Total: 12 pages

Date: 26 May 2026

TPB Ref.: A/YL-LFS/607

By Email

Town Planning Board
15/F, North Point Government Offices
333, Java Road
North Point
Hong Kong
(Attn: The Secretary)

Dear Sir,

Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years at Lots 2035 RP (Part), 2036 RP (Part), 2037 (Part), 2038 (Part), 2039 (Part), 2040 RP, 2042 RP (Part), 2044 RP (Part), 2048 (Part), 2049 (Part), 2050, 2051, 2052, 2054 (Part), 2055 (Part), 2058 (Part) in D.D. 129 & Adjoining Government Land, Lau Fau Shan, Yuen Long, N.T.

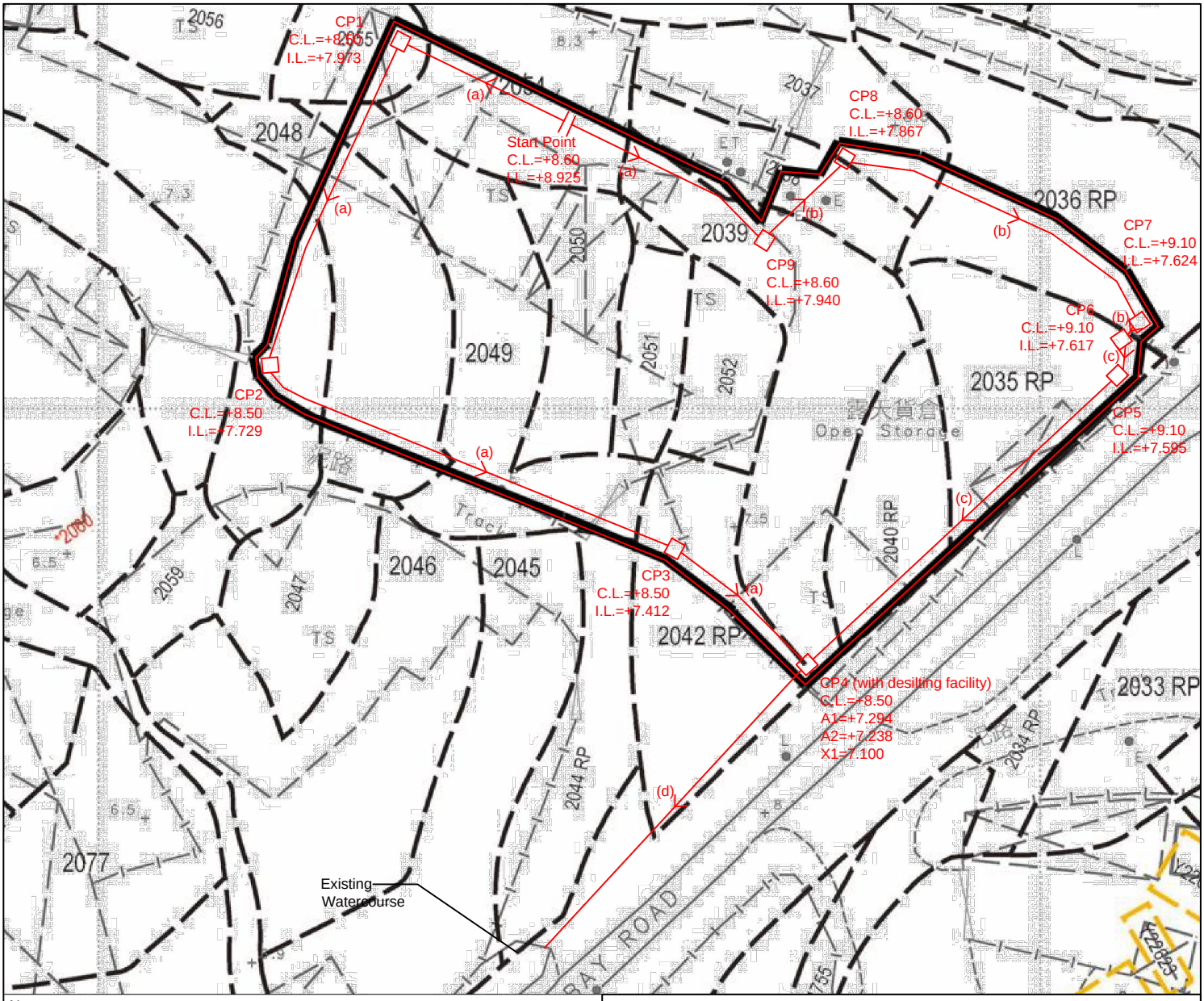
We are glad to submit the drainage proposal and FSI proposal herewith in support of the captioned application.

Should you have any enquiries, please feel free to contact our Mr. Patrick Tsui at [redacted] at your convenience.

