Total: 12 pages

Date: 14 July 2026

TPB Ref.: A/YL-TYST/1365

By Email

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

Dear Sir,

Temporary Warehouses for Storage of Exhibition Materials, Vehicle Parts & Food Provision for a Period of 3 Years at Lots 1013 S.A (Part), 1013 S.B (Part) & 1014 in D.D. 119, Pak Sha Tsuen, Yuen Long, N.T.

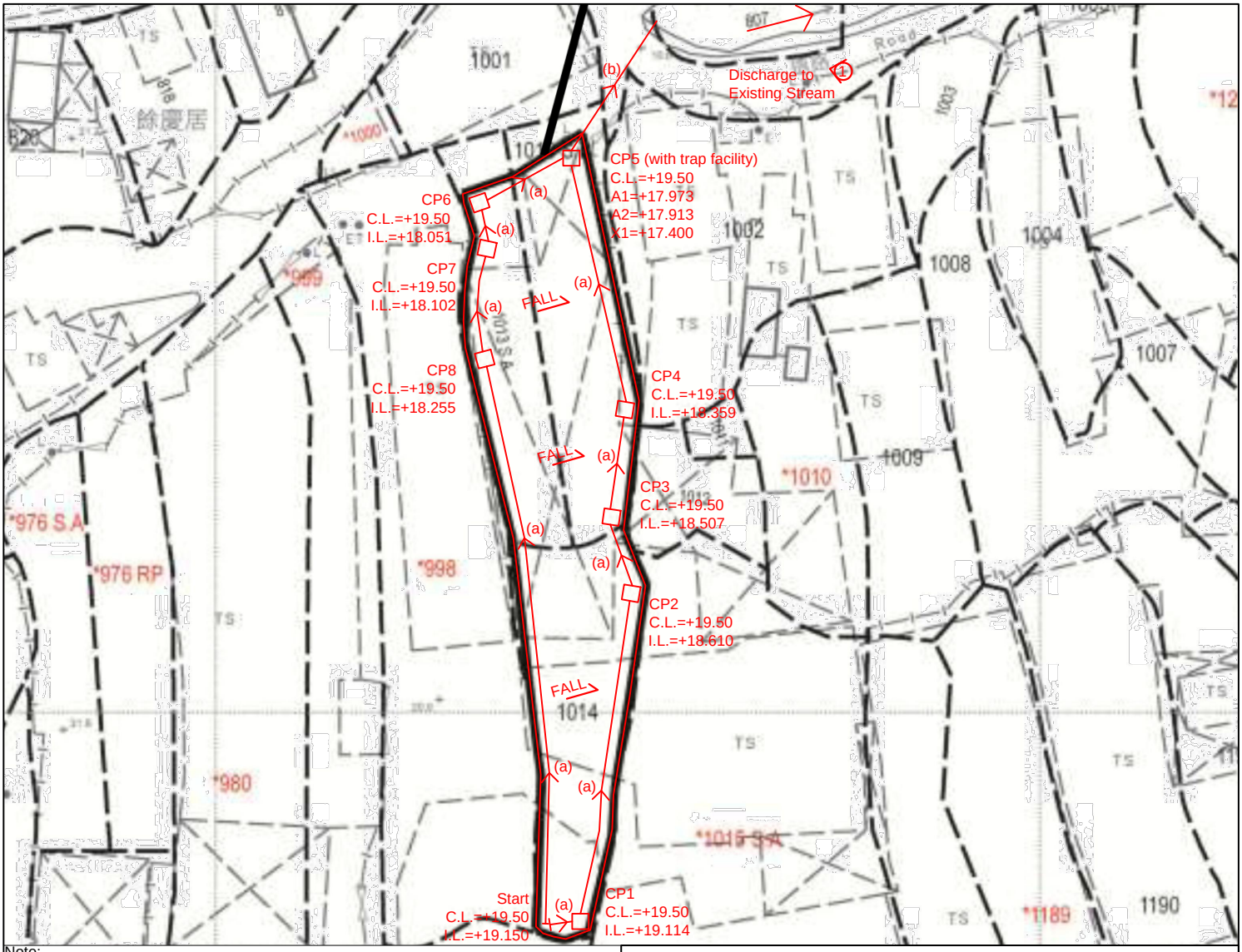
We are glad to submit the drainage proposal and FSI proposal in support of the captioned application.

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. Emily WONG) – By Email

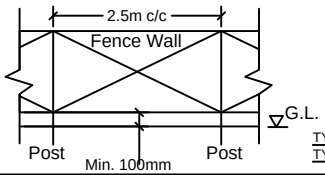


Note:

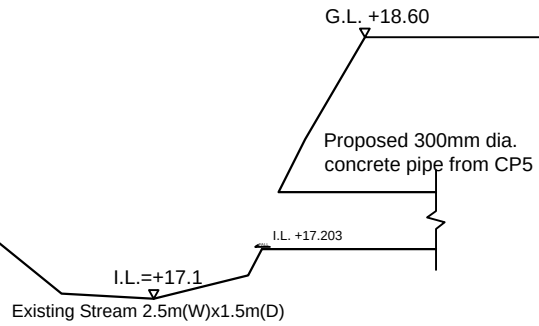
1. Catchpits (CP5) with trap facility shall follow CEDD standard drawing No. C2406I.
2. Catchpit and UC follows Typical Details of Geotechnical Manual for Slope Fig.8.10 and Fig.8.11 respectively.
3. Fence Wall to be erected (if any) shall be Open-bottom type.
4. No site formation/levelling works to be carried out.

