2025年3月18日

此文件在_____收到。城市規劃委員會只會在收到所有必要的資料及文件後才正式確認收到申請的日期。

This document is received on 2025 -03- 18
The Town Planning Board will formally acknowledge the date of receipt of the application only upon receipt of all the required information and documents.

Form No. S16-I
表格第 S16-I 號

APPLICATION FOR PERMISSION UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE (CAP. 131)

根據《城市規劃條例》(第131章)第16條遞交的許可申請

Applicable to proposals not involving or not only involving:
適用於建議不涉及或不祇涉及:

(i) Construction of "New Territories Exempted House(s)";
興建「新界豁免管制屋宇」;

(ii) Temporary use/development of land and/or building not exceeding 3 years in rural areas or Regulated Areas; and
位於鄉郊地區或受規管地區土地上及/或建築物內進行為期不超過三年的臨時用途/發展;及

(iii) Renewal of permission for temporary use or development in rural areas or Regulated Areas
位於鄉郊地區或受規管地區的臨時用途或發展的許可續期

Applicant who would like to publish the notice of application in local newspapers to meet one of the Town Planning Board's requirements of taking reasonable steps to obtain consent of or give notification to the current land owner, please refer to the following link regarding publishing the notice in the designated newspapers: https://www.tpb.gov.hk/en/plan_application/apply.html

申請人如欲在本地報章刊登申請通知,以採取城市規劃委員會就取得現行土地擁有人的同意或通知現行土地擁有人所指定的其中一項合理步驟,請瀏覽以下網址有關在指定的報章刊登通知:
https://www.tpb.gov.hk/tc/plan_application/apply.html

General Note and Annotation for the Form
填寫表格的一般指引及註解

\# "Current land owner" means any person whose name is registered in the Land Registry as that of an owner of the land to which the application relates, as at 6 weeks before the application is made
「現行土地擁有人」指在提出申請前六星期,其姓名或名稱已在土地註冊處註冊為該申請所關乎的土地的擁有人的人

& Please attach documentary proof 請夾附證明文件

^ Please insert number where appropriate 請在適當地方註明編號

Please fill "NA" for inapplicable item 請在不適用的項目填寫「不適用」

Please use separate sheets if the space provided is insufficient 如所提供的空間不足,請另頁說明

Please insert a「✔」at the appropriate box 請在適當的方格內上加上「✔」號

2500569 14.3.2025 By Hand

Form No. S16-I 表格第 S16-I 號

For Official Use Only 請勿填寫此欄	Application No. 申請編號	A/KC/610
	Date Received 收到日期	2025 -03- 18

1. The completed form and supporting documents (if any) should be sent to the Secretary, Town Planning Board (the Board), 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong.
申請人須把填妥的申請表格及其他支持申請的文件 (倘有)，送交香港北角渣華道 333 號北角政府合署 15 樓城市規劃委員會(下稱「委員會」)秘書收。

2. Please read the "Guidance Notes" carefully before you fill in this form. The document can be downloaded from the Board's website at http://www.tpb.gov.hk/. It can also be obtained from the Secretariat of the Board at 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong (Tel: 2231 4810 or 2231 4835), and the Planning Enquiry Counters of the Planning Department (Hotline: 2231 5000) (17/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong and 14/F, Sha Tin Government Offices, 1 Sheung Wo Che Road, Sha Tin, New Territories).
請先細閱《申請須知》的資料單張，然後填寫此表格。該份文件可從委員會的網頁下載 (網址：http://www.tpb.gov.hk/)，亦可向委員會秘書處 (香港北角渣華道 333 號北角政府合署 15 樓 – 電話：2231 4810 或 2231 4835)及規劃署的規劃資料查詢處(熱線：2231 5000) (香港北角渣華道 333 號北角政府合署 17 樓及新界沙田上禾輋路 1 號沙田政府合署 14 樓)索取。

3. This form can be downloaded from the Board's website, and obtained from the Secretariat of the Board and the Planning Enquiry Counters of the Planning Department. The form should be typed or completed in block letters. The processing of the application may be refused if the required information or the required copies are incomplete.
此表格可從委員會的網頁下載，亦可向委員會秘書處及規劃署的規劃資料查詢處索取。申請人須以打印方式或以正楷填寫表格。如果申請人所提交的資料或文件副本不齊全，委員會可拒絕處理有關申請。

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1. Name of Applicant 申請人姓名/名稱

(☐ Mr. 先生 / ☐ Mrs. 夫人 / ☐ Miss 小姐 / ☐ Ms. 女士 / ☑ Company 公司 / ☐ Organisation 機構)

OXO YW Limited

2. Name of Authorised Agent (if applicable) 獲授權代理人姓名/名稱（如適用）

(☐ Mr. 先生 / ☐ Mrs. 夫人 / ☐ Miss 小姐 / ☐ Ms. 女士 / ☑ Company 公司 / ☐ Organisation 機構)

KJL Limited

3. Application Site 申請地點

(a) Full address / location / demarcation district and lot number (if applicable) 詳細地址／地點／丈量約份及地段號碼（如適用）	7-11 Wing Kin Road, Kwai Chung, New Territories DD446 Kwai Chung Town Lot 145 & adjoining Government Land at Wing Chong Street (New Grant Lot known as Kwai Chung Town Lot 534)
(b) Site area and/or gross floor area involved 涉及的地盤面積及／或總樓面面積	☑Site area 地盤面積 964.2 sq.m 平方米 ☑About 約 ☑Gross floor area 總樓面面積 10,991.88 約 sq.m 平方米 ☑About 約
(c) Area of Government land included (if any) 所包括的政府土地面積（倘有）	35.169 sq.m 平方米 ☐About 約

(d) Name and number of the related statutory plan(s) 有關法定圖則的名稱及編號	Approved Kwai Chung Outline Zoning Plan (OZP No. S/KC/32)
(e) Land use zone(s) involved 涉及的土地用途地帶	"Industrial" ("I")
(f) Current use(s) 現時用途	Industrial use (If there are any Government, institution or community facilities, please illustrate on plan and specify the use and gross floor area) (如有任何政府、機構或社區設施，請在圖則上顯示，並註明用途及總樓面面積)

4. "Current Land Owner" of Application Site 申請地點的「現行土地擁有人」

The applicant 申請人 –

☑ is the sole "current land owner"#& (please proceed to Part 6 and attach documentary proof of ownership).
是唯一的「現行土地擁有人」#& (請繼續填寫第 6 部分，並夾附業權證明文件)。

☐ is one of the "current land owners"#& (please attach documentary proof of ownership).
是其中一名「現行土地擁有人」#& (請夾附業權證明文件)。

☐ is not a "current land owner"#.
並不是「現行土地擁有人」#。

☐ The application site is entirely on Government land (please proceed to Part 6).
申請地點完全位於政府土地上（請繼續填寫第 6 部分）。

5. Statement on Owner's Consent/Notification
就土地擁有人的同意/通知土地擁有人的陳述

(a) According to the record(s) of the Land Registry as at ..... (DD/MM/YYYY), this application involves a total of ..... "current land owner(s)"#.
根據土地註冊處截至 ..... 年 ..... 月 ..... 日的記錄，這宗申請共牽涉 ..... 名「現行土地擁有人」#。

(b) The applicant 申請人 –

☐ has obtained consent(s) of ..... "current land owner(s)"#.
已取得 ..... 名「現行土地擁有人」#的同意。

Details of consent of "current land owner(s)"# obtained 取得「現行土地擁有人」#同意的詳情		
No. of 'Current Land Owner(s)' 「現行土地擁有人」數目	Lot number/address of premises as shown in the record of the Land Registry where consent(s) has/have been obtained 根據土地註冊處記錄已獲得同意的地段號碼／處所地址	Date of consent obtained (DD/MM/YYYY) 取得同意的日期 (日/月/年)

(Please use separate sheets if the space of any box above is insufficient. 如上列任何方格的空間不足，請另頁說明)

☐ has notified ..... "current land owner(s)"#
已通知 ..... 名「現行土地擁有人」#。

Details of the "current land owner(s)" # notified 已獲通知「現行土地擁有人」#的詳細資料		
No. of 'Current Land Owner(s)' 「現行土地擁有人」數目	Lot number/address of premises as shown in the record of the Land Registry where notification(s) has/have been given 根據土地註冊處記錄已發出通知的地段號碼／處所地址	Date of notification given (DD/MM/YYYY) 通知日期(日/月/年)

(Please use separate sheets if the space of any box above is insufficient. 如上列任何方格的空間不足，請另頁說明)

☐ has taken reasonable steps to obtain consent of or give notification to owner(s):
已採取合理步驟以取得土地擁有人的同意或向該人發給通知。詳情如下：

Reasonable Steps to Obtain Consent of Owner(s) 取得土地擁有人的同意所採取的合理步驟

☐ sent request for consent to the "current land owner(s)" on _____ (DD/MM/YYYY)#&
於_____(日/月/年)向每一名「現行土地擁有人」#郵遞要求同意書&

Reasonable Steps to Give Notification to Owner(s) 向土地擁有人發出通知所採取的合理步驟

☐ published notices in local newspapers on _____ (DD/MM/YYYY)&
於_____(日/月/年)在指定報章就申請刊登一次通知&

☐ posted notice in a prominent position on or near application site/premises on _____ (DD/MM/YYYY)&
於_____(日/月/年)在申請地點／申請處所或附近的顯明位置貼出關於該申請的通知&

☐ sent notice to relevant owners' corporation(s)/owners' committee(s)/mutual aid committee(s)/management office(s) or rural committee on _____ (DD/MM/YYYY)&
於_____(日/月/年)把通知寄往相關的業主立案法團/業主委員會/互助委員會或管理處，或有關的鄉事委員會&

Others 其他

☐ others (please specify)
其他（請指明）

_____

_____

_____

_____

Note: May insert more than one「✔」.
Information should be provided on the basis of each and every lot (if applicable) and premises (if any) in respect of the application.
註: 可在多於一個方格內加上「✔」號
申請人須就申請涉及的每一地段（倘適用）及處所（倘有）分別提供資料

6. Type(s) of Application 申請類別

☐ Type (i) Change of use within existing building or part thereof
第(i)類 更改現有建築物或其部分內的用途

☐ Type (ii) Diversion of stream / excavation of land / filling of land / filling of pond as required under Notes of Statutory Plan(s)
第(ii)類 根據法定圖則《註釋》內所要求的河道改道／挖土／填土／填塘工程

☐ Type (iii) Public utility installation / Utility installation for private project
第(iii)類 公用事業設施裝置/私人發展計劃的公用設施裝置

☑ Type (iv) Minor relaxation of stated development restriction(s) as provided under Notes of Statutory Plan(s)
第(iv)類 略為放寬於法定圖則《註釋》內列明的發展限制

☑ Type (v) Use / development other than (i) to (iii) above
第(v)類 上述的(i)至(iii)項以外的用途／發展

Note 1: May insert more than one「✓」.
註 1： 可在多於一個方格內加上「✓」號
Note 2: For Development involving columbarium use, please complete the table in the Appendix.
註 2： 如發展涉及靈灰安置所用途，請填妥於附件的表格。

(i) For Type (i) application 供第(i)類申請

(a) Total floor area involved 涉及的總樓面面積	sq.m 平方米		
(b) Proposed use(s)/development 擬議用途/發展	(If there are any Government, institution or community facilities, please illustrate on plan and specify the use and gross floor area) (如有任何政府、機構或社區設施，請在圖則上顯示，並註明用途及總樓面面積)		
(c) Number of storeys involved 涉及層數		Number of units involved 涉及單位數目	
(d) Proposed floor area 擬議樓面面積	Domestic part 住用部分 ..... sq.m 平方米 ☐About 約		
	Non-domestic part 非住用部分..... sq.m 平方米 ☐About 約		
	Total 總計 ..... sq.m 平方米 ☐About 約		

(e) Proposed uses of different floors (if applicable) 不同樓層的擬議用途(如適用)
(Please use separate sheets if the space provided is insufficient)
(如所提供的空間不足，請另頁說明)

Floor(s) 樓層	Current use(s) 現時用途	Proposed use(s) 擬議用途

(ii) For Type (ii) application 供第(ii)類申請	
(a) Operation involved 涉及工程	☐ Diversion of stream 河道改道 ☐ Filling of pond 填塘 Area of filling 填塘面積 ..... sq.m 平方米 ☐About 約 Depth of filling 填塘深度 ..... m 米 ☐About 約 ☐ Filling of land 填土 Area of filling 填土面積 ..... sq.m 平方米 ☐About 約 Depth of filling 填土厚度 ..... m 米 ☐About 約 ☐ Excavation of land 挖土 Area of excavation 挖土面積 ..... sq.m 平方米 ☐About 約 Depth of excavation 挖土深度 ..... m 米 ☐About 約 (Please indicate on site plan the boundary of concerned land/pond(s), and particulars of stream diversion, the extent of filling of land/pond(s) and/or excavation of land) (請用圖則顯示有關土地／池塘界線，以及河道改道、填塘、填土及／或挖土的細節及/或範圍))
(b) Intended use/development 有意進行的用途／發展	

(iii) For Type (iii) application 供第(iii)類申請	
(a) Nature and scale 性質及規模	☐ Public utility installation 公用事業設施裝置 ☐ Utility installation for private project 私人發展計劃的公用設施裝置 Please specify the type and number of utility to be provided as well as the dimensions of each building/structure, where appropriate 請註明有關裝置的性質及數量，包括每座建築物/構築物(倘有)的長度、高度和闊度

Name/type of installation 裝置名稱／種類	Number of provision 數量	Dimension of each installation /building/structure (m) (LxWxH) 每個裝置／建築物／構築物的尺寸 (米) (長 x 闊 x 高)

(Please illustrate on plan the layout of the installation 請用圖則顯示裝置的布局)

(iv) For Type (iv) application 供第(iv)類申請

(a) Please specify the proposed minor relaxation of stated development restriction(s) and **also fill in the proposed use/development and development particulars in part (v) below** –
請列明擬議略為放寬的發展限制**並填妥於第(v)部分的擬議用途/發展及發展細節** –

☑	Plot ratio restriction 地積比率限制	From 由 9.5 to 至 not more than 11.4
☐	Gross floor area restriction 總樓面面積限制	From 由 .....sq. m 平方米 to 至 .....sq. m 平方米
☐	Site coverage restriction 上蓋面積限制	From 由 .....% to 至 ..... %
☑	Building height restriction 建築物高度限制	From 由 .....m 米 to 至 ..... m 米 From 由 105 ..... mPD 米 (主水平基準上) to 至 109.55 .....mPD 米 (主水平基準上) From 由 ..... storeys 層 to 至 ..... storeys 層
☐	Non-building area restriction 非建築用地限制	From 由 .....m to 至 ..... m
☐	Others (please specify) 其他（請註明）	.....

(v) For Type (v) application 供第(v)類申請

(a) Proposed use(s)/development 擬議用途/發展	Proposed minor relaxation of plot ratio and building height restriction for permitted information technology and telecommunication industries (Data Centre) (Please illustrate the details of the proposal on a layout plan 請用平面圖說明建議詳情)

(b) Development Schedule 發展細節表

Proposed gross floor area (GFA) 擬議總樓面面積	10,991.88 ..... sq.m 平方米	☐About 約
Proposed plot ratio 擬議地積比率	11.4	☐About 約
Proposed site coverage 擬議上蓋面積	not more than 82 %	☐About 約
Proposed no. of blocks 擬議座數	1	
Proposed no. of storeys of each block 每座建築物的擬議層數	18 ..... storeys 層 ☑ include 包括 2 storeys of basements 層地庫 ☐ exclude 不包括 ..... storeys of basements 層地庫	
Proposed building height of each block 每座建築物的擬議高度	109.55 ..... mPD 米(主水平基準上) ..... m 米	☐About 約 ☐About 約

☐ Domestic part 住用部分

GFA 總樓面面積 ..... sq. m 平方米 ☐About 約

number of Units 單位數目 .....

average unit size 單位平均面積 .....sq. m 平方米 ☐About 約

estimated number of residents 估計住客數目 .....

☑ Non-domestic part 非住用部分 GFA 總樓面面積

☐ eating place 食肆 ..... sq. m 平方米 ☐About 約

☐ hotel 酒店 ..... sq. m 平方米 ☐About 約

(please specify the number of rooms 請註明房間數目) .....

☐ office 辦公室 ..... sq. m 平方米 ☐About 約

☐ shop and services 商店及服務行業 ..... sq. m 平方米 ☐About 約

☐ Government, institution or community facilities 政府、機構或社區設施 (please specify the use(s) and concerned land area(s)/GFA(s) 請註明用途及有關的地面面積／總樓面面積)

.....

.....

.....

☑ other(s) 其他 (please specify the use(s) and concerned land area(s)/GFA(s) 請註明用途及有關的地面面積／總樓面面積)

Information Technology and Telecommunication Industries (Data Centre) / GFA 10,991.88sq.m

☐ Open space 休憩用地 (please specify land area(s) 請註明地面面積)

☐ private open space 私人休憩用地 ..... sq. m 平方米 ☐ Not less than 不少於

☐ public open space 公眾休憩用地 ..... sq. m 平方米 ☐ Not less than 不少於

(c) Use(s) of different floors (if applicable) 各樓層的用途 (如適用)

[Block number] [座數]	[Floor(s)] [層數]	[Proposed use(s)] [擬議用途]
1	B/F2-B/F1	Car park, sprinkler water tank, fuel tanks, car lift, M&E facilities
.....	G/F	Parking & Loading/Unloading, car lift, main lift lobby, M&E facilities
.....	1-3/F	CLP cable facilities and M&E facilities
.....	6, 10 & 14/F	M&E facilities
.....	4, 5, 7-9,11-13, & 15/16/F	Data Centre

(d) Proposed use(s) of uncovered area (if any) 露天地方（倘有）的擬議用途

.....

Section (c) continued: R/F - M&E facilities, area reserved for cooling tower & flat roof and UR/F - M&E facilities, lift machine room & flat roof

7. Anticipated Completion Time of the Development Proposal 擬議發展計劃的預計完成時間

Anticipated completion time (in month and year) of the development proposal (by phase (if any)) (e.g. June 2023)
擬議發展計劃預期完成的年份及月份 (分期 (倘有)) (例：2023 年 6 月)
(Separate anticipated completion times (in month and year) should be provided for the proposed public open space and Government, institution or community facilities (if any))
(申請人須就擬議的公眾休憩用地及政府、機構或社區設施 (倘有) 提供個別擬議完成的年份及月份)

Proposed development is expected to be completed by 2029

8. Vehicular Access Arrangement of the Development Proposal 擬議發展計劃的行車通道安排

Any vehicular access to the site/subject building? 是否有車路通往地盤／有關建築物？	Yes 是	☑ There is an existing access. (please indicate the street name, where appropriate) 有一條現有車路。(請註明車路名稱(如適用)) Wing Kin Road ☐ There is a proposed access. (please illustrate on plan and specify the width) 有一條擬議車路。（請在圖則顯示，並註明車路的闊度）
	No 否	☐
Any provision of parking space for the proposed use(s)? 是否有為擬議用途提供停車位？	Yes 是	☑ (Please specify type(s) and number(s) and illustrate on plan) 請註明種類及數目並於圖則上顯示) Private Car Parking Spaces 私家車車位 11 Motorcycle Parking Spaces 電單車車位 2 Light Goods Vehicle Parking Spaces 輕型貨車泊車位 Medium Goods Vehicle Parking Spaces 中型貨車泊車位 Heavy Goods Vehicle Parking Spaces 重型貨車泊車位 Others (Please Specify) 其他 (請列明)
	No 否	☐
Any provision of loading/unloading space for the proposed use(s)? 是否有為擬議用途提供上落客貨車位？	Yes 是	☑ (Please specify type(s) and number(s) and illustrate on plan) 請註明種類及數目並於圖則上顯示) Taxi Spaces 的士車位 Coach Spaces 旅遊巴車位 Light Goods Vehicle Spaces 輕型貨車車位 3 Medium Goods Vehicle Spaces 中型貨車車位 Heavy Goods Vehicle Spaces 重型貨車車位 1 Others (Please Specify) 其他 (請列明)
	No 否	☐

9. Impacts of Development Proposal 擬議發展計劃的影響

If necessary, please use separate sheets to indicate the proposed measures to minimise possible adverse impacts or give justifications/reasons for not providing such measures.
如需要的話，請另頁註明可盡量減少可能出現不良影響的措施，否則請提供理據/理由。

Does the development proposal involve alteration of existing building? 擬議發展計劃是否包括現有建築物的改動?	Yes 是	☑ Please provide details 請提供詳情 Demolition of the existing industrial building
	No 否	☐
Does the development proposal involve the operation on the right? 擬議發展是否涉及右列的工程? (Note: where Type (ii) application is the subject of application, please skip this section. 註：如申請涉及第(ii)類申請，請跳至下一條問題。)	Yes 是	☐ (Please indicate on site plan the boundary of concerned land/pond(s), and particulars of stream diversion, the extent of filling of land/pond(s) and/or excavation of land) (請用地盤平面圖顯示有關土地／池塘界線，以及河道改道、填塘、填土及／或挖土的細節及/或範圍) ☐ Diversion of stream 河道改道 ☐ Filling of pond 填塘 Area of filling 填塘面積 ..... sq.m 平方米 ☐About 約 Depth of filling 填塘深度 ..... m 米 ☐About 約 ☐ Filling of land 填土 Area of filling 填土面積 ..... sq.m 平方米 ☐About 約 Depth of filling 填土厚度 ..... m 米 ☐About 約 ☐ Excavation of land 挖土 Area of excavation 挖土面積..... sq.m 平方米 ☐About 約 Depth of excavation 挖土深度 .....m 米 ☐About 約
	No 否	☑

Would the development proposal cause any adverse impacts? 擬議發展計劃會否造成不良影響？			
	On environment 對環境	Yes 會 ☐	No 不會 ☑
	On traffic 對交通	Yes 會 ☐	No 不會 ☑
	On water supply 對供水	Yes 會 ☐	No 不會 ☑
	On drainage 對排水	Yes 會 ☐	No 不會 ☑
	On slopes 對斜坡	Yes 會 ☐	No 不會 ☑
	Affected by slopes 受斜坡影響	Yes 會 ☐	No 不會 ☑
	Landscape Impact 構成景觀影響	Yes 會 ☐	No 不會 ☑
	Tree Felling 砍伐樹木	Yes 會 ☐	No 不會 ☑
	Visual Impact 構成視覺影響	Yes 會 ☐	No 不會 ☑
	Others (Please Specify) 其他 (請列明)	Yes 會 ☐	No 不會 ☐
	_____		
	_____		
	Please state measure(s) to minimise the impact(s). For tree felling, please state the number, diameter at breast height and species of the affected trees (if possible) 請註明盡量減少影響的措施。如涉及砍伐樹木，請說明受影響樹木的數目、及胸高度的樹幹直徑及品種(倘可)		
	.....		
	.....		
	.....		
	.....		
	.....		

10. Justifications 理由

The applicant is invited to provide justifications in support of the application. Use separate sheets if necessary.
現請申請人提供申請理由及支持其申請的資料。如有需要，請另頁說明。

Please refer to the planning statement for details

11. Declaration 聲明

I hereby declare that the particulars given in this application are correct and true to the best of my knowledge and belief.
本人謹此聲明，本人就這宗申請提交的資料，據本人所知及所信，均屬真實無誤。

I hereby grant a permission to the Board to copy all the materials submitted in this application and/or to upload such materials to the Board's website for browsing and downloading by the public free-of-charge at the Board's discretion. 本人現准許委員會酌情將本人就此申請所提交的所有資料複製及/或上載至委員會網站，供公眾免費瀏覽或下載。

Signature 簽署 ..... ☐ Applicant 申請人 / ☑ Authorised Agent 獲授權代理人

Kenneth John Li ..... Director .....

Name in Block Letters 姓名（請以正楷填寫） Position (if applicable) 職位 （如適用）

Professional Qualification(s) 專業資格
☑ Member 會員 / ☐ Fellow of 資深會員
☑ HKIP 香港規劃師學會 / ☐ HKIA 香港建築師學會 /
☐ HKIS 香港測量師學會 / ☐ HKIE 香港工程師學會 /
☐ HKILA 香港園境師學會/ ☑ HKIUD 香港城市設計學會
☑ RPP 註冊專業規劃師 (RPP No. 186)
Others 其他 MRTPI

on behalf of 代表 KJL Limited

☑ Company 公司 / ☐ Organisation Name and Chop (if applicable) 機構名稱及簽章（如適用）

Date 日期 13 MAR 2025 ..... (DD/MM/YYYY 日/月/年)

Remark 備註

The materials submitted in this application and the Board's decision on the application would be disclosed to the public. Such materials would also be uploaded to the Board's website for browsing and free downloading by the public where the Board considers appropriate.
委員會會向公眾披露申請人所遞交的申請資料和委員會對申請所作的決定。在委員會認為合適的情況下，有關申請資料亦會上載至委員會網頁供公眾免費瀏覽及下載。

Warning 警告

Any person who knowingly or wilfully makes any statement or furnish any information in connection with this application, which is false in any material particular, shall be liable to an offence under the Crimes Ordinance.
任何人在明知或故意的情況下，就這宗申請提出在任何要項上是虛假的陳述或資料，即屬違反《刑事罪行條例》。

Statement on Personal Data 個人資料的聲明

1. The personal data submitted to the Board in this application will be used by the Secretary of the Board and Government departments for the following purposes:
委員會就這宗申請所收到的個人資料會交給委員會秘書及政府部門，以根據《城市規劃條例》及相關的城市規劃委員會規劃指引的規定作以下用途：
   (a) the processing of this application which includes making available the name of the applicant for public inspection when making available this application for public inspection; and
   處理這宗申請，包括公布這宗申請供公眾查閱，同時公布申請人的姓名供公眾查閱；以及
   (b) facilitating communication between the applicant and the Secretary of the Board/Government departments.
   方便申請人與委員會秘書及政府部門之間進行聯絡。

2. The personal data provided by the applicant in this application may also be disclosed to other persons for the purposes mentioned in paragraph 1 above.
申請人就這宗申請提供的個人資料，或亦會向其他人士披露，以作上述第 1 段提及的用途。

3. An applicant has a right of access and correction with respect to his/her personal data as provided under the Personal Data (Privacy) Ordinance (Cap. 486). Request for personal data access and correction should be addressed to the Secretary of the Board at 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong.
根據《個人資料(私隱)條例》(第 486 章)的規定，申請人有權查閱及更正其個人資料。如欲查閱及更正個人資料，應向委員會秘書提出有關要求，其地址為香港北角渣華道 333 號北角政府合署 15 樓。

For Developments involving Columbarium Use, please also complete the following:
如發展涉及靈灰安置所用途，請另外填妥以下資料:

Ash interment capacity 骨灰安放容量@

Maximum number of sets of ashes that may be interred in the niches
在龕位內最多可安放骨灰的數量 _____

Maximum number of sets of ashes that may be interred other than in niches
在非龕位的範圍內最多可安放骨灰的數量 _____

Total number of niches 龕位總數 _____

Total number of single niches
單人龕位總數 _____

Number of single niches (sold and occupied)
單人龕位數目 (已售並佔用) _____

Number of single niches (sold but unoccupied)
單人龕位數目 (已售但未佔用) _____

Number of single niches (residual for sale)
單人龕位數目 (待售) _____

Total number of double niches
雙人龕位總數 _____

Number of double niches (sold and fully occupied)
雙人龕位數目 (已售並全部佔用) _____

Number of double niches (sold and partially occupied)
雙人龕位數目 (已售並部分佔用) _____

Number of double niches (sold but unoccupied)
雙人龕位數目 (已售但未佔用) _____

Number of double niches (residual for sale)
雙人龕位數目 (待售) _____

Total no. of niches other than single or double niches (please specify type)
除單人及雙人龕位外的其他龕位總數 (請列明類別)

_____

Number. of niches (sold and fully occupied)
龕位數目 (已售並全部佔用) _____

Number of niches (sold and partially occupied)
龕位數目 (已售並部分佔用) _____

Number of niches (sold but unoccupied)
龕位數目 (已售但未佔用) _____

Number of niches (residual for sale)
龕位數目 (待售) _____

Proposed operating hours 擬議營運時間 _____

_____

@ Ash interment capacity in relation to a columbarium means –
就靈灰安置所而言，骨灰安放容量指：
- the maximum number of containers of ashes that may be interred in each niche in the columbarium;
每個龕位內可安放的骨灰容器的最高數目;
- the maximum number of sets of ashes that may be interred other than in niches in any area in the columbarium; and
在該靈灰安置所並非龕位的範圍內，總共最多可安放多少份骨灰；以及
- the total number of sets of ashes that may be interred in the columbarium.
在該骨灰安置所內，總共最多可安放多少份骨灰。

