



盈卓
規劃
有限公司

Our Ref. : DD115 Lot 1212 S.A ss.3
Your Ref. : TPB/A/YL-NSW/378

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

By E-mail

28 September 2026

Dear Sir,

Further Information

Proposed Temporary Warehouse (excluding Dangerous Goods Godown) with Ancillary Facilities and Associated Filling of Land for a Period of 3 Years in ""Other Specified Uses"" annotated "Comprehensive Development to include Wetland Restoration Area" Zone, Lots 1212 S.A ss.2 (Part) and 1212 S.A ss.3 (Part) in D.D. 115 and adjoining Government Land and Discrepant Area (Part), Yuen Long, New Territories

(S.16 Planning Application No. A/YL-NSW/378)

We write to provide further information with the following document in support of the captioned application:

- the drainage impact assessment accepted under the previous application No. A/YL-NSW/334 (**Annex 1**).

Should you require more information, please contact the undersigned at [REDACTED].
Thank you for your kind attention.

Yours faithfully,

For and on behalf of
R-riches Planning Limited

A handwritten signature in black ink, followed by a circular purple company stamp. The stamp contains the text 'R-RICHES PLANNING LIMITED' and '盈卓規劃有限公司' around a central emblem.

Christian CHIM
Town Planner

cc DPO/TMYLW, PlanD

(Attn.: Mr. Ajyum CHAN
(Attn.: Ms. Athena LAI

email: adchan@pland.gov.hk)
email: apylai@pland.gov.hk)



Annex 1

Drainage impact assessment
accepted under the previous application No. A/YL-NSW/334

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: DD115 Lot 1212 S.A ss.3
本署檔號 Our Reference: TPB/A/YL-NSW/334
電話號碼 Tel. No.: 3168 4043/3168 4072
傳真機號碼 Fax No.: 3168 4074/3168 4075

By Post and Fax

R-riches Planning Limited

(Attn.: Danny NG/Christian CHIM)

23 September 2026

Dear Sir/Madam,

Submission for Compliance with Approval Condition

(a) - The Submission of a Revised Drainage Impact Assessment

Proposed Temporary Warehouse (excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Other Specified Uses" annotated "Comprehensive Development to include Wetland Restoration Area" Zone, Lots 1212 S.A ss.2 (Part) and 1212 S.A ss.3 (Part) in D.D. 115 and adjoining Government Land, Yuen Long, New Territories

(Application No. A/YL-NSW/334)

I refer to your submission dated 14.9.2026 with the captioned approval condition. The relevant department has been consulted on your submission. Your submission is considered:

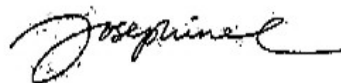
- ☒ Acceptable. The captioned condition **has been complied with**. Please find the advisory comment from relevant department in *Appendix*.
- ☐ Acceptable. Since the captioned condition requires both the submission and implementation of the proposal, it **has not been fully complied with**. Please proceed to implement the accepted proposal for full compliance with the approval condition.
- ☐ Not acceptable. The captioned condition **has not been complied with**.

透過規劃工作，使香港成為一個宜居、具競爭力和可持續發展的亞洲國際都會

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Should you have any queries on the departmental comments, please contact Mr. TSANG Fan Kong, Fanco (Tel: 3965 8926) of the Drainage Services Department directly.

Yours faithfully,



(Josephine LO)
District Planning Officer/
Fanling Sheung Shui & Yuen Long East
Planning Department

C.C.

CE/MN, DSD

(Attn.: Mr. TSANG Fan Kong, Fanco)

Internal

CTP/TPB(1)

JL/AC/al

*Appendix*Advisory Comments from the Chief Engineer/Mainland North Division, Drainage Services Department:

The applicant shall note the reminders in **Appendix A**. The applicant shall implement the proposed drainage facilities on site in accordance with this drainage proposal and the requirements set out in **Appendix A**.

Should it be discovered at a later stage that any requirements in **Appendix A** have not yet been properly complied with in the drainage proposal, the requirements concerned should still be followed and implemented on site at the applicant's own cost, including any abortive costs that may be incurred, for compliance with approval condition (b).

Appendix A**Responses on DSD's Requirements and Reminders**

Planning Application No.: _____

Location: Lot No. _____

_____ in D.D. _____

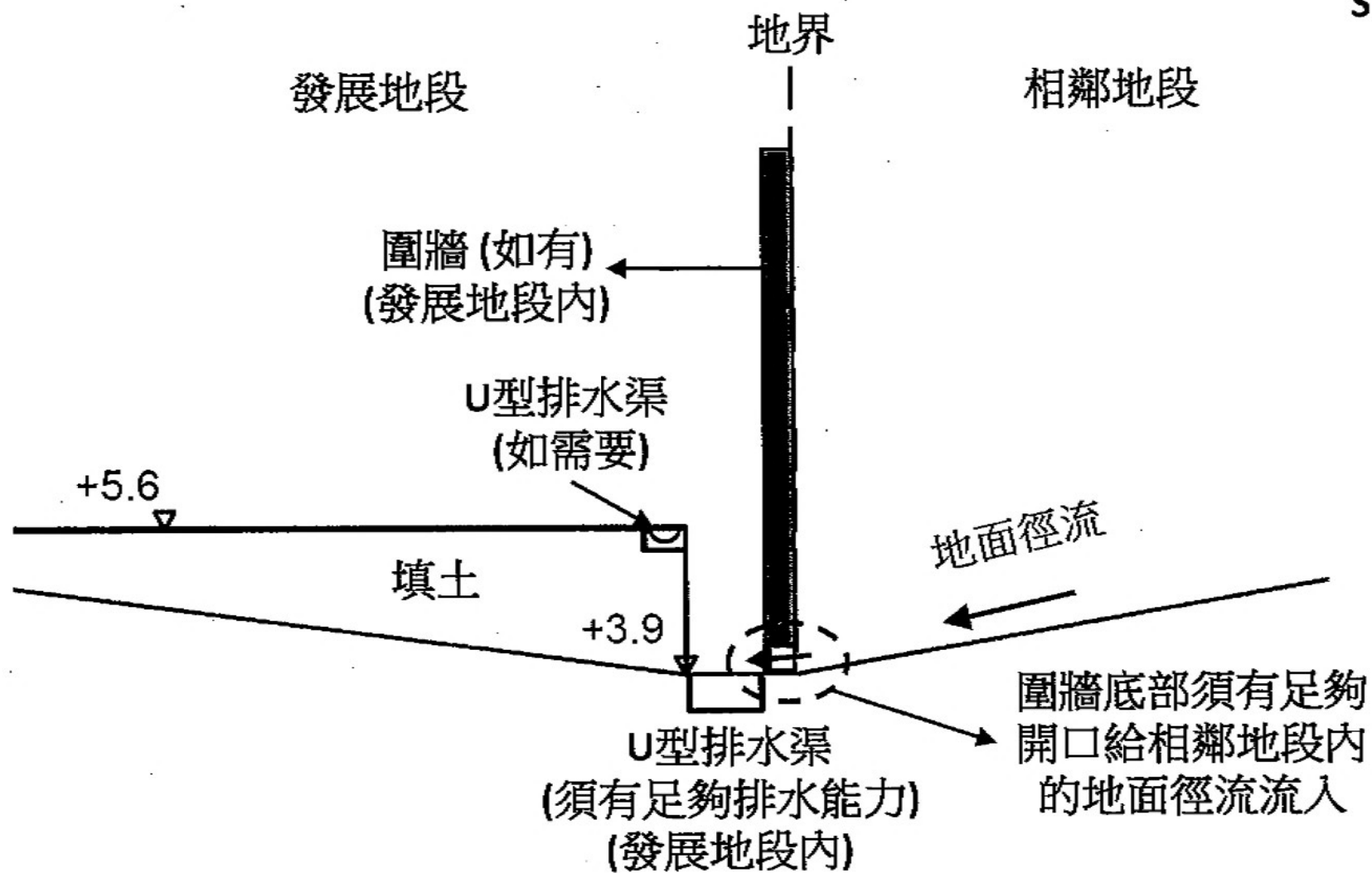
Site Area: _____ m²
 Land filling works involved? _____ Yes / No
 Maximum increase in formation level: _____ m
 Maximum level difference with adjoining lot: _____ m
 Filling of pond(s) involved? _____ Yes / No
 Estimated size of pond to be filled: _____ m³

No.	(A) DSD's Requirements	Fulfilled in the submission? (Yes / No)
1	For sites considered complex (those 1 hectare or larger, in flood-prone areas, or involving pond filling or major earthworks), you should hire a qualified engineer (Registered Professional Engineer in the Civil Engineering discipline) to follow DSD Advice Note No. 1 and submit a proposal signed and certified by the engineer. For other sites, it is also advisable to hire a qualified engineer to prepare your drainage proposal.	
2	The proposed development should neither obstruct overland flow nor adversely affect any existing natural streams, village drains, ditches and the adjacent areas, etc., unless there is proper diversion.	
3	Adequate surface channels shall be provided to collect and convey the surface runoff accrued on the application site.	
4	If there is existing surface runoff flowing from the adjoining lots towards the application site, peripheral surface channels with sufficient drainage capacity, set at a level lower than the adjoining lots, should be constructed to collect and convey the runoff (See Sketch A).	
5	Where boundary walls or hoarding are erected, adequate openings should be provided to allow existing overland flow from the adjoining lots to pass through (see Sketch A).	
6	The applicant shall be required to place all the proposed works 3m away from the top of the bank of any existing watercourses or natural streams. All the proposed works in the vicinity of the watercourses should not create any adverse drainage impacts, both during and after construction. Adequate measures should be provided by the applicant to DSD's satisfaction in order to prevent the subject site from being eroded and flooded and to ensure that the capacity of watercourses and the flooding susceptibility of the adjoining areas would not be adversely affected by the proposed development.	
7	The applicant should indicate the proposed and existing ground levels of the application site and ground levels of adjacent areas on the drainage plan.	
8	Cross sections showing the proposed drainage facilities and existing and proposed ground levels of the application site with respect to the adjacent areas should be given.	
9	The proposal should indicate how the runoff (the flow direction) within the site and from the adjacent areas would be discharged to the proposed drainage system.	
10	Sand trap or provision alike should be clearly indicated on the proposed drainage plan and provided before the collected runoff is discharged to the existing drainage facilities.	

11	The applicant should clearly indicate the full alignment of the discharge path from the application site all the way down to the ultimate discharge point (e.g. a well-established stream course/public drainage system).	
12	The applicant should clearly indicate the existing drainage facilities on the proposed drainage plan. Site photos of existing drainage facilities including the discharge point (e.g. existing local village drain and its downstream drainage facilities) should be provided in order to demonstrate the presence and reflect condition of the existing drainage system. Also, the applicant should provide site photo(s) to demonstrate size of the existing drainage facilities.	
13	Cover levels and invert levels of the proposed and existing drainage facilities should be shown on the drainage plan. Invert levels of drainage facilities at the upstream should be higher than that at the downstream. Also, gradients and sizes of the proposed and existing drainage facilities should be shown on the drainage plan.	
14	The applicant should demonstrate with hydraulic calculation that the proposed drainage facilities are adequate to collect, convey and discharge the surface runoff accrued on the application site and the overland flow intercepted from the adjacent lands. External catchment shall be properly considered	
15	Connection to existing drainage facilities should be designed and constructed to prevent back flows at the drainage outlet when water level at the existing drainage facilities is high.	
16	Stormwater Drainage Manual (SDM) and the newly promulgated SDM - Corrigendum published by DSD shall be considered in the hydraulic calculation. Also, storm constants of HKO Headquarters shall be adopted. In general, a 10-year design return period is sufficient for village drainage systems.	
17	Deposition of sediment in stormwater drainage system should be considered in the hydraulic calculation as per the requirement in Stormwater Drainage Manual (Section 9.3).	
18	The applicant should check flow velocity of the proposed drainage facilities. The flow velocity is suggested to be within a range, i.e. 0.75 m/s to 3.0 m/s.	
19	Catchpit should be provided at where a proposed surface channel changes direction / gradient.	
20	The applicant should provide construction details of the proposed drainage facilities.	
21	The applicant should provide details for connection of the proposed and existing drainage facilities.	
22	Grating should be provided for the surface channels.	
23	Precast concrete pipe should generally be used for stormwater connection.	
24	Connection of the proposed and existing drainage facilities shall be designed and constructed such that there is no water leakage at the proposed connection.	
25	For the construction details of the proposed drainage facilities, reference should be made to current CEDD's standard drawings.	
	(B) DSD's Reminders	Fulfilled in the submission? (Yes / No)
1	Any existing drainage facilities within/outside the application site should not be disturbed or interfered with until any necessary diversion works, which have been accepted by the owner of the existing drainage facilities, have been satisfactorily completed. Such diversion works should be carried out by the applicant at his/her own cost. Moreover, sufficient allowance for future maintenance of the existing drainage facilities should be provided.	

