寄件者: [redacted]
寄件日期: 2025年09月15日星期一 15:26
收件者: tpbpd/PLAND
副本: [redacted]
主旨: Fw: S. 16 Planning Application No. A/YL-KTN/1157 - Departmental Comments
附件: A-YL-KTN-1157 15-9-2025.pdf

[redacted]

Thank you for the phone call. Please see the attachment for the further information on AFCD and DSD. Please contact Mr. Tang via email [redacted] if you have any question regarding to the captioned application.

Yours sincerely,
Mr. Tang

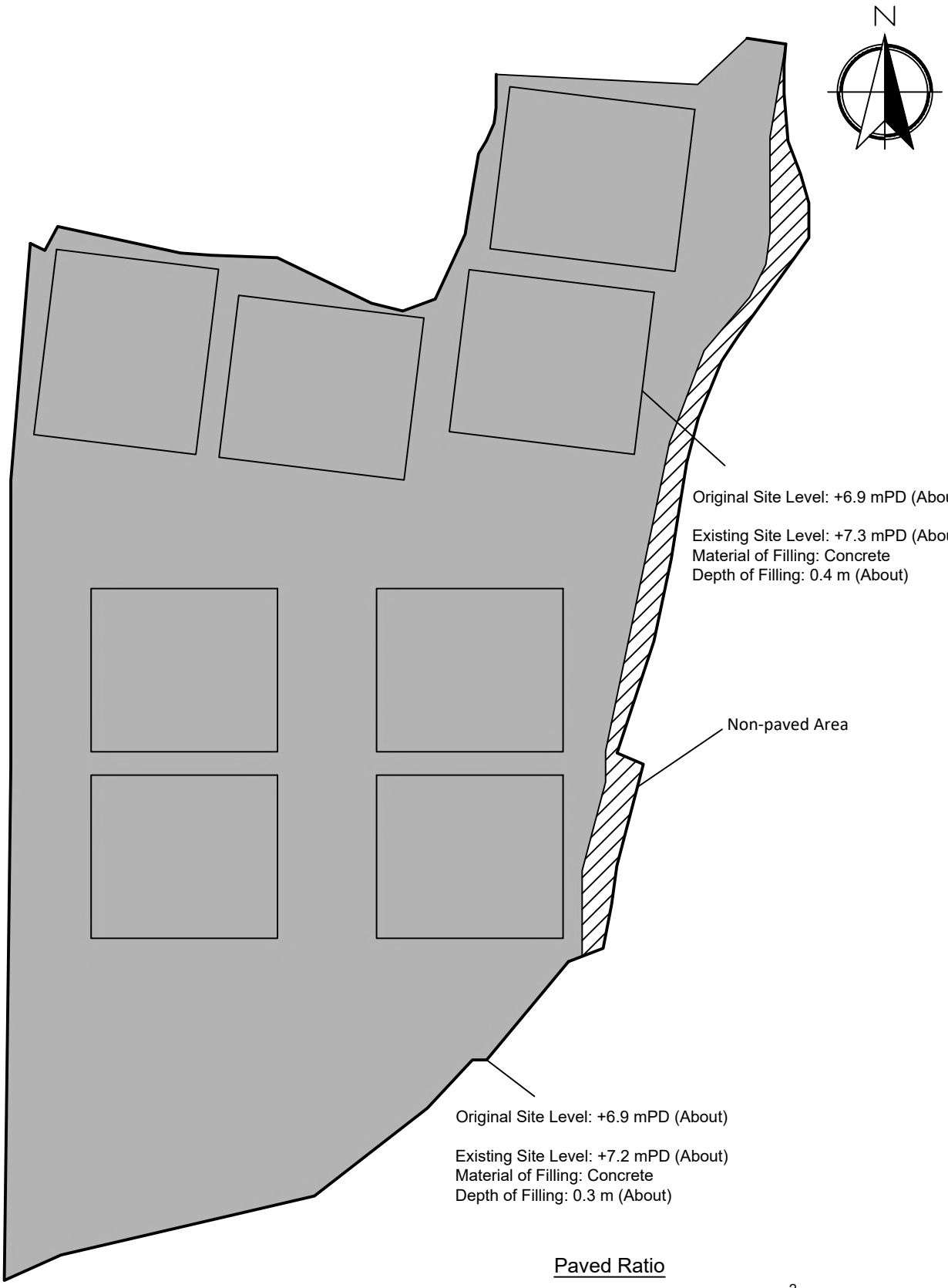
漁農自然護理署及城市規劃委員會:

有關漁農自然護理署對 A/YL-KTN/1157 的查詢

收悉　貴署對 A/YL-KTN/1157 申請的意見，現以書面回覆。

保護水道是在本規劃申請的重點。申請範圍雖然包括該渠道，但相關位置不會進行任何填土及平整的工程，亦會沿用該渠道進行去水及引水的用途，不會影響其運作。申請範圍已完成所有平整及填土工程，在本規劃申請期內不會進行相關工程，並保留現況。申請人亦會定期進行清理及保養，確保渠道暢通。申請人亦已提供渠道建議書，請參考文件尾端。以下為渠道的相片:

希望此附加文件能釋除　貴署的查詢，並支持本申請。



Legend:

Paved Area 平整範圍

Non-Paved Area 不平整範圍

Paved Ratio

Non-Paved Area: 157.9 m^2 (About 3.3%)

Paved Area: 4,577.1 m^2 (About 96.7%)

Appendix 4

Location: DD 109 Lot 1354 (Part)
DD 109 Lot 1356 (Part)
DD 109 Lot 1373 (Part)
DD 109 Lot 1374 (Part)
DD 109 Lot 1375 (Part)
OZP: S/YL-KTN/11
District: Kam Tin North
Zoning: Agriculture
Date: 13 August 2025

Paved Area
平整位置圖

擬議臨時貨倉（危險品倉庫除外）連附屬設施和相關填土工程（為期3年）

Proposed Temporary Warehouse (excluding Dangerous Goods Godown) with Ancillary Facilities and Associated Filling of Land for a Period of 3 Years

SCALE

1:500

@A4

For Identification Only

Drawing No.: 4-01

A/YL-KTN/1157 Drainage proposal comment

2. (A)

(i) Noted.

(ii) There is no existing watercourse that area. The only existing drainage is at the east side of the application site.

(iii) External catchment area from the north of the site has been considered. The runoff from east and southeast of the site would not pass through the site because there is an existing 1.65m(W)x1.2m(D) open channel in between.

(iv) Cross sections are provided.

(B)

(i) It is indicated.

(ii) Peripheral channel has been provided. The minor filling works that aims at leveling the site would not obstruct any overland flow.

(iii) Hydraulic calculation checking the proposed 600UC and 600pipe is provided.

(iv) Hydraulic calculation checking the existing 1.65m(W)x1.2m(D) open channel is provided.

(v) The design flow velocity is presented in the calculation and all are within the range 0.75 m/s to 3.0 m/s.

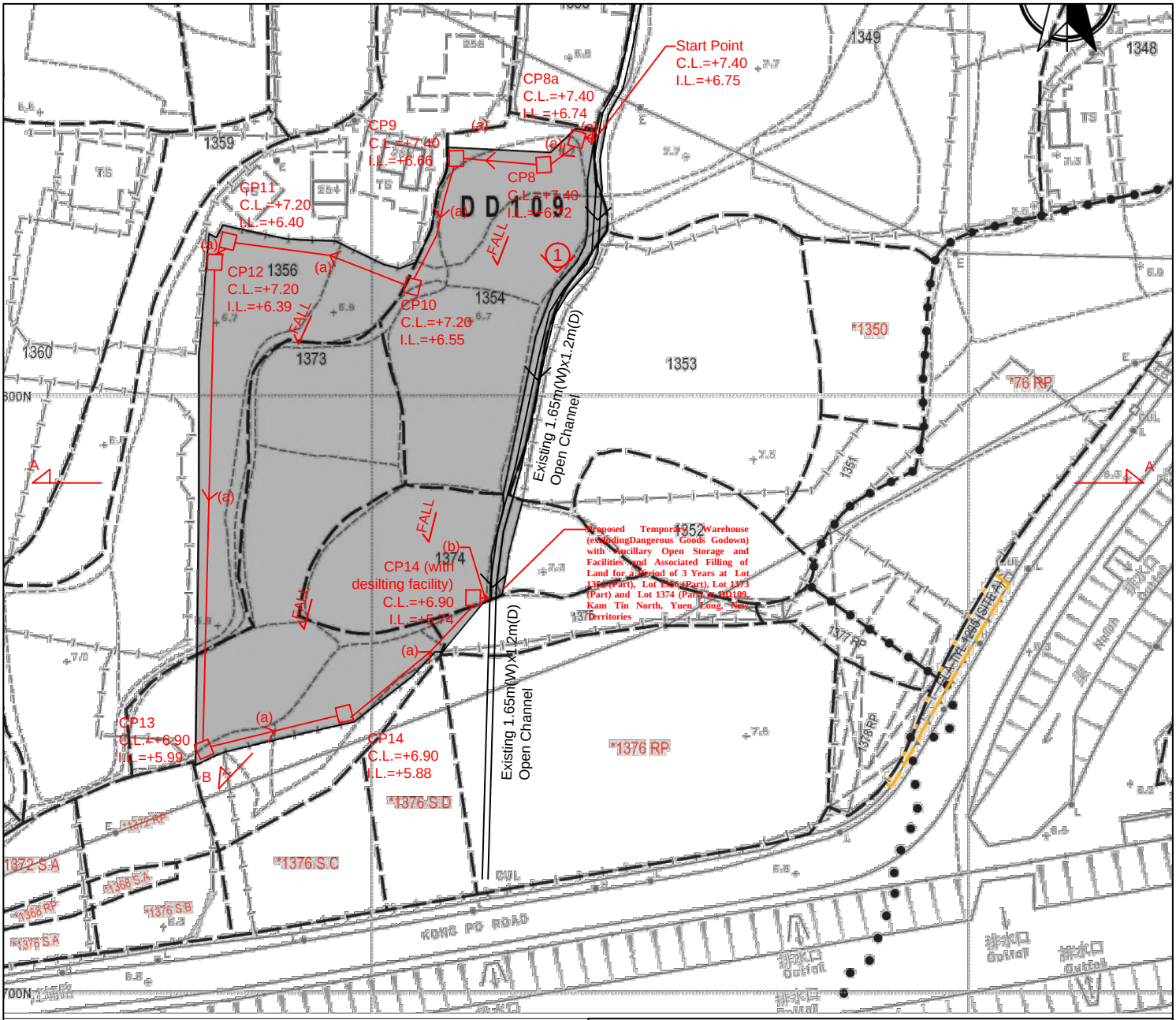
(vi) Noted.

(C)

(i) Noted.

(ii) Noted.

(iii) Noted.

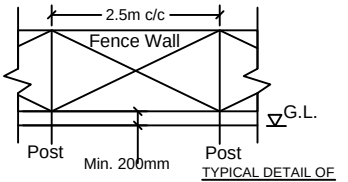


Note:

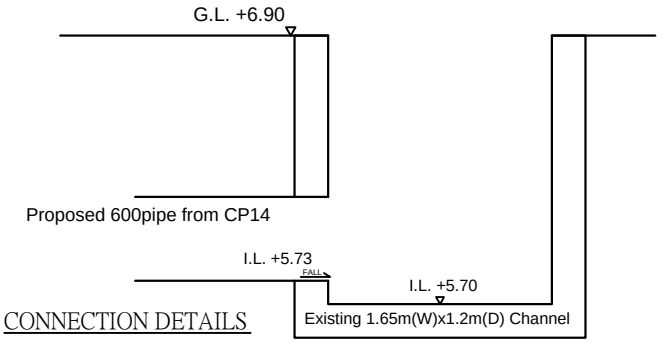
1. Catchpits (CP5 & CP14) with desilting facility shall follow CEDD standard drawing No. C2406I.
2. Catchpit and UC follows Typical Details of Geotechnical Manual for Slope Fig.8.10 and Fig.8.11 respectively.
3. Open-bottom type fence wall to be erected.
4. There is no site formation works. Filling works to be carried out to leveling the site.

LEGEND

CP	Proposed CatchPit
(a)	Proposed 600UC (1:200) with Cast Iron Cover
(b)	Proposed 600mm dia. concrete pipe (1:100)
	Existing 1.65m(W)x1.2m(D) Open Channel
1	Photo Viewport



TYPICAL DETAIL OF OPEN-BOTTOM TYPE FENCE WALL



CONNECTION DETAILS

Title:

Drainage Proposal - LAYOUT

D01

Drawn by:

DM

Date:

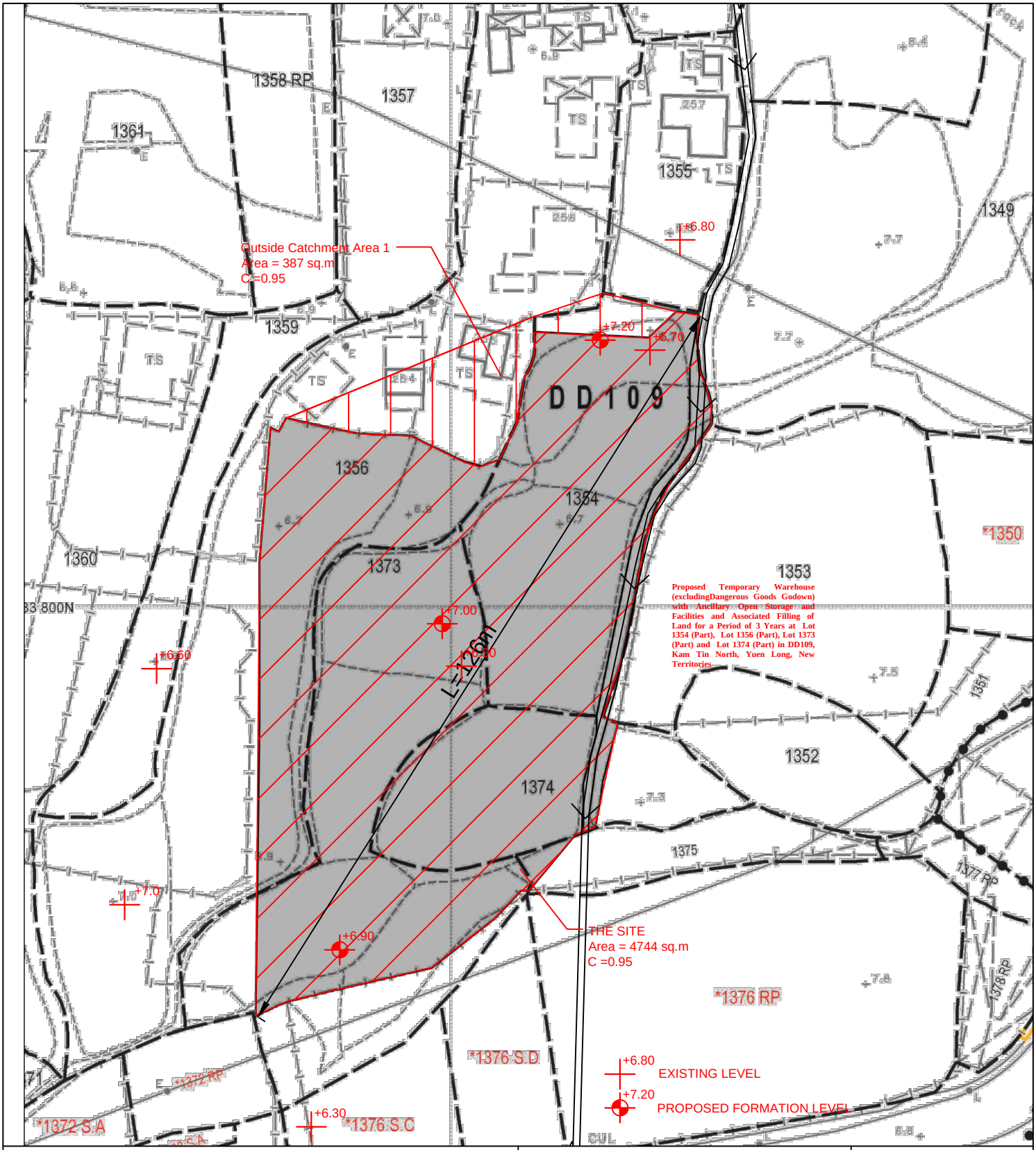
18-8-2025

Project:

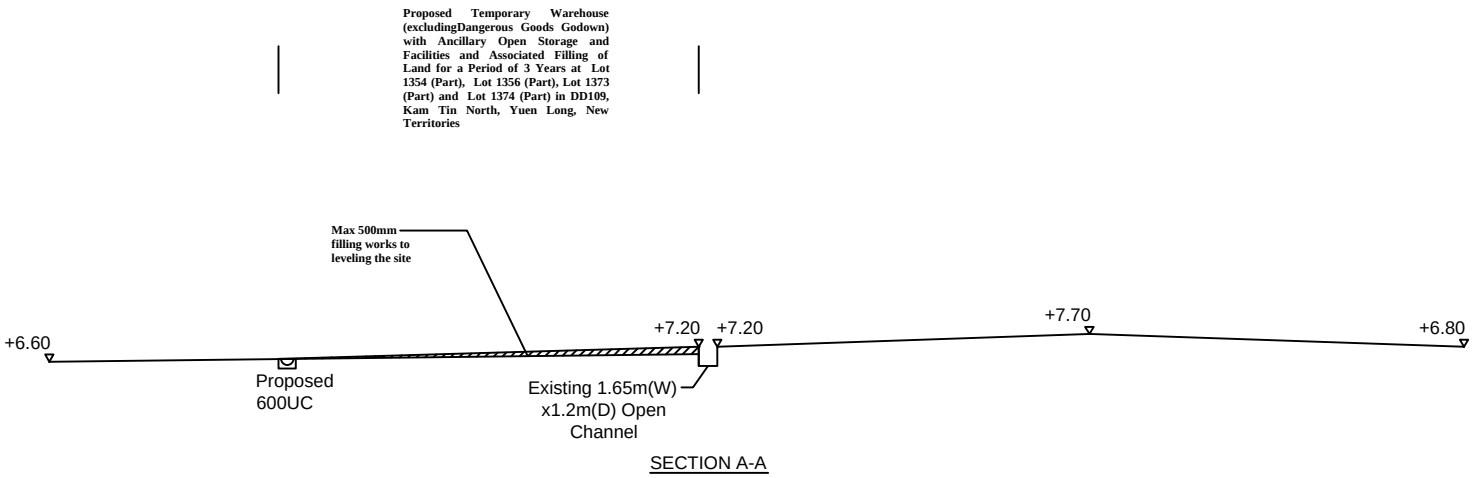
Proposed Temporary Warehouse (excludingDangerous Goods Godown) with Ancillary Open Storage and Facilities and Associated Filling of Land for a Period of 3 Years at Lot 1354 (Part), Lot 1356 (Part), Lot 1373 (Part) and Lot 1374 (Part) in DD109, Kam Tin North, Yuen Long, New Territories

正宏工程顧問公司

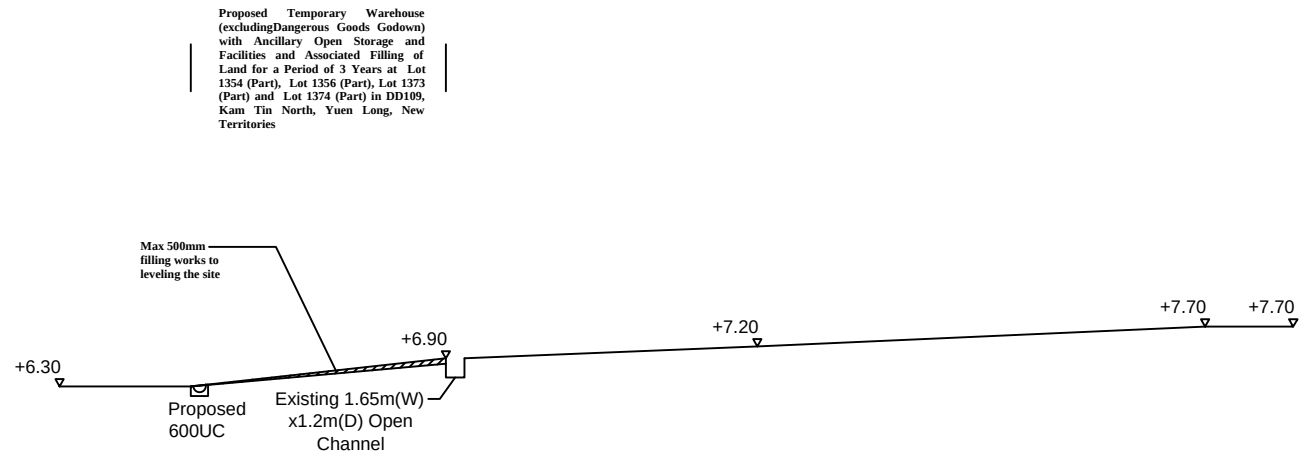
CHING WAN ENGINEERING CONSULTANT COMPANY



Project: **Proposed Temporary Warehouse (excludingDangerous Goods Godown) with Ancillary Open Storage and Facilities and Associated Filling of Land for a Period of 3 Years at Lot 1354 (Part), Lot 1356 (Part), Lot 1373 (Part) and Lot 1374 (Part) in DD109, Kam Tin North, Yuen Long, New Territories**	Title: Catchment Area Plan	D02
	Drawn by: DM	Date: 18–8–2025
	正宏工程顧問公司 CHING WAN ENGINEERING CONSULTANT COMPANY	



SECTION A-A



SECTION B-B

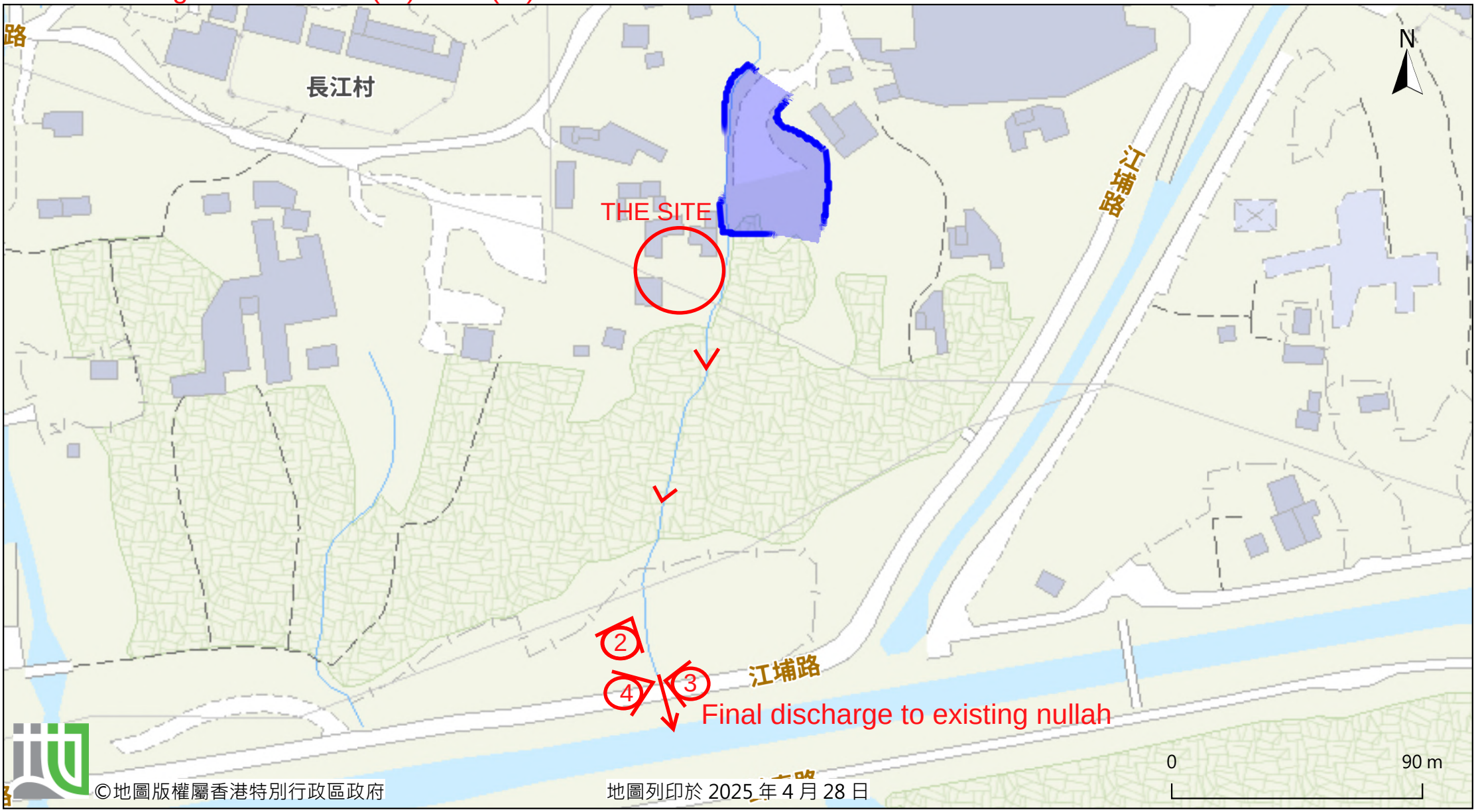
Project: **Proposed Temporary Warehouse (excludingDangerous Goods Godown) with Ancillary Open Storage and Facilities and Associated Filling of Land for a Period of 3 Years at Lot 1354 (Part), Lot 1356 (Part), Lot 1373 (Part) and Lot 1374 (Part) in DD109, Kam Tin North, Yuen Long, New Territories**	Title: SECTIONS	D03
	Drawn by: DM	Date: 18–8–2025
	正宏工程顧問公司 CHING WAN ENGINEERING CONSULTANT COMPANY	

Photo 1

GEOINFO MAP
地理資訊地圖

前往地圖: https://www.map.gov.hk/gm/geo:22.4436,114.0735?z=2257

Final discharge of Ex. 1.65m(W)x1.2D(W)



由「地理資訊地圖」網站提供: https://www.map.gov.hk

Photo 2

Photo 3

Photo 4

Outside Catchment Area 1, Area	=	490	m^2	(C=	0.95	)
THE SITE, Area	=	4669	m^2	(C=	0.95	)

Calculation of Design Runoff of the Proposed Development,
For the design of drains of southwestern side of the site, Catchment Area 1 + The Site

$$\Sigma Q = \Sigma 0.278\ C\ i\ A$$

A = 490+4669 m^2
= 5159
= 0.005159 km^2

t = $0.14465\ L/\ H^{0.2}A^{0.1}$
= $0.14465*126/1^{0.2}*5159^{0.1}$
= 7.752 min

i = $1.16*a/(t+b)^c$ (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (16% increase due to climate change)
= $1.16*505.5/(7.752+3.29)^{0.355}$
= 250.0 mm/hr

Therefore, Q = 0.278*0.95*250.0*0.005131
= 0.3406 m^3/sec
= 20435 lit/min

Provide 600UC (1:200) is OK

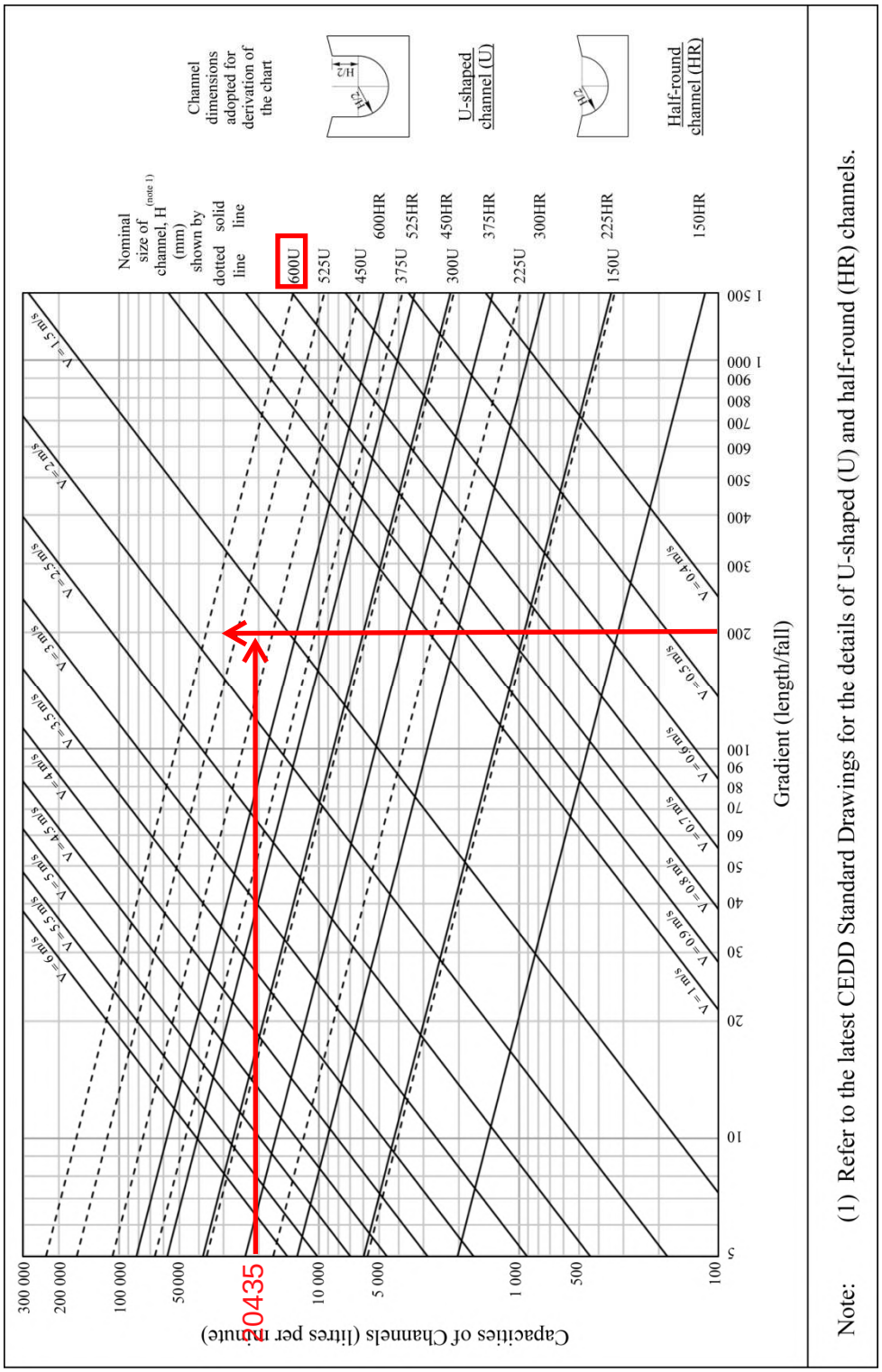


Figure 1 - Chart for the rapid design of U-shaped and half-round channels up to 600 mm

Note: (1) Refer to the latest CEDD Standard Drawings for the details of U-shaped (U) and half-round (HR) channels.

