

寄件者: Tang Lok San <[REDACTED]>  
寄件日期: 2026年04月01日星期三 15:34  
收件者: tpbpd/PLAND  
副本: Athena Pui Yin LAI/PLAND  
主旨: S16 Planning Application No. A/YL-KTN/1224 Supplementary Document  
附件: AYL-KTN 1224 20260401.pdf  
類別: Internet Email

Town Planning Board,

Please see the attachment for the supplementary document of S16 Application A/YL-KTN/1224.  
Please contact Mr. Tang via email [REDACTED] if you have any question regarding to  
the captioned application.

Yours faithfully,  
Mr. Tang

**A/YL-KTN/1224 申請詳細**

本次申請的申請人與之前的申請人不是同一位（申請編號：A/YL-KTN/994），與 A/YL-KTN/994 無關。

在上一個規劃申請 A/YL-KTN/994，相關申請人已履行多個附加條件。

Approval Conditions of Application No. A/YL-KTN/994		Date of Compliance
(f)	the provision of fire extinguisher(s) with a valid fire certificate	2.8.2024
(g)	the submission of a fire service installations proposal	2.8.2024

申請人希望透過新的規劃申請，繼續進行在申請 A/YL-KTN/994 中獲渠務署接受的擬議渠道設計。雖然本規劃申請的佈局及出入口有改變，用途及地面用料沒有實質改變，將會沿用已接受的渠道設計。渠道設計請參考下方。

現場會存放金屬、膠喉、汽車、汽車零件及建築材料，例如排水管、水喉及電箱、挖掘機、升降台等。

場內只存放私家車，數量不會超過 15 輛。

現場不會儲放水泥、泥土、粉煤灰、骨材、淤泥、細石、沙、碎片、鋸屑或木屑或其他多塵的材料，以免影響周遭環境。

申請地點計畫使用約 3 米高的金屬實心板將整個申請範圍圍起。

申請範圍內堆疊存放不超過 3 米高。

本申請內露天存放的空間不會儲放任何危險品，申請地點只會用在存放用途，不會進行任何有關回收、清潔、修理、拆解或其他工場作業。

Proposed Temporary Open Storage of  
Construction Materials for a Period of 3 Years and  
Associated Filling of Land in “Agriculture” Zone,  
Lots 1290 RP (Part) and 1291 (Part) in D.D. 107,  
Fung Kat Heung, Kam Tin, Yuen Long, New  
Territories

Drainage Appraisal

April 2024

## Table of Content

1. Introduction .....	1
1.1 Background .....	1
1.2 The Site .....	1
2. Development Proposal.....	2
2.1 The Proposed Development .....	2
3. Assessment Criteria .....	2
4. Proposed Drainage System .....	5
5. Conclusion.....	5

## List of Table

Table 1 - Key Development Parameters	2
Table 2– Design Return Periods under SDM	2

## List of Figure

Figure 1 – Site Location Plan

Figure 2 - Existing Drainage Plan

Figure 3 – Proposed Drainage System

Figure 4 – Catchment Plan

## List of Appendix

Appendix A – Design Calculation

Appendix B - Development Layout Plan

Appendix C – Reference Drawings for Uchannel and Catchpit

Appendix D – Photo Record of Surroundings

Appendix E - Sections

Appendix F – Checking of Existing 3m (W) x 2m (D) Channel

# 1. Introduction

## 1.1 Background

1.1.1 The applicant seeks planning permission from the Town Planning Board (the Board) to use Lots 1290 RP (Part) and 1291 (Part), Fung Kat Heung, Kam Tin, Yuen Long, New Territories (the Site) for 'Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years and Associated Filling of Land' (proposed development).

1.1.2 This Drainage Proposal is to support the planning application for the proposed use.

## 1.2 The Site

1.2.1 The Application Site area is about 3,796m<sup>2</sup>, and it is at rural area of Kam Tin North. The site is currently an open area with existing temporary structures. The site location plan is shown in **Figure 1**.

1.2.2 The Application Site is surrounded by temporary structures and local track. The existing ground level varies from approx. +10.3 mPD to +11.7 mPD. The site is intended to be filled and paved to ground level from +11.2 mPD to +11.9 mPD.

1.2.3 There is an existing channel adjacent to the site at the west and south. Existing Drainage Plan is shown in **Figure 2** for reference.

1.2.4 The site at the east is slightly higher than the Application Site. The eastern area is mostly grassland. It is assumed that the unpaved area is 75% for assessment purposes. Catchment Plan is shown in **Figure 4**.

1.2.5 Proposed Development Layout plan is shown in **Appendix B** for reference.

## 2. Development Proposal

### 2.1 The Proposed Development

2.1.1 The total site area is approximately 3,796m<sup>2</sup>. The indicative development schedule is summarized in Table 1 below for technical assessment purpose. The proposed catchment plan is shown in Figure 4.

Proposed Development	
Total Site Area (m <sup>2</sup> )	3,796
Assume all proposed site area as paved area after development for assessment purpose	
Zone A (m <sup>2</sup> )	1,700
Zone B (m <sup>2</sup> )	2,096
External Catchment	
Eastern External Catchment (m <sup>2</sup> )	4,246
The Area is mostly grassland It is assumed that paved to unpaved ratio is 20:80 for assessment purposes.	

**Table 1 - Key Development Parameters**

## 3. Assessment Criteria

3.1.1 The Recommended Design Return Period based on Flood Level from SDM (Table 10) is adopted for this DIA. 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 village drainage system intended to collect runoff from the internal site and discharge to existing nearby existing stream. 1 in 10 years return period is adopted for the drainage design.

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 Headquarters Rainfall Zone. Therefore, for 10 years return period, the following values are adopted.

a	=	471.9
b	=	3.02
c	=	0.397

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:

- Paved Area: C = 0.95
- Unpaved Area: C = 0.35

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

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

Where,

V = velocity of the pipe flow (m/s)

S<sub>f</sub> = 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:

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

where,

V = velocity of the pipe flow (m/s)

S<sub>f</sub> = hydraulic gradient

k<sub>f</sub> = roughness value (m)

v = kinematics viscosity of fluid

D = pipe diameter (m)

R = hydraulic radius (m)

## 4. Proposed Drainage System

- 4.1.1 The Application Site and the surrounding areas are generally flat with gentle gradient toward the west. Drainage system is proposed to collect the runoff from the application site and external catchment at the east. It is proposed to discharge to **existing 3m (W) x 2m (D) channel at the west.** The alignment, size and gradient of the proposed drains are shown in **Figure 3.**
- 4.1.2 The design calculations of proposed channels are shown in **Appendix A.**
- 4.1.3 **The design checking of existing 3m (W) x 2m (D) channel at the west for drainage discharge is shown in Appendix F.**
- 4.1.4 The reference drawings of proposed drains are shown in **Appendix C.**

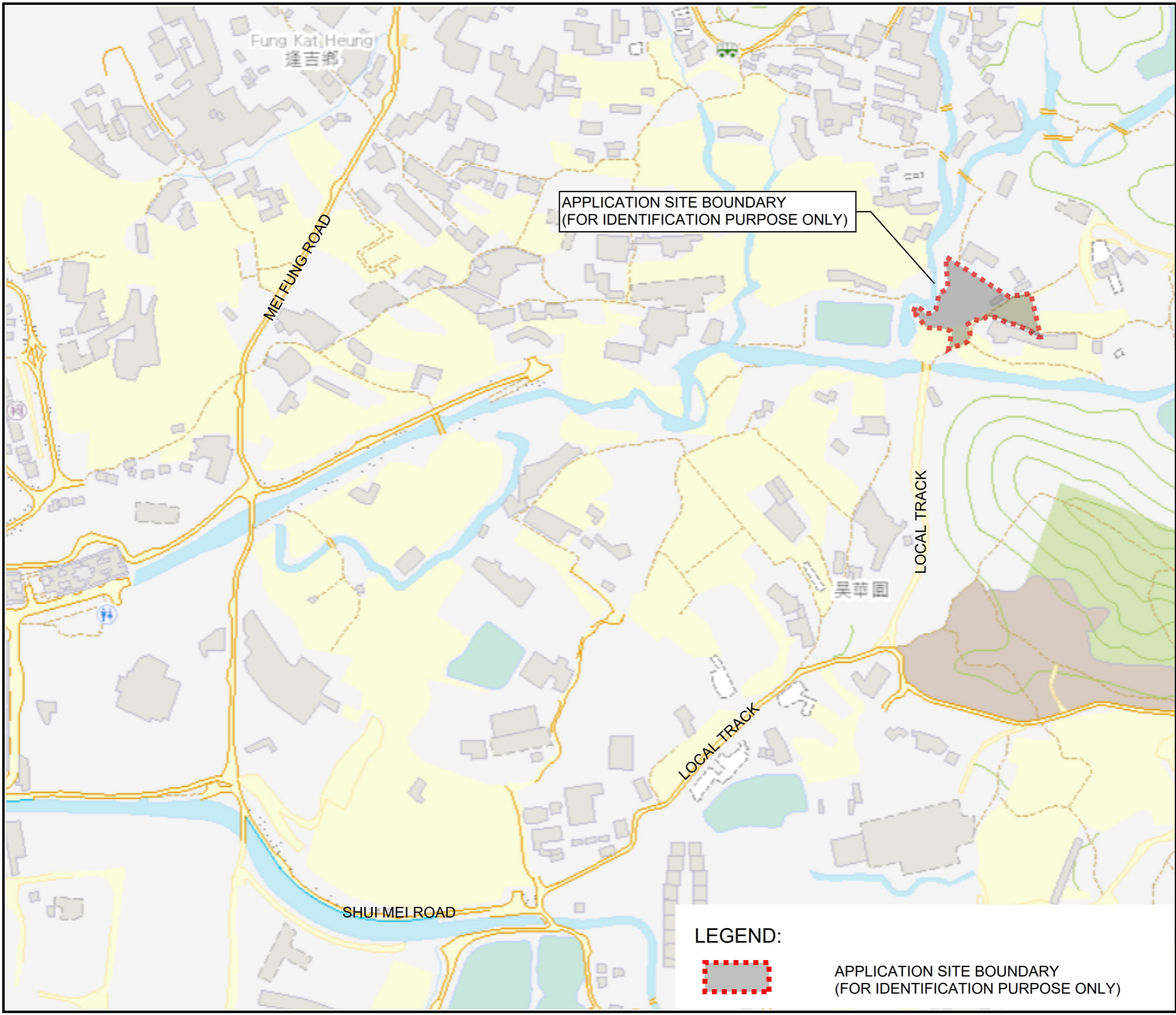
## 5. Conclusion

- 5.1.1 A drainage appraisal has been conducted for the Proposed Development. The surface runoff from the Application Site will be collected by the proposed perimeter Uchannel/drains and discharged to the existing stream at the west.
- 5.1.2 With the proposed drainage system, it is anticipated that there will be no significant drainage impact to the area after the implementation of the development.

