

Appendix I

Accepted Drainage Impact Assessment
under Previous Application No. A/NE-MUP/185



規 劃 署

沙田、大埔及北區規劃處
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十三樓 1301-1314 室

**Planning Department**

Sha Tin, Tai Po & North
District Planning Office
Rooms 1301-1314, 13/1/
Shatin Government Offices,
1 Sheung Wo Che Road, Sha Tin,
N.T., Hong Kong

來函檔號 Your Reference DD38 Lot 115 & VL
本署檔號 Our Reference () in TPB/A/NE-MUP/185
電話號碼 Tel. No. : 2158 6220
傳真機號碼 Fax No. : 2691 2806

By Post & Fax (2323 3662)

1 November 2024

R-riches Property Consultants Ltd.
Block D, The Richfield
236 Kat Hing Wai
Kam Tin, New Territories
(Attn.: Danny NG)

Dear Sir/Madam,

**Proposed Temporary Warehouse with Ancillary Facilities for a
Period of 3 Years and Associated Filling of Land in "Agriculture" and
"Residential (Group D)" Zones, Lots 107 (Part), 109 (Part), 115 (Part), 116 (Part),
117, 118, 119, 120, 121, 122, 123, 124 S.A, 124 S.B, 125, 126 (Part), 127 (Part),
128 (Part), 131, 133 (Part), 134, 135 (Part), 136, 141, 142, 143, 144 RP (Part),
148, 150, 151 and 152 in D.D. 38 and adjoining Government Land, Sha Tau Kok
(Compliance with Approval Condition (c) for Planning Application No. A/NE-MUP/185)**

I refer to your submission dated 30.10.2024 for compliance with approval condition (c) in relation to the submission of a drainage impact assessment to the satisfaction of the Director of Drainage Services or of the Town Planning Board under the captioned planning application.

Chief Engineer/Mainland North, Drainage Services Department (Contact person: Mr. Wilson TAI; Tel.: 2300 1693) has been consulted and considered the approval condition (c) has been complied with. His advisory comments are attached at **Appendix I**. Please proceed to implement the mitigation measures identified in the accepted drainage impact assessment for compliance with approval condition (d).

Should you have any queries related to planning matters, please contact Mr. William WONG of this department at 2158 6164.

Yours faithfully,

(Rico TSANG)

for Director of Planning

Appendix I

Advisory comments of the Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD) (Contact person: Mr. Wilson TAI; Tel.: 2300 1693):

- (a) please be advised that the limited desk-top checking by DSD on the drainage proposal covers only the fundamental aspects of the drainage design which will by no means relieve the project proponent's obligations to ensure that (i) the proposed drainage works will not cause any adverse drainage or environmental impacts in the vicinity; and (ii) the proposed drainage works and the downstream drainage systems have the adequate capacity and are in good conditions to receive the flows collected from his lot and all upstream catchments;
- (b) the cover levels of proposed u-channels and catch pits should be flush with the adjoining ground level;
- (c) the applicant should check and ensure that the existing drainage system to which the proposed connection will be made have adequate capacity and satisfactory condition to cater for the additional discharge from the captioned lot. The applicant should also ensure that the flow from this site will not overload the existing drainage system;
- (d) the applicant is reminded that where walls are erected or kerbs are laid along the boundary of the site, peripheral channels should be provided on both sides of the walls or kerbs with details to be agreed by DSD;
- (e) the applicant is reminded that all existing flow paths as well as the run-off falling onto and passing through the site should be intercepted and disposed of via proper discharge points. The applicant shall also ensure that no works, including any site formation works, shall be carried out as may adversely interfere with the free flow condition of the existing drain, channels and watercourses on or in the vicinity of the subject site any time during or after the works;
- (f) the proposed drainage works, whether within or outside the lot boundary, should be constructed and maintained by the lot owner at their own expense;
- (g) for works to be undertaken outside the lot boundary, the applicant should obtain prior consent and agreement from District Lands Officer/North, Lands Department and/or relevant private lot owners;
- (h) the applicant should make good all the adjacent affected areas upon the completion of the drainage works;
- (i) the applicant should construct and maintain the proposed drainage works properly and rectify the system if it is found to be inadequate or ineffective during operation;

- (j) as usual, Government should be empowered to inspect conditions of the private drainage system (including the petrol interceptor if any) and to enforce its cleansing by the owners, if necessity arises (c.g. upon receipt of complaints); and
- (k) the existing drainage facilities, watercourse, river, channel and the like should not be affected and obstructed by the construction materials, waste or debris from the proposed development.

Our Ref.: DD38 Lot 115 & VL
Your Ref.: TPB/A/NE-MUP/185

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

By Email

30 October 2024

Dear Sir,

Compliance with Approval Condition (c)

**Proposed Temporary Warehouse with Ancillary Facilities for a Period of 3 Years
and Filling of Land in “Agriculture” and “Residential (Group D)” Zones,
Lots 107 (Part), 109 (Part), 115 (Part), 116 (Part), 117, 118, 119, 120, 121, 122, 123, 124 S.A,
124 S.B, 125, 126 (Part), 127 (Part), 128 (Part), 131, 133 (Part), 134, 135 (Part), 136, 141, 142, 143,
144 RP (Part), 148, 150, 151 and 152 in D.D. 38 and Adjoining Government Land, Sha Tau Kok**

(S.16 Planning Application No. A/NE-MUP/185)

We are writing to submit a response-to-comments table and a drainage impact assessment (DIA) for compliance with approval condition (c) of the subject application, i.e. *the submission of a DIA (Appendix I)*.

Should you require more information regarding the application, please contact the undersigned at your convenience. Thank you for your kind attention.

Yours faithfully,

For and on behalf of
R-riches Property Consultants Limited




Danny NG
Town Planner



Appendix I – Response to the Comments of Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD)

Comments of the CE/MN, DSD (Contact Person: Mr. Wilson TAI; Tel: 2300 1693)		
(1)	According to DSD’s “Technical Note to prepare a Drainage Submission”, this submission should be signed and certified by a qualified engineer (Registered Professional Engineer (RPE) in the Civil Engineering discipline) before it is submitted to DSD for comment. Please request the RPE to print his name and sign on the cover page of the drainage impact assessment report; and	Noted and revised accordingly.
(2)	It is noted from section 1-1 in Appendix D that the formation level of some portions of the application site are higher than the adjacent existing ground level. Hence, the cover level of the proposed u-channel at those portions should be revised to match the existing ground levels so as to ensure no adverse drainage impact to lands and premises adjoining the development site.	Noted. The cover level of proposed channel should made with existing ground level on site. Please refer to updated Appendix A, Appendix D and Figure 3.2 (Appendix II).

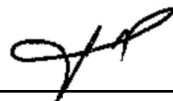
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) WITH ANCILLARY FACILITIES
FOR A PERIOD OF 3 YEARS WITH ASSOCIATED FILLING OF LAND

Drainage Impact Assessment

PROPOSED TEMPORARY WAREHOUSE WITH ANCILLARY
FACILITIES FOR A PERIOD OF 3 YEARS AND ASSOCIATED FILLING
OF LAND, VARIOUS LOTS IN DD38 AND ADJOINING
GOVERNMENT LAND, SHA TAU KOK, NEW TERRITORIES

Drainage Impact Assessment Report

October 24_2



Prepared by: Yeung Toi Tung

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1. Introduction

1.1 Background

- 1.1.1 The applicant seeks planning permission for a proposed temporary warehouse with ancillary facilities for a period of three years and associated filling of land at the development site.
- 1.1.2 This Drainage Impact Assessment aim to support the development in drainage aspect.

1.2 The Site

- 1.2.1 The development site situates beside Sha Tau Kok Road – Wo Hang. It has an area of about 11,698m². The site location plan is shown in **Figure 1**.
- 1.2.2 The existing site ground levels falling from the hill side to Sha Tau Kok Road – Wo Hang various from + 28.6 to +30.7 mPD. The existing site is currently fully paved. It is proposed to fill not more than 0.2m of concrete for construction of the temporary structures and circulation area.
- 1.2.3 There is an approx. 5m width channel beside Sha Tau Kok Road – Wo Hang. Existing Drainage Plan are shown in **Figure 2** for reference.
- 1.2.4 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 11,698m². The indicative development schedule is summarized in **Table 1** below for technical assessment purpose. The catchment plan is shown in **Figure 4**.

Proposed Development	
Total Site Area (m ²)	11,698
Paved Area (m ²)	11,698
Assume all proposed site area as paved area for assessment purpose	

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 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 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 North District Zone. Therefore, for 10 years return period, the following values are adopted.

a	=	454.9
b	=	3.44
c	=	0.412

(Corrigendum No.1/2024)

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:

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

where,

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

4. Proposed Drainage System

4.1. Proposed U Channels

- 4.1.1 Proposed U-channels are designed for collection of runoff within and near the Development Site. Please refer to the **Figure 4** for proposed catchment plan. The proposed drains are to be discharged to the existing approx. 5m channel beside Sha Tau Kok Road – Wo Hang. The design calculations of proposed UChannels are shown in **Appendix A**.
- 4.1.2 Checking of capacity of approx. 5m channel against the flow from the site is also shown in **Appendix A**. The utilization of the channel against the flow is minimal. In addition, the existing site is already fully paved. No unacceptable drainage impact is anticipated
- 4.1.3 The alignment, size, gradient and details of the proposed drains are shown in **Figure 3.1** and **Figure 3.2**.

5. Conclusion

- 5.1.1 Drainage impact assessment has been conducted for the Proposed Development. As the existing site is fully paved, with implementation of proposed drainage system, no unacceptable drainage impact is anticipated.