LEGEND

CP	Proposed CatchPit
(a)	Proposed 300UC (1:100) with Cast Iron Cover
(b)	Proposed 300mm dia. concrete pipe(1:100)
1	Photo Viewspot



TYPICAL DETAIL OF OPEN-BOTTOM TYPE FENCE WALL



CONNECTION DETAILS

正宏工程顧問公司

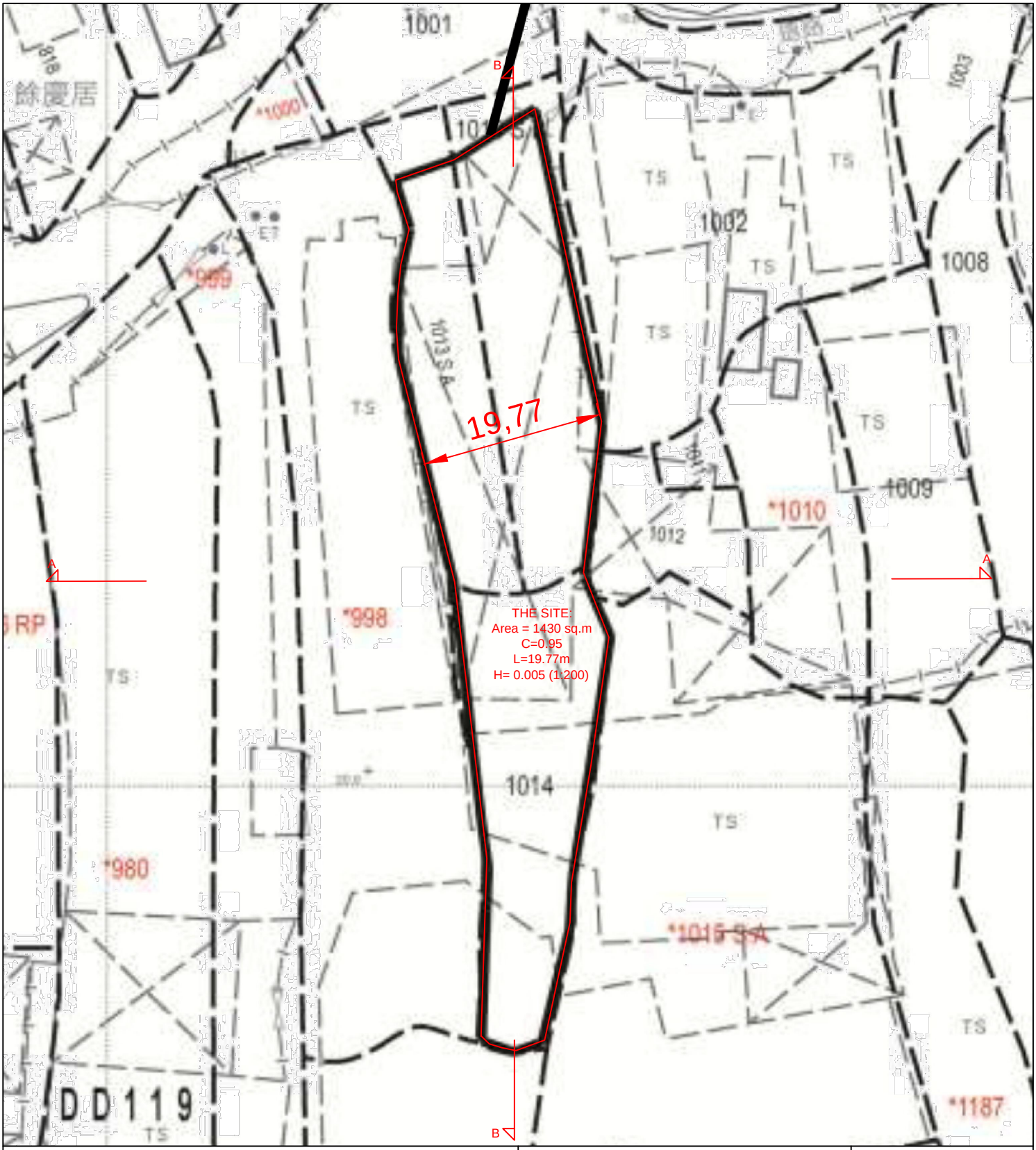
CHING WAN ENGINEERING CONSULTANT COMPANY

Project:

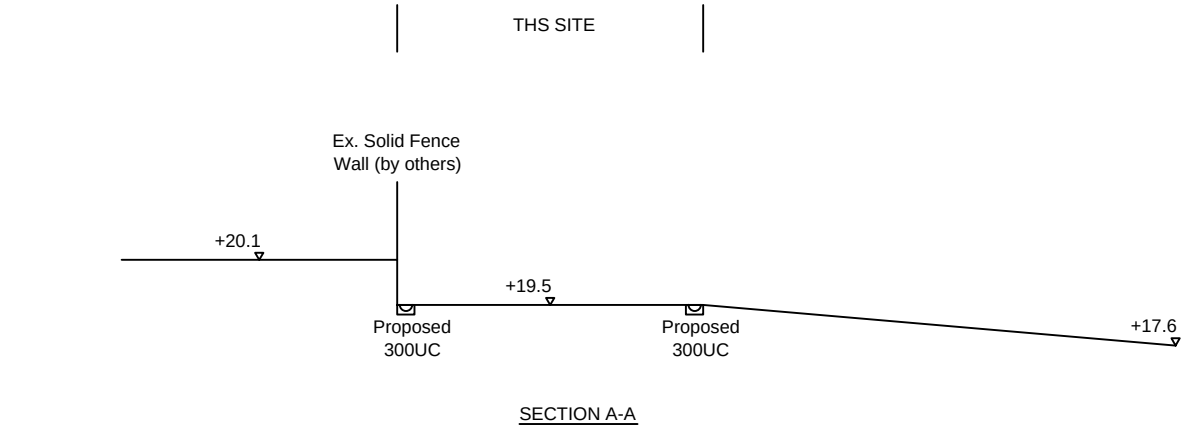
Proposed Temporary Warehouse for Storage of Exhibition Materials, Vehicle Parts & Food Provision for a Period of 3 Years at Lots 1013S.A (Part), 1013 S.B (Part) and 1014 in D.D. 119, Pak Sha Tsuen, Yuen Long, New Territories