- End of Text -

# FIGURES

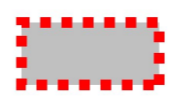
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APPLICATION SITE BOUNDARY  
(FOR IDENTIFICATION PURPOSE ONLY)

**PROJECT:**  
Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Lots 1290 RP (Part) and 1291 (Part) in D.D. 107, Fung Kat Heung, Kam Tin, Yuen Long, New Territories

**LEGEND:**



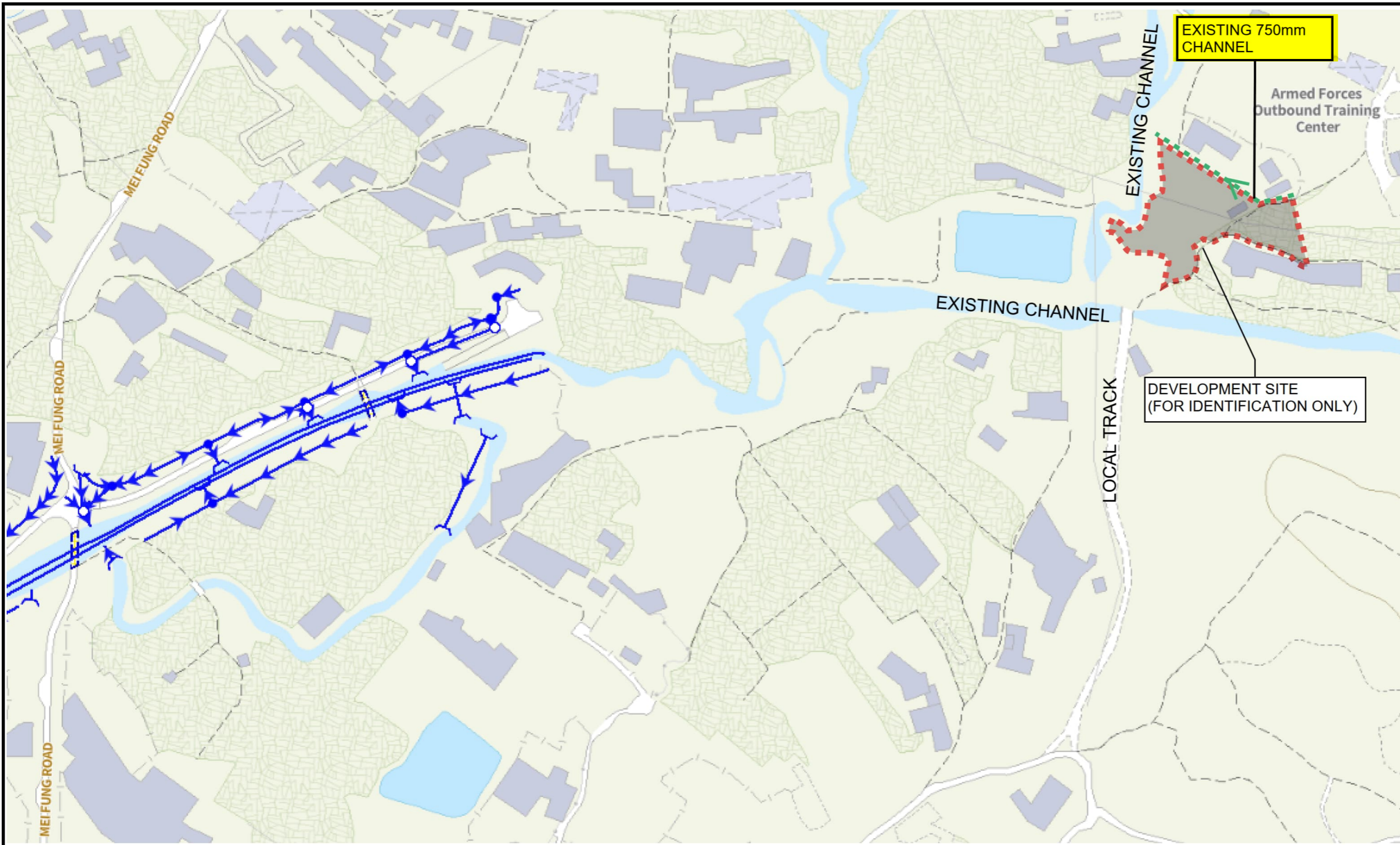
APPLICATION SITE BOUNDARY  
(FOR IDENTIFICATION PURPOSE ONLY)

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REV	DESCRIPTION	DATE
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DRAWING TITLE  
SITE LOCATION PLAN

DRAWING NUMBER  
FIGURE 1



**PROJECT:**  
 Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Lots 1290 RP (Part) and 1291 (Part) in D.D. 107, Fung Kat Heung, Kam Tin, Yuen Long, New Territories

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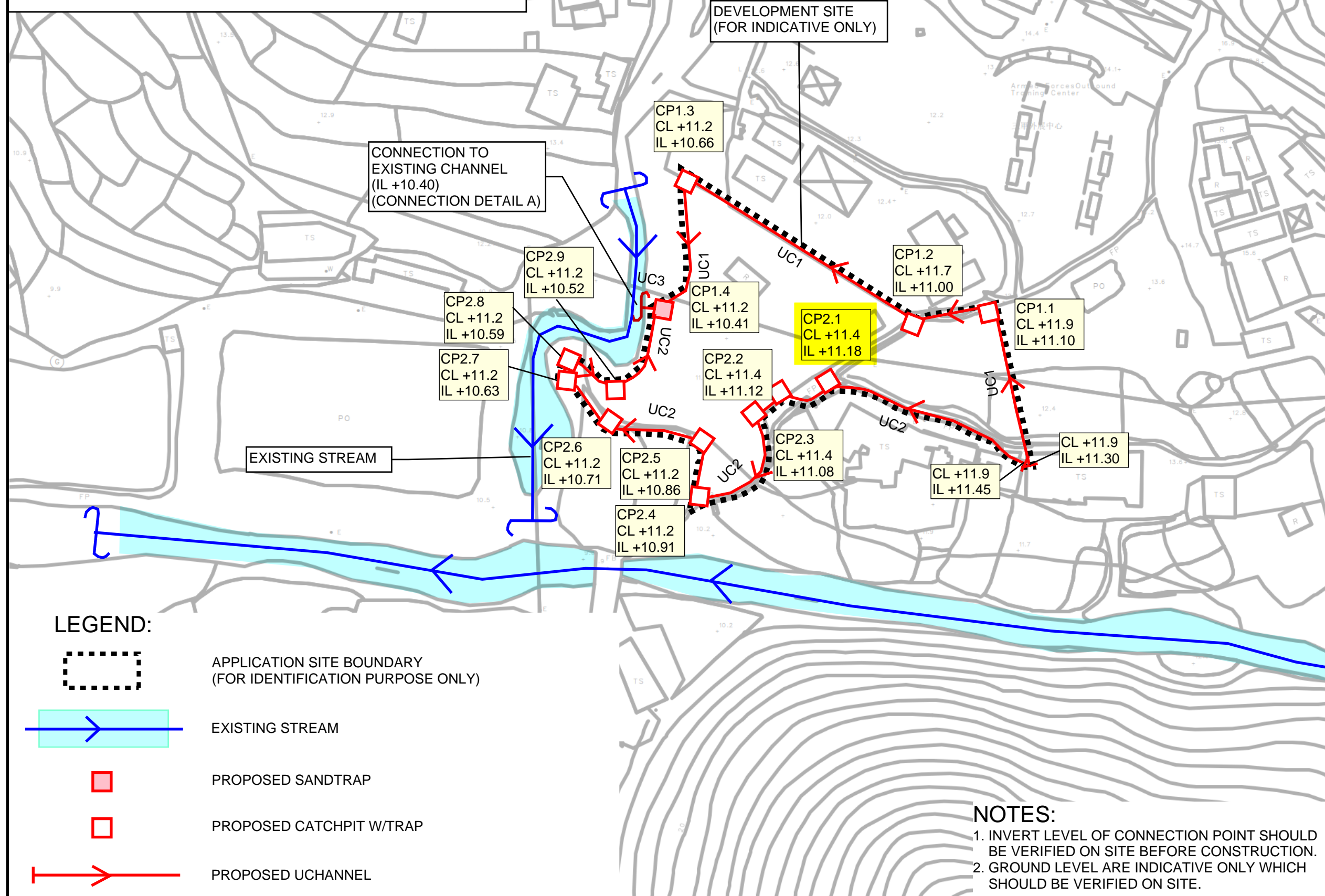
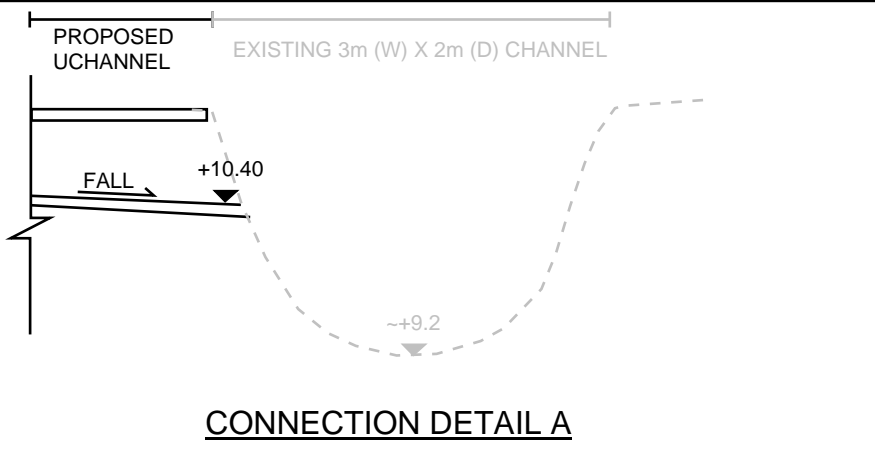
- |                          |                        |  |
|--------------------------|------------------------|--|
| Combined Manhole         | Tapping Point (Sewer)  | Tapping Point (Storm)                  |
| Overflow (Combined)      | Sewer Terminal Manhole | Storm Water Terminal Manhole           |
| Pipe (Combined)          | Catchpit               | Tunnel Protection Zone (100m / 200m)   |
| Interface Valve Chamber  | Inlet                  | Tunnel Protection Zone (General Range) |
| Sewer Manhole            | Storm Water Manhole    | Tunnel / Box Culvert (Sewer)           |
| Oil / Petrol Interceptor | Outlet                 | Tunnel / Box Culvert (Storm)           |
| Overflow (Sewer)         | Pipe (Storm)           |  |
| Pipe (Sewer)             | Sand Trap              |  |