Check 600mm dia. Pipes by Colebrook-White Equation

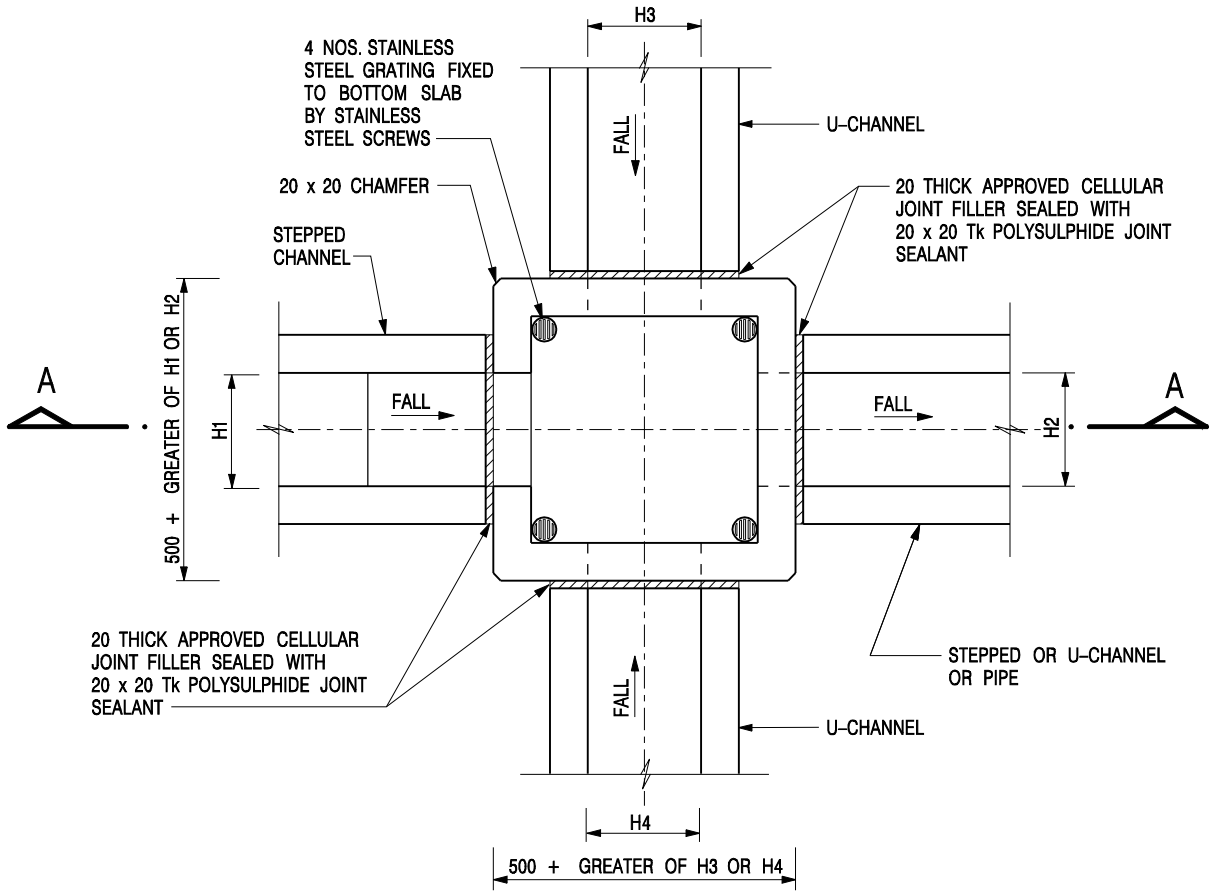
$$V = -\sqrt{(8gDs)}\log\left(\frac{ks}{3.7D} + \frac{2.51v}{D\sqrt{(2gDs)}}\right)$$

where :

V	=			mean velocity (m/s)	
g	=	9.81	m/s2	gravitational acceleration (m/s2)	
D	=	0.6	m	internal pipe diameter (m)	
ks	=	0.00015	m	hydraulic pipeline roughness (m)	(Table14, from DSD SDM 2018, concrete pipe)
v	=	1.14E-06	m2/s	kinematic viscosity of fluid (m2/s)	
s	=	0.01		hydraulic gradient	

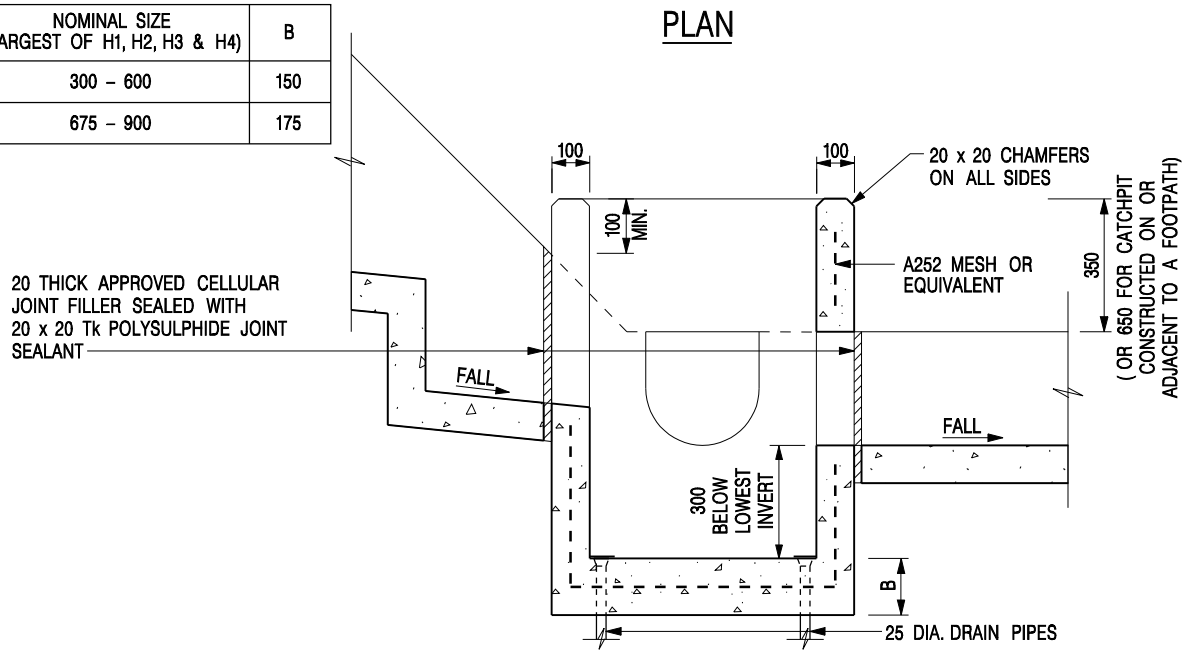
Therefore, design V of pipe capacity = 2.8059 m/s

Q= 0.8VA (0.8 factor for sedimentation)
= 0.635 m3/s
= 38081 lit/min
> 20435 lit/min Ok



PLAN

NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
300 – 600	150
675 – 900	175



SECTION A – A

NOTES:

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

REF.	REVISION	SIGNATURE	DATE
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

CATCHPIT WITH TRAP

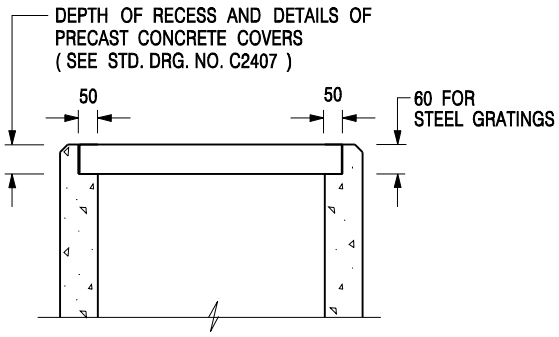
(SHEET 1 OF 2)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2406 /1



ALTERNATIVE TOP SECTION
FOR PRECAST CONCRETE COVERS / GRATINGS

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE SHALL BE GRADE 20 /20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.
4. FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.
5. CONCRETE TO BE COLOURED AS SPECIFIED.
6. UNLESS REQUESTED BY THE MAINTENANCE PARTY AND AS DIRECTED BY THE ENGINEER, CATCHPIT WITH TRAP IS NORMALLY NOT PREFERRED DUE TO PONDING PROBLEM.
7. UPON THE REQUEST FROM MAINTENANCE PARTY, DRAIN PIPES AT CATCHPIT BASE CAN BE USED BUT THIS IS FOR CATCHPITS LOCATED AT SLOPE TOE ONLY AND AS DIRECTED BY THE ENGINEER.
8. FOR CATCHPITS CONSTRUCTED ON OR ADJACENT TO A FOOTPATH, STEEL GRATINGS (SEE DETAIL 'A' ON STD. DRG. NO. C2405 /2) OR CONCRETE COVERS (SEE STD. DRG. NO. C2407) SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.
9. IF INSTRUCTED BY THE ENGINEER, HANDRAILING (SEE DETAIL 'J' ON STD. DRG. NO. C2405 /5; EXCEPT ON THE UPSLOPE SIDE) IN LIEU OF STEEL GRATINGS OR CONCRETE COVERS CAN BE ACCEPTED AS AN ALTERNATIVE SAFETY MEASURE FOR CATCHPITS NOT ON A FOOTPATH NOR ADJACENT TO IT. TOP OF THE HANDRAILING SHALL BE 1 000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1 000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1 000 mm MEASURED FROM THE INVERT LEVEL TO THE ADJACENT GROUND LEVEL. AND, STEP IRONS (SEE DSD STD. DRG. NO. DS1043) AT 300 c/c STAGGERED SHALL BE PROVIDED. THICKNESS OF CATCHPIT WALL FOR INSTALLATION OF STEP IRONS SHALL BE INCREASED TO 150 mm.
11. FOR RETROFITTING AN EXISTING CATCHPIT WITH STEEL GRATING, SEE DETAIL 'G' ON STD. DRG. NO. C2405 /4.
12. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

REF.	REVISION	SIGNATURE	DATE
A	MINOR AMENDMENT.	Original Signed	04.2016
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

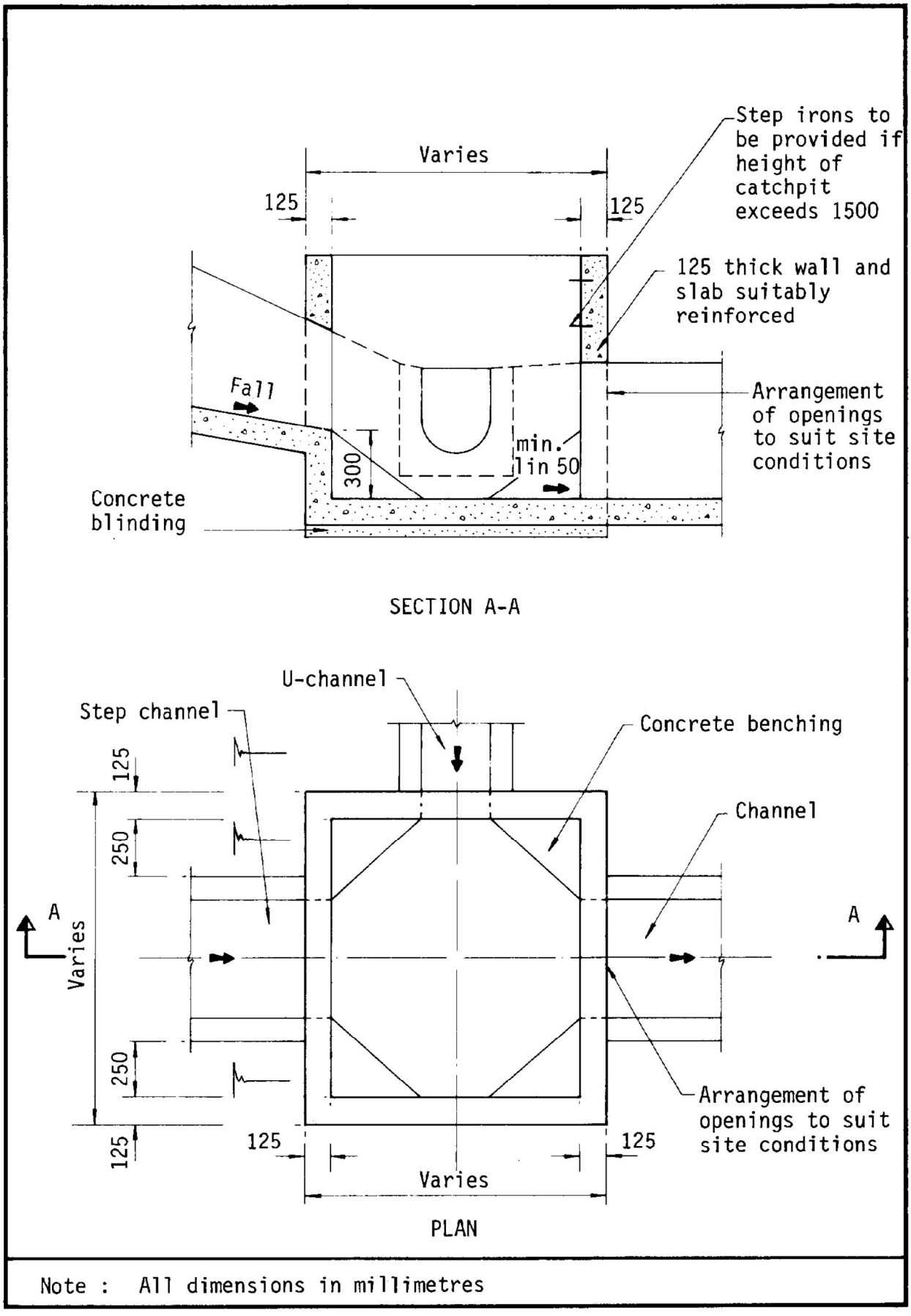
CATCHPIT WITH TRAP
(SHEET 2 OF 2)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

