C2405/1	CP7	21.35	21.35	A1 20.95-400UC	X1 20.94-400UC	CP99 尾井	1 : 250
C2406/1	CP99 尾井	21.35	21.35	A1 20.90-400UC A2 20.90-400UC	X1 20.75-EX 600UC	EX 600UC	1 : 100
ic2412e	CP1-CP2	21.90	21.90			--	1 : 250
ic2412e	CP1-CP2	21.60	21.60			--	1 : 250
ic2412e	CP2-CP3	21.60-21.45	21.60-21.45			--	1 : 250
ic2412e	CP3-CP99	21.45-21.35	21.45-21.35			--	1 : 250
ic2412e	CP4-CP5	21.60-21.45	21.60-21.45			--	1 : 250
ic2412e	CP5-CP6	21.45-21.43	21.45-21.43			--	1 : 250
ic2412e	CP6-CP7	21.43-21.35	21.43-21.35			--	1 : 250
ic2412e	CP7-CP99	21.35	21.35			--	1 : 250

**Rational method**

$Q = C i A$

$i$  = rainfall intensity

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

SK/435  
Proposed 400UC

Cross Fall	L =	0.14465	Concrete	L =	0.14465
	H =	143.2		H =	143.2 m
	A =	0.3		A =	0.3 m
		1368		A =	1368 m <sup>2</sup>
				$t_0 =$	12.80 min

50 Year Rainwater Intensity	intensity	185 m/hr			16%
		0.185	/	3600	* 1.16
	intensity =	5.96111E-05 m/s			

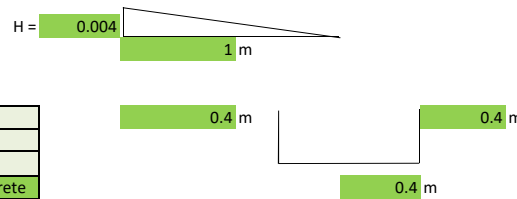
$Q_p = C \times i \times A$

C =	0.9
i =	5.96E-05 m/s
A =	1368 m <sup>2</sup>

$Q_p = 0.073393 \text{ m}^3/\text{s}$

**SK/435**

Q(m discharge of open channel) **0.164954 m<sup>3</sup>/s**



Area	=	0.4 * 0.4	0.16
P	=	0.4 * 2 + 0.4	1.2
R <sub>h</sub>	=		0.133333
n	=		0.016 Concrete
S <sub>0</sub> = H/L	0.004	1	0.004

SK/435  
**Q(m<sup>3</sup>/s) = 0.164954 m<sup>3</sup>/s**

\* **Steady Uniform flow**  
\* Momentum equation becomes the **Manning Equation**

SK/435  
**Q(m<sup>3</sup>/s) = 0.164954 m<sup>3</sup>/s**

50 Year Rainwater Intensity  
**Concrete Q(m<sup>3</sup>/s) = 0.073393 m<sup>3</sup>/s**

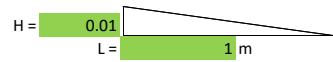
$$Q(\text{m}^3/\text{s}) = \frac{A}{n} R_h^{2/3} S_0^{1/2}$$

\* where R<sub>h</sub>=hydraulic radius = A/P, P=wetted perimeter, S<sub>0</sub>=bottom slope, n=Mannings roughness coefficient.

SK/435  
% = **0.164954**  
% = **0.073393**  
Q(m<sup>3</sup>/s) = **44.5** % OK

**EX 600UCC**

Q(m discharge of open channel) **0.769076 m<sup>3</sup>/s**



Area	=	0.6 * 0.6	0.36
P	=	0.6*2+0.6	1.8
R <sub>h</sub>	=		0.200
n	=		0.016 Concrete
S <sub>0</sub> = H/L		0.01	1 0.01



**EX 600UCC**

Q(m<sup>3</sup>/s) = **0.769076 m<sup>3</sup>/s**

\* **Steady Uniform flow**  
\* **Momentum equation becomes the Manning Equation**

**EX 600UCC**

Q(m<sup>3</sup>/s) = **0.769076 m<sup>3</sup>/s**

50 Year Rainwater Intensity

Q(m<sup>3</sup>/s) = **0.073393 m<sup>3</sup>/s**

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

- where R<sub>h</sub>=hydraulic radius = A/P, P=wetted perimeter, S<sub>0</sub>=bottom slope, n=Mannings roughness coefficient.