Gist of Application 申請摘要

(Please provide details in both English and Chinese as far as possible. This part will be circulated to relevant consultees, uploaded to the Town Planning Board's Website for browsing and free downloading by the public and available at the Planning Enquiry Counters of the Planning Department for general information.)
(請盡量以英文及中文填寫。此部分將會發送予相關諮詢人士、上載至城市規劃委員會網頁供公眾免費瀏覽及下載及於規劃署規劃資料查詢處供一般參閱。)

Application No. 申請編號	(For Official Use Only) (請勿填寫此欄)
Location/address 位置／地址	7-11 Wing Kin Road, Kwai Chung, New Territories DD446Kwai Chung Town Lot 145 & adjoining Government Land at Wing Chong Street (New Grant Lot known as Kwai Chung Town Lot 534)
Site area 地盤面積	964.2 sq. m 平方米 ☑About 約 (includes Government land of 包括政府土地 35.169 sq. m 平方米 ☑About 約)
Plan 圖則	Approved Kwai Chung Outline Zoning Plan (OZP No. S/KC/32)
Zoning 地帶	"Industrial" ("I")
Applied use/ development 申請用途/發展	Proposed minor relaxation of plot ratio and building height restriction for permitted information technology and telecommunication industries (Data Centre)

(i) Gross floor area and/or plot ratio 總樓面面積及／或地積比率		sq.m 平方米		Plot Ratio 地積比率	
	Domestic 住用		☐ About 約 ☐ Not more than 不多於		☐About 約 ☐Not more than 不多於
	Non-domestic 非住用	10,991.88	☑ About 約 ☐ Not more than 不多於	11.4	☐About 約 ☑Not more than 不多於
(ii) No. of blocks 幢數	Domestic 住用				
	Non-domestic 非住用	1			
	Composite 綜合用途				

(iii)	Building height/No. of storeys 建築物高度／層數	Domestic 住用	m 米 ☐ (Not more than 不多於)
			mPD 米(主水平基準上) ☐ (Not more than 不多於)
			Storeys(s) 層 ☐ (Not more than 不多於) *(☐Include 包括/☐ Exclude 不包括* ☐ *Carport 停車間* ☐ *Basement 地庫* ☐ *Refuge Floor 防火層* ☐ *Podium 平台)*
		Non-domestic 非住用	100.5 m 米 ☐ (Not more than 不多於)
			109.55 mPD 米(主水平基準上) ☑ (Not more than 不多於)
			18 Storeys(s) 層 ☐ (Not more than 不多於) *(☑Include 包括/☐ Exclude 不包括* ☐ *Carport 停車間* 2 ☑ *Basement 地庫* ☐ *Refuge Floor 防火層* ☐ *Podium 平台)*
		Composite 綜合用途	m 米 ☐ (Not more than 不多於)
			mPD 米(主水平基準上) ☐ (Not more than 不多於)
			Storeys(s) 層 ☐ (Not more than 不多於) *(☐Include 包括/☐ Exclude 不包括* ☐ *Carport 停車間* ☐ *Basement 地庫* ☐ *Refuge Floor 防火層* ☐ *Podium 平台)*
(iv)	Site coverage 上蓋面積	Not more than 82 % ☑ About 約	
(v)	No. of units 單位數目		
(vi)	Open space 休憩用地	Private 私人	sq.m 平方米 ☐ Not less than 不少於
		Public 公眾	sq.m 平方米 ☐ Not less than 不少於

(vii) No. of parking spaces and loading / unloading spaces 停車位及上落客貨車位數目	Total no. of vehicle parking spaces 停車位總數	13
	Private Car Parking Spaces 私家車車位	11
	Motorcycle Parking Spaces 電單車車位	2
	Light Goods Vehicle Parking Spaces 輕型貨車泊車位	
	Medium Goods Vehicle Parking Spaces 中型貨車泊車位	
	Heavy Goods Vehicle Parking Spaces 重型貨車泊車位	
	Others (Please Specify) 其他 (請列明)	
	Total no. of vehicle loading/unloading bays/lay-bys 上落客貨車位／停車處總數	4
	Taxi Spaces 的士車位	
	Coach Spaces 旅遊巴車位	
	Light Goods Vehicle Spaces 輕型貨車車位	3
	Medium Goods Vehicle Spaces 中型貨車位	
	Heavy Goods Vehicle Spaces 重型貨車車位	1
	Others (Please Specify) 其他 (請列明)	

Submitted Plans, Drawings and Documents 提交的圖則、繪圖及文件

	Chinese 中文	English 英文
Plans and Drawings 圖則及繪圖		
Master layout plan(s)/Layout plan(s) 總綱發展藍圖／布局設計圖	☐	☐
Block plan(s) 樓宇位置圖	☐	☑
Floor plan(s) 樓宇平面圖	☐	☑
Sectional plan(s) 截視圖	☐	☑
Elevation(s) 立視圖	☐	☐
Photomontage(s) showing the proposed development 顯示擬議發展的合成照片	☐	☑
Master landscape plan(s)/Landscape plan(s) 園境設計總圖／園境設計圖	☐	☐
Others (please specify) 其他（請註明）	☐	☐
_____		
_____		
Reports 報告書		
Planning Statement/Justifications 規劃綱領/理據	☐	☑
Environmental assessment (noise, air and/or water pollutions) 環境評估（噪音、空氣及／或水的污染）	☐	☑
Traffic impact assessment (on vehicles) 就車輛的交通影響評估	☐	☑
Traffic impact assessment (on pedestrians) 就行人的交通影響評估	☐	☐
Visual impact assessment 視覺影響評估	☐	☑
Landscape impact assessment 景觀影響評估	☐	☐
Tree Survey 樹木調查	☐	☐
Geotechnical impact assessment 土力影響評估	☐	☐
Drainage impact assessment 排水影響評估	☐	☐
Sewerage impact assessment 排污影響評估	☐	☑
Risk Assessment 風險評估	☐	☐
Others (please specify) 其他（請註明）	☐	☐
_____		
_____		

Note: May insert more than one「✔」. 註：可在多於一個方格內加上「✔」號

Note: The information in the Gist of Application above is provided by the applicant for easy reference of the general public. Under no circumstances will the Town Planning Board accept any liabilities for the use of the information nor any inaccuracies or discrepancies of the information provided. In case of doubt, reference should always be made to the submission of the applicant.

註： 上述申請摘要的資料是由申請人提供以方便市民大眾參考。對於所載資料在使用上的問題及文義上的歧異，城市規劃委員會概不負責。若有任何疑問，應查閱申請人提交的文件。

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Section 16 Planning Application

for Proposed Minor Relaxation of Plot Ratio and Building Height for Information Technology and Telecommunications Industries (Data Centre) Use at 7-11 Wing Kin Road and adjoining Government Land at Wing Chong Street, Kwai Chung, New Territories

PLANNING STATEMENT

Prepared by

KJL Limited

in association with

Studio Raymond Chau Architecture Limited

CKM Asia Limited

Cinotech Consultants Limited

Larry H.C. Tam & Associates Limited

for

OXO YW Limited

March 2025

EXECUTIVE SUMMARY

BACKGROUND

This application is submitted on behalf of OXO YW Limited, the registered owner of 7-11 Wing Kin Road, Kwai Chung, to seek the Town Planning Board's permission for the proposed minor relaxation of plot ratio restriction from 9.5 to 11.4 and building height restriction from 105mPD to 109.55mPD for permitted information technology and telecommunications industries (data centre) use at 7-11 Wing Kin Road and adjoining government land at Wing Chong Street, Kwai Chung, New Territories (i.e. the application site).

The application site falls within an area zoned "Industrial" ("I") on the Kwai Chung Outline Zoning Plan ("OZP") no. S/KC/32. According to the Notes for the "I" zone, the proposed information technology and telecommunication industries (data centre) at the application site is under Column 1 use in this "I" zone, which is always permitted. However, the proposed new data centre's proposed plot ratio of 11.4 exceeds the plot ratio restriction under the OZP of 9.5. In addition, the proposed building height of the proposed scheme at 109.55mPD exceeds the height restriction under the OZP of 105mPD. Therefore, planning permission from the Town Planning Board ("the Board") is required.

The application aligns with the SAR Government's intention under the IB Revitalisation Scheme that "IBs located in 'I' zone could be redeveloped into new premises for conventional 'industrial/godown uses' and/or 'modern industrial uses". Further, the proposed relaxation of the maximum non-domestic permissible PR by up to 20% could, in effect, allow owners to recover any GFA loss in meeting present-day building standards, thereby incentivising industrial building redevelopment.

DESCRIPTION OF PROPOSED DEVELOPMENT

The proposed development involves redeveloping an existing industrial building into a new 18-storey building for a permitted data centre. The major development parameters for the proposed development are shown in the table as follows:

Site Area	About 964.2m^2 (including additional land of 35.169m^2 granted by the District Land Conference on 6.10.2021)
Plot Ratio	No more than 11.4
Total Gross Floor Area	About 10,991.88m^2 (non-domestic)
Site Coverage	Not more than 82% (Site coverage permitted under PNAP-132)
No. of Storeys	18 storeys (including 2 levels of basement)
Building Height	109.55mPD (at main roof level)
Proposed Use	Information Technology and Telecommunication Industries (Data Centre)

Parking Spaces	• Private cars: 11 nos. (including one no. accessible) • Motorcycle: 2 nos.
Goods Vehicle Loading / Unloading Bays	• Light Goods Vehicle: 3 nos. • Heavy Goods Vehicle: 1 nos.
Greenery	About 195m^2 • G/F: 2m^2 • 1/F: 11m^2 • 2/F: 4m^2 • 3/F: 9m^2 • Vertical: 169m^2

PLANNING JUSTIFICATIONS

The proposed development at the application site is appropriate in planning terms because of the following planning justifications:

- The proposed minor relaxation of plot ratio restriction by 20% aligns with the 2018 Policy Address to incentivise the redevelopment of industrial buildings constructed before 1987.
- The proposed data centre aligns with the planning intention of the "I" zone.
- The proposed development is compatible with the surrounding land use.
- The proposed scheme fully utilises the development potential of the application site with modern-day building standards.
- The proposed minor relaxation of plot ratio and building height will not adversely affect the surrounding areas visually.
- The proposed building setbacks at Wing Chong Street and Wing Kin Road will provide a better streetscape, walking environment and visual permeability.
- The proposed greening, including vertical greening, will enhance the streetscape and improve visual amenity.
- The proposed scheme will be seen as a catalyst and precedent in the gradual transformation of this industrial area.
- The proposed development is considered feasible from a traffic point of view.
- The proposed development would have no adverse environmental impact on air, noise, or the sewerage system.

CONCLUSION

Given the abovementioned justifications, the Applicant respectfully requests that the Town Planning Board approve the application.

行政摘要

引言

是次第 16 條規劃許可申請人安秀耀榮有限公司，為葵涌永建路 7-11 號的註冊擁有人。 此規劃報告旨在支持是次根據《城市規劃條例》第 16 條提出的規劃許可申請，擬議申請在葵涌永建路 7-11 號以及位於永創街的毗鄰政府土地（即申請地點）略為放寬地積比率和建築高度限制，以作准許的資訊科技及電訊業用途。

根據葵涌分區計劃大綱圖（圖則編號為 S/KC/32），該申請地點屬於「工業」地帶。根據「工業」地帶的註釋，擬議發展的「資 訊 科 技 及 電 訊 業 (數據中心)」用途為經常允許的第 1 欄用途。申請人擬議將地積比率限制略為放寬至 11.4 以及建築高度略為放寬至 109.55mPD 超過了葵涌分區計劃大綱草圖中的地積比率和建築高度限制，因此，現按《城市規劃條例》第 16 條向城市規劃委員會提出申請。

是次申請符合特區政府在活化工廈計劃下的意向，即位於「工業」地帶的工廈可重新發展為新處所，作傳統的「工業/倉庫用途」及/或「現代工業用途」。此外，放寬最高核准非住用地積比率，上限為 20%，實際上可以讓業主重獲符合當今建築標準的建築面積損失，從而激勵工廈的重建。

擬議項目發展重點

擬議發展計劃涉及將現有工業樓宇重建為 18 層工業樓宇，以用於「貨倉(危險品倉庫除外)」用途。擬議發展方案的主要發展參數如下表所示:

地盤面積	約 964.2 平方米 (包括附加土地約 35.169 平方米)
地積比率	不多於 11.4
總樓面面積	約 10,991.88 平方米 (非住用)
上蓋面積	不多於 82% (PNAP-132 允許的覆蓋率)
層數	18 層 (包括兩層地庫)
建築物高度	109.55mPD
擬議用途	資 訊 科 技 及 電 訊 業 (數據中心)
停車位數目	• 私家車車位: 11 (包括 1 個殘疾人士泊車位) • 電單車車位: 2

上落客貨車位數目	• 輕型貨車上落客貨車位：3 • 重型貨車上落客貨車位：1
綠化	約 195平方米 • G/F: 2 平方米 • 1/F: 11 平方米 • 2/F: 4 平方米 • 3/F: 9 平方米 • 垂直綠化: 169 平方米

發展理據

擬議發展計劃在規劃層面上理應視為恰當，以下是是項申請的規劃理據：

- 擬議略為放寬 20%地積比率限制符合政府《2018 年施政報告》的意向，以鼓勵重建1987年以前建造的工業樓宇。
- 擬議發展的「數據中心」用途完全符合「工業」地帶的規劃意向。
- 擬議發展與周圍的土地使用是兼容的。
- 更好地利用申請地點土地的開發潛力並符合最新的建築條例的建築設計。
- 擬議略為放寬地積比率和建築物高度並不會在視覺上影響周邊地區。
- 擬議將永創街和永建路的樓宇後移，提供更好的街景和步行環境。
- 擬議的綠化包括垂直綠化在內將增強街景和改善視覺舒適度。
- 擬議計劃將被視為該工業區逐步轉型的催化劑和先例。
- 擬議發展從交通角度考慮是可行的。
- 擬議發展不會對空氣,噪音和污水收集系統產生負面影響。

總結

綜觀上述理由，申請人謹請城規會批准是次申請。

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1. Introduction

1.1. Background

1.1.1 This application is submitted on behalf of OXO YW Limited, the registered owner of 7-11 Wing Kin Road, Kwai Chung, to seek the Town Planning Board's permission for the proposed minor relaxation of plot ratio restriction from 9.5 to 11.4 and building height restriction from 105mPD to 109.55mPD for permitted data centre use at 7-11 Wing Kin Road, Kwai Chung, New Territories (i.e., the application site).

1.1.2 The application site falls within an area zoned "Industrial" ("I") on the Kwai Chung Outline Zoning Plan ("OZP") no. S/KC/32 (**Figure 1.1** refers). According to the Notes for the "I" zone, the proposed use at the application site for the data centre is Column 1 use in this "I" zone, which is always permitted. However, the proposed plot ratio of 11.4 exceeds the plot ratio restriction under the OZP of 9.5, and the proposed building height of 109.55mPD exceeds the height restriction by 4.55m (about 4.3%) under the OZP of 105mPD. Therefore, planning permission from the Town Planning Board ("the Board") is required.

1.1.3 The gross area of the application site is about 964.2m^2.

1.2 Purpose of this application

1.2.1 The Applicant wishes to state the purposes of this planning application as follows:

- To apply for a proposed minor relaxation of plot ratio and building height for permitted data centre use at the application site.
- To redevelop the existing 2-storey industrial building into a new 18-storey industrial building for permitted 'data centre' use.
- To align with the SAR Government's intention under the IB Revitalisation Scheme that "IBs located in 'I' zone could be redeveloped into new premises for conventional 'industrial/godown uses' and/or 'modern industrial uses. In particular after the Government has extended the application deadline to October 2024.
- To better utilise the application site's potential with modern-day and better safety standards by redeveloping the existing industrial building in Kwai Chung Town Lot 145 that was constructed before 1987 ("pre-1987 IB").
- To allow the Applicant (landowner) to recover the GFA loss in meeting present-day building standards through the proposed relaxation of the maximum non-domestic permissible PR by up to 20%, incentivising industrial building redevelopment.

2. Development Context

2.1. Site context

2.1.1. The application site is at No. 7-11 Wing Kin Road and adjoining government land at Wing Chong Street. The existing industrial building was constructed before 1987 ("pre-1987 IB").

2.1.2. The application site abuts Wing Kin Road and Wing Chong Street to the east and west, respectively. The application site can be accessed from Wing Kin Road and Wing Chong Street. (**Figures 2.1** refers)

2.2. Surrounding land use

2.2.1. The application site is surrounded by industrial and industrial/office buildings at Wing Kin Road, Wing Chong Street and Wing Kei Road, which are in active use. It is located southwest of the Kwai Chung industrial area and is accessible by public transport, such as the green minibuses along Wing Kei Road.

2.2.2. The Tsuen Wan Chinese Permanent Cemetery is west of the application site and across Wing Hau Road. Kwai Chung Park is located south of the application site across Kwai Hei Street.

2.3. Statutory planning requirements

2.3.1. The application site falls within an area zoned "Industrial" ("I") on the Kwai Chung Outline Zoning Plan (OZP) no. S/KC/32.

2.3.2. According to the Notes for the "I" zone, the proposed 'information technology and telecommunications industries (data centre)' at the application site is under Column 1 uses in this "I" zone, which is always permitted. However, firstly, the proposed plot ratio of 11.4 exceeds the plot ratio restriction under the OZP of 9.5. Secondly, the proposed building height of 109.5mPD exceeds the height restriction under the OZP of 105mPD. Therefore, planning permission from the Board is required.

2.3.3. The Notes of the OZP stated that the "I" zone is primarily for general industrial uses to ensure an adequate supply of industrial floor space to meet demand from production-oriented industries. Information technology and telecommunications industries, offices related to industrial use, and selected uses akin to industrial production that would not compromise building and fire safety are always permitted in this zone. The proposed 'information technology and telecommunications (data centre)' is under Column 1, which is always allowed. Thus, the proposed use aligns with the planning intention of the "I" zone.

2.3.4. The Board may consider a minor relaxation of plot ratio/building height on application under section 16 of the Ordinance based on the individual merits of the development or redevelopment proposal.

2.4 Planning history

2.4.1 There were previously approved planning applications (application no. A/KC/457 and A/KC/496) on the subject site. A/KC/457 was approved by the Board on 17.3.2020 with

conditions for proposed offensive trade (lard boiling factory) with conditions. A/KC/496 was approved by the Board on 14.7.2023 for proposed warehouse use (excluding Dangerous Goods Godown) with conditions. The Applicant has complied with conditions (a) and (c).

2.4.2 The Board has also approved similar industrial building redevelopment applications for minor relaxation of plot ratio and/or height relaxation for data centres in the Kwai Chung District. The similar approved data centre cases are summarised in Table 2.1 below.

Table 2.1: Similar approved data centre cases

Planning Application No.	Address	Proposed Uses	TPB Approval Date
A/KC/502	Cargo Consolidation Complex, 43 Container Port Road, Kwai Chung	Data Centre (relaxation of PR from 9.5 to 10.263)	11/8/2023
A/KC/491	13-17 Wah Sing Street, Kwai Chung	Data Centre (relaxation of PR from 9.5 to 11.4)	26/8/2022
A/KC/488	11-19 Wing Yip Street, Kwai Chung	Data Centre (relaxation of PR from 9.5 to 10.19)	15/7/2022
A/KC/480	45-51 Tai Lin Pai Road, Kwai Chung	Data Centre (relaxation of PR from 9.5 to 11.4 and height from 120mPD to 129mPD)	24/12/2021
A/KC/454	Cargo Consolidation Complex, 43 Container Port Road, Kwai Chung	Data Centre (relaxation of PR from 9.5 to 10.269)	1/2/2019

2.5 Land administrative matters

2.5.1 The application site is located in Kwai Chung Town Lot 145 and no. 7-11 Wing Kin Road, Kwai Chung, under proposed New Grant No. 4708 ('the New Grant') of 8.1.1970. The lease modification application is in progress, and the Lands Department issued the draft basic terms of the offer for the conditions of exchange served to the registered landowners on 24.11.2024. The Applicant has replied to the Lands Department to accept the draft basic terms of the offer on 4.12.2024. Once the new land grant is executed, the new grant site will be known as Kwai Chung Town Lot 534.

2.5.2 Under the existing Government lease, there is no restriction on building height or GFA for redevelopment. The building was completed in 1972 with a GFA of about 941m^2. The previous industrial activity was suspended several years ago, in 2018. The dangerous goods store license for the existing building, once held under its occupation permit, has expired and has not been renewed.

3. Description of Proposed Development

3.1. Proposed development

3.1.1. The proposed development involves redeveloping an existing industrial building into an 18-storey data centre. The industrial building was constructed before 1987 ("pre-1987 IB").

3.1.2. The proposed design scheme for the new data centre incorporates various landscape treatments, including planting areas and vertical greening features, which have been offered to enhance the area's streetscape and improve the proposed development's visual amenity. A 4.3m wide non-building area facing Wing Kin Road is reserved as a maintenance area for the underground fuel tanks at basement 1 level.

3.1.3. The floor layout and section plans are provided in **Figures 3.1A** to **3.1N.**

3.1.4. Although the site area is less than 1,000m^2 and no site coverage of greenery is required under the Sustainable Building Design Guidelines (SBDG), the proposed scheme provides a total of 195m^2 greenery (including 169m^2 vertical greenery). In addition, various landscape treatments, including planting areas and vertical green wall, are proposed to enhance the area's streetscape and improve the visual amenity of the proposed development.

Building Setback at Wing Kin Road and Wing Chong Street

3.1.5 According to the draft basic terms of offer issued by the Lands Department in November 2024, the Highways Department requires a setback of 3.7m from the existing lot boundary abutting Wing Kin Road. Given that the current width of Wing Kin Road is about 15.84m wide and is a one-way street without traffic congestion, the proposed 3.7m building setback is considered sufficient.

3.1.6. Under the Buildings Ordinance, the voluntary ground floor setback would not be granted any bonus plot ratio by the Buildings Department. However, such an arrangement could provide a better streetscape and good quality street-level urban space along Wing Kin Street.

3.1.7. As mentioned above, in addition to the building setback from the application boundary abutting Wing Kin Road, a further building setback (subject to detailed design) from 6/F and above facing Wing Chong Street has been incorporated into the proposed scheme to provide a wider separation from buildings on the opposite side of Wing Chong Street to enhance air ventilation and visual permeability (see **Figure 3.1O** and **Figure 3.1P**).

Greening Proposals

3.1.8. The proposed design scheme incorporates various greenery proposals, including planters facing Wing Kin Road and vertical greening at the facades facing Wing Kin Road and Wing Chong Street, respectively, to provide a pleasant external building design. A total of 169m^2 of vertical greening is proposed in the primary zone as per PNAP APP-152.

Reduction of Building Height at the Main Roof Level

3.1.9. The proposed building height has been reduced by about 5% from 115.2mPD to 109.55mPD compared to the previously approved scheme (A/KC/496); the vertical greening and greenery provision at certain levels on the façade of the new building fronting Wing Kin Road and Wing Chong Street could reduce any potential visual impact on the surrounding area.

All-Weather Protection Canopy

3.1.10. Given the need to allow a buffer for fire safety reasons for the fuel tank below ground, providing a full-length canopy along the Wing Kin Road frontage is not allowable. The Applicant proposes a full-length canopy along the building frontage facing Wing Chong Street for weather protection for pedestrians. A non-full-length canopy on the Wing Kin Road frontage is also proposed. (Note: The canopy design is subject to departmental comments in the detailed design stage.)

3.1.11. Despite the site constraints, the proposed development has contributed to the gradual gentrification of this old industrial building into a modern-day industrial building with good-quality design and safety standards.

3.1.12. In summary, the proposed scheme incorporates setbacks, canopies on both building frontages, greenery proposals and a reduction in the building height at the main roof level. These measures may improve the streetscape by softening the building edge, promoting visual interest, and promoting pedestrian comfort.

3.1.13. Pertinent design features and illustrations/photomontages for the proposed development are shown in **Figures 3.1O to 3.1P**.

3.1.14. The major development parameters of the proposed development are summarised in **Table 3.1** and **Table 3.2** below.

Table 3.1: Major development parameters for the proposed development

Site Area	About 964.2m^2 (including additional land of 35.169m^2 granted by the District Land Conference on 6.10.2021)
Plot Ratio	No more than 11.4
Total Gross Floor Area	About 10,991.88m^2 (non-domestic)
Site Coverage	Not more than 82%
No. of Storeys	18 storeys (including and 2 levels of basement)
Building Height	109.55mPD (at main roof level)
Proposed Use	Information Technology and Telecommunication Industries (Data Centre)

Parking Spaces	• Private cars: 11 nos. (including one no. accessible) • Motorcycle: 2 nos.
Goods Vehicle Loading / Unloading Bays	• Light Goods Vehicle: 3 nos. • Heavy Goods Vehicle: 1 nos.
Greenery	About 195m^2 • G/F: 2m^2 • 1/F: 11m^2 • 2/F: 4m^2 • 3/F: 9m^2 • Vertical: 169m^2

Table 3.2: The main uses of the floor of the proposed development

Floor	Main Uses
B/F2 B/F1	Sprinkler Water Tank / M&E facilities Parking for private cars, motorcycles, light goods vehicles, car lifts, the main lift lobby, fuel tanks, and M&E facilities.
G/F	Parking for heavy and light goods vehicles, car lift, main lift lobby and M&E facilities
1/F-3/F	CLP cable facilities and M&E facilities
6/F, 10/F, 14/F	M&E facilities
4-5/F, 7-9/F, 11/F-13/F, 15/F-16/F	Data Centre
Roof Floor	M&E facilities
Upper Roof Floor	AC water tank and lift machine room

3.1.15 The changes made to the previously approved scheme (A/KC/496) mainly involve changing industrial use to data centre use. Some design changes are proposed, such as reducing the building height and leaving most of the basement 2 level unexcavated. Details of changes between the previously approved scheme and the current scheme are summarised in Table 3.3 below.

Table 3.3: Comparison between the approved scheme (A/KC/496) and the current scheme

Parameters	**Approved Application (A/KC/496)**	**Current Scheme**	**Remarks**
Site Area	About 964.2m^2	About 964.2m^2	No Change
Proposed Use	Warehouse (excluding DG Godowns)	Information Technology and telecommunication industries (Data Centre)	No Change
Plot ratio	11.4	11.4	No Change
Total GFA	10,991.88m^2	10,991.88m^2	No Change
Maximum Building Height (at main roof level)	115.2mPD	109.55mPD	- 5.65m (reduced by about 5%)
No of Storeys	22 (including three basement levels + one refuge floor)	18 (including two basement levels)	- 4 storeys (reduced by 18%)
Site Coverage (SC)	not more than 80%	not more than 82%	Increase by 2% (per PNAP-132)
Building setback at Wing Kin Road	About 4.1m from the site boundary	About 3.7m from the site boundary	Changes as per draft basic terms of Conditions of Exchange
Building setback at Wing Chong Street per SBDG	About 7.5m from the centre of Wing Chong Street	There is no setback at Wing Chong Street	Changes to cater for data centre use.
Floor Height (about)	• G/F: 6m • 1/F: 6.2m • 2/F- 18/F: 5.5m to 5.6m	• G/F: 11m • 1/F-3/F: 6m • 4/F - 18/F: 5.5m	Design changes to cater for data centre use
Greenery provisions	About 20% (195m^2)	About 20% (195m^2)	No Change
Car parking and loading & unloading spaces	Private car = 11 (including 1 accessible parking space) Motorcycle = 4 L&UL for LGV = 12 L&UL for HGV = 4	Private car = 11 (including 1 accessible parking space) Motorcycle = 2 L&UL for LGV = 3 L&UL for HGV = 1	Change of parking and L&UL spaces provision due to the change of use to data centre use.
Anticipated completion year	2028	2029	

3.2. Traffic consideration

3.2.1. The proposed data centre is expected to be completed by 2029, and the design year adopted in the Traffic Impact Assessment (TIA) for the capacity analysis is 2032, i.e., approximately three years after its completion.