Yours faithfully,

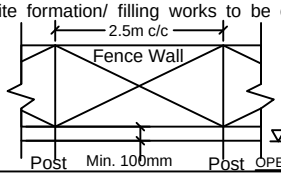
Patrick Tsui

c.c. Tuen Mun and Yuen Long West District Planning Office (Attn: Ms. Christina LEE) – By Email



Note:

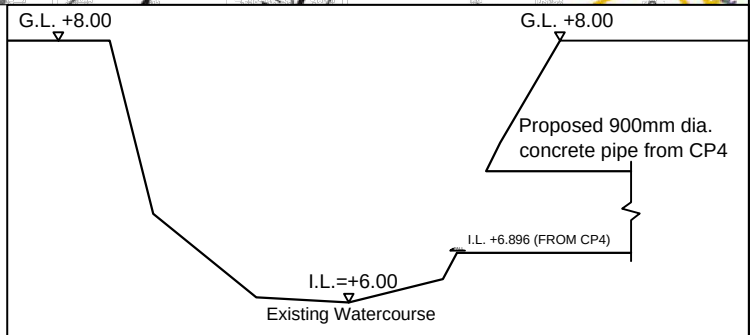
1. Catchpits (CP4) with desilting facility shall follow CEDD standard drawing No. C2406I.
2. Catchpit and UC follows Typical Details of Geotechnical Manual for Slope Fig.8.10 and Fig.8.11 respectively.
3. Fence Wall to be erected (if any) shall be Open-bottom type.
4. No site formation/ filling works to be carried out.



TYPICAL DETAIL OF OPEN-BOTTOM TYPE FENCE WALL

LEGEND

- CP — Proposed CatchPit
- (a) — Proposed 450UC (1:150) with Cast Iron Cover
- (b) — Proposed 525UC (1:150) with Cast Iron Cover
- (c) — Proposed 600UC (1:125) with Cast Iron Cover
- (d) — Proposed 900mm dia. concrete pipe (1:250)



CONNECTION DETAILS

正宏工程顧問公司

CHING WAN ENGINEERING CONSULTANT COMPANY

Title: Drainage Proposal - LAYOUT

D01–1

Drawn by: DM

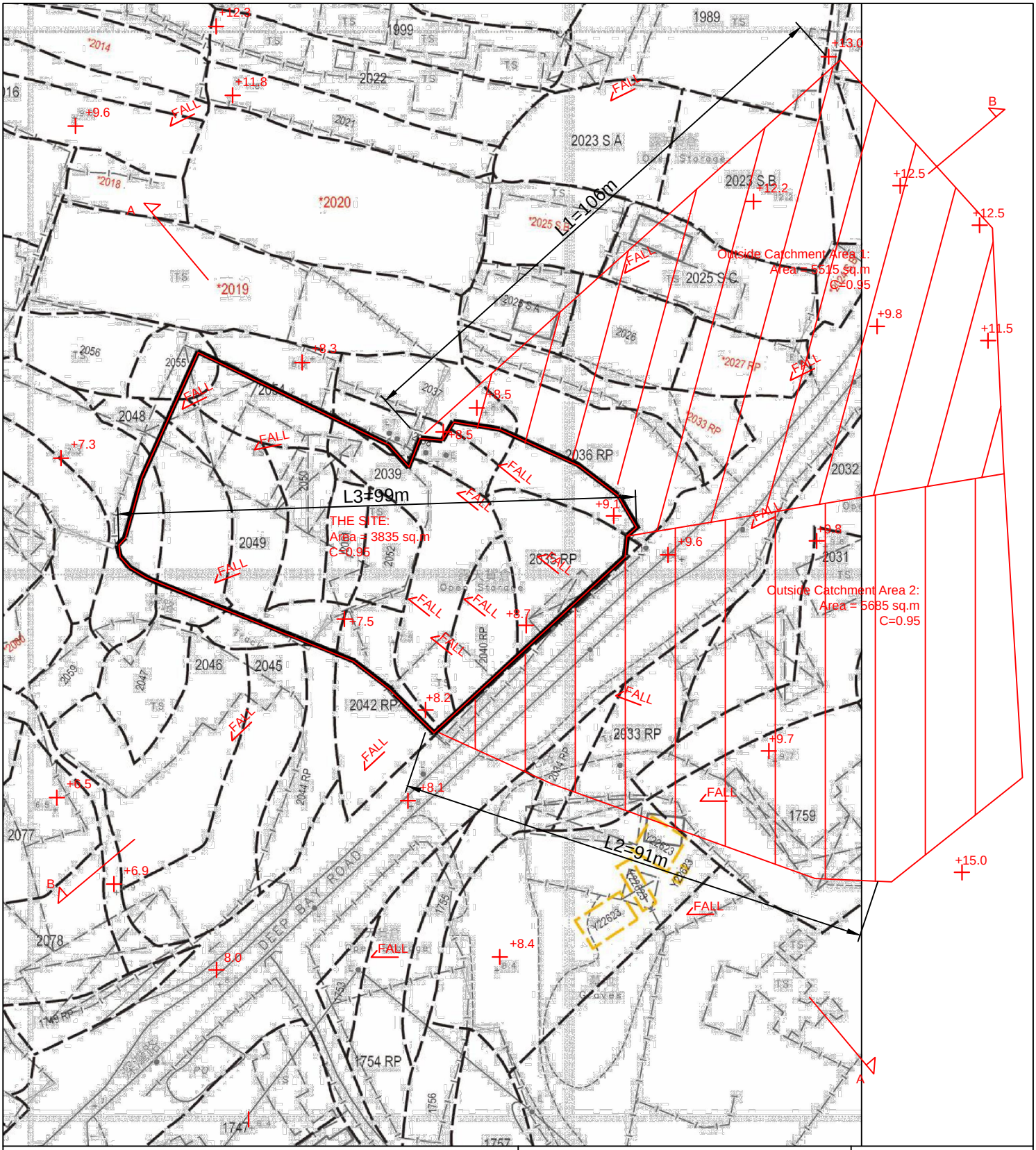
Date: 6–3–2026

Check by: DM

Scale: ----

Project:

Proposed Temporary Open Storage of Construction Materais for a Period of 3 Years at Lots 2035 RP (Part), 2036 RP (Part), 2037 (Part), 2038 (Part), 2039 (Part), 2040 RP, 2042 RP (Part), 2044 RP (Part), 2048 (Part), 2049 (Part), 2050, 2051, 2052, 2054 (Part), 2055 (Part) and 2058 (Part) in D.D. 129, Lau Fau Shan, Yuen Long, New Territories (Application Number:)

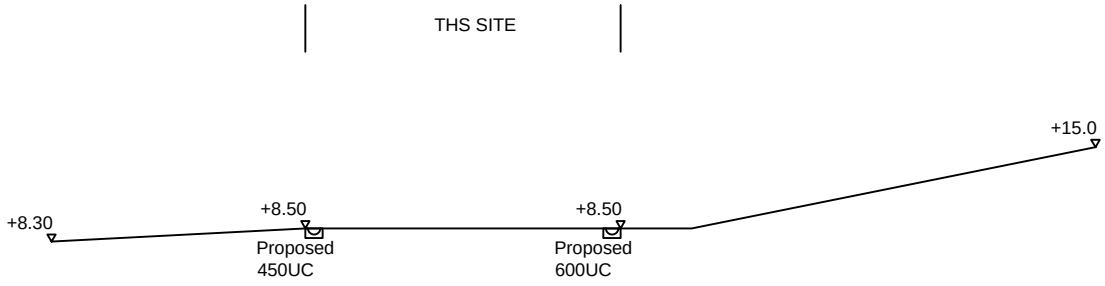


正宏工程顧問公司

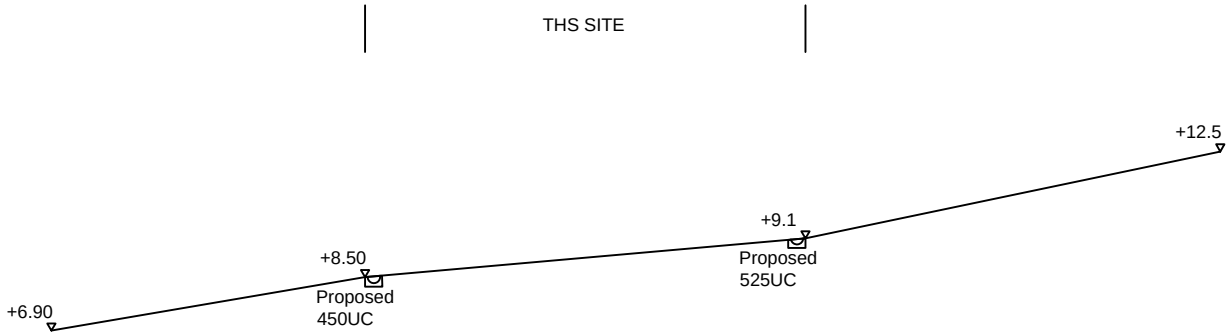
CHING WAN ENGINEERING CONSULTANT COMPANY

Title: Drainage Proposal - CATCHEMTN AREA PLAN		D02
Drawn by: DM	Date: 6-3-2026	
Check by: DM	Scale: ----	

Project:
Proposed Temporary Open Storage of Construction Materais for a Period of 3 Years at Lots 2035 RP (Part), 2036 RP (Part), 2037 (Part), 2038 (Part), 2039 (Part), 2040 RP, 2042 RP (Part), 2044 RP (Part), 2048 (Part), 2049 (Part), 2050, 2051, 2052, 2054 (Part), 2055 (Part) and 2058 (Part) in D.D. 129, Lau Fau Shan, Yuen Long, New Territories (Application Number:)



SECTION A-A



SECTION B-B

正宏工程顧問公司 CHING WAN ENGINEERING CONSULTANT COMPANY	Title: Drainage Proposal - SECTIONS	D03
	Drawn by: DM	Date: 6–3–2026
Project: **Proposed Temporary Open Storage of Construction Materais for a Period of 3 Years at Lots 2035 RP (Part), 2036 RP (Part), 2037 (Part), 2038 (Part), 2039 (Part), 2040 RP, 2042 RP (Part), 2044 RP (Part), 2048 (Part), 2049 (Part), 2050, 2051, 2052, 2054 (Part), 2055 (Part) and 2058 (Part) in D.D. 129, Lau Fau Shan, Yuen Long, New Territories (Application Number:)**	Check by: DM	Scale: ————

Outside Catchment Area 1, Area = 5515 m^2 (C= 0.95) L1= 106 m

Outside Catchment Area 2, Area = 5685 m^2 (C= 0.95) L2= 91 m

THE SITE, Area = 3835 m^2 (C= 0.95) L3= 99 m

Calculation of Design Runoff of the Proposed Development,

For the design runoff from Outside Catchment Area 1

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

$A = 5515\ m^2$

$= 5515$

$= 0.005515\ km^2$

$t = 0.14465\ L1/\ H^{0.2}A^{0.1}$

$= 0.14465*106/1^{0.2}*5515^{0.1}$

$= 6.478$ min

$i = 1.16*a/(t+b)^c$ (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (16% increase due to climate change)