EXTRACT FROM GEOINFO MAP ON MAR 2024


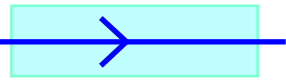



REV	DESCRIPTION	DATE
DRAWING TITLE EXISTING DRAINAGE PLAN		
DRAWING NUMBER FIGURE 2A		

**UCHANNEL TYPE**  
 UCHANNEL 1 (UC1) - 525mm, 1 IN 200  
 UCHANNEL 2 (UC2) - 375mm, 1 IN 200  
 UCHANNEL 3 (UC3) - 600mm, 1 IN 200

**PROJECT:**  
 Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Lots 1290 RP (Part) and 1291 (Part) in D.D. 107, Fung Kat Heung, Kam Tin, Yuen Long, New Territories



**LEGEND:**

-  APPLICATION SITE BOUNDARY (FOR IDENTIFICATION PURPOSE ONLY)
-  EXISTING STREAM
-  PROPOSED SANDTRAP
-  PROPOSED CATCHPIT W/TRAP
-  PROPOSED UCHANNEL

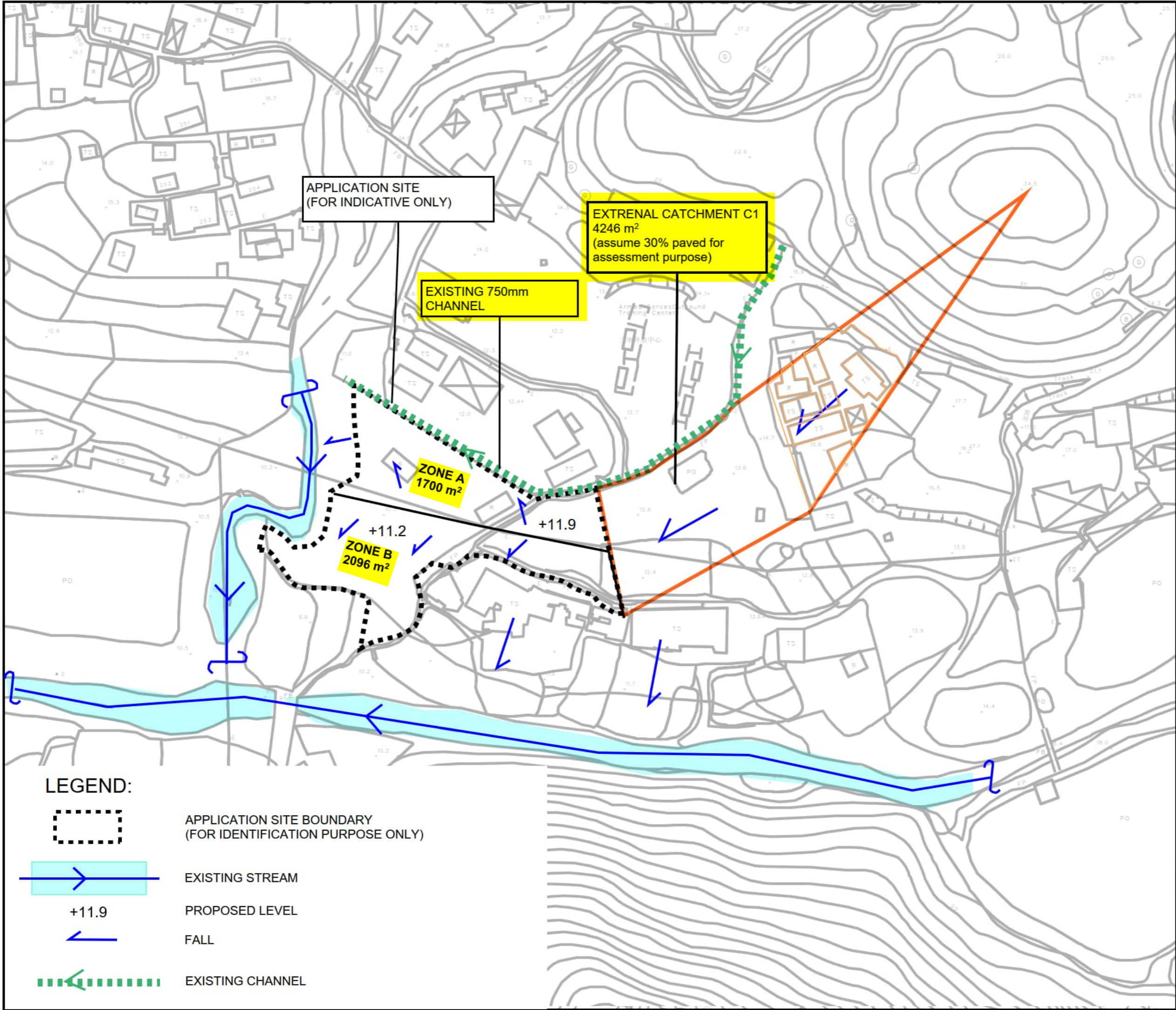
**NOTES:**

1. INVERT LEVEL OF CONNECTION POINT SHOULD BE VERIFIED ON SITE BEFORE CONSTRUCTION.
2. GROUND LEVEL ARE INDICATIVE ONLY WHICH SHOULD BE VERIFIED ON SITE.

REV	DESCRIPTION	DATE


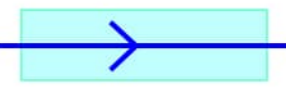



DRAWING TITLE  
**PROPOSED DRAINAGE SYSTEM**

DRAWING NUMBER  
**FIGURE 3B**



**PROJECT:**  
 Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Lots 1290 RP (Part) and 1291 (Part) in D.D. 107, Fung Kat Heung, Kam Tin, Yuen Long, New Territories

**LEGEND:**

-  APPLICATION SITE BOUNDARY (FOR IDENTIFICATION PURPOSE ONLY)
-  EXISTING STREAM
-  +11.9 PROPOSED LEVEL
-  FALL
-  EXISTING CHANNEL

REV	DESCRIPTION	DATE

DRAWING TITLE  
**CATCHMENT PLAN**

DRAWING NUMBER  
**FIGURE 4A**

# Appendix

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# Appendix A - Design Calculation

## U Channel 1 - Zone A with External Catchment C1

### Runoff Estimation

Design Return Period		1 in	10	years
Paved Area	1700 + 4246 x 0.3 =		2974	(m <sup>2</sup> )
Unpaved Area	4246 x 0.7 =		2972	(m <sup>2</sup> )
Total Equivalent Area	2974 x 0.95 + 2972 x 0.35 =		3865	(m <sup>2</sup> )
Time of Concentration *			6.20	min
Rainfall Intensity, I **			195	mm/hr
Design Discharge Rate, Q	0.278 x 3865 x 195 / 1000000 =		0.210	m <sup>3</sup> /s

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

### U Channel

Channel Size		1 in	525	(mm)
Gradient			200	
Velocity			1.62	m/s
Capacity			0.400	m <sup>3</sup> /s

Utilization  $0.21 / 0.4 = 52.54$  % OK (Allowed 10% for siltation)

## U Channel 2 - Zone B

### Runoff Estimation

Design Return Period		1 in	10	years
Paved Area	2096		2096	(m <sup>2</sup> )
Unpaved Area			0	(m <sup>2</sup> )
Total Equivalent Area	2096 x 0.95 + 0 x 0.35 =		1991	(m <sup>2</sup> )
Time of Concentration *			6.20	min
Rainfall Intensity, I **			195	mm/hr
Design Discharge Rate, Q	0.278 x 0 x 195 / 1000000 =		0.108	m <sup>3</sup> /s

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

### U Channel

Channel Size		1 in	375	(mm)
Gradient			200	
Velocity			1.30	m/s
Capacity			0.163	m <sup>3</sup> /s

Utilization  $0.108 / 0.163 = 66.39$  % OK (Allowed 10% for siltation)

## U Channel 3 - Combined (Zone A + B + C1)

### Runoff Estimation

Design Return Period		1 in	10	years
Paved Area	2974 + 2096 =		5070	(m <sup>2</sup> )
Unpaved Area	2972 + 0 =		2972	(m <sup>2</sup> )
Total Equivalent Area	5070 x 0.95 + 2972 x 0.35 =		5857	(m <sup>2</sup> )
Time of Concentration *			6.20	min
Rainfall Intensity, I **			195	mm/hr
Design Discharge Rate, Q	0.278 x 5857 x 195 / 1000000 =		0.318	m <sup>3</sup> /s

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

### U Channel

Channel Size		1 in	600	(mm)
Gradient			200	
Velocity			1.78	m/s
Capacity			0.570	m <sup>3</sup> /s

Utilization  $0.318 / 0.57 = 55.76$  % OK (Allowed 10% for siltation)

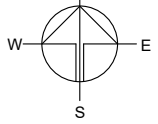
## Time of Concentration for External Catchment C1

Catchment	Flow Distance	Highest Level	Lowest Level	Gradient (per 100m) = (H1-H2)/L x 100	to (min) = 0.14465L / (H <sup>0.2</sup> A <sup>0.1</sup> )	tc = to + tf
A	L			H		
(m <sup>2</sup> )	(m)	(mPD)	(mPD)		(min)	(min)
4246	166	34.5	12.5	13.253	6.211	6.211
tc	=	6.211 (min)				

