寄件者: Louis Tse <[redacted]>
寄件日期: 2026年07月17日星期五 17:55
收件者: tpbpd/PLAND
副本: Bon Tang; Matthew Ng; Christian Chim; Danny Ng; Grace Wong
主旨: [SI] S.16 Application No. A/YL-KTN/1262 - Supplementary Information
附件: SI for A_YL-KTN_1262 (20260717).pdf

Dear Sir,

Attached herewith the supplementary information to support the subject application.

Should you require more information, please do not hesitate to contact me. Thank you for your kind attention.

Kind Regards,

Louis TSE | Town Planner
R-riches Group (HK) Limited

R-riches Property Consultants Limited | R-riches Planning Limited | R-riches Construction Limited
[redacted]

R-RICHES PLANNING LIMITED

盈卓規劃有限公司

Our Ref. : DD107 Lot 1834 & VL
Your Ref. : TPB/A/YL-KTN/1262

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

By Email

17 July 2026

Dear Sir,

Supplementary Information

Proposed Temporary Open Storage of Construction Materials and Machineries for a Period of 3 Years in "Comprehensive Development Area (1)" and "Other Specified Uses" annotated "Railway Reserve" Zones, Various Lots in D.D. 107, Cheung Chun San Tsuen, Kam Tin, Yuen Long

(S.16 Planning Application No. A/YL-KTN/1262)

We are writing to submit supplementary information for the subject application, details are as follows:

- The applicant provides a drainage proposal to support the application. (**Annex I**).

Should you require more information regarding the application, please contact our Mr. Danny NG at [redacted] or the undersigned at your convenience. Thank you for your kind attention.

Yours faithfully,

For and on behalf of
R-riches Planning Limited

Louis TSE
Town Planner

cc DPO/FSYLE, PlanD (Attn.: Ms. Andrea YAN email: awyyan@pland.gov.hk)
(Attn.: Mr. Ivan FUNG email: isyfung@pland.gov.hk)

[redacted]

Annex I

PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND MACHINERY FOR A PERIOD OF 3 YEARS, VARIOUS LOTS IN D.D. 107, CHEUNG CHUN SAN TSUEN, KAM TIN, YUEN LONG, NEW TERRITORIES

Drainage Proposal

Jul 2026 r2

MARVELLOUS
CONSTRUCTION & DESIGN COMPANY LIMITED

Table of Contents

List of Table

List of Figure

List of Appendix

1 Introduction

1.1 Background

1.1.1 The applicant seeks planning permission from the Town Planning Board (the Board) to use Lots 1834, 1835, 1836 (Part), 1837 (Part), 1838 (Part) and 1839 (Part) in D.D. 107, Cheung Chun San Tsuen, Kam Tin, Yuen Long, New Territories (the Site) for 'Proposed Temporary Open Storage of Construction Materials and Machinery for a Period of 3 Years'.

1.1.2 This report aims to support the development in drainage aspect.

1.2 Application Site

1.2.1 The application site is located to the south of Cheung Chun San Tsuen. It has an area of approx. 9,732 m^2. The site location is shown in **Figure 1**.

1.2.2 The existing site is mostly unpaved. Existing levels are various from approximately +3.0 to +6.2 mPD. The applicant intended to maintain the existing levels. No major site formation of the Application Site is anticipated.

1.2.3 There is an existing approx.. 25m width watercourse at the west of the site. **Figure 2** indicates the existing drainage system of the area.

2 Development Proposal

2.1 The Proposed Development

2.1.1 The total site area is approximately 9,732 m^2. The catchment plan is shown in **Figure 4**.

Proposed Development Area (Approx.)	
Total Site Area (m^2)	9,732
Paved Area after Development (m^2)	9,732

Table 1 – Site Development Area

3 Assessment Criteria

3.1.1 The Recommended Design Return Period based on Flood Level from SDM (Table 10) is adopted for this report. The recommendation is summarized in **Table 2** below.

Description	Design Return Periods
Intensively Used Agricultural Land	2 – 5 Years
Village Drainage Including Internal Drainage System under a polder Scheme	10 Years
Main Rural Catchment Drainage Channels	50 Years
Urban Drainage Trunk System	200 Years
Urban Drainage Branch System	50 Years

Table 2– Design Return Periods under SDM

3.1.2 The proposed drainage system intended to collect runoff from internal site and external catchment. 1 in 50 years return period is adopted.

3.1.3 Stormwater drainage design will be carried out in accordance with the criteria set out in the Stormwater Drainage Manual published by DSD. The proposed design criteria to be adopted for design of this stormwater drainage system and factors which have been considered are summarised below.

1. Intensity-Duration-Frequency Relationship – The Recommended Intensity-Duration-Frequency relationship is used to estimate the intensity of rainfall. It can be expressed by the following algebraic equation.

$$i = \frac{a}{(t_d + b)^c}$$

The site is located within the HKO Zone. Therefore, for 50 years return period, the following values are adopted.

a	=	505.5
b	=	3.29
c	=	0.355

(Corrigendum No.1/2024)

The development is proposed for temporary use for a period of 3 years. 11.1% rainfall increase due to climate change is considered.

2. The peak runoff is calculated by the Rational Method
   i.e. $Q_p = 0.278CiA$

where	Q_p	=	peak runoff in m^3/s
	C	=	runoff coefficient (dimensionless)
	i	=	rainfall intensity in mm/hr
	A	=	catchment area in km^2

3. The run-off coefficient (C) of surface runoff are taken as follows:

   1. Paved Area: C = 0.95
   2. Unpaved Area: C = 0.35

4. Manning's Equation is used for calculation of velocity of flow inside the channels:

Manning's Equation: $v = \frac{R^{\frac{1}{6}}}{n} R^{\frac{1}{2}} S_f^{\frac{1}{2}}$

Where,

V = velocity of the pipe flow (m/s)
S_f = hydraulic gradient
n = manning's coefficient
R = hydraulic radius (m)

5. Colebrook-White Equation is used for calculation of velocity of flow inside the pipes:

Colebrook-White Equation: $\underline{v} = -\sqrt{32gRS}log\left(\frac{k_s}{14.8R} + \frac{1.255v}{R\sqrt{32gRS_f}}\right)$

where,

V	=	velocity of the pipe flow (m/s)
S_f	=	hydraulic gradient
k_f	=	roughness value (m)
v	=	kinematics viscosity of fluid
D	=	pipe diameter (m)
R	=	hydraulic radius (m)

4 Proposed Drainage System

4.1. Proposed Channels

4.1.1 Proposed channels are designed for collection of runoff for application site. The design calculation of proposed drains are shown in **Appendix A**. The channels are proposed to be discharged to existing 25m (W) watercourse at the west of the site. The checking of existing pipe underneath the northwest portion of the site is shown in **Appendix A.** The existing pipe to be upgraded to 375mm if found smaller than 375mm.

4.1.2 The alignment, size, gradient and details of the proposed drains are shown in **Figure 3**. The catchment plan is shown in **Figure 4**.