(Application Number:)

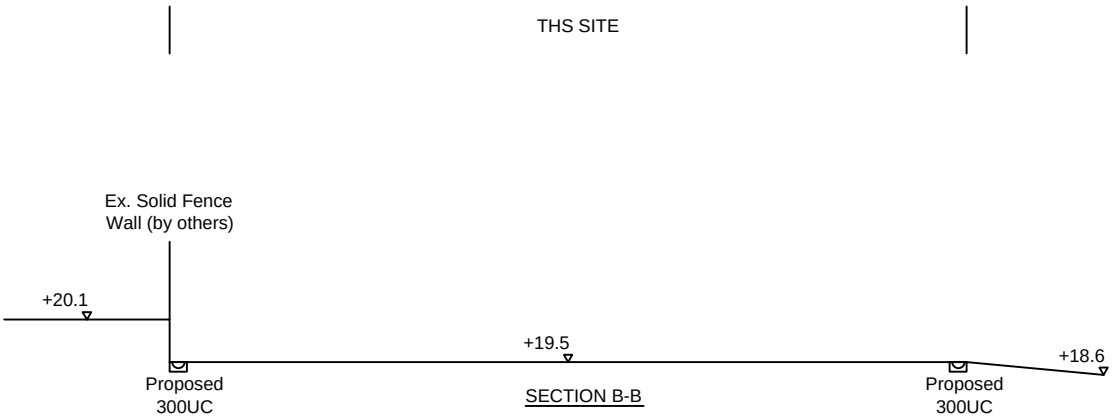
Title: Drainage Proposal - LAYOUT	D01
Drawn by: DM	Date: 14–7–2026
Check by: DM	Scale: ————



正宏工程顧問公司 CHING WAN ENGINEERING CONSULTANT COMPANY	Title: Drainage Proposal - CATCHEMTN AREA PLAN	D02
	Drawn by: DM	Date: 14–7–2026
Project: **Proposed Temporary Warehouse for Storage of Exhibition Materials, Vehicle Parts & Food Provision for a Period of 3 Years at Lots 1013S.A (Part), 1013 S.B (Part) and 1014 in D.D. 119, Pak Sha Tsuen, Yuen Long, New Territories** **(Application Number:)**	Check by: DM	Scale: – – – –