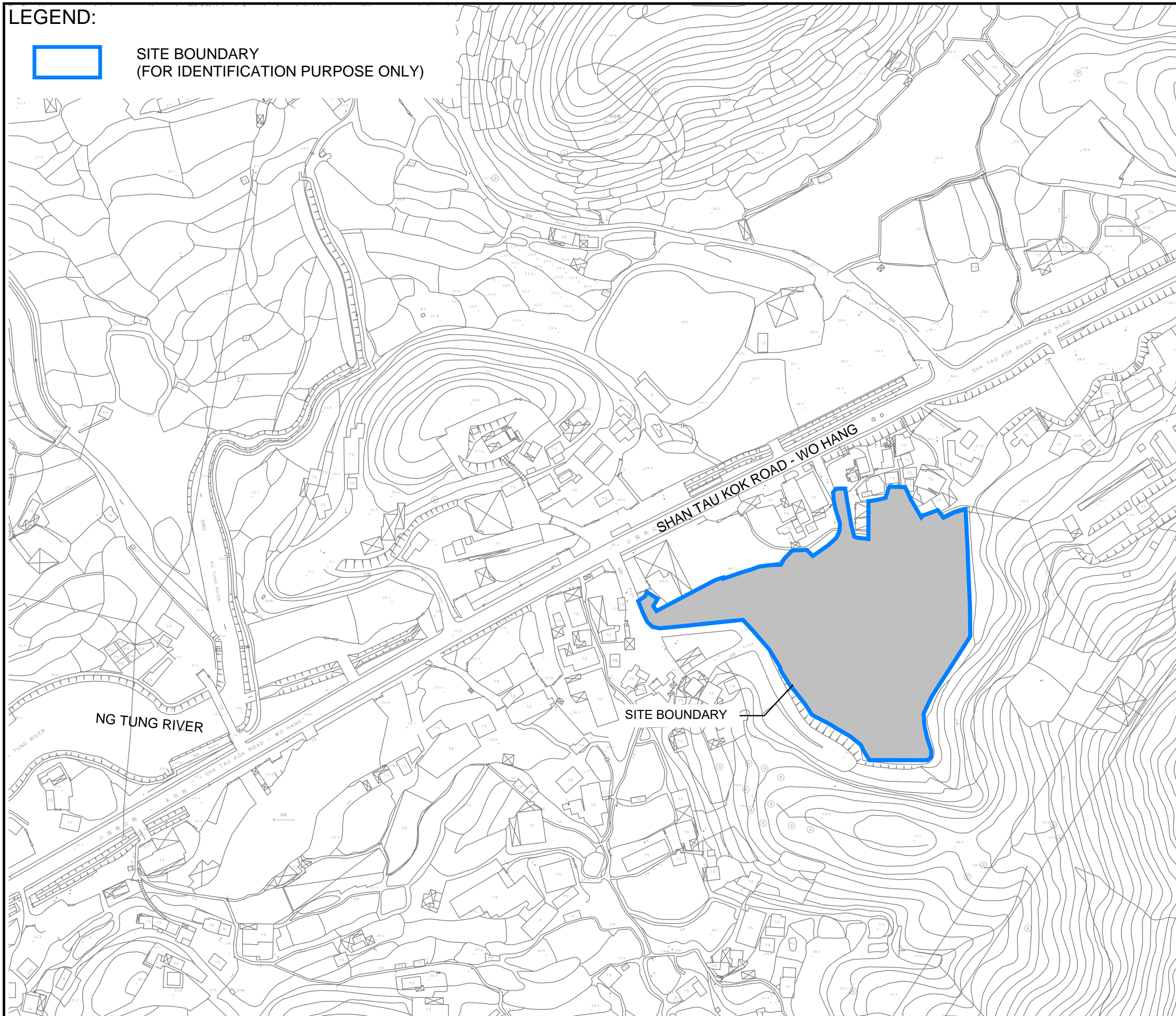
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FIGURES

LEGEND:



**SITE BOUNDARY
(FOR IDENTIFICATION PURPOSE ONLY)**

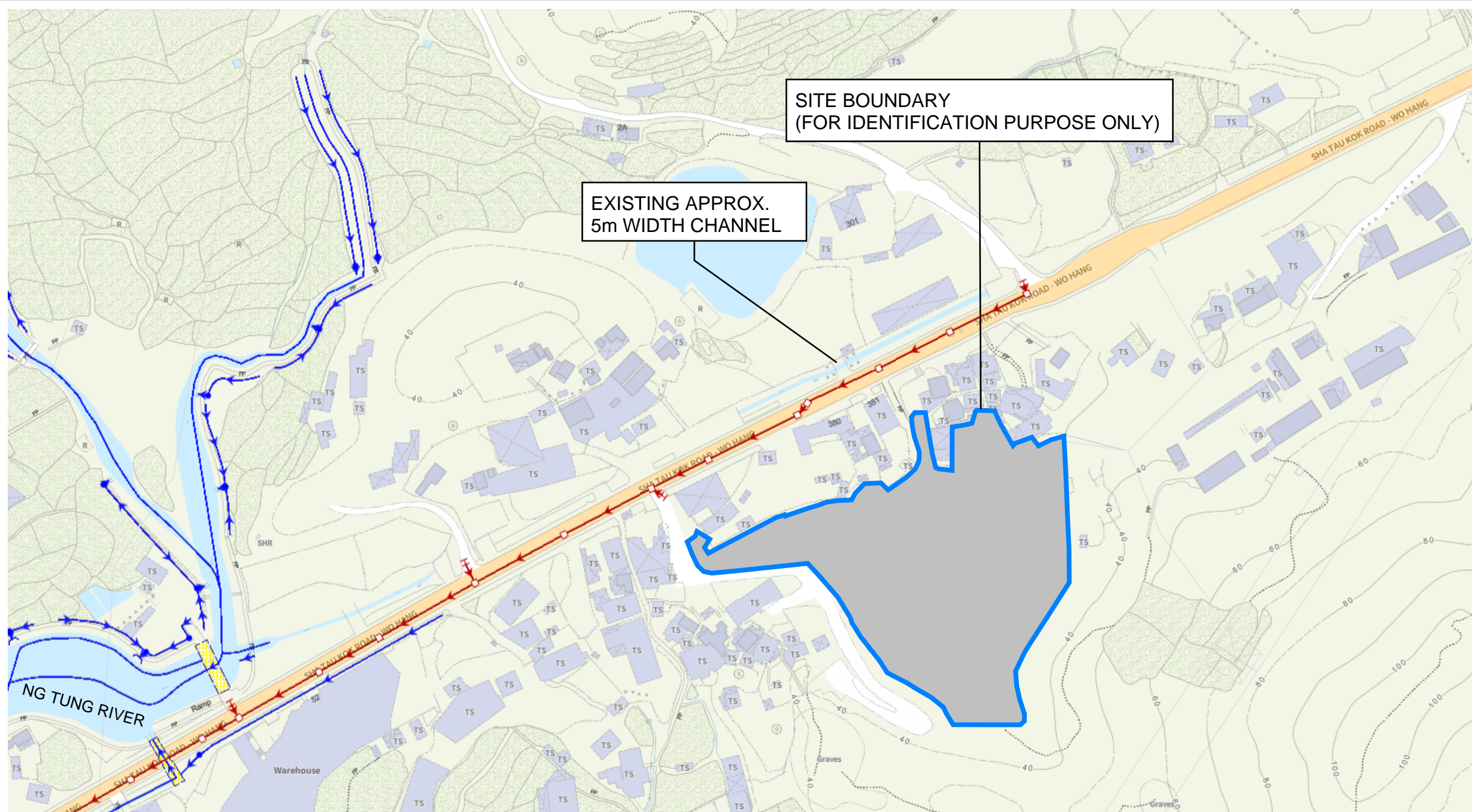


**PROJECT:
PROPOSED TEMPORARY
WAREHOUSE WITH
ANCILLARY FACILITIES FOR
A PERIOD OF 3 YEARS AND
ASSOCIATED FILLING OF
LAND, VARIOUS LOTS IN
DD38 AND ADJOINING
GOVERNMENT LAND, SHA
TAU KOK, NEW
TERRITORIES**

VER	DESCRIPTION	DATE
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DRAWING TITLE SITE LOCATION PLAN		
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DRAWING NUMBER FIGURE 1		
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SITE BOUNDARY
(FOR IDENTIFICATION PURPOSE ONLY)

EXISTING APPROX.
5m WIDTH CHANNEL

PROJECT:
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LEGEND:






	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		

VER	DESCRIPTION	DATE

DRAWING TITLE
EXISTING DRAINAGE
PLAN

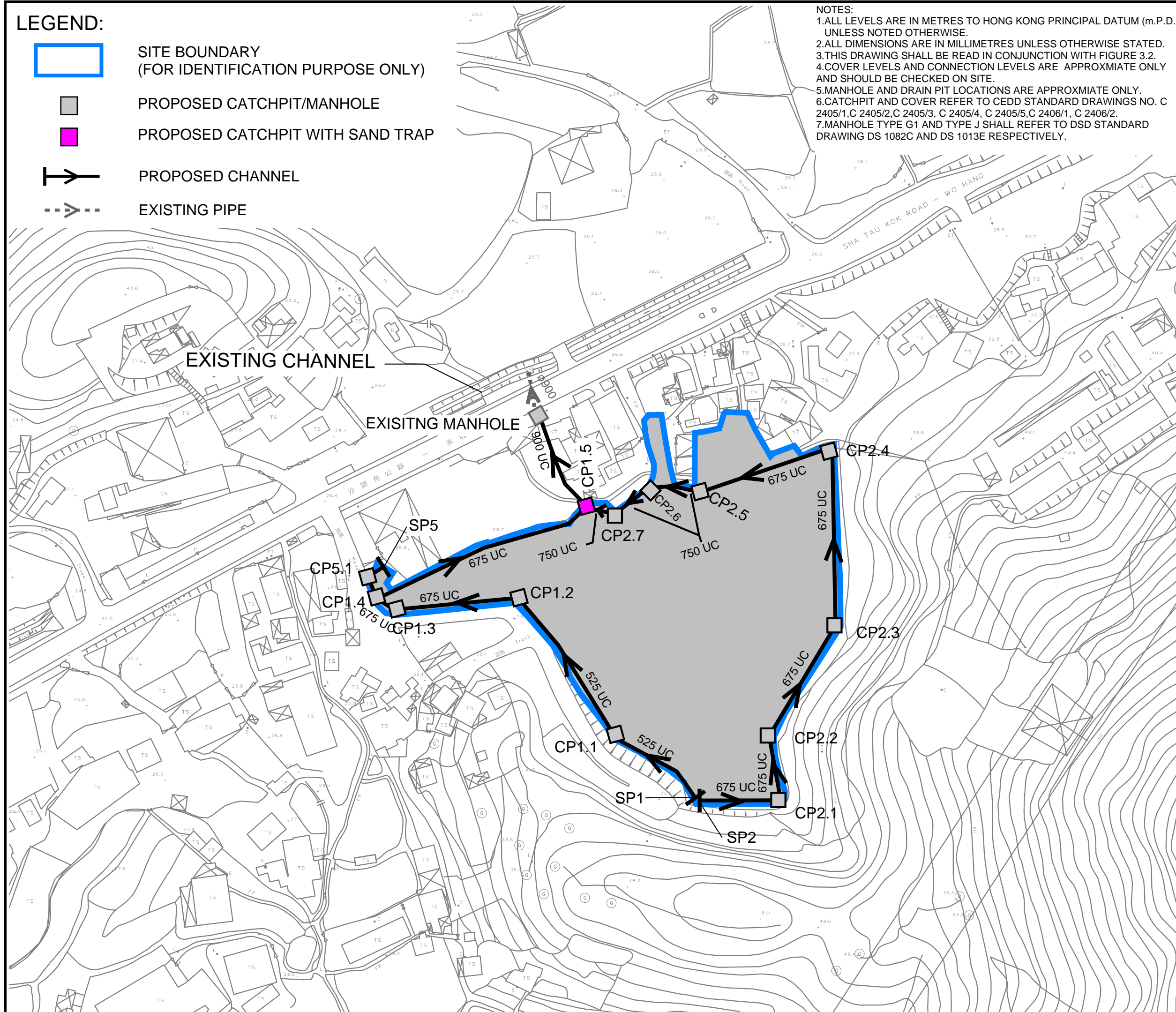
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FIGURE 2

LEGEND:

-  SITE BOUNDARY
(FOR IDENTIFICATION PURPOSE ONLY)
-  PROPOSED CATCHPIT/MANHOLE
-  PROPOSED CATCHPIT WITH SAND TRAP
-  PROPOSED CHANNEL
-  EXISTING PIPE

- 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. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH FIGURE 3.2.
 4. COVER LEVELS AND CONNECTION LEVELS ARE APPROXIMATE ONLY AND SHOULD BE CHECKED ON SITE.
 5. MANHOLE AND DRAIN PIT LOCATIONS ARE APPROXIMATE ONLY.
 6. CATCHPIT AND COVER REFER TO CEDD STANDARD DRAWINGS NO. C 2405/1, C 2405/2, C 2405/3, C 2405/4, C 2405/5, C 2406/1, C 2406/2.
 7. MANHOLE TYPE G1 AND TYPE J SHALL REFER TO DSD STANDARD DRAWING DS 1082C AND DS 1013E RESPECTIVELY.

PROJECT:
 PROPOSED TEMPORARY
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 TAU KOK, NEW
 TERRITORIES



VER	DESCRIPTION	DATE

DRAWING TITLE
**PROPOSED DRAINAGE
 SYSTEM**

DRAWING NUMBER
FIGURE 3.1

DRAINAGE SCHEDULE

US MH/PIT	DS MH/PIT	US GL	DS GL	Size mm	Gradient 1 in	US IL	DS IL	U/S MH/PIT TYPE#	Length m	Remark
SP1	CP1.1	30.9	30.0	525	100	30.30	29.40	SP	37.3	
CP1.1	CP1.2	30.0	29.2	525	100	29.60	28.60	CP	62.2	
CP1.2	CP1.3	29.2	29.1	675	250	28.35	28.17	CP	44.9	
CP1.3	CP1.4	29.1	29.1	675	250	28.17	28.14	CP	7.3	
CP1.4	CP1.5	29.1	29.1	675	250	28.14	27.81	CP	83.3	
CP1.5	Existing Manhole	29.1	26.9	900	50	27.69	25.93	CP	36.5	
Existing Manhole	Existing Discharge Point	26.9	26.8	900	200	25.33	25.25	Existing	14.2	Existing Pipe - Review by Colebrook-White Equation
SP2	CP2.1	30.9	30.9	675	150	30.15	29.95	SP	30.0	
CP2.1	CP2.2	30.9	30.9	675	150	29.95	29.79	CP	23.6	
CP2.2	CP2.3	30.9	29.7	675	150	29.79	28.95	CP	46.6	
CP2.3	CP2.4	29.7	29.1	675	150	28.95	28.35	CP	64.2	
CP2.4	CP2.5	29.1	29.1	675	150	28.35	28.02	CP	50.2	
CP2.5	CP2.6	29.1	29.1	750	200	28.02	27.92	G1	19.2	
CP2.6	CP2.7	29.1	29.1	750	200	27.92	27.77	G1	29.7	
CP2.7	CP1.5	29.1	29.1	750	200	27.77	27.69	G1	15.2	
SP5	CP5.1	29.1	29.1	300	190	28.73	28.69	SP	6.6	
CP5.1	CP1.4	29.1	29.1	300	190	28.69	28.65	CP	8.3	

#SP: StartPoint

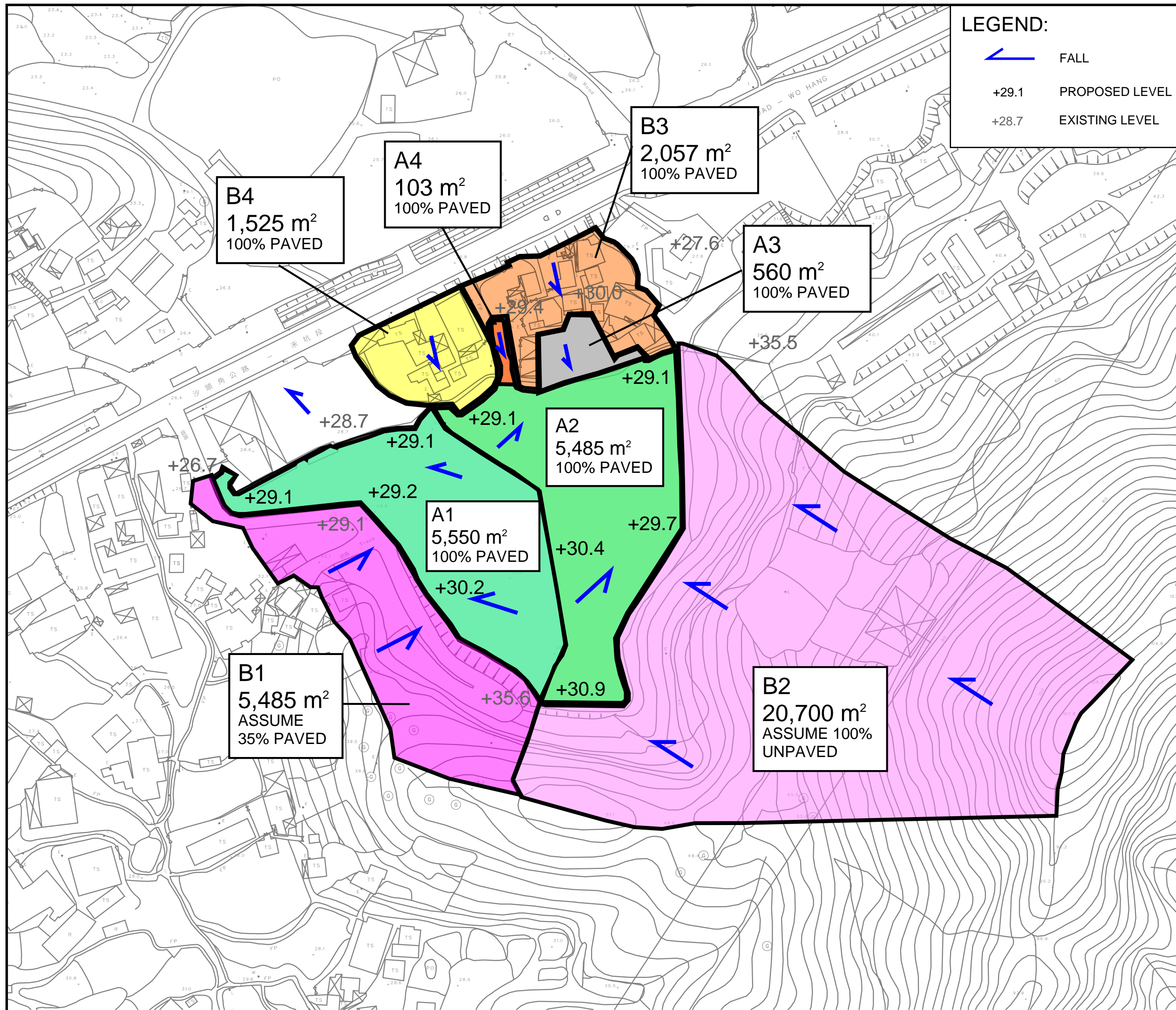
- NOTES:
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PROJECT:
 PROPOSED TEMPORARY WAREHOUSE WITH ANCILLARY FACILITIES FOR A PERIOD OF 3 YEARS AND ASSOCIATED FILLING OF LAND, VARIOUS LOTS IN DD38 AND ADJOINING GOVERNMENT LAND, SHA TAU KOK, NEW TERRITORIES

VER	DESCRIPTION	DATE

DRAWING TITLE
DRAINAGE SCHEDULE

DRAWING NUMBER
FIGURE 3.2



LEGEND:

← FALL

+29.1 PROPOSED LEVEL

+28.7 EXISTING LEVEL

PROJECT:
 PROPOSED TEMPORARY WAREHOUSE WITH ANCILLARY FACILITIES FOR A PERIOD OF 3 YEARS AND ASSOCIATED FILLING OF LAND, VARIOUS LOTS IN DD38 AND ADJOINING GOVERNMENT LAND, SHA TAU KOK, NEW TERRITORIES

VER	DESCRIPTION	DATE

DRAWING TITLE
CATCHMENT PLAN

DRAWING NUMBER
FIGURE 4

APPENDIX

Appendix A: Proposed Drainage Design

North District	Return Period	1 in	10	years	n	0.016	Storm Constant	North District a	454.9	
					Ks	0.15		North District b	3.44	
					Viscosity	0.000001		North District c	0.412	
								Pavement Type	Hard Paved	Green
								Runoff Coefficient	0.95	0.35

Catchment Area Table (Area in m²)

Catchment	A1	A2	A3	A4	B1	B2	B3	B4	A1 to A4	SupA1-1				
Pave: Unpave	1:0	1:0	1:0	1:0	0.35:0.65	0:1	1:0	1:0	1:0	1:0				
Area	5550	5485	560	103	4844	20700	2057	1525	11698.00	50.00				
Equival. Area	5272.50	5210.75	532.00	97.85	2712.64	7245.00	1954.15	1448.75	11113.10	47.50				

Design Table

US MH/PIT	DS MH/PIT	US GL	DS GL	Size mm	Gradient 1 in	US IL	DS IL	U/S MH/PIT TYPE#	Length m	Full Bore V m/s	Full Bore Cap. m ³ /s	Catchment ID1	Catchment ID2	Catchment ID3	Catchment ID4	Catchment ID5	Catchment ID6	Total Equivalent Area	ToC	Intensity mm/hr	Total Discharge m ³ /s	Utilitization	Remark
SP1	CP1.1	30.9	30.0	525	100	30.30	29.40	SP	37.25	2.01	0.49	A1	B1					7985.14	5.00	189	0.42	84.8%	
CP1.1	CP1.2	30.0	29.2	525	100	29.60	28.60	CP	62.23	2.01	0.49	A1	B1					7985.14	5.31	186	0.41	83.6%	
CP1.2	CP1.3	29.2	29.1	675	250	28.35	28.17	CP	44.93	1.50	0.61	A1	B1					7985.14	5.83	182	0.40	66.0%	
CP1.3	CP1.4	29.1	29.1	675	250	28.17	28.14	CP	7.27	1.50	0.61	A1	B1					7985.14	6.32	178	0.39	64.6%	
CP1.4	CP1.5	29.1	29.1	675	250	28.14	27.81	CP	83.26	1.50	0.61	A1	B1					7985.14	6.40	177	0.39	64.4%	
Existing Manhole	Existing Discharge Point	29.1	26.9	900	50	27.69	25.93	CP	36.45	4.07	2.94	A1 to A4	B1	B2	B3	B4		24473.64	7.33	171	1.16	39.5%	Existing Pipe - Review by Colebrook-White Equation
Existing Manhole	Existing Discharge Point	26.9	26.8	900	200	25.33	25.25	Existing	14.2	2.53	1.61	A1 to A4	B1	B2	B3	B4		24473.64	7.48	170	1.16	71.7%	Existing Pipe - Review by Colebrook-White Equation
SP2	CP2.1	30.9	30.9	675	150	30.15	29.95	SP	29.96	1.94	0.79	A2	B2					12455.75	5.00	189	0.65	82.9%	
CP2.1	CP2.2	30.9	30.9	675	150	29.95	29.79	CP	23.56	1.94	0.79	A2	B2					12455.75	5.26	187	0.65	81.9%	
CP2.2	CP2.3	30.9	29.7	675	150	29.79	28.95	CP	46.56	1.94	0.79	A2	B2					12455.75	5.46	185	0.64	81.1%	
CP2.3	CP2.4	29.7	29.1	675	150	28.95	28.35	CP	64.24	1.94	0.79	A2	B2					12455.75	5.86	182	0.63	79.7%	
CP2.4	CP2.5	29.1	29.1	675	150	28.35	28.02	CP	50.24	1.94	0.79	A2	A3	B2				12987.75	6.41	177	0.64	81.1%	
CP2.5	CP2.6	29.1	29.1	750	200	28.02	27.92	G1	19.22	1.80	0.91	A2	A3	A3	B2	B3		15473.90	6.84	174	0.75	82.8%	
CP2.6	CP2.7	29.1	29.1	750	200	27.92	27.77	G1	29.69	1.80	0.91	A2	A3	A3	B2	B3		15473.90	7.02	173	0.74	82.2%	
CP2.7	CP1.5	29.1	29.1	750	200	27.77	27.69	G1	15.15	1.80	0.91	A2	A3	A3	B2	B3	B4	16922.65	7.30	171	0.80	88.9%	
SP5	CP5.1	29.1	29.1	300	190	28.73	28.69	SP	6.63	1.00	0.08	SupA1-1						47.50	5.00	189	0.00	3.1%	
CP5.1	CP1.4	29.1	29.1	300	190	28.69	28.65	CP	8.33	1.00	0.08	SupA1-1						47.50	5.11	188	0.00	3.1%	
*5m CH Checking (assume 3m only)				3000	250					4.06	32.64	A1	A2	A3	A4	B1	B2	21070.74	7.48	170	1.00	3.0%	

* According to the check of capacity of approx. 5m channel against the site flow, the utilization is less than 5%. No unacceptable drainage impact is anticipated.

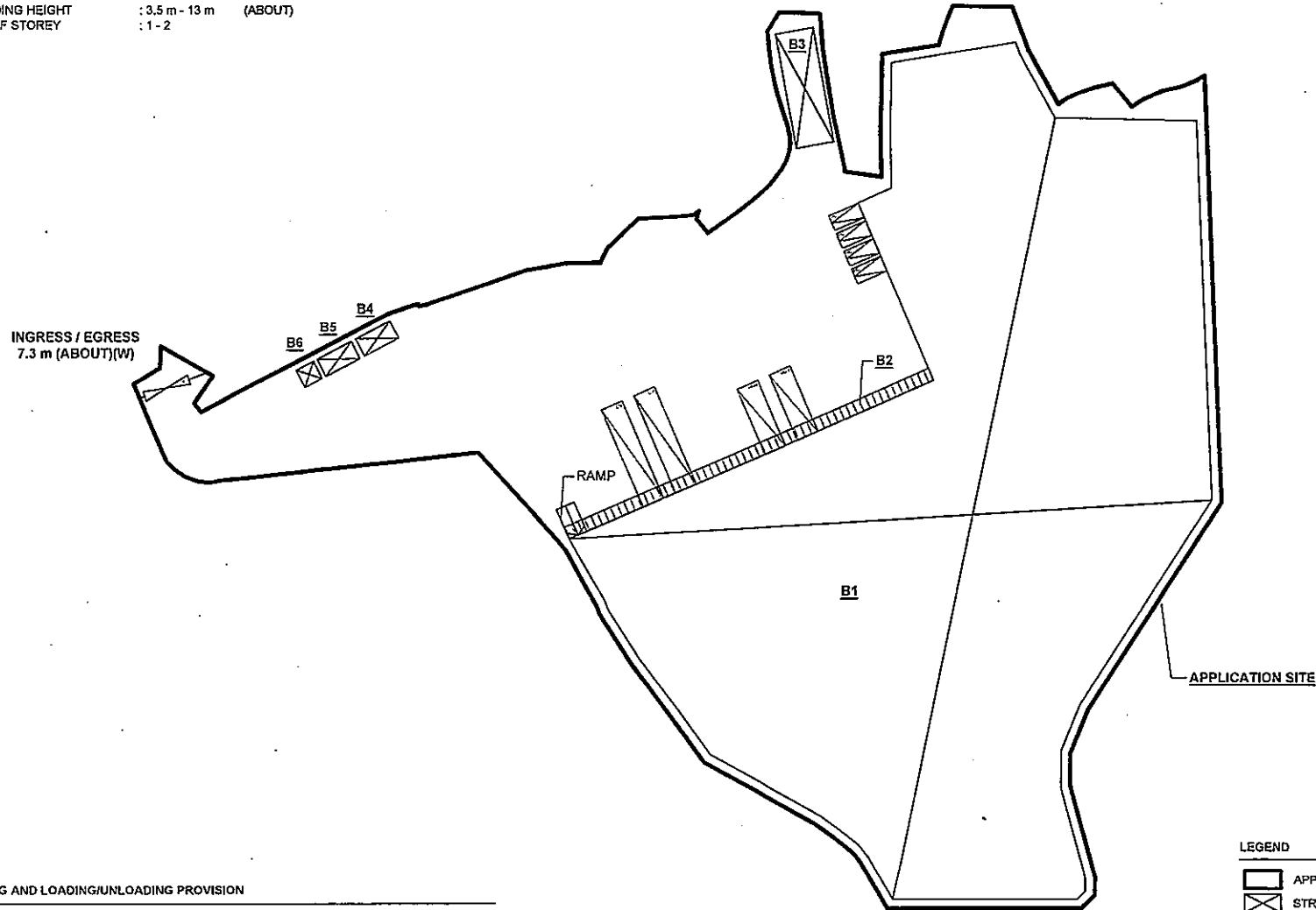
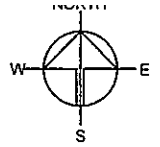
#SP: Start Point