# Appendix B - Proposed Development Layout Plan

## DEVELOPMENT PARAMETERS

APPLICATION SITE AREA : 3,796 m<sup>2</sup> (ABOUT)  
 COVERED AREA : NOT APPLICABLE  
 UNCOVERED AREA : 3,796 m<sup>2</sup> (ABOUT)



### LEGEND

- APPLICATION SITE
- STRUCTURE
- OPEN STORAGE AREA
- LOADING / UNLOADING SPACE FOR MGW
- INGRESS / EGRESS

### PARKING AND LOADING / UNLOADING PROVISIONS

NO. OF L/UL SPACE FOR MEDIUM GOODS VEHICLE : 1  
 DIMENSION OF L/UL SPACE : 11 m (L) x 3.5 m (W)

PLANNING CONSULTANT



PROJECT

PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS FOR A PERIOD OF 3 YEARS AND ASSOCIATED FILLING OF LAND

SITE LOCATION

LOTS 1290 RP (PART) AND 1291 (PART) IN D.D. 107, FUNG KAT HEUNG, KAM TIN, YUEN LONG, NEW TERRITORIES

SCALE

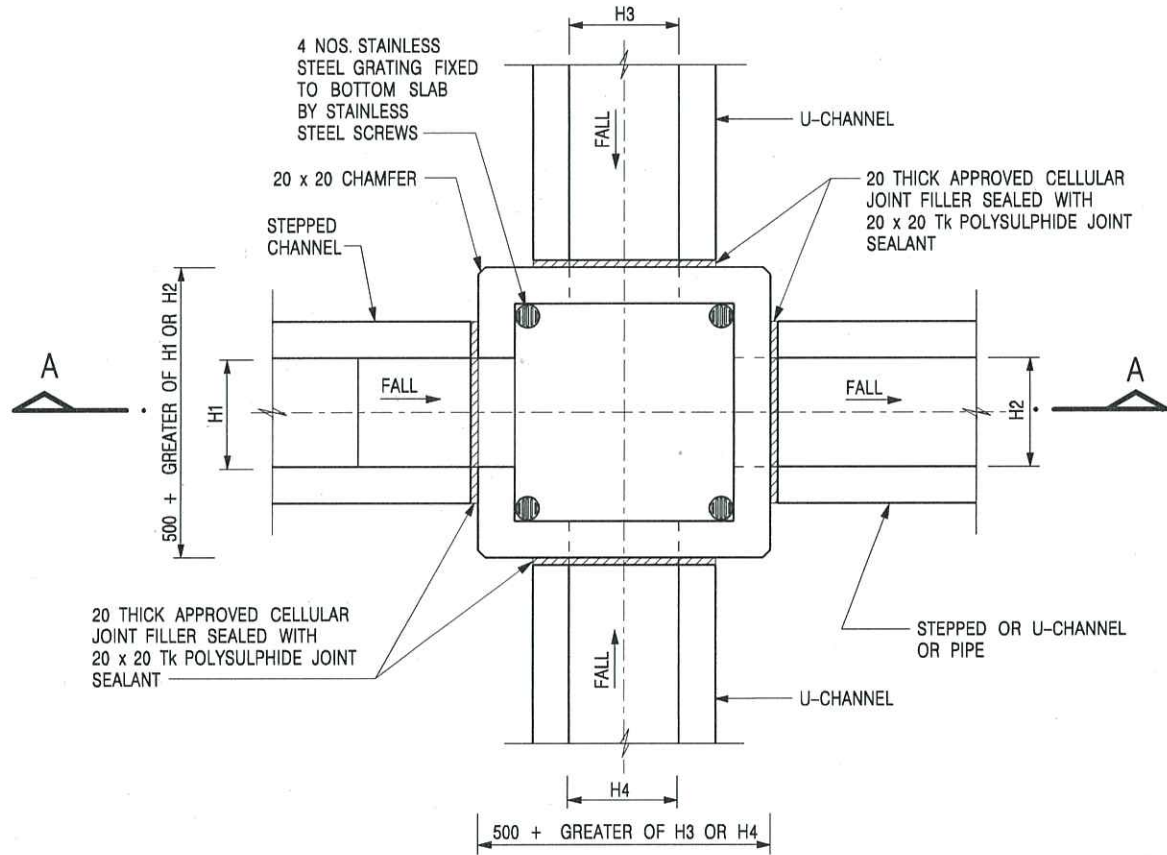
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DRAWN BY MN	DATE 11.1.2024
REVISED BY	DATE
APPROVED BY	DATE

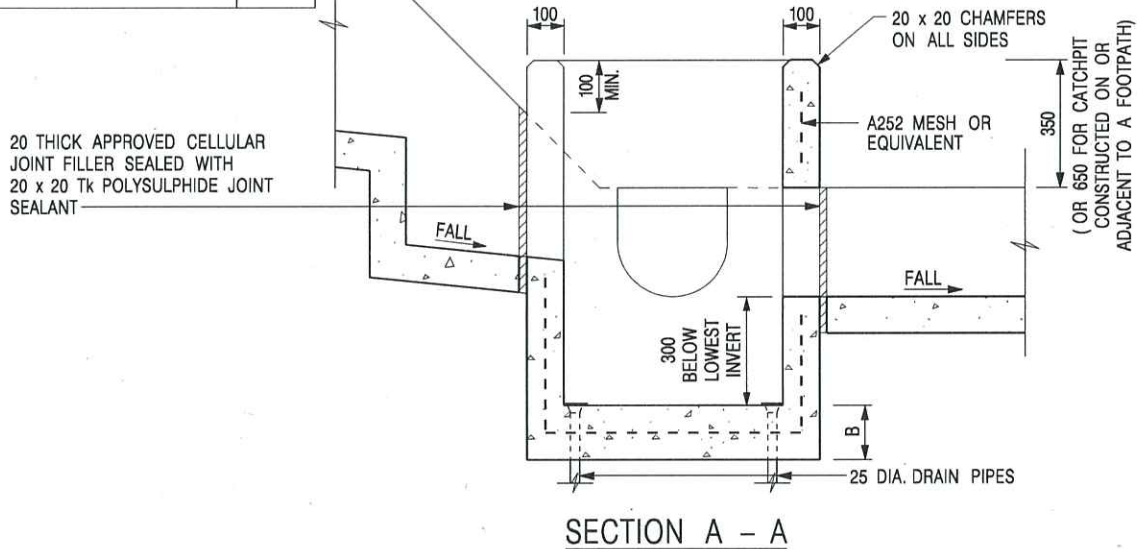
DWG. TITLE  
LAYOUT PLAN

DWG NO. PLAN 5	VER. 001
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# Appendix C - Reference Drawings



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



**NOTES:**

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

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

CATCHPIT WITH TRAP  
(SHEET 1 OF 2)



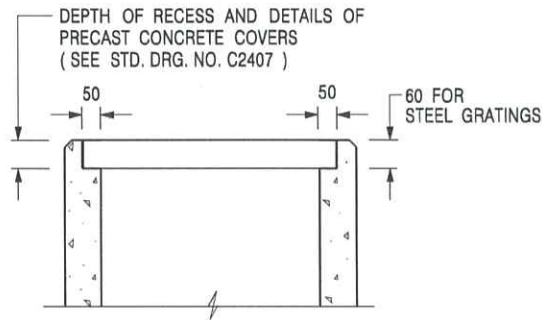
CIVIL ENGINEERING AND  
DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DRAWING NO.

DATE JAN 1991

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.

A	MINOR AMENDMENT.	Original Signed	04.2016
-	FORMER DRG. NO. C2406J.	Original Signed	03.2015
<b>REF.</b>	<b>REVISION</b>	<b>SIGNATURE</b>	<b>DATE</b>

CATCHPIT WITH TRAP  
(SHEET 2 OF 2)