4.1.5 Reference Drawings are shown in **Appendix C** for reference.

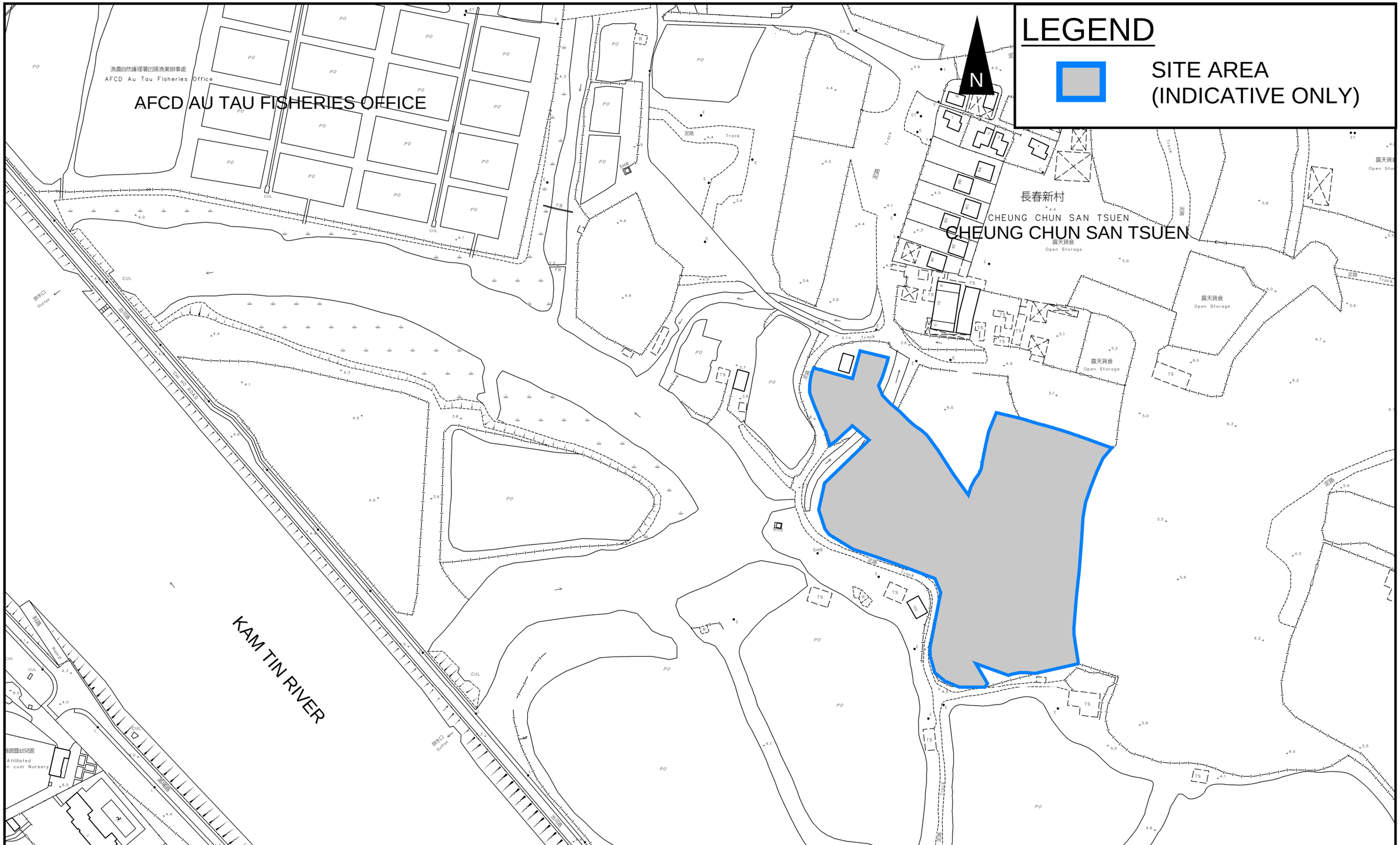
5 Conclusion

5.1.1 Drainage review has been conducted for the Proposed Development. The surface runoff will be collected by the proposed drains and discharge to 25m (W) watercourse at the west, which will eventually discharge to Kam Tin River.

5.1.2 With implementation of the above drainage system, no unacceptable drainage impact is anticipated.

- End of Text -

FIGURES



PROJECT:
PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND MACHINERY FOR A PERIOD OF 3 YEARS

TITLE
SITE LOCATION PLAN

FIGURE NUMBER
FIGURE 1

LOCATION:
VARIOUS LOTS IN D.D. 107, CHEUNG CHUN SAN TSUEN, KAM TIN, YUEN LONG, NEW TERRITORIES

VER	DESCRIPTION	DATE

LEGEND

SITE AREA
(INDICATIVE ONLY)

PROJECT: PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND MACHINERY FOR A PERIOD OF 3 YEARS	TITLE EXISTING DRAINAGE PLAN	FIGURE NUMBER FIGURE 2
LOCATION: VARIOUS LOTS IN D.D. 107, CHEUNG CHUN SAN TSUEN, KAM TIN, YUEN LONG, NEW TERRITORIES		