2	No construction debris, silt and sediments, or cementitious materials should be discharged into or deposited inside any existing natural streams, watercourses, drains, ditches or sewers from the application site without prior approval. Any blockage or damage arising from the proposed development shall be made good at the cost of the applicant and to DSD's satisfaction. The applicant shall also be liable for and shall indemnify against all claims and demands arising out of or in connection with this regard.	
3	The applicant should be reminded to minimize the possible adverse environmental impacts on any existing watercourses in his design and during construction. EPD and AFCD should be consulted on possible environmental and/or ecological impacts of the proposed development which is in the vicinity of any existing watercourses.	
4	The applicant is required to rectify/modify the drainage system if they are found to be inadequate or ineffective during operation. The applicant shall also be liable for and shall indemnify claims and demands arising out of damage or nuisance caused by a failure of the drainage system.	
5	For any proposed connection to DSD's drainage facilities, the applicant should submit form HBP1 to this Division for application of technical audit. Upon our acceptance of the connection application, the applicant shall carry out the proposed connection works in accordance with DSD's Standard Drawings at the resources of the applicant.	
6	If the existing drainage facilities, to which the applicant proposed to discharge the stormwater from the application site was not maintained by this office, the applicant should identify the owner of the existing drainage facilities and seek agreement from the owner prior to commencement of the proposed works. In the case that it is a local village drains, DO/YL should be consulted.	
7	The applicant should consult DLO/YL and seek consent from the relevant owners for any drainage works to be carried out outside his lot boundary before commencement of the drainage works.	
8	Comments from HyD, TD and RMO shall be sought if drainage works are proposed to be carried out within highway polygon or on carriageway.	

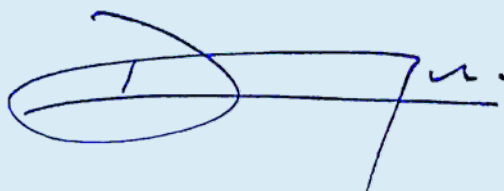
Sketch A



Proposed Temporary Warehouse (Excluding D.G.G.)
with Ancillary Facilities for a Period of 3 Years and
Associated Filling of Land in “OU(CDWRA)” Zone, Lots
1212 S.A ss.2 (Part) and 1212 S.A ss.3 (Part) in D.D.
115 and Adjoining GL, Yuen Long, New Territories

Drainage Impact Assessment

Sep 2026



YU Cheuk Yin Derek (RP0735920)



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1 Introduction

1.1 Background

- 1.1.1 The applicant seeks planning permission from the Town Planning Board (the Board) under Section (S.) 16 of the Town Planning Ordinance (Cap. 131) (the Ordinance) to use Lots 1212 S.A ss.2 (Part) and 1212 S.A ss.3 (Part) in D.D. 115 and adjoining Government Land (GL), Yuen Long, New Territories (the Site) for 'Proposed Temporary Warehouse (excluding Dangerous Goods Godown (D.G.G.)) with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land'
- 1.1.2 This report aims to support the development in drainage aspect.

1.2 Application Site and Existing Site Conditions

- 1.2.1 The application site is situated beside Chung Yip Road. It has an area of approx. 11,770 m². The site location is shown in **Figure 1**.
- 1.2.2 The existing site is fully hard paved with level various from approx. +4.2mPD to + 4.8mPD. The proposed site intent to fill not more than 0.2m concrete for formation of structures, parking, L/UL spaces and circulation.
- 1.2.3 There is a 2500(W) x 2000(H) Box Culvert near Lau Yip Road, which would eventually discharge to Shan Pui River. **Figure 2** indicate the existing drainage system of the area.

2 Development Proposal

2.1 The Proposed Development

- 2.1.1 The total site area is approximately 11,770 m². After the development the site would be fully paved. The catchment plan is shown in **Figure 4-2**.

Proposed Development	
Total Site Area (m ²)	11,770
Paved Area before Development (m ²)	11,770
Paved Area after Development (m ²)	11,770

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 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 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)

11.1% rainfall increase due to climate change as per Table 28 of Corrigendum No. 1/2022 to be 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:

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

Where,

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

S_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:
$$v = -\sqrt{32gRS_f} \log \left(\frac{k_s}{14.8R} + \frac{1.255v}{R\sqrt{32gRS_f}} \right)$$

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 and Pipe

- 4.1.1 Proposed channels are designed for collection of runoff for internal. They are proposed to connect to existing box culvert near Lau Yip Road.
- 4.1.2 The ground level fall of existing site is similar to the proposed site levels. Existing catchments have been discharged to existing box culvert via Lau Yip Road road drain and existing channels at the east and north of the site (**Figure 6**). Further to comment from DSD, the existing catchment area is taken as the whole proposed catchment A1 + A2 + A3 + A4 (11,770 m²). According to the checking in **Appendix A**, the increase in utilization due to the proposed development would be 0% (14.3% - 14.3% = 0%) of existing box culvert. The site is proposed to remain fully hard paved, there is no unacceptable drainage impact anticipated.
- 4.1.3 The design calculations of proposed UChannels and pipes are shown in **Appendix A**.

4.2 Maintenance

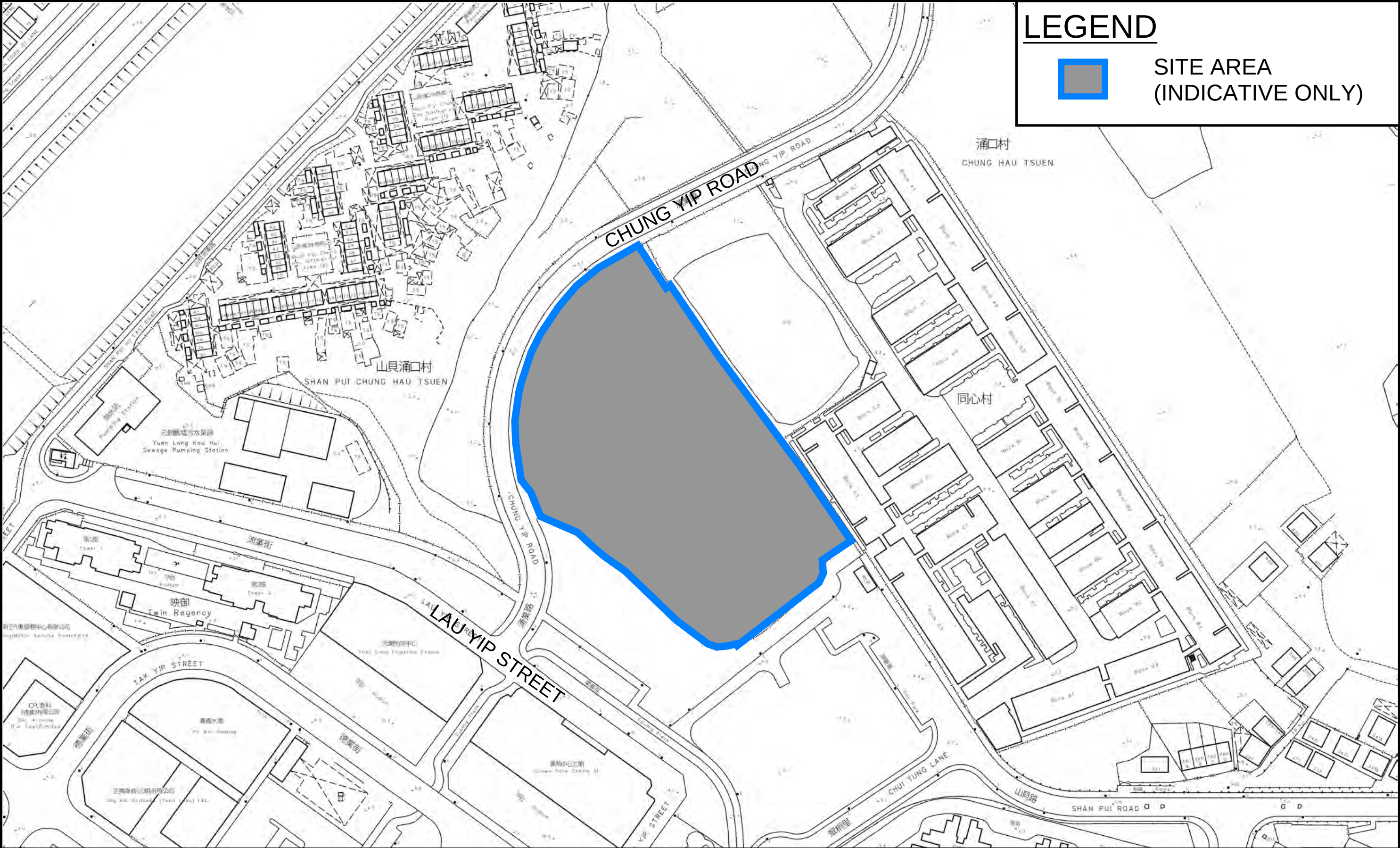
- 4.2.1 The Development will take up the maintenance responsibilities of drains within the site and drains from the development upto existing box culvert.