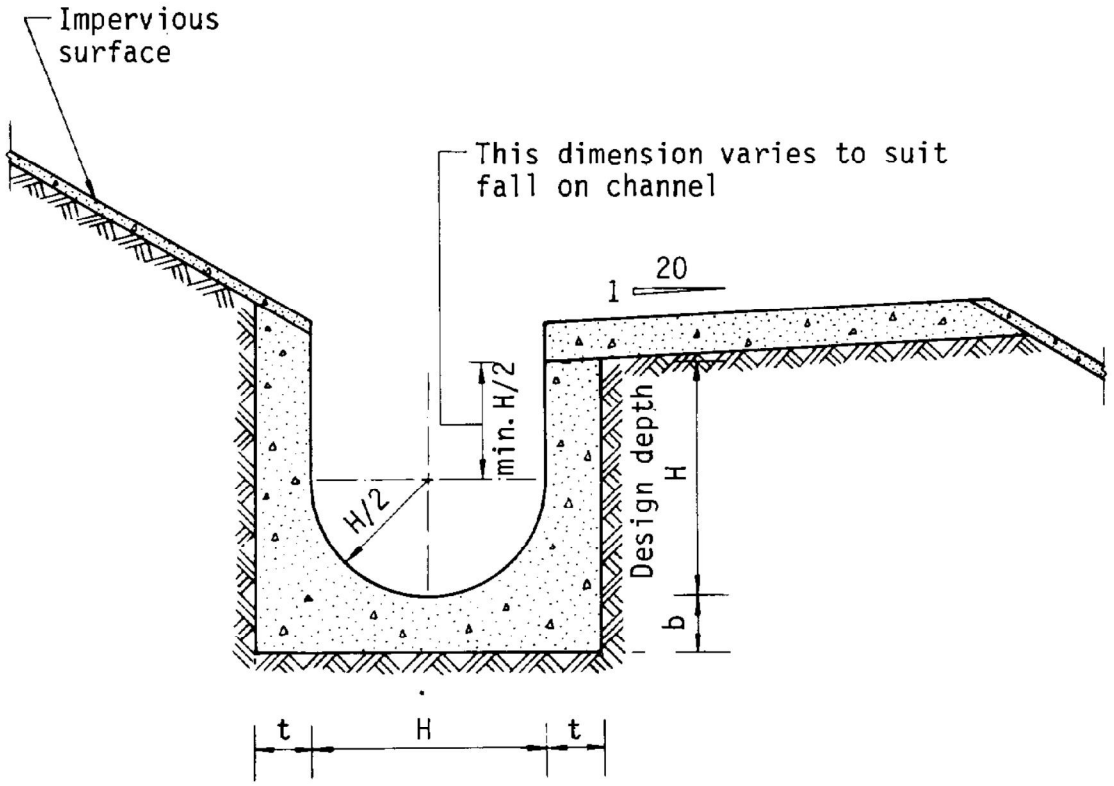
DATE JAN 1991

DRAWING NO. C2406 /2A



Note : All dimensions in millimetres

Figure 8.10 - Typical Details of Catchpits



Dimensions of U - channel

Nominal size of channel H (mm)	Thickness t (mm)	Thickness b (mm)
225 to 600	150	150
675 to 1200	175	225

Figure 8.11 - Typical U-channel Details

(D)

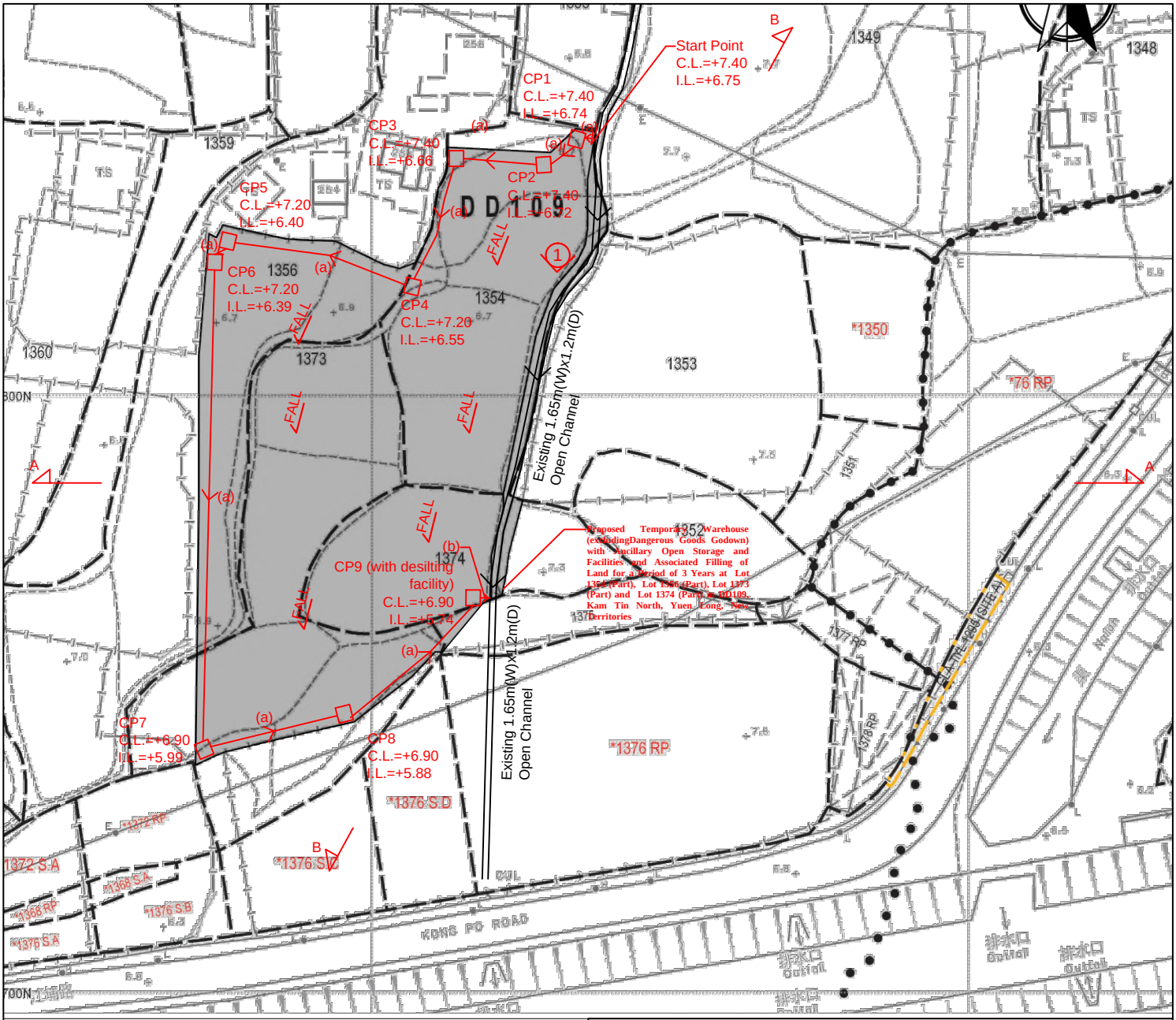
(i) Typo, it is revised.

(ii) Cement grout is provided in the connection to prevent the leakage at the proposed connection.

(iii) Flap valve is proposed to prevent backflow.

(iv) CEDD standard details are followed in this submission.

(v) The debris in the existing 1.65m(W)x1.2m(D) open channel shall be removed, this is stated in the Notes.

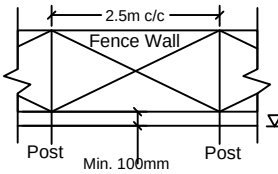


Note:

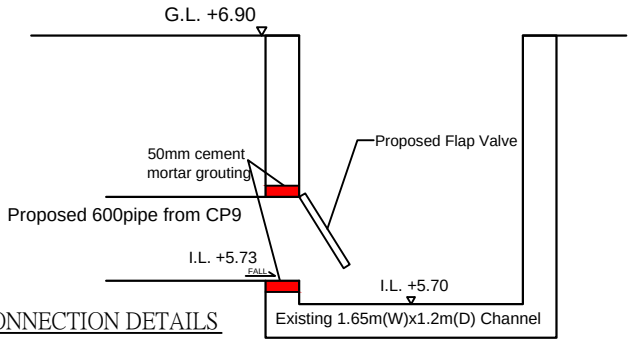
1. Catchpits (CP9) with desilting facility shall follow CEDD standard drawing No. C2406I.
2. Catchpit and UC shall follow CEDD standard drawing No.2405 and 2409J respectively.
3. Open-bottom type fence wall to be erected.
4. There is no site formation works. Filling works to be carried out to leveling the site.
5. The debris in the existing 1.65m(W)x1.2m(D) open channel shall be removed.

LEGEND

CP	Proposed CatchPit
(a)	Proposed 600UC (1:200) with Cast Iron Cover
(b)	Proposed 600mm dia. concrete pipe (1:100)
	Existing 1.65m(W)x1.2m(D) Open Channel
1	Photo Viewport



TYPICAL DETAIL OF OPEN-BOTTOM TYPE FENCE WALL



CONNECTION DETAILS

Title:

Drainage Proposal - LAYOUT

D01

Project:

Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities and Associated Filling of Land for a Period of Three Years at Lots 1354 (Part), 1356 (Part), 1373 (Part), 1374 (Part) and 1375 (Part) in D.D. 109, Kam Tin North, Yuen Long, New Territories

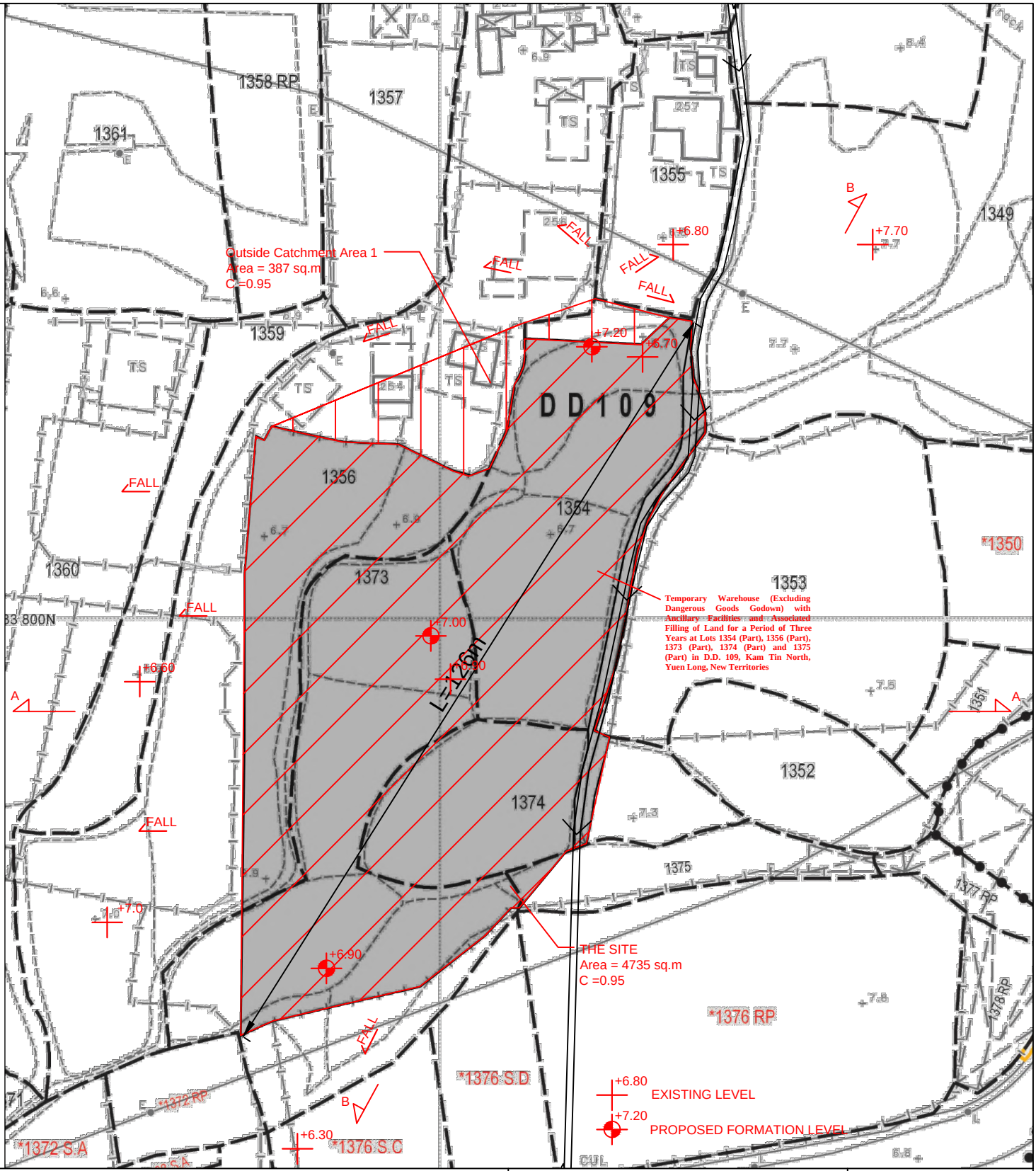
(Application Number: A/YL-KTN/1157)

Drawn by: DM

Date: 15-9-2025

正宏工程顧問公司

CHING WAN ENGINEERING CONSULTANT COMPANY



Project:

Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities and Associated Filling of Land for a Period of Three Years at Lots 1354 (Part), 1356 (Part), 1373 (Part), 1374 (Part) and 1375 (Part) in D.D. 109, Kam Tin North, Yuen Long, New Territories

(Application Number: A/YL-KTN/1157)