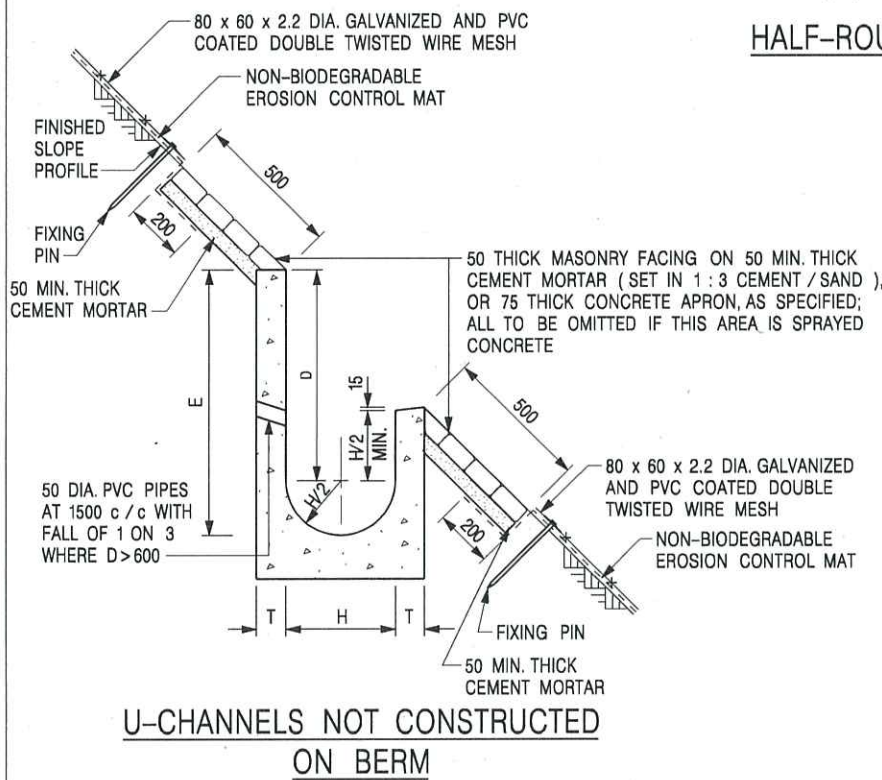
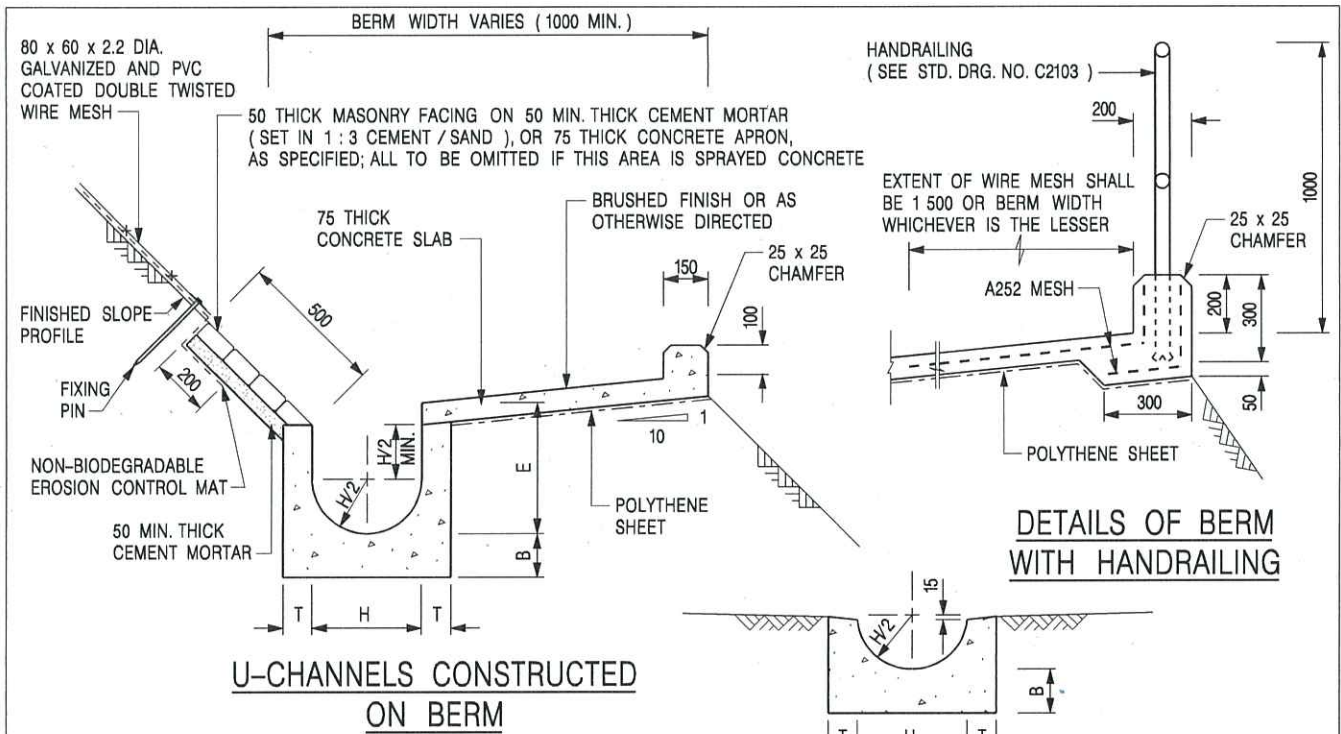
**CIVIL ENGINEERING AND  
DEVELOPMENT DEPARTMENT**

**SCALE** 1 : 20

**DRAWING NO.**

**DATE** JAN 1991

**C2406 /2A**



**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/E.
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/E)

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)



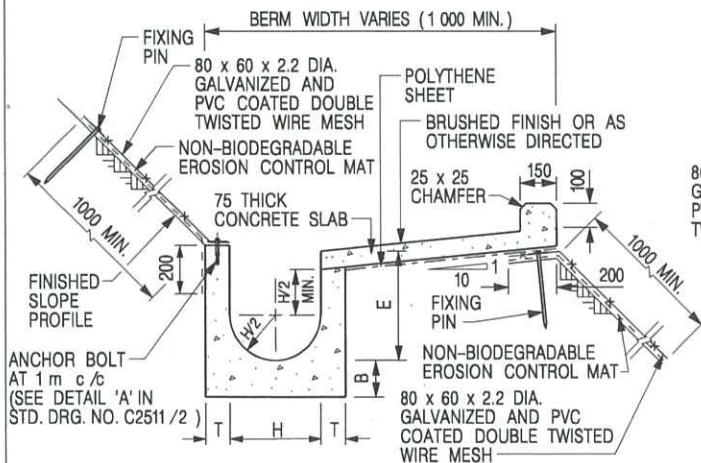
**CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT**

SCALE 1 : 25

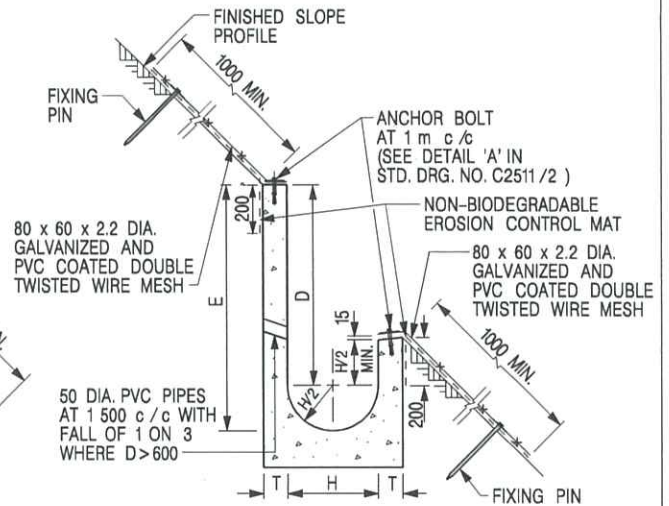
DRAWING NO.

DATE JAN 1991

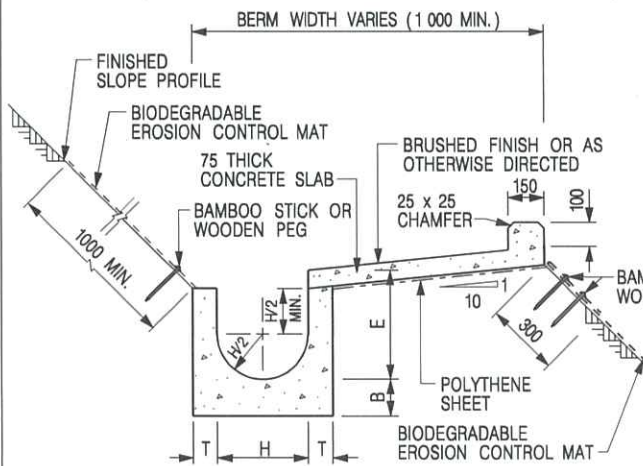
C24091



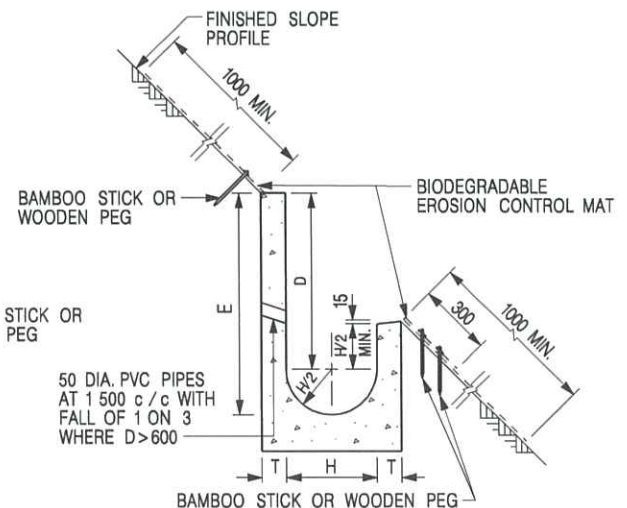
**U-CHANNELS CONSTRUCTED ON BERM WITH NON-BIODEGRADABLE EROSION CONTROL MAT**



**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:**

- ALL DIMENSIONS ARE IN MILLIMETRES.
- ALL CONCRETE TO BE GRADE 20 /20.
- CONCRETE SURFACE FINISH SHALL BE CLASS U2, F2 OR BRUSHED FINISH AS DIRECTED.
- SPACING OF EXPANSION JOINT IN CHANNELS, BERM SLABS AND APRONS TO BE 10 METRES MAXIMUM, SEE STD. DRG. NO. C2413 FOR DETAILS.
- JOINTS FOR CHANNELS, BERM SLABS, APRONS AND WALLS, ETC. TO BE ON THE SAME ALIGNMENT.
- FOR DIMENSIONS T, H, & B, SEE TABLE BELOW.
- FOR TYPICAL FIXING PIN DETAILS, SEE STD. DRG. NO. C2511/2.
- MINIMUM SIZE OF 25 x 50 x 300mm SHALL BE PROVIDED FOR WOODEN PEG.
- MINIMUM SIZE OF 10mm DIAMETER WITH 200mm LONG SHALL BE PROVIDED FOR BAMBOO STICK.
- 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)**



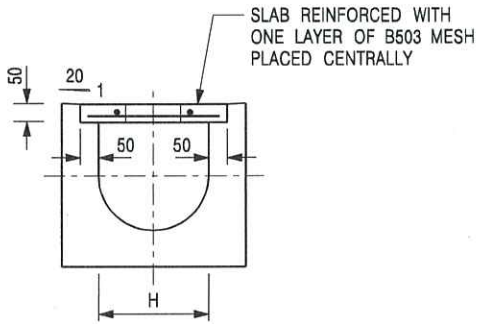
**CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT**

**SCALE** DIAGRAMMATIC

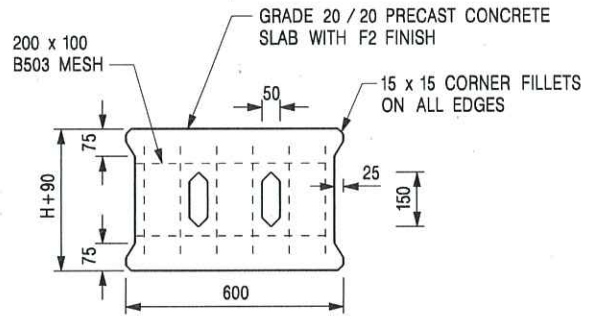
**DRAWING NO.**

**DATE** JAN 1991

**C24101**



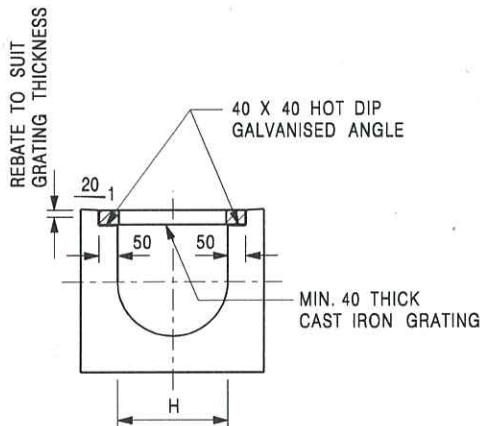
TYPICAL SECTION



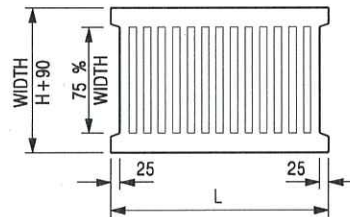
PLAN OF SLAB

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.