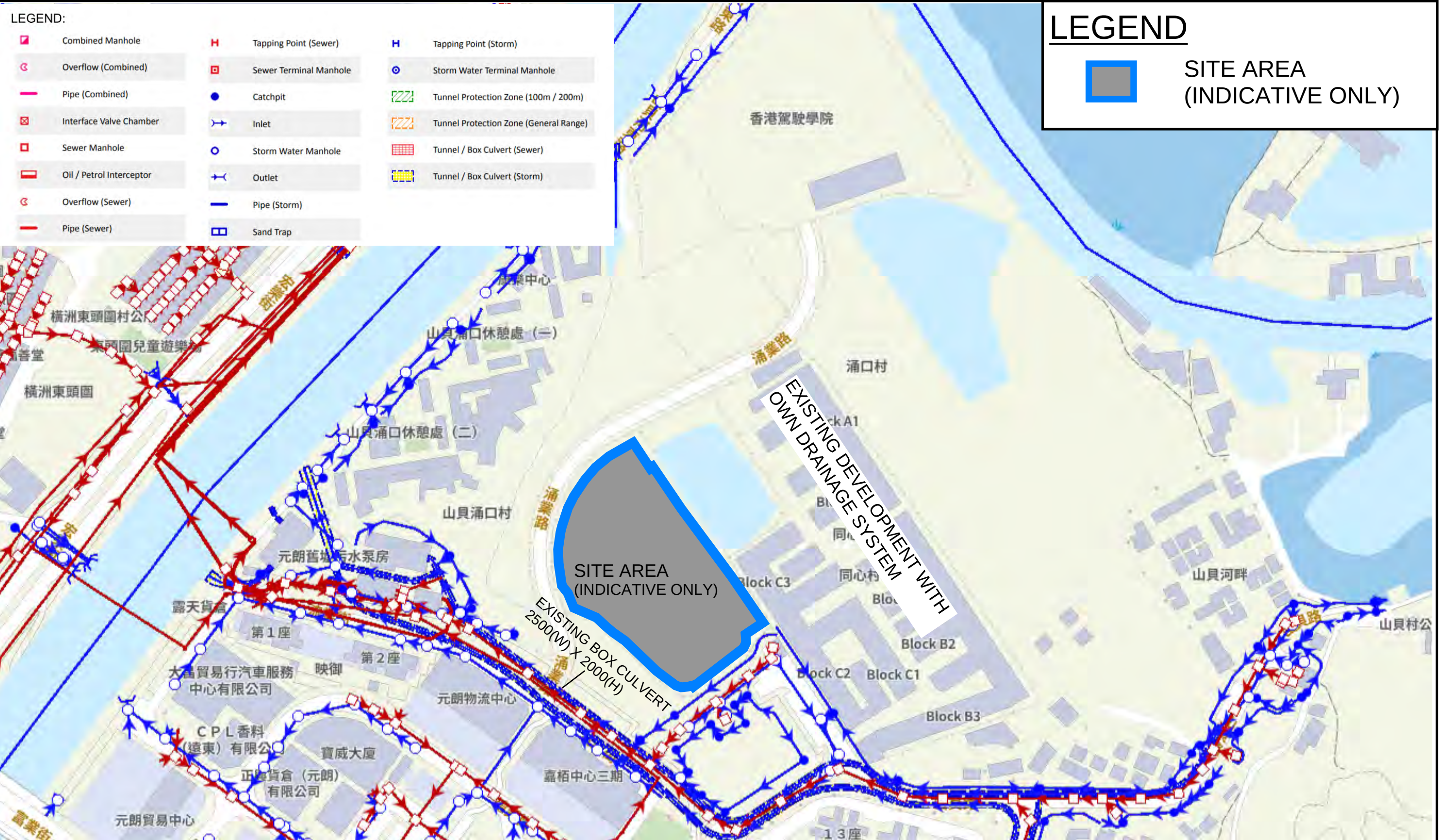
5 Conclusion

- 5.1.1 Drainage review has been conducted for the Proposed Development. U Channels and drain pipes are proposed to collect the runoff from internal catchment and discharge to existing box culvert near Lau Yip Road.
- 5.1.2 With implementation of the above drainage system, no unacceptable drainage impact is anticipated.

- End of Text -

FIGURES





LEGEND

- SITE AREA
(INDICATIVE ONLY)
- EXISTING STREAM
- PROPOSED CHANNEL
- PROPOSED CONCRETE PIPE
- EXISTING CHANNEL
- PROPOSED CATCHPIT
- PROPOSED CATCHPIT W/TRAP
- PROPOSED MANHOLE E1 AS
PER DSD STANDARD
DRAWING NO. DS 1080

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

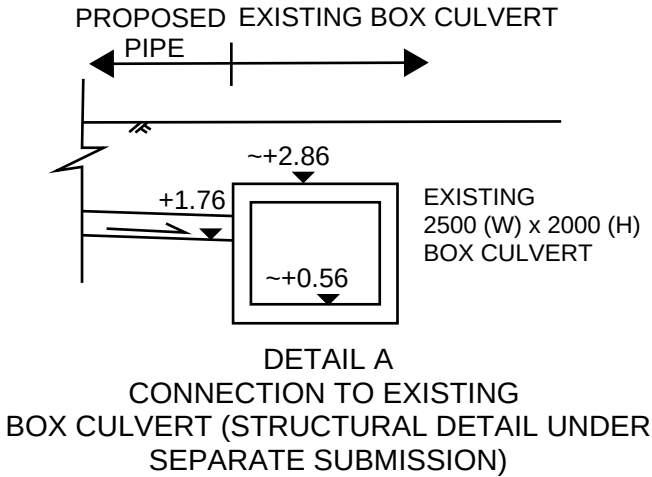
; MH/PIT	DS MH/PIT	US GL	DS GL	Size mm	Gradient 1 in	Type	US IL	DS IL	U/S MH/PIT TYPE #	Remark
SP01	CP1.01	4.8	4.7	450	200	UC	4.35	4.25	SP	#SP: Start Point
CP1.01	CP1.02	4.7	4.6	450	200	UC	4.25	4.15	CP	
CP1.02	CP1.03	4.6	4.2	450	200	UC	4.15	3.75	CP	
CP1.03	CP2.05	4.2	4.4	525	200	UC	3.68	3.26	CP	
SP02	CP2.01	4.8	4.3	450	200	UC	4.35	3.75	SP	
CP2.01	CP2.02	4.3	4.3	450	200	UC	3.75	3.73	CP	
CP2.02	CP2.03	4.3	4.2	450	200	UC	3.73	3.64	CP	
CP2.03	CP2.04	4.2	4.2	675	200	UC	3.53	3.13	CP	
CP2.04	CP2.05	4.2	4.2	675	200	UC	3.13	2.90	CP	
CP2.05	MH1.01	4.2	4.7	675	105	PIPE	2.31	1.89	CP	
MH1.01	MH1.02	4.7	4.7	675	105	PIPE	1.89	1.80	E1	
MH1.02	Existing Box Culvert	4.7	4.7	675	105	PIPE	1.80	1.76	E1	

PROPOSED DRAINS BELOW IL
OF EXISTING DRAINS

EXISTING BOX CULVERT
2500 X 2000
(1 IN 2036)

DETAIL A
CONNECTION TO
EXISTING BOX CULVERT
(STRUCTURAL DETAIL
UNDER SEPARATE
SUBMISSION)

EXISTING
CHANNEL



PROJECT:

Proposed Temporary Warehouse (Excluding D.G.G.) with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “OU(CDWRA)” Zone

TITLE

PROPOSED DRAINAGE
SYSTEM

FIGURE NUMBER

FIGURE 3

LOCATION:

Lots 1212 S.A ss.2 (Part) and 1212 S.A ss.3 (Part) in D.D. 115 and Adjoining GL, Yuen Long, New Territories



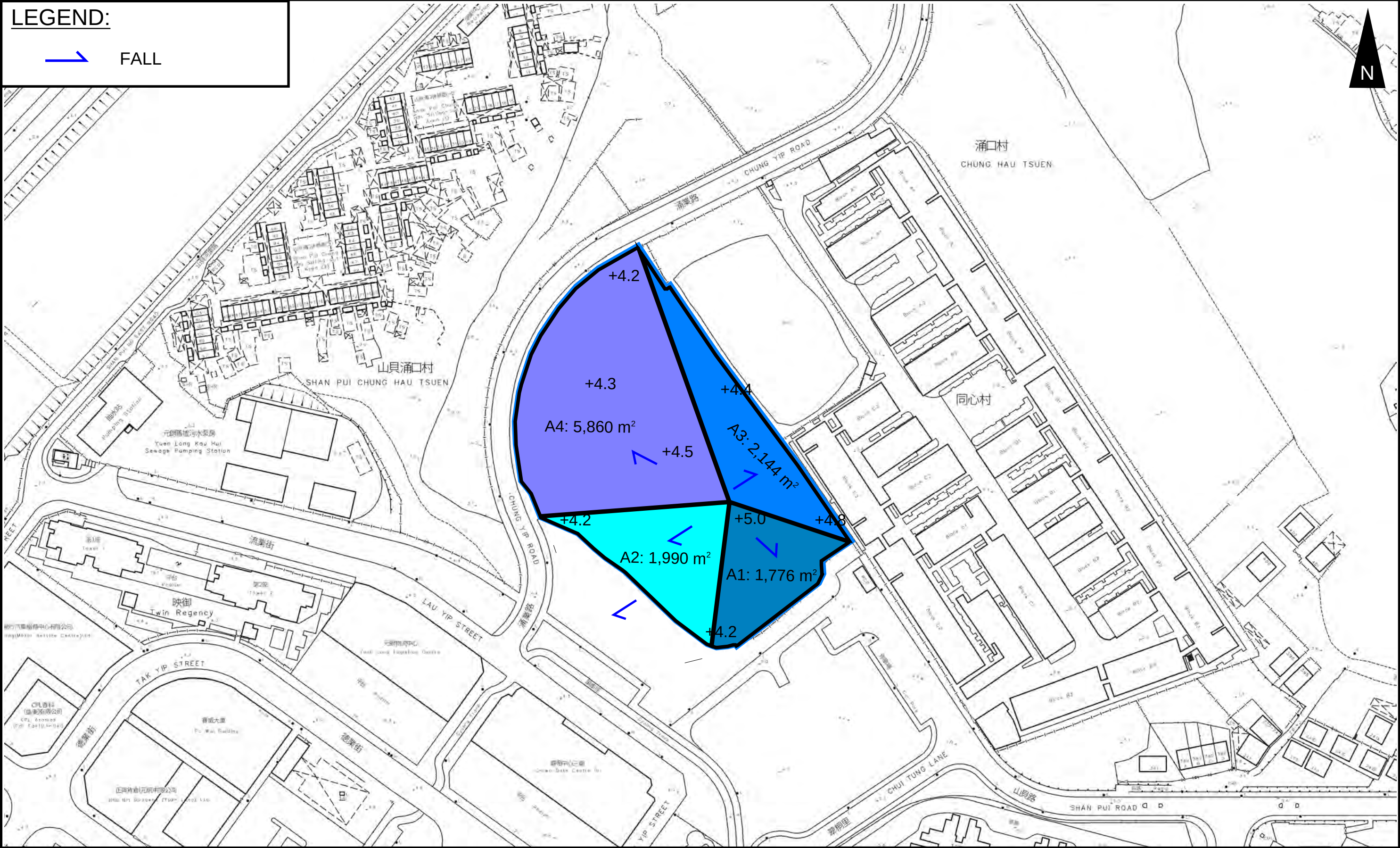
VER

DESCRIPTION

DATE

LEGEND:

 FALL



PROJECT:

Proposed Temporary Warehouse (Excluding D.G.G.) with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “OU(CDWRA)” Zone

TITLE
CATCHMENT PLAN

FIGURE NUMBER
FIGURE 4

LOCATION:

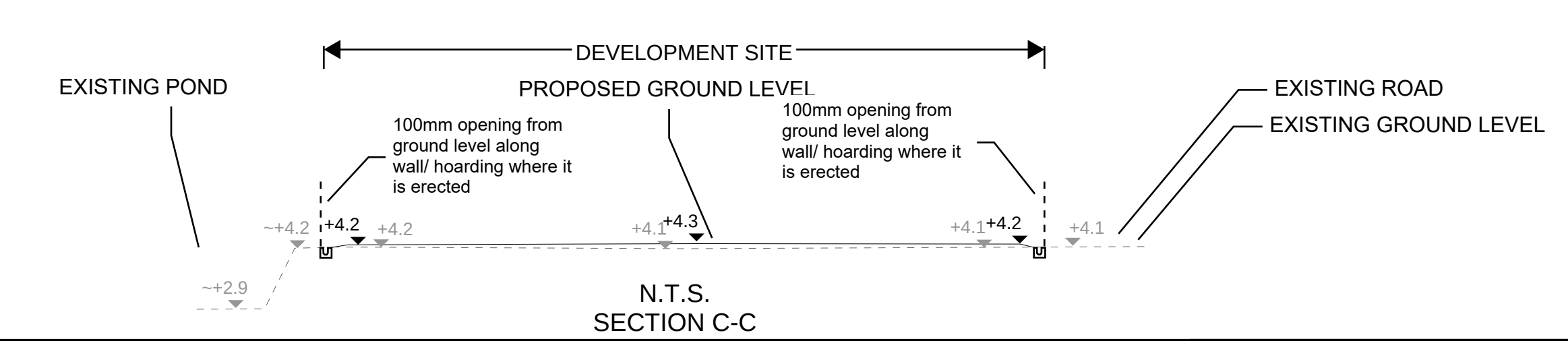
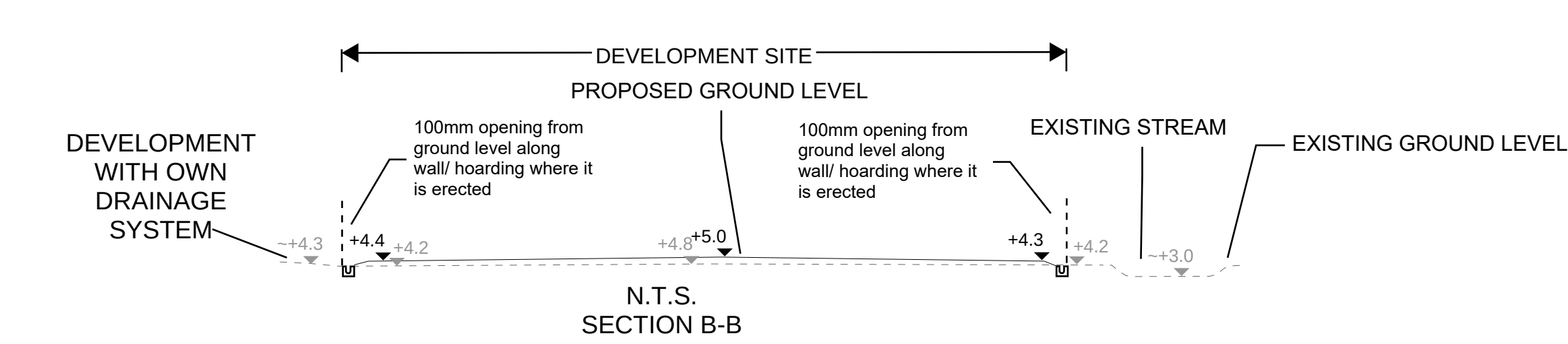
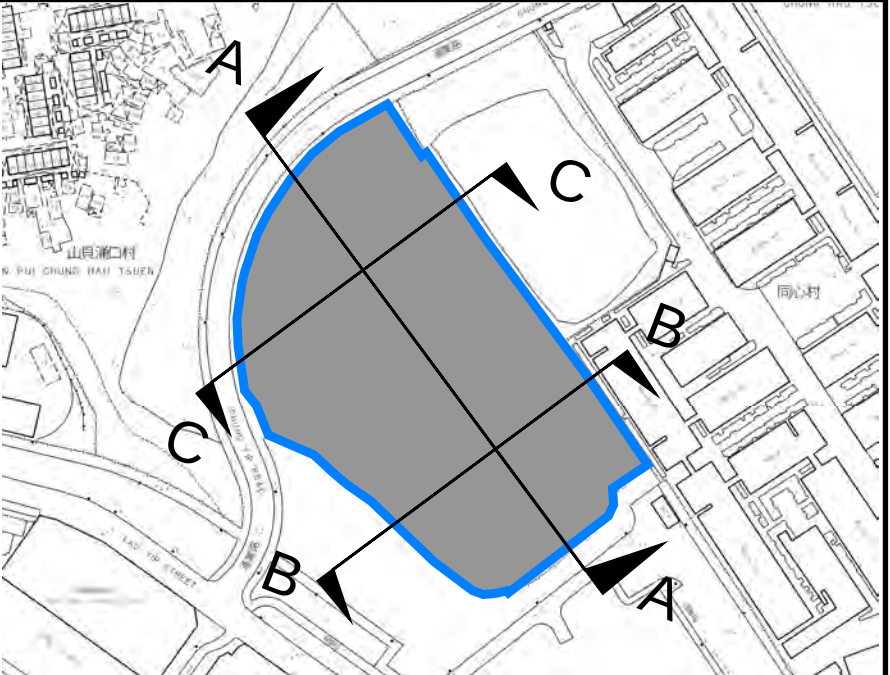
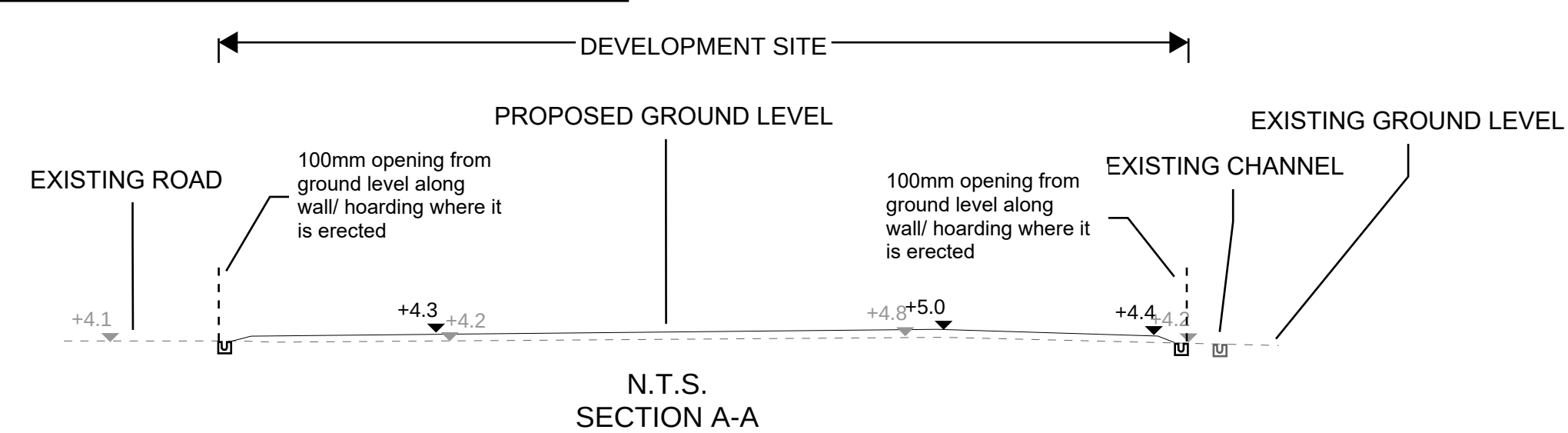
Lots 1212 S.A ss.2 (Part) and 1212 S.A ss.3 (Part) in D.D. 115 and Adjoining GL, Yuen Long, New Territories



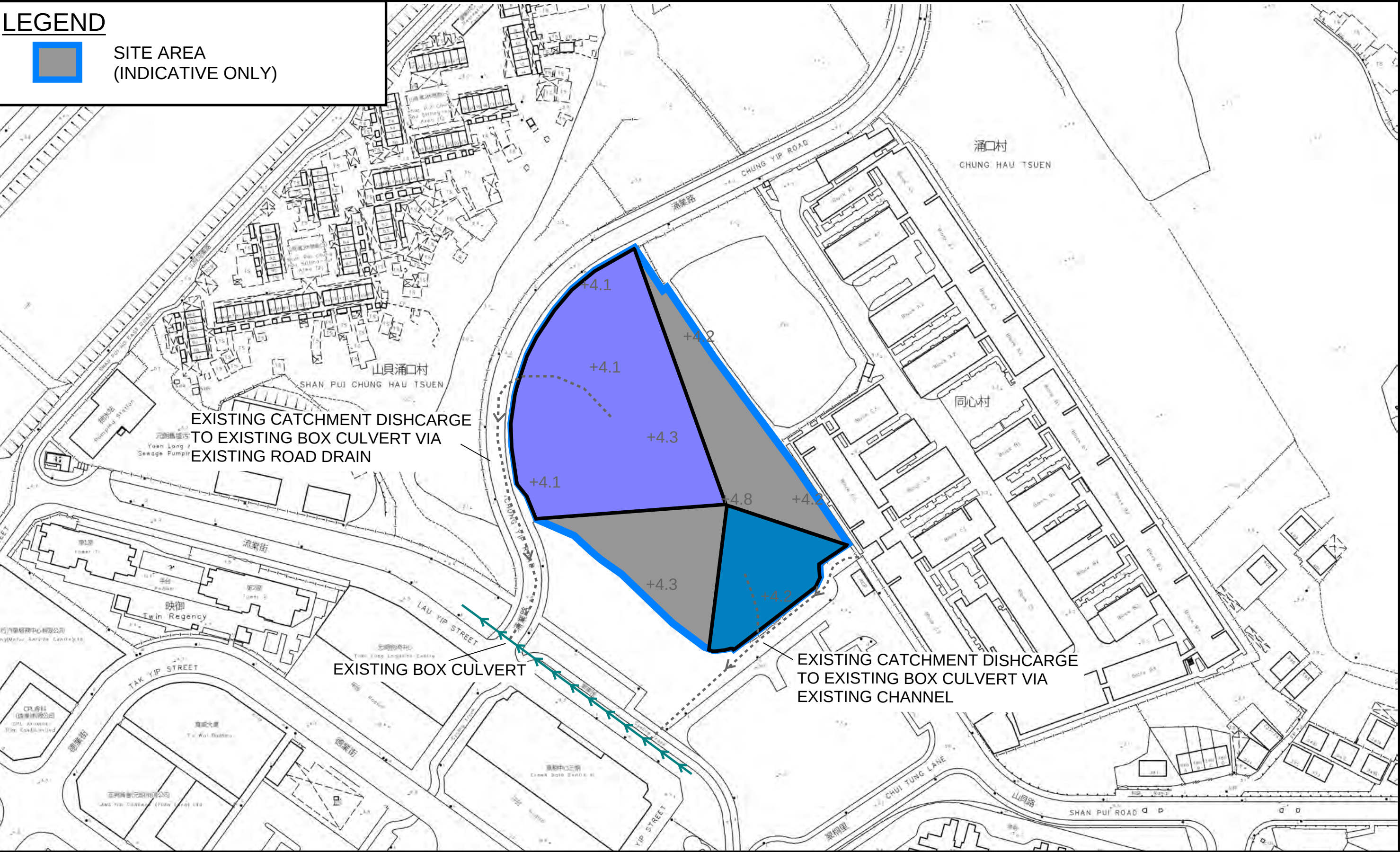
VER	DESCRIPTION	DATE
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LEGEND

SITE AREA
(INDICATIVE ONLY)



PROJECT: Proposed Temporary Warehouse (Excluding D.G.G.) with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “OU(CDWRA)” Zone	TITLE SECTION	FIGURE NUMBER FIGURE 5		
LOCATION: Lots 1212 S.A ss.2 (Part) and 1212 S.A ss.3 (Part) in D.D. 115 and Adjoining GL, Yuen Long, New Territories				
		VER	DESCRIPTION	DATE



PROJECT: Proposed Temporary Warehouse (Excluding D.G.G.) with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “OU(CDWRA)” Zone	TITLE EXISTING CATCHMENT OF BOX CULVERT DUE TO EXISTING SITE	FIGURE NUMBER FIGURE 6		
LOCATION: Lots 1212 S.A ss.2 (Part) and 1212 S.A ss.3 (Part) in D.D. 115 and Adjoining GL, Yuen Long, New Territories		VER	DESCRIPTION	DATE

APPENDIX

Appendix A: Design Calculation

Zone

HKO

Return Period	1 in	50	years
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n	0.014
Ks (Conc. PIPE)	0.15
Viscosity	0.000001