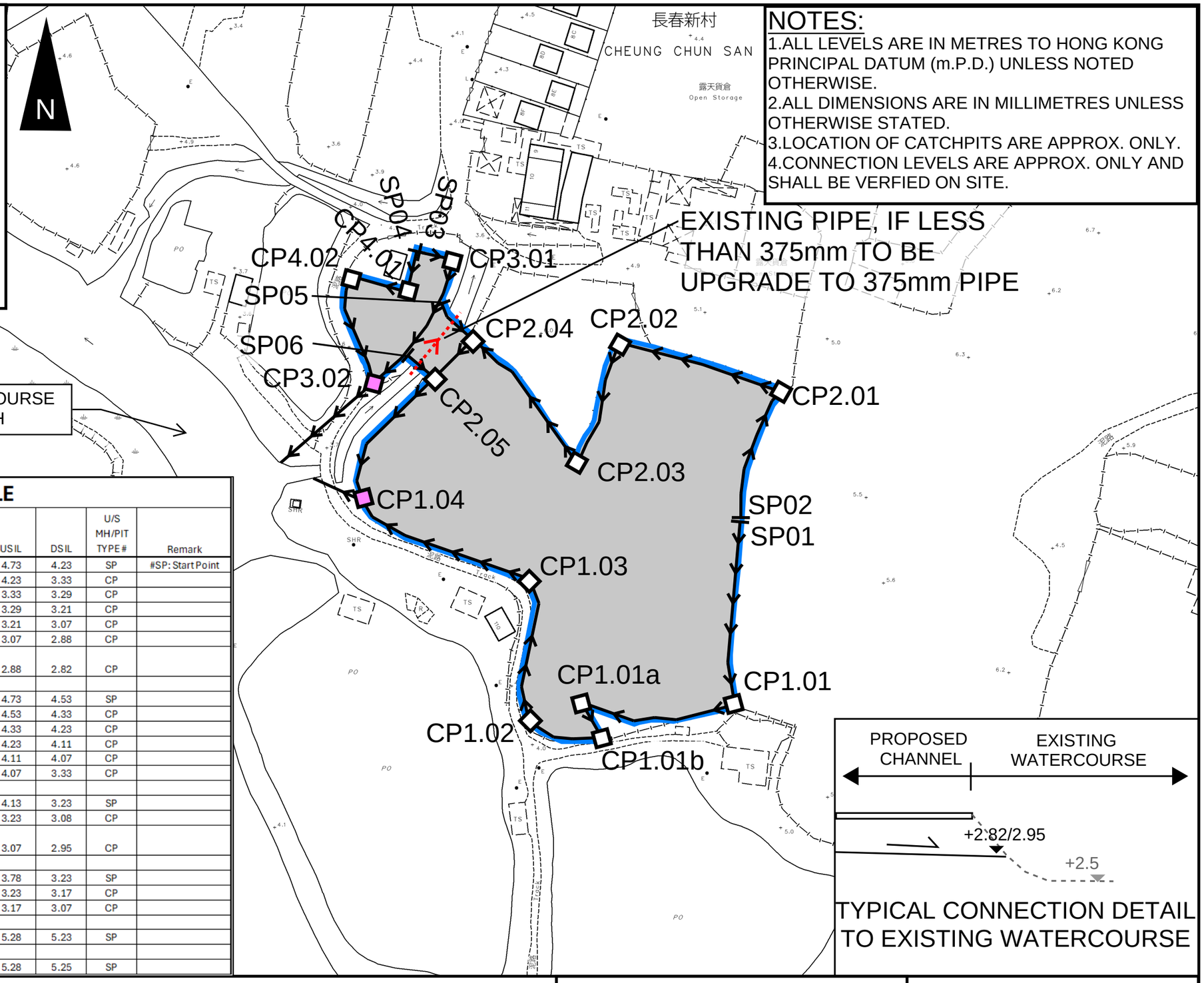
VER	DESCRIPTION	DATE

LEGEND

- SITE AREA (INDICATIVE ONLY)
- PROPOSED CHANNEL
- EXISTING 375 CONCRETE PIPE (IF LESS THAN 375 TO BE UPGRADED TO 375)
- PROPOSED CATCHPIT
- PROPOSED CATCHPIT w/TRAP

NOTES:

1.ALL LEVELS ARE IN METRES TO HONG KONG PRINCIPAL DATUM (m.P.D.) UNLESS NOTED OTHERWISE.
2.ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
3.LOCATION OF CATCHPITS ARE APPROX. ONLY.
4.CONNECTION LEVELS ARE APPROX. ONLY AND SHALL BE VERFIED ON SITE.



DRINAGE SCHEDULE

US MH/PIT	DS MH/PIT	USGL	DSGL	Size mm	Gradient 1 in	Type	USIL	DSIL	U/S MH/PIT TYPE #	Remark
SP01	CP1.01	5.4	4.9	675	300	UC	4.73	4.23	SP	#SP: Start Point
CP1.01	CP1.01a	4.9	4.0	675	300	UC	4.23	3.33	CP	
CP1.01a	CP1.01b	4.0	4.0	675	300	UC	3.33	3.29	CP	
CP1.01b	CP1.02	4.0	4.0	675	300	UC	3.29	3.21	CP	
CP1.02	CP1.03	4.0	4.0	675	300	UC	3.21	3.07	CP	
CP1.03	CP1.04	4.0	4.0	675	300	UC	3.07	2.88	CP	
CP1.04	Existing Watercourse	4.0	3.7	825	300	UC	2.88	2.82	CP	
SP02	CP2.01	5.4	5.2	675	400	UC	4.73	4.53	SP	
CP2.01	CP2.02	5.2	5.0	675	400	UC	4.53	4.33	CP	
CP2.02	CP2.03	5.0	6.0	675	400	UC	4.33	4.23	CP	
CP2.03	CP2.04	6.0	6.0	675	400	UC	4.23	4.11	CP	
CP2.04	CP2.05	6.0	6.0	675	400	UC	4.11	4.07	CP	
CP2.05	CP1.04	6.0	4.0	675	400	UC	4.07	3.33	CP	
SP03	CP3.01	4.5	3.6	375	300	UC	4.13	3.23	SP	
CP3.01	CP3.02	3.6	3.6	375	300	UC	3.23	3.08	CP	
CP3.02	Existing Watercourse	3.6	3.7	375	300	UC	3.07	2.95	CP	
SP03	CP4.01	4.5	3.6	375	300	UC	3.78	3.23	SP	
CP4.01	CP4.02	3.6	3.6	375	300	UC	3.23	3.17	CP	
CP4.02	CP3.02	3.6	3.6	375	300	UC	3.17	3.07	CP	
SP05	CP2.04	6.0	6.0	375	300	UC	5.28	5.23	SP	
SP06	CP2.05	6.0	6.0	375	300	UC	5.28	5.25	SP	

PROJECT:
PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND MACHINERY FOR A PERIOD OF 3 YEARS

LOCATION:
VARIOUS LOTS IN D.D. 107, CHEUNG CHUN SAN TSUEN, KAM TIN, YUEN LONG, NEW TERRITORIES

TITLE
PROPOSED DRAINAGE SYSTEM

FIGURE NUMBER
FIGURE 3

VER	DESCRIPTION	DATE

LEGEND:

FALL

長春新村
CHEUNG CHUN SAN TSUEN

N

B5 Unpaved
84 m²

B6 Paved
203 m²

A4 Paved
186 m²

A3 Paved
713 m²

B4 Unpaved
725 m²

C1 Unpaved
475 m²

A2 Paved
4,372 m²

B3 Unpaved
2,162 m²

A1 Paved
4,463 m²

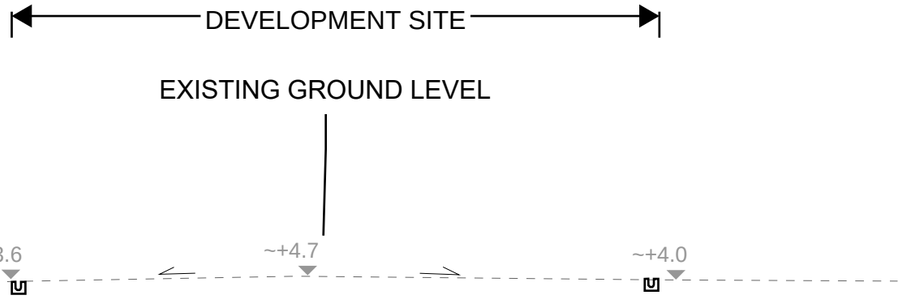
B2 Unpaved
4,047 m²

B1 Unpaved
600 m²

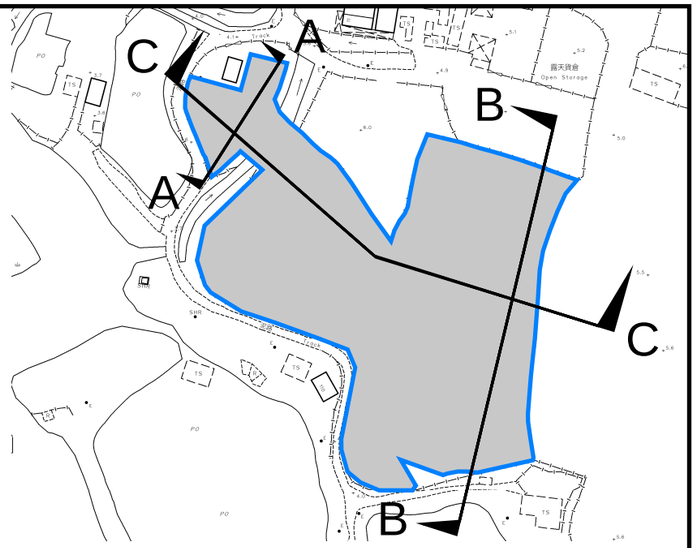
PROJECT: PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND MACHINERY FOR A PERIOD OF 3 YEARS	TITLE CATCHMENT PLAN	FIGURE NUMBER FIGURE 4
LOCATION: VARIOUS LOTS IN D.D. 107, CHEUNG CHUN SAN TSUEN, KAM TIN, YUEN LONG, NEW TERRITORIES		VER / DESCRIPTION / DATE