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



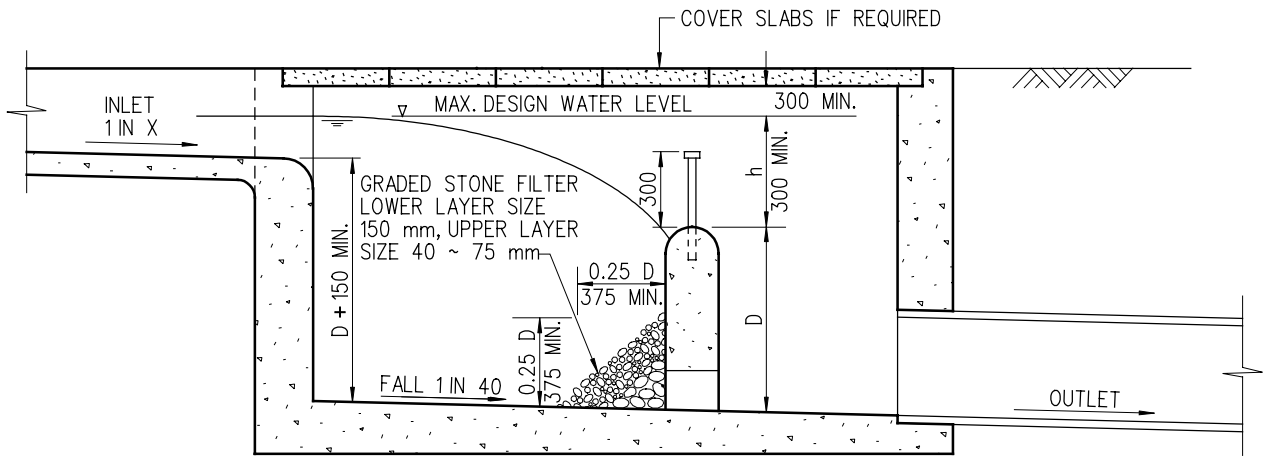
CIVIL ENGINEERING AND  
DEVELOPMENT DEPARTMENT

SCALE 1 : 20

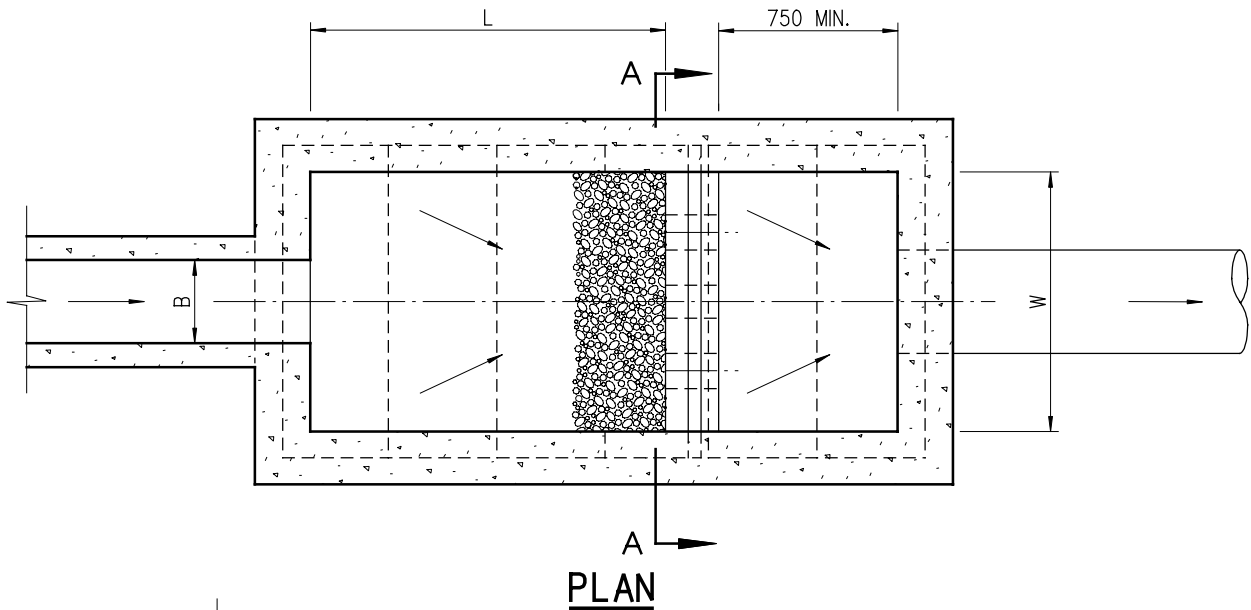
DRAWING NO.

DATE JAN 1991

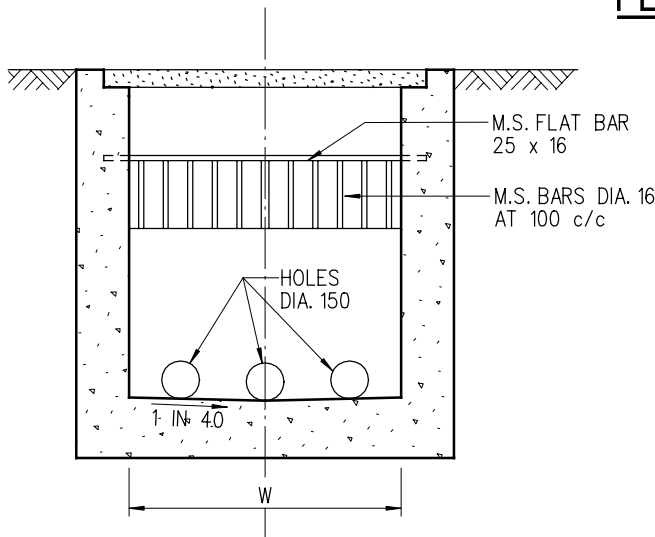
C2412E



**LONGITUDINAL SECTION**



**PLAN**



**SECTION A-A**

**NOTES:**

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. NORMALLY FOR DRAINS OF 900 mm DIA. AND BELOW. FOR BIGGER DRAINS AND STEEP TERRAIN, SAND TRAP SHOULD BE SPECIALLY DESIGNED.
3. SIZE  
 DEPTH :  $D \leq 750$   
 WIDTH :  $W \geq 3B$   
 LENGTH :  $4.8D^{0.67} h^{0.5} X^{0.5} \geq 4B$
4. GRADED STONE FILTER SHALL BE CRUSHER RUN GRANITE AGGREGATE.
5. CAPACITY  $D W L$  TO BE ACCORDING TO SIZE AND NATURE OF CATCHMENT, PROVIDING DETENTION TIME NOT LESS THAN 5 MINUTES FOR MAX. DESIGN FLOW OF INLET.