SECTION A-A



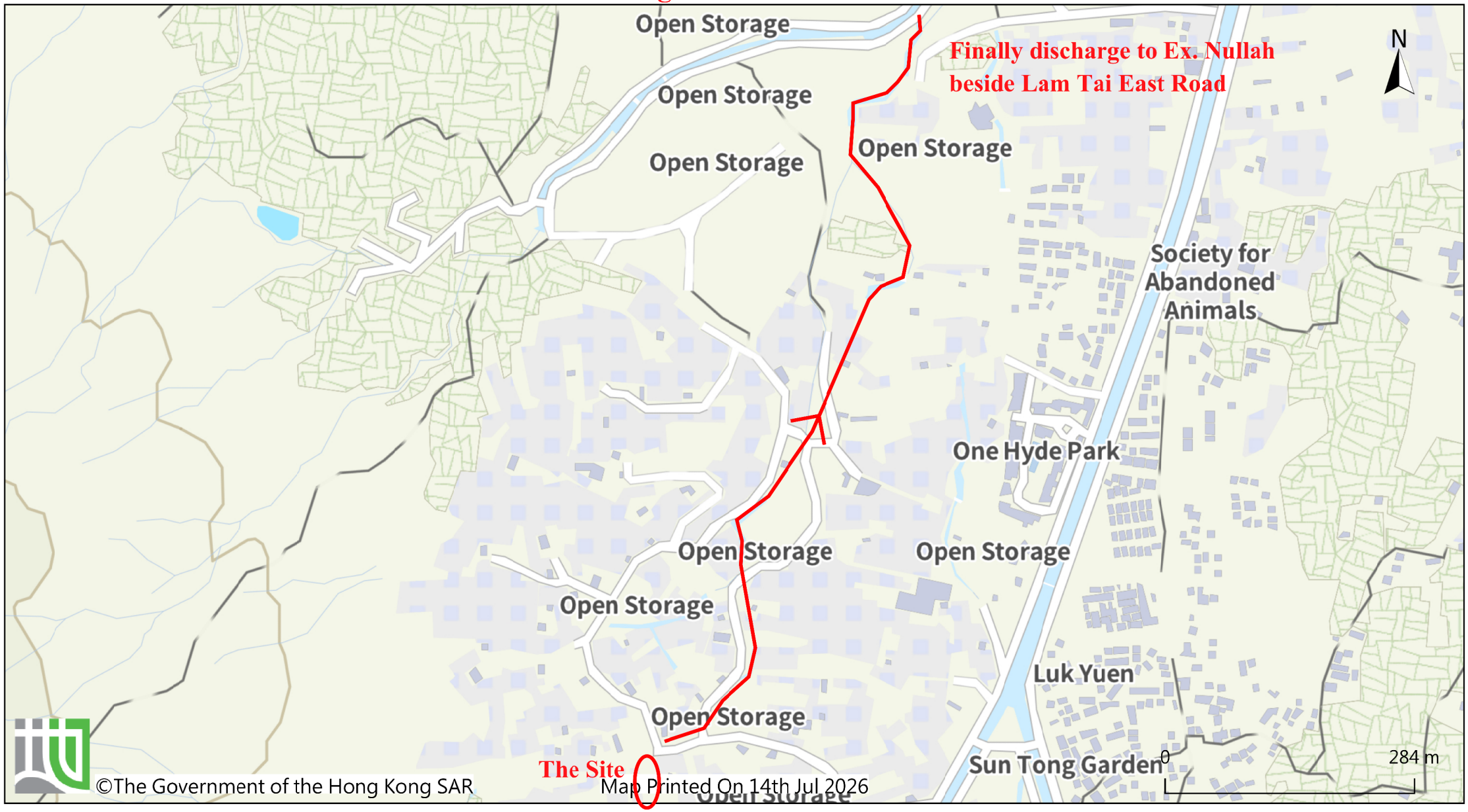
SECTION B-B

正宏工程顧問公司 CHING WAN ENGINEERING CONSULTANT COMPANY	Title: Drainage Proposal - SECTIONS	D03
	Drawn by: DM	Date: 14−7−2026
Project: **Proposed Temporary Warehouse for Storage of Exhibition Materials, Vehicle Parts & Food Provision for a Period of 3 Years at Lots 1013S.A (Part), 1013 S.B (Part) and 1014 in D.D. 119, Pak Sha Tsuen, Yuen Long, New Territories** **(Application Number:)**	Check by: DM	Scale: −−−−

GEOINFO MAP
地理資訊地圖

Go to map: https://www.map.gov.hk/gm/geo:22.4232,114.0173?z=9028

Fina Discharge Path



Powered by GeoInfo Map: https://www.map.gov.hk

Google

香港, 新界

Photo 1

THE SITE, Area = 1430 m^2 (C= 0.95) L= 19.77 m, H= 0.005 m

Calculation of Design Runoff of the Proposed Development,

The Site:

A = 1430 m^2
= 1430
= 0.00143 km^2

t = $0.14465\ L/H^{0.2}A^{0.1}$
= $0.14465*19.77/0.005^{0.2}*1430^{0.1}$
= 3.990 min

i = $1.16*a/(t+b)^c$ (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (16% increase due to climate change)
= $1.16*505.5/(3.990+3.29)^{0.355}$
= 289.8 mm/hr

Therefore, Q1 = 0.278*0.95*289.8*0.00143/0.9 (0.9 factor is adopted for sedimentation)
= **0.1216** m^3/sec

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

where R = $(\pi r^2/2+2r^2)/(\pi r+2r)$ r= 0.15 m
= 0.1042 m A= 0.0803 m^2

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

S_f = 0.010 (1: 100)

Therefore, V = $0.1563^{2/3}*0.004^{0.5}/0.014$
= **1.845** m/sec

Maximum Capacity (Q_{max}) = V*A
= **0.1482** m^3/sec
> **0.1216** m^3/sec
% Utilization = **82%**

Provide 300UC (1:100) is OK

Colebrook-White Equation

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

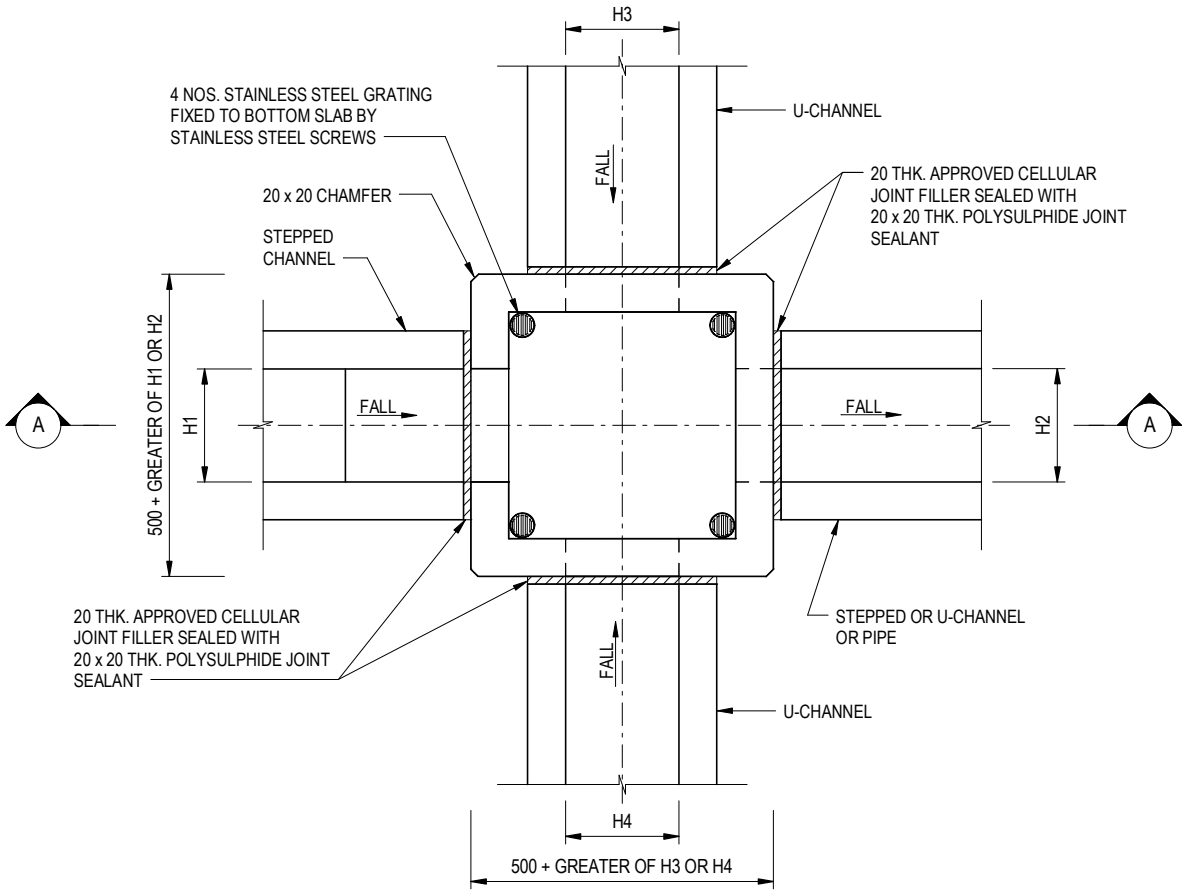
where :