Storm Constant	HKO a	505.5
	HKO b	3.29
	HKO c	0.355

Catchment Area Table (Area in m²)

Catchment	A1	A2	A3	A4	Total Site Area	Half of Total Site Area								
Total Area	1776	1990	2144	5860	11770	5885								
Hard Paved Area	1776	1990	2144	5860	11770	5885								
Unpaved Area	0	0	0	0	0	0								
Equival. Area	1687.2	1890.5	2036.8	5567	11181.5	5590.75								

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 m³/s	Catchment ID1	Catchment ID2	Catchment ID3	Catchment ID4	Catchment ID5	Total Equivalent Area m²	ToC min	Intensity mm/hr	Intensity mm/hr (with 11.1%*)	Total Discharge m³/s	Utilitization	Remark
SP01	CP1.01	4.80	4.70	450	200	UC	4.35	4.25	SP	13.81	1.37	0.22	A1						1687.20	4.00	250	274.7	0.13	58.0%
CP1.01	CP1.02	4.70	4.60	450	200	UC	4.25	4.15	CP	7.17	1.37	0.22	A1						1687.20	4.17	248	272.5	0.13	57.5%
CP1.02	CP1.03	4.60	4.20	450	200	UC	4.15	3.75	CP	40.16	1.37	0.22	A1						1687.20	4.26	247	271.3	0.13	57.3%
CP1.03	CP2.05	4.20	4.40	525	200	UC	3.68	3.26	CP	83.43	1.51	0.34	A1	A2					3577.70	4.75	241	265.4	0.26	78.7%
SP02	CP2.01	4.80	4.25	450	200	UC	4.35	3.75	SP	120.23	1.37	0.22	A3						2036.80	4.00	250	274.7	0.16	70.0%
CP2.01	CP2.02	4.25	4.25	450	200	UC	3.75	3.73	CP	2.92	1.37	0.22	A3						2036.80	5.47	234	257.4	0.15	65.6%
CP2.02	CP2.03	4.25	4.20	450	200	UC	3.73	3.64	CP	19.83	1.37	0.22	A3						2036.80	5.50	234	257.0	0.15	65.5%
CP2.03	CP2.04	4.20	4.20	675	200	UC	3.53	3.13	CP	78.17	1.79	0.66	A3	A4					7603.80	5.74	231	254.5	0.54	82.1%
CP2.04	CP2.05	4.20	4.20	675	200	UC	3.13	2.90	CP	46.06	1.79	0.66	A3	A4					7603.80	6.47	225	247.6	0.52	79.9%
CP2.05	MH1.01	4.20	4.70	675	105	PIPE	2.31	1.89	CP	44.4	2.77	0.89	A1	A2	A3	A4			11181.50	6.90	222	243.9	0.76	84.9%
MH1.01	MH1.02	4.70	4.70	675	105	PIPE	1.89	1.80	E1	9.8	2.76	0.89	A1	A2	A3	A4			11181.50	7.17	220	241.7	0.75	84.4%
MH1.02	Existing Box Culvert	4.70	4.70	675	105	PIPE	1.80	1.76	E1	3.3	2.76	0.89	A1	A2	A3	A4			11181.50	7.23	219	241.2	0.75	84.2%
				Size mm	Gradient 1 in		Flow Area m²	Wetted Perimeter m	Hydraulic Radius m		V m/s	Capacity m³/s												
Existing Box Culvert (Ks = 3) Proposed Conditions				2000 x 2500	2036	Box Culvert	4.28	6.30	0.68		1.22	5.23	A1	A2	A3	A4			11181.50	7.25	219	241.0	0.75	14.3%
Existing Box Culvert (Ks = 3) Existing Conditions				2000 x 2500	2036	Box Culvert	4.28	6.30	0.68		1.22	5.23	A1	A2	A3	A4			11181.50	7.25	219	241.0	0.75	14.3%
The utilization of Existing Box Culvert due to the development is only 14.3%. Increase in utilization due to the development is 0%, no drainage impact is anticipated.																								

#SP: Start Point
##: with 10% reduction in flow area
^11.1% rainfall increase due to climate change as per Table 28 of Corrigendum no. 1/2022.

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)
1776	50.5	5	4.8	0.396	4.160	4.160



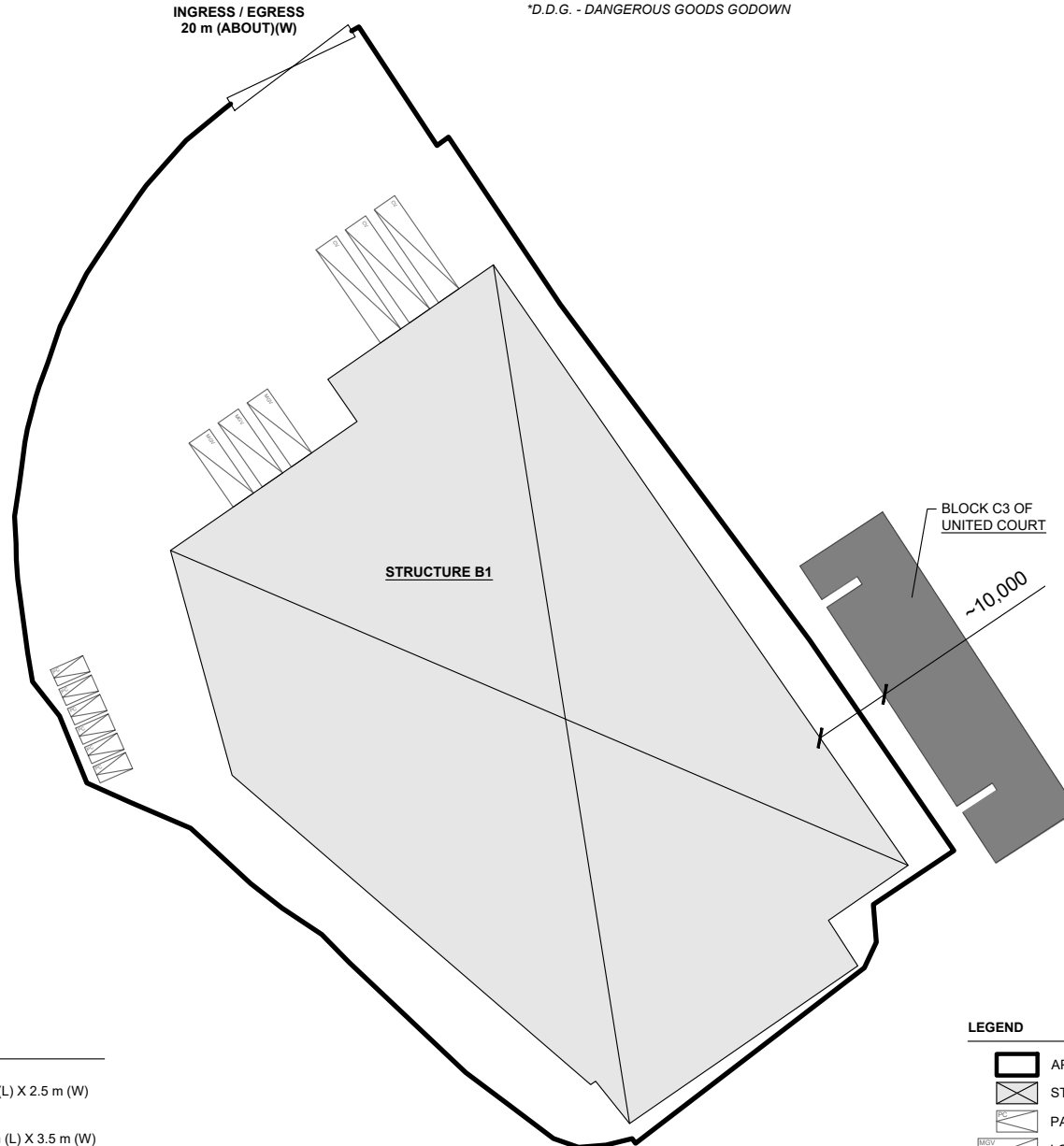
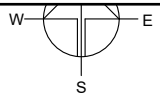
APPENDIX B - PROPOSED SITE LAYOUT PLAN

DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 11,770 m ²	(ABOUT)
COVERED AREA	: 6,649 m ²	(ABOUT)
UNCOVERED AREA	: 5,121 m ²	(ABOUT)
PLOT RATIO	: 1.1	(ABOUT)
SITE COVERAGE	: 56 %	(ABOUT)
NO. OF STRUCTURE	: 1	
DOMESTIC GFA	: NOT APPLICABLE	
NON-DOMESTIC GFA	: 13,298 m ²	(ABOUT)
TOTAL GFA	: 13,298 m ²	(ABOUT)
BUILDING HEIGHT	: 13 m	(ABOUT)
NO. OF STOREY	: 2	

B1	WAREHOUSE (EXCL. D.G.G.) SITE OFFICE, WASHROOM, FIRE SERVICE INSTALLATIONS	6,649 m ² (ABOUT)	13,298 m ² (ABOUT)	13 m (2-STOREY)
TOTAL		6,649 m ² (ABOUT)	13,298 m ² (ABOUT)	

*D.D.G. - DANGEROUS GOODS GODOWN



INGRESS / EGRESS
20 m (ABOUT)(W)

STRUCTURE B1

BLOCK C3 OF
UNITED COURT

~10,000

PARKING AND LOADING/UNLOADING PROVISIONS

NO. OF PRIVATE CAR PARKING SPACE	: 6
DIMENSIONS OF PARKING SPACE	: 5 m (L) X 2.5 m (W)
NO. OF L/UL SPACE FOR MEDIUM GOODS VEHICLE	: 3
DIMENSION OF L/UL SPACE	: 11 m (L) X 3.5 m (W)
NO. OF L/UL SPACE FOR CONTAINER VEHICLE	: 3
DIMENSION OF L/UL SPACE	: 16 m (L) X 3.5 m (W)

LEGEND

	APPLICATION SITE
	STRUCTURE
	PARKING SPACE (PC)
	LOADING / UNLOADING SPACE (MGV)
	LOADING / UNLOADING SPACE (CV)
	INGRESS / EGRESS

PLANNING CONSULTANT



PROJECT

PROPOSED WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) WITH ANCILLARY FACILITIES FOR A PERIOD OF 3 YEARS ABD ASSOCIATED FILLING OF LAND