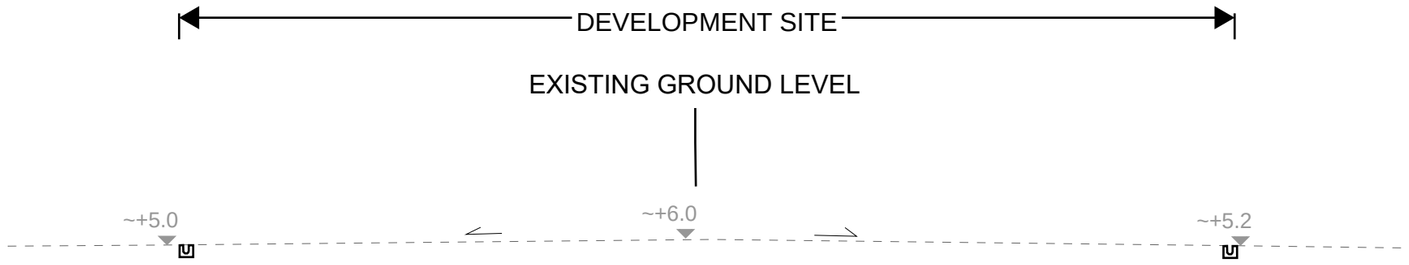
LEGEND

SITE AREA
(INDICATIVE ONLY)



N.T.S.
SECTION A-A





N.T.S.
SECTION B-B

N.T.S.
SECTION C-C

PROJECT: PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND MACHINERY FOR A PERIOD OF 3 YEARS	TITLE SECTIONS	FIGURE NUMBER FIGURE 5
LOCATION: VARIOUS LOTS IN D.D. 107, CHEUNG CHUN SAN TSUEN, KAM TIN, YUEN LONG, NEW TERRITORIES		

VER	DESCRIPTION	DATE

APPENDIX

Appendix A: Design Calculation

Zone

HKO

Return Period	1 in	50	years

n	0.014
Ks	0.15
Viscosity	0.000001

Storm Constant		
	HKO a	505.5
	HKO b	3.29
	HKO c	0.355

Catchment Area Table (Area in m^2)

Catchment	A1	A2	A3	A4	B1	B2	B3	B4	B5	B6	C1								
Total Area	4463	4372	713	184	600	4047	2162	725	84	203	475								
Hard Paved Area	4463	4372	713	184	0	0	0	0	0	203	0								
Unpaved Area	0	0	0	0	600	4047	2162	725	84	0	475								
Equival. Area	4239.85	4153.4	677.35	174.8	210	1416.45	756.7	253.75	29.4	192.85	166.25								

Pavement Type	Hard Paved	Unpaved
Runoff Coefficient	0.95	0.35

Calculation Table of Drainage System

US MH/PIT	DS MH/PIT	US GL	DS GL	Size mm	Gradient 1 in	Type	US IL	DS IL	U/S MH/PIT TYPE #	Length m	V m/s ###	Capacity m^3/s	Catchments	Total Equivalent Area m^2	ToC min	Intensity mm/hr ##	Total Discharge m^3/s	Utilitization	Remark
SP01	CP1.01	5.40	4.90	675	250	UC	4.73	4.23	SP	53.8	1.60	0.59	A1,B2	5656.30	2.90	294	0.46	78.9%	
CP1.01	CP1.01a	4.90	4.00	675	250	UC	4.23	3.33	CP	46.4	1.60	0.59	A1,B1,B2	5866.30	3.46	285	0.46	79.3%	
CP1.01a	CP1.01b	4.00	4.00	675	300	UC	3.33	3.29	CP	11.9	1.46	0.53	A1,B1,B2	5866.30	3.94	278	0.45	84.8%	
CP1.01b	CP1.02	4.00	4.00	675	300	UC	3.29	3.21	CP	22.5	1.46	0.53	A1,B1,B2	5866.30	4.08	276	0.45	84.3%	
CP1.02	CP1.03	4.00	4.00	675	300	UC	3.21	3.07	CP	42.9	1.46	0.53	A1,B1,B2	5866.30	4.34	273	0.45	83.2%	
CP1.03	CP1.04	4.00	4.00	675	300	UC	3.07	2.88	CP	56.9	1.46	0.53	A1,B1,B2	5866.30	4.82	267	0.44	81.4%	
CP1.04	Existing Watercourse	4.00	3.70	825	300	UC	2.88	2.82	CP	16	1.67	0.91	A1,A2,B1,B2,B3,B4	11030.15	5.94	255	0.78	85.7%	
SP02	CP2.01	5.40	5.20	675	350	UC	4.73	4.53	SP	39.5	1.35	0.50	A2,B3	4910.10	2.90	294	0.40	81.0%	
CP2.01	CP2.02	5.20	5.00	675	400	UC	4.53	4.33	CP	49.4	1.27	0.46	A2,B3	4910.10	3.39	286	0.39	84.3%	
CP2.02	CP2.03	5.00	6.00	675	350	UC	4.33	4.22	CP	37.9	1.35	0.50	A2,B3,B4	5163.85	4.04	277	0.40	80.3%	
CP2.03	CP2.04	6.00	6.00	675	400	UC	4.22	4.10	CP	47.9	1.27	0.46	A2,B3,B4	5163.85	4.50	271	0.39	84.0%	
CP2.04	CP2.05	6.00	6.00	675	400	UC	4.10	4.05	CP	17.4	1.27	0.46	A2,A4,B3,B4	5338.65	5.13	264	0.39	84.4%	
CP2.05	CP1.04	6.00	4.00	675	400	UC	4.05	3.33	CP	43.4	1.27	0.46	A2,A4,B3,B4	5338.65	5.36	261	0.39	83.6%	
SP03	CP3.01	4.50	3.60	375	300	UC	4.13	3.23	SP	10.3	0.99	0.11	A3,B5	706.75	2.90	294	0.06	51.8%	
CP3.01	CP3.02	3.60	3.60	375	300	UC	3.23	3.08	CP	43.8	0.99	0.11	A3,A4,B5	881.55	3.11	291	0.07	63.8%	
CP3.02	Existing Watercourse	3.60	3.70	375	300	UC	3.07	2.95	CP	35.8	0.99	0.11	A3,A4,B5,B6	1074.40	3.88	279	0.08	74.7%	
SP03	CP4.01	4.50	3.60	375	300	UC	3.78	3.23	SP	12.2	0.99	0.11	A3,B6	870.20	2.90	294	0.07	63.7%	
CP4.01	CP4.02	3.60	3.60	375	300	UC	3.23	3.17	CP	17.3	0.99	0.11	A3,B6	870.20	3.11	291	0.07	63.0%	
CP4.02	CP3.02	3.60	3.60	375	300	UC	3.17	3.07	CP	28.4	0.99	0.11	A3,B6	870.20	3.40	286	0.07	62.0%	
SP05	CP2.04	6.00	6.00	375	300	UC	5.28	5.23	SP	13.8	0.99	0.11	A4	174.80	2.90	294	0.01	12.8%	
SP06	CP2.05	6.00	6.00	375	300	UC	5.28	5.25	SP	9.2	0.99	0.11	A4	174.80	2.90	294	0.01	12.8%	
Existing Pipe Underneath Northwest Portion of Site				375	200	UC					1.21	0.14	C1	166.25	2.90	294	0.01	9.9%	

#SP: Start Point

: With 11.1% rainfall increase as per Table 28 of SDM Corrigendum No. 1/2022.