V	=			mean velocity (m/s)
g	=	9.81	m/s2	gravitational acceleration (m/s2)
D	=	0.3	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	=	0.010		hydraulic gradient (1: 100)

Therefore, design V of pipe capacity = 1.955 m/s

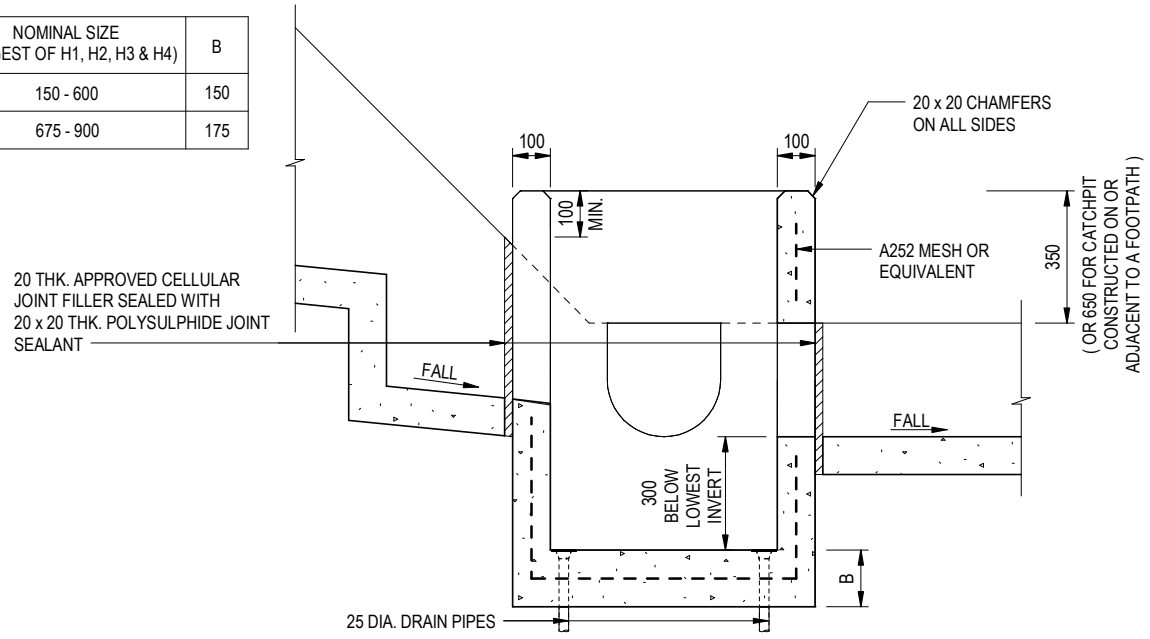
Q = VA (0.8 factor for sedimentation)
= **0.138** m3/s
> **0.1216** lit/min Ok
% Utilization = **88%**

Provide 300mm dia. concrete pipe (1:100) is OK



PLAN

NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
150 - 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
A	BIM OBJECT REVISION.	Original Signed	12.2025
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

CATCHPIT WITH TRAP (SHEET 1 OF 2)

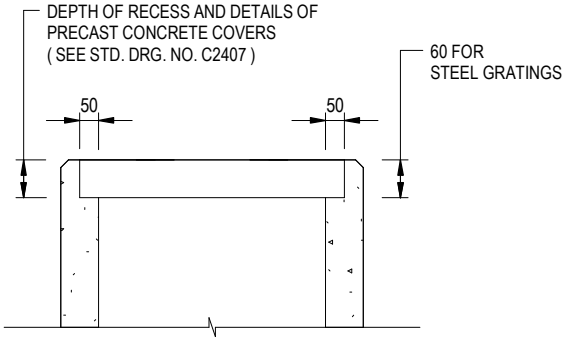
CEDD

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2406 /1A



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 1000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.

10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1000 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
B	BIM OBJECT REVISION.	Original Signed	12.2025
A	MINOR AMENDMENT.	Original Signed	04.2016
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

CATCHPIT WITH TRAP
(SHEET 2 OF 2)