SK/435 to (Existing 600mm UCC)

% = **0.769076**

% = **0.073393**

Q(m<sup>3</sup>/s) = **9.5 % OK**

Drainage Impact assessment report of 600 mm channel is Acceptable

Concrete

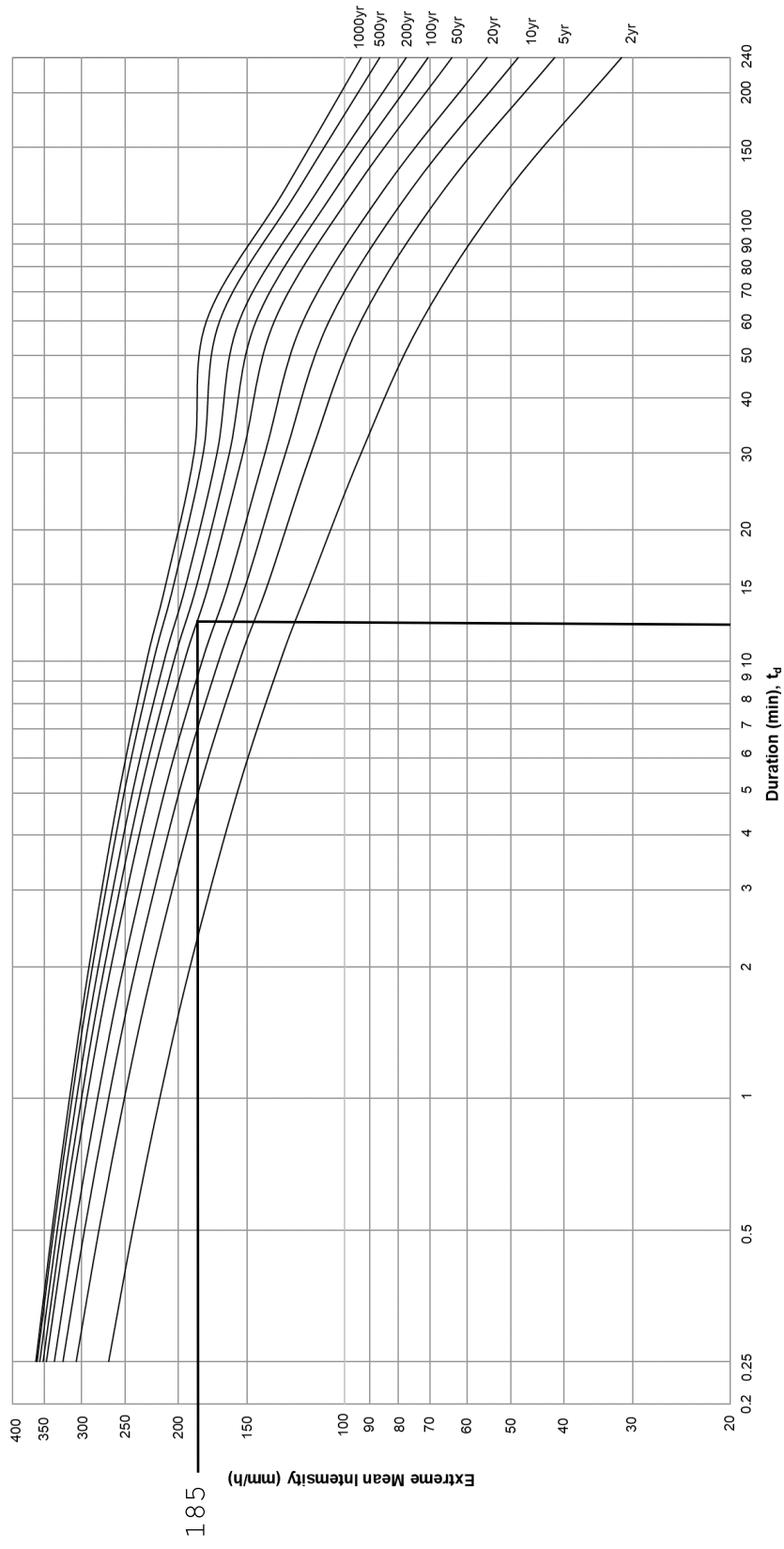
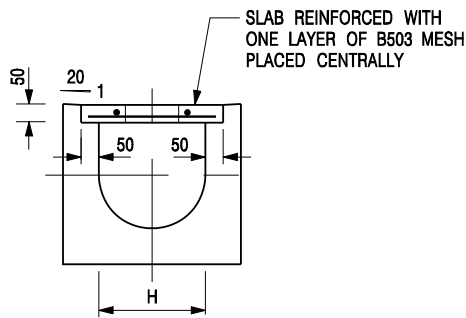