$= 1.16*505.5/(6.478+3.29)^{0.355}$

$= 261.1$ mm/hr

Therefore, $Q1 = 0.278*0.95*261.1*0.005515$

$= 0.3803\ m^3/sec$

$= \underline{\mathbf{22817}}$ lit/min

Calculation of Design Runoff of the Proposed Development,

For the design runoff from Outside Catchment Area 3

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

$A = 5685\ m^2$

$= 5685$

$= 0.005685\ km^2$

$t = 0.14465\ L2/\ H^{0.2}A^{0.1}$

$= 0.14465*91/1^{0.2}*5685^{0.1}$

$= 5.545$ min

$i = 1.16*a/(t+b)^c$ (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (16% increase due to climate change)

$= 1.16*505.5/(5.545+3.29)^{0.355}$

$= 270.6$ mm/hr

Therefore, $Q2 = 0.278*0.95*270.6*0.005685$

$= 0.4062\ m^3/sec$

$= \underline{\mathbf{24374}}$ lit/min

For the design runoff from The Site

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

$A = 3835\ m^2$

$= 3835$

$= 0.003835\ km^2$

$t = 0.14465\ L3/\ H^{0.2}A^{0.1}$

$= 0.14465*99/1^{0.2}*3835^{0.1}$

$= 6.27$ min

$i = 1.16*a/(t+b)^c$ (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (16% increase due to climate change)

$= 1.16*505.5/(6.27+3.29)^{0.355}$

$= 263.1$ mm/hr

Therefore, $Q3 = 0.278*0.95*263.1*0.003835$

$= 0.2664\ m^3/sec$

$= \underline{\mathbf{15986}}$ lit/min

For the design of drains from CP9 to CP6, Q1

$Q = Q1$

$= \underline{\mathbf{22817}}$ lit/min

Provid 525UC(1:150)

For the design of drains from CP6 to CP4, Q1+Q2

$Q = Q1 + Q2$

$= 22817 + 24374$

$= \underline{\mathbf{47191}}$ lit/min

Provid 600UC(1:125)

For the design of drains from Start Point to CP9 and Start Point to CP4 via CP1, Q3

$Q = Q3$

$= \underline{\mathbf{15986}}$ lit/min

Provid 450UC(1:150)

For the design of drains outfall from the site, All Runoff (Q from Portion 2 + Portion 3)

$Q = Q1 + Q2 + Q3$

$= 22817 + 24374 + 15986$

$= \underline{\mathbf{63177}}$ lit/min

Provid 900mm dia. concrete pipe (1:250)

GEO Technical Guidance Note No. 43 (TGN 43)
Guidelines on Hydraulic Design of U-shaped and Half-round Channels on Slopes