APPENDIX B - PROPOSED SITE LAYOUT PLAN

DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 11,698 m ²	(ABOUT)
COVERED AREA	: 7,637 m ²	(ABOUT)
UNCOVERED AREA	: 4,061 m ²	(ABOUT)
PLOT RATIO	: 1.3	(ABOUT)
SITE COVERAGE	: 65 %	(ABOUT)
NO. OF STRUCTURE	: 6	
DOMESTIC GFA	: NOT APPLICABLE	
NON-DOMESTIC GFA	: 15,105 m ²	(ABOUT)
TOTAL GFA	: 15,105 m ²	(ABOUT)
BUILDING HEIGHT	: 3.5 m - 13 m	(ABOUT)
NO. OF STOREY	: 1 - 2	

STRUCTURE	USE	COVERED AREA	GFA	BUILDING HEIGHT
B1	WAREHOUSE (EXCL. D.G.G.)	7,350 m ² (ABOUT)	14,720 m ² (ABOUT)	13 m (ABOUT)(2-STOREY)
B2	RAIN SHELTER FOR L/U/L	124 m ² (ABOUT)	124 m ² (ABOUT)	13 m (ABOUT)(1-STOREY)
B3	SITE OFFICE	108 m ² (ABOUT)	216 m ² (ABOUT)	7 m (ABOUT)(2-STOREY)
B4	UTILITIES AND METER ROOM	18 m ² (ABOUT)	18 m ² (ABOUT)	3.5 m (ABOUT)(1-STOREY)
B5	WASHROOM	18 m ² (ABOUT)	18 m ² (ABOUT)	3.5 m (ABOUT)(1-STOREY)
B6	CARETAKER OFFICE	9 m ² (ABOUT)	9 m ² (ABOUT)	3.5 m (ABOUT)(1-STOREY)
TOTAL		7,637 m ² (ABOUT)	15,105 m ² (ABOUT)	



PARKING AND LOADING/UNLOADING PROVISION

NO. OF PRIVATE CAR PARKING SPACE	: 4
DIMENSION OF PARKING SPACE	: 5 m (L) X 2.5 m (W)
NO. OF LOADING/UNLOADING SPACE FOR MEDIUM GOODS VEHICLE	: 2
DIMENSION OF LOADING/UNLOADING SPACE	: 11 m (L) X 3.5 m (W)
NO. OF LOADING/UNLOADING SPACE FOR CONTAINER VEHICLE	: 2
DIMENSION OF LOADING/UNLOADING SPACE	: 16 m (L) X 3.5 m (W)

LEGEND

	APPLICATION SITE
	STRUCTURE (ENCLOSED)
	STRUCTURE (CANOPY)
	LOADING / UNLOADING SPACE (MGV)
	LOADING / UNLOADING SPACE (CV)
	PRIVATE CAR PARKING SPACE
	INGRESS / EGRESS

PLANNING CONSULTANT



PROJECT

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

SITE LOCATION

VARIOUS LOTS IN D.D. 38 AND ADJOINING GOVERNMENT LAND, SHA TAU KOK, NEW TERRITORIES

SCALE

1 : 1000 @ A4

DRAWN BY

MN

DATE

23.3.2023

REVISED BY

OL

DATE

28.3.2023

APPROVED BY

DATE

DWG. TITLE

LAYOUT PLAN

DWG. NO.

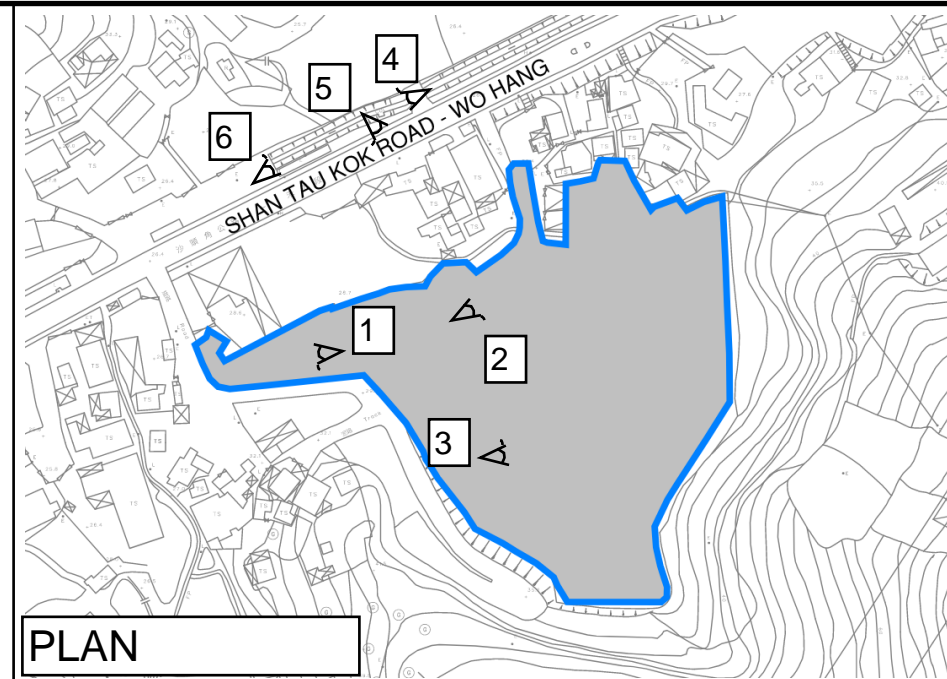
PLAN 4

VER.

002



VIEW 1

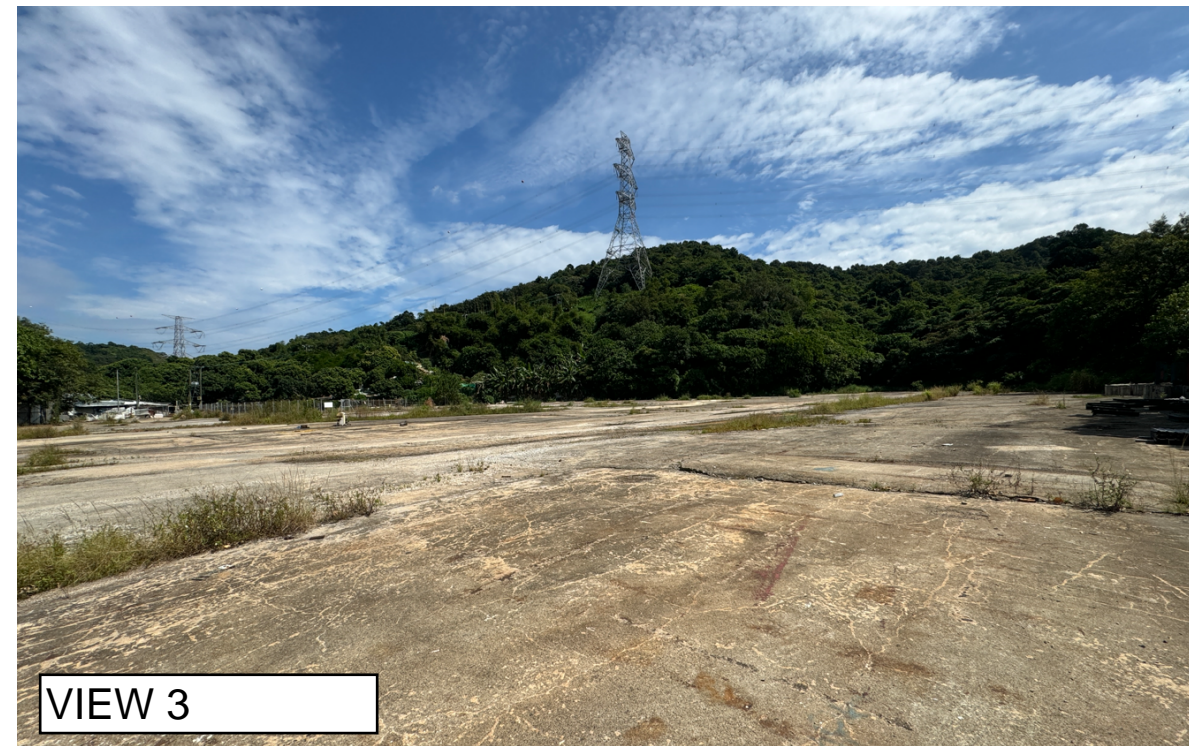


PLAN

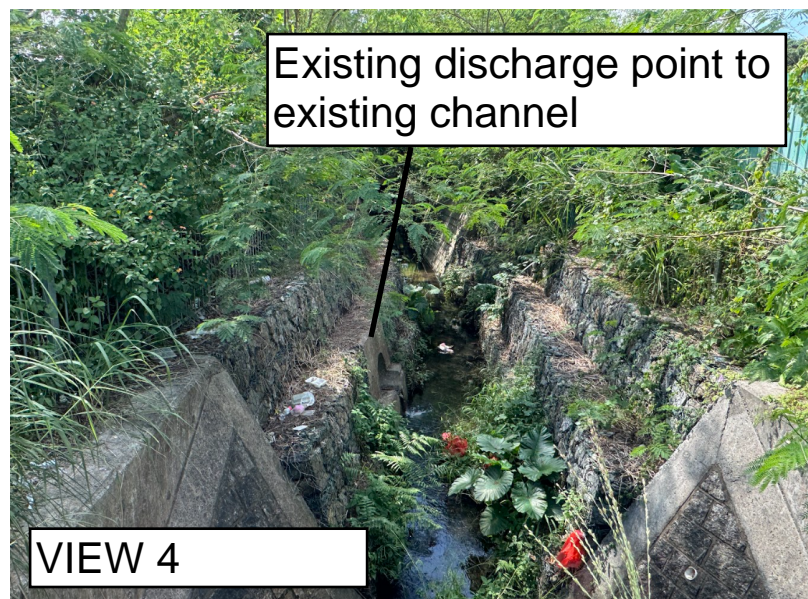
PROJECT:
 PROPOSED TEMPORARY
 WAREHOUSE WITH
 ANCILLARY FACILITIES FOR
 A PERIOD OF 3 YEARS AND
 ASSOCIATED FILLING OF
 LAND, VARIOUS LOTS IN
 DD38 AND ADJOINING
 GOVERNMENT LAND, SHA
 TAU KOK, NEW
 TERRITORIES