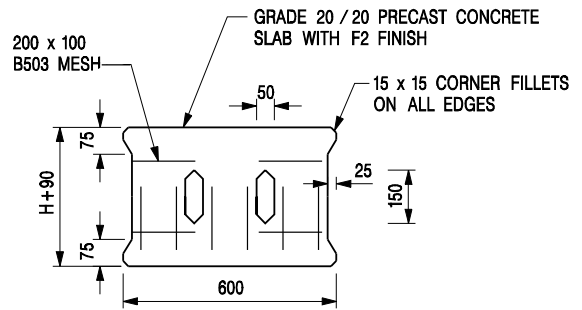
Figure 4a – Intensity-Duration-Frequency Curves of HKO Headquarters  
(for durations not exceeding 4 hours)

b4

Proposed 400UC



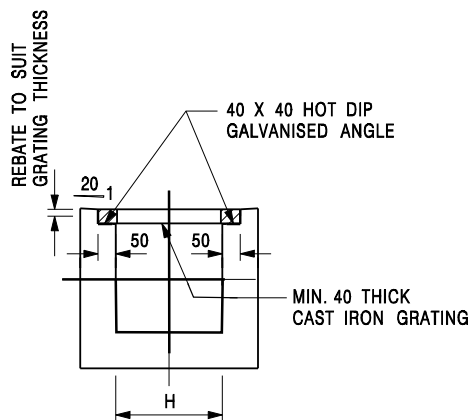
TYPICAL SECTION



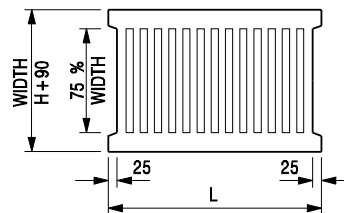
PLAN OF SLAB

U-CHANNELS WITH PRECAST CONCRETE SLABS

(UP TO H OF 525)



TYPICAL SECTION



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

CAST IRON GRATING

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

U-CHANNEL WITH CAST IRON GRATING

(UP TO H OF 525)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. H=NOMINAL CHANNEL SIZE.
3. ALL CAST IRON FOR GRATINGS SHALL BE GRADE EN-GJL-150 COMPLYING WITH BS EN 1561.
4. 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.