###: 10% reduction of Area as per SDM section 9.3

Time of Concentration Checking

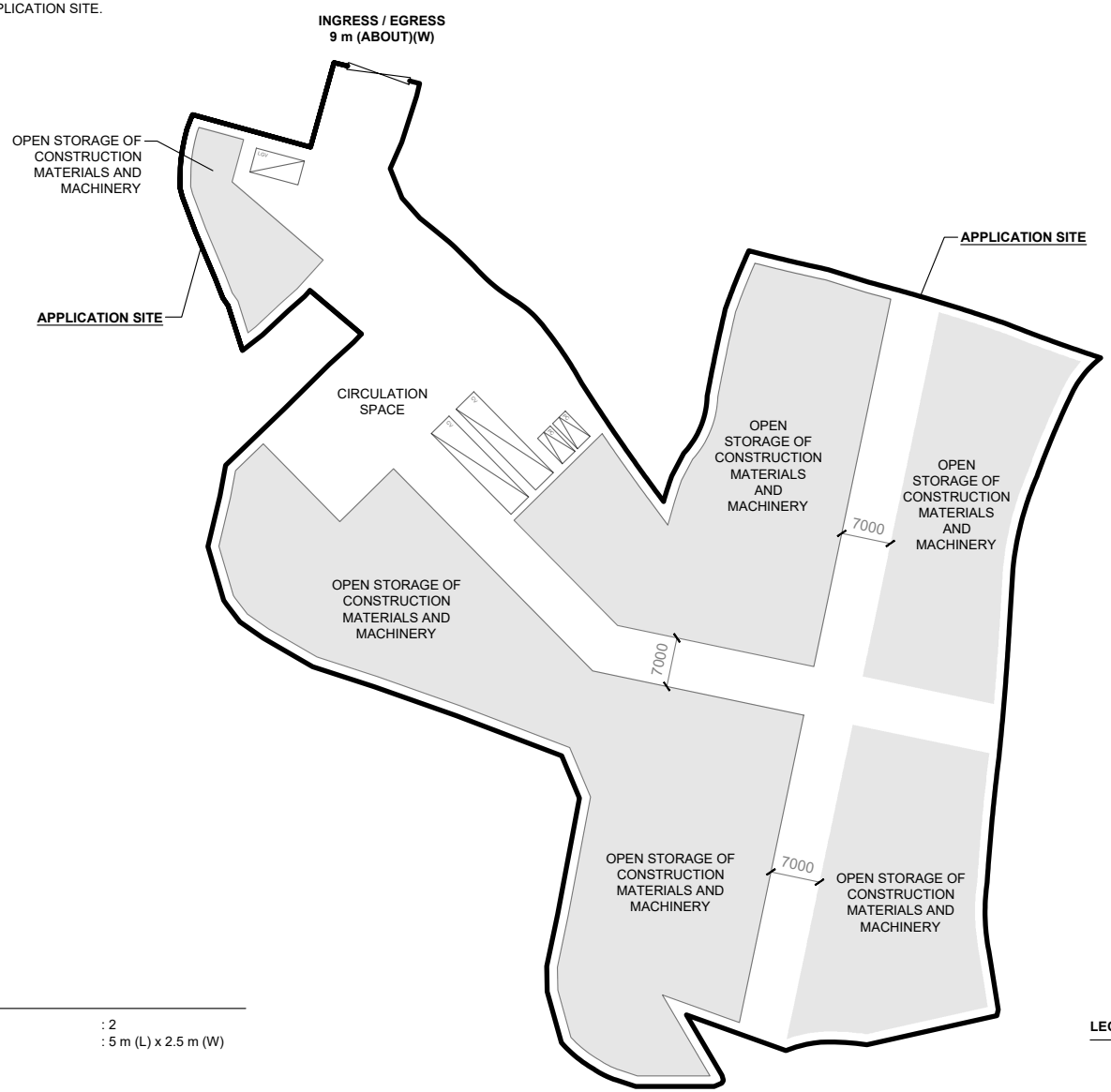
Catchment	Flow Distance	Highest Level	Lowest Level	Gradient (per 100m) = (H1-H2)/L x 100	to (min) = $0.14465L/(H^{0.2}A^{0.1})$	tc = to + tf
A	L	H1	H2			
(m2)	(m)	(mPD)	(mPD)		(min)	(min)
186	39	6.2	5.4	2.051	2.9	2.9

APPENDIX B - PROPOSED SITE LAYOUT PLAN

DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 9,732 m^2	(ABOUT)
COVERED AREA	: NOT APPLICABLE	
UNCOVERED AREA	: 9,732 m^2	(ABOUT)
OPEN STORAGE AREA	: 6,110 m^2	(ABOUT)
HEIGHT OF STACKING	: NOT MORE THAN 3 m	

NO STRUCTURE IS PROPOSED AT THE APPLICATION SITE.



PARKING PROVISIONS

NO. OF PRIVATE CAR PARKING SPACE	: 2
DIMENSION OF PARKING SPACE	: 5 m (L) x 2.5 m (W)

LOADING / UNLOADING PROVISIONS

NO. OF L/UL SPACE FOR LIGHT GOODS VEHICLE	: 1
DIMENSION OF L/UL SPACE	: 7 m (L) x 3.5 m (W)
NO. OF L/UL SPACE FOR CONTAINER VEHICLE	: 2
DIMENSION OF L/UL SPACE	: 16 m (L) x 3.5 m (W)

**SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY*

LEGEND

- APPLICATION SITE
- OPEN STORAGE AREA
- INGRESS / EGRESS
- PARKING SPACE (PC)
- LOADING / UNLOADING SPACE (LGV)
- LOADING / UNLOADING SPACE (CV)