3.2.2. The 2032 traffic flows used for the junction analysis are produced regarding the following:

(1) 2031 traffic flows derived with reference to the Base District Traffic Model ("BDTM");

(2) The estimated traffic growth from 2031 to 2032 is based on the higher of the (a) 2019–based Territorial Population and Employment Data Matrix ("TPEDM") data produced by the Planning Department ("PlanD") for Kwai Chung District, (b) Hong Kong Population Projections 2022 – 2046 published by Census and Statistics Department ("C&SD"), or (c) historic Annual Average Daily Traffic Growth ("AADT") produced by Transport Department ("TD");

(3) The traffic generated by the proposed data centre.

3.2.3. The traffic consultant conducted manual classified counts at the critical junctions near the proposed data centre to establish the peak-hour traffic flows. The key junctions operate with capacities during the AM and PM peak hours.

3.2.4. The internal transport facilities are provided per the requirement of the draft Provisional Basic Terms Offer ("draft PBTO"). A light goods vehicle lift is provided to access B1/F and B2/F from G/F. All vehicles can quickly enter and leave the proposed data centre and their respective space/bay.

3.2.5. The proposed data centre is expected to be completed by 2029, and the junction capacity analysis is undertaken for 2032. For the design year 2032, the junctions analysed are expected to operate with capacities during the peak hours for the case without and with the proposed data centre (refer to Section 4 of the Traffic Impact Assessment in Appendix I).

3.2.6. The TIA concludes, therefore, that the proposed data centre will have no adverse traffic impact to the surrounding road network, which is acceptable from the traffic engineering point of view.

3.2.7. Please refer to the Traffic Impact Assessment in **Appendix I** for details.

3.3. Air Quality consideration

3.3.1. An air quality Impact Assessment (AQIA) has been prepared to address the air quality impact of the proposed development's construction on the surrounding area and the impact of the surrounding area on the proposed development.

3.3.2. With the implementation of dust suppression measures as outlined in the Air Pollution Control (Construction Dust) Regulation and adherence to good site practices, no adverse air quality impacts associated with the construction works are expected.

3.3.3. The proposed development is not considered an air pollution source during its operation. A qualitative assessment indicates that vehicular and industrial emissions are not expected to constrain the proposed development, provided that the locations of the fresh air intakes are carefully designed.

3.3.4. Therefore, no air quality impact arising from the proposed development is expected. Please refer to the Air Quality Impact Assessment in **Appendix II.**

3.4 Noise consideration

3.4.1 A Noise Impact Assessment (NIA) has been prepared to address the potential noise impacts from the construction and operation of the proposed development.

3.4.2 The overall noise impact during the construction phase is considered insignificant. Depending on the detailed site work arrangements, mitigation measures will be implemented as necessary and applicable, per ProPECC PN 1/24, to minimise construction noise impacts on nearby NSRs.

3.4.3 The provision of openable windows for ventilation is not anticipated. Therefore, potential impacts of road traffic and existing fixed noise sources on the proposed development are not expected.

3.4.4 The planned fixed noise sources of the proposed development should not cause any adverse noise impacts if the maximum allowable sound power levels (SWLs) are properly implemented. Thus, no planned fixed noise impacts are anticipated.

3.4.5 Therefore, no noise impact arising from the proposed development is expected. Please refer to the Noise Impact Assessment in Appendix III.

3.5 Sewerage consideration

3.5.1 A Sewage Impact Assessment (SIA) has been prepared to address all the potential adverse sewerage impacts from the proposed development and recommend mitigation measures, improvement works, and other measures and works if required.

3.5.2 The estimated daily sewage discharge from the Project is 38.7 m^3/day. Sewage from the Project will be collected by the new terminal sewage manhole FTMH01 and discharged to the existing sewer manhole FMH4022807 via a proposed 225mm PE sewer with a slope of 1:100. The actual layout and invert levels of the proposed sewer are subject to detailed design.

3.5.3 The sewage network is considered to have sufficient capacities to cater for the expected sewage flows from the proposed development and the surrounding catchments. Therefore, no adverse sewerage impact on the public sewage system is expected from the proposed development. Please refer to the Sewerage Impact Assessment in Appendix IV.

3.6 Visual Impact Consideration

3.6.1 A total of 7 VPs are selected for visual impact assessment. Based on the comparison between the existing condition and the proposed scenario, two cause a slightly adverse visual impact by the proposed development, two cause partly enhanced/partly adverse, one has negligible to slightly adverse, and two have a negligible visual impact. The overall visual impact is therefore envisaged to be negligible to slightly adverse.

3.6.2 The massing and disposition of the proposed development will not create a significant visual blockage or cause significant visible changes for public viewers. In addition, the proposed building height has been reduced by about 5% from 115.2 to 109.55 mPD compared to the previously approved scheme (A/KC/496). The proposed development's scale and height are visually compatible with the surrounding industrial developments. Vertical greening and planters are proposed at the lower levels of the building façade to minimise the likely visual impact and soften the proposed building structure. The area's street environment and visual amenities will be enhanced by replacing the old industrial building with a modern-day development and greening provision. Please refer to the Visual Impact Assessment in Appendix V for details.

4 Justifications for the Proposed Development

4.1 The proposed minor relaxation of plot ratio restriction by 20% aligns with the 2018 Policy Address to incentivise the redevelopment of industrial buildings constructed before 1987

4.1.1 The Chief Executive's 2018 Policy Address announced a new scheme for revitalising industrial buildings to encourage owners to redevelop industrial buildings constructed before 1987. The planning policy aims to increase the maximum permissible domestic plot ratio within specific "Residential" ("R") zones to allow relaxation of the maximum allowable non-domestic plot ratio by up to 20% for redevelopment projects of these pre-1987 industrial buildings located outside "R" zones in Main Urban Areas and New Towns. Individual applications must be made to the TPB within three years from 10.10.2018, and the modified lease should be executed within three years after the planning permission is granted.

4.1.2 The existing industrial building is an eligible industrial building constructed before 1987, and the Occupation Permit ("OP") was issued on 15.6.1972. Therefore, the proposed minor relaxation of plot ratio restriction by 20% aligns with the 2018 Policy Address to incentivise the redevelopment of industrial buildings constructed before 1987.

4.1.3 As mentioned above, the application also aligns with the SAR Government's intention that "IBs located in 'I' zone could be redeveloped into new premises for conventional 'industrial/godown uses' and/or 'modern industrial uses". Further, the proposed relaxation of the maximum non-domestic permissible PR by up to 20% could allow owners to recover any GFA loss in meeting present-day building standards, thereby incentivising industrial building redevelopment."

4.2 The proposed Data Centre aligns with the planning intention of the "I" zone

4.2.1 The proposed use fits the purpose and planning intention of the 'I" zone. Information technology and telecommunications industries, offices related to industrial use, and selected uses akin to industrial production that would not compromise building and fire safety are always permitted in this zone.

4.2.2 The proposed information technology and telecommunication industries (data centre) use is under Column 1, which is always permitted. The proposed use aligns with the "I "zone's planning intention.

4.3 The proposed development is compatible with the surrounding land use

4.3.1 The application site is located within a predominantly industrial area, surrounded mainly by the "I" zone, with industrial/office buildings in the immediate vicinity.

4.3.2 The proposed redevelopment of an existing industrial building into an 18-storey data centre is compatible with the surrounding land use. Therefore, the proposed use would not cause any environmental impacts on the surrounding areas.

4.4 The proposed scheme fully utilises the development potential of the application site with modern-day building standards

4.4.1 The application site contains an industrial building completed in 1972 with a GFA of about 941m^2. The existing building has been left mainly vacant since its previous industrial use was suspended in 2018.

4.4.2 This application's positive impact is replacing an old industrial building with a new data centre with modern-day standards and supporting facilities to meet the changing market needs.

4.5 The proposed minor relaxation of plot ratio and building height will not adversely affect the surrounding areas visually.

4.5.1 The proposed development is compatible with the surrounding neighbourhood. The application site is mainly surrounded by buildings in the "I" zone, with a maximum plot ratio of 9.5 and a maximum height of 105mPD under the OZP.

4.5.2 Based on the Visual Impact Assessment in Appendix V, the proposed development's scale and height are considered visually compatible with the surrounding industrial developments. Planters and Vertical greening at the lower levels of the proposed development will soften the proposed building structure. Replacing the old industrial building with a modern-day development with a greening provision will enhance the area's street environment and visual amenities.

4.6 The proposed building setback at Wing Chong Street and Wing Kin Road will provide a better streetscape, walking environment and visual permeability.

4.6.1 The proposed building setback at Wing Kin Road and Wing Chong Street, both one-way streets, will provide a wider separation from buildings to enhance the walking environment and visual permeability. Air ventilation along these streets could also be enhanced.

4.7 The proposed greening, including vertical greening, will enhance the streetscape and improve visual amenity

4.7.1 Greening space provision has been maximised by providing planters at ground level and 1/F to 3/F fronting Wing Kin Road. The vertical greening at sections of building facades fronting Wing Chong Street will improve the street environment and visual amenity.

4.8 The proposed development will be seen as a catalyst and precedent in the gradual transformation of this industrial area

4.8.1 The area was characterised by the concentration of offensive trade businesses and polluting industries, including but not limited to the application site in the 1960s'. The proposed minor relaxation of the plot ratio restriction and change of uses in this application will form a catalyst and a precedent in gradually transforming the area, once predominated by offensive trades and polluting industries, to non-polluting industrial uses.

4.9 The proposed development is considered feasible from a traffic point of view

4.9.1 Based on the calculations and findings in the Traffic Impact Assessment (TIA) in **Appendix I**, it is concluded that the proposed development is acceptable from a traffic engineering viewpoint.

4.10 The proposed development would have no adverse impact on air, noise and the sewerage system

4.10.1 Based on the Air Quality Impact Assessment, Noise Impact Assessment and Sewerage Impact Assessment in Appendix II, III and IV, respectively, it is concluded that the proposed development will not cause any adverse impact in terms of air, noise and sewerage to the neighbourhood.

5 Conclusion

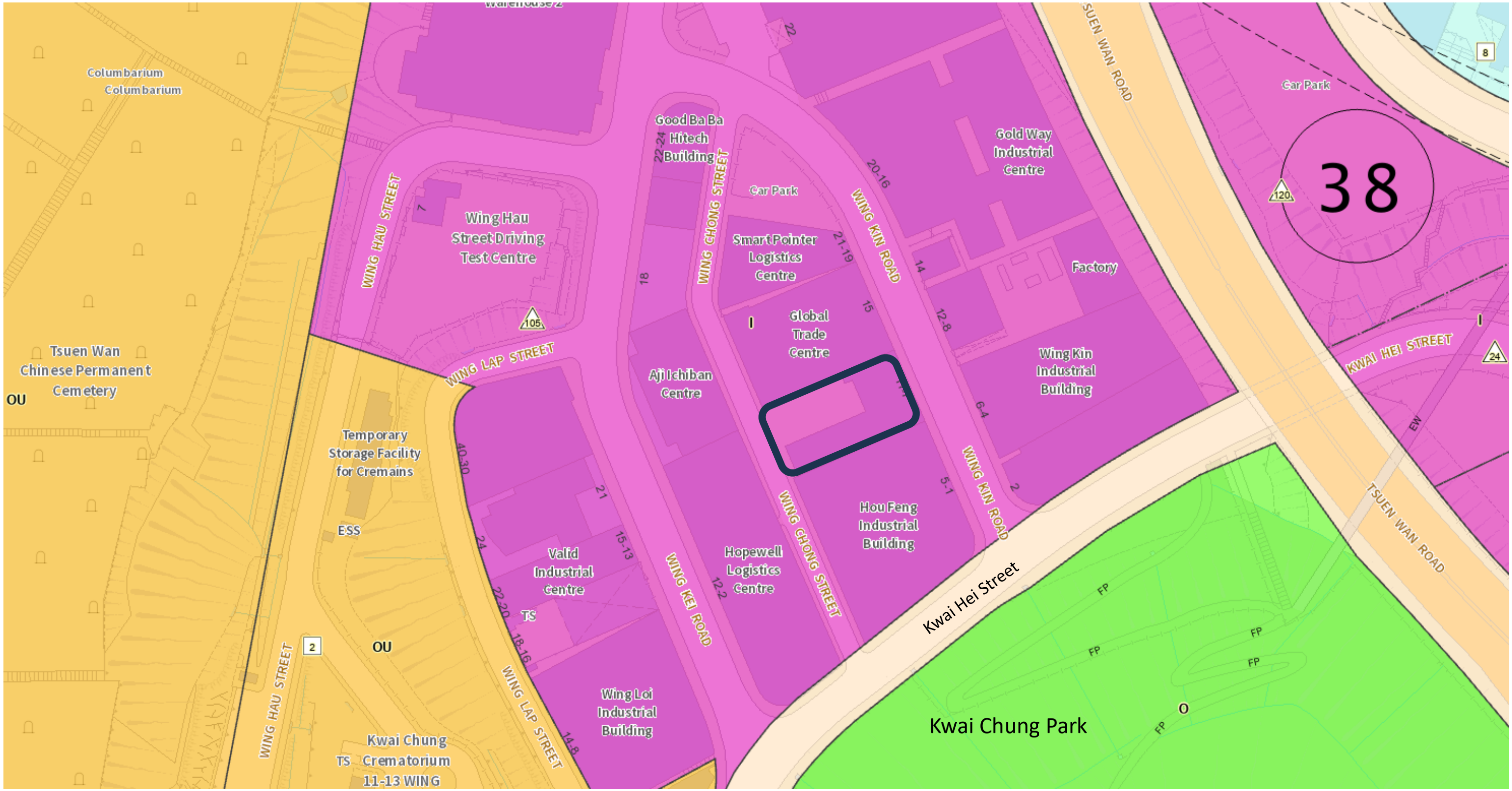
5.1 The application is submitted on behalf of the Applicant, OXO YW Limited, to seek the Town Planning Board's permission for the proposed minor relaxation of plot ratio restriction from 9.5 to 11.4 and height relaxation from 105mPD to 109.55mPD for permitted information technology and telecommunications industries (data centre) use at the application site.

5.2 The proposed minor relaxation of plot ratio restriction by 20% aligns with the 2018 Policy Address to incentivise the redevelopment of industrial buildings constructed before 1987. The proposed relaxation of the building height conforms with the surrounding industrial buildings of similar height in the area. The technical impact assessments concluded that the proposed development would not cause any adverse visual impact, traffic impact, air, noise, or sewerage impact on the neighbourhood. The proposed planters and vertical greening on the façade will soften the building edges and enhance the streetscape.

5.3 For the above reasons, the Board is earnestly requested to consider and grant approval to this application.

Figures

Figures



Legend

Application Site

Job Title: Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145)	**Drawing Title:** Figure 1.1: Application Site Location Plan under Outline Zoning Plan (extracts of Kwai Chung OZP No. S/KC/32)	KJL Ltd.



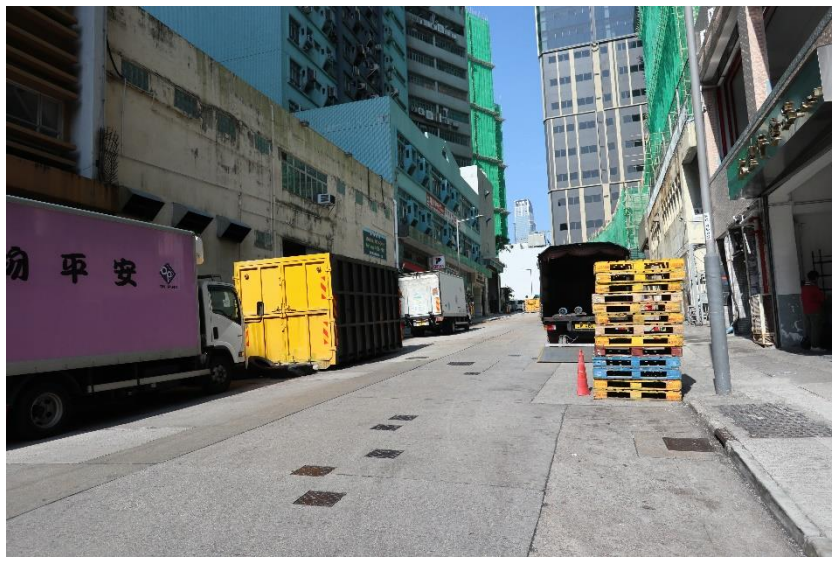
1. View from Kwai Hei Road facing west



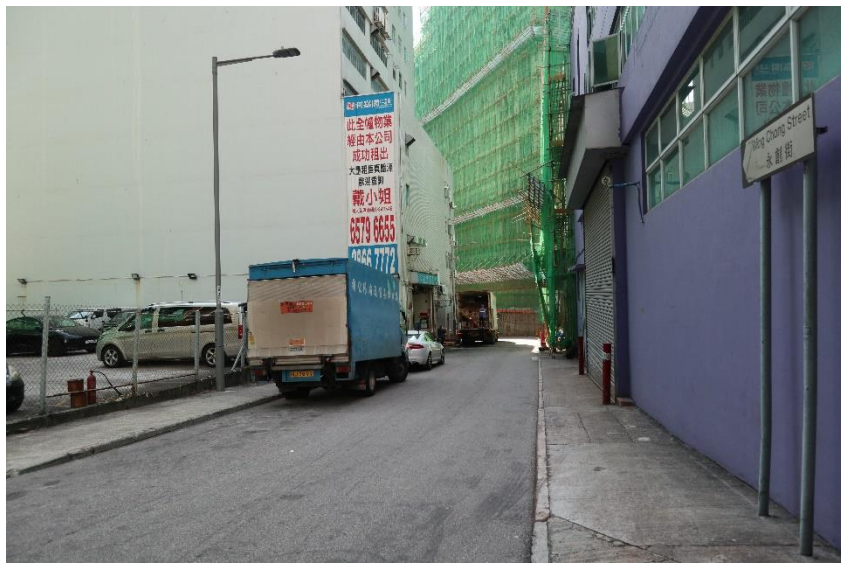
4. Application Site (view from Wing Chong Street)



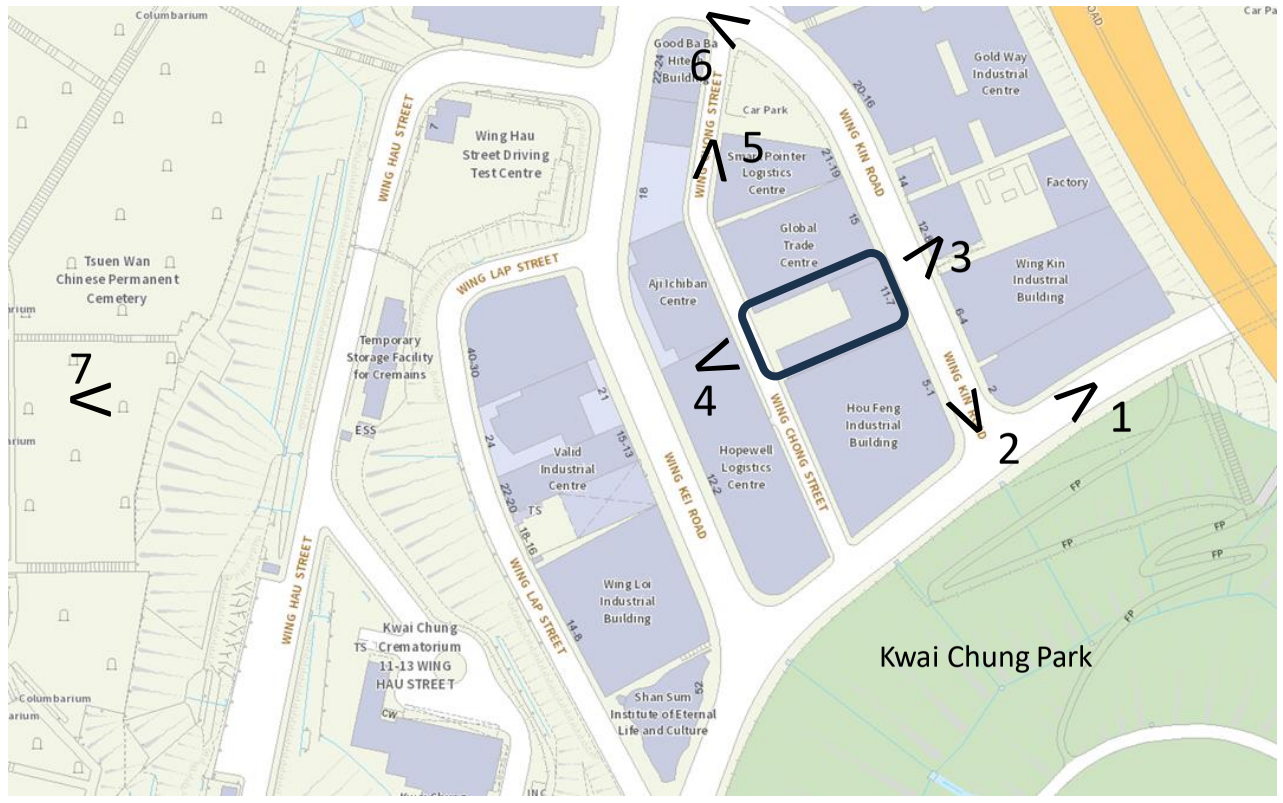
7. View from Tsuen Wan Chinese Cemetery



2. View from Wing Kin Road facing north



5. View from Wing Chong Street facing south





3. Application Site (view from Wing Kin Road)



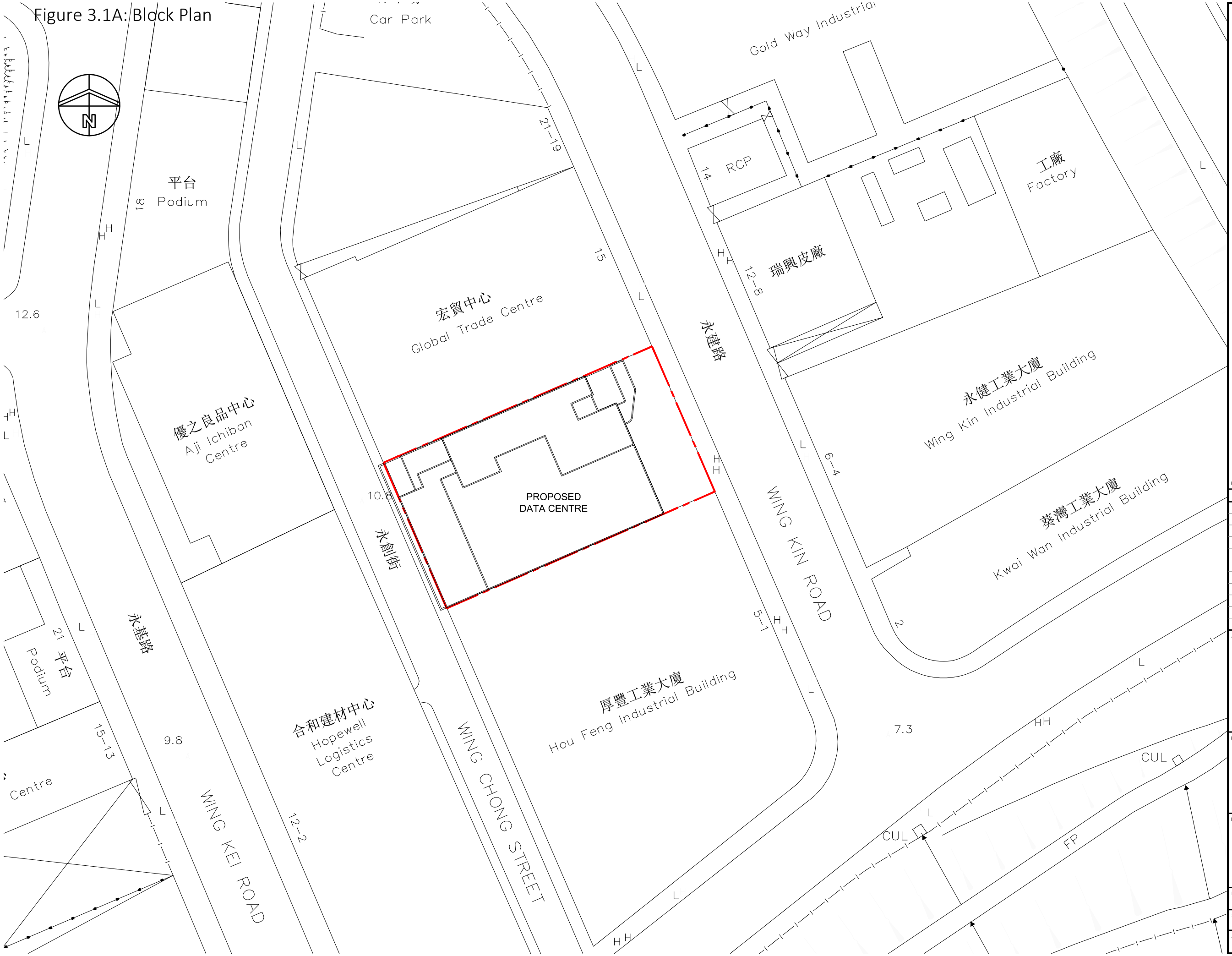
6. View from the junction of Wing Kei Road/Wing Kin Road

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145)

Drawing Title:
Figure 2.1: Photographs of the Application Site

KJL Ltd.