b5

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**

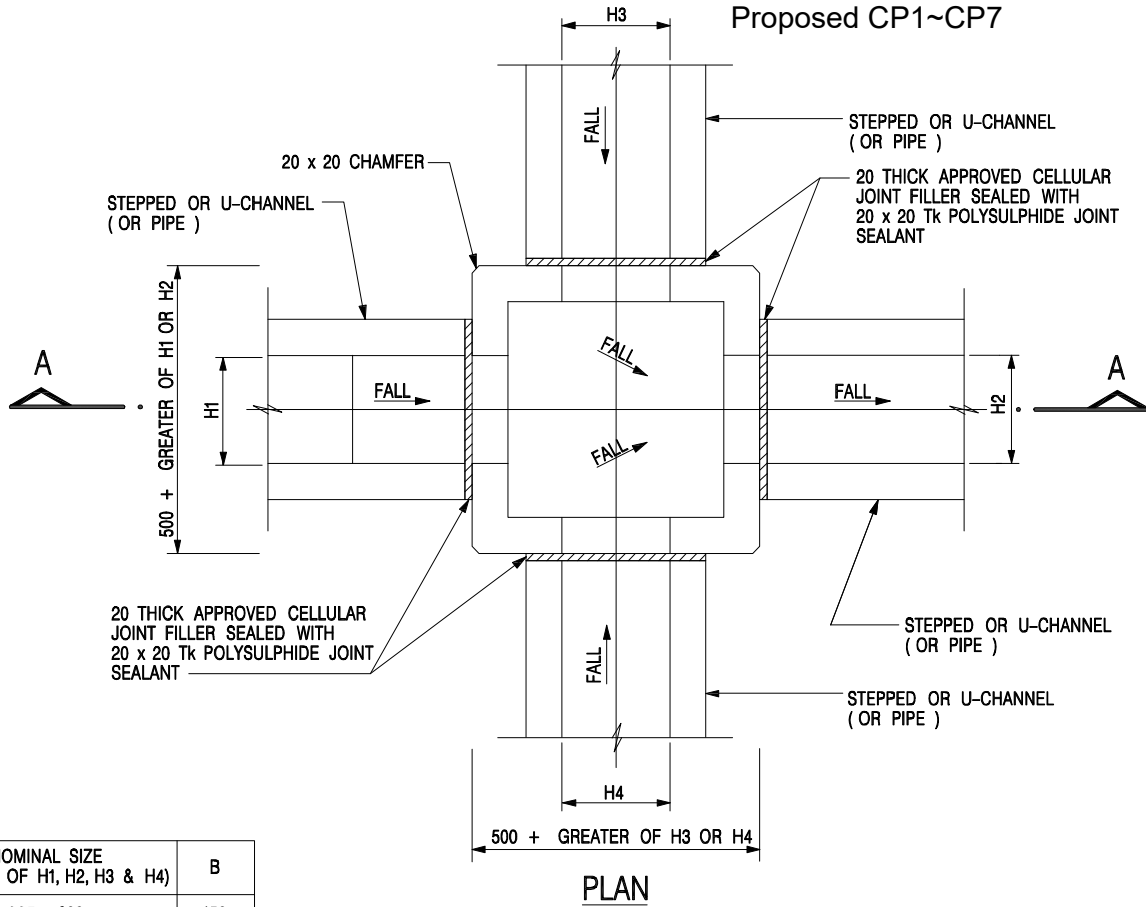
SCALE 1 : 20

DRAWING NO.

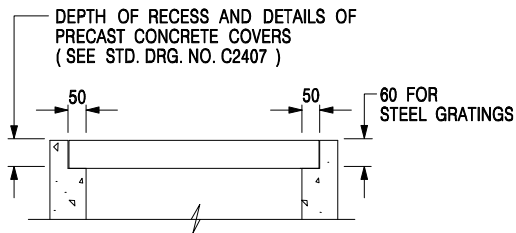
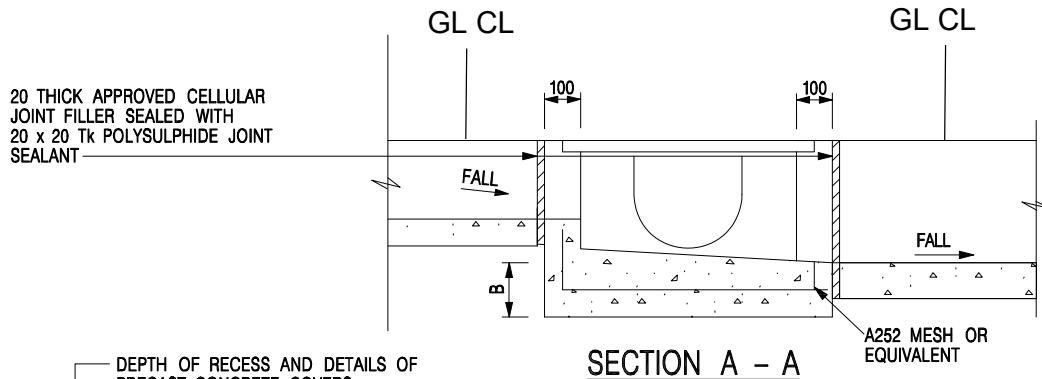
DATE JAN 1991