B	REDRAWN BY CAD	ORIGINAL SIGNED	8.8.2001
A	GENERAL REVIEW	ORIGINAL SIGNED	2.2.2001
REV.	DESCRIPTION	SIGNATURE	DATE

**SAND TRAP**

**DRAINAGE SERVICES DEPARTMENT**

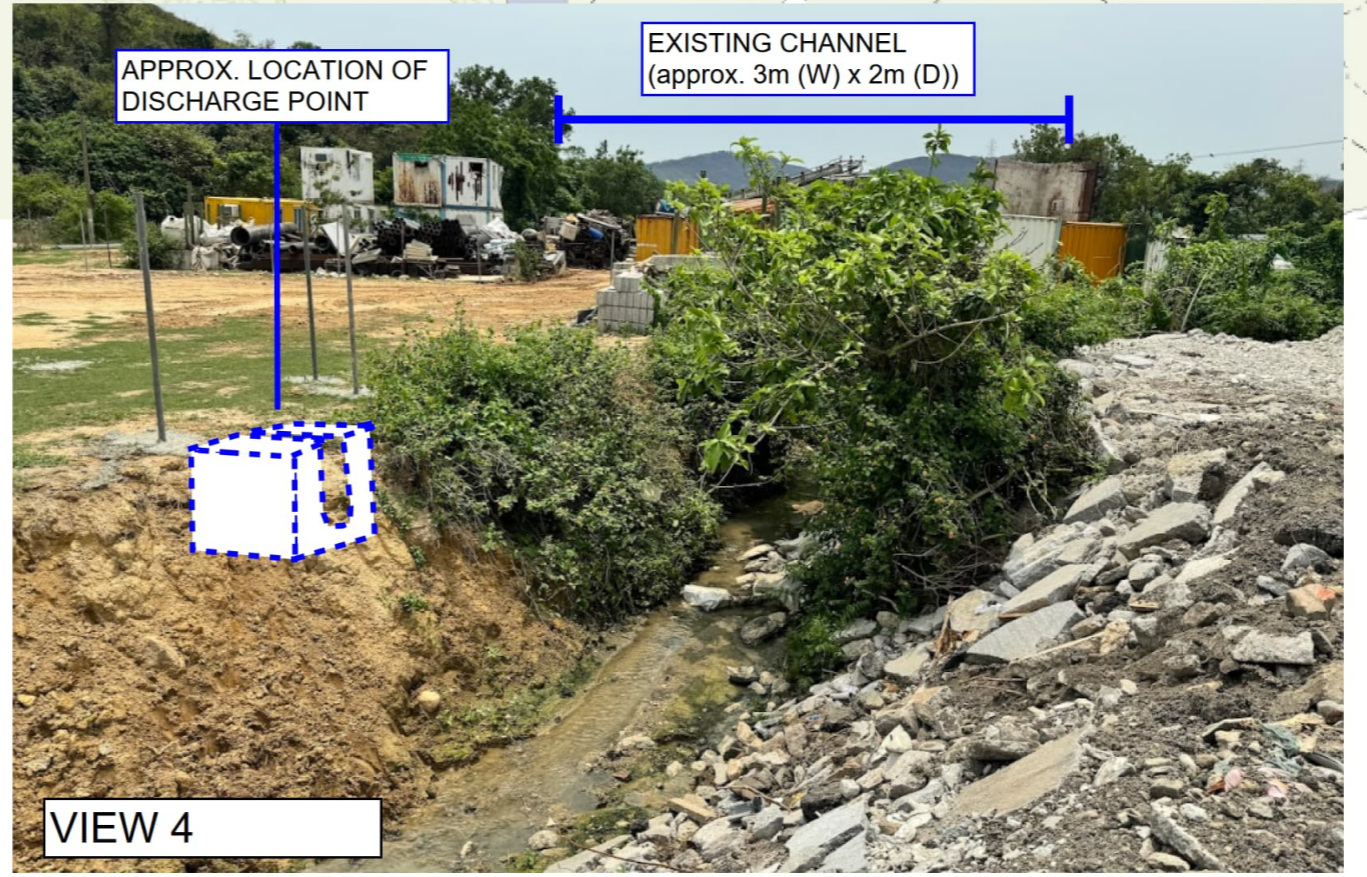
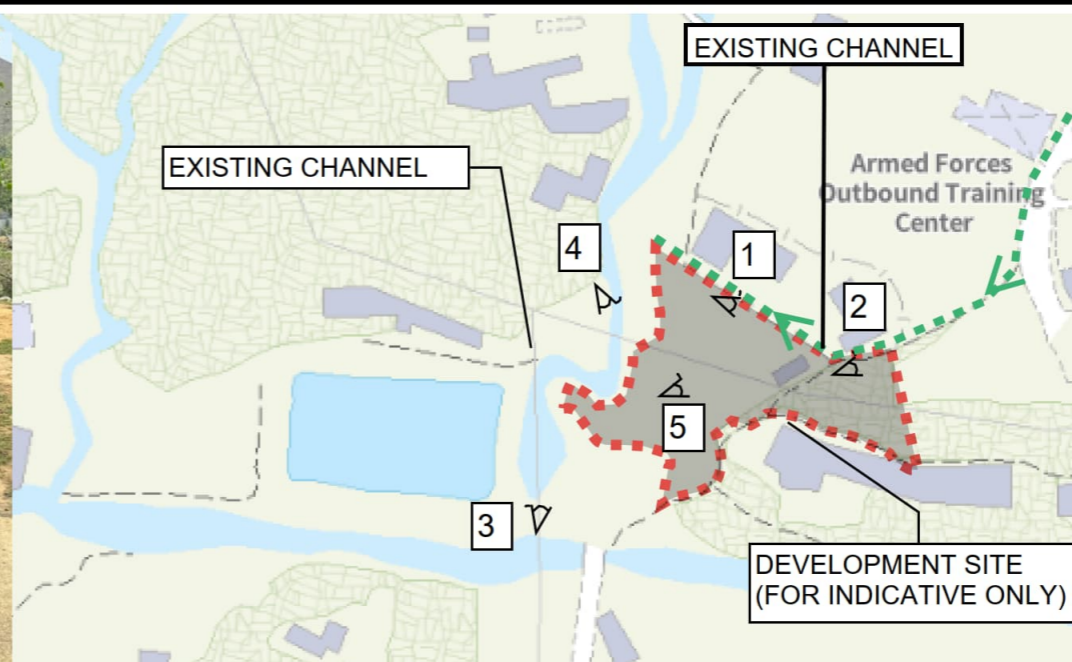
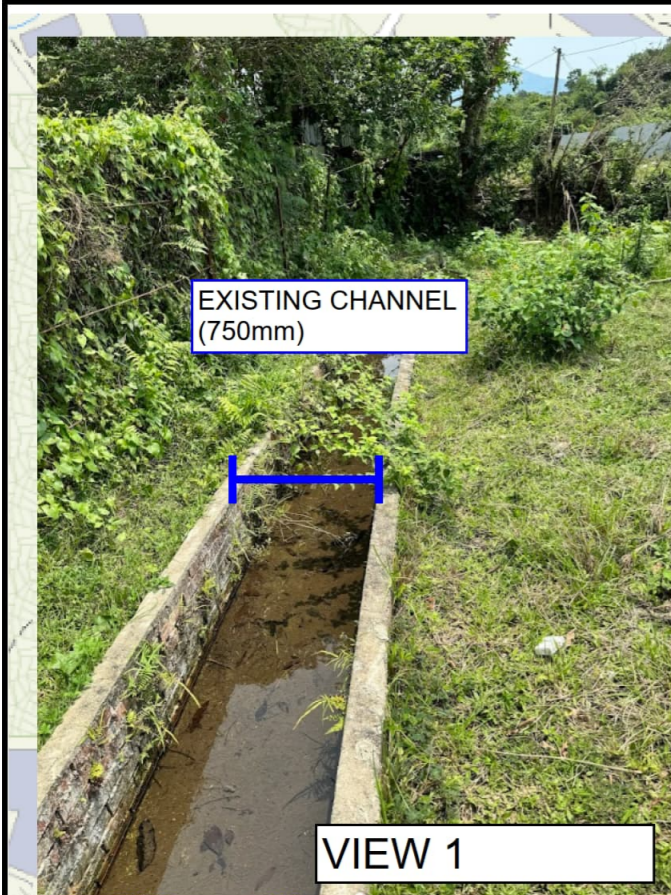
REFERENCE

DRAWING No.

SCALE

DIAGRAMMATIC

**DS 1025B**



**PROJECT:**  
 Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond in "Agriculture" Zone, Lot 1434 (part) in D.D. 107, Kam Tin, Yuen Long, New Territories

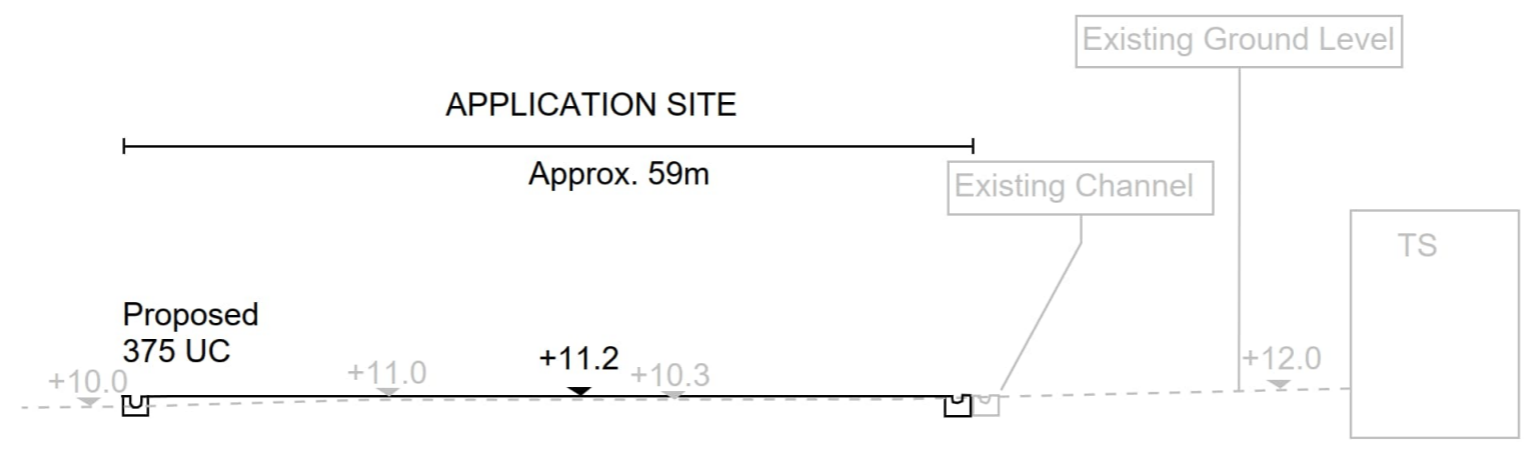

Photos Record of Surroundings

Appendix D

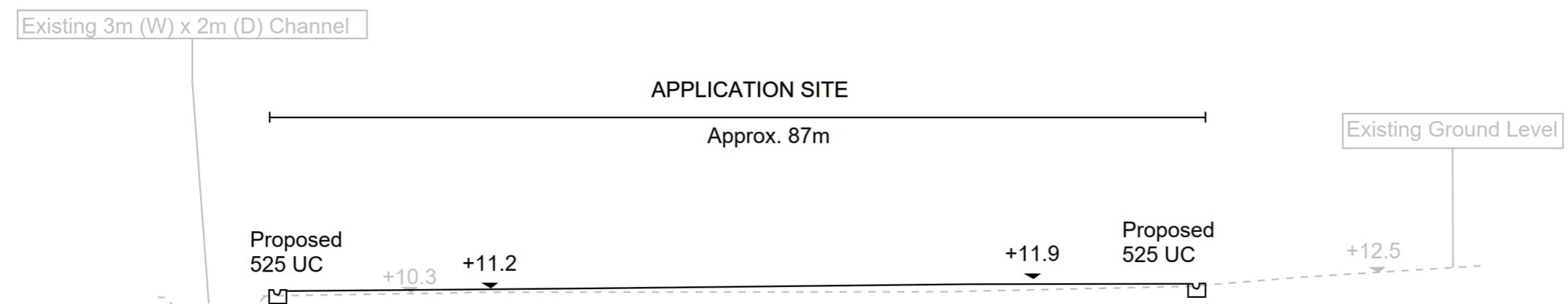


PLAN

**PROJECT:**  
 Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land and Pond in "Agriculture" Zone, Lot 1434 (part) in D.D. 107, Kam Tin, Yuen Long, New Territories



SECTION 1  
 NTS



SECTION 2  
 NTS

SECTIONS

Appendix E

## Appendix F Checking of Existing 3m (W) x 2m (D) Channel [Assume width of channel is 2m for Assessment Purpose]

### Runoff Estimation

Design Return Period		1 in	10	years
Paved Area	$5070 + 530101 \times 0.25 =$		137,595	(m <sup>2</sup> )
Unpaved Area	$2972 + 530101 \times 0.75 =$		400,548	(m <sup>2</sup> )
Total Equivalent Area	$137595 \times 0.95 + 400548 \times 0.35 =$		270,907	(m <sup>2</sup> )
Time of Concentration *			29.30	min
Rainfall Intensity, I **			141	mm/hr
Design Discharge Rate, Q	$0.278 \times 270907 \times 141 / 1000000 =$		10.597	m <sup>3</sup> /s