Figure 3.1A: Block Plan



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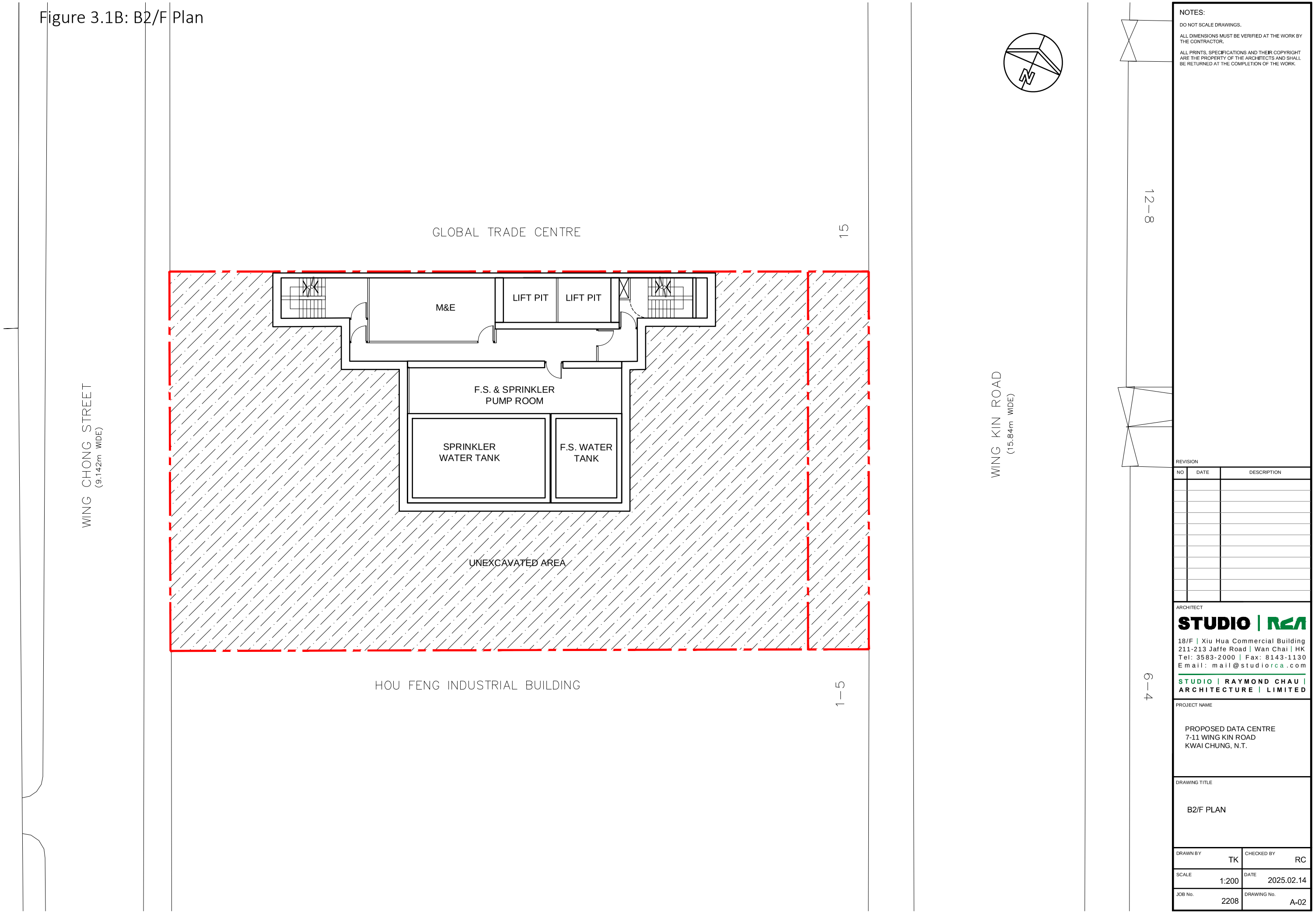
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BLOCK PLAN

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Figure 3.1B: B2/F Plan



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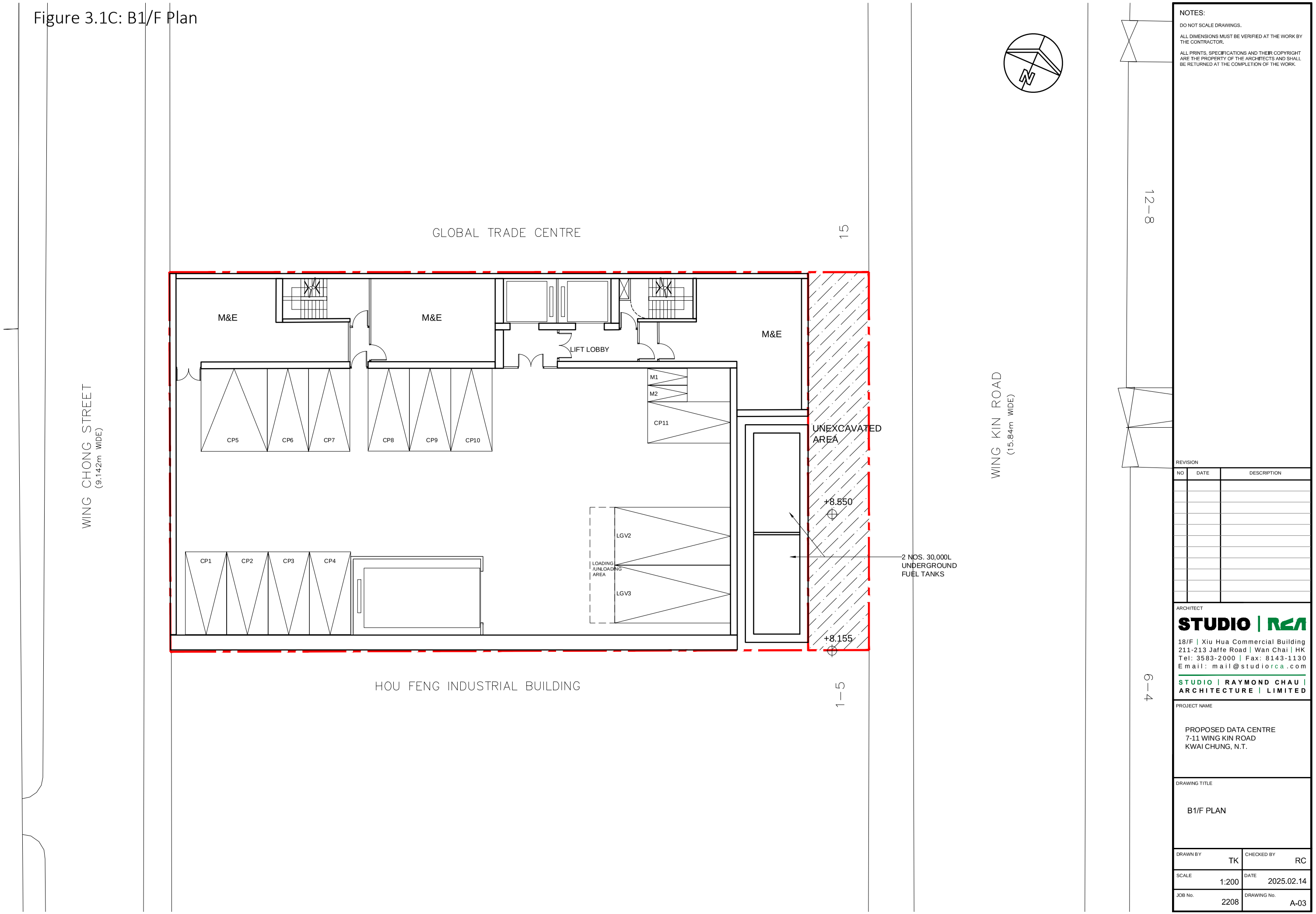
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B2/F PLAN

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Figure 3.1C: B1/F Plan



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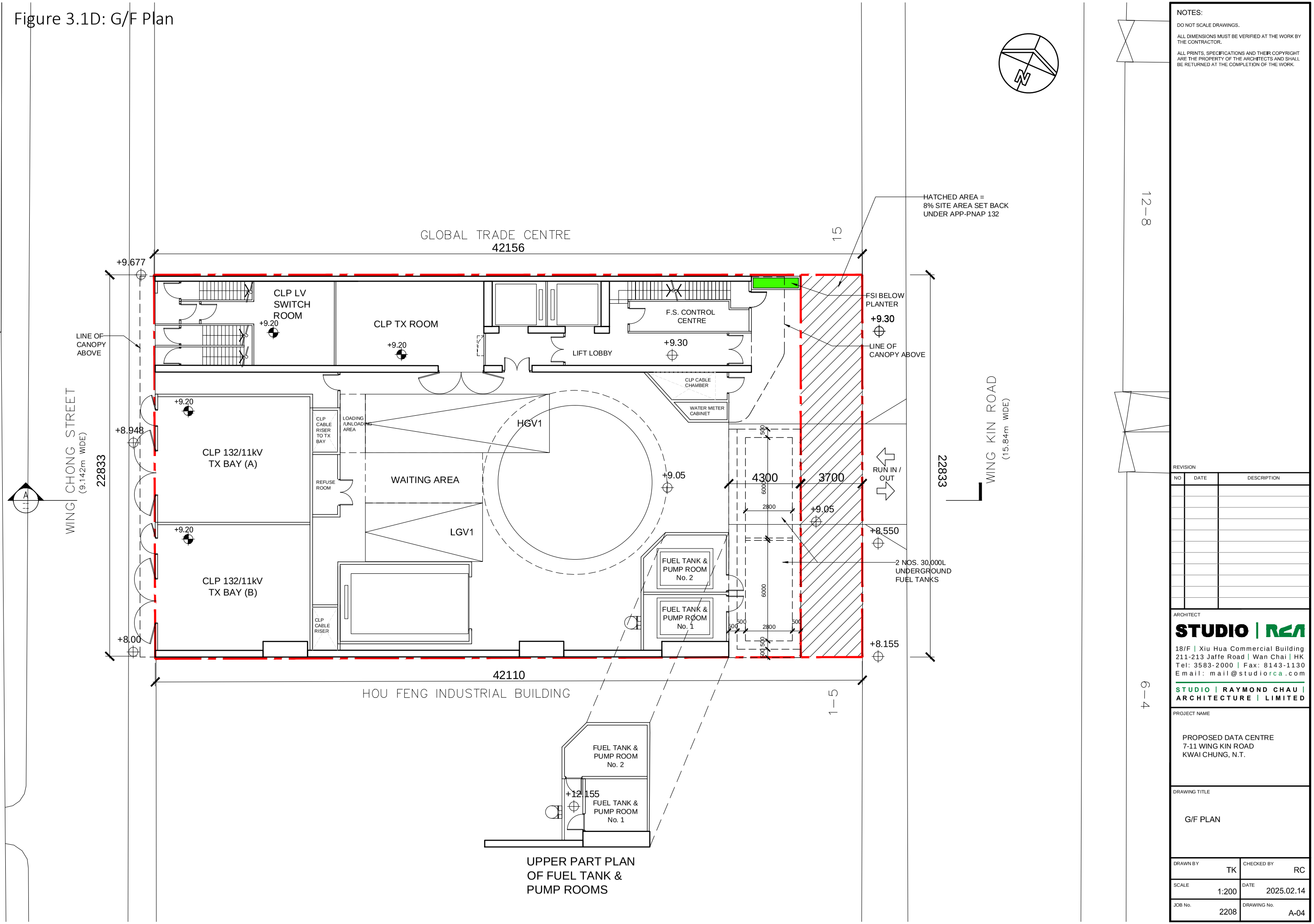
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7-11 WING KIN ROAD
KWAI CHUNG, N.T.

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B1/F PLAN

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Figure 3.1D: G/F Plan



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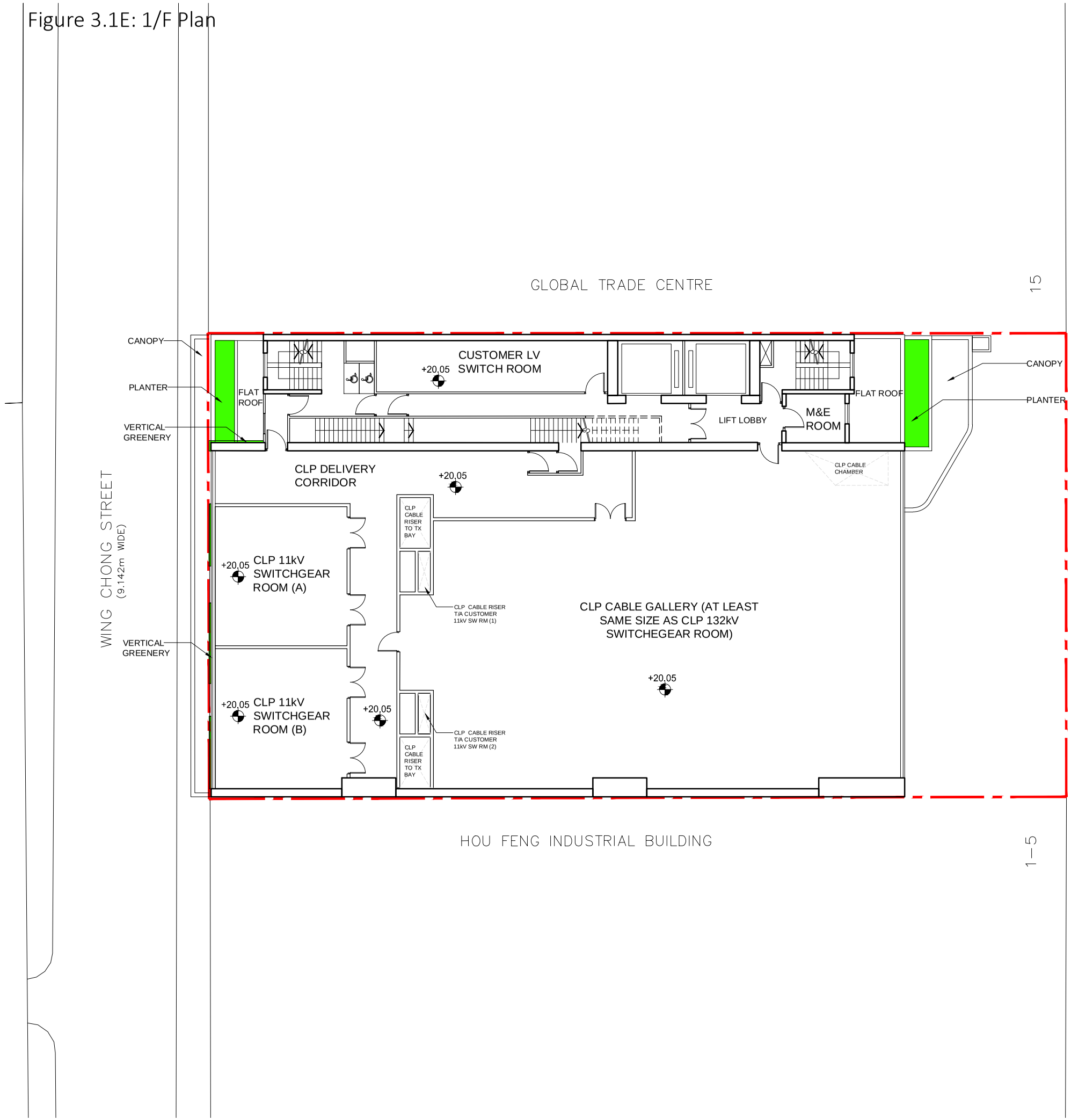
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G/F PLAN

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Figure 3.1E: 1/F Plan



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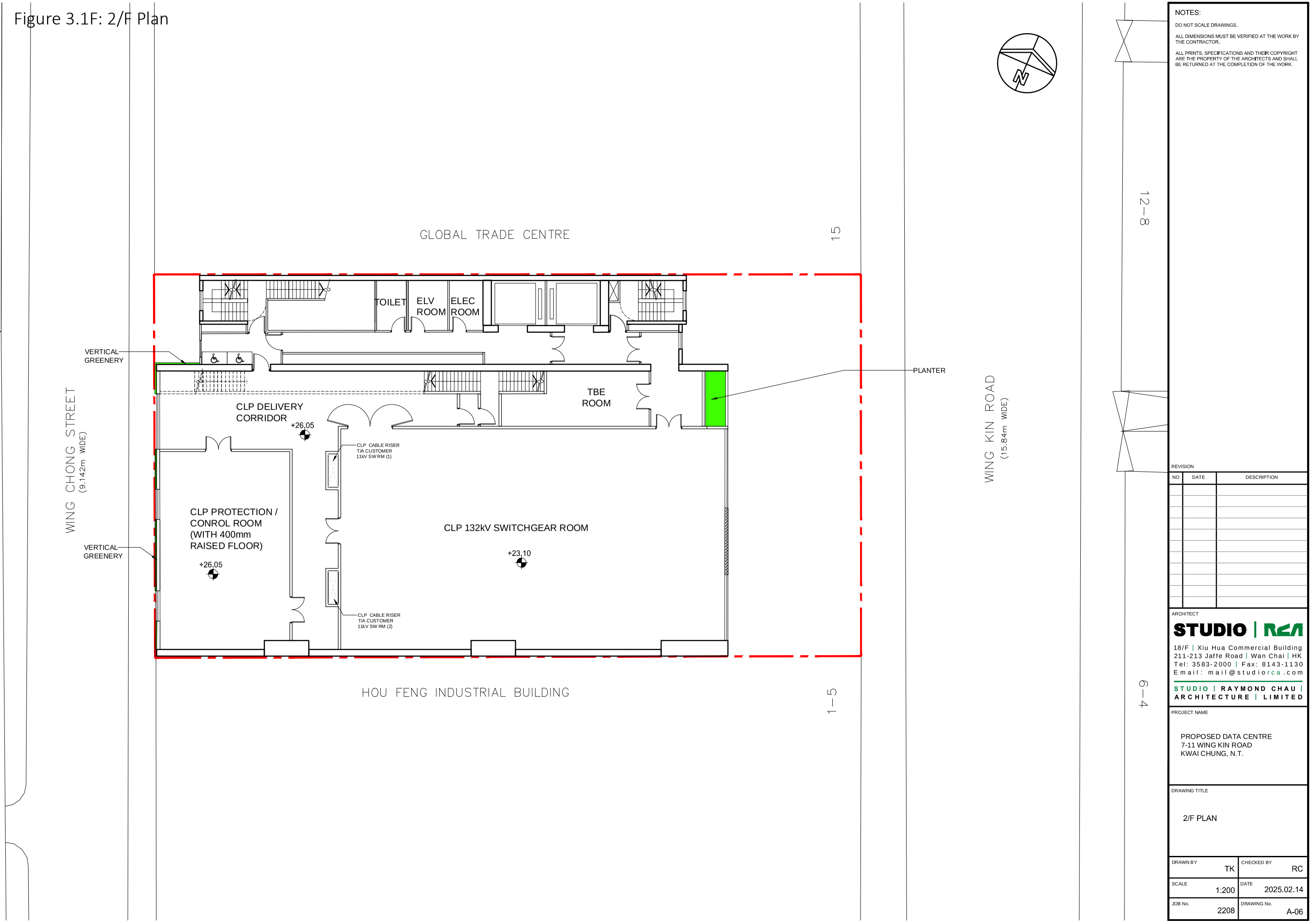
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1/F PLAN

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Figure 3.1F: 2/F Plan



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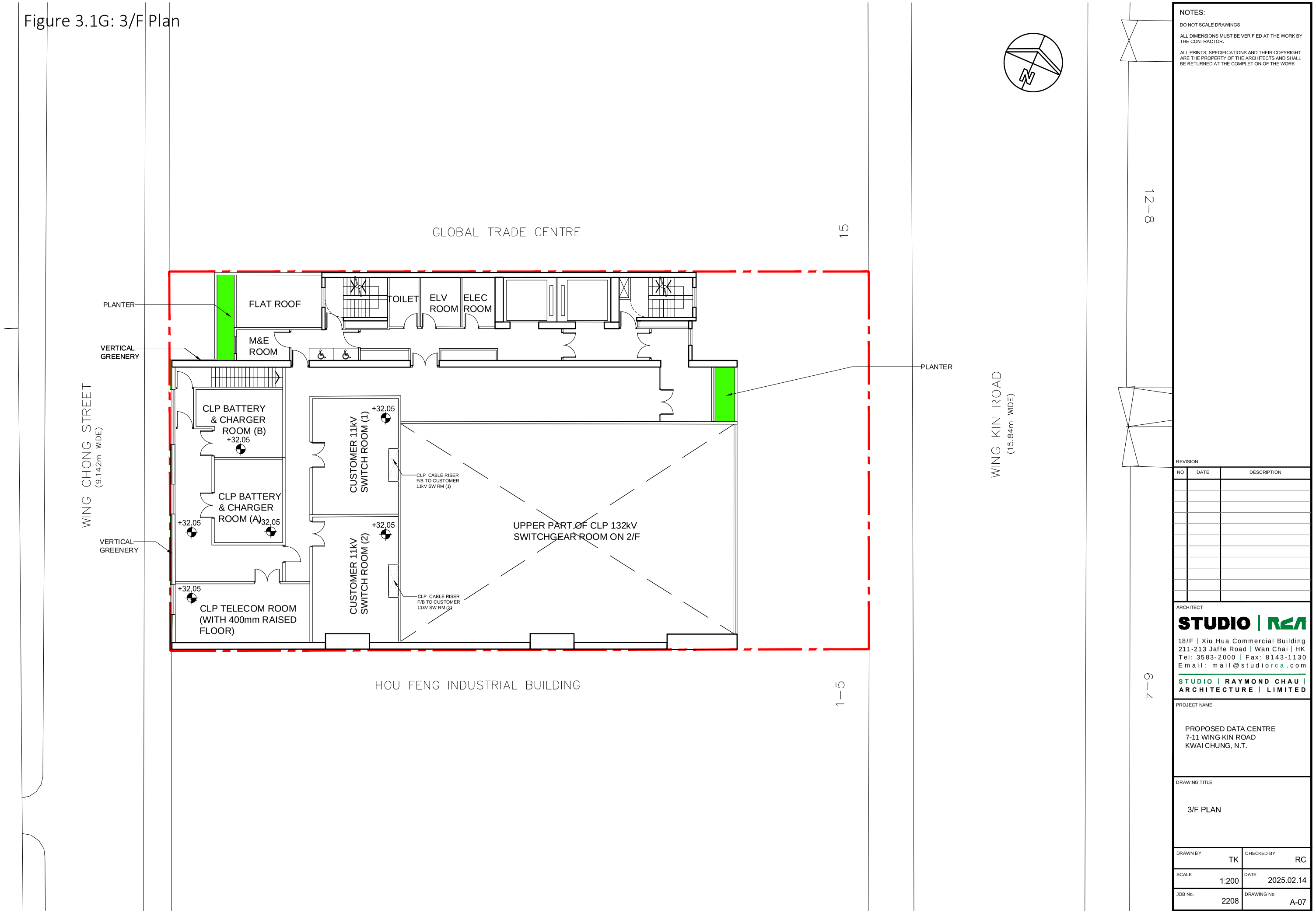
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Figure 3.1G: 3/F Plan



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2208	A-07

Figure 3.1H: 4/F-5/F Plan (Data Hall)

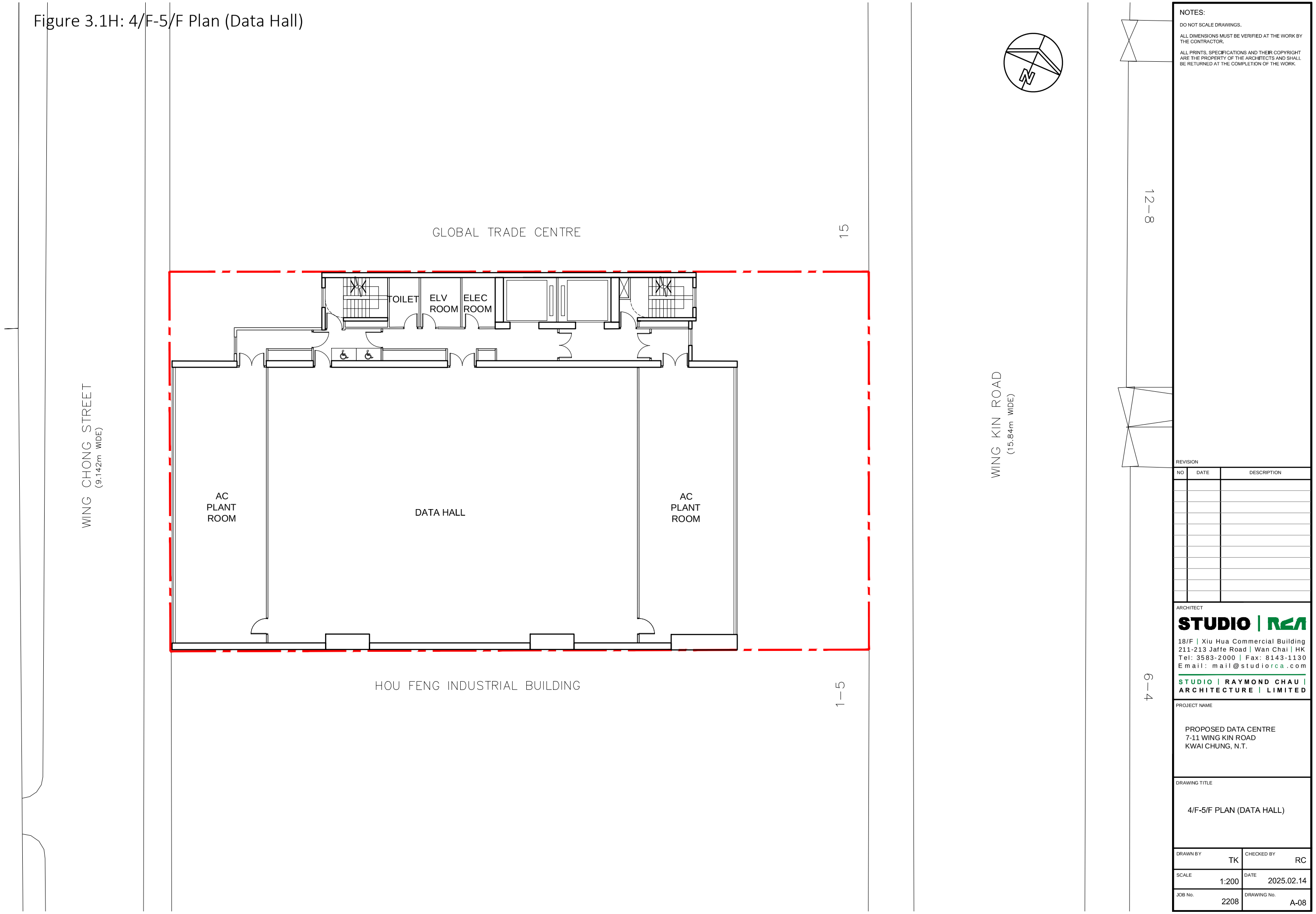
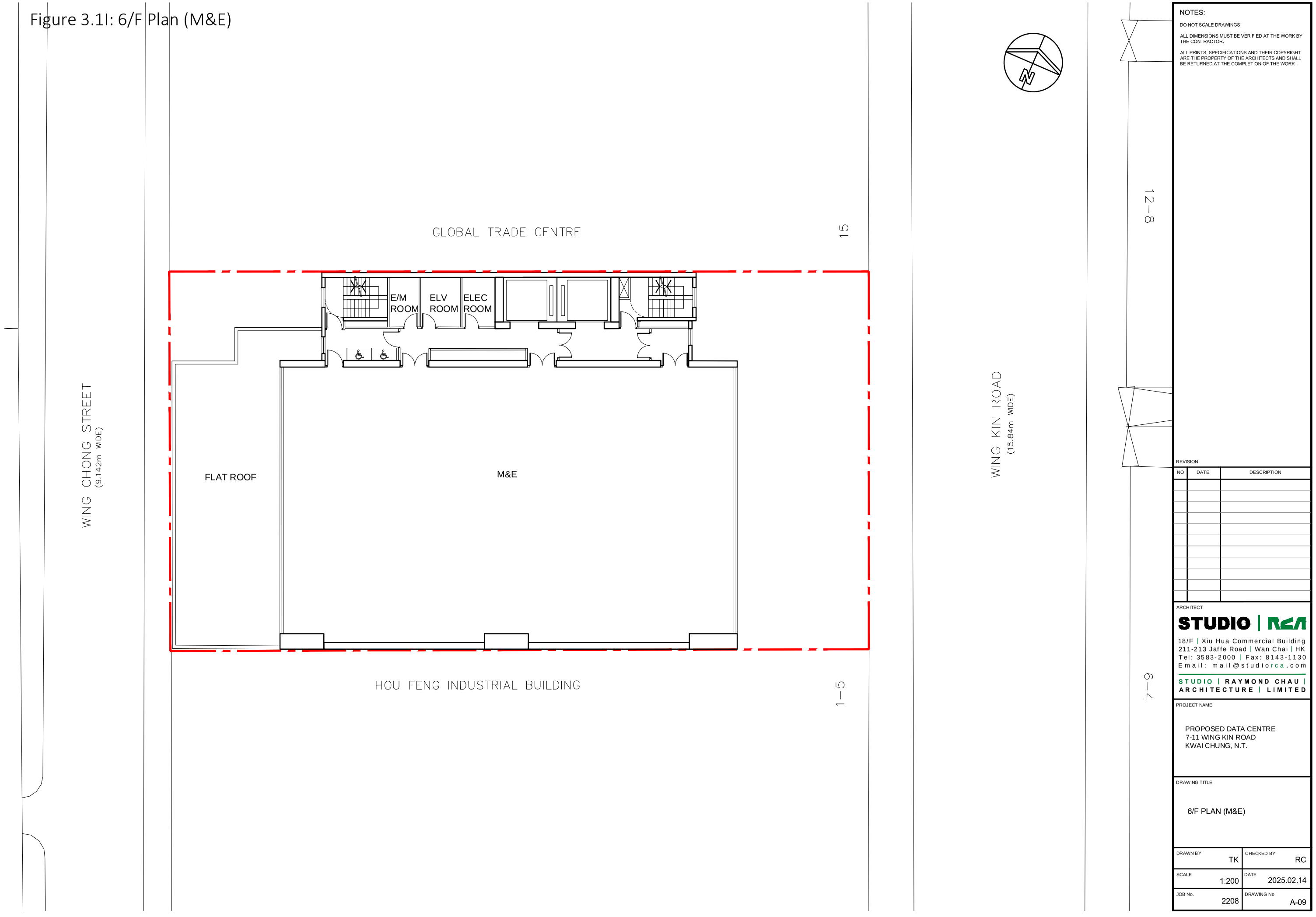


Figure 3.1I: 6/F Plan (M&E)



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6/F PLAN (M&E)

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Figure 3.1J: 7/F-9/F, 11/F-13/F & 15/F-16/F Plans (Typical Data Hall Floor Plans)