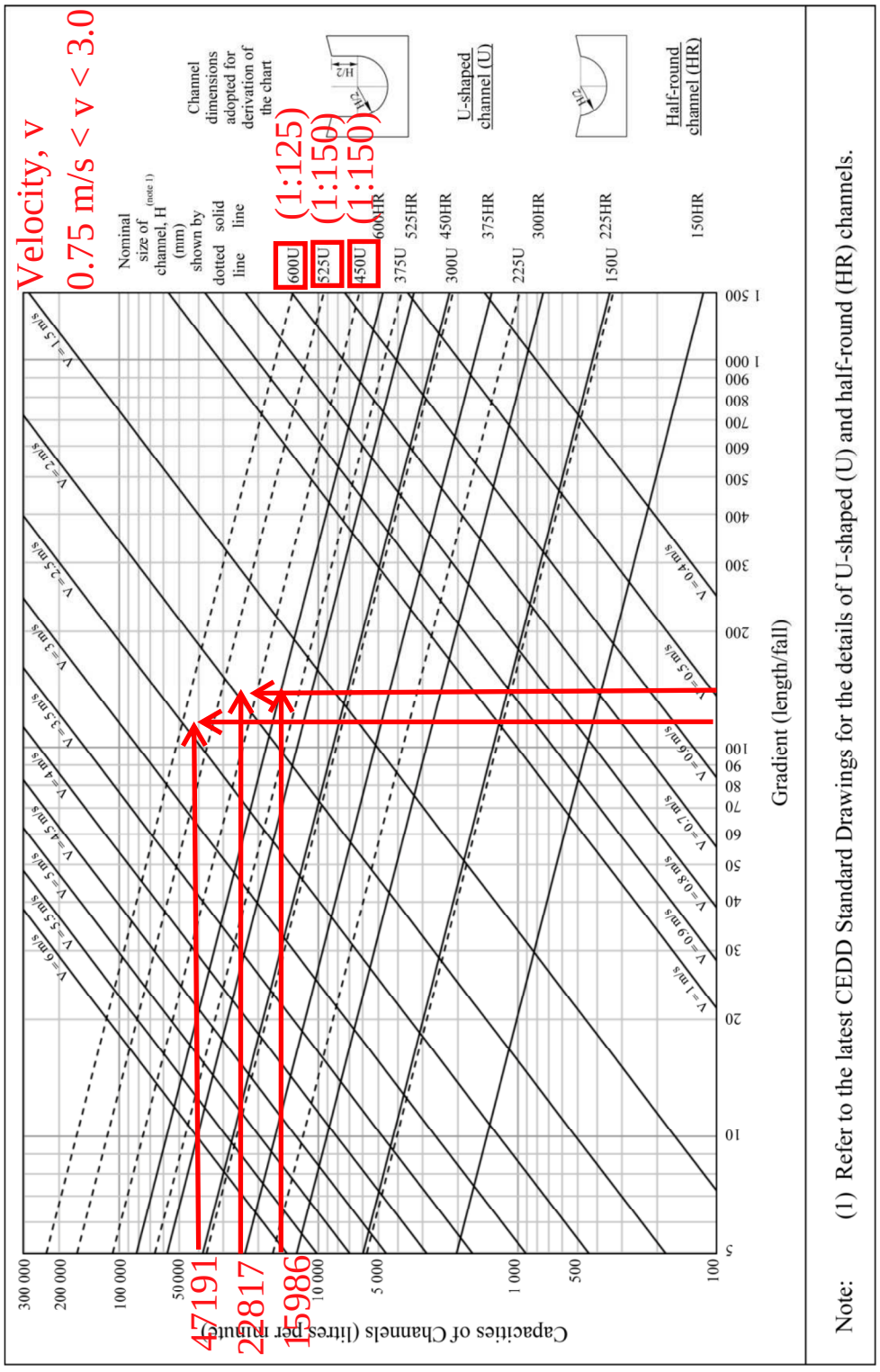


Figure 1 - Chart for the rapid design of U-shaped and half-round channels up to 600 mm

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

Check 900mm dia. Pipes by Colebrook-White Equation

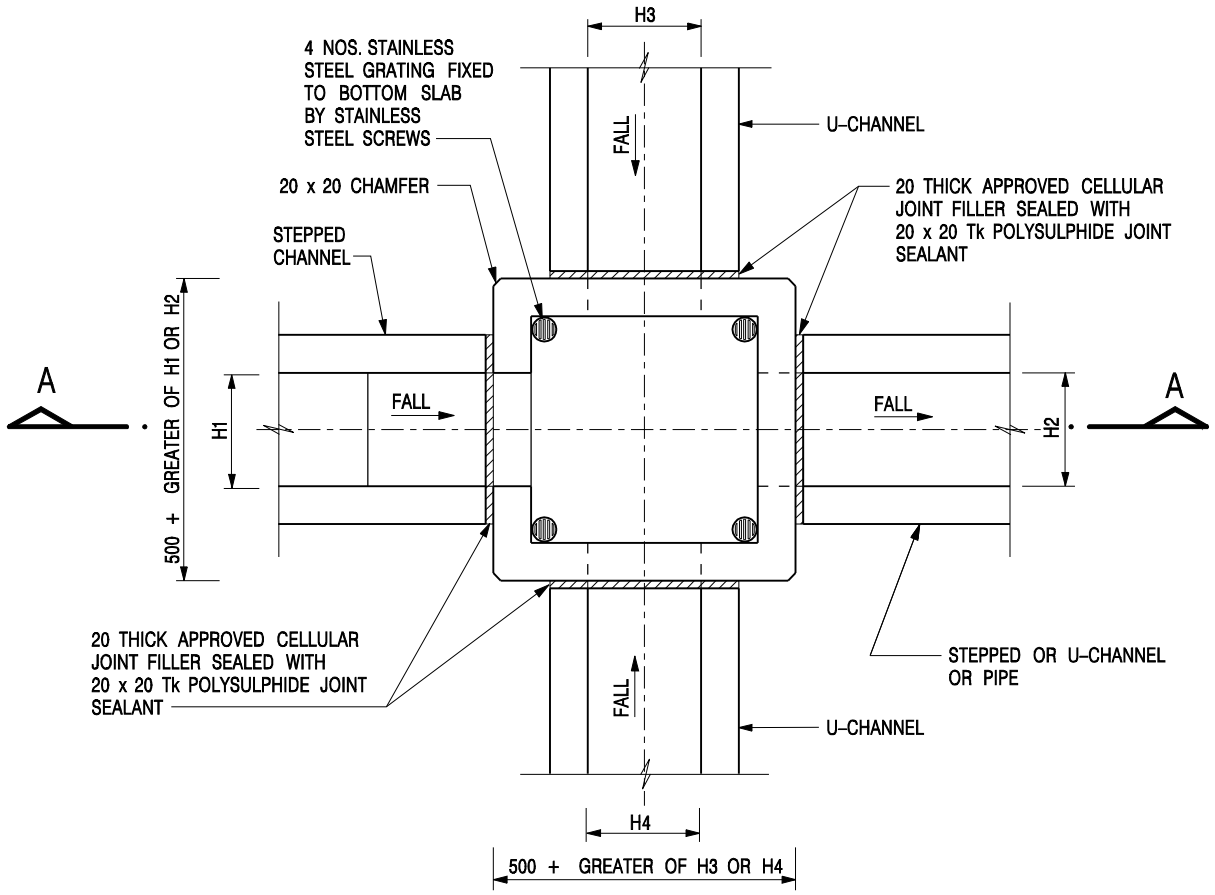
$$V = -\sqrt{(8gDs)}\log\left(\frac{ks}{3.7D} + \frac{2.51v}{D\sqrt{(2gDs)}}\right)$$

where :