C2412E

Proposed CP1~CP7



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

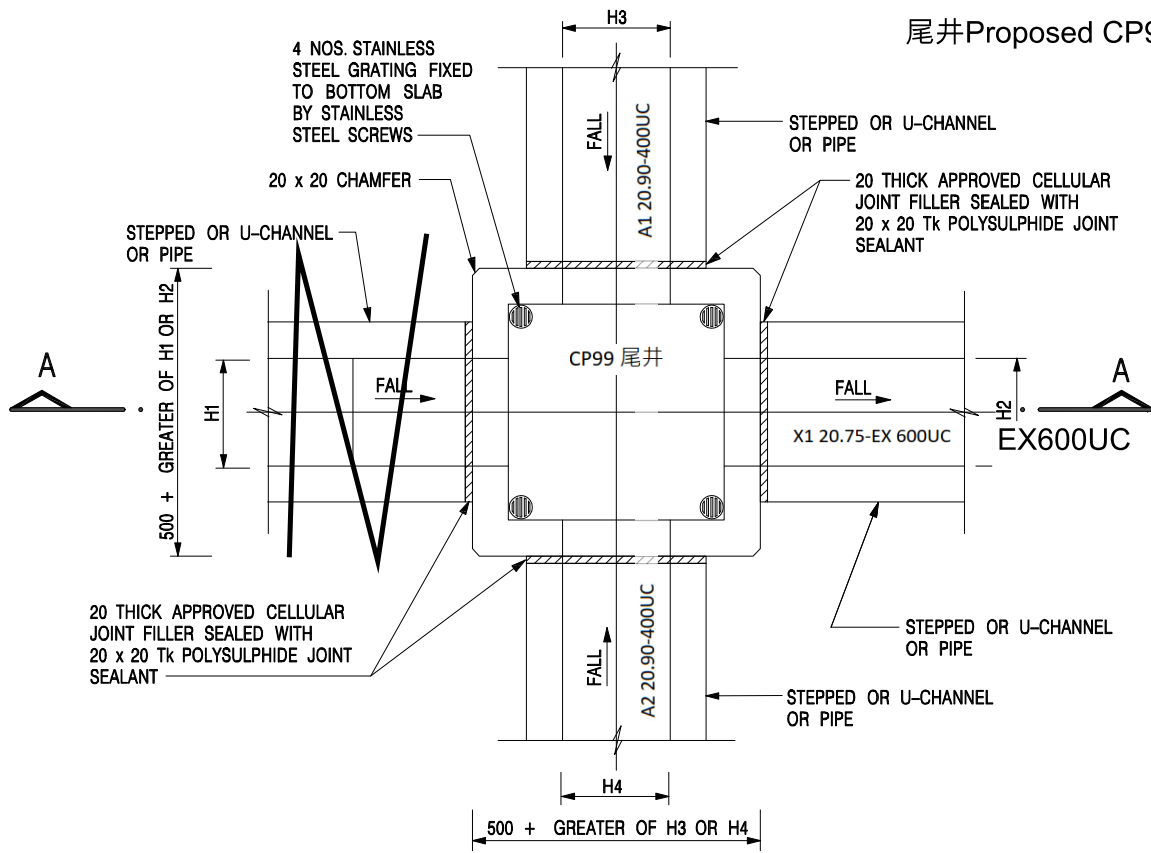
b6

REF.	REVISION	Original Signed	SIGNATURE

STANDARD CATCHPIT DETAILS  
(SHEET 1)

SCALE 1 : 20

DRAWING NO.  
C2405 /1

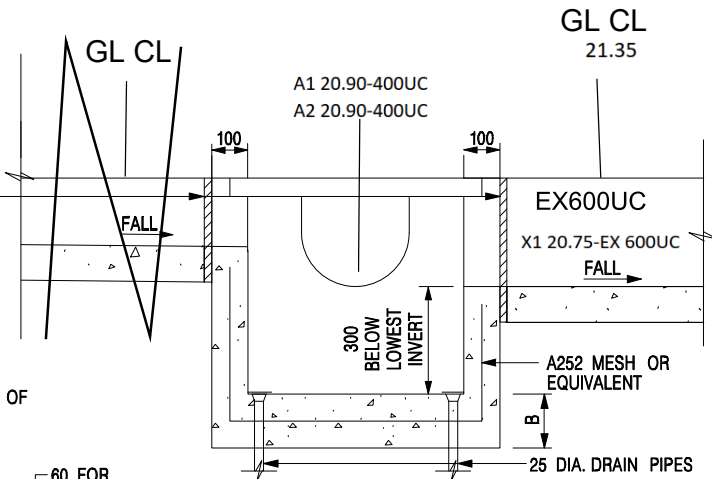
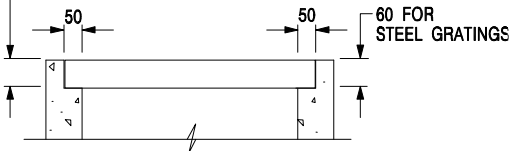


PLAN

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

20 THICK APPROVED CELLULAR JOINT FILLER SEALED WITH 20 x 20 Tk POLYSULPHIDE JOINT SEALANT

DEPTH OF RECESS AND DETAILS OF PRECAST CONCRETE COVERS (SEE STD. DRG. NO. C2407)