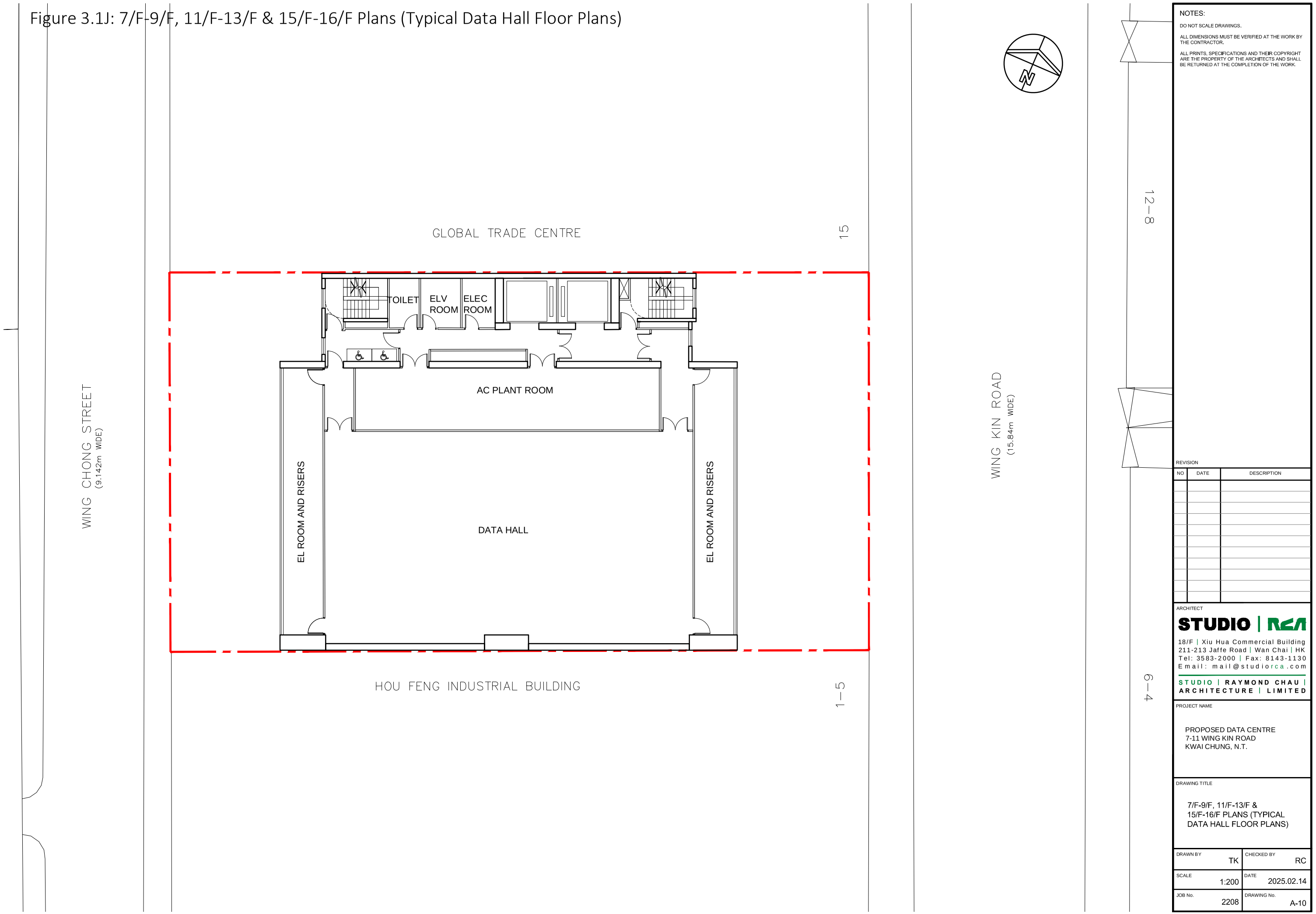


Figure 3.1K: 10/F & 14/F Plans (Typical M&E Floor Plans)

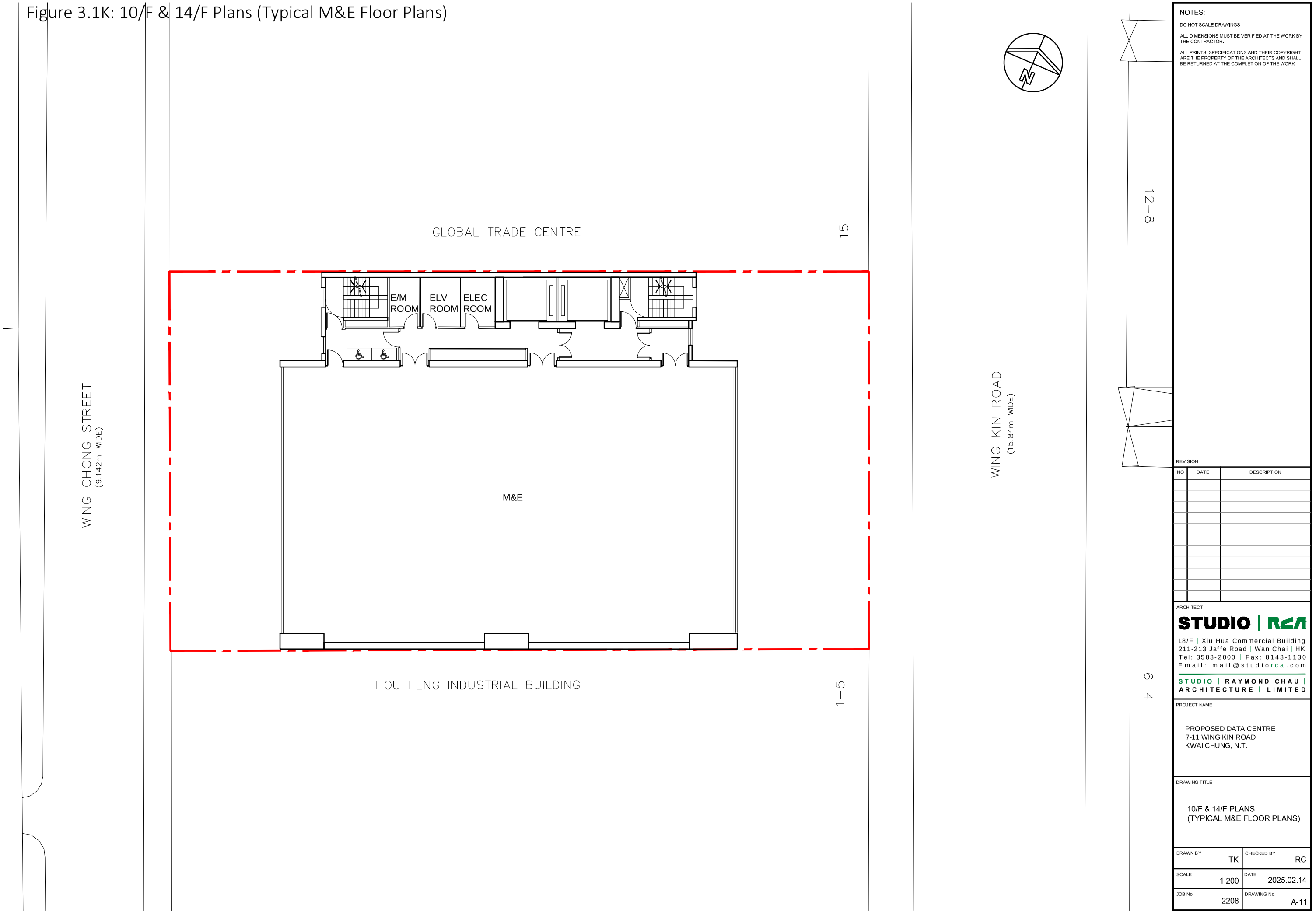


Figure 3.1L: R/F Plan

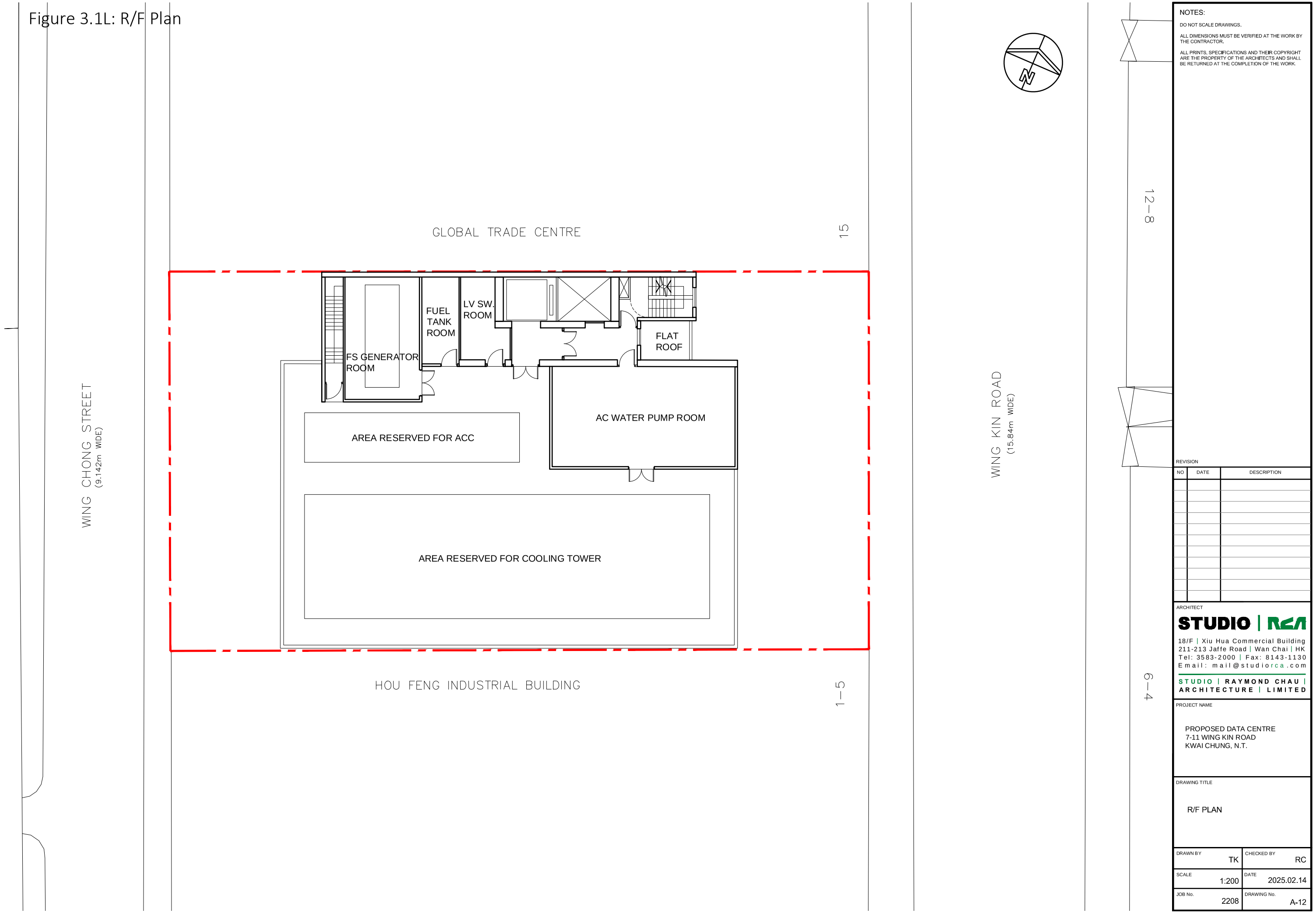
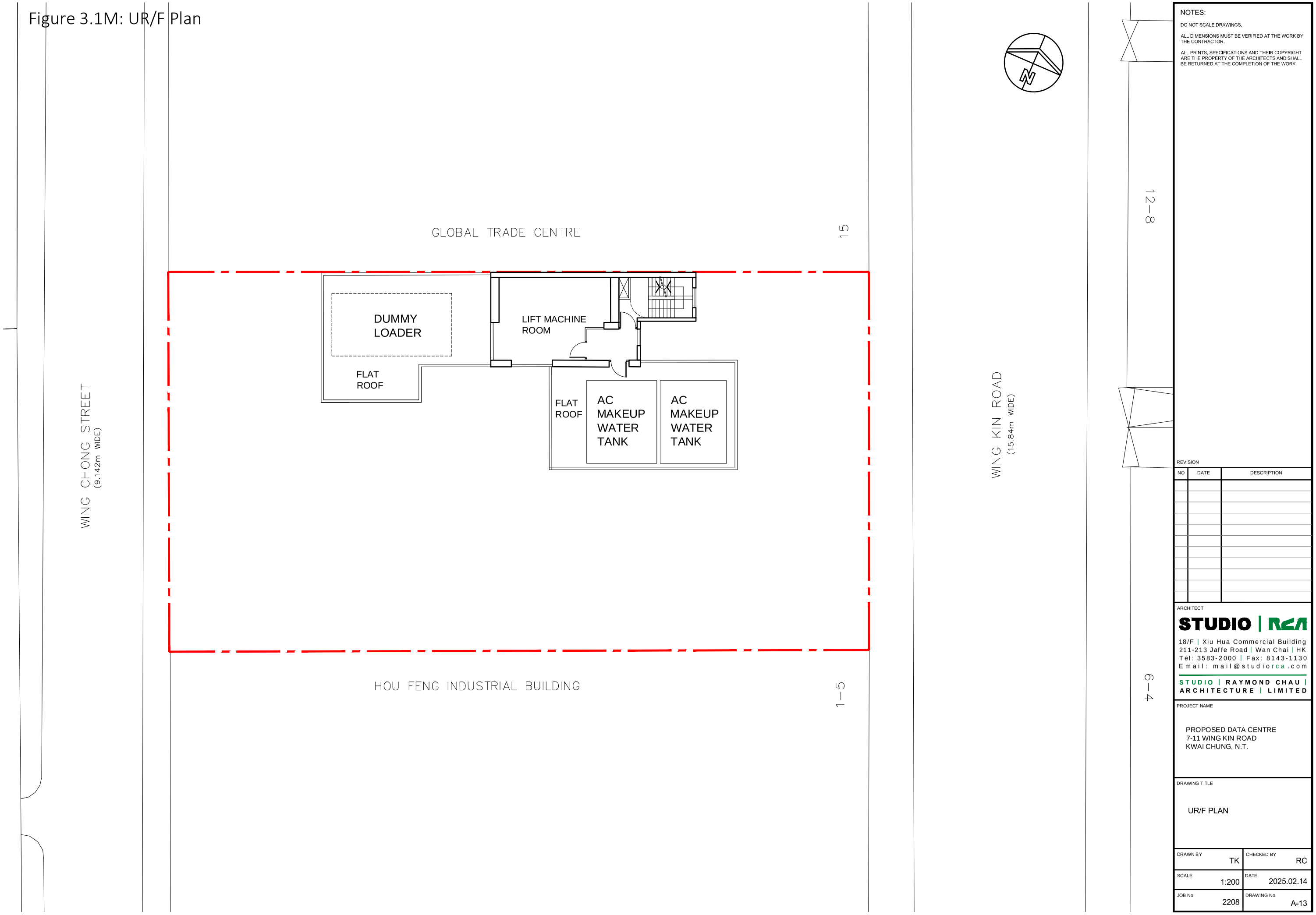


Figure 3.1M: UR/F Plan



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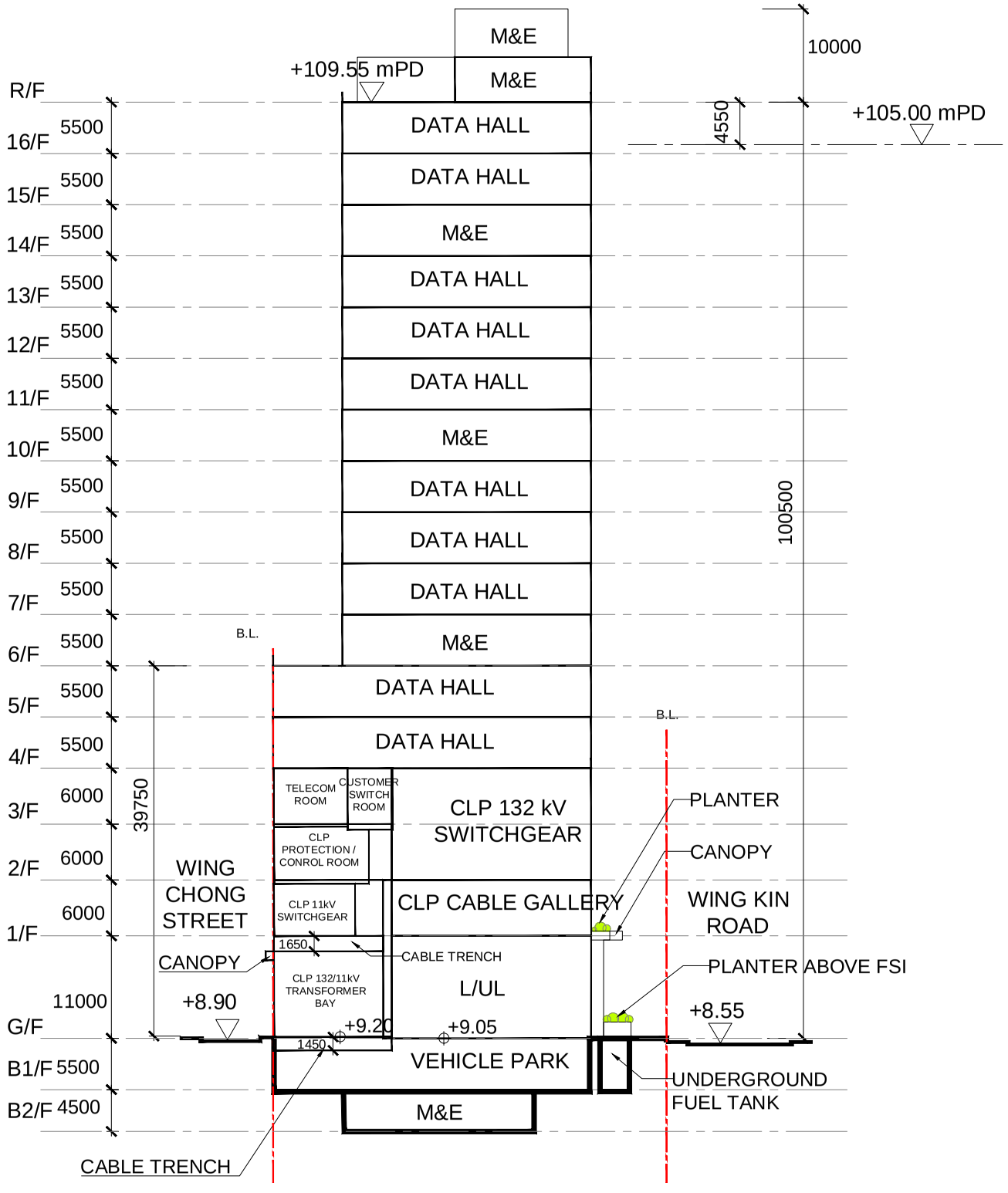
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Figure 3.1N: Section AA Plan



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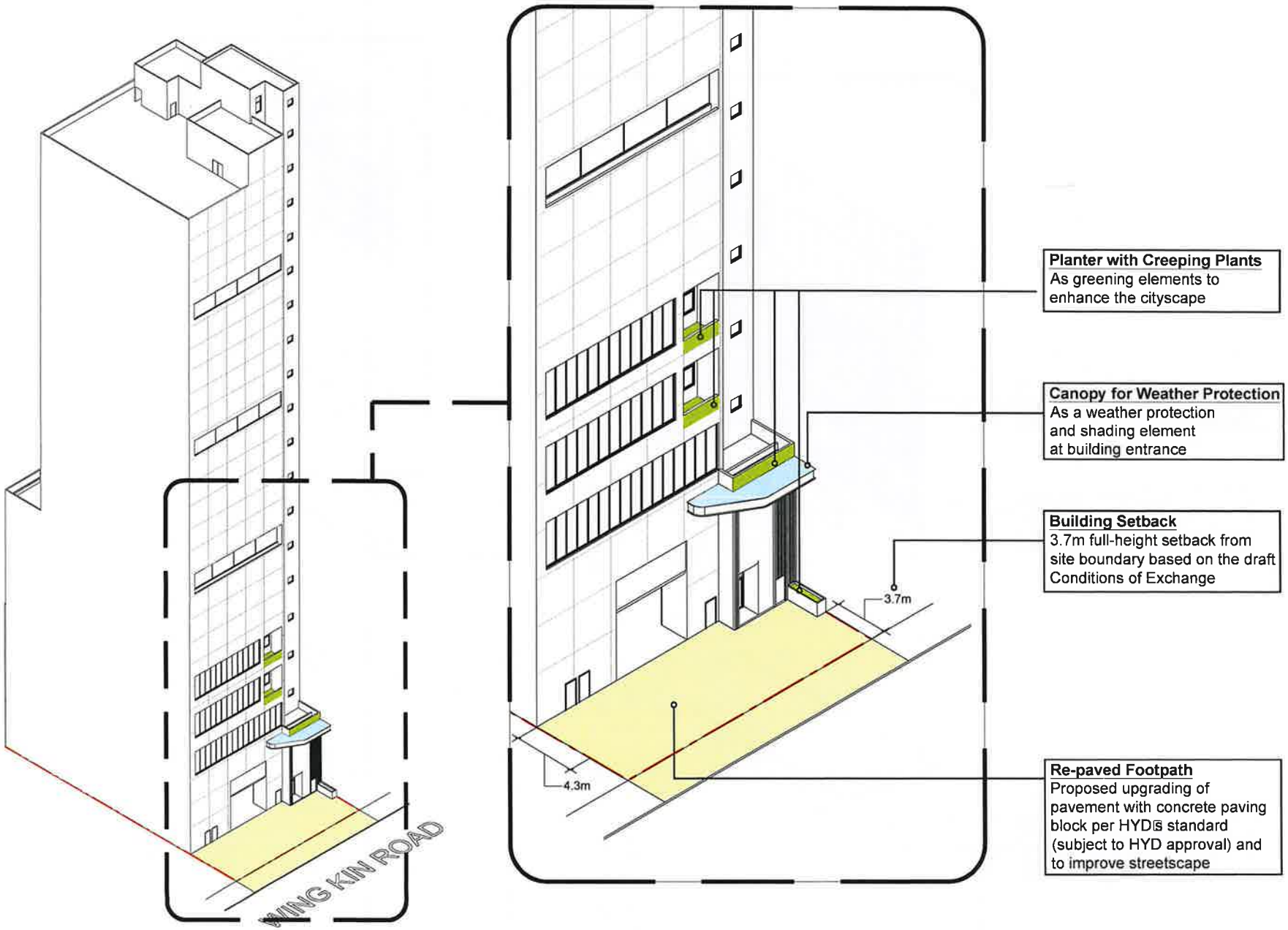
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2208	A-14

Figure 3.1O



Planter with Creeping Plants
As greening elements to enhance the cityscape

Canopy for Weather Protection
As a weather protection and shading element at building entrance

Building Setback
3.7m full-height setback from site boundary based on the draft Conditions of Exchange

Re-paved Footpath
Proposed upgrading of pavement with concrete paving block per HYDs standard (subject to HYD approval) and to improve streetscape

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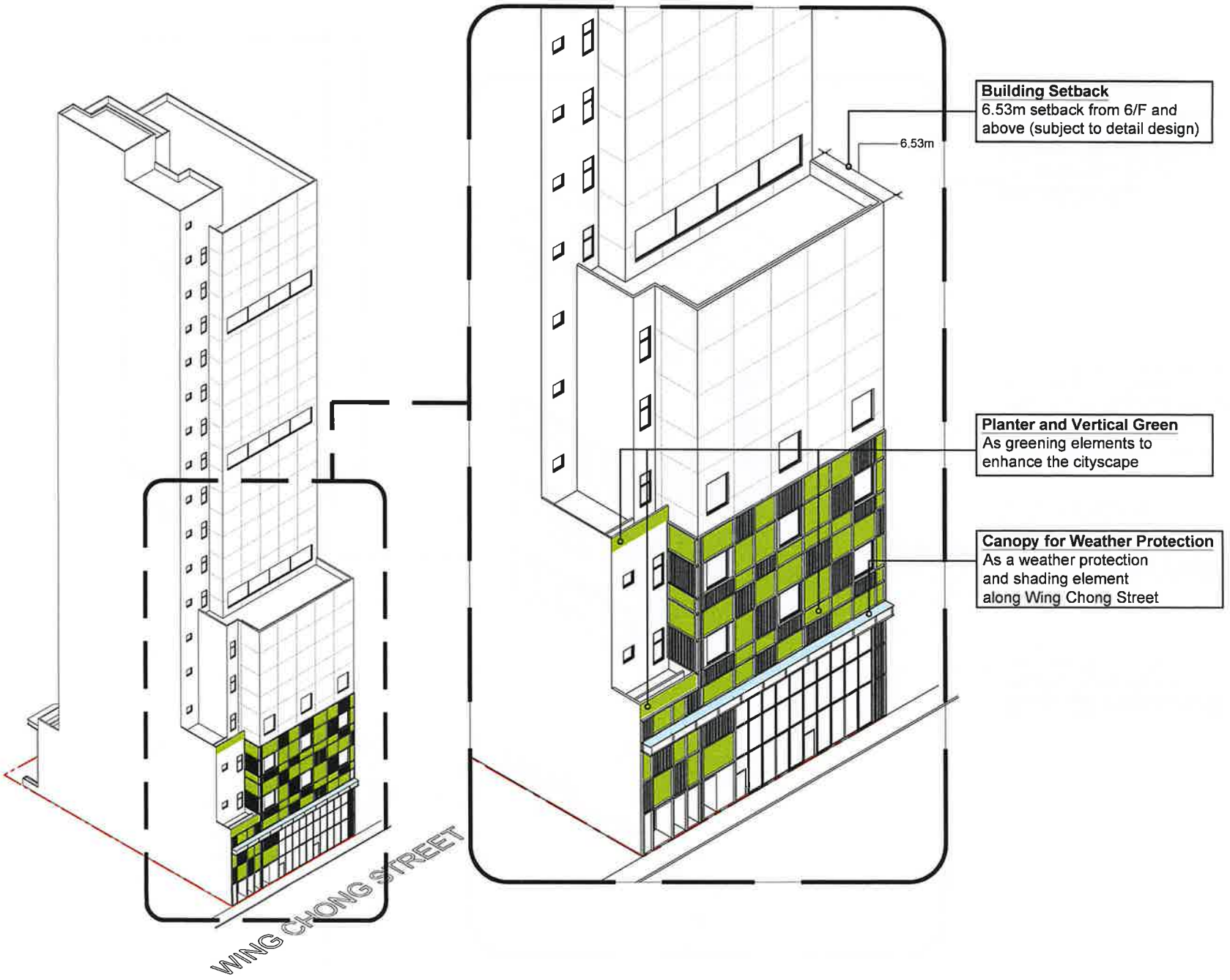
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PROJECT NAME
REDEVELOPMENT OF
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE
ISOMETRIC DRAWING A

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Figure 3.1P



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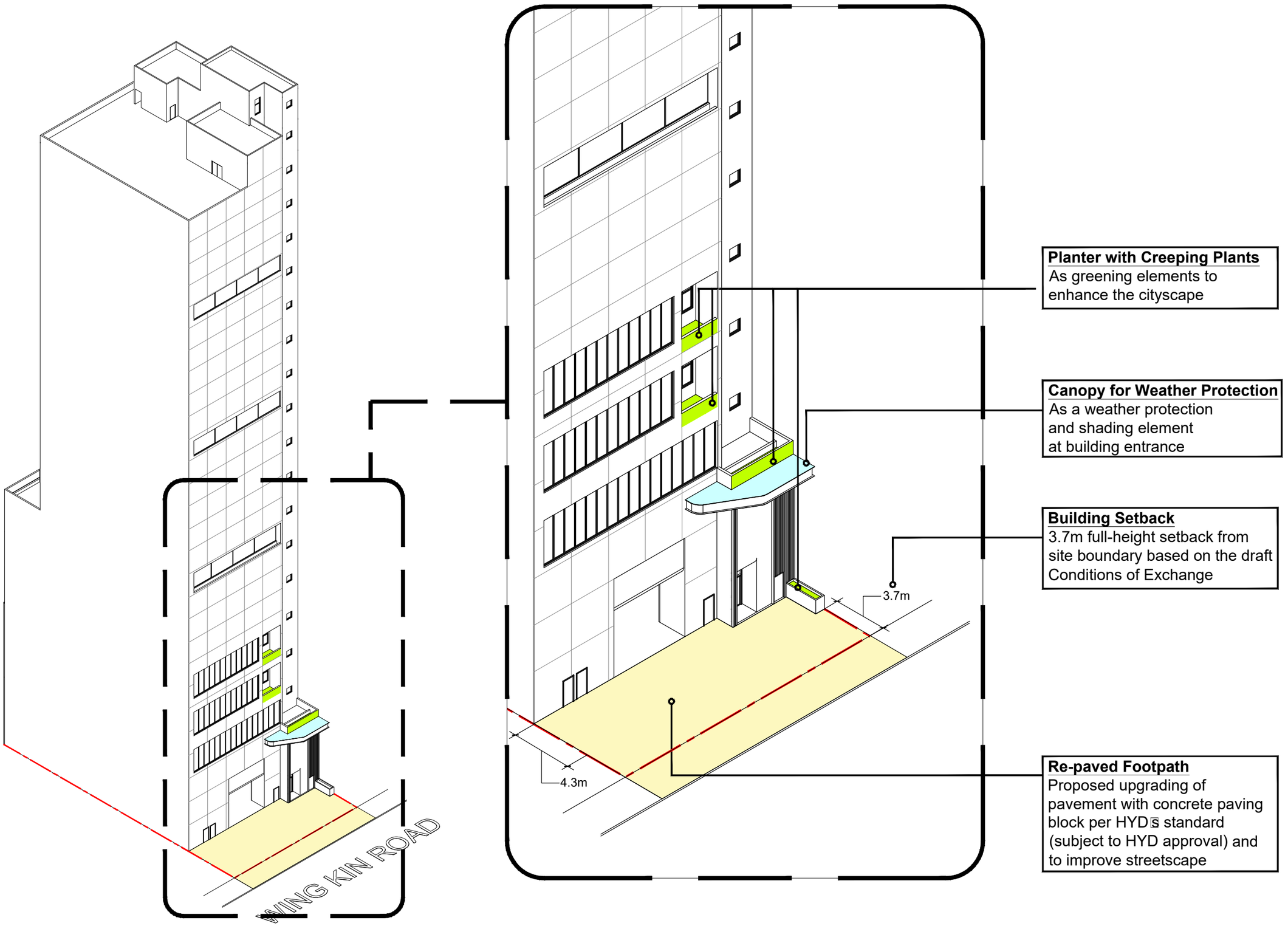
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2208	AR-11