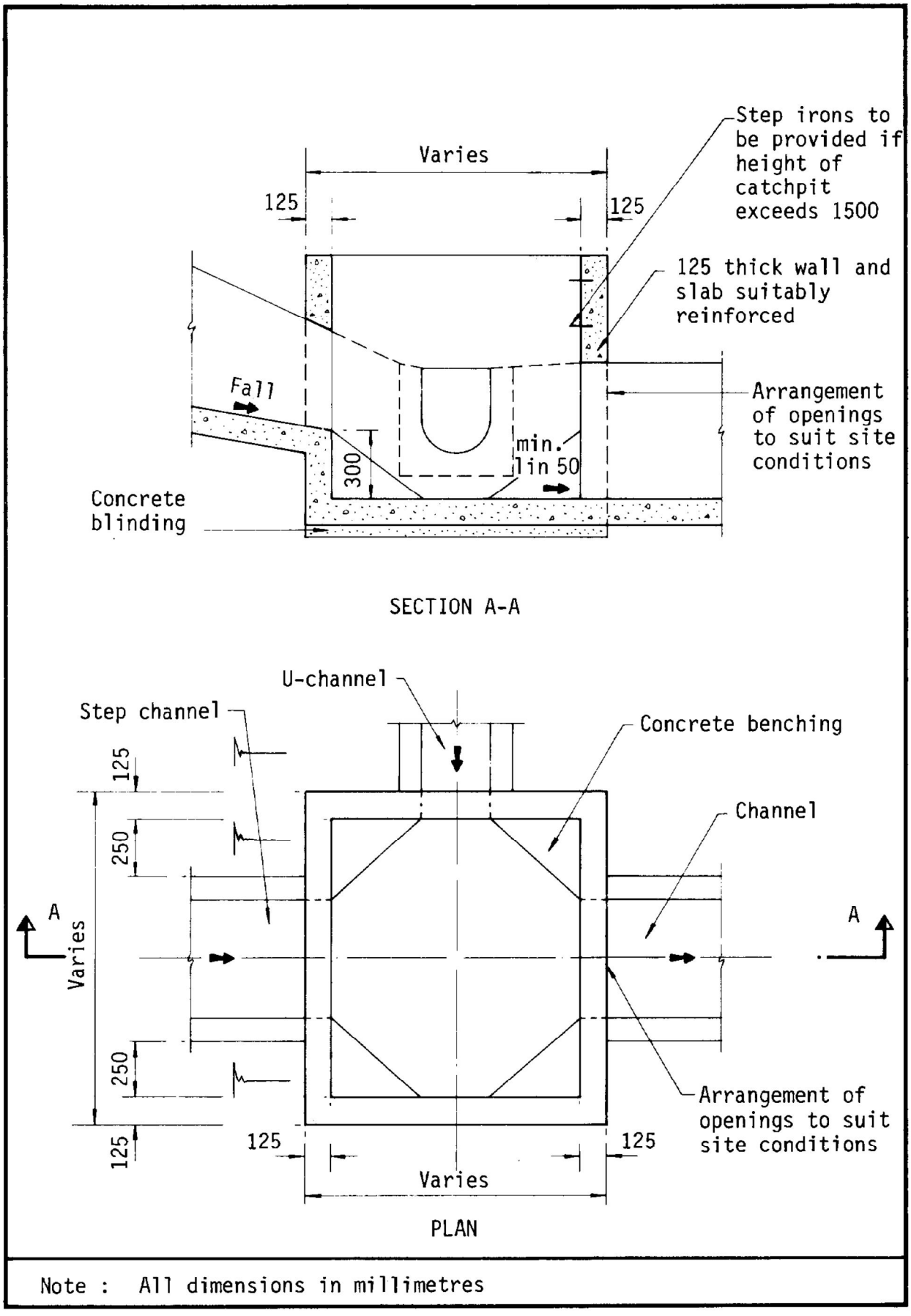
CEDD

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

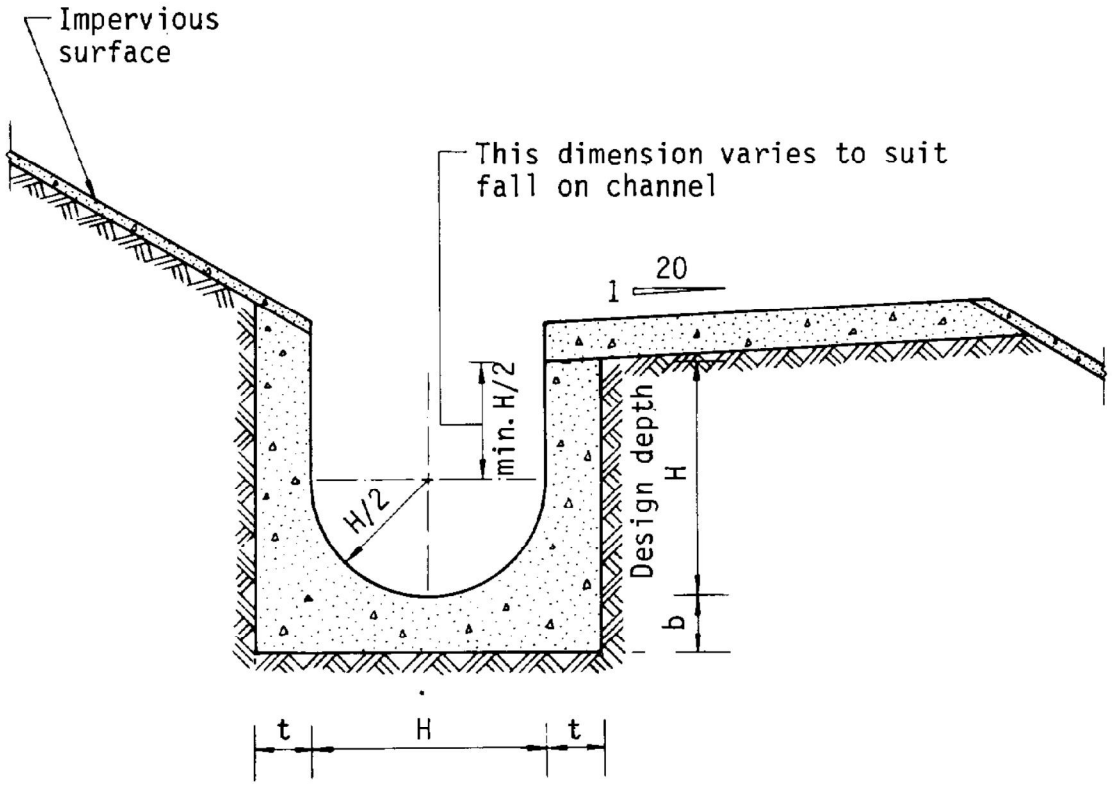
DATE JAN 1991

DRAWING NO.
C2406 /2B



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. GENERAL

1.1 FIRE SERVICE INSTALLATIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE CODES OF PRACTICE FOR MINIMUM FIRE SERVICE INSTALLATIONS AND EQUIPMENT AND INSPECTION, TESTING AND MAINTENANCE OF INSTALLATIONS AND EQUIPMENT 2022 (COP 2022), FSD CIRCULAR LETTERS AND THE HONG KONG WATERWORKS STANDARD REQUIREMENTS. [SEP 2022]"