VIEW 2

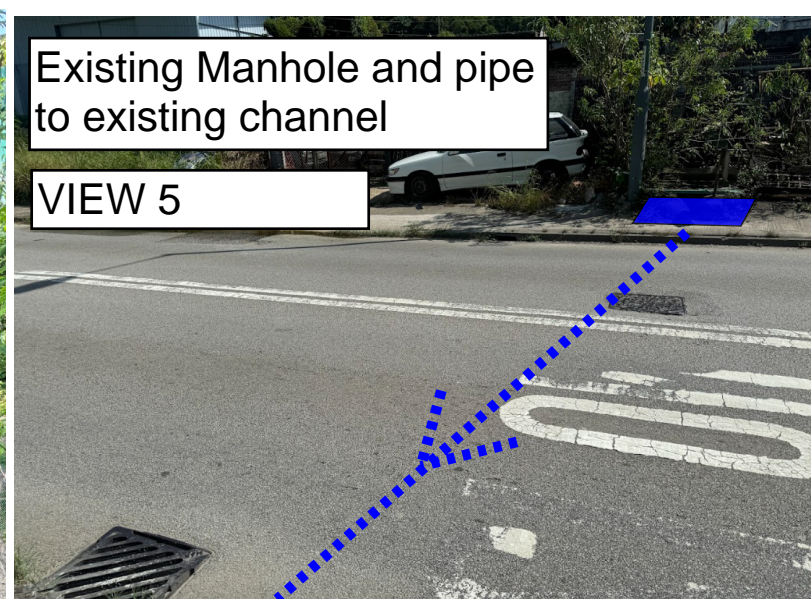


VIEW 3



Existing discharge point to
 existing channel

VIEW 4



Existing Manhole and pipe
 to existing channel

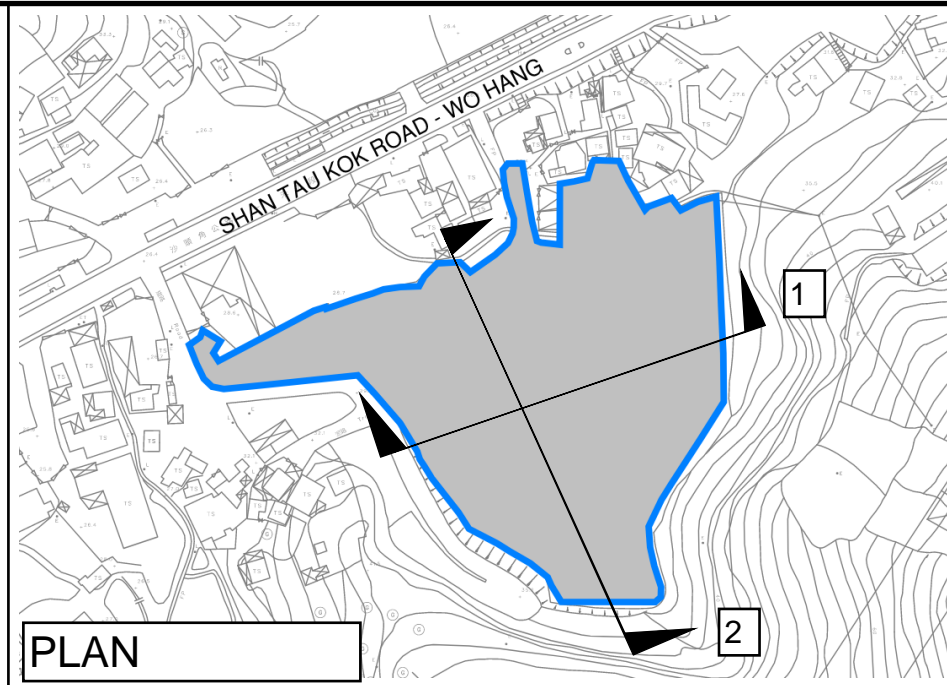
VIEW 5



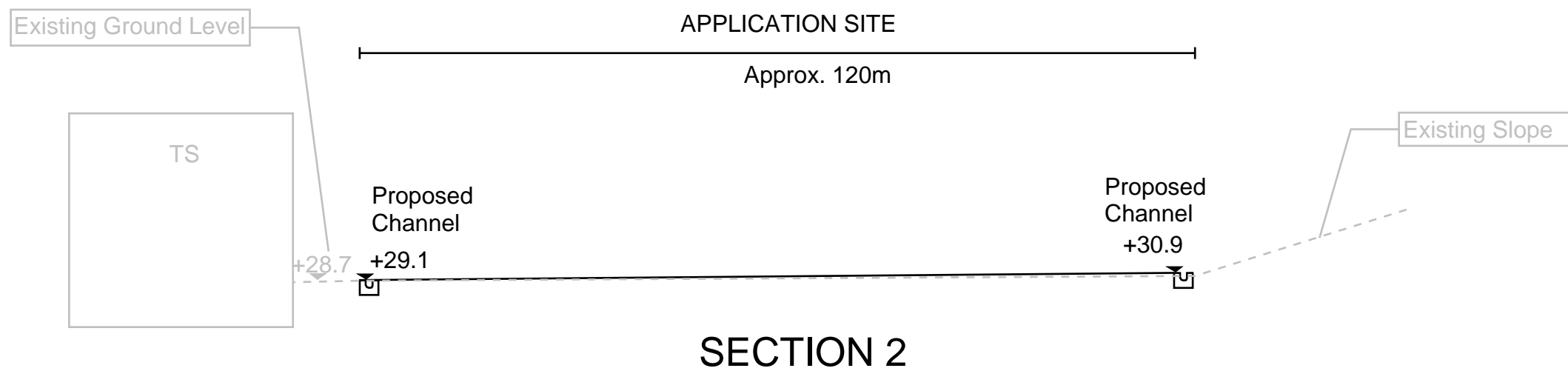
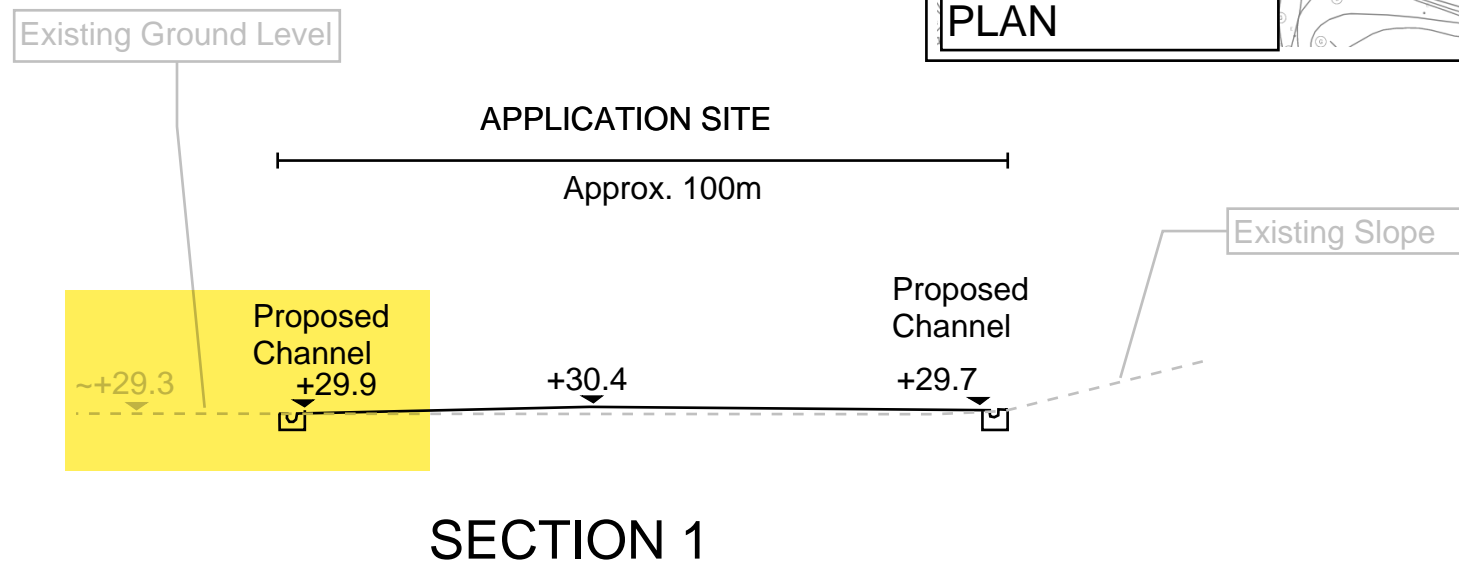
VIEW 6

Photos Record of
 Surroundings

Appendix C



PROJECT:
 PROPOSED TEMPORARY
 WAREHOUSE WITH
 ANCILLARY FACILITIES FOR
 A PERIOD OF 3 YEARS AND
 ASSOCIATED FILLING OF
 LAND, VARIOUS LOTS IN
 DD38 AND ADJOINING
 GOVERNMENT LAND, SHA
 TAU KOK, NEW
 TERRITORIES



SECTIONS

Appendix D

Appendix II

Fire Service Installations Proposal



FIRE SERVICES NOTES:

1. HOSE REEL SYSTEM

- 1.1 HOSE REEL SHALL BE PROVIDED AT POSITIONS AS INDICATED ON PLANS.
- 1.2 THERE SHALL BE SUFFICIENT HOSE REELS TO ENSURE THAT EVERY PART OF THE BUILDING CAN BE REACHED BY A LENGTH OF NOT MORE THAN 30M OF HOSE REEL TUBING. ONE ACTUATING POINT AND ONE AUDIO WARNING DEVICE TO BE LOCATED AT EACH HR POINT. THE ACTUATING POINT SHOULD INCLUDE FACILITIES FOR THE FIRE PUMP START DEVICE INITIATION.
- 1.3 A MODIFIED HOSE REEL SYSTEM OF 2,000 LITRES WATER TANK TO BE PROVIDED FOR THE ENTIRE BUILDING AS INDICATED ON PLAN.
- 1.4 NO FIRE SERVICES INLET TO BE PROVIDED FOR THE MODIFIED HOSE REEL SYSTEM.
- 1.5 WATER SUPPLY FOR THE MODIFIED HOSE REEL SYSTEM TO BE SINGLE END FEED FROM THE GOVERNMENT TOWN MAIN.
- 1.6 TWO FIXED FIRE PUMPS (DUTY/STANDBY) TO BE PROVIDED AT F.S. & SPR. PUMP ROOM.
- 1.7 THE HR SYSTEM INSTALLED SHOULD BE IN ACCORDANCE WITH PARA. 5.14 OF THE CODE OF PRACTICE FOR MINIMUM FIRE SERVICE INSTALLATION AND EQUIPMENT 2012.
- 1.8 AN INSTRUCTION PLATE SHALL BE PROVIDED NEXT TO THE BREAK GLASS UNIT FOR OPERATION OF HOSE REEL.