Figure 3.1O



Planter with Creeping Plants
As greening elements to enhance the cityscape

Canopy for Weather Protection
As a weather protection and shading element at building entrance

Building Setback
3.7m full-height setback from site boundary based on the draft Conditions of Exchange

Re-paved Footpath
Proposed upgrading of pavement with concrete paving block per HYD's standard (subject to HYD approval) and to improve streetscape

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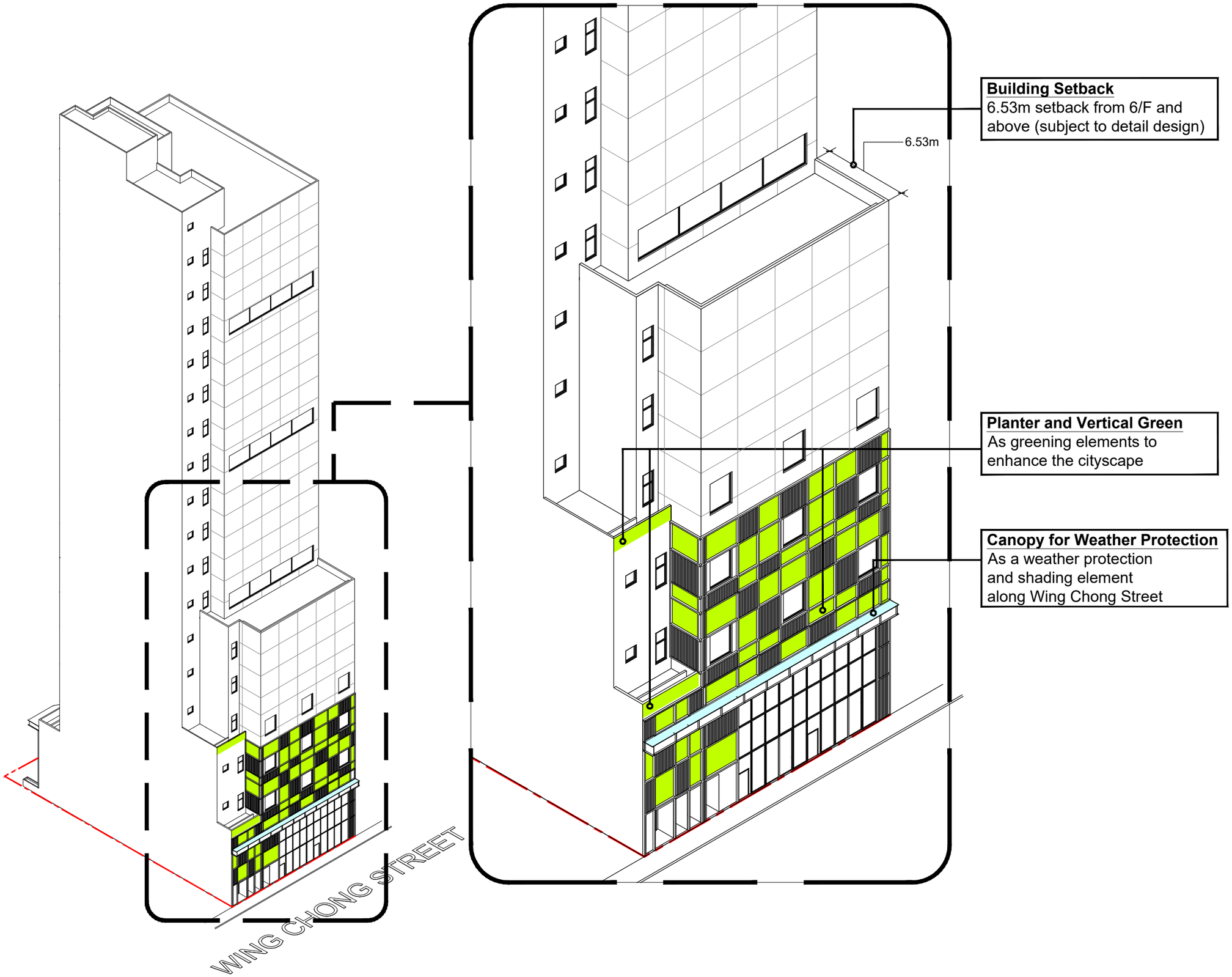
REDEVELOPMENT OF
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KWAI CHUNG, N.T.

DRAWING TITLE

ISOMETRIC DRAWING A

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SCALE	DATE
N/A	2025.03.12
JOB No.	DRAWING No.
2208	AR-10

Figure 3.1P



Building Setback
6.53m setback from 6/F and above (subject to detail design)

Planter and Vertical Green
As greening elements to enhance the cityscape

Canopy for Weather Protection
As a weather protection and shading element along Wing Chong Street

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STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

PROJECT NAME

REDEVELOPMENT OF
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

ISOMETRIC DRAWING B

DRAWN BY	CHECKED BY
MH	RC
SCALE	DATE
N/A	2025.03.12
JOB No.	DRAWING No.
2208	AR-11

File Ref.: TPB/A/KC/510

BY EMAIL & BY POST (tpbpd@pland.gov.hk)

21st March 2025

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

Attn: The Secretary of the Town Planning Board

Dear Sir/Madam,

Kwai Chung Town Lot 145 and Adjoining Government Land
7-11 Wing Kin Road, Kwai Chung
(New Grant Lot known as Kwai Chung Town Lot 534)
Section 16 Planning Application No. A/KC/510

We refer to the captioned Section 16 application submitted on 14 March 2022.

On behalf of the Applicant, we wish to clarify that the proposed number of storeys for the new industrial building (data centre) will be 19 storeys, including 2 storeys of basements.

We have enclosed the amended Executive Summary (in both Chinese and English) for the Board members' information.

Should you have any queries regarding the above, please contact Ms. Mina Leung or the undersigned at [redacted] Thank you.

Yours sincerely,



Kenneth J. Li
Director

Encl.

c.c. Tsuen Wan and West Kowloon District Planning Office, Planning Department – Attn: Mr. Cecil Chow [By Email at ccchow@pland.gov.hk]

EXECUTIVE SUMMARY

BACKGROUND

This application is submitted on behalf of OXO YW Limited, the registered owner of 7-11 Wing Kin Road, Kwai Chung, to seek the Town Planning Board's permission for the proposed minor relaxation of plot ratio restriction from 9.5 to 11.4 and building height restriction from 105mPD to 109.55mPD for permitted information technology and telecommunications industries (data centre) use at 7-11 Wing Kin Road and adjoining government land at Wing Chong Street, Kwai Chung, New Territories (i.e. the application site).

The application site falls within an area zoned "Industrial" ("I") on the Kwai Chung Outline Zoning Plan ("OZP") no. S/KC/32. According to the Notes for the "I" zone, the proposed information technology and telecommunication industries (data centre) at the application site is under Column 1 use in this "I" zone, which is always permitted. However, the proposed new data centre's proposed plot ratio of 11.4 exceeds the plot ratio restriction under the OZP of 9.5. In addition, the proposed building height of the proposed scheme at 109.55mPD exceeds the height restriction under the OZP of 105mPD. Therefore, planning permission from the Town Planning Board ("the Board") is required.

The application aligns with the SAR Government's intention under the IB Revitalisation Scheme that "IBs located in 'I' zone could be redeveloped into new premises for conventional 'industrial/godown uses' and/or 'modern industrial uses". Further, the proposed relaxation of the maximum non-domestic permissible PR by up to 20% could, in effect, allow owners to recover any GFA loss in meeting present-day building standards, thereby incentivising industrial building redevelopment.

DESCRIPTION OF PROPOSED DEVELOPMENT

The proposed development involves redeveloping an existing industrial building into a new 18-storey building for a permitted data centre. The major development parameters for the proposed development are shown in the table as follows:

Site Area	About 964.2m^2 (including additional land of 35.169m^2 granted by the District Land Conference on 6.10.2021)
Plot Ratio	No more than 11.4
Total Gross Floor Area	About 10,991.88m^2 (non-domestic)
Site Coverage	Not more than 82% (Site coverage permitted under PNAP-132)
No. of Storeys	19 storeys (including 2 levels of basement)
Building Height	109.55mPD (at main roof level)
Proposed Use	Information Technology and Telecommunication Industries (Data Centre)

Parking Spaces	• Private cars: 11 nos. (including one no. accessible) • Motorcycle: 2 nos.
Goods Vehicle Loading / Unloading Bays	• Light Goods Vehicle: 3 nos. • Heavy Goods Vehicle: 1 nos.
Greenery	About 195m^2 • G/F: 2m^2 • 1/F: 11m^2 • 2/F: 4m^2 • 3/F: 9m^2 • Vertical: 169m^2

PLANNING JUSTIFICATIONS

The proposed development at the application site is appropriate in planning terms because of the following planning justifications:

- The proposed minor relaxation of plot ratio restriction by 20% aligns with the 2018 Policy Address to incentivise the redevelopment of industrial buildings constructed before 1987.
- The proposed data centre aligns with the planning intention of the "I" zone.
- The proposed development is compatible with the surrounding land use.
- The proposed scheme fully utilises the development potential of the application site with modern-day building standards.
- The proposed minor relaxation of plot ratio and building height will not adversely affect the surrounding areas visually.
- The proposed building setbacks at Wing Chong Street and Wing Kin Road will provide a better streetscape, walking environment and visual permeability.
- The proposed greening, including vertical greening, will enhance the streetscape and improve visual amenity.
- The proposed scheme will be seen as a catalyst and precedent in the gradual transformation of this industrial area.
- The proposed development is considered feasible from a traffic point of view.
- The proposed development would have no adverse environmental impact on air, noise, or the sewerage system.

CONCLUSION

Given the abovementioned justifications, the Applicant respectfully requests that the Town Planning Board approve the application.

行政摘要

引言

是次第 16 條規劃許可申請人安秀耀榮有限公司，為葵涌永建路 7-11 號的註冊擁有人。 此規劃報告旨在支持是次根據《城市規劃條例》第 16 條提出的規劃許可申請，擬議申請在葵涌永建路 7-11 號以及位於永創街的毗鄰政府土地（即申請地點）略為放寬地積比率和建築高度限制，以作准許的資訊科技及電訊業用途。

根據葵涌分區計劃大綱圖（圖則編號為 S/KC/32），該申請地點屬於「工業」地帶。根據「工業」地帶的註釋，擬議發展的「資訊科技及電訊業(數據中心)」用途為經常允許的第 1 欄用途。申請人擬議將地積比率限制略為放寬至 11.4 以及建築高度略為放寬至 109.55mPD 超過了葵涌分區計劃大綱草圖中的地積比率和建築高度限制，因此，現按《城市規劃條例》第 16 條向城市規劃委員會提出申請。

是次申請符合特區政府在活化工廈計劃下的意向，即位於「工業」地帶的工廈可重新發展為新處所，作傳統的「工業/倉庫用途」及/或「現代工業用途」。此外，放寬最高核准非住用地積比率，上限為 20%，實際上可以讓業主重獲符合當今建築標準的建築面積損失，從而激勵工廈的重建。

擬議項目發展重點

擬議發展計劃涉及將現有工業樓宇重建為 18 層工業樓宇，以用於「貨倉(危險品倉庫除外)」用途。擬議發展方案的主要發展參數如下表所示:

地盤面積	約 964.2 平方米 (包括附加土地約 35.169 平方米)
地積比率	不多於 11.4
總樓面面積	約 10,991.88 平方米 (非住用)
上蓋面積	不多於 82% (PNAP-132 允許的覆蓋率)
層數	19 層 (包括兩層地庫)
建築物高度	109.55mPD
擬議用途	資訊科技及電訊業 (數據中心)
停車位數目	• 私家車車位: 11 (包括 1 個殘疾人士泊車位) • 電單車車位: 2

上落客貨車位數目	• 輕型貨車上落客貨車位：3 • 重型貨車上落客貨車位：1
綠化	約 195平方米 • G/F: 2 平方米 • 1/F: 11 平方米 • 2/F: 4 平方米 • 3/F: 9 平方米 • 垂直綠化: 169 平方米

發展理據

擬議發展計劃在規劃層面上理應視為恰當，以下是是項申請的規劃理據：

- 擬議略為放寬 20%地積比率限制符合政府《2018 年施政報告》的意向，以鼓勵重建1987年以前建造的工業樓宇。
- 擬議發展的「數據中心」用途完全符合「工業」地帶的規劃意向。
- 擬議發展與周圍的土地使用是兼容的。
- 更好地利用申請地點土地的開發潛力並符合最新的建築條例的建築設計。
- 擬議略為放寬地積比率和建築物高度並不會在視覺上影響周邊地區。
- 擬議將永創街和永建路的樓宇後移，提供更好的街景和步行環境。
- 擬議的綠化包括垂直綠化在內將增強街景和改善視覺舒適度。
- 擬議計劃將被視為該工業區逐步轉型的催化劑和先例。
- 擬議發展從交通角度考慮是可行的。
- 擬議發展不會對空氣,噪音和污水收集系統產生負面影響。

總結

綜觀上述理由，申請人謹請城規會批准是次申請。

KJL Ltd. *development consultancy*

File Ref.: TPB/A/KC/510

BY EMAIL & BY POST (tpbpd@pland.gov.hk)

23rd June 2025

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

Attn: The Secretary of the Town Planning Board

RECEIVED
26 JUN 2025
Town Planning Board

Dear Sir/Madam,

7-11 Wing Kin Road, Kwai Chung, New Territories
Section 16 Planning Application No. A/KC/510

We refer to the captioned section 16 application received by the Town Planning Board (the Board) on 18.3.2025 and 21.3.2025.

As per Town Planning Board Guideline No. 32B, the applicant submits our responses with supporting information to clarify the queries and address comments by various Government Departments, which we received through the Planning Department. Therefore, we submit four hard copies and one soft copy of the R to C table and supporting information, including updated layout plans, illustrations and isometric drawings, the technical assessment and the new Water Supply Impact Assessment (WSIA) for the Board's consideration.

This further information is considered not to be proposing a material change in the nature of the application. Therefore, it could be exempted from the publication and recounting requirements per the TPB PG-No.32B. However, should this further information be accepted but not exempted from the publication and recounting requirements, we would still like to proceed with the application with further information.

Should you have any queries, please contact our Ms. Mina Leung at [redacted] or the undersigned at [redacted]. Thank you.

Yours sincerely,

Kenneth J. Li
Director

Encl.

c.c. Tsuen Wan and West Kowloon District Planning Office, Planning Department – Attn: Messrs. W.C. Lui and Cecil Chow [By Email at wclui@pland.gov.hk and cccchow@pland.gov.hk

Application under Section 16 of the Town Planning Ordinance
Proposed Minor Relaxation of Plot Ratio and Building Height Restrictions
for Permitted Information Technology and Telecommunications Industries (Data Processing Centre)
at 7-11 Wing Kin Road, Kwai Chung, New Territories
in DD 446, Kwai Chung Town Lot 145 and adjoining Government Land
at Wing Chong Street (Application No. A/KC/510)

Departmental Comments	Response to Comments
Comments from Planning Department dated 10.4.2025 General comments Data Centre 1. The Applicant should advise which tier of data centre is intended to redevelop at the captioned site.	A Tier 3 data centre is proposed at the application site.
2. The applicant should advise whether they have liaised with CLP on data centre facilities and/or taking account of their requirements/ guidelines/recommendations etc. Besides, the Applicant should advise which design measures were proposed to cater for data centre design requirements, which may be recommended by power supply and telecommunication services providers, if the design cannot meet Sustainable Building Design Guidelines (SBDG).	The proposed development has been developed in consultation with CLP, and the layouts fully consider their requirements.

3. PS Table 3.3: Noted there is no setback at Wing Chong Street at G/F to 5/F. The applicant should clarify whether such design is to cater for any design requirements of the proposed data centre as required under Building (Planning) Regulation (B(P)R) or CLP, etc.	The scheme now provides a setback at Wing Chong Street to comply with the prerequisites under PNAP APP-151 at G/F and 1/F.
4. PS Section A-A and paragraph 3.1.9: the applicant should elaborate on the proposed design of the location of the 132 kV Switchgear, cable gallery, protection/control room, 132/11kv transformer bay on G/F to 3/F in terms whether such design proposal have taken into account the guidelines or requirements from power supply and telecommunication network providers.	The proposals have been developed in consultation with CLP and the layouts have fully taken into consideration their requirements.
Figures 3.1O and 3.1P (detail comments marked in attached files) 5. PS paragraph 3.1.7 – With reference to Figures 3.1O and 3.1P Isometric Drawings A and B, please supplement the width of the building setback (i.e. 6.53m) from 6/F and above facing Wing Chong Street. Detail comments marked in attached file.	Noted. Noted and revised accordingly.
6. PS Drawing No. A-04, Figures 3.1O and 3.1P – Thus, more annotation regarding provision/intention of design features should be indicated in Figures 3.1O and 3.1P (see also attached). It is noted that in addition to 3.7m full height setback facing Wing Kin Road, the Applicant also proposed maximum	Noted, the additional 4.3m setback accommodates the two underground fuel tanks. We have added a note that the setback proposed is for improvement of air ventilation, visual, and streetscape.

'4.3m' setback taking into account of underground fuel tank facilities, please indicate this information clearly in the Figure 3.1O. Also, the Applicant should advise the setback proposed is for improvement of air ventilation, visual and streetscape.	
7. PS Figures 3.1O and 3.1P and Section A-A – features should be clearly marked or annotated. The applicant should justify the location of the proposed vertical greenery is only available to the frontage at Wing Chong Street but not to the frontage at the development at Wing Kin Road from the perspective of the design requirements of the proposed data centre.	Vertical greening is added to the building frontage at Wing Kin Road. Relevant Isometric figures and Section AA have been revised accordingly.
Building Height (BH) 8. The Applicant should advise whether the proposed building height (BH) is to cater for proposed plot ratio (PR), and take into account of SBDG, setback set out under the Kwai Chung Outline Development Plan (ODP) No. D/KC/D, data centre design requirements as per CLP's settings and layout etc.	The setback requirement per the Kwai Chung Outline Development Plan has reduced the site coverage of the lower floors of the podium by about 84.4m^2 or 8.76%. PNAP APP-132 has also been adopted for increased site coverage at lower floors. Together with CLP's requirements and data hall operation requirements, such as A/C, the proposed overall height is necessary to cater for such requirements.
9. The Applicant to confirm the current design as to provide vehicle parking spaces, some M&E and fuel tanks at basement levels is the approach to minimize the BH.	Vehicle parking spaces, M&E facilities, and fuel tanks are proposed at the basement level to minimise the building height.
10. PS Table 3.3 'Floor Height': the applicant should clarify whether there are data centre	CLP requirements for the 132/11kV transformer bays and switchgear necessitate an increased floor-to-floor height of 11m on G/F and 6m on 1-

requirements in terms of floor height (i.e. 11m for G/F, 1-3/F and 5.5m for 4-18/F in the proposal).	3/F. The data hall operation requirements, such as A/C and structure for long span beam depths, also increase the floor heights to 5.5m on 4-16/F. A data centre requires a typical floor height of 5.5m. We also wish to add that TPB has approved similar data centre applications, such as A/KC/466, A/KC/473, and A/KC/491, on 29/5/2000, 11/6/2021, and 26/8/2022, respectively.
Sustainable Building Design Guidelines (SBDG) 11. The Applicant should advise which proposed design feature is in compliance with SBDG and which proposed design feature is not. Besides, non-compliance with SBDG may affect Gross Floor Area (GFA) concession under General Building Plan (GBP) submission. Applicant to advise whether their proposal have already taken account of GFA concession issue.	No additional GFA concessions are proposed for the development.
Canopies 12. Planning Statement (PS) paragraph 3.1.10: the applicant should clarify providing a full-length canopy along the Wing Kin Road frontage is not allowable according to which particular fire safety guidelines or requirements, and the applicant should elaborate if there is other or any difficulty to provide in designing the canopy.	After further clarification with FSD, the canopy along Wing Kin Road has been revised to be fully extended to cover the entire frontage.
13. PS paragraph 3.1.10 – Please advise the widths of the full-length canopy along the building frontage facing Wing Chong Street and the canopy along the building frontage facing Wing Kin Road, if any.	Noted. The depth of the full-length canopy facing Wing Kin Road is added to the 1/F plan accordingly.

Please also annotate on Section A-A and Isometric Drawings A and B for the sake of clarity.	
14. Also, the applicant should justify the proposed height of 11m for the canopy at the Wing Kin Road frontage in terms of its functionality of weather protection to pedestrian. Applicant to clarify the height of the proposed canopy facing Wing Chong Street as well.	Noted, the canopy at Wing Kin Road has been lowered to provide a clear headroom of 6m. The canopy along Wing Chong Street is omitted since under B(P)R, a canopy shall be 1/10 of the street width, which in this case is 900mm. This provides minimal weather protection for pedestrians.
Setback 15. PS Table 3.3: According to paragraph 3.1.7 and Isometric Drawing B, a 6.53m building setback from 6/F and above facing Wing Chong Street is proposed. Please clarify whether such feature are proposed under SBDG/ B(P)R/ or mainly voluntary.	The setback is to meet the permitted site coverage under PNAP-132.
Visual Impact Assessment (VIA) 16. Paragraph 3.6.1 – Please update the conclusion of Visual Impact Assessment (VIA) taking into account our comments on VIA below.	The conclusion of the VIA has been updated accordingly.
Visual Impact Assessment (VIA) 17. Paragraph 3.2 – According to the Town Planning Board Guidelines on Submission of VIA for Planning Application to the Town Planning Board (TPB PG-No. 41), the extent of the assessment area for VIA should equal to approximately three times of the height of the proposed development. As the absolute BH of the proposed development	The visual envelope for this VIA has been revised to about 303m.

is about 101m, the visual envelope for this VIA should be about 303m (i.e. 101m x 3).	
18. Paragraph 3.3 – Please supplement Kwai Chung Park to the south of the Site.	Kwai Chung Park is added to the text of the VIA.
19. Paragraph 4.1 - With reference to paras. 3.1.5 to 3.1.7 of PS, two setbacks, including a 3.7m full-height setback from the site boundary abutting Wing Kin Road and a 6.53m setback from 6/F and above along Wing Chong Street, are incorporated in the proposed development. Please review/rectify.	The 3.7m full-height setback fronting Wing Kin Road and buildings set back from 6/F and above facing Wing Chong Street are added to the VIA.
20. Paragraph 5.1 – It is noted that the VPs at Wing Kei Road Trucks Car Park and Kwai Chung Park under the previously approved Application No. A/KC/496 are not included in the subject VIA as they are currently closed for public access due to the construction works as claimed by the applicant. In this connection, please explore a VP at Wing Kei Road 5-A-Side Soccer Pitch to the northwest of the Site and a VP near the temporary cricket ground in Kwai Chung Park to the south of the Site.	The VIA report has assessed and incorporated the visual impact of the VPs at the former Wing Kei Road Trucks Car Park and Kwai Chung Park.
21. Paragraph 6.3.1 (4th line) and paragraph 6.3.2 (6th line) – Please revise to read as "Kerry Tc Warehouse 2".	Text amended.
22. Paragraph 6.3.2 – Please review whether the BHs of Kerry Tc Warehouse 2, Global Trade Centre and Mei Kei Industrial Building should be 108.58mPD, 93.4mPD and 91.58mPD respectively.	The building heights of Kerry Tc Warehouse 2, Global Trade Centre, and Mei Kei Industrial Building have been revised to 108.58 mPD, 93.4 mPD, and 91.58 mPD, respectively.

23. Paragraph 6.4.2 – Judging from the photomontage, please supplement the proposed development would block the open sky view and reduce visual permeability. As such, it would be more tenable to grade the visual impact to VP4 as "moderately adverse" rather than "slightly adverse".	As shown in the photomontage of VP4, the proposed development will be blocked by Wing Loi Industrial Building. Nevertheless, the proposed development will block the gap of an open sky view. Hence, the visual impact from this VP is revised to moderately adverse instead of slightly adverse.
24. Paragraph 6.6.1 – The distance between VP6 and the proposed development should be about 720m instead of 650m.	Text amended.
25. Paragraph 6.6.1 – (a) The distance between VP6 and the proposed development should be about 720m instead of 650m. (b) Please supplement VP6 is dominated by the football ground and running track with open sky view.	Text amended
26. Paragraph 6.6.2 – Please consider to delete "existing clusters of industrial buildings …. Yee Lim Industrial Building (78.8mPD) and" in the 2nd and 3rd lines.	The sentence "existing clusters of industrial buildings….. Yee Lim Industrial Building (78.8mPD) and" has been deleted from the text.
27. Figure 1 – Judging from the photomontages, the photo-taking point of VP3 should be located to the further northwest and the photo-taking point of VP6 should be located to the further northeast.	The location of VP3 and VP6 has been adjusted.
28. Figure 4 (VP3)– Please revise to read as "Wonderland Villas".	Figure amended.
29. Figure 5 (VP4)–	Figure amended.