NORTH
W E
S

PLANNING CONSULTANT
R-RICHES PLANNING LIMITED

PROJECT
PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND MACHINERY FOR A PERIOD OF 3 YEARS

SITE LOCATION
VARIOUS LOTS IN D.D. 107, CHEUNG CHUN SAN TSUEN, KAM TIN, YUEN LONG, NEW TERRITORIES

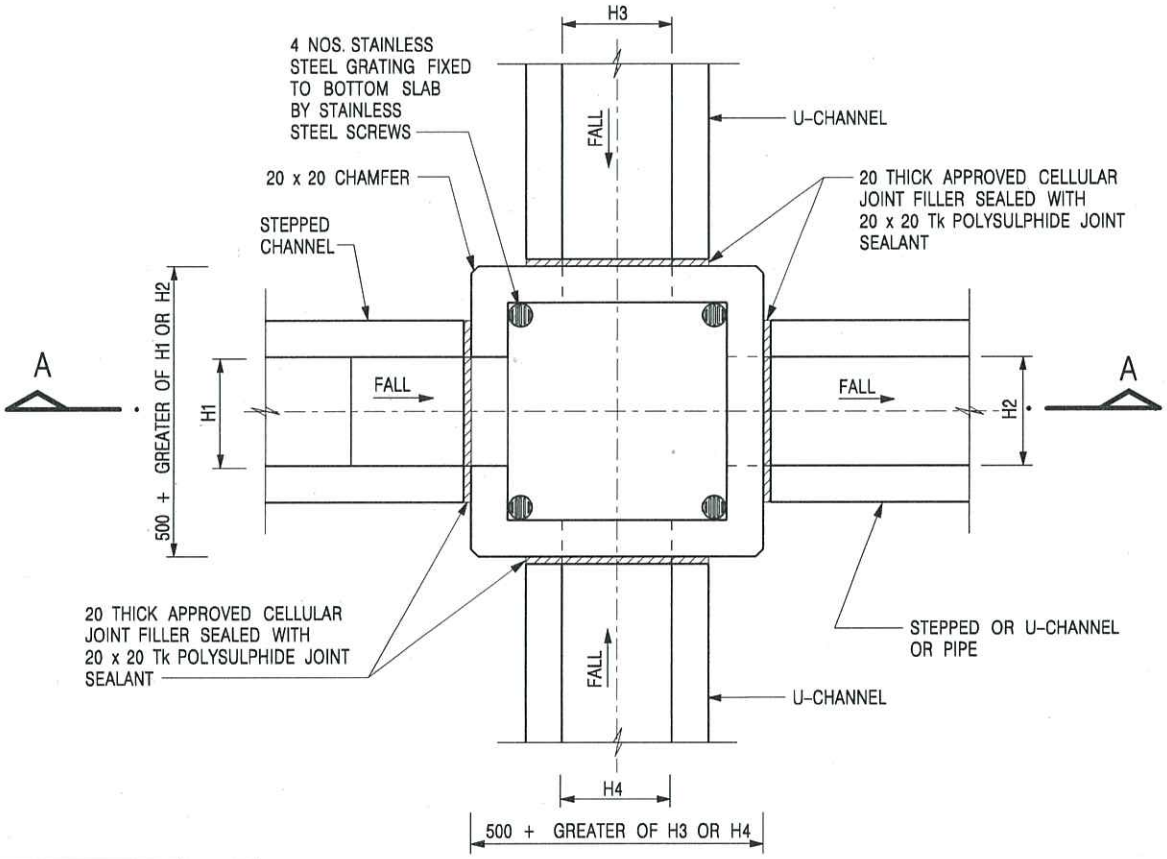
SCALE
1 : 1000 @ A4

DRAWN BY	DATE
MN	22.12.2025
REVISED BY	DATE
LT	02.03.2026
APPROVED BY	DATE

DWG. TITLE
LAYOUT PLAN

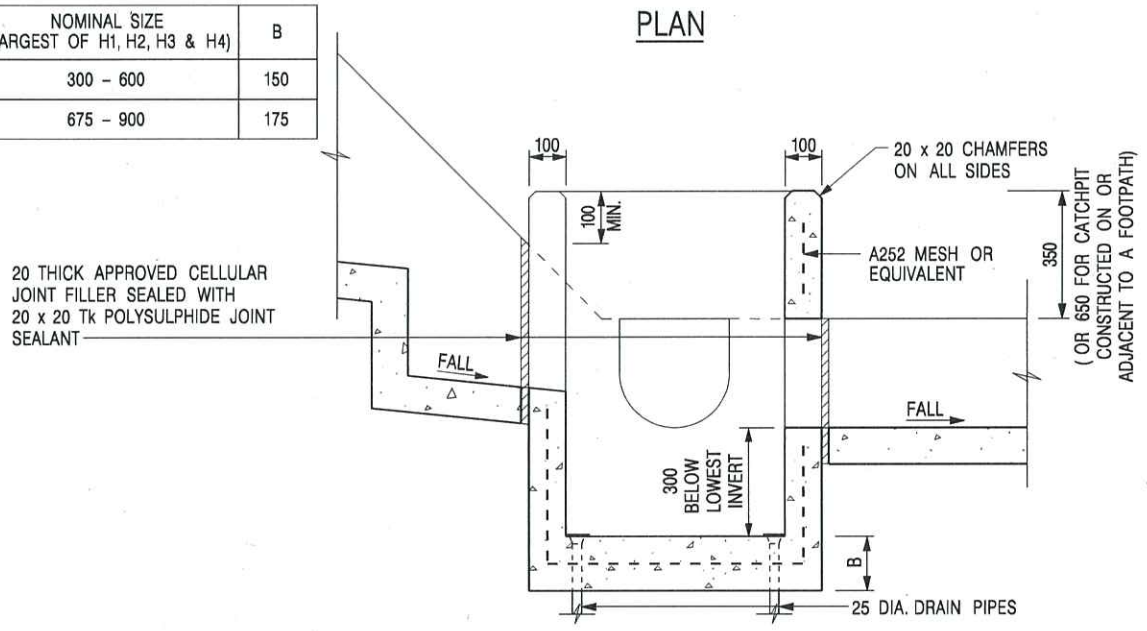
DWG NO.	VER.
PLAN 5	001

Appendix C - Reference Drawings



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)

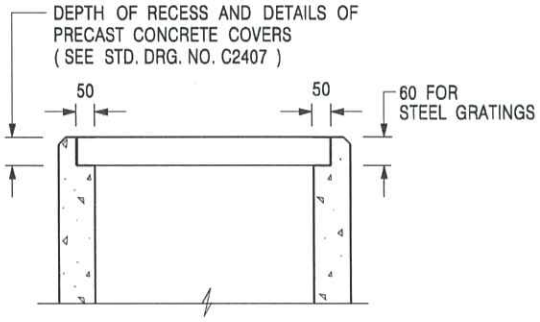
CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2406 /1

卓越工程 建設香港 We Engineer Hong Kong's Development



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

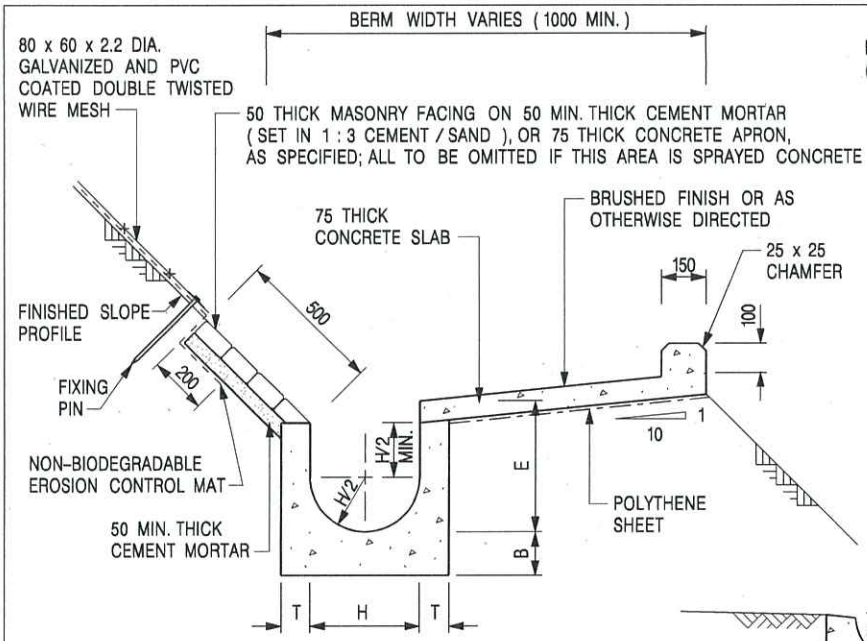
CATCHPIT WITH TRAP
(SHEET 2 OF 2)