V	=			mean velocity (m/s)	
g	=	9.81	m/s2	gravitational acceleration (m/s2)	
D	=	0.9	m	internal pipe diameter (m)	
ks	=	0.00006	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	=	0.004		hydraulic gradient (1: 250)	

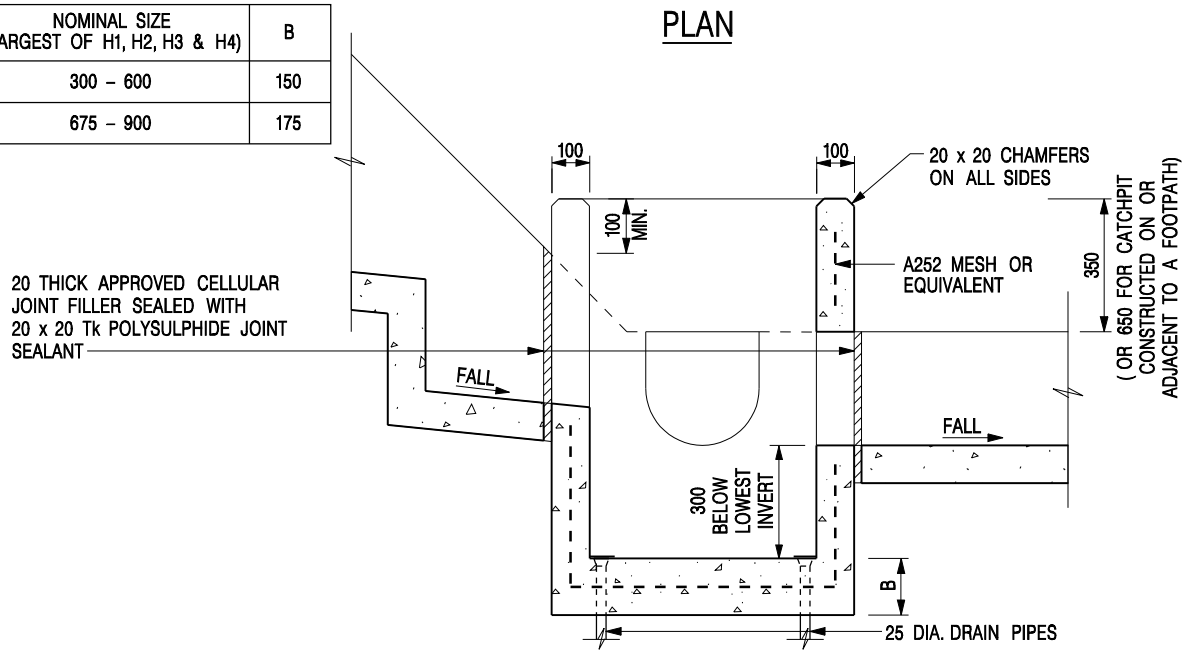
Therefore, design V of pipe capacity = 2.40 m/s

Q= 0.8VA (0.8 factor for sedimentation)
= 1.224 m3/s
= 73416 lit/min
> 63177 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

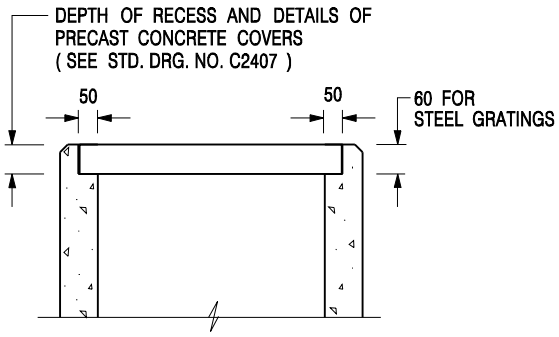
(SHEET 1 OF 2)