(a) The BH of the proposed development should be 109.55mPD instead of 115.2mPD. (b) For the sake of clarity, please annotate Wing Loi Industrial Building.	
30. Figure 7 (VP6) – (a) It seems that the proposed development should appear to be shorter. (b) The BH of Yee Lim Industrial Building should be 78/76mPD instead of 63.4mPD.	Figure amended. The BH of Yee Lim Industrial Building has been revised to 76-78 mPD.
31. Figure 8 (VP7) – It seems that the proposed development should appear to be shorter which would be completely blocked by Tsuen Wan Chinese Permanent Cemetery. As such, it would be more tenable to grade the visual impact to VP7 as "negligible" rather than "slight". Please update the visual analysis in para. 6.7.2 accordingly.	Figure amended and rating revised to "negligible".
32. Paragraph 7.1 – Please update the conclusion of VIA taking into our comments above, as appropriate.	The conclusion of the VIA has been revised. The revised VIA report is enclosed in **Attachment 2**.
Comments from Architectural Services Department (ArchsD): 33. Based on the information provided, it is noted that the proposed development mainly consists of one building block with a plot ratio (PR) of 11.4 (a 20% increase from the maximum PR of 9.5 allowed under the current approved Kwai Chung Outline Zoning Plan No. S/KC/32 (the OZP)) and a BH at 109.55mPD (a 4.33% increase from the BH restriction of 105mPD as stipulated on the OZP. It	 Noted.

is also noted that the proposed PR and BH is the same and reduces respectively as compared with a previously approved planning application i.e. A/KC/496. From the photomontages provided, it appears that the proposal would have little visual impact to the surrounding environment. We have no comment from architectural and visual impact point of view, subject to PlanD's views above.	
Comments from Highways Department (HyD): 34. Figure 3.1O and 3.1P – please specify the dimension of canopy projecting over the public footpath at Wing Chong Street and in close proximity to the Pink Hatched Blue Area at Wing Kin Road. The Applicant should observe the requirements of canopy under CAP. 123F Building (Planning) Regulation and submit the details of the canopy to Buildings Department for vetting.	Noted and revised accordingly.
35. Paragraph 3.1.5 PS- The 3.7m setback from existing lot boundary is not required by HyD, please revise.	Noted. PS has been revised, and the previous reference about HyD has been deleted from the text.
36. Should there be any HyD's inventory such as existing pavement, exclusive road drain etc. affected due to the proposed development, the relevant details shall be submitted for HyD's comment and the roadworks carried out by the Applicant shall be in accordance with HyD's standard.	Noted. HyD's comments will be sought during the detailed design stage.
Comments from Water Supplies Department (WSD):	

37. As a data centre will usually involve high water demand, the Applicant is advised to prepare a Water Supply Impact Assessment (WSIA) to assess water demand and propose the necessary improvement works on the existing fresh water distribution system so as to secure water supply for the proposed development.	A Water Supply Impact Assessment has been prepared and is attached in **Attachment 3**.
38. Should you have any enquiries on the comments from WSD, please contact Mr. Eddie HE of WSD at 2152 5746 or the undersigned regarding the application.	Noted.
Comments from Environmental Protection Department (EPD): General	
39. Since the application site falls within the consultation zone of the Gin Drinkers Bay Landfill, Landfill Gas Hazard Assessment shall be conducted in accordance with Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97).	A landfill gas hazard assessment will be conducted during the detailed design stage.
40. It has been noted that an existing industrial building will be redeveloped into a new data centre. However, the information provided lacks details about the industries and operations that have taken place on the ground floor of the subject site over time. Please conduct a land contamination assessment to address any potential land contamination at the subject site.	A land contamination assessment will be conducted during the detailed design stage.
Air Quality Impact Assessment (Appendix II)	

41. Section 2.3 – Please advise when the chimney survey conducted, if any. Please be reminded that it should be the responsibility of the applicant and their consultant to ensure the validity of the chimney data by their own site survey(s). Should the information of industrial chimneys be subsequently found to be incorrect, the assessment results as presented would be invalidated.	An on-site survey and desktop study were conducted in April 2022 and updated in December 2024 to identify the industrial chimneys in the area. Section 2.3.1 has been revised accordingly (**see Attachment 4**).
42. Section 6 – A. Noted from Drawing No. A-03 under Appendix 2-1 that carpark is proposed at B1/F and G/F. Please be advised to follow "ProPECC PN 2/96 - Control of Air Pollution in Car Park".	Sections 3.9.1 & 6.5 have been revised accordingly.
B. Please advise any utilization of fossil fuels during normal operation and any emergency generators for backup purpose.	In the current design, backup generators powered by diesel fuel will be provided to address potential electricity outages or emergencies. These backup generators will not operate during normal conditions. Aside from the backup generators, no diesel or other fossil fuels will be utilised in the project. Section 6.4 has been supplemented accordingly.
43. Section 6.2.2 – Please provide relevant information of the Annual Traffic Census 2023 to support that Wing Kin Road and Wing Chong Road are classified as Local Distributors.	The correspondence with the Transport Department regarding road classification is supplemented in Appendix 6-1. Section 6.2.2 has been revised accordingly.
44. Section 6.2.3 Bullet 4 – Please revise the sentence as "…… the buffer region of the chimney at ~~Kwai Chung Crematorium~~ Wing Loi Industrial Building (CH01b)".	Section 6.2.4 Bullet has been revised accordingly.
45. Figure 6-3a to 6-3g – To facilitate checking, please supplement (i) the height range of the proposed fresh air intake and (ii) the chimney height (in terms of mPD). Based on the information in	The tables for the list of chimneys (Table 6-1) and Floor Levels (Table 6-2) have been supplemented for better presentation.

	Drawing No. Section A-A under Appendix 2-1 and Figure 2-3, please review the following buffer regions in corresponding figure.	Floor levels have been shown in the captions of Figures 6-3a to 6-3g. In addition, more information about the buffer regions has been included.
A.	Figure 6-3c: CH02 of 52mPD against 2/F Ceiling of 32mPD Since the vertical difference between CH02 and the expected intake will be 20mPD, please review if the Buffer Region of "20m-30m below chimney exhaust" is missing.	Since the Buffer Region of "20m-30m below chimney exhaust" for CH02 is far from the proposed development, it is not included in Figure 6-3c. Please refer to Figure 6-2b for the buffer region for 32mPD and below.
B.	Figure 6-3d: CH01b of 85mPD against 3/F Ceiling of 38mPD Since the vertical difference between CH01b and the expected intake will be 47mPD, please review if the Buffer Region of "> 40m below chimney exhaust" should be adopted instead.	The buffer region of CH01b shall be limited to 20m for 3/F. Therefore, its buffer region will be out of range and not visible in Figure 6-3d. Figure 6-3d has been revised accordingly.
C.	Figure 6-3g: CH03a of 99mPD against 7/F Ceiling of 60mPD Since the vertical difference between the CH03a and the expected intake will be 39mPD, please review if the Buffer Region of "30m-40m below chimney exhaust" should be adopted instead.	The fresh air intake on 7/F shall be limited to 59mPD. Section 6.3.2 Bullet 3 and Figure 6-3g have been revised accordingly.
Sewerage Impact Assessment (Appendix IV)		
46.	Section 2.1.2 – Please supplement the application no. and approval year of the previous planning application for industrial use (warehouse).	The application number and approval year are indicated in Section 2.1.2 of SIA (v1.0) (see **Attachment 5**).
47.	Section 3.2 – Please advise if there is discharge of bleed-off water from cooling tower into the sewerage system. If yes, such discharge rate should be included.	Bleed-off water from the proposed data centre's water-cooling system will be discharged to the public sewerage system. The discharge of water from the water-cooling system has been included in the calculation. Sections 3.2.1 to 3.2.3, 4.1.2, Tables 3-1, 3-4 & 3-5, and Appendix 3-2 have been updated accordingly.

48. Section 3.2.2 – The applicant should have information about the number of staffs to be hired for the proposed data centre, estimation of employee population using GFA should be avoided.	The applicant planned to hire 20-25 staff for the proposed data centre. Therefore, 25 staff members were adopted to calculate the sewage discharge from the proposed data centre for conservatism. Section 3.2.2, Tables 3-1, 3-4 & 3-5, and Appendix 3-2 have been updated accordingly.
49. Section 3.2.3 – Please review the unit flow factor for the employees of the proposed development, and revise the sewage estimate as appropriate.	The Unit Flow Factor of 0.28m^3/day for J11 (Community, Social & Personal Services) in Table T-2 of GEFS has been adopted. Section 3.2.2, Tables 3-1, 3-4 & 3-5, and Appendix 3-2 have been updated accordingly.
50. Please be reminded that the implementation of local sewer connection/upgrading/diversion works shall meet the satisfaction of Drainage Services Department.	Noted.
<u>Comments from Planning Department dated 11.4.2025</u> General comments 1. According to the aerial photo of 2023, the site is situated in an area of industrial urban landscape character predominated by a mix of commercial, industrial and industrial-office development. The site is currently occupied by an existing industrial building without any landscape resources. The proposed use is not incompatible with the surrounding environment. Hence, we have no objection in principle to the application from landscape planning perspective.	Noted.
2. Comments on the submission from landscape planning perspective:	

(a) Noting green wall was proposed at the facades facing Wing Kin Road and Wing Ching Street (Dwg. No. AR10 and AR11), the Applicant is advised to indicate the proposed green wall on section/elevation drawing(s) for reference.	Noted and revised accordingly.
(b) It is noted that the planters are proposed on several floors. The Applicant is advised to provide typical planter details to demonstrate sufficient soil provisions for the proposed planters on G/F, 1/F, 2/F and 3/F, in particular, minimum clear soil depths of 1200mm, 600mm and 300mm should be provided for trees, shrubs and groundcover planting respectively for their sustainable growth.	Noted and revised accordingly.
(c) The Applicant is recommended to further explore the planting opportunity of the Wing Kin Road to enhance the landscape quality and provide more greenery particularly at pedestrian level.	Noted and revised accordingly.
Advisory comments 3. The Applicant is reminded that approval of the Section 16 application under Town Planning Ordinance does not imply approval of the site coverage of greenery requirements under APP PNAP-152 and/or under the lease. The site coverage of greenery calculation should be submitted separately to Buildings Department for approval.	 Noted.
<u>Comments from Transport Department (TD):</u> Comments in the TIA from traffic and transport point of view:	

<table>
<tr>
<td>4. Please review if more parking space, especially motorcycle, could be added.</td>
<td>It should be noted that internal transport facilities for the Proposed Data Centre are provided in accordance to the Clauses 22(a)(i)(I), 22(c)(i)(I), 22(e)(i)(I), 22(e)(ii)(I) and 22(e)(iii)(I) of the draft Provisional Basic Terms Offer.</td>
</tr>
<tr>
<td>5. Section 2 refers. Please also provide the link capacity assessment for the existing condition.</td>
<td>Existing link capacity assessment is conducted and shown in Table 2.8 of the revised Traffic Impact Assessment (the “revised TIA”) (see Attachment 6).</td>
</tr>
<tr>
<td>6. Section 2.9 refers. Please include the dates which the trip generation survey were carried out.</td>
<td>Table 2.2 of the revised TIA contains the trip generation survey dates of the 3 surveyed data centres.</td>
</tr>
<tr>
<td>7. Section 4.12 refers. Table 4.6 does not match with Figure 4.3 and 4.3. Please review and clarify.
(a) J2 Kwai Hei Street / Wing Kei Road: W-CB
(b) J3 Kwai Hei Street / Wing Chong Street: W-BA and W-BC
(c) J4 Kwai Hei Street / Wing Kin Road: W-CB
(d) J6 Shing Yiu Street / Wing Kei Road: W-CB</td>
<td>We refer to Section 2.4.1.1 in Chapter 2.4 of Volume 2 of Transport Planning & Transport Planning & Design Manual (“TPDM”), where the 2-way design flow for a local road is 800 veh/hour. In order to conduct a link capacity assessment, the traffic flow is converted from pcu/hour (as shown in Figures 4.2 and 4.3) to veh/hour. For ease of reference, the traffic flows in the pcu/hr for Wing Kei Road, Wing Kin Road and Kwai Hei Street are presented in Table R1.

TABLE R1 TRAFFIC FLOWS IN PCU / HOUR
<table>
<tr><th rowspan="2">Ref</th><th rowspan="2">Links</th><th rowspan="2">Scenario (Without / With Proposed Data Centre)</th><th colspan="2">Traffic Flow (pcu/hour)</th></tr>
<tr><th>AM Peak [a]</th><th>PM Peak [b]</th></tr>
<tr><td rowspan="2">L1</td><td rowspan="2">Wing Kei Road</td><td>Without</td><td>455</td><td>283</td></tr>
<tr><td>With</td><td>459</td><td>288</td></tr>
<tr><td rowspan="2">L2</td><td rowspan="2">Wing Kin Road</td><td>Without</td><td>295</td><td>391</td></tr>
<tr><td>With</td><td>301</td><td>395</td></tr>
<tr><td rowspan="2">L3</td><td rowspan="2">Kwai Hei Street</td><td>Without</td><td>556</td><td>474</td></tr>
<tr><td>With</td><td>560</td><td>478</td></tr>
</table>
</td>
</tr>
</table>

<table>
<tr><td></td><td>Based on the survey results, the pcu factors are found to be 1.36 and 1.40 in the AM and PM peak hours respectively. The converted traffic flows in <u>veh/hour</u> are found in Table R2 and these are adopted for link capacity assessment which is presented in Table 4.6 found in the revised TIA.

TABLE R2 TRAFFIC FLOWS IN VEH / HOUR
<table>
<tr><th rowspan="2">Ref</th><th rowspan="2">Links</th><th rowspan="2">Scenario (Without / With Proposed Data Centre)</th><th colspan="2">Traffic Flow (veh/hour)</th></tr>
<tr><th>AM Peak [c](1)</th><th>PM Peak [d] (2)</th></tr>
<tr><td rowspan="2">L1</td><td rowspan="2">Wing Kei Road</td><td>Without</td><td>335</td><td>203</td></tr>
<tr><td>With</td><td>338</td><td>206</td></tr>
<tr><td rowspan="2">L2</td><td rowspan="2">Wing Kin Road</td><td>Without</td><td>217</td><td>280</td></tr>
<tr><td>With</td><td>222</td><td>283</td></tr>
<tr><td rowspan="2">L3</td><td rowspan="2">Kwai Hei Street</td><td>Without</td><td>409</td><td>339</td></tr>
<tr><td>With</td><td>412</td><td>342</td></tr>
</table>
Note: (1) [c] = [a] in Table R1 / 1.36 (2) [d] = [b] in Table R1 / 1.40</td></tr>
<tr><td>8. Please demonstrate that V-rCB is 170m at J4 Kwai Hei Street / Wing Kin Road.</td><td>We refer to the calculation in Appendix 1 of the revised TIA. The visibility V-rCB at J4 Kwai Hei Street / Wing Kin Road is 110m, as indicated in Figure R1 (see Attachment 7).</td></tr>
<tr><td>9. Lane A4 at J5 Wing Kei Road / Kwai Fuk Road is relatively short. Please reduce saturation flow of A4 to reflect the short lane effect.</td><td>The updated calculation is found in Appendix 1 of the revised TIA.</td></tr>
<tr><td>10. For Table 2.5, only KMB are mentioned in the table. Please suitably revise the “note” underneath the table.</td><td>Noted. Table 2.5 in the revised TIA is updated.</td></tr>
<tr><td><u>Comments from Drainage Services Department (DSD): dated 14.4.2025</u>

Please find below comments on the SIA:</td><td></td></tr>
</table>

2. Appendix 3-1: Please provide supporting information on the area of different categories.	As mentioned in Section 3.3.2, the GFA of the catchment is calculated based on the land lot area and the maximum allowable plot ratio of 9.5, except for the specified catchment. The area of the land lot is estimated in the GeoInfo Map. Appendix 3-1 has been revised with a supplementary note to demonstrate the estimation.
3. Section 3.2 – Please advise if there is any discharge from cooling system into the public drainage system.	Bleed-off water from the proposed data centre's water-cooling system will be discharged to the public sewerage system. The discharge of water from the water-cooling system has been included in the calculation. Sections 3.2.1 to 3.2.3, 4.1.2, Tables 3-1, 3-4 & 3-5, and Appendix 3-2 have been updated accordingly.
<u>Comments from Buildings Department (BD) dated 15.4.2025</u> Please find below comments under the Buildings Ordinance (BO) based on the information provided: 1. BD has no objection to relax the plot ratio from 9.5 to 11.4 and the height restriction from 105mPD to 109.55mPD noting that the development parameter do not exceeding the limitation under the First Schedule of Building (Planning) Regulations (B(P)R);	Noted.
2. Regarding the relaxation of site coverage under First Schedule of B(P)R, i.e. 82%, which is only permissible in non-domestic building for the building height not more than 40m from street level on the basis of complying requirements as stipulated in PNAP APP-132, modification should also be applied with specified form and justification during building submission stage for BD further consideration;	Noted.

3. Regarding the site area, the proof of site parameter should be submitted during building plan submission stage for BD further consideration and complied with PNAP ADM-21;	Noted.
4. There is no definition for "pre-1987 industrial building" under BO. Therefore, BD has no comment on it. It is noted that the Occupation Permit (no. : NT105/72) for storage area and dangerous goods storage was issued for the existing building on 6.6.1972;	Noted.
5. Prerequisites under PNAP APP-151 and sustainable building design requirements (building separation, building set back and site coverage of greenery) under PNAP APP-152 would be applicable to the building plan submission if gross floor area (GFA) concessions for non-mandatory areas/greenery features are to be applied or relaxation of site coverage in accordance with PNAP APP-132. Attention is drawn to the applicant that the proposed building shall be set back from Wing Chong Street in compliance with the provision in paragraph 7 of PNAP APP-152. Given that the site area does not exceed 20,000 m^2 and the continuous projected façade length is less than 60 m, and considering that the site area is also less than 1,000 m^2, it follows that building separation and the provision of greenery are generally not required in accordance with PNAP APP-152;	Noted, and the setback is provided accordingly.
6. Regarding the canopy project over street i.e. Wing Cheong Street, it was subjected to the compliance	Noted. The canopy along Wing Chong Street has been omitted.

with the requirements of regulation 10 of the B(P)R. Attention is drawn to the applicant that the site coverage and plot ratio for the canopy may be excluded if the criteria set in paragraph 3(k) of PNAP APP-19 was met;	
7. Emergency vehicular access shall be provided for all the buildings to be erected on the site in accordance with the requirement under the Regulation 41D of the B(P)R;	Noted. EVA shall be provided accordingly. Details shall be submitted during the GBP stage.
8. For UBW erected on leased land, enforcement action may be taken by the BD to effect removal in accordance with the prevailing enforcement policy against UBW as and when necessary. The granting of any planning approval should not be construed as an acceptance of any existing building works or UBW on the application site under the BO;	Noted.
9. Detailed checking under the BO will be carried out at building plan submission stage.	Noted.
<u>Comments from Fire Services Department (FSD) on 2.5.2025</u> FSD has adverse comments; details are as follows: 1. The underground fuel tank should be fully ventilated directly to the open air.	Noted.
2. Based on the information provided by the applicant, FSD raises no objection to the two proposed 30,000L underground fuel tanks on B1/F, and the fuel tank room on R/F from a Dangerous Goods (DG) licensing perspective. However, the	The fuel tank room has been omitted accordingly.

proposed fuel tank and pump room No.1 and No. 2 on G/F with fuel tank and fuel pump sited in the same room are considered unacceptable.	
3. The applicant should read the FSD Publication "A Guide to Application for Dangerous Goods Licence and Approval" before submitting a DG application to FSD.	Noted.

Attachment 1
Planning Statement with figures

Section 16 Planning Application

for Proposed Minor Relaxation of Plot Ratio and Building Height for Information Technology and Telecommunications Industries (Data Centre) Use at 7-11 Wing Kin Road and adjoining Government Land at Wing Chong Street, Kwai Chung, New Territories

PLANNING STATEMENT

Prepared by

KJL Limited

in association with

Studio Raymond Chau Architecture Limited

CKM Asia Limited

Cinotech Consultants Limited

Larry H.C. Tam & Associates Limited

for

OXO YW Limited

June 2025

EXECUTIVE SUMMARY

BACKGROUND

This application is submitted on behalf of OXO YW Limited, the registered owner of 7-11 Wing Kin Road, Kwai Chung, to seek the Town Planning Board's permission for the proposed minor relaxation of plot ratio restriction from 9.5 to 11.4 and building height restriction from 105mPD to 109.55mPD for permitted information technology and telecommunications industries (data centre) use at 7-11 Wing Kin Road and adjoining government land at Wing Chong Street, Kwai Chung, New Territories (i.e. the application site).

The application site falls within an area zoned "Industrial" ("I") on the Kwai Chung Outline Zoning Plan ("OZP") no. S/KC/32. According to the Notes for the "I" zone, the proposed information technology and telecommunication industries (data centre) at the application site is under Column 1 use in this "I" zone, which is always permitted. However, the proposed new data centre's proposed plot ratio of 11.4 exceeds the plot ratio restriction under the OZP of 9.5. In addition, the proposed building height of the proposed scheme at 109.55mPD exceeds the height restriction under the OZP of 105mPD. Therefore, planning permission from the Town Planning Board ("the Board") is required.

The application aligns with the SAR Government's intention under the IB Revitalisation Scheme that "IBs located in 'I' zone could be redeveloped into new premises for conventional 'industrial/godown uses' and/or 'modern industrial uses". Further, the proposed relaxation of the maximum non-domestic permissible PR by up to 20% could, in effect, allow owners to recover any GFA loss in meeting present-day building standards, thereby incentivising industrial building redevelopment.

DESCRIPTION OF PROPOSED DEVELOPMENT

The proposed development involves redeveloping an existing industrial building into a new 19-storey building for a permitted data centre. The major development parameters for the proposed development are shown in the table as follows:

Site Area	About 964.2m^2 (including additional land of 35.169m^2 granted by the District Land Conference on 6.10.2021)
Plot Ratio	No more than 11.4
Total Gross Floor Area	About 10,991.88m^2 (non-domestic)
Site Coverage	Not more than 82% (Site coverage permitted under PNAP-132)
No. of Storeys	19 storeys (including 2 levels of basement)
Building Height	109.55mPD (at main roof level)
Proposed Use	Information Technology and Telecommunication Industries (Data Centre)

Parking Spaces	• Private cars: 11 nos. (including one no. accessible) • Motorcycle: 2 nos.
Goods Vehicle Loading / Unloading Bays	• Light Goods Vehicle: 3 nos. • Heavy Goods Vehicle: 1 nos.
Greenery	About 195m^2 • G/F: 2m^2 • 1/F: 11m^2 • 2/F: 4m^2 • 3/F: 9m^2 • Vertical: 169m^2

PLANNING JUSTIFICATIONS

The proposed development at the application site is appropriate in planning terms because of the following planning justifications:

- The proposed minor relaxation of plot ratio restriction by 20% aligns with the 2018 Policy Address to incentivise the redevelopment of industrial buildings constructed before 1987.
- The proposed data centre aligns with the planning intention of the "I" zone.
- The proposed development is compatible with the surrounding land use.
- The proposed scheme fully utilises the development potential of the application site with modern-day building standards.
- The proposed minor relaxation of plot ratio and building height will not adversely affect the surrounding areas visually.
- The proposed building setbacks at Wing Chong Street and Wing Kin Road will provide a better streetscape, walking environment and visual permeability.
- The proposed greening, including vertical greening, will enhance the streetscape and improve visual amenity.
- The proposed scheme will be seen as a catalyst and precedent in the gradual transformation of this industrial area.
- The proposed development is considered feasible from a traffic point of view.
- The proposed development would have no adverse environmental impact on air, noise, water supply or the sewerage system.

CONCLUSION

Given the abovementioned justifications, the Applicant respectfully requests that the Town Planning Board approve the application.

行政摘要

引言

是次第 16 條規劃許可申請人安秀耀榮有限公司，為葵涌永建路 7-11 號的註冊擁有人。 此規劃報告旨在支持是次根據《城市規劃條例》第 16 條提出的規劃許可申請，擬議申請在葵涌永建路 7-11 號以及位於永創街的毗鄰政府土地（即申請地點）略為放寬地積比率和建築高度限制，以作准許的資訊科技及電訊業用途。

根據葵涌分區計劃大綱圖（圖則編號為 S/KC/32），該申請地點屬於「工業」地帶。根據「工業」地帶的註釋，擬議發展的「資 訊 科 技 及 電 訊 業 (數據中心)」用途為經常允許的第 1 欄用途。申請人擬議將地積比率限制略為放寬至 11.4 以及建築高度略為放寬至 109.55mPD 超過了葵涌分區計劃大綱草圖中的地積比率和建築高度限制，因此，現按《城市規劃條例》第 16 條向城市規劃委員會提出申請。

是次申請符合特區政府在活化工廈計劃下的意向，即位於「工業」地帶的工廈可重新發展為新處所，作傳統的「工業/倉庫用途」及/或「現代工業用途」。此外，放寬最高核准非住用地積比率，上限為 20%，實際上可以讓業主重獲符合當今建築標準的建築面積損失，從而激勵工廈的重建。

擬議項目發展重點

擬議發展計劃涉及將現有工業樓宇重建為 19 層工業樓宇，以用於「貨倉(危險品倉庫除外)」用途。擬議發展方案的主要發展參數如下表所示:

地盤面積	約 964.2 平方米 (包括附加土地約 35.169 平方米)
地積比率	不多於 11.4
總樓面面積	約 10,991.88 平方米 (非住用)
上蓋面積	不多於 82% (PNAP-132 允許的覆蓋率)
層數	19 層 (包括兩層地庫)
建築物高度	109.55mPD
擬議用途	資 訊 科 技 及 電 訊 業 (數據中心)
停車位數目	• 私家車車位: 11 (包括 1 個殘疾人士泊車位) • 電單車車位: 2

上落客貨車位數目	• 輕型貨車上落客貨車位：3 • 重型貨車上落客貨車位：1
綠化	約 195平方米 • G/F: 2 平方米 • 1/F: 11 平方米 • 2/F: 4 平方米 • 3/F: 9 平方米 • 垂直綠化: 169 平方米

發展理據

擬議發展計劃在規劃層面上理應視為恰當，以下是是項申請的規劃理據：

- 擬議略為放寬 20%地積比率限制符合政府《2018 年施政報告》的意向，以鼓勵重建1987年以前建造的工業樓宇。
- 擬議發展的「數據中心」用途完全符合「工業」地帶的規劃意向。
- 擬議發展與周圍的土地使用是兼容的。
- 更好地利用申請地點土地的開發潛力並符合最新的建築條例的建築設計。
- 擬議略為放寬地積比率和建築物高度並不會在視覺上影響周邊地區。
- 擬議將永創街和永建路的樓宇後移，提供更好的街景和步行環境。
- 擬議的綠化包括垂直綠化在內將增強街景和改善視覺舒適度。
- 擬議計劃將被視為該工業區逐步轉型的催化劑和先例。
- 擬議發展從交通角度考慮是可行的。
- 擬議發展不會對空氣,噪音, 供水和污水收集系統產生負面影響。

總結

綜觀上述理由，申請人謹請城規會批准是次申請。

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1. Introduction

1.1. Background

1.1.1 This application is submitted on behalf of OXO YW Limited, the registered owner of 7-11 Wing Kin Road, Kwai Chung, to seek the Town Planning Board's permission for the proposed minor relaxation of plot ratio restriction from 9.5 to 11.4 and building height restriction from 105mPD to 109.55mPD for permitted data centre use at 7-11 Wing Kin Road, Kwai Chung, New Territories (i.e., the application site).

1.1.2 The application site falls within an area zoned "Industrial" ("I") on the Kwai Chung Outline Zoning Plan ("OZP") no. S/KC/32 (**Figure 1.1** refers). According to the Notes for the "I" zone, the proposed use at the application site for the data centre is Column 1 use in this "I" zone, which is always permitted. However, the proposed plot ratio of 11.4 exceeds the plot ratio restriction under the OZP of 9.5, and the proposed building height of 109.55mPD exceeds the height restriction by 4.55m (about 4.3%) under the OZP of 105mPD. Therefore, planning permission from the Town Planning Board ("the Board") is required.

1.1.3 The gross area of the application site is about 964.2m^2.

1.2 Purpose of this application

1.2.1 The Applicant wishes to state the purposes of this planning application as follows:

- To apply for a proposed minor relaxation of plot ratio and building height for permitted data centre use at the application site.
- To redevelop the existing 2-storey industrial building into a new 18-storey industrial building for permitted 'data centre' use.
- To align with the SAR Government's intention under the IB Revitalisation Scheme that "IBs located in 'I' zone could be redeveloped into new premises for conventional 'industrial/godown uses' and/or 'modern industrial uses. In particular after the Government has extended the application deadline to October 2024.
- To better utilise the application site's potential with modern-day and better safety standards by redeveloping the existing industrial building in Kwai Chung Town Lot 145 that was constructed before 1987 ("pre-1987 IB").
- To allow the Applicant (landowner) to recover the GFA loss in meeting present-day building standards through the proposed relaxation of the maximum non-domestic permissible PR by up to 20%, incentivising industrial building redevelopment.

2. Development Context

2.1. Site context

2.1.1. The application site is at No. 7-11 Wing Kin Road and adjoining government land at Wing Chong Street. The existing industrial building was constructed before 1987 ("pre-1987 IB").

2.1.2. The application site abuts Wing Kin Road and Wing Chong Street to the east and west, respectively. The application site can be accessed from Wing Kin Road and Wing Chong Street. (**Figures 2.1** refers)

2.2. Surrounding land use

2.2.1. The application site is surrounded by industrial and industrial/office buildings at Wing Kin Road, Wing Chong Street and Wing Kei Road, which are in active use. It is located southwest of the Kwai Chung industrial area and is accessible by public transport, such as the green minibuses along Wing Kei Road.

2.2.2. The Tsuen Wan Chinese Permanent Cemetery is west of the application site and across Wing Hau Road. Kwai Chung Park is located south of the application site across Kwai Hei Street.

2.3. Statutory planning requirements

2.3.1. The application site falls within an area zoned "Industrial" ("I") on the Kwai Chung Outline Zoning Plan (OZP) no. S/KC/32.

2.3.2. According to the Notes for the "I" zone, the proposed 'information technology and telecommunications industries (data centre)' at the application site is under Column 1 uses in this "I" zone, which is always permitted. However, firstly, the proposed plot ratio of 11.4 exceeds the plot ratio restriction under the OZP of 9.5. Secondly, the proposed building height of 109.5mPD exceeds the height restriction under the OZP of 105mPD. Therefore, planning permission from the Board is required.