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

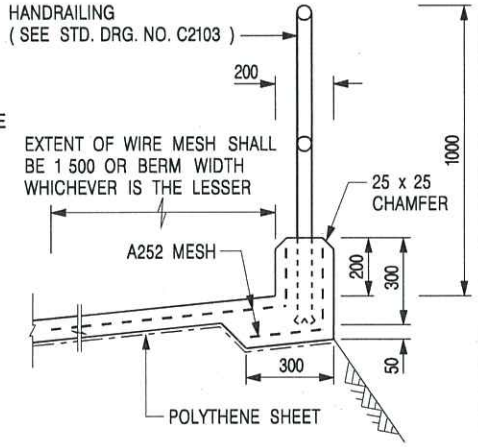
SCALE 1 : 20

DATE JAN 1991

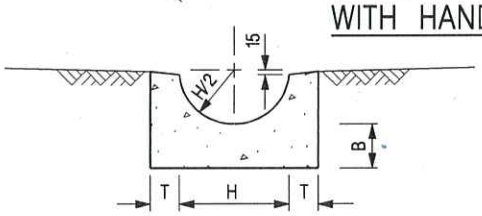
DRAWING NO. C2406 /2A



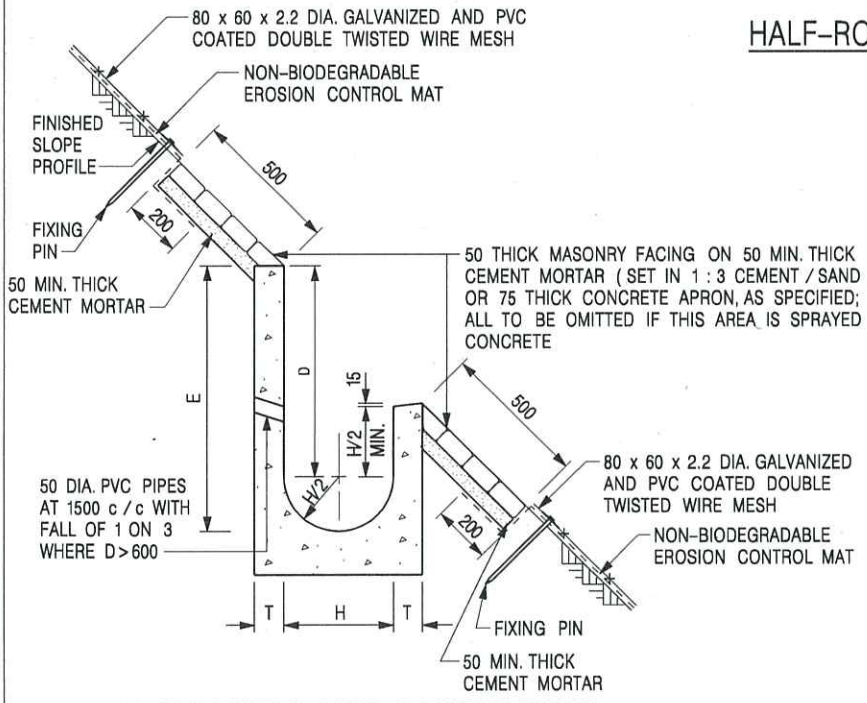
U-CHANNELS CONSTRUCTED ON BERM



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)

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
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
E	DRAWING TITLE AMENDED.	Original Signed	11.2001
D	MINOR AMENDMENT.	Original Signed	08.2001
C	150 x 100 UPSTAND ADDED AT BERM.	Original Signed	6.99
B	MINOR AMENDMENTS.	Original Signed	3.94