Title: Catchment Area Plan

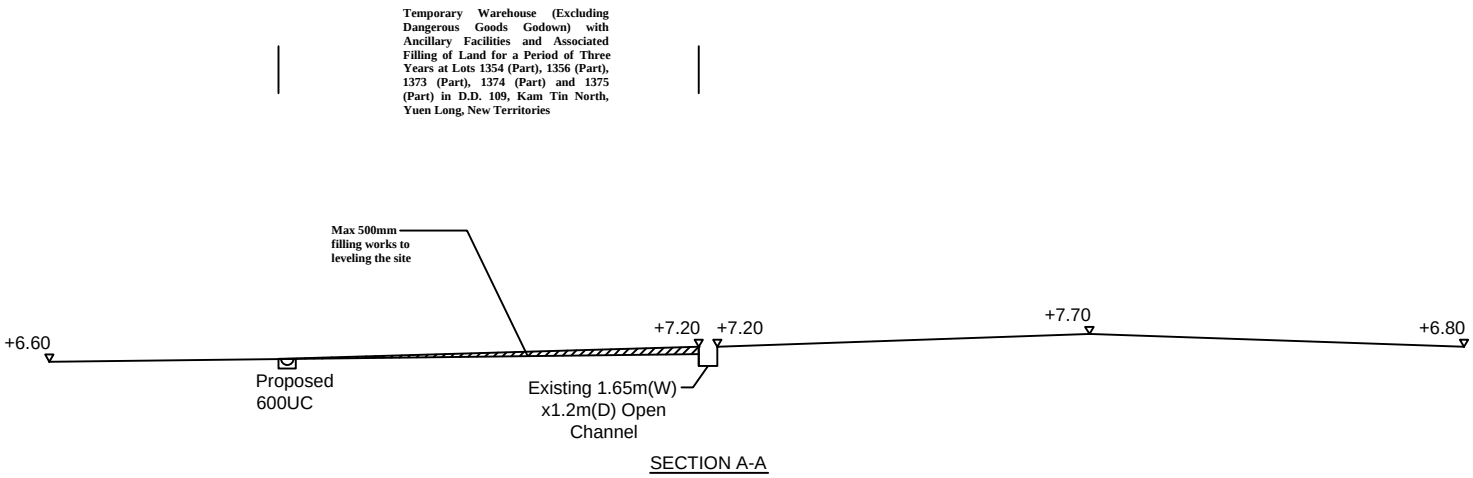
D02

Drawn by: DM

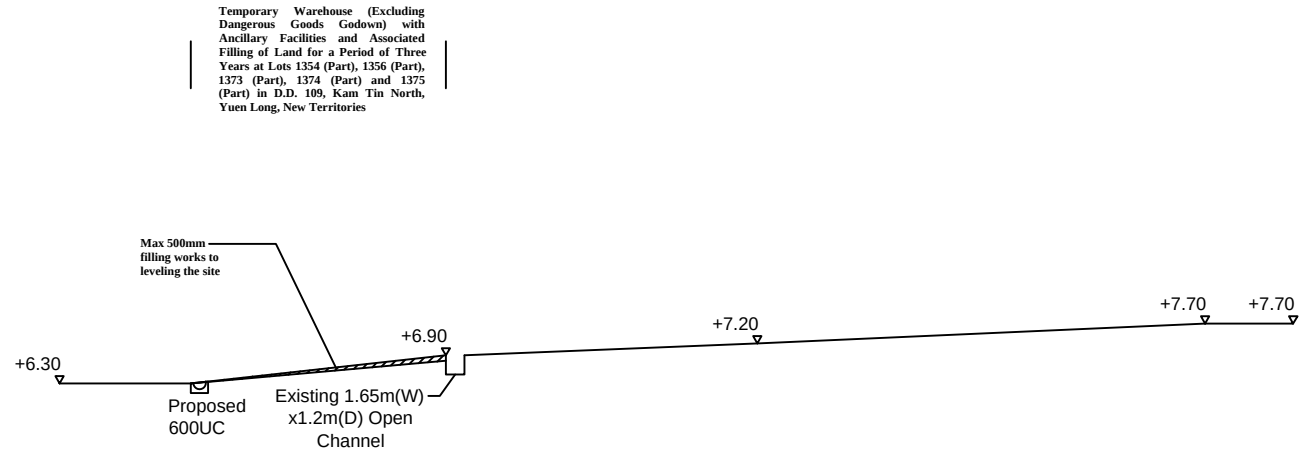
Date: 15-9-2025

正宏工程顧問公司

CHING WAN ENGINEERING CONSULTANT COMPANY



SECTION A-A



SECTION B-B

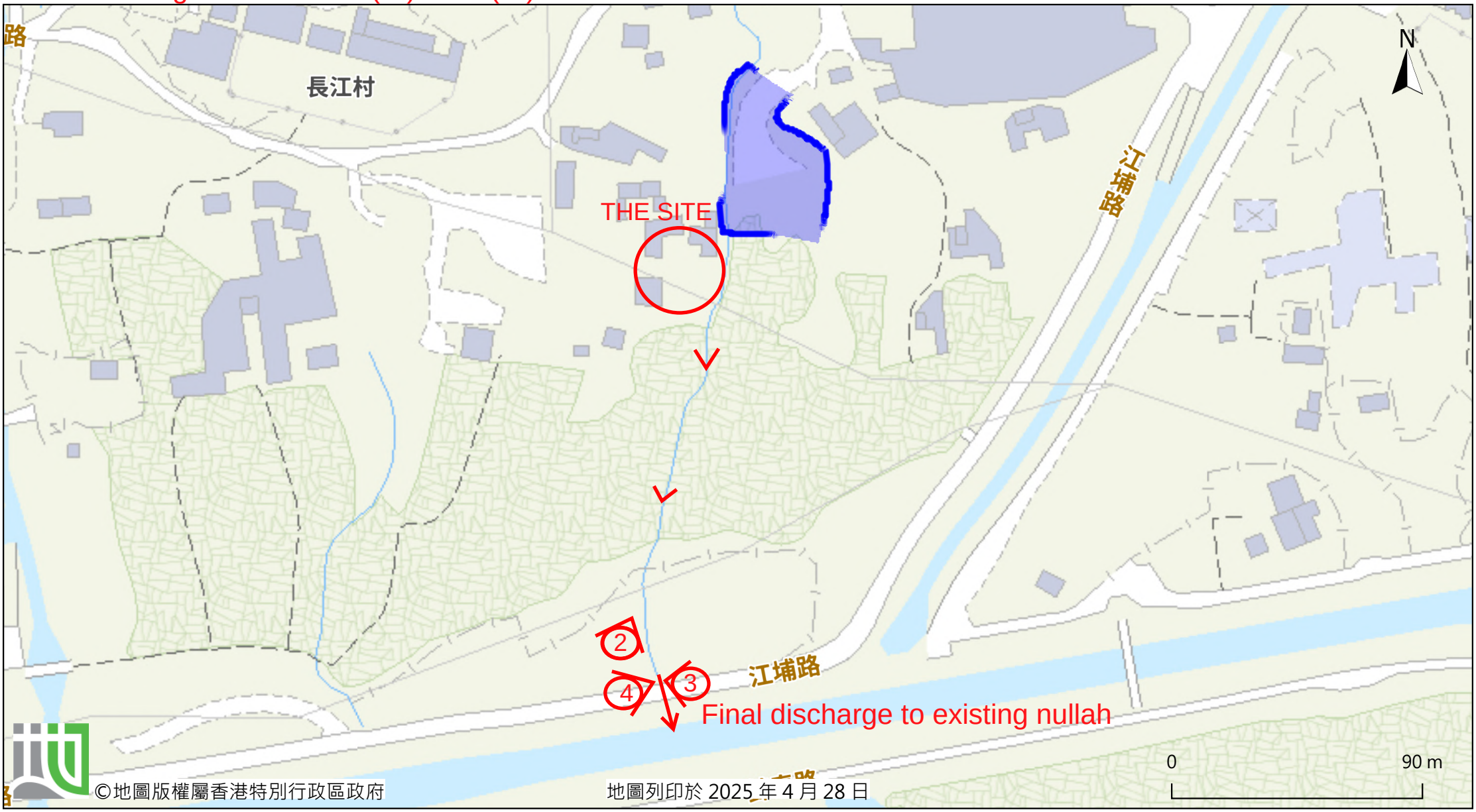
Project: **Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities and Associated Filling of Land for a Period of Three Years at Lots 1354 (Part), 1356 (Part), 1373 (Part), 1374 (Part) and 1375 (Part) in D.D. 109, Kam Tin North, Yuen Long, New Territories** **(Application Number: A/YL-KTN/1157)**	Title: SECTIONS	D03
	Drawn by: DM	Date: 15-9-2025
	正宏工程顧問公司 CHING WAN ENGINEERING CONSULTANT COMPANY	

Photo 1

GEOINFO MAP
地理資訊地圖

前往地圖: https://www.map.gov.hk/gm/geo:22.4436,114.0735?z=2257

Final discharge of Ex. 1.65m(W)x1.2D(W)



由「地理資訊地圖」網站提供: https://www.map.gov.hk

Photo 2

Photo 3

Photo 4

Outside Catchment Area 1, Area	=	387	m^2	(C=	0.95	)
THE SITE, Area	=	4735	m^2	(C=	0.95	)

Calculation of Design Runoff of the Proposed Development,
For the design of drains inside the site, Catchment Area 1 + The Site

$\Sigma Q = \Sigma 0.278\ C\ i\ A$

$A = 387+4735 = 5122 = 0.005122$ km^2

$t = 0.14465\ L/\ H^{0.2}A^{0.1}$
$= 0.14465*126/1^{0.2}*5122^{0.1}$
$= 7.758$ min

$i = 1.16*a/(t+b)^c$ (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (16% increase due to climate change)
$= 1.16*505.5/(7.758+3.29)^{0.355}$
$= 249.9$ mm/hr

Therefore, $Q = 0.278*0.95*249.9*0.005122$
$= 0.3381$ m^3/sec
$= \underline{20285}$ lit/min

Provide 600UC (1:200) is OK

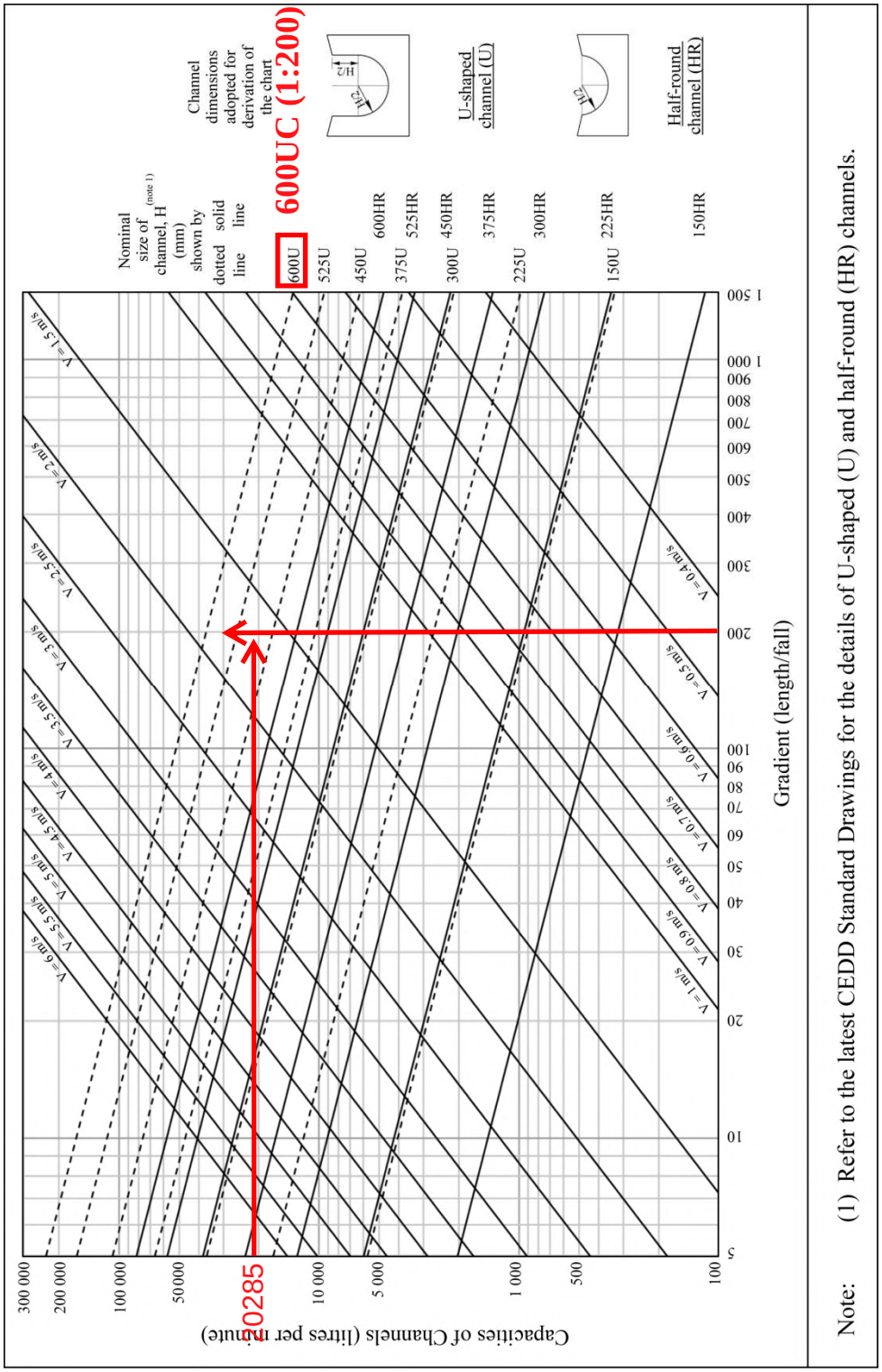


Figure 1 - Chart for the rapid design of U-shaped and half-round channels up to 600 mm

Check 600mm dia. Pipes by Colebrook-White Equation

$$V = -\sqrt{(8gDs)}\log\left(\frac{ks}{3.7D} + \frac{2.51v}{D\sqrt{(2gDs)}}\right)$$

where :

V	=			mean velocity (m/s)	
g	=	9.81	m/s2	gravitational acceleration (m/s2)	
D	=	0.6	m	internal pipe diameter (m)	
ks	=	0.00015	m	hydraulic pipeline roughness (m)	(Table14, from DSD SDM 2018, concrete pipe)
v	=	1.14E-06	m2/s	kinematic viscosity of fluid (m2/s)	
s	=	0.01		hydraulic gradient	

Therefore, design V of pipe capacity = 2.8059 m/s

Q= 0.8VA (0.8 factor for sedimentation)
= 0.635 m3/s
= 38081 lit/min
> 20285 lit/min Ok

GEOINFO MAP
地理資訊地圖

前往地圖: https://www.map.gov.hk/gm/geo:22.4442,114.0743?z=4514

Catchment Area Plan for Existing 1.65m(W)x1.2m(D) Open Channel

地圖列印於 2025 年 9 月 15 日

由「地理資訊地圖」網站提供: https://www.map.gov.hk

Catchment Area = 34452 m^2 (C= 0.95)

Calculation of Design Runoff

For checking the existing 1.65m(W)x1.2m(D) Open Channel

$\Sigma Q = \Sigma 0.278\ C\ i\ A$

A = 34452 m^2
= 34452
= 0.034452 km^2

t = $0.14465\ L/\ H^{0.2}A^{0.1}$
= $0.14465*75/1^{0.2}*34452^{0.1}$
= 3.816 min

i = $1.16*a/(t+b)^c$ (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (16% increase due to climate change)
= $1.16*505.5/(3.816+3.29)^{0.355}$
= 292.3 mm/hr

Therefore, Q = 0.278*0.95*292.3*0.034452
= 2.6597 m^3/sec
= 159579 lit/min

Calculation Maximum Capacity of Existing 1.65m(W)x1.2m(D) Open Channel

Manning Equation $V = R^{2/3}*S_f^{0.5}/n$

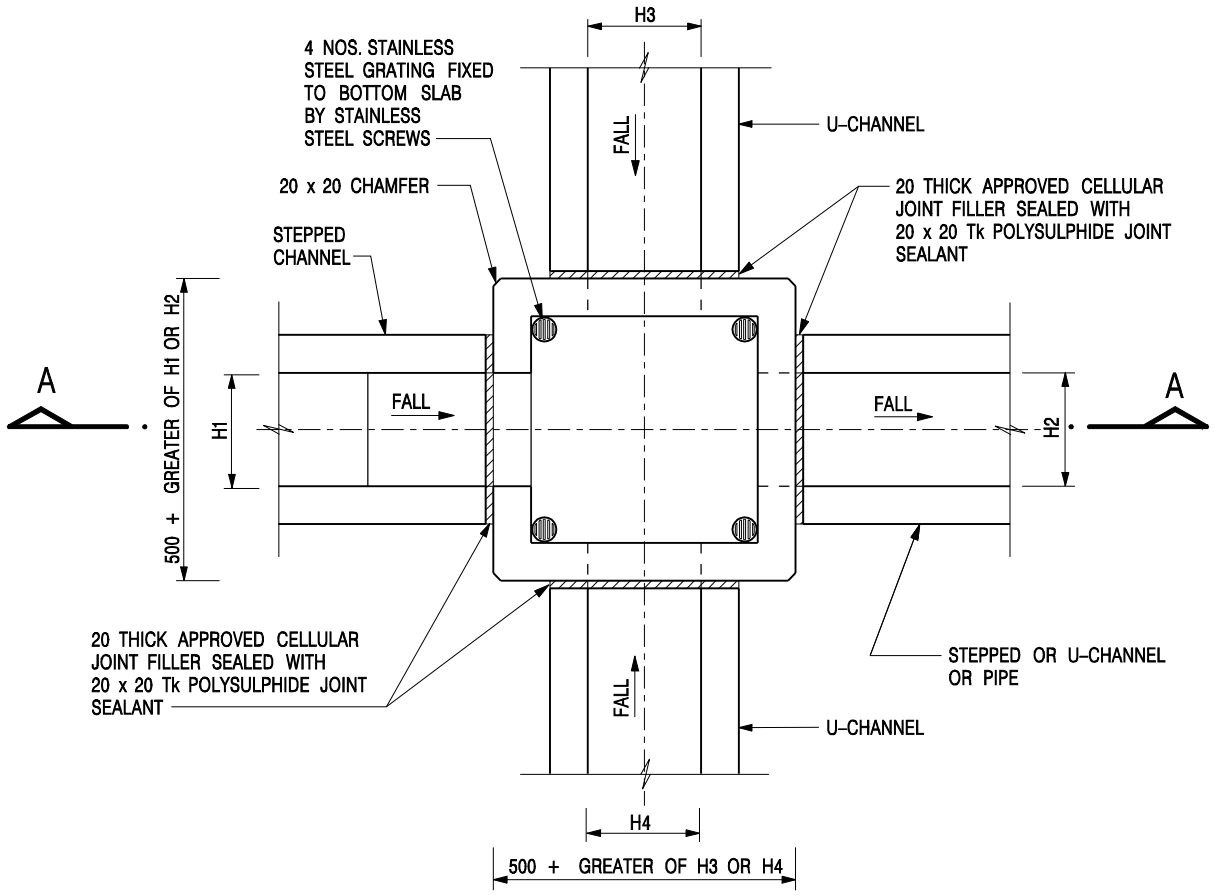
where R = WD/(W+2D) W= 1.65 m
= 0.4521 m D= 1 m (200mm freeboard considered)
Area=WD= 1.65 m2

n = 0.012 $s/m^{1/3}$ (Talbe 13 of Stormwater Drainage Manual)