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

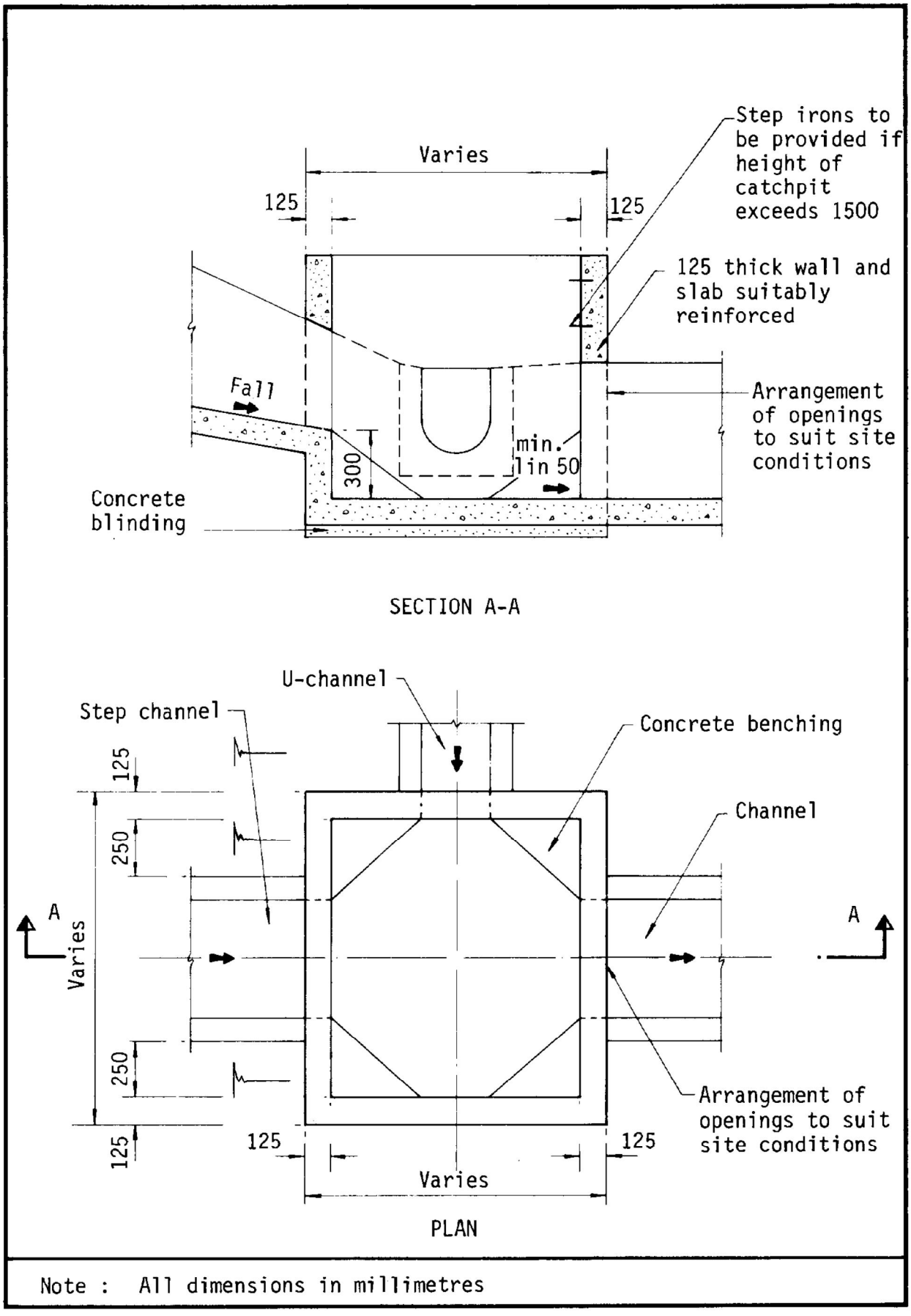
CATCHPIT WITH TRAP
(SHEET 2 OF 2)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