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

### U Channel

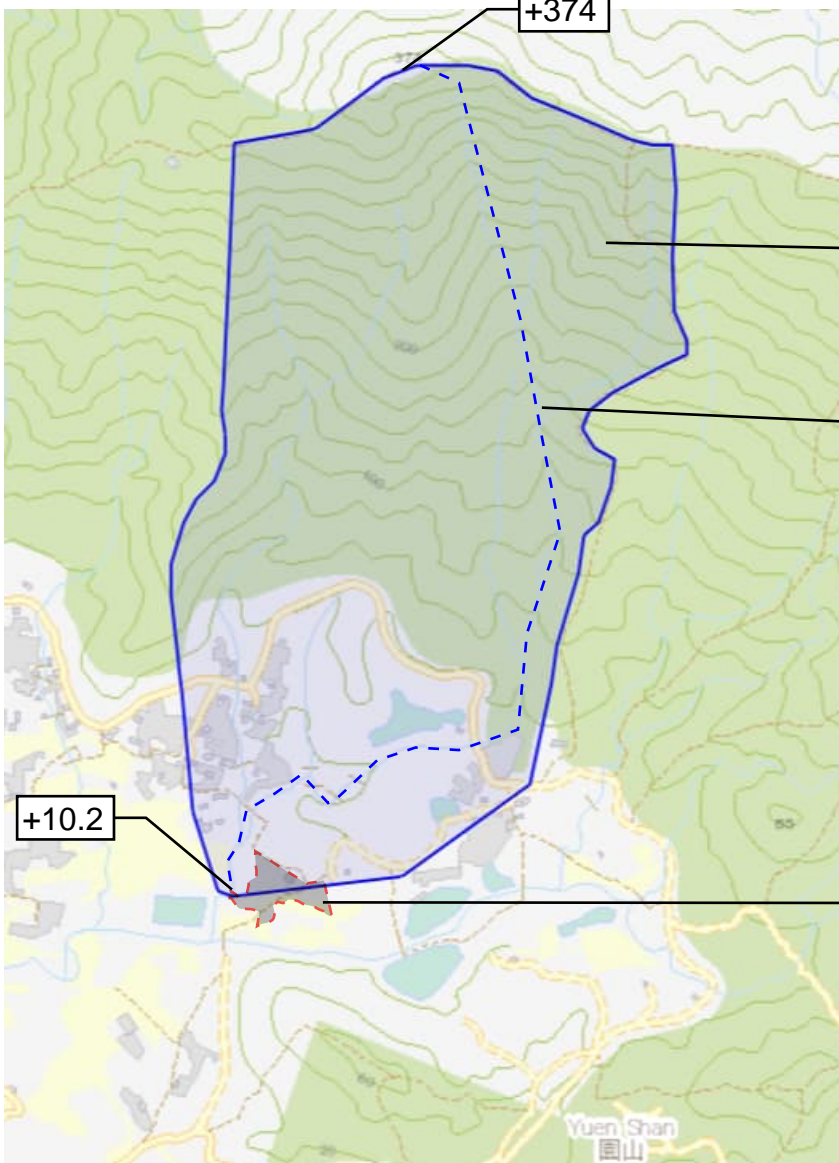
Channel Size		1 in	2000	(mm)
Gradient			130	
Velocity			4.91	m/s
Capacity			17.543	m <sup>3</sup> /s

Utilization  $10.597 / 17.543 = 60.41$  % OK (Allowed 10% for siltation)

## Time of Concentration for Existing 3m (W) x 2m (D) Channel

Catchment	Flow Distance	Highest Level	Lowest Level	Gradient (per 100m)	to (min) =	tc =
				$= (H1-H2)/L \times 100$	$0.14465L / (H^{0.2} A^{0.1})$	to + tf
A	L			H		
(m <sup>2</sup> )	(m)	(mPD)	(mPD)		(min)	(min)
530101	1446	374	10.2	25.159	29.371	29.371

tc = 29.371 (min)



Catchment Area  
530,101 m<sup>2</sup>

Flow Distance  
1446 m  
(base on stream shown on basemap)

DEVELOPMENT SITE  
(FOR INDICATIVE ONLY)

# 規 劃 署

粉嶺、上水及元朗東規劃處  
新界荃灣青山公路 388 號  
中染大廈 22 樓 2202 室



## Planning Department

Fanling, Sheung Shui & Yuen Long East  
District Planning Office  
Unit 2202, 22/F, CDW Building,  
388 Castle Peak Road, Tsuen Wan, N.T.

來函檔號 Your Reference : DD107 Lots 1290 RP & 1291  
本署檔號 Our Reference : TPB/A/YL-KTN/994  
電話號碼 Tel. No. : 3168 4049  
傳真機號碼 Fax No. : 3168 4074/ 3168 4075

**By Post & Fax** [REDACTED]

R-riches Property Consultants Ltd.

[REDACTED]  
(Attn: Louis TSE / Danny NG / Christian CHIM)

6 March 2026

Dear Sir/ Madam,

**Submission for Compliance with Approval Condition (d) -  
the Implementation of the Accepted Drainage Proposal**


**Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years  
and Associated Filling of Land in "Agriculture" Zone, Lots 1290 RP (Part)  
and 1291 (Part) in D.D. 107, Fung Kat Heung, Kam Tin, Yuen Long**  
**(Application No. A/YL-KTN/994)**

I refer to your submission dated 27.10.2025 for compliance with the captioned approval condition. The relevant department has been consulted on your submission. Your submission is considered:

- Acceptable. The captioned condition has been complied with.
- Acceptable. Since the captioned condition requires both the submission and implementation of the proposal, it has not been fully complied with. Please proceed to implement the accepted proposal for full compliance with the approval condition.
- Not acceptable. The captioned condition has not been complied with. Please find detailed departmental comments in *Appendix*.

Should you have any queries on the departmental comments, please contact Miss Jessica KWAN (Tel.: 3965 8924) of the Drainage Services Department directly.

Yours faithfully,

  
( Andrea YAN )  
for District Planning Officer/  
Fanling Sheung Shui & Yuen Long East  
Planning Department

C.C.  
CE/MN of DSD

(Attn.: Miss Jessica KWAN)

Internal  
CTP/TPB

AY/IF

Appendix

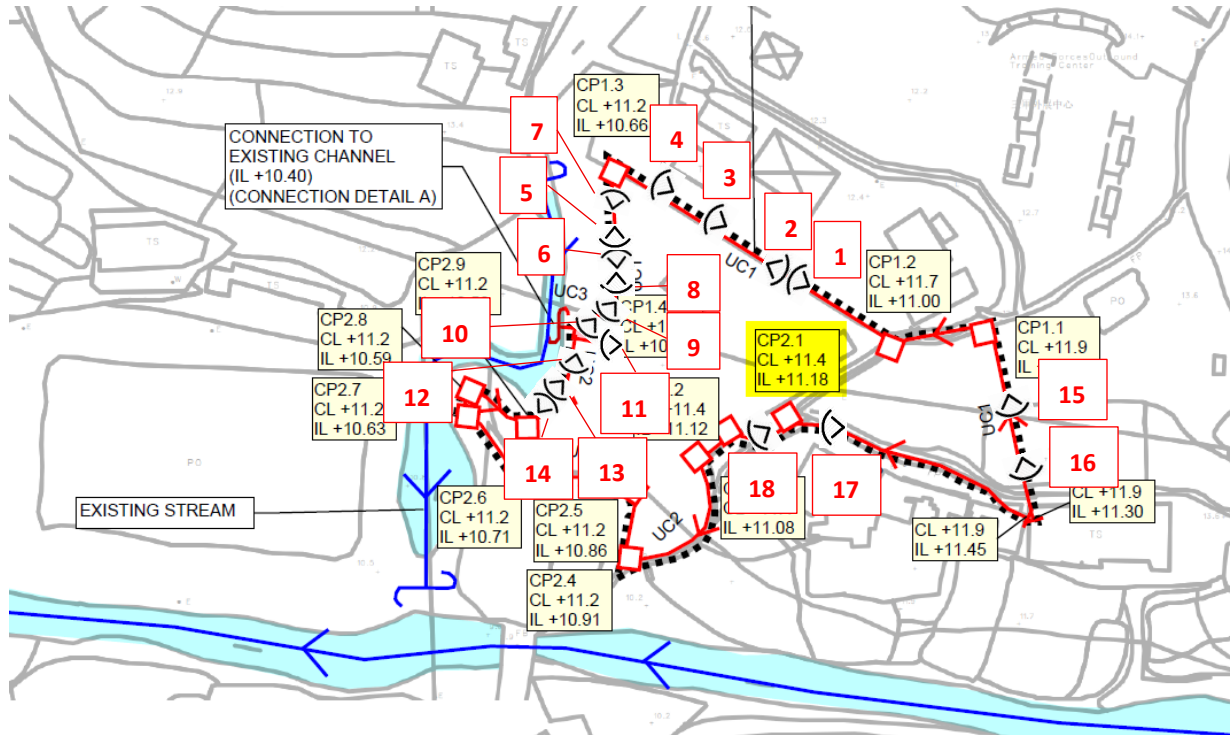
Comments from Chief Engineer/Mainland North of the Drainage Services Department

The as-built drainage system under the captioned planning application is not acceptable due to the following reasons.

1. The as-built drainage system was not constructed as per the accepted drainage proposal.
2. Some proposed drainage facilities shown in the accepted drainage proposal could not be seen in application site. The as-built drainage facilities should not be covered up by plants, machineries and other materials.
3. Debris was found in as-built drainage facilities that water flow would be obstructed.
4. Inadequate openings at the toe of the hoarding which may obstruct the overland flow.
5. An unknown 150 mm dia. pipe, which was not shown in the accepted drainage proposal, was improperly connected to the as-built catchpit CP1.1.

**Appendix I - Photographic Records of the Existing Drainage Facilities**

(a) Photographic records of the existing drainage facilities within the Site are as follows:



1



2



3



4



5



6



7



8



9



10



11



12



13



14



15



16



17



18