S_f = 0.006667

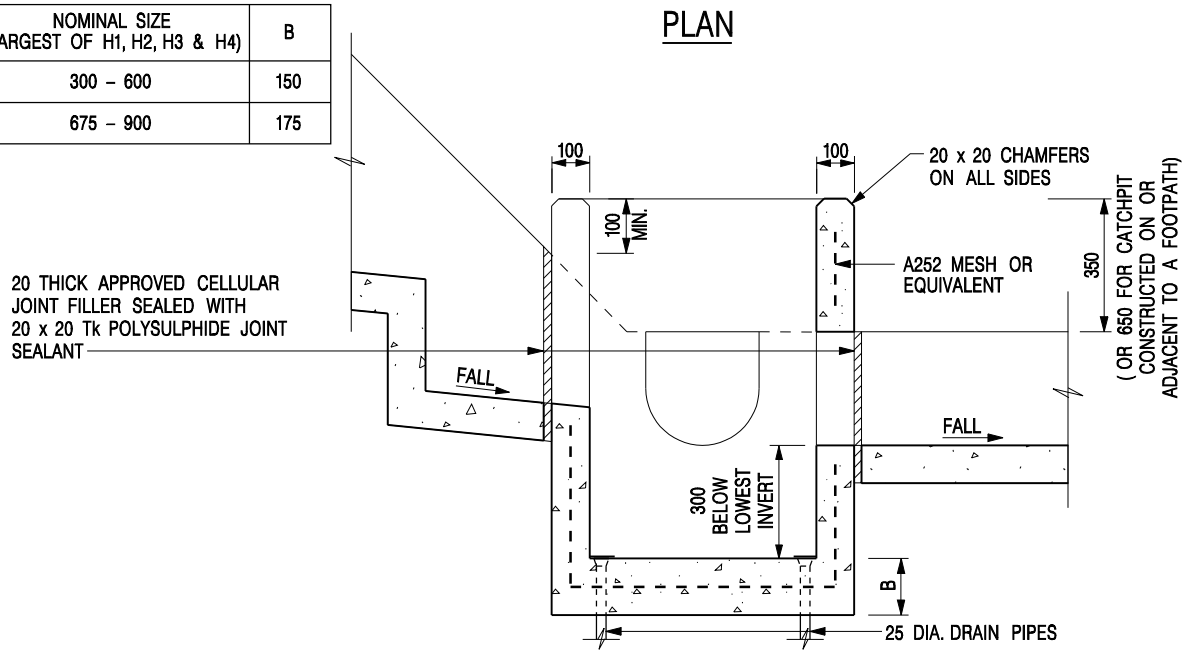
Therefore, V = $0.4521^{2/3}*0.006667^{0.5}/0.012$
= 4.0077 m/sec

Maximum Capacity (Q_{max}) = V*A
= 3.21 m^3/sec
= 192372 lit/min
> 159579 lit/min OK



PLAN

NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
300 – 600	150
675 – 900	175



SECTION A – A

NOTES:

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

REF.	REVISION	SIGNATURE	DATE
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

CATCHPIT WITH TRAP

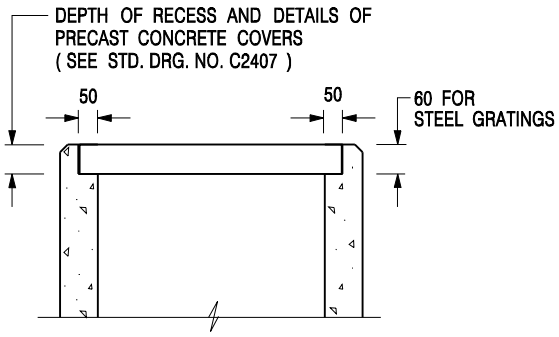
(SHEET 1 OF 2)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2406 /1



ALTERNATIVE TOP SECTION
FOR PRECAST CONCRETE COVERS / GRATINGS

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE SHALL BE GRADE 20 /20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.
4. FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.
5. CONCRETE TO BE COLOURED AS SPECIFIED.
6. UNLESS REQUESTED BY THE MAINTENANCE PARTY AND AS DIRECTED BY THE ENGINEER, CATCHPIT WITH TRAP IS NORMALLY NOT PREFERRED DUE TO PONDING PROBLEM.
7. UPON THE REQUEST FROM MAINTENANCE PARTY, DRAIN PIPES AT CATCHPIT BASE CAN BE USED BUT THIS IS FOR CATCHPITS LOCATED AT SLOPE TOE ONLY AND AS DIRECTED BY THE ENGINEER.
8. FOR CATCHPITS CONSTRUCTED ON OR ADJACENT TO A FOOTPATH, STEEL GRATINGS (SEE DETAIL 'A' ON STD. DRG. NO. C2405 /2) OR CONCRETE COVERS (SEE STD. DRG. NO. C2407) SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.
9. IF INSTRUCTED BY THE ENGINEER, HANDRAILING (SEE DETAIL 'J' ON STD. DRG. NO. C2405 /5; EXCEPT ON THE UPSLOPE SIDE) IN LIEU OF STEEL GRATINGS OR CONCRETE COVERS CAN BE ACCEPTED AS AN ALTERNATIVE SAFETY MEASURE FOR CATCHPITS NOT ON A FOOTPATH NOR ADJACENT TO IT. TOP OF THE HANDRAILING SHALL BE 1 000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1 000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1 000 mm MEASURED FROM THE INVERT LEVEL TO THE ADJACENT GROUND LEVEL. AND, STEP IRONS (SEE DSD STD. DRG. NO. DS1043) AT 300 c/c STAGGERED SHALL BE PROVIDED. THICKNESS OF CATCHPIT WALL FOR INSTALLATION OF STEP IRONS SHALL BE INCREASED TO 150 mm.
11. FOR RETROFITTING AN EXISTING CATCHPIT WITH STEEL GRATING, SEE DETAIL 'G' ON STD. DRG. NO. C2405 /4.
12. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

REF.	REVISION	SIGNATURE	DATE
A	MINOR AMENDMENT.	Original Signed	04.2016
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

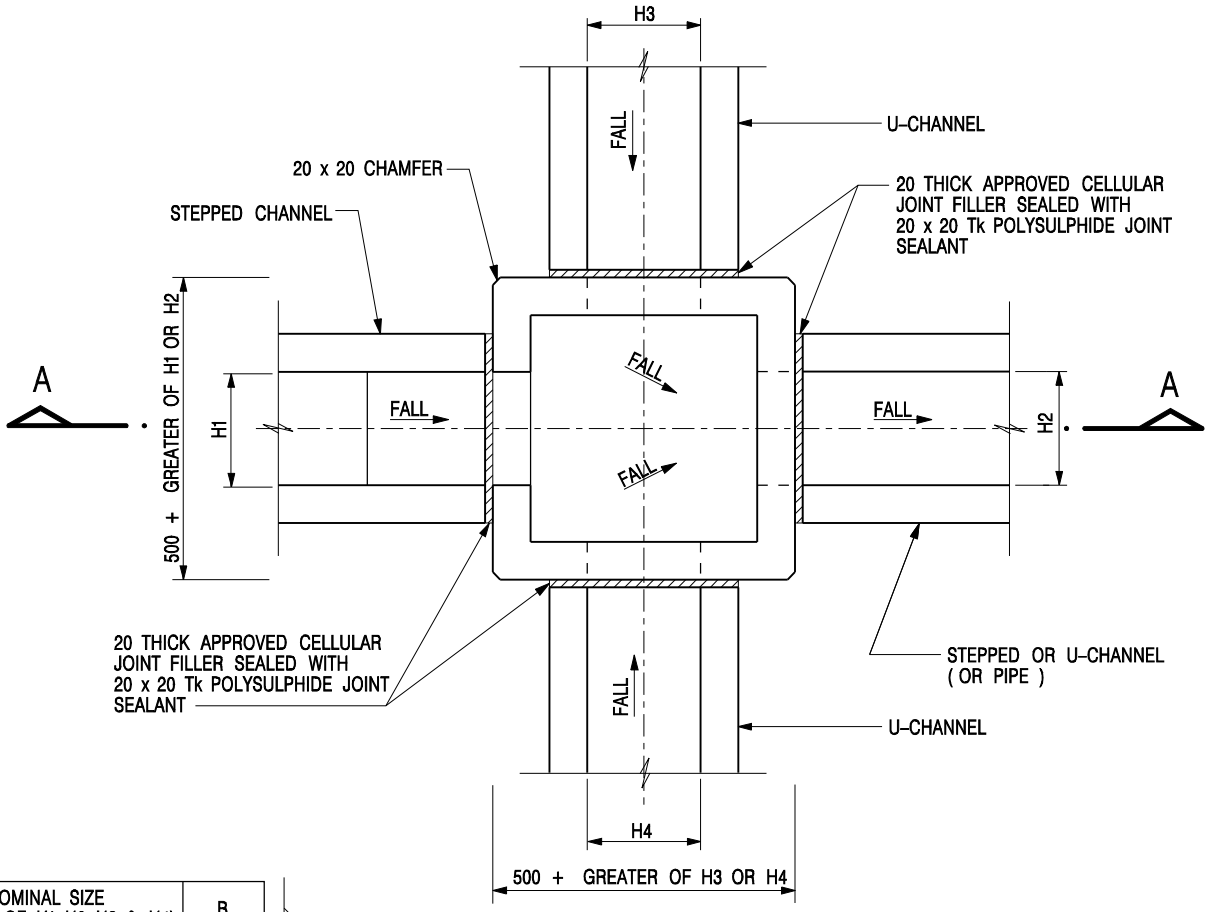
CATCHPIT WITH TRAP
(SHEET 2 OF 2)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

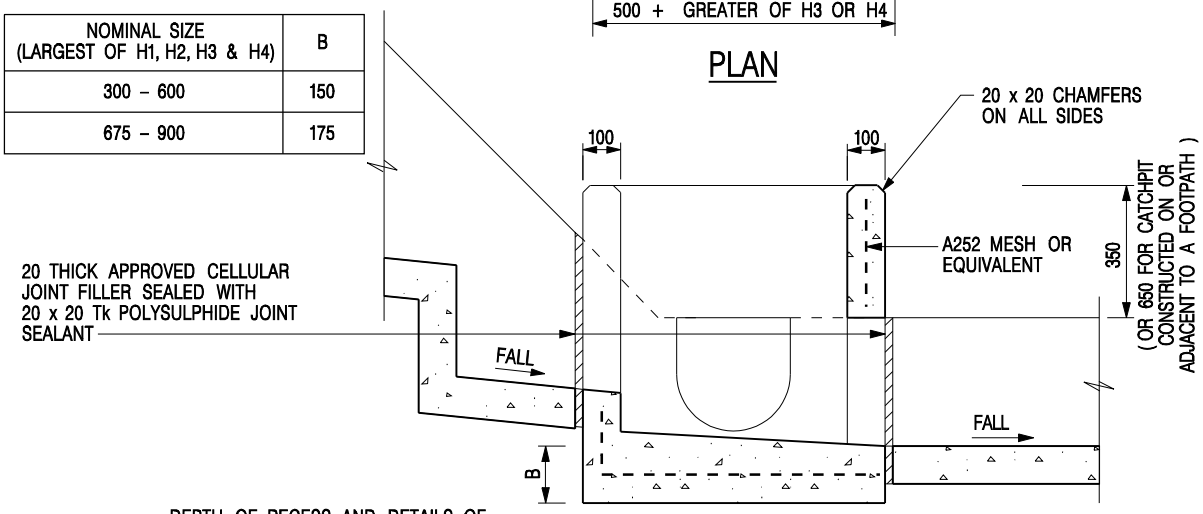
DATE JAN 1991

DRAWING NO. C2406 /2A

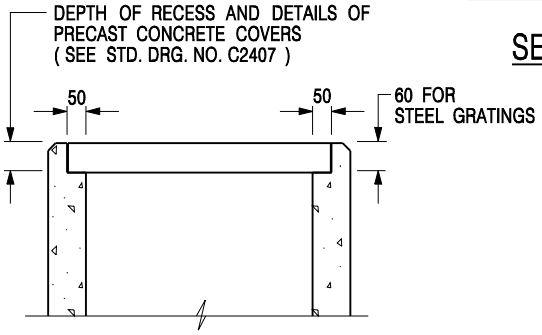


PLAN

NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
300 – 600	150
675 – 900	175



SECTION A – A



ALTERNATIVE TOP SECTION FOR PRECAST CONCRETE COVERS / GRATINGS

NOTES:

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

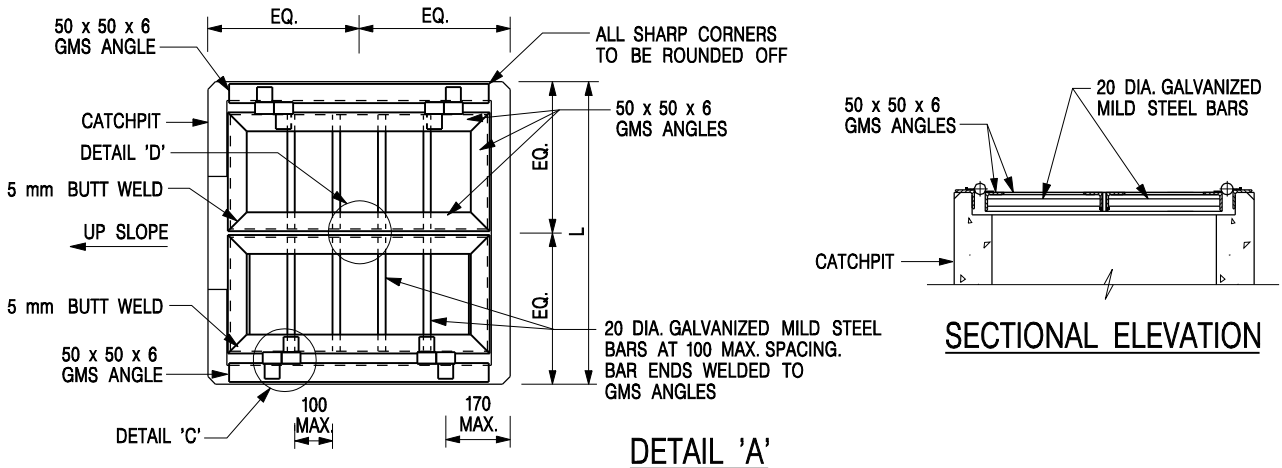
REF.	REVISION	SIGNATURE	DATE
–	FORMER DRG. NO. C2405J.	Original Signed	03.2015