SITE LOCATION

LOTS 1212 S.A ss.2 (PART) AND 1212 S.A ss.3 (PART) IN D.D. 115 AND ADJOINING GOVERNMENT LAND, YUEN LONG, NEW TERRITORIES

SCALE

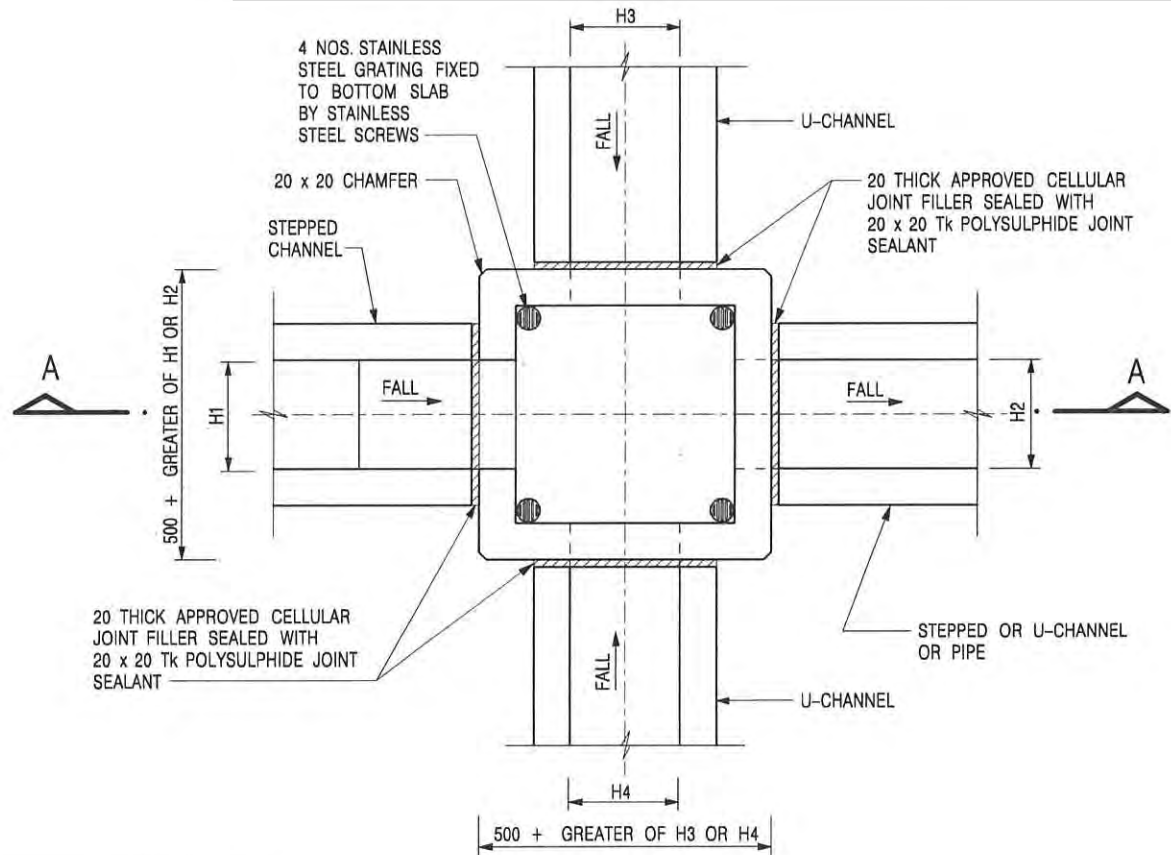
1 : 1000 @ A4

DRAWN BY MN	DATE 28.12.2023
CHECKED BY	DATE
APPROVED BY	DATE

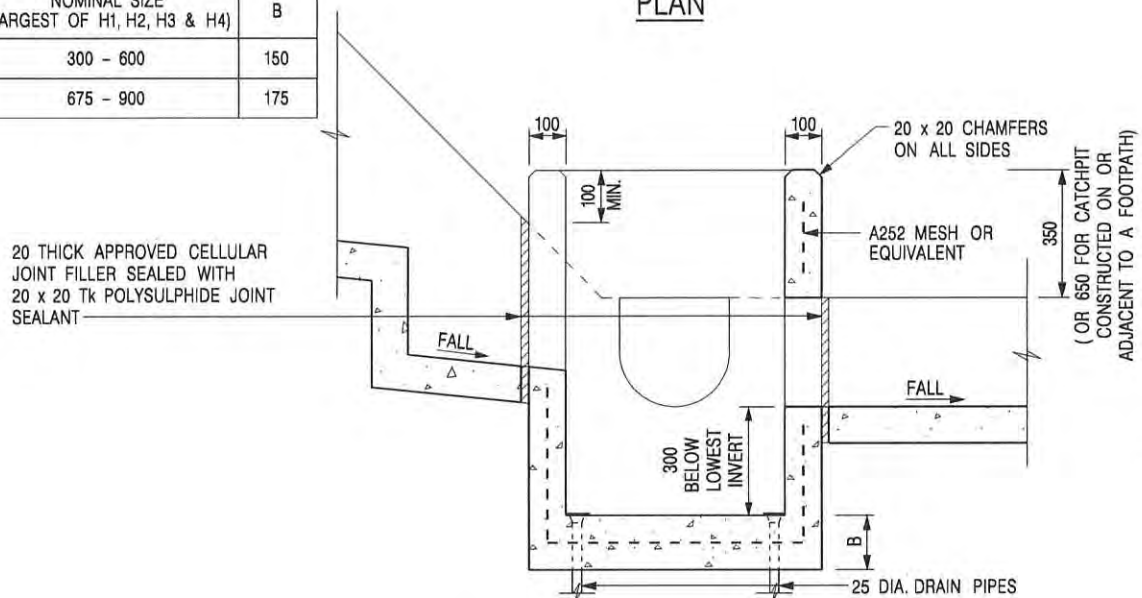
DWG. TITLE
LAYOUT PLAN

DWG NO. PLAN 8	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.

CATCHPIT WITH TRAP
(SHEET 1 OF 2)

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



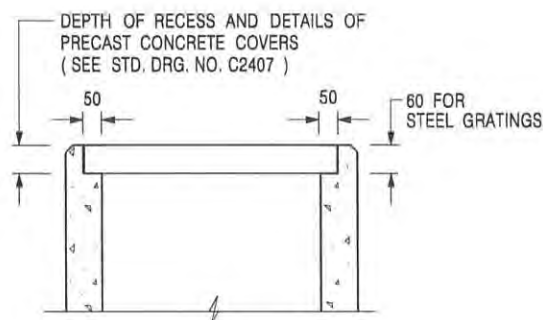
CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT

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.

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

CATCHPIT WITH TRAP
(SHEET 2 OF 2)



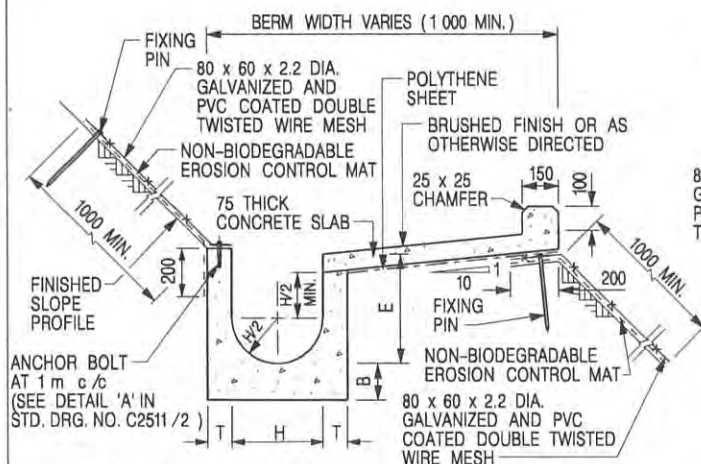
**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

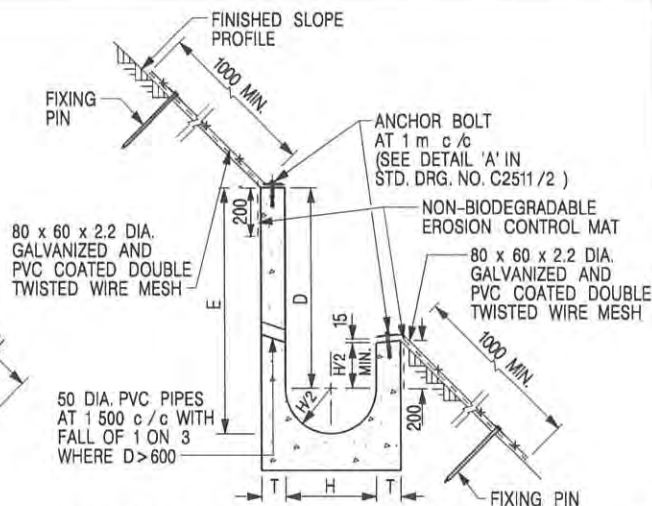
DRAWING NO.

DATE JAN 1991

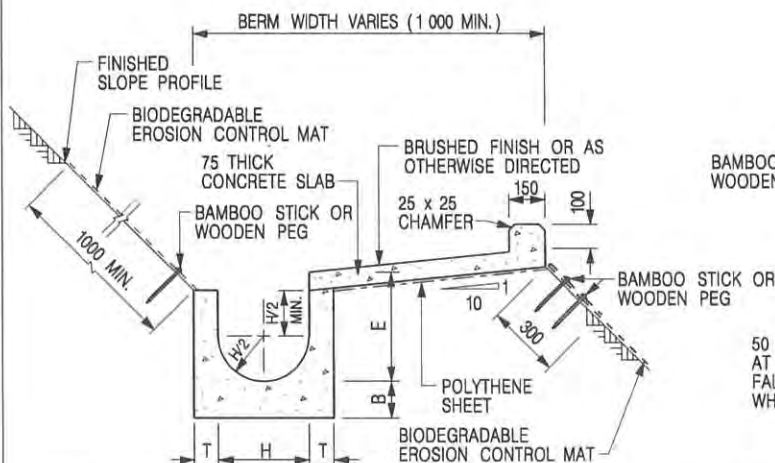
C2406 / 2A



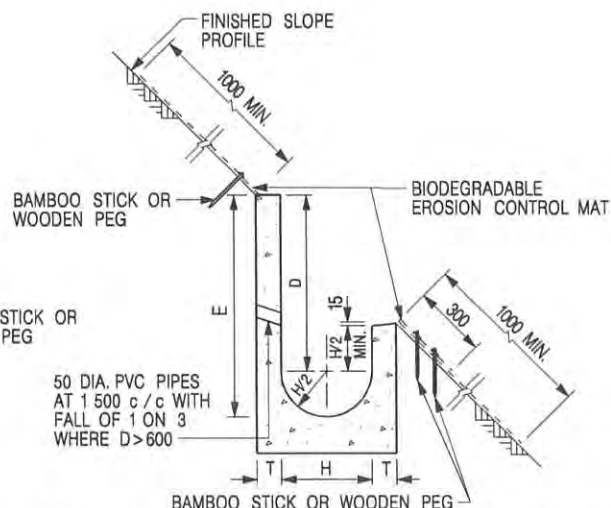
**U-CHANNELS CONSTRUCTED ON BERM
WITH NON-BIODEGRADABLE
EROSION CONTROL MAT**



**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)**



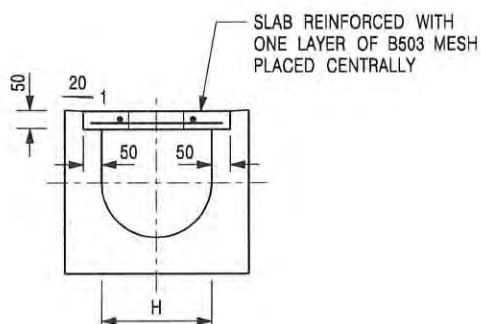
**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE DIAGRAMMATIC

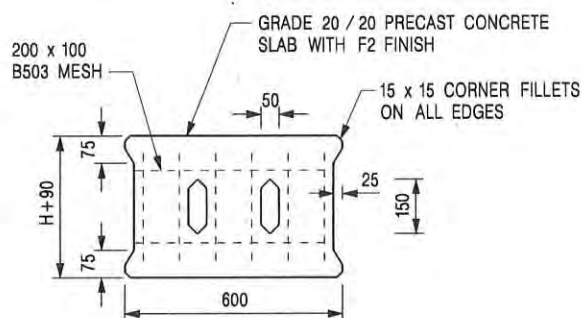
DRAWING NO.