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

CEDD **CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT**

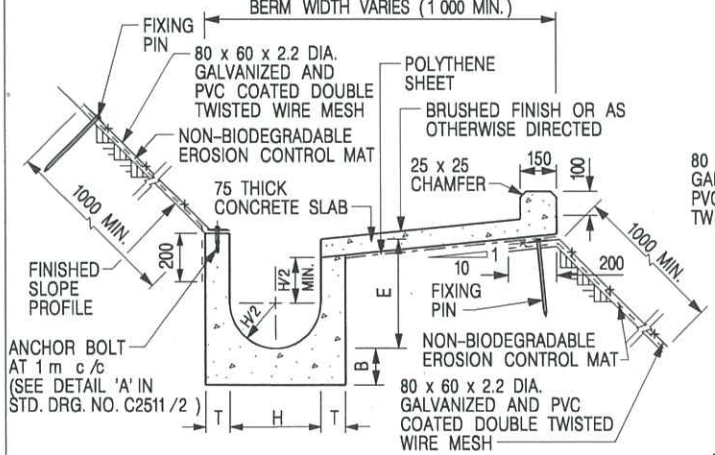
SCALE 1 : 25

DATE JAN 1991

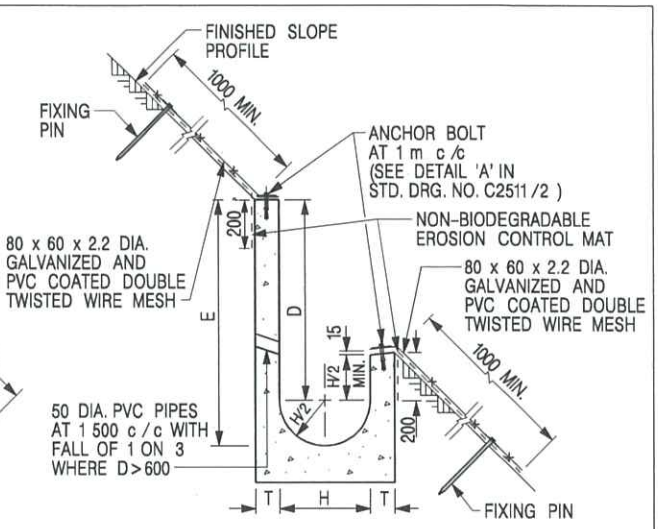
DRAWING NO. C2409I

卓越工程 建設香港

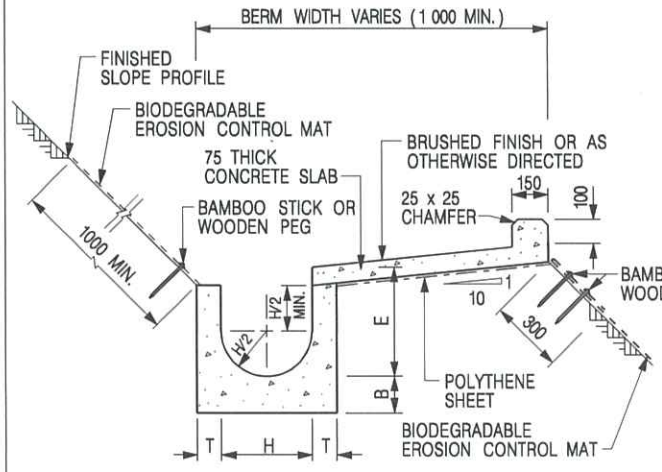
We Engineer Hong Kong's Development



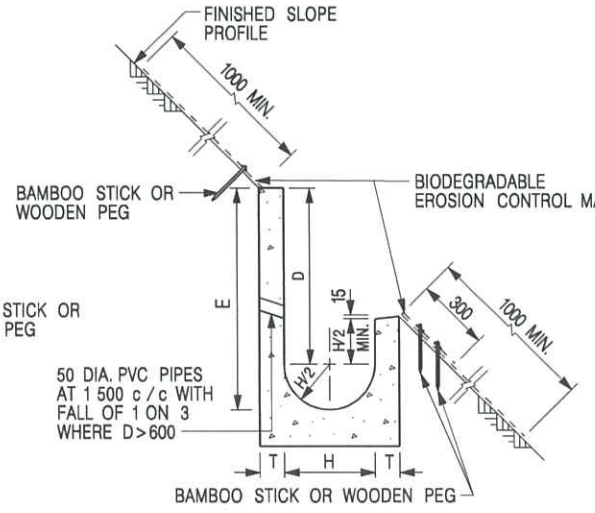
U-CHANNELS CONSTRUCTED ON BERM WITH NON-BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS NOT CONSTRUCTED ON BERM WITH NON-BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS CONSTRUCTED ON BERM WITH BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS NOT CONSTRUCTED ON BERM WITH BIODEGRADABLE EROSION CONTROL MAT

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. FOR TYPICAL FIXING PIN DETAILS, SEE STD. DRG. NO. C2511/2.
8. MINIMUM SIZE OF 25 x 50 x 300mm SHALL BE PROVIDED FOR WOODEN PEG.
9. MINIMUM SIZE OF 10mm DIAMETER WITH 200mm LONG SHALL BE PROVIDED FOR BAMBOO STICK.
10. THE FIXING DETAILS OF NON-BIODEGRADABLE AND BIODEGRADABLE EROSION CONTROL MATS ON EXISTING BERM SHALL REFER TO STD. DRG. NO. C2511/1.

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
I	MINOR AMENDMENT.	Original Signed	07.2018
H	FIXING DETAILS OF BIODEGRADABLE EROSION CONTROL MAT ADDED.	Original Signed	12.2017
G	DIMENSION TABLE AMENDED.	Original Signed	01.2005
F	MINOR AMENDMENT.	Original Signed	01.2004
E	GENERAL REVISION.	Original Signed	12.2002
D	MINOR AMENDMENT.	Original Signed	08.2001
C	150 x 100 UPSTAND ADDED AT BERM.	Original Signed	6.99
B	MINOR AMENDMENT.	Original Signed	3.94
A	MINOR AMENDMENT.	Original Signed	10.92

DETAILS OF HALF-ROUND AND U-CHANNELS (TYPE B - WITH EROSION CONTROL MAT APRON)

CEDD **CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT**

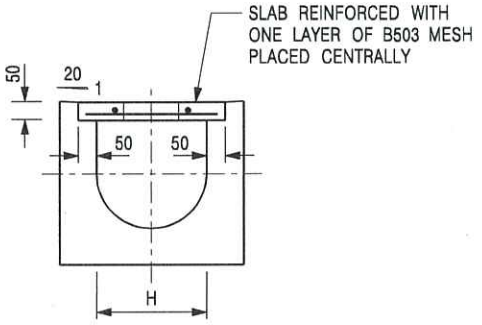
SCALE DIAGRAMMATIC

DATE JAN 1991

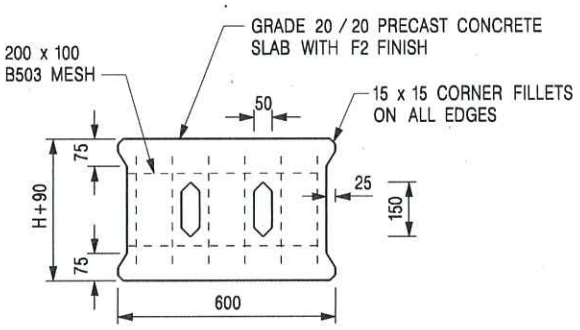
DRAWING NO. C2410I

卓越工程 建設香港

We Engineer Hong Kong's Development



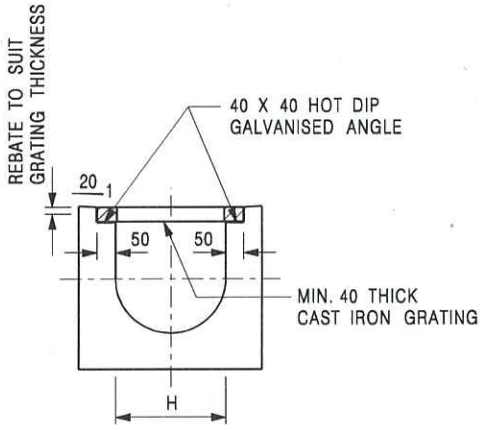
TYPICAL SECTION



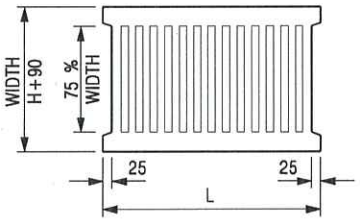
PLAN OF SLAB

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.

REF.	REVISION	SIGNATURE	DATE
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

COVER SLAB AND CAST IRON GRATING FOR CHANNELS

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

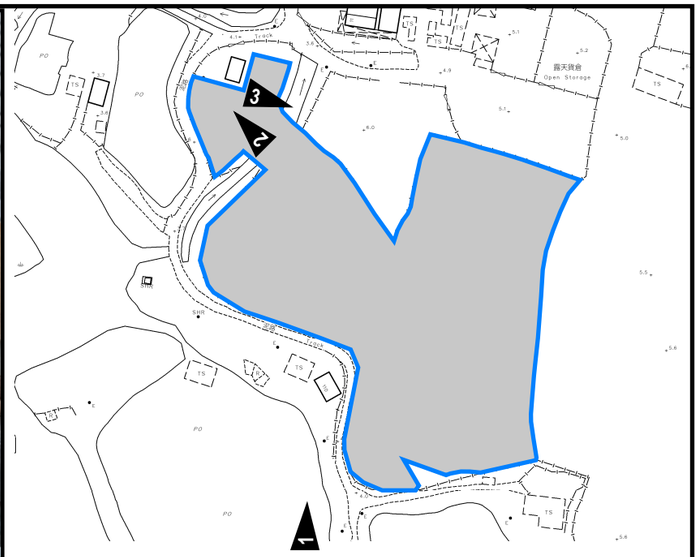
SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2412E

VIEW 1

VIEW 3



VIEW 2

PROJECT:
PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND MACHINERY FOR A PERIOD OF 3 YEARS

LOCATION:
VARIOUS LOTS IN D.D. 107, CHEUNG CHUN SAN TSUEN, KAM TIN, YUEN LONG, NEW TERRITORIES

TITLE
SITE PHOTO

FIGURE NUMBER
APPENDIX D

VER	DESCRIPTION	DATE