STANDARD CATCHPIT DETAILS

(SHEET 1 OF 5)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

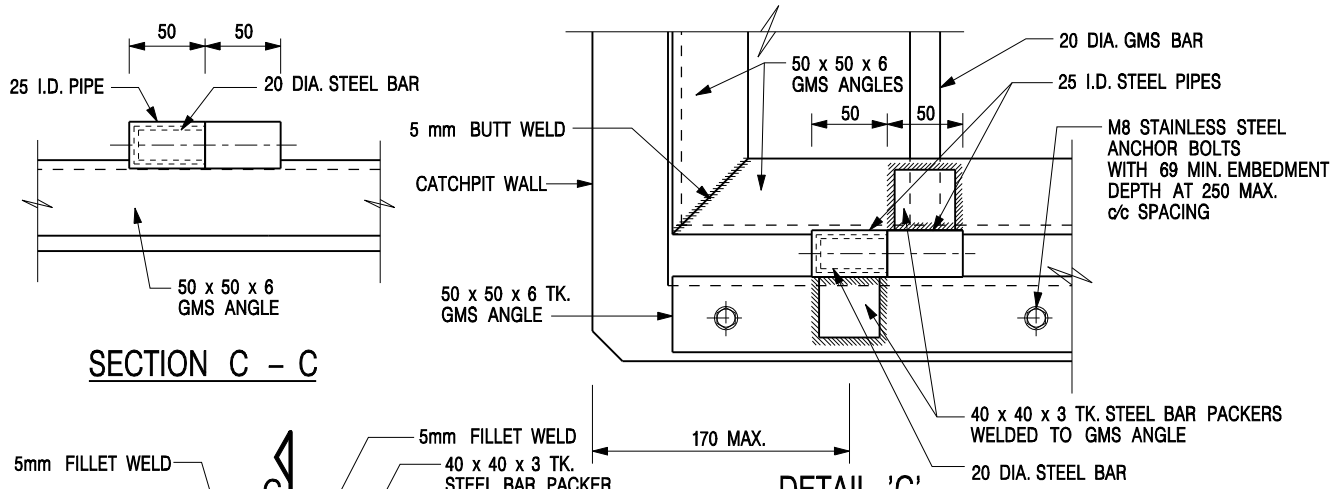
SCALE	1 : 20	DRAWING NO.
DATE	JAN 1991	C2405 /1



DETAIL 'A'

(DETAILS OF DOUBLE SIDE OPENING STEEL GRATING FOR L>900mm)

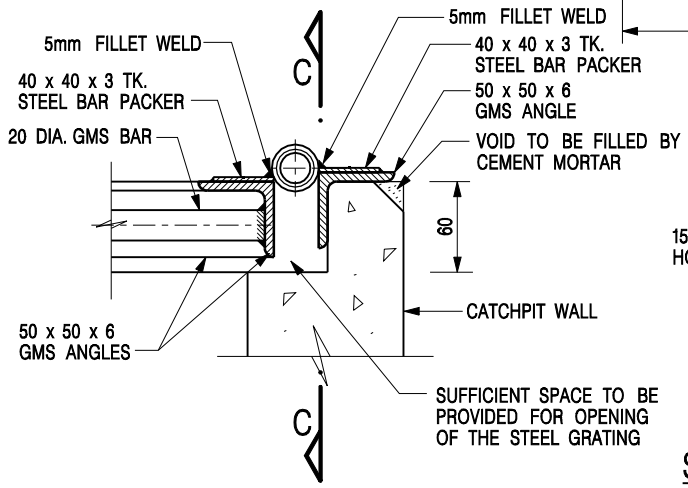
SCALE 1 : 20



DETAIL 'C'

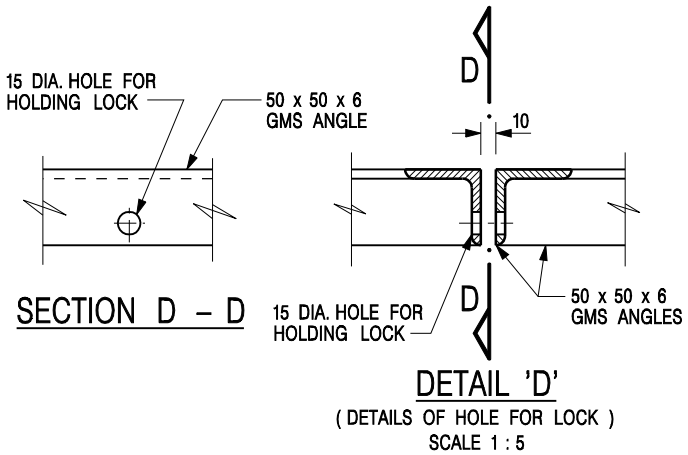
(DETAILS OF HINGE)

SCALE 1 : 5



SECTIONAL ELEVATION

(DETAIL 'C')



DETAIL 'D'

(DETAILS OF HOLE FOR LOCK)

SCALE 1 : 5

NOTES:

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

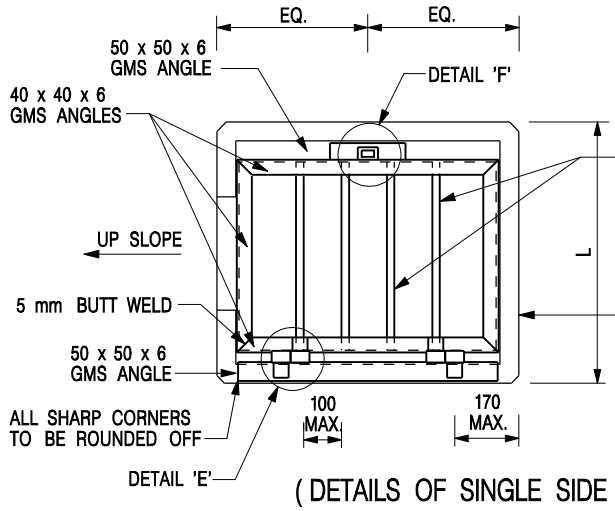
REF.	REVISION	SIGNATURE	DATE
–	FORMER DRG. NO. C2405J.	Original Signed	03.2015

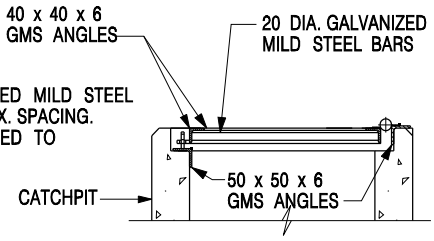
STANDARD CATCHPIT DETAILS

(SHEET 2 OF 5)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE AS SHOWN	DRAWING NO. C2405 /2
DATE JAN 1991	



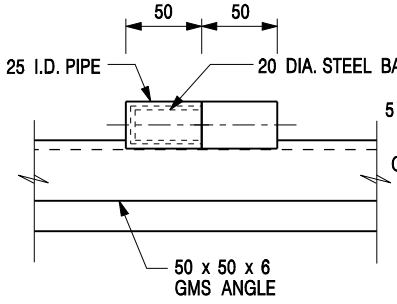


SECTIONAL ELEVATION

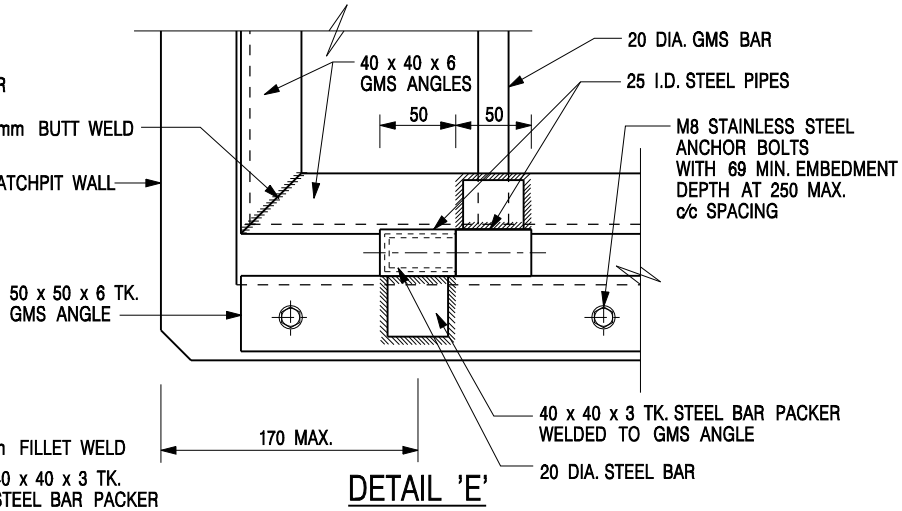
DETAIL 'B'

(DETAILS OF SINGLE SIDE OPENING STEEL GRATING FOR L≤900mm)

SCALE 1 : 20



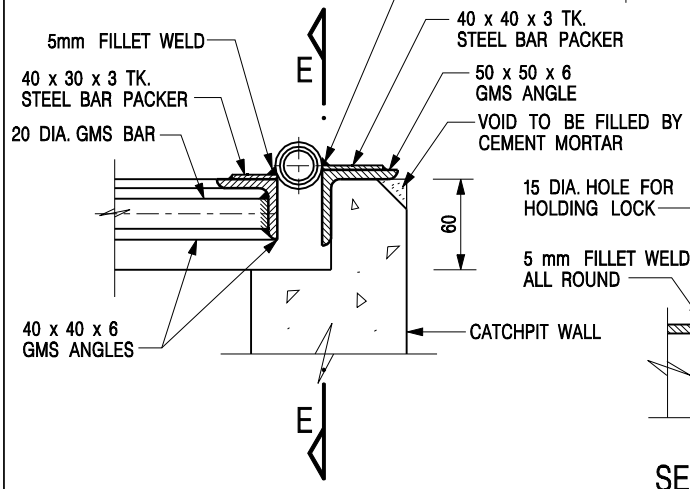
SECTION E – E



DETAIL 'E'

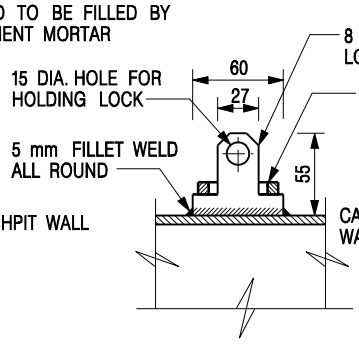
(DETAILS OF HINGE)

SCALE 1 : 5

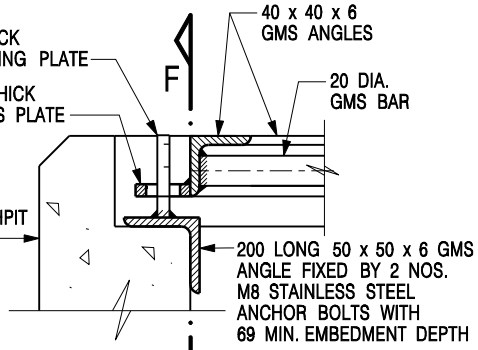


SECTIONAL ELEVATION

(DETAIL 'E')



SECTION F – F



DETAIL 'F'

(DETAILS OF LOCKING PLATE)

SCALE 1 : 5

NOTES:

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

REF.	REVISION	SIGNATURE	DATE
–	FORMER DRG. NO. C2405J.	Original Signed	03.2015

STANDARD CATCHPIT DETAILS

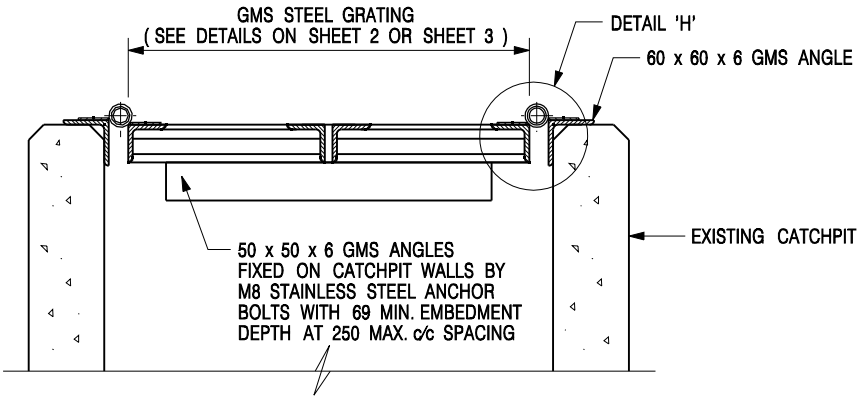
(SHEET 3 OF 5)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE AS SHOWN

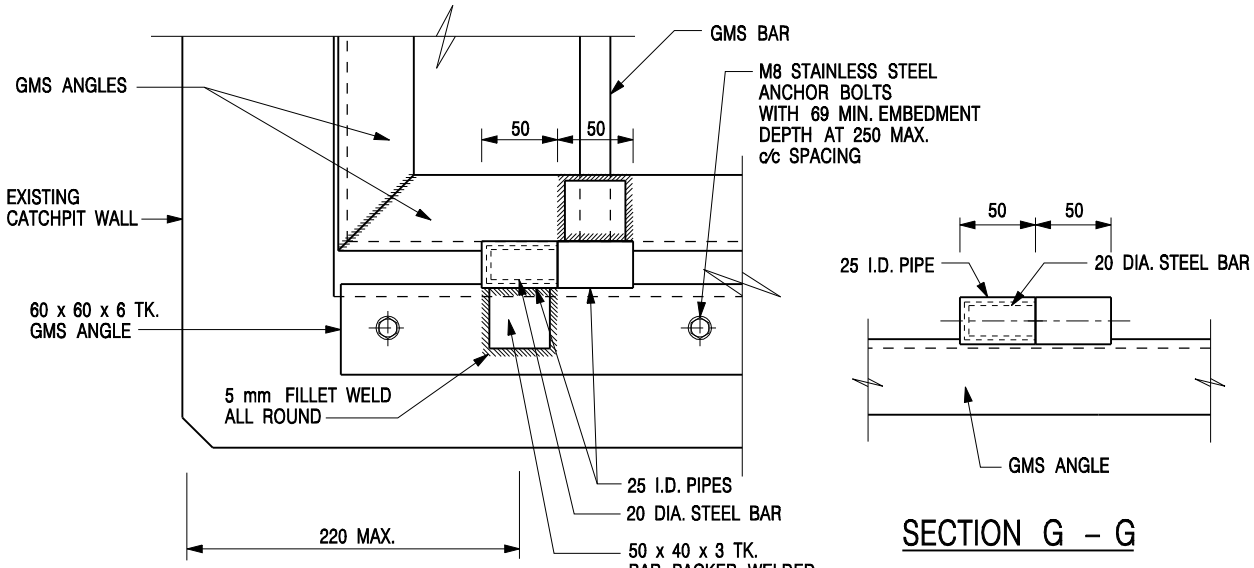
DATE JAN 1991

DRAWING NO. C2405 /3



DETAIL 'G' – DETAILS OF STEEL GRATING CONSTRUCTED ON EXISTING CATCHPIT

SCALE 1 : 10

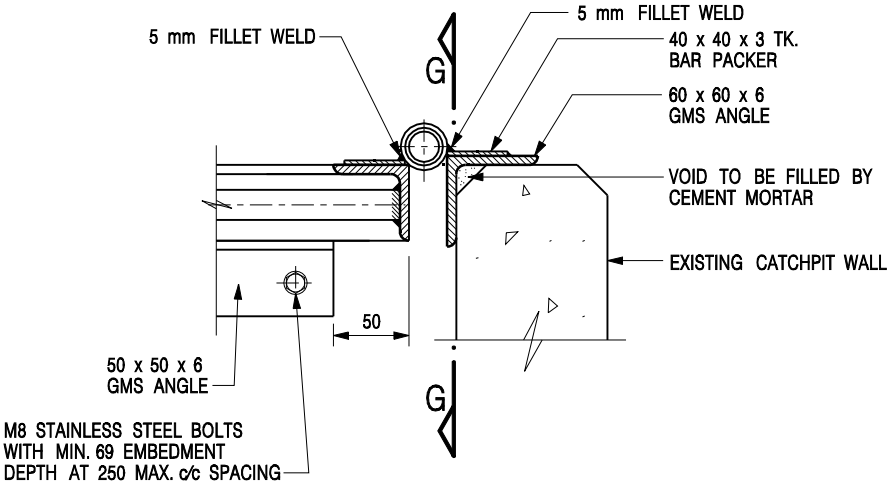


DETAIL 'H'