DATE JAN 1991

C24101



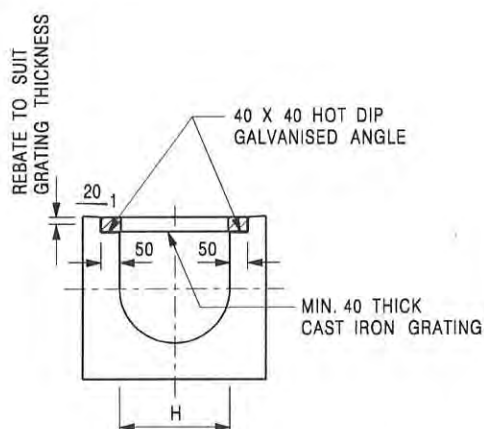
TYPICAL SECTION



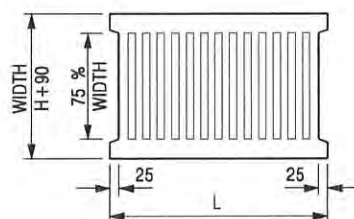
PLAN OF SLAB

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



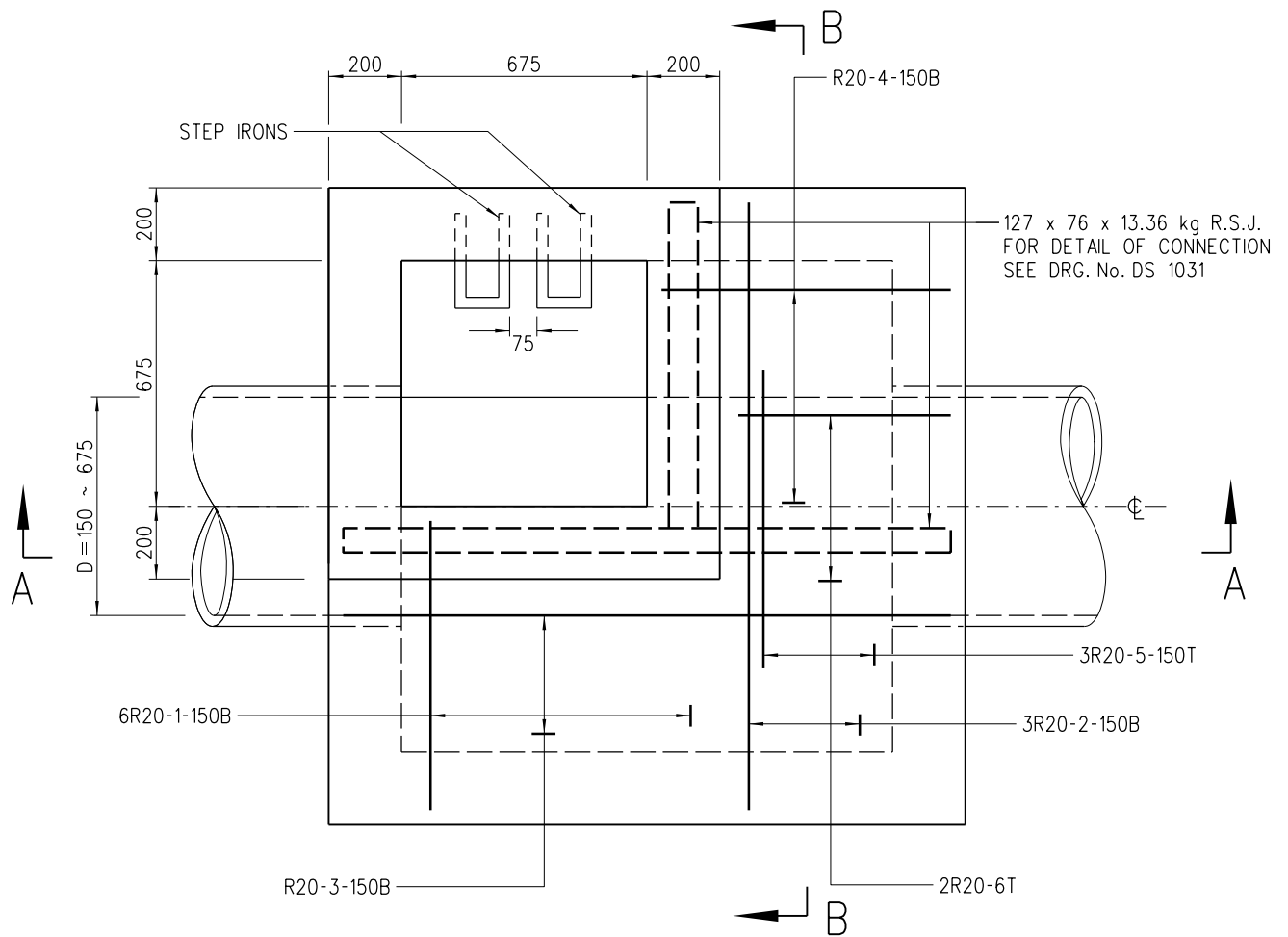
**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

DATE JAN 1991

DRAWING NO.

C2412E



PLAN

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES.
- NOTATION OF REINFORCEMENT : THE SEQUENCE OF DESCRIPTION OF IDENTIFICATION MARKS ON DRAWINGS FOR STEEL REINFORCING BARS FOR CONCRETE WORK IS AS FOLLOWS (NUMBER, TYPE, SIZE, MARK, SPACING, LOCATION OR COMMENT)
- B DENOTES GRADE 500B RIBBED REINFORCEMENT.
- R DENOTES GRADE 250 PLAIN REINFORCEMENT.
- PIPE DIAMETER : 150 TO 675 mm
- NORMAL RANGE OF DEPTH : 1500 TO 3 000 mm (MEASURED FROM ROAD LEVEL TO LOWEST INVERT)
- USED IN : STORMWATER DRAIN AND SEWER
- JUNCTION : POSITION OF JUNCTION TO BE DETERMINED IN EACH INDIVIDUAL CASE. CHANNELS IMMEDIATELY UNDER ACCESS TO MANHOLE SHOULD BE AVOIDED.
- TOP TREATMENT : SEE DRG. No. DS 1032
- FOUNDATION : FOUNDATION OF MANHOLE VARIES WITH SITE CONDITION. THEREFORE, IT SHOULD BE DETERMINED ON SITE BY THE ENGINEER.
- CONCRETE : GRADE 30/20
- ALL BAR MARKS APPEARED HEREON ARE USED FOR REFERENCE IN THIS DRAWING ONLY.
- MINIMUM COVER AT END OF BARS 40 mm
- COVER AND FRAME NOT SHOWN ON PLAN FOR CLARITY.
- RECESS WITH SQUARE STEEL ROD SHALL BE PROVIDED AT TOP OF MANHOLE CHAMBER FOR INSTALLING MONITORING DEVICE(S). DETAILS REFER TO DSD STANDARD DRAWING NO. DS 1099.

C	NOTE 15 ADDED	ORIGINAL SIGNED	2.8.2022
B	NOTE 11 DELETED NOTES 2, 3 & 4 ADDED	ORIGINAL SIGNED	29.4.2015
A	NOTE 11 REVISED	ORIGINAL SIGNED	24.11.2014
	NEW ISSUE	ORIGINAL SIGNED	15.8.2007
REV.	DESCRIPTION	SIGNATURE	DATE

STANDARD MANHOLE
TYPE E1

DRAINAGE SERVICES DEPARTMENT

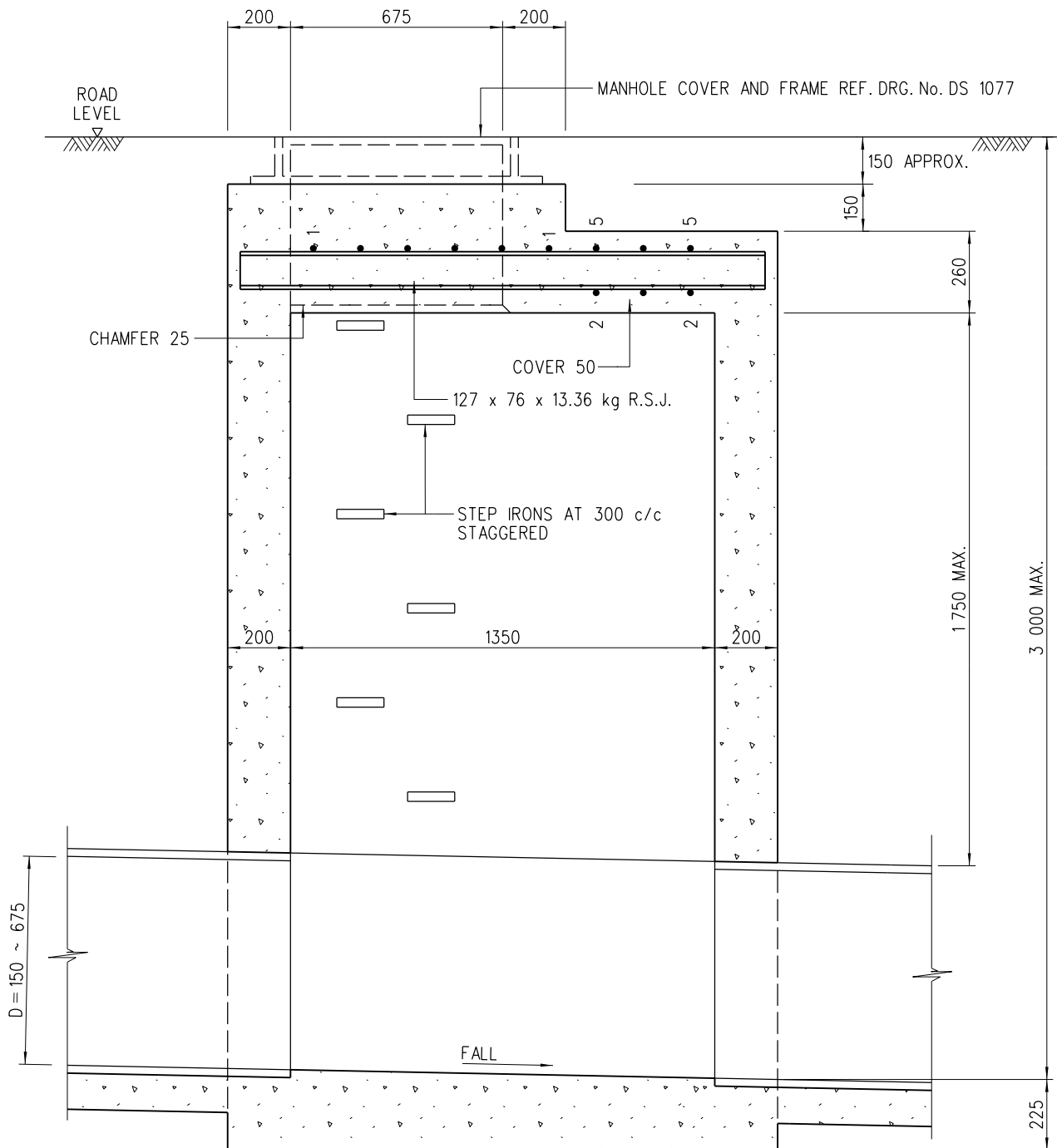
REFERENCE

DRAWING No.