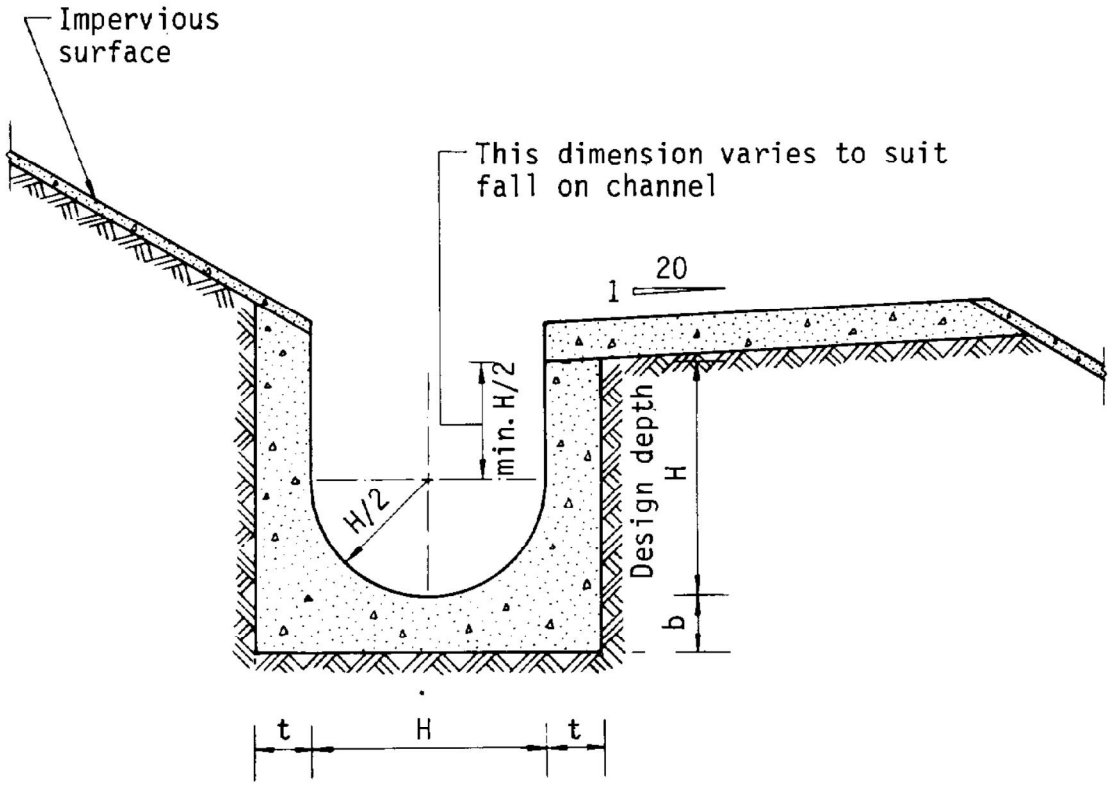
DATE JAN 1991

DRAWING NO. C2406 /2A



Note : All dimensions in millimetres

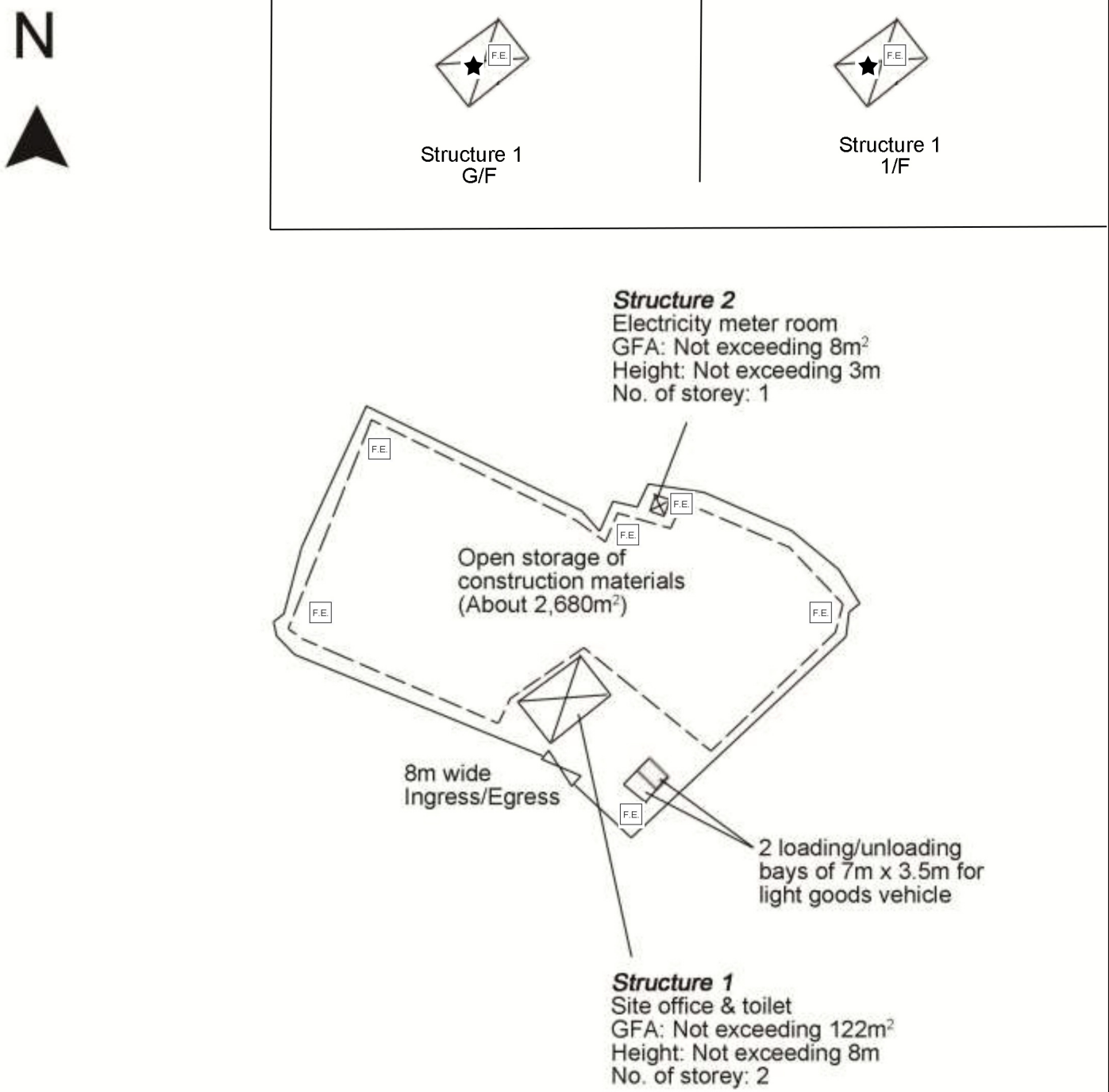
Figure 8.10 - Typical Details of Catchpits



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



F.S.NOTES:

1 THE STAND-ALONE FIRE DETECTOR SHALL BE PROVIDED IN ACCORDANCE WITH THE "STAND-ALONE FIRE DETECTOR GENERAL GUIDELINES ON PURCHASE, INSTALLATION & MAINTENANCE [SEP 2021]"

2 PORTABLE FIRE FIGHTING APPLIANCES SHALL BE PROVIDED AT POSITIONS AS INDICATED ON LAYOUT PLAN. IN ACCORDING TO CODES OF PRACTICE FOR MINIMUM FIRE SERVICES INSTALLATIONS AND EQUIPMENT.

Project 項目名稱:

Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years at Lots 2035 RP (Part), 2036 RP (Part), 2037 (Part), 2038 (Part), 2039 (Part), 2040 RP, 2042 RP (Part), 2044 RP (Part), 2048 (Part), 2049 (Part), 2050, 2051, 2052, 2054 (Part), 2055 (Part), 2058 (Part) in D.D. 129 & Adjoining Government Land, Lau Fau Shan, Yuen Long, N.T.

Drawing Title 圖目:

Fire Service Installations Proposal

Drawing No. 圖號:

Figure 1

Remarks 備註:

F.E. 5kg carbon dioxide fire extinguisher

★ Stand alone battery type smoke detector

Scale 比例:

1:1000