2. AUTOMATIC SPRINKLER SYSTEM

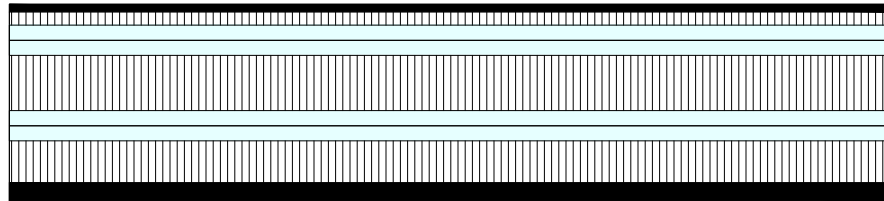
- 2.1 AUTOMATIC SPRINKLER SYSTEM SUPPLIED BY A 135,000L SPRINKLER WATER TANK AND HAZARD CLASS OH3 SHALL BE PROVIDED TO THE ENTIRE BUILDING/ STRUCTURE IN ACCORDANCE WITH LPC RULES INCORPORATING BS EN12845: 2015 AND FSD CIRCULAR LETTER 5/2020. THE SPRINKLER TANK, SPRINKLER PUMP ROOM, SPRINKLER INLET AND SPRINKLER CONTROL VALVE GROUP SHALL BE CLEARLY MARKED ON PLANS.
- 2.2 THE CLASSIFICATION OF THE AUTOMATIC SPRINKLER INSTALLATION TO BE ORDINARY HAZARD GROUP 3.
- 2.3 ONE NUMBER 135,000 LITRES SPRINKLER WATER TANK TO BE PROVIDED AS INDICATED ON PLANS.
- 2.4 SPRINKLER CONTROL VALVE SET AND SPRINKLER INLET TO BE PROVIDED AS INDICATED ON PLANS.
- 2.5 TYPE OF STORAGE METHOD FOR THE BUILDING IS AS FOLLOWS:
 - (A) STORAGE CATEGORY: CATEGORY (I)
 - (B) STORAGE HEIGHT: NOT EXCEEDING 4M
 - (C) STORAGE: ST1

3. FIRE ALARM SYSTEM

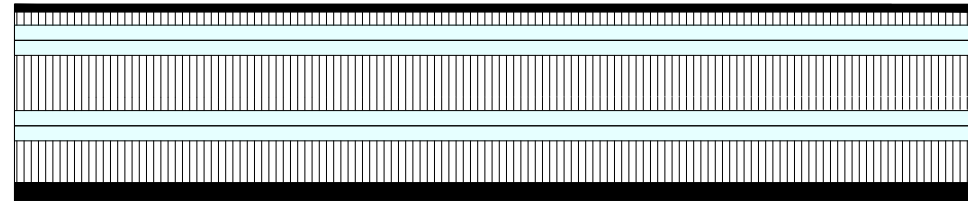
- 3.1 FIRE ALARM SYSTEM SHALL BE PROVIDED THROUGHOUT THE ENTIRE BUILDING IN ACCORDANCE WITH BS 5839-1: 2017 AND FSD CIRCULAR LETTER N0.6/2021. ONE ACTUATING POINT AND ONE AUDIO WARNING DEVICE SHOULD BE LOCATED AT EACH HOSE REEL POINT. THE ACTUATION POINT SHOULD INCLUDE FACILITIES FOR FIRE PUMP START AND AUDIO / VISUAL WARNING DEVICE INITIATION.
- 3.2 AN ADDRESSABLE TYPE FIRE ALARM PANEL TO BE PROVIDED AND LOCATED INSIDE G/F F.S. & SPR. PUMP ROOM.

4. MISCELLANEOUS F.S. INSTALLATION

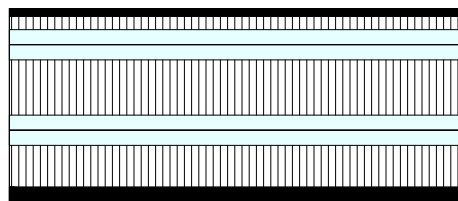
- 4.1 PORTABLE FIRE EXTINGUISHER WITH SPECIFIED TYPE AND CAPACITY TO BE PROVIDED AT LOCATIONS AS INDICATED ON PLANS.
- 4.2 SUFFICIENT EMERGENCY LIGHTING SHALL BE PROVIDED THROUGHOUT THE ENTIRE BUILDINGS/STRUCTURES IN ACCORDANCE WITH BS 5266-1:2016, BS EN 1838:2013 AND FSD CL 4/2021.
- 4.3 SUFFICIENT DIRECTIONAL AND EXIT SIGN SHALL BE PROVIDED IN ACCORDANCE WITH BS 5266: PART 1 AND FSD CIRCULAR LETTER 5/2008.
- 4.4 NO EMERGENCY GENERATOR TO BE PROVIDED FOR SERVING THE EMERGENCY POWER. DUPLICATED POWER SUPPLIES FOR ALL FIRE SERVICES INSTALLATIONS COMPRISING A CABLE CONNECTED FROM ELECTRICITY MAINS DIRECTLY BEFORE THE MAIN SWITCH.
- 4.5 WHEN A VENTILATION/ AIR CONDITIONING CONTROL SYSTEM TO A BUILDING IS PROVIDED, IT SHALL STOP MECHANICALLY INDUCED AIR MOVEMENT WITHIN A DESIGNATED FIRE COMPARTMENT.
- 4.6 NO DYNAMIC SMOKE EXTRACTION SYSTEM SHALL BE PROVIDED SINCE FIRE COMPARTMENT NOT EXCEEDING 7000 CUBIC METRES AND THE AGGREGATE AREA OF OPENABLE WINDOWS OF THE RESPECTIVE COMPARTMENT EXCEEDS 6.25% OF THE FLOOR AREA OF THAT COMPARTMENT.



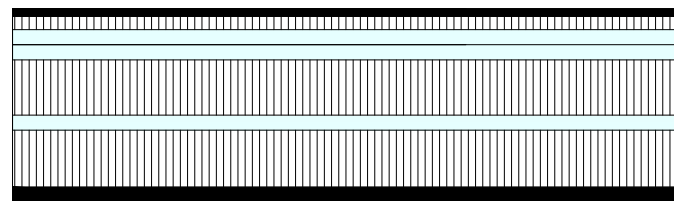
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

OPENABLE WINDOW AREA CALCULAION UNDER F.S.D. REQUIREMENT FOR COMPARTMENT EXCEEDING 7000m³	
LOCATION	STRUCTURE B1
GFA	11,396 m²
OPENABLE WINDOW AREA REQUIRED	$11,396 \text{ m}^2 \times 6.25\% = \mathbf{712 \text{ m}^2}$
OPENABLE WINDOW AREA PROVIDED	REFER TO ELEVATION - (A-A) = 232m² REFER TO ELEVATION - (B-B) = 256m² REFER TO ELEVATION - (C-C) = 120m² REFER TO ELEVATION - (D-D) = 132m²
TOTAL = 740m² > 712m²	