SCALE

1 : 20

DS 1080C
(SHEET 1 OF 3)



SECTION A-A

BAR MARKS	SHAPE CODE ○
1 & 4	(99)
2, 3 & 6	(35)
5	(20)

C	NOTE 15 ADDED	ORIGINAL SIGNED	2.8.2022
B	NOTE 11 DELETED NOTES 2, 3 & 4 ADDED	ORIGINAL SIGNED	29.4.2015
A	NOTE 11 REVISED	ORIGINAL SIGNED	24.11.2014
	NEW ISSUE	ORIGINAL SIGNED	15.8.2007
REV.	DESCRIPTION	SIGNATURE	DATE

STANDARD MANHOLE
TYPE E1

DRAINAGE SERVICES DEPARTMENT

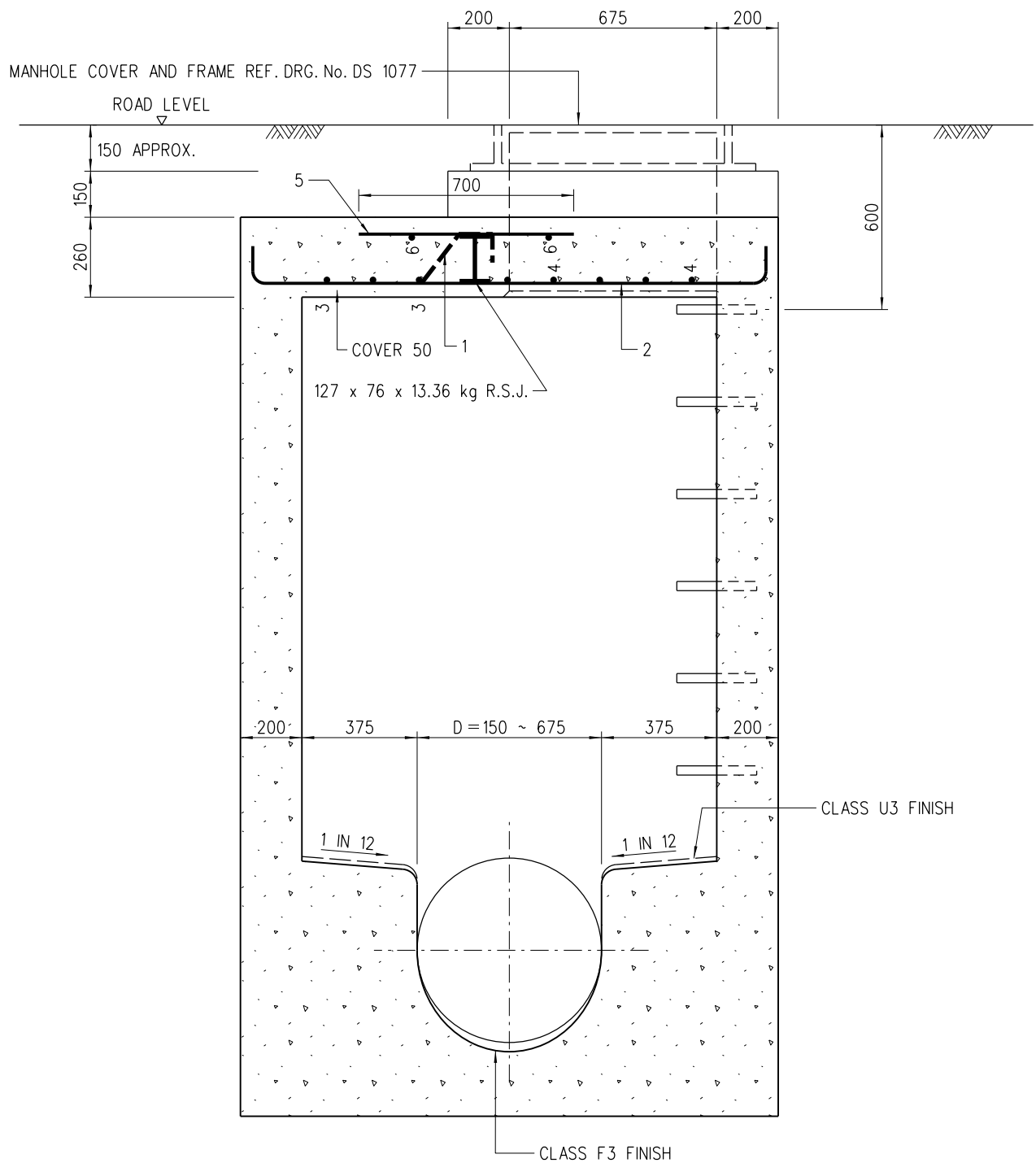
REFERENCE

DRAWING No.

SCALE

1 : 20

DS 1080C
(SHEET 2 OF 3)



SECTION B-B

C	NOTE 15 ADDED	ORIGINAL SIGNED	2.8.2022
B	NOTE 11 DELETED NOTES 2, 3 & 4 ADDED	ORIGINAL SIGNED	29.4.2015
A	NOTE 11 REVISED	ORIGINAL SIGNED	24.11.2014
	NEW ISSUE	ORIGINAL SIGNED	15.8.2007
REV.	DESCRIPTION	SIGNATURE	DATE

STANDARD MANHOLE
TYPE E1

DRAINAGE SERVICES DEPARTMENT

REFERENCE

DRAWING No.

SCALE

1 : 20

DS 1080C

(SHEET 3 OF 3)



PHOTO 1



PHOTO 2



PHOTO 3



PHOTO 4



PHOTO 5



PHOTO 6

EXISTING
STREAM

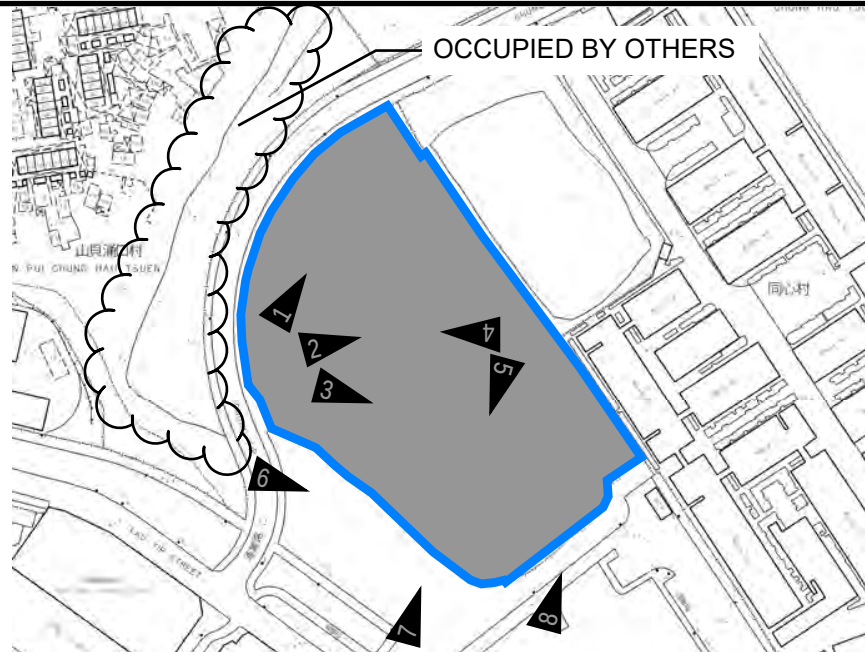


PHOTO 7

EXISTING
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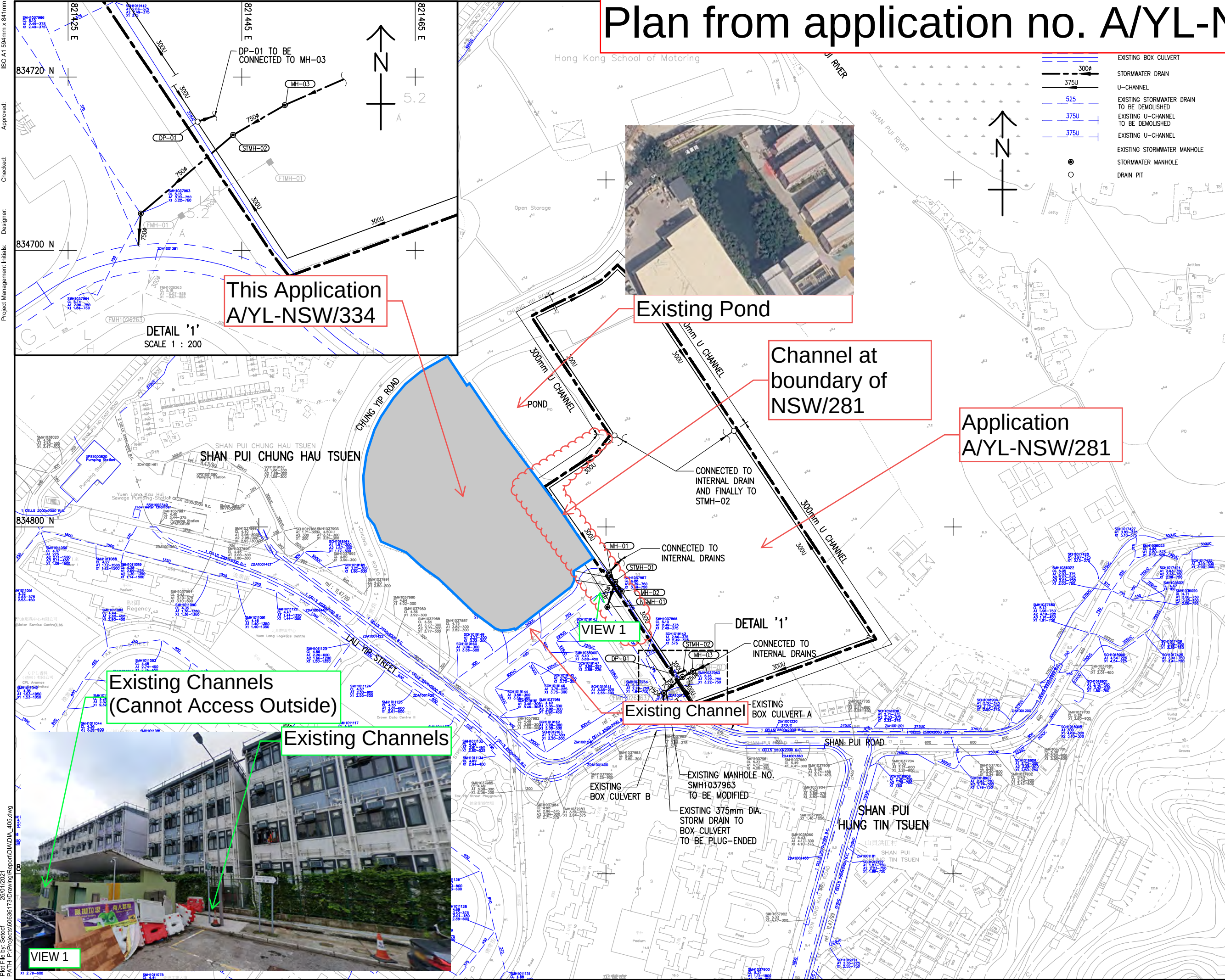
PHOTO 8



EXISTING
CHANNEL

PROJECT: Proposed Temporary Warehouse (Excluding D.G.G.) with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “OU(CDWRA)” Zone	SITE PHOTOS	APPENDIX D		
LOCATION: Lots 1212 S.A ss.2 (Part) and 1212 S.A ss.3 (Part) in D.D. 115 and Adjoining GL, Yuen Long, New Territories	M MARVELLOUS CONSTRUCTION & DESIGN COMPANY LIMITED			
		VER	DESCRIPTION	DATE

Plan from application no. A/YL-NSW/281



SECTION 16 PLANNING
APPLICATION FOR
PROPOSED TEMPORARY
TRANSITIONAL HOUSING
& ANCILLARY USES
DEVELOPMENT AT
VARIOUS LOTS IN D.D. 115
& ADJOINING
GOVERNMENT LAND,
TUNG TAU, YUEN LONG,
THE NEW TERRITORIES

CLIENT
THE HONG KONG GOVERNMENT

CONSULTANT
AECOM

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS
AECOM

ISSUE/REVISION
REV

REV	DATE	DESCRIPTION	CHK
A	MAY, 20	MINOR AMENDMENT	
-	MAR, 20	1ST SUBMISSION	

STATUS
REV

SCALE	DIMENSION UNIT
A1 1 : 1000	METRES

KEY PLAN
REV

PROJECT NO.
60636173

CONTRACT NO.
4040000

SHEET TITLE
PROPOSED DRAINAGE LAYOUT

SHEET NUMBER
60636173/DIA/FIGURE 5A