(DETAILS OF HINGE)

SCALE 1 : 5

SECTION G – G



SECTIONAL ELEVATION

(DETAIL 'H')

NOTES:

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

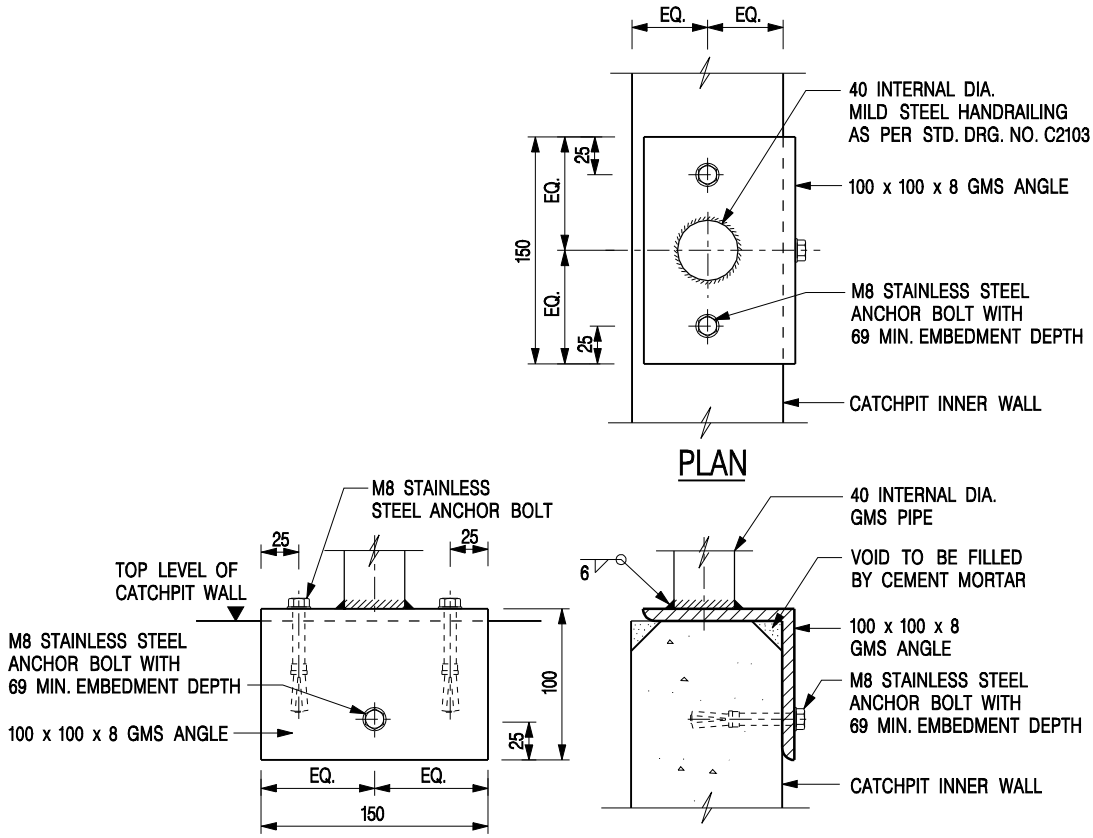
REF.	REVISION	SIGNATURE	DATE
–	FORMER DRG. NO. C2405J.	Original Signed	03.2015

STANDARD CATCHPIT DETAILS

(SHEET 4 OF 5)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE AS SHOWN	DRAWING NO. C2405 /4
DATE JAN 1991	



DETAIL 'J' – FIXING DETAILS FOR HANDRAILING ON TOP OF CATCHPIT WALL

SCALE 1 : 5

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE SHALL BE GRADE 20 /20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.
4. FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.
5. CONCRETE TO BE COLOURED AS SPECIFIED.
6. FOR CATCHPITS CONSTRUCTED ON OR ADJACENT TO A FOOTPATH, STEEL GRATINGS (SEE DETAILS ON SHEET 2 OR SHEET 3) OR CONCRETE COVERS (SEE STD. DRG. NO. C2407) SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.
7. IF INSTRUCTED BY THE ENGINEER, HANDRAILING (SEE DETAIL 'J' ON SHEET 5; EXCEPT ON THE UPSLOPE SIDE) IN LIEU OF STEEL GRATINGS OR CONCRETE COVERS CAN BE ACCEPTED AS AN ALTERNATIVE SAFETY MEASURE FOR CATCHPITS NOT ON A FOOTPATH NOR ADJACENT TO IT. TOP OF THE HANDRAILING SHALL BE 1 000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
8. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1 000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1 000 mm MEASURED FROM THE INVERT LEVEL TO THE ADJACENT GROUND LEVEL. AND, STEP IRONS (SEE DSD STD. DRG. NO. DS1043) AT 300 mm c/c STAGGERED SHALL BE PROVIDED. THICKNESS OF CATCHPIT WALL FOR INSTALLATION OF STEP IRONS SHALL BE INCREASED TO 150 mm.
9. FOR RETROFITTING AN EXISTING CATCHPIT WITH STEEL GRATING, SEE DETAIL 'G' ON SHEET 4.
10. ALL STEEL ANGLES SHALL COMPLY WITH BS EN 10025 AND BS EN 10056.
11. UNLESS OTHERWISE SPECIFIED, ALL WELDS SHALL BE 5 mm CONTINUOUS FILLET WELDS.
12. ALL WELDS SHALL BE CHIPPED, GROUND SMOOTH, BRUSHED TO REMOVE SLAG PRIOR TO HOT-DIP GALVANIZATION.
13. ALL STEELWORK SHALL BE HOT-DIP GALVANIZED TO BS EN ISO 1461. ALL EXPOSED STEELWORK SURFACES SHALL BE TREATED AND PAINTED IN ACCORDANCE WITH THE GENERAL SPECIFICATION.
14. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

REF.	REVISION	SIGNATURE	DATE
–	FORMER DRG. NO. C2405J.	Original Signed	03.2015

STANDARD CATCHPIT DETAILS

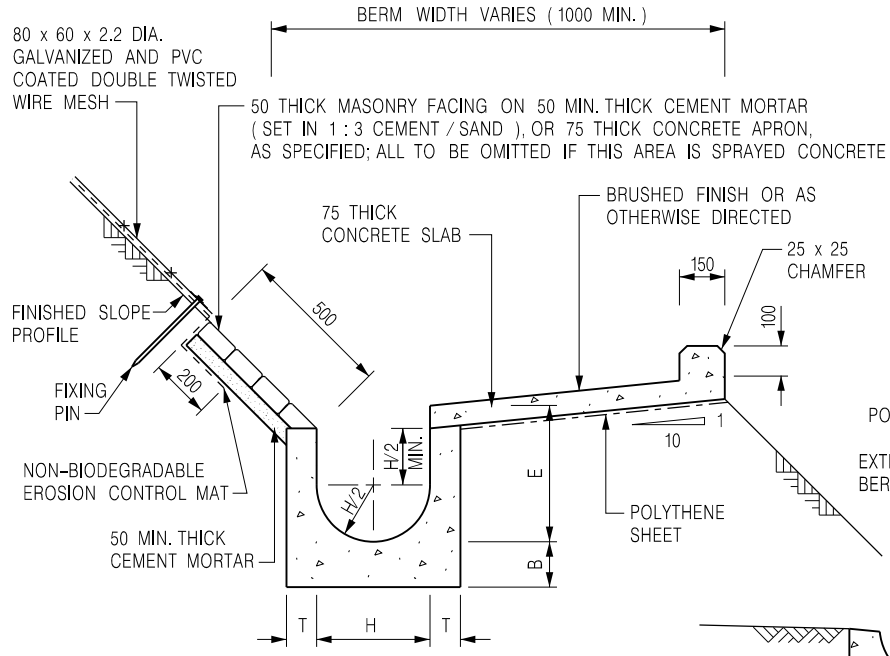
(SHEET 5 OF 5)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

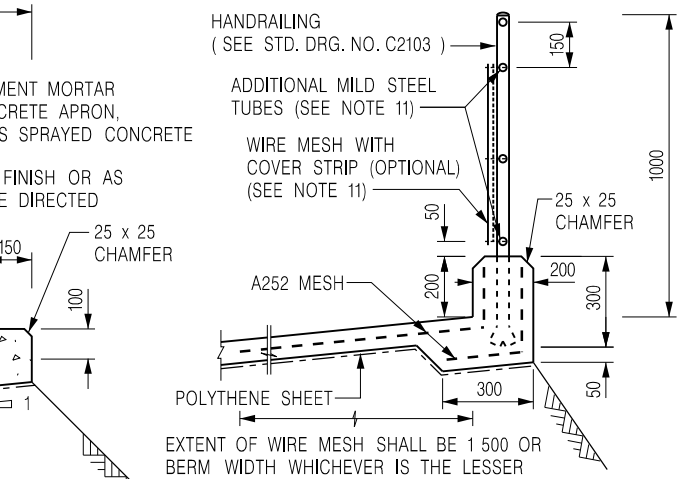
SCALE AS SHOWN

DATE JAN 1991

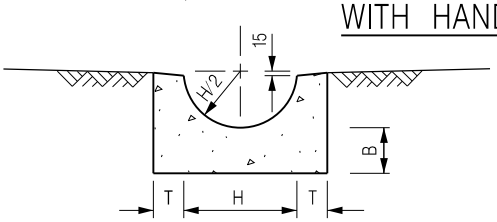
DRAWING NO. C2405 /5



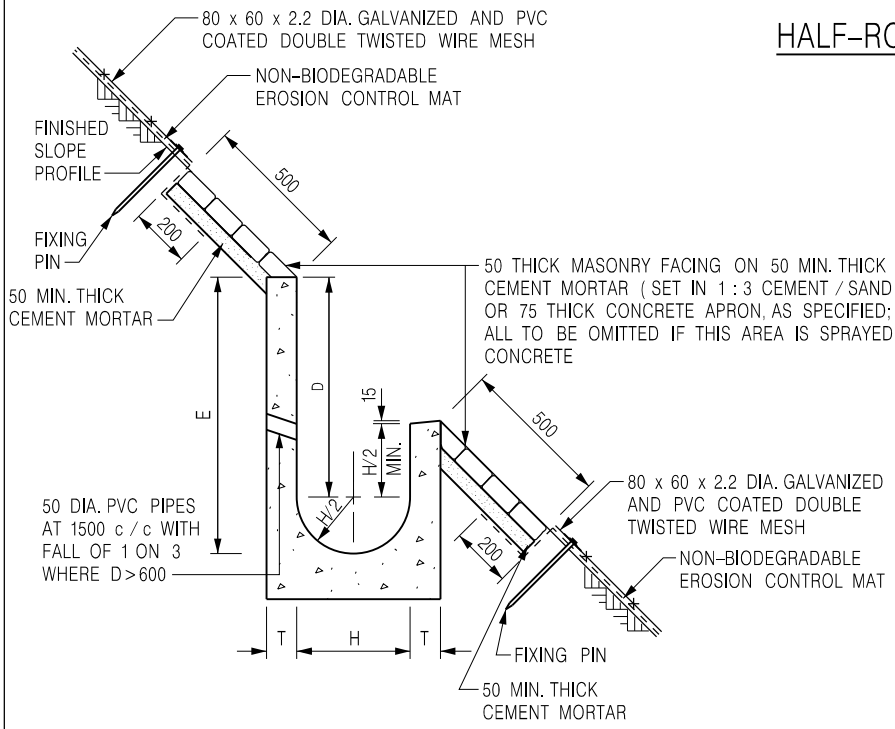
U-CHANNELS CONSTRUCTED ON BERM



DETAILS OF BERM WITH HANDRAILING



HALF-ROUND CHANNEL



U-CHANNELS NOT CONSTRUCTED ON BERM

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE TO BE GRADE 20 / 20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2, F2 OR BRUSHED FINISH AS DIRECTED.
4. SPACING OF EXPANSION JOINT IN CHANNELS, BERM SLABS AND APRONS TO BE 10 METRES MAXIMUM, SEE STD. DRG. NO. C2413 FOR DETAILS.
5. JOINTS FOR CHANNELS, BERM SLABS, APRONS AND WALLS, ETC. TO BE ON THE SAME ALIGNMENT.
6. FOR DIMENSIONS T, H, & B, SEE TABLE BELOW.
7. BIODEGRADABLE EROSION CONTROL MAT IF REQUIRED, SEE STD. DRG. NO. C2511/1E.
8. CONCRETE TO BE COLOURED AS SPECIFIED.
9. CONCRETE U-CHANNEL CAN BE CAST IN-SITU OR PRECAST CONCRETE SUBJECT TO THE ENGINEER'S AGREEMENT ON THE DETAILS.
10. DETAILS OF EROSION CONTROL MAT AND WESH MESH ON BERM. (SEE STD DRG. NO. C2511/1E)
11. THE WIRE MESH ON HANDRAILING IS OPTIONAL. THE COVER STRIP AND ADDITIONAL MILD STEEL TUBES ARE NEEDED ONLY IF WIRE MESH IS PROVIDED. (SEE STD. DRG. NO. C2103)

NOMINAL SIZE H	T	B	REINFORCEMENT
300	80	100	A252 MESH PLACED CENTRALLY AND T=100 WHEN E>650
375 – 600	100	150	
675 – 900	125	175	A252 MESH PLACED CENTRALLY

REF.	REVISION	SIGNATURE	DATE
J	DETAILS OF HANDRAILING AMENDED.	Original Signed	08.2024
I	MINOR AMENDMENT.	Original Signed	07.2018
H	THICKNESS OF MASONRY FACING AMENDED.	Original Signed	01.2005
G	MINOR AMENDMENT.	Original Signed	01.2004
F	GENERAL REVISION.	Original Signed	12.2002

DETAILS OF HALF-ROUND AND U-CHANNELS (TYPE A – WITH MASONRY APRON)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 25

DATE JAN 1991

DRAWING NO. C2409J