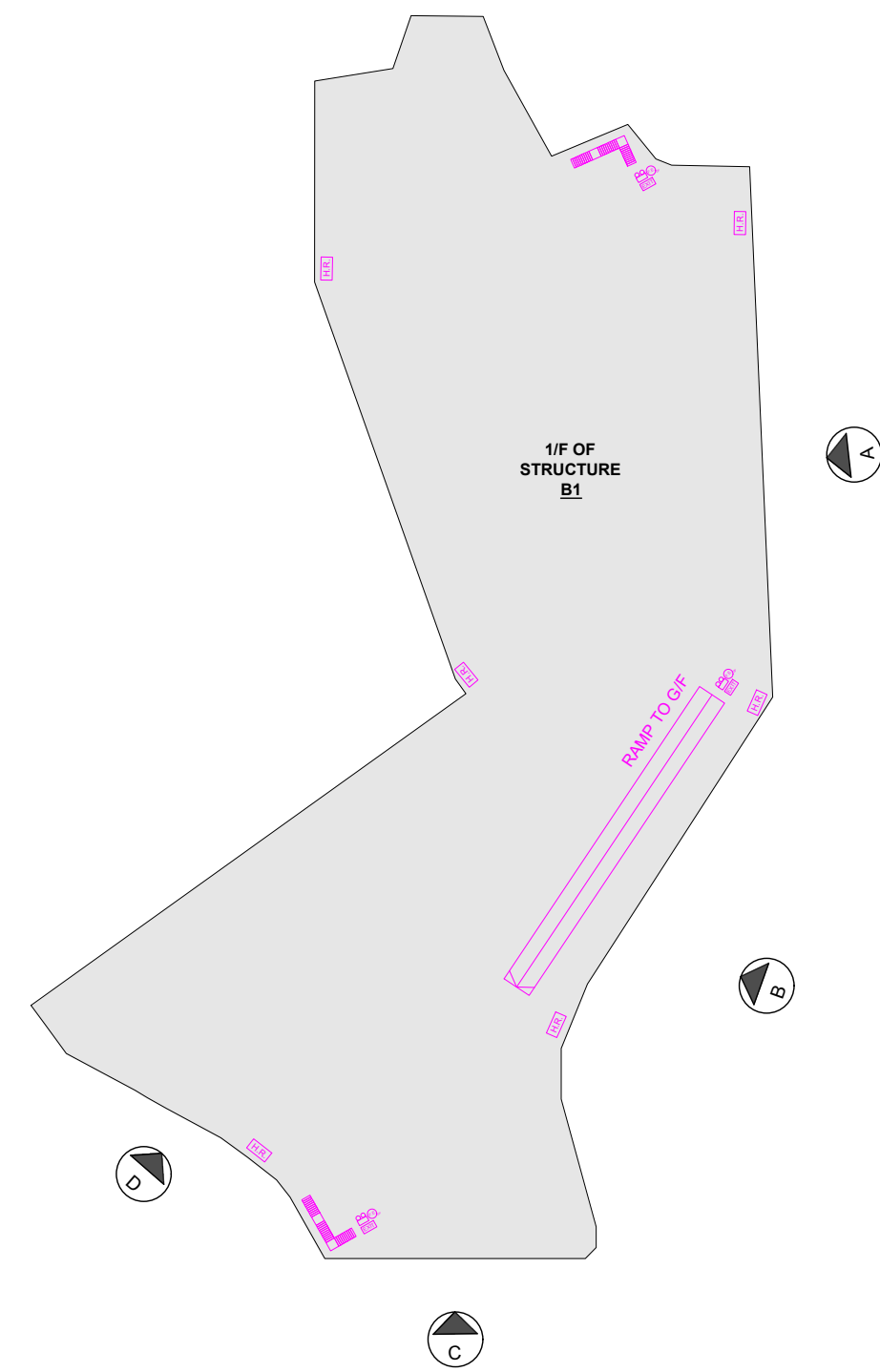
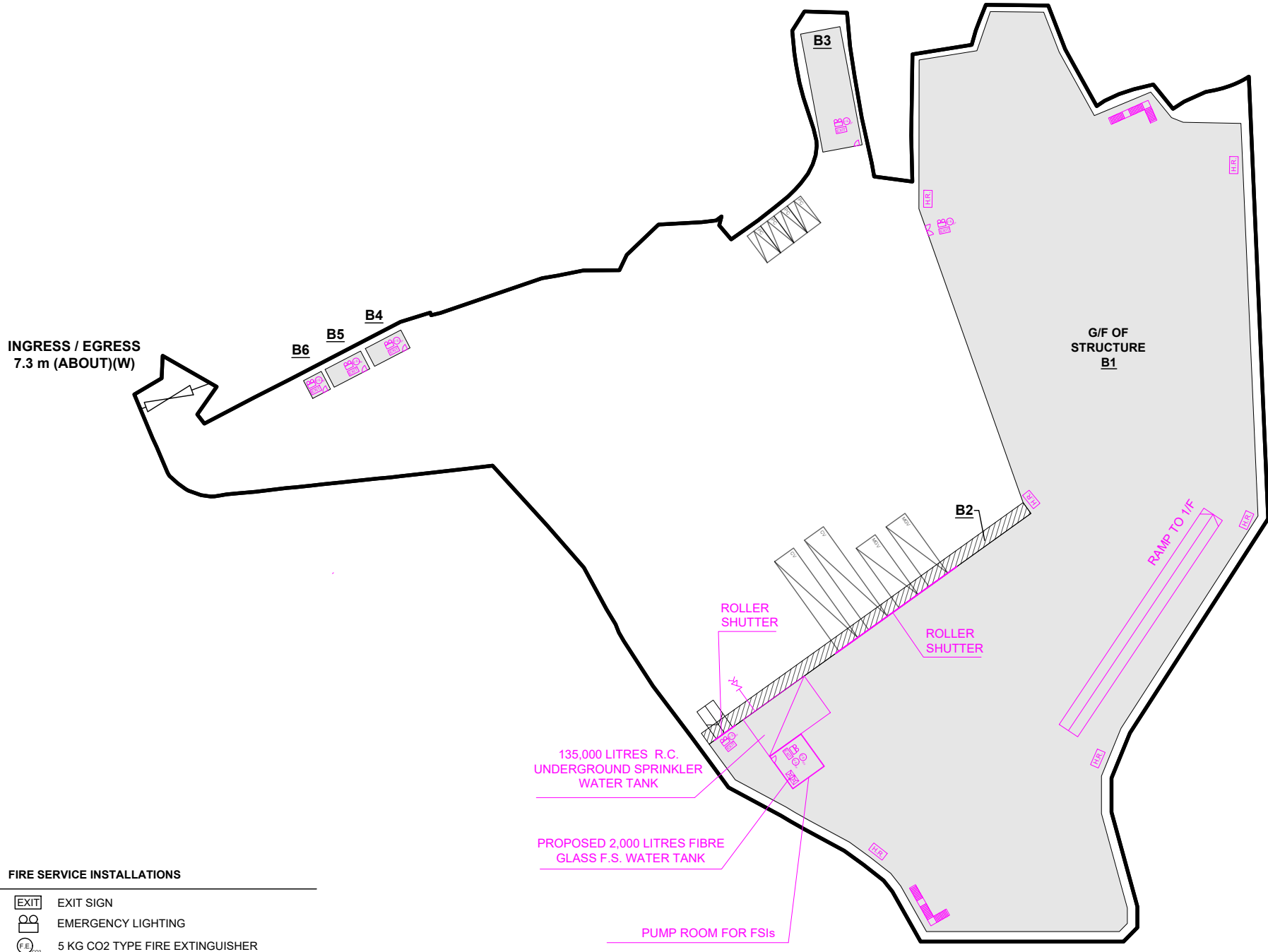
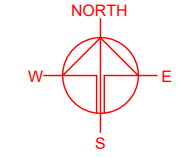
PROJECT
 PROPOSED WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) WITH ANCILLARY FACILITIES FOR A PERIOD OF 3 YEARS WITH ASSOCIATED FILLING OF LAND

SITE LOCATION
 VARIOUS LOTS IN D.D. 38 AND ADJOINING GOVERNMENT LAND, SHA TAU KOK, NEW TERRITORIES

SCALE 1 : 500 @ A3	
DRAWN BY MN	DATE 8.1.2025
CHECKED BY	DATE
APPROVED BY	DATE
DWG. TITLE FSIs PROPOSAL (1/2)	
DWG NO. APPENDIX II	VER. 001

DEVELOPMENT PARAMETERS		
APPLICATION SITE AREA	: 11,698 m ²	(ABOUT)
COVERED AREA	: 5,970 m ²	(ABOUT)
UNCOVERED AREA	: 5,728 m ²	(ABOUT)
PLOT RATIO	: 1.01	(ABOUT)
SITE COVERAGE	: 51 %	(ABOUT)
NO. OF STRUCTURE	: 6	
DOMESTIC GFA	: NOT APPLICABLE	
NON-DOMESTIC GFA	: 11,776 m ²	(ABOUT)
TOTAL GFA	: 11,776 m ²	(ABOUT)
BUILDING HEIGHT	: 3.5 m - 13 m	(ABOUT)
NO. OF STOREY	: 1 - 2	

STRUCTURE	USE	COVERED AREA	GROSS FLOOR AREA	BUILDING HEIGHT
B1	WAREHOUSE (EXCL. D.G.G.)	5,698 m ² (ABOUT)	11,396 m ² (ABOUT)	13 m (ABOUT)(2-STOREY)
B2	RAIN SHELTER FOR L/U/L	119 m ² (ABOUT)	119 m ² (ABOUT)	7 m (ABOUT)(1-STOUREY)
B3	SITE OFFICE	108 m ² (ABOUT)	216 m ² (ABOUT)	7 m (ABOUT)(2-STOUREY)
B4	UTILITIES AND METER ROOM	18 m ² (ABOUT)	18 m ² (ABOUT)	3.5 m (ABOUT)(1-STOUREY)
B5	WASHROOM	18 m ² (ABOUT)	18 m ² (ABOUT)	3.5 m (ABOUT)(1-STOUREY)
B6	CARETAKER OFFICE	9 m ² (ABOUT)	9 m ² (ABOUT)	3.5 m (ABOUT)(1-STOUREY)
TOTAL		5,970 m² (ABOUT)	11,776 m² (ABOUT)	



FIRE SERVICE INSTALLATIONS	
	EXIT SIGN
	EMERGENCY LIGHTING
	5 KG CO2 TYPE FIRE EXTINGUISHER
	4 KG DRY POWER TYPE FIRE EXTINGUISHER
	HOSE REEL PUMP
	SPRINKLER PUMP
	150mm FIRE ALARM BELL
	PUMP CONTROL PANEL
	BREAK GLASS UNIT
	VISUAL ALARM DEVICE
	2,000 LITRES FIBRE GLASS F.S. WATER TANK
	135,000 LITRES R.C. SPRINKLER WATER TANK
	HOSE REEL SET
	SPRINKLER CONTROL VALVE
	SPRINKLER INLET

LEGEND	
	APPLICATION SITE
	STRUCTURE (ENCLOSED)
	STRUCTURE (CANOPY)
	PARKING SPACE (PC)
	L/U/L SPACE (MGV)
	L/U/L SPACE (CV)
	INGRESS / EGRESS

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

SITE LOCATION
 VARIOUS LOTS IN D.D. 38 AND ADJOINING GOVERNMENT LAND, SHA TAU KOK, NEW TERRITORIES

SCALE
 1 : 800 @ A3

DRAWN BY	DATE
MN	8.1.2025

CHECKED BY	DATE

APPROVED BY	DATE

DWG. TITLE
 FSIs PROPOSAL (2/2)

DWG. NO.	VER.
APPENDIX II	001