SECTION A - A

NOTES:

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

b8

REF.	REVISION	Original Signed	DATE
-			

CATCHPIT WITH TRAP  
(SHEET 1)

SCALE 1 : 20  
DATE

DRAWING NO.  
C2406 /1

1

申請位置



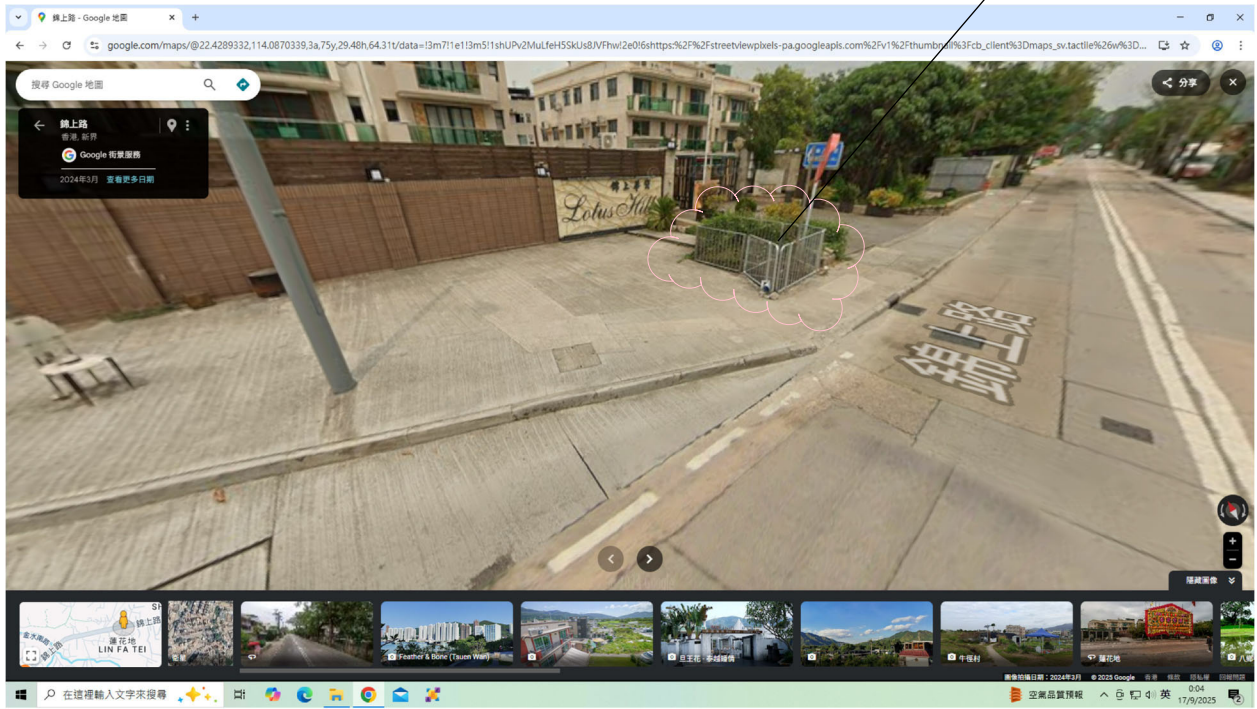
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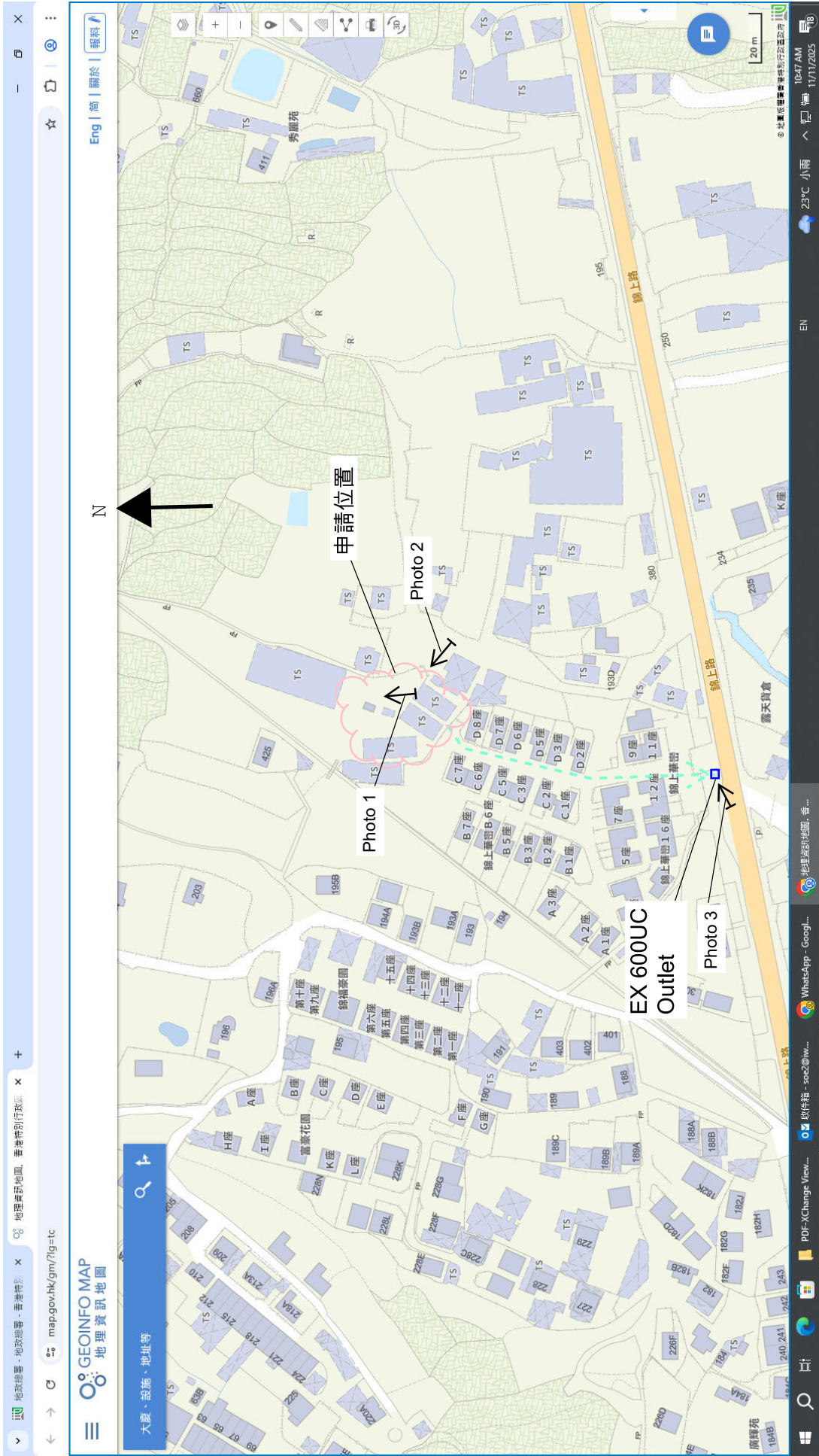
申請位置