1.2 ALL TUBES AND FITTINGS SHALL BE G.M.S. TO BS1387 MEDIUM GRADE WHERE PIPEWORK UP TO ø150mm.

1.3 ALL TUBES AND FITTINGS SHALL BE DUCTILE IRON TO BS EN545 K12 WHERE PIPEWORK ABOVE ø150mm.

1.4 ALL DRAIN PIPES SHALL BE DISCHARGED TO A CONSPICUOUS POSITION WITHOUT THE POSSIBILITY OF BEING SUBMERGED.

1.5 ALL PUDDLE FLANGES SHALL BE MADE OF DUCTILE IRON

1.6 SMOKE EXTRACTION SYSTEM(S) SHALL NOT BE PROVIDED AS THE AGGREGATE AREA OF OPERABLE WINDOW OF STRUCTURE EXCEEDS 6.25% OF THE FLOOR AREA OF THE COMPARTMENT.

1.7 VENTILATION/AIR CONDITIONING SYSTEM NOT TO BE PROVIDED.

2. AUTOMATIC SPRINKLER SYSTEM

2.1 AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH LPC RULES FOR AUTOMATIC SPRINKLER INSTALLATIONS INCORPORATING BS EN 12845: 2015 (INCLUDING TECHNICAL BULLETINS, NOTES, COMMENTAR AND RECOMMENDATIONS) AND FSD CIRCULAR LETTER NO. 5/2020. THE CLASSIFICATION OF THE OCCUPANCIES WILL BE ORDINARY HAZARD GROUP III.

2.2 ONE 135m^3 SPRINKLER WATER TANK WILL BE PROVIDED AS INDICATED ON PLAN. THE TOWN MAIN WATER SUPPLY WILL BE FED FROM SINGLE END.

2.3 TWO SPRINKLER PUMPS (DUTY/STANDBY) AND ONE JOCKEY PUMP SHALL BE PROVIDED IN FS PUMP ROOM LOCATED AT EXTERNAL AREA.

2.4 SPRINKLER CONTROL VALVE SET AND SPRINKLER INLET SHALL BE PROVIDED AS INDICATED ON PLAN.

2.5 A TEST VALVE SHALL BE PROVIDED FOR EACH ZONE OF SPRINKLER PIPE. THIS VALVE SHALL BE AT A CONSPICUOUS POSITION THAT WATER CAN BE DRAINED AWAY EASILY.

2.6 ALL SUBSIDIARY STOP VALVES TO BE ELECTRIC MONITORING TYPE.

2.7 ALL ELECTRIC TYPE VALVES SHOULD GIVE VISUAL SIGNALS TO FIRE SERVICE MAIN SUPERVISORY CONTROL PANEL TO INDICATE THE STATUS (OPEN/CLOSE) OF THE VALVES.

2.8 SECONDARY ELECTRICITY SUPPLY DIRECTLY TEE OFF BEFORE CLP'S INCOMING MAIN SWITCH SHALL BE PROVIDED FOR THE SPRINKLER PUMPS.

2.9 THE SPRINKLER SYSTEM DESIGN IS BASED ON THE FOLLOWINGS:
HAZARD CLASS : ORDINARY HAZARD GROUP III
TYPE OF STORAGE : POST-PALLET (ST2)
STORAGE CATEGORY : CATEGORY I
MAXIMUM STORAGE HIEGHT : 3.5m
SPRINKLER PROTECTION : CEILING PROTECTION ONLY
THE MAXIMUM STORAGE AREAS SHALL BE 50m^2 FOR SINGLE BLOCK
THE MINIMUM CLEARANCE AROUND EACH SINGLE STORAGE CLOCK : 2.4m

THE SPRINKLER SYSTEM DESIGN IS BASED ON THE FOLLOWINGS:
HAZARD CLASS : ORDINARY HAZARD GROUP III
TYPE OF STORAGE : FREE STANDING
STORAGE CATEGORY : CATEGORY I
MAXIMUM STORAGE HIEGHT : 4m
SPRINKLER PROTECTION : CEILING PROTECTION ONLY
THE MAXIMUM STORAGE AREAS SHALL BE 50m^2 FOR SINGLE BLOCK
THE MINIMUM CLEARANCE AROUND EACH SINGLE STORAGE CLOCK : 2.4m

3. FIRE DETECTOR SYSTEM

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

3.2 WHERE TWO OR MORE STAND-ALONE FIRE DETECTORS ARE INSTALLED IN AN ENCLOSED STRUCTURE, ALL DETECTORS SHALL BE INTERCONNECTED (EITHER WIRED OR WIRELESSLY) SUCH THAT WHEN ONE OF THE DETECTORS IS TRIGGERED, ALL CONNECTED DETECTORS SHALL SOUND AN ALARM SIMULTANEOUSLY.