EX 600UC

3





--- = EX 600UC & Fall 1:100

Photo Location Plan

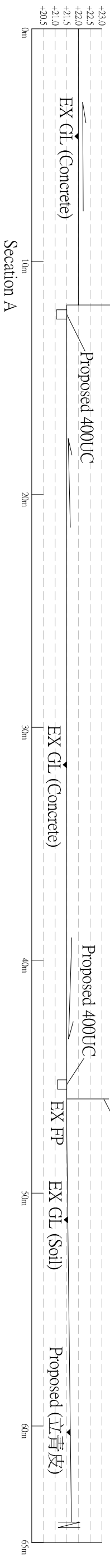
c2

(OUT Site)

(申請範圍)

EX FP

A/YL-SK/421 申請  
已有渠務(Proposed)

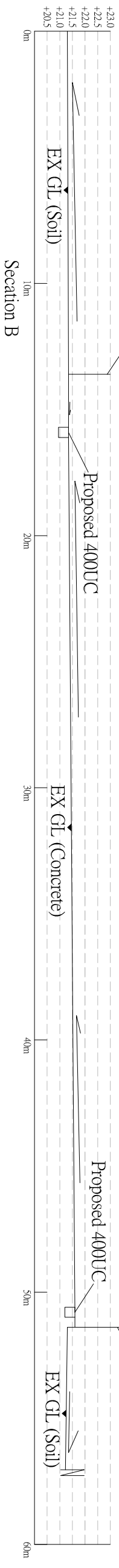


Secation A

(OUT Site)

(申請範圍)

(OUT Site)



Secation B

d1 Secation

Scale : 1:250 A4