4. EMERGENCY LIGHTING

4.1 EMERGENCY LIGHTING SHALL BE PROVIDED IN ACCORDANCE WITH "BS 5266-1 :2016 AND BS EN 1838 :2013", AND THE FSD CIRCULAR LETTER NO. 4/2021, COVERING ALL AREA. EMERGENCY LIGHTINGS SHALL BE BACKED UP BY BUILT-IN BATTERY AND CAPABLE OF MAINTAINING FUNCTION OF NOT LESS THAN 2 HOURS IN CASE OF POWER FAILURE

5. EXIT SIGN

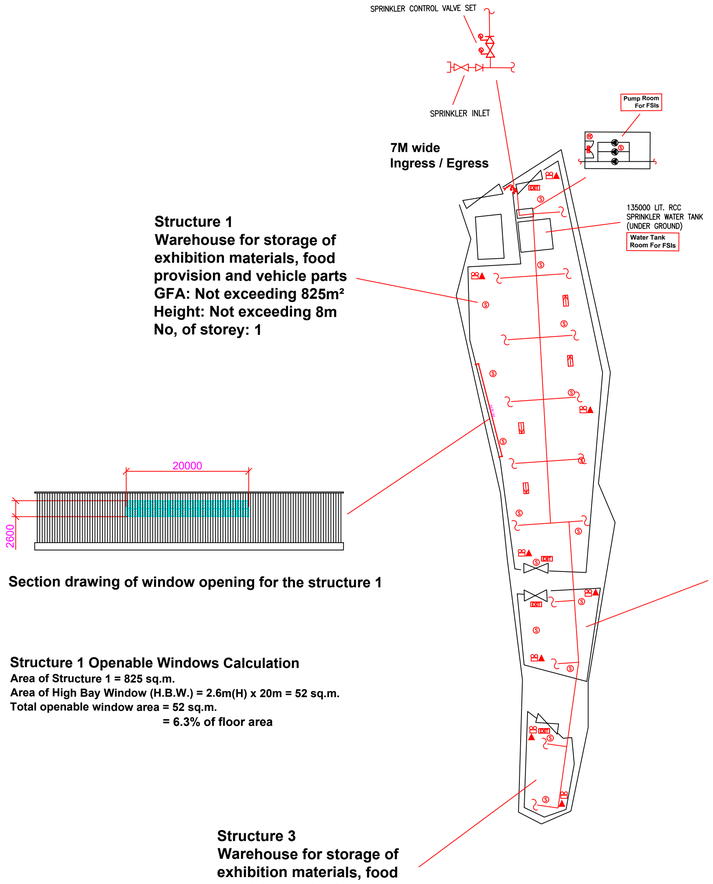
5.1 ALL EXIT SIGNS/DIRECTIONAL EXIT SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH BS 5266-1 :2016 AND FSD CIRCULAR LETTER NO. 5/2008, FOR THE BUILDING. EXIT SIGNS/DIRECTIONAL EXIT SIGNS SHALL BE BACKED UP BY BUILT-IN BATTERY AND CAPABLE OF MAINTAINING FUNCTION OF NOT LESS THAN 2 HOURS IN CASE OF POWER FAILURE.

6. PORTABLE APPLIANCES

6.1 PORTABLE HAND OPERATED APPLIANCES SHALL BE PROVIDED AS INDICATED ON PLAN.

6.2 A SUITABLE TYPE OF PORTABLE FIRE EXTINGUISHER SHALL BE PROVIDED IN LOCATIONS WHERE EASILY ACCESSIBLE BY PERSON IN CHARGE WHERE THE NO. OF F.E. SHALL BE PROVIDED ACCORDING TO THE FORMULA = [STORAGE AREA] (M^2) X (0.003]

6.3 A 20-35 KG WHEELED TYPE DRY CHEMICAL FIRE EXTINGUISHER IN EVERY 500M^2 ON EVERY FLOOR OF THE PREMISES AND SHALL BE PROVIDED TO ENSURE THAT EVERY PART OF THE PREMISES CAN BE REACHED BY WHEELED TYPE DRY CHEMICAL FIRE EXTINGUISHER FROM A DISTANCE OF NOT MORE THAN 30M



Section drawing of window opening for the structure 1

Structure 1 Openable Windows Calculation
Area of Structure 1 = 825 sq.m.
Area of High Bay Window (H.B.W.) = 2.6m(H) x 20m = 52 sq.m.
Total openable window area = 52 sq.m.
= 6.3% of floor area

LEGEND

- STAND ALONE BATTERY TYPE SMOKE DETECTOR
- 25KG WHEELED TYPE DRY CHEMICAL FIRE EXTINGUISHER
- EMERGENCY LIGHT
- EXIT SIGN
- NON-RETURN VALVE
- SPRINKLER CONTROL VALVE SET
- GATE VALVE
- GATE TYPE (With MONITORING)
- PUMP SET
- Y-TYPE STRAINER
- SPRINKLER INLET
- PRESSURE GAUGE
- SPRINKLER HEAD (ON PLAN)
- 5KG DRY POWDER FIRE EXTINGUISHER
- SUBSIDIARY VALVE / FLOW SWITCH
- 5KG CO2 FIRE EXTINGUISHER
- DIRECTIONAL SIGN

PROJECT : Temporary Warehouses for Storage of Exhibition Materials, Vehicle Parts & Food Provision for a Period of 3 Years at Lots 1013 S.A (Part), 1013 S.B (Part) & 1014 in D.D. 119, Pak Sha Tsuen, Yuen Long, N.T.	DRAWING TITLE : **F.S. Notes, Legend, Fire Service Installation Layout Plan**	ARCHITECT :
CONSULTANT :	FIRE SERVICE CONTRACTOR : **Century Fire Service Engineering Co., Ltd.**	

REV	DESCRIPTION	DATE

	NAME	DATE
DRAWN BY	C.K.NG	11 Jul 2026
CHECKED BY		
APPROVED BY		

DRAWING NO : **FS-01** REV. **0**
SCALE : 1 : 250 (A1)
SOURCE : B.O.O. Ref. BD
F.S.D. Ref. FP