2.3.3. The Notes of the OZP stated that the "I" zone is primarily for general industrial uses to ensure an adequate supply of industrial floor space to meet demand from production-oriented industries. Information technology and telecommunications industries, offices related to industrial use, and selected uses akin to industrial production that would not compromise building and fire safety are always permitted in this zone. The proposed 'information technology and telecommunications (data centre)' is under Column 1, which is always allowed. Thus, the proposed use aligns with the planning intention of the "I" zone.

2.3.4. The Board may consider a minor relaxation of plot ratio/building height on application under section 16 of the Ordinance based on the individual merits of the development or redevelopment proposal.

2.4 Planning history

2.4.1 There were previously approved planning applications (application no. A/KC/457 and A/KC/496) on the subject site. A/KC/457 was approved by the Board on 17.3.2020 with

conditions for proposed offensive trade (lard boiling factory) with conditions. A/KC/496 was approved by the Board on 14.7.2023 for proposed warehouse use (excluding Dangerous Goods Godown) with conditions. The Applicant has complied with conditions (a) and (c).

2.4.2 The Board has also approved similar industrial building redevelopment applications for minor relaxation of plot ratio and/or height relaxation for data centres in the Kwai Chung District. The similar approved data centre cases are summarised in Table 2.1 below.

Table 2.1: Similar approved data centre cases

Planning Application No.	Address	Proposed Uses	TPB Approval Date
A/KC/491	13-17 Wah Sing Street, Kwai Chung	Data Centre (relaxation of PR from 9.5 to 11.4)	26/8/2022
A/KC/488	11-19 Wing Yip Street, Kwai Chung	Data Centre (relaxation of PR from 9.5 to 10.19)	15/7/2022
A/KC/480	45-51 Tai Lin Pai Road, Kwai Chung	Data Centre (relaxation of PR from 9.5 to 11.4 and height from 120mPD to 129mPD)	24/12/2021
A/KC/473	2-10 Tai Yuen Street, Kwai Chung	Data Centre (relaxation of PR from 9.75 to 11.7)	11/6/2021
A/KC/466	2-16 Lam Tin Street, Kwai Chung	Data Centre (relaxation of PR from 9.5 to 11.4 and height from 130mPD to 146.5mPD)	29/5/2020

2.5 Land administrative matters

2.5.1 The application site is located in Kwai Chung Town Lot 145 and no. 7-11 Wing Kin Road, Kwai Chung, under proposed New Grant No. 4708 ('the New Grant') of 8.1.1970. The lease modification application is in progress, and the Lands Department issued the draft basic terms of the offer for the conditions of exchange served to the registered landowners on 24.11.2024. The Applicant has replied to the Lands Department to accept the draft basic terms of the offer on 4.12.2024. Once the new land grant is executed, the new grant site will be known as Kwai Chung Town Lot 534.

2.5.2 Under the existing Government lease, there is no restriction on building height or GFA for redevelopment. The building was completed in 1972 with a GFA of about 941m^2. The previous industrial activity was suspended several years ago, in 2018. The dangerous goods store license for the existing building, once held under its occupation permit, has expired and has not been renewed.

3. Description of Proposed Development

3.1. Proposed development

3.1.1. The proposed development involves redeveloping an existing industrial building into an 18-storey data centre. The industrial building was constructed before 1987 ("pre-1987 IB").

3.1.2. The proposed design scheme for the new data centre incorporates various landscape treatments, including planting areas and vertical greening features, which have been offered to enhance the area's streetscape and improve the proposed development's visual amenity. A 4.3m wide non-building area facing Wing Kin Road is reserved as a maintenance area for the underground fuel tanks at basement 1 level. This non-building area will further enhance local air ventilation and street environment.

3.1.3. The floor layout and section plans are provided in **Figures 3.1A** to **3.1N.**

3.1.4. Although the site area is less than 1,000m^2 and no site coverage of greenery is required under the Sustainable Building Design Guidelines (SBDG), the proposed scheme provides a total of 195m^2 greenery (including 169m^2 vertical greenery). In addition, various landscape treatments, including planting areas and vertical green wall, are proposed to enhance the area's streetscape and improve the visual amenity of the proposed development. The planter details and typical details of the vertical green wall are illustrated in Figures 3.1O and 3.1P.

Building Setback at Wing Kin Road and Wing Chong Street

3.1.5 According to the draft basic terms of offer issued by the Lands Department in November 2024, a setback of 3.7m from the existing lot boundary abutting Wing Kin Road is required. Given that the current width of Wing Kin Road is about 15.84m wide and is a one-way street without traffic congestion, the proposed 3.7m building setback is considered sufficient.

3.1.6. Under the Buildings Ordinance, the voluntary ground floor setback would not be granted any bonus plot ratio by the Buildings Department. However, such an arrangement could provide a better streetscape and good quality street-level urban space along Wing Kin Road.

3.1.7. As mentioned above, in addition to the building setback from the application boundary abutting Wing Kin Road, a further building setback of about 6.53m (subject to detailed design) from 6/F and above facing Wing Chong Street has been incorporated into the proposed scheme to provide a wider separation from buildings on the opposite side of Wing Chong Street to enhance air ventilation and visual permeability (see **Figure 3.1Q** and **Figure 3.1R**).

Greening Proposals

3.1.8. The proposed design scheme incorporates various greenery proposals, including planters facing Wing Kin Road and vertical greening at the facades facing Wing Kin Road and Wing Chong Street, respectively, to provide a pleasant external building design. A total of 169m^2 of vertical greening is proposed in the primary zone as per PNAP APP-152.

Reduction of Building Height at the Main Roof Level

3.1.9. The proposed building height has been reduced by about 5% from 115.2mPD to 109.55mPD compared to the previously approved scheme (A/KC/496). To facilitate the future operation of the data centre, a 132kV switchgear, cable gallery, protection/control room, two 132/11kV transformer bays are provided on G/F to 3/F according to CLP's requirements. The vertical greening and greenery provision at certain levels on the façade of the new building fronting Wing Kin Road and Wing Chong Street could reduce any potential visual impact on the surrounding area.

All-Weather Protection Canopy

3.1.10. A full-length canopy is proposed along the building frontage facing Wing Kin Road for weather protection for pedestrians (Note: The canopy design is subject to departmental comments in the detailed design stage).

3.1.11. Despite the site constraints, the proposed development has contributed to the gradual gentrification of this old industrial building into a modern-day industrial building with good-quality design and safety standards.

3.1.12. In summary, the proposed scheme incorporates setbacks, canopy fronting Wing Kin Road, greenery proposals and a reduction in the building height at the main roof level. These measures may improve the streetscape by softening the building edge, promoting visual interest, and promoting pedestrian comfort.

3.1.13. Pertinent design features and illustrations/photomontages for the proposed development are shown in **Figures 3.1O to 3.1P**.

3.1.14. The major development parameters of the proposed development are summarised in **Table 3.1** and **Table 3.2** below.

Table 3.1: Major development parameters for the proposed development

Site Area	About 964.2m^2 (including additional land of 35.169m^2 granted by the District Land Conference on 6.10.2021)
Plot Ratio	No more than 11.4
Total Gross Floor Area	About 10,991.88m^2 (non-domestic)
Site Coverage	Not more than 82%
No. of Storeys	19 storeys (including and 2 levels of basement)
Building Height	109.55mPD (at main roof level)
Proposed Use	Information Technology and Telecommunication Industries (Data Centre)

Parking Spaces	• Private cars: 11 nos. (including one no. accessible) • Motorcycle: 2 nos.
Goods Vehicle Loading / Unloading Bays	• Light Goods Vehicle: 3 nos. • Heavy Goods Vehicle: 1 nos.
Greenery	About 195m^2 • G/F: 2m^2 • 1/F: 11m^2 • 2/F: 4m^2 • 3/F: 9m^2 • Vertical: 169m^2

Table 3.2: The main uses of the floor of the proposed development

Floor	Main Uses
B/F2 B/F1	Sprinkler Water Tank / M&E facilities Parking for private cars, motorcycles, light goods vehicles, car lifts, the main lift lobby, fuel tanks, and M&E facilities.
G/F	Parking for heavy and light goods vehicles, car lift, main lift lobby and M&E facilities
1/F-3/F	CLP cable facilities and M&E facilities
6/F, 10/F, 14/F	M&E facilities
4-5/F, 7-9/F, 11/F-13/F, 15/F-16/F	Data Centre
Roof Floor	M&E facilities
Upper Roof Floor	AC water tank and lift machine room

3.1.15 The changes made to the previously approved scheme (A/KC/496) mainly involve changing industrial use to data centre use. Some design changes are proposed, such as reducing the building height and leaving most of the basement 2 level unexcavated. Details of changes between the previously approved scheme and the current scheme are summarised in Table 3.3 below.

Table 3.3: Comparison between the approved scheme (A/KC/496) and the current scheme

Parameters	Approved Application (A/KC/496)	Current Scheme	Remarks
Site Area	About 964.2m^2	About 964.2m^2	No Change
Proposed Use	Warehouse (excluding DG Godowns)	Information Technology and telecommunication industries (Data Centre)	No Change
Plot ratio	11.4	11.4	No Change
Total GFA	10,991.88m^2	10,991.88m^2	No Change
Maximum Building Height (at main roof level)	115.2mPD	109.55mPD	- 5.65m (reduced by about 5%)
No of Storeys	22 (including three basement levels + one refuge floor)	19 (including two basement levels)	- 3 storeys (reduced by 14%)
Site Coverage (SC)	not more than 80%	not more than 82%	Increase by 2% (per PNAP-132)
Building setback at Wing Kin Road	About 4.1m from the site boundary	About 3.7m from the site boundary	Changes as per the draft basic terms of Conditions of Exchange
Building setback at Wing Chong Street per SBDG	About 7.5m from the centre of Wing Chong Street	About 7.5m from the centre of Wing Chong Street	No Change
Floor Height (about)	• G/F: 6m • 1/F: 6.2m • 2/F- 18/F: 5.5m to 5.6m	• G/F: 11m • 1/F-3/F: 6m • 4/F - 18/F: 5.5m	Design changes to cater for data centre use
Greenery provisions	About 20% (195m^2)	About 20% (195m^2)	No Change
Car parking and loading & unloading spaces	Private car = 11 (including 1 accessible parking space) Motorcycle = 4 L&UL for LGV = 12 L&UL for HGV = 4	Private car = 11 (including 1 accessible parking space) Motorcycle = 2 L&UL for LGV = 3 L&UL for HGV = 1	Change of parking and L&UL spaces provision due to the change of use to data centre use.
Anticipated completion year	2028	2029	

3.2. Traffic consideration

3.2.1. The proposed data centre is expected to be completed by 2029, and the design year adopted in the Traffic Impact Assessment (TIA) for the capacity analysis is 2032, i.e., approximately three years after its completion.

3.2.2. The 2032 traffic flows used for the junction analysis are produced regarding the following:

(1) 2031 traffic flows derived with reference to the Base District Traffic Model ("BDTM");

(2) The estimated traffic growth from 2031 to 2032 is based on the higher of the (a) 2019–based Territorial Population and Employment Data Matrix ("TPEDM") data produced by the Planning Department ("PlanD") for Kwai Chung District, (b) Hong Kong Population Projections 2022 – 2046 published by Census and Statistics Department ("C&SD"), or (c) historic Annual Average Daily Traffic Growth ("AADT") produced by Transport Department ("TD");

(3) The traffic generated by the proposed data centre.

3.2.3. The traffic consultant conducted manual classified counts at the critical junctions near the proposed data centre to establish the peak-hour traffic flows. The key junctions operate with capacities during the AM and PM peak hours.

3.2.4. The internal transport facilities are provided per the requirement of the draft Provisional Basic Terms Offer ("draft PBTO"). A light goods vehicle lift is provided to access B1/F and B2/F from G/F. All vehicles can quickly enter and leave the proposed data centre and their respective space/bay.

3.2.5. The proposed data centre is expected to be completed by 2029, and the junction capacity analysis is undertaken for 2032. For the design year 2032, the junctions analysed are expected to operate with capacities during the peak hours for the case without and with the proposed data centre (refer to Section 4 of the Traffic Impact Assessment in Appendix I).

3.2.6. The TIA concludes, therefore, that the proposed data centre will have no adverse traffic impact on the surrounding road network, which is acceptable from the traffic engineering point of view.

3.2.7. Please refer to the Traffic Impact Assessment in **Appendix I** for details.

3.3. Air Quality consideration

3.3.1. An air quality Impact Assessment (AQIA) has been prepared to address the air quality impact of the proposed development's construction on the surrounding area and the impact of the surrounding area on the proposed development.

3.3.2. With the implementation of dust suppression measures as outlined in the Air Pollution Control (Construction Dust) Regulation and adherence to good site practices, no adverse air quality impacts associated with the construction works are expected.

3.3.3. The proposed development is not considered an air pollution source during its operation. A qualitative assessment indicates that vehicular and industrial emissions are not expected to constrain the proposed development, provided that the locations of the fresh air intakes are carefully designed.

3.3.4. Therefore, no air quality impact arising from the proposed development is expected. Please refer to the Air Quality Impact Assessment in **Appendix II.**

3.4 Noise consideration

3.4.1 A Noise Impact Assessment (NIA) has been prepared to address the potential noise impacts from the construction and operation of the proposed development.

3.4.2 The overall noise impact during the construction phase is considered insignificant. Depending on the detailed site work arrangements, mitigation measures will be implemented as necessary and applicable, per ProPECC PN 1/24, to minimise construction noise impacts on nearby NSRs.

3.4.3 The provision of openable windows for ventilation is not anticipated. Therefore, potential impacts of road traffic and existing fixed noise sources on the proposed development are not expected.

3.4.4 The planned fixed noise sources of the proposed development should not cause any adverse noise impacts if the maximum allowable sound power levels (SWLs) are properly implemented. Thus, no planned fixed noise impacts are anticipated.

3.4.5 Therefore, no noise impact arising from the proposed development is expected. Please refer to the Noise Impact Assessment in Appendix III.

3.5 Sewerage consideration

3.5.1 A Sewage Impact Assessment (SIA) has been prepared to address all the potential adverse sewerage impacts from the proposed development and recommend mitigation measures, improvement works, and other measures and works if required.

3.5.2 The estimated daily sewage discharge from the Project is 157 m^3/day. Sewage from the Project will be collected by the new terminal sewage manhole FTMH01 and discharged to the existing sewer manhole FMH4022807 via a proposed 225mm PE sewer with a slope of 1:100. The actual layout and invert levels of the proposed sewer are subject to detailed design.

3.5.3 The sewage network is considered to have sufficient capacities to cater for the expected sewage flows from the proposed development and the surrounding catchments. Therefore, no adverse sewerage impact on the public sewage system is expected from the proposed development. Please refer to the Sewerage Impact Assessment in Appendix IV.

3.6 Water Supply Consideration

3.6.1. Water Supply Impact Assessment (WSIA) has been prepared to address all the potential adverse water supply impacts from the proposed development and recommend mitigation measures, improvement works, and other measures and works, if required.

3.6.2. The estimated fresh water demand from the project is 961.5 m3/day, an increase from the existing demand of 150.6 m3/day. The existing freshwater main cannot meet the application site's freshwater demand. Therefore, a new 200 mm fresh water main connected to the existing 400 mm fresh water main along Kwai Hei Street has been proposed. The specific alignment and connection points of the proposed new water pipes will be determined during the detailed design phase of the development.

3.6.3. 3.6.3. The estimated salt water demand from the project is 2.75 m3/day, down from the existing demand of 19.77 m3/day. The existing saltwater main can meet the saltwater demand of the application site, so no modifications to the saltwater mains are required.

3.6.4. Therefore, no adverse water supply impact on the public water supply system is expected from the proposed development. Please refer to the Water Supply Impact Assessment in **Appendix V**.

3.7 Visual Impact Consideration

3.7.1 A total of 9 VPs are selected for visual impact assessment. Based on the comparison between the existing condition and the proposed scenario, one will cause a moderately adverse visual impact by the proposed development, two will cause slightly adverse visual impact, two cause partly enhanced/partly adverse, one has negligible to slightly adverse, and three have a negligible visual impact. The overall visual impact is therefore envisaged
to be negligible to slightly adverse.

3.7.2 The massing and disposition of the proposed development will not create a significant visual blockage or cause significant visible changes for public viewers. In addition, the proposed building height has been reduced by about 5% from 115.2 to 109.55 mPD compared to the previously approved scheme (A/KC/496). The proposed development's scale and height are visually compatible with the surrounding industrial developments. Vertical greening and planters are proposed at the lower levels of the building façade to minimise the likely visual impact and soften the proposed building structure. The area's street environment and visual amenities will be enhanced by replacing the old industrial building with a modern-day development and greening provision. Please refer to the Visual Impact Assessment in **Appendix VI** for details.

4 Justifications for the Proposed Development

4.1 The proposed minor relaxation of plot ratio restriction by 20% aligns with the 2018 Policy Address to incentivise the redevelopment of industrial buildings constructed before 1987

4.1.1 The Chief Executive's 2018 Policy Address announced a new scheme for revitalising industrial buildings to encourage owners to redevelop industrial buildings constructed before 1987. The planning policy aims to increase the maximum permissible domestic plot ratio within specific "Residential" ("R") zones to allow relaxation of the maximum allowable non-domestic plot ratio by up to 20% for redevelopment projects of these pre-1987 industrial buildings located outside "R" zones in Main Urban Areas and New Towns. Individual applications must be made to the TPB within three years from 10.10.2018, and the modified lease should be executed within three years after the planning permission is granted.

4.1.2 The existing industrial building is an eligible industrial building constructed before 1987, and the Occupation Permit ("OP") was issued on 15.6.1972. Therefore, the proposed minor relaxation of plot ratio restriction by 20% aligns with the 2018 Policy Address to incentivise the redevelopment of industrial buildings constructed before 1987.

4.1.3 As mentioned above, the application also aligns with the SAR Government's intention that "IBs located in 'I' zone could be redeveloped into new premises for conventional 'industrial/godown uses' and/or 'modern industrial uses". Further, the proposed relaxation of the maximum non-domestic permissible PR by up to 20% could allow owners to recover any GFA loss in meeting present-day building standards, thereby incentivising industrial building redevelopment."

4.2 The proposed Data Centre aligns with the planning intention of the "I" zone

4.2.1 The proposed use fits the purpose and planning intention of the 'I" zone. Information technology and telecommunications industries, offices related to industrial use, and selected uses akin to industrial production that would not compromise building and fire safety are always permitted in this zone.

4.2.2 The proposed information technology and telecommunication industries (data centre) use is under Column 1, which is always permitted. The proposed use aligns with the "I "zone's planning intention.

4.3 The proposed development is compatible with the surrounding land use

4.3.1 The application site is located within a predominantly industrial area, surrounded mainly by the "I" zone, with industrial/office buildings in the immediate vicinity.

4.3.2 The proposed redevelopment of an existing industrial building into an 18-storey data centre is compatible with the surrounding land use. Therefore, the proposed use would not cause any environmental impacts on the surrounding areas.

4.4 The proposed scheme fully utilises the development potential of the application site with modern-day building standards

4.4.1 The application site contains an industrial building completed in 1972 with a GFA of about 941m^2. The existing building has been left mainly vacant since its previous industrial use was suspended in 2018.

4.4.2 This application's positive impact is replacing an old industrial building with a new data centre with modern-day standards and supporting facilities to meet the changing market needs.

4.5 The proposed minor relaxation of plot ratio and building height will not adversely affect the surrounding areas visually.

4.5.1 The proposed development is compatible with the surrounding neighbourhood. The application site is mainly surrounded by buildings in the "I" zone, with a maximum plot ratio of 9.5 and a maximum height of 105mPD under the OZP.

4.5.2 Based on the Visual Impact Assessment in Appendix V, the proposed development's scale and height are considered visually compatible with the surrounding industrial developments. Planters and Vertical greening at the lower levels of the proposed development will soften the proposed building structure. Replacing the old industrial building with a modern-day development with a greening provision will enhance the area's street environment and visual amenities.

4.6 The proposed building setback at Wing Chong Street and Wing Kin Road will provide a better streetscape, walking environment and visual permeability.

4.6.1 The proposed building setback at Wing Kin Road and Wing Chong Street, both one-way streets, will provide a wider separation from buildings to enhance the walking environment and visual permeability. Air ventilation along these streets could also be enhanced.

4.7 The proposed greening, including vertical greening, will enhance the streetscape and improve visual amenity

4.7.1 Greening space provision has been maximised by providing planters at ground level and 1/F to 3/F fronting Wing Kin Road. The vertical greening at sections of building facades fronting Wing Chong Street will improve the street environment and visual amenity.

4.8 The proposed development will be seen as a catalyst and precedent in the gradual transformation of this industrial area

4.8.1 The area was characterised by the concentration of offensive trade businesses and polluting industries, including but not limited to the application site in the 1960s'. The proposed minor relaxation of the plot ratio restriction and change of uses in this application will form a catalyst and a precedent in gradually transforming the area, once predominated by offensive trades and polluting industries, to non-polluting industrial uses.

4.9 The proposed development is considered feasible from a traffic point of view

4.9.1 Based on the calculations and findings in the Traffic Impact Assessment (TIA) in **Appendix I**, it is concluded that the proposed development is acceptable from a traffic engineering viewpoint.

4.10 The proposed development would have no adverse impact on air, noise, water supply and the sewerage system

4.10.1 Based on the Air Quality Impact Assessment, Noise Impact Assessment, Water Supply Impact Assessment and Sewerage Impact Assessment in Appendix II, III and IV, respectively, it is concluded that the proposed development will not cause any adverse impact in terms of air, noise, water supply and sewerage to the neighbourhood.

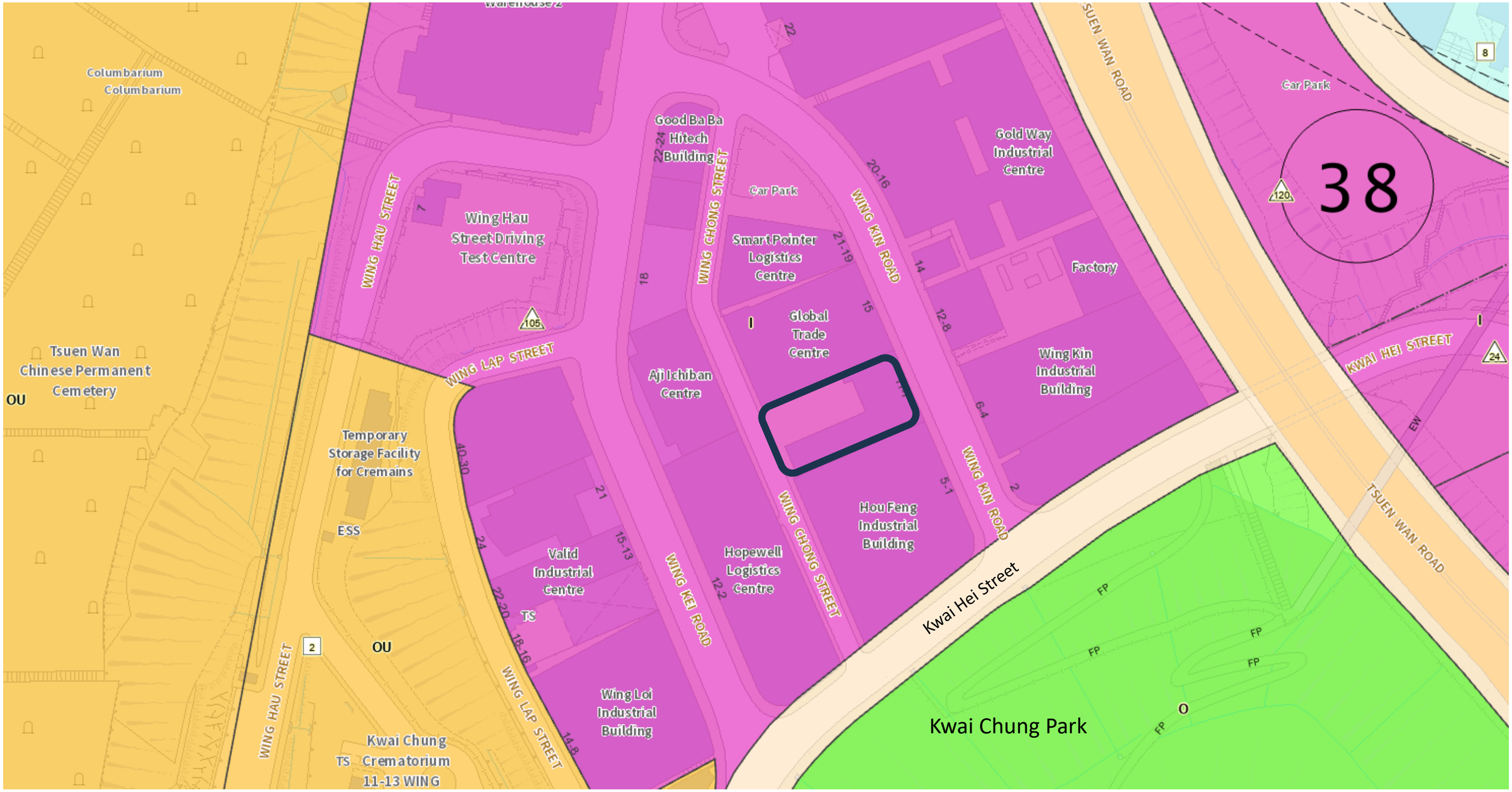
5 Conclusion

5.1 The application is submitted on behalf of the Applicant, OXO YW Limited, to seek the Town Planning Board's permission for the proposed minor relaxation of plot ratio restriction from 9.5 to 11.4 and height relaxation from 105mPD to 109.55mPD for permitted information technology and telecommunications industries (data centre) use at the application site.

5.2 The proposed minor relaxation of plot ratio restriction by 20% aligns with the 2018 Policy Address to incentivise the redevelopment of industrial buildings constructed before 1987. The proposed relaxation of the building height conforms with the surrounding industrial buildings of similar height in the area. The technical impact assessments concluded that the proposed development would not cause any adverse visual impact, traffic impact, air, noise, or sewerage impact on the neighbourhood. The proposed planters and vertical greening on the façade will soften the building edges and enhance the streetscape.

5.3 For the above reasons, the Board is earnestly requested to consider and grant approval to this application.

Figures



Legend

Application Site

Job Title: Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145)	**Drawing Title:** Figure 1.1: Application Site Location Plan under Outline Zoning Plan (extracts of Kwai Chung OZP No. S/KC/32)	KJL Ltd.



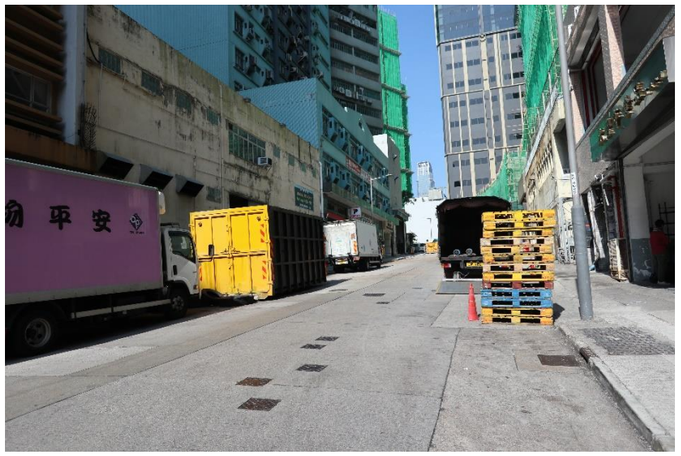
1. View from Kwai Hei Road facing west



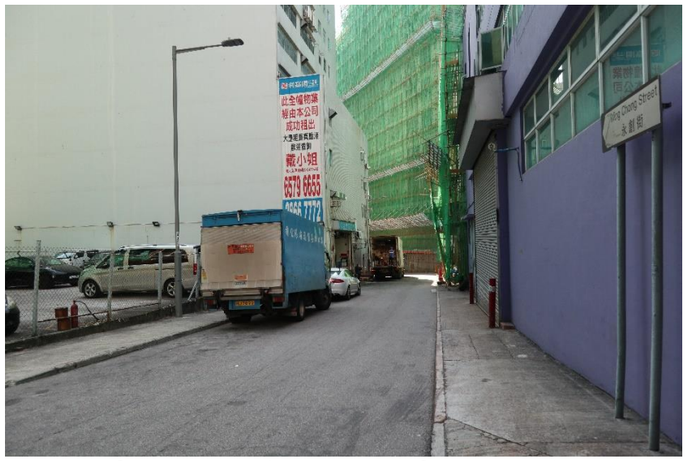
4. Application Site (view from Wing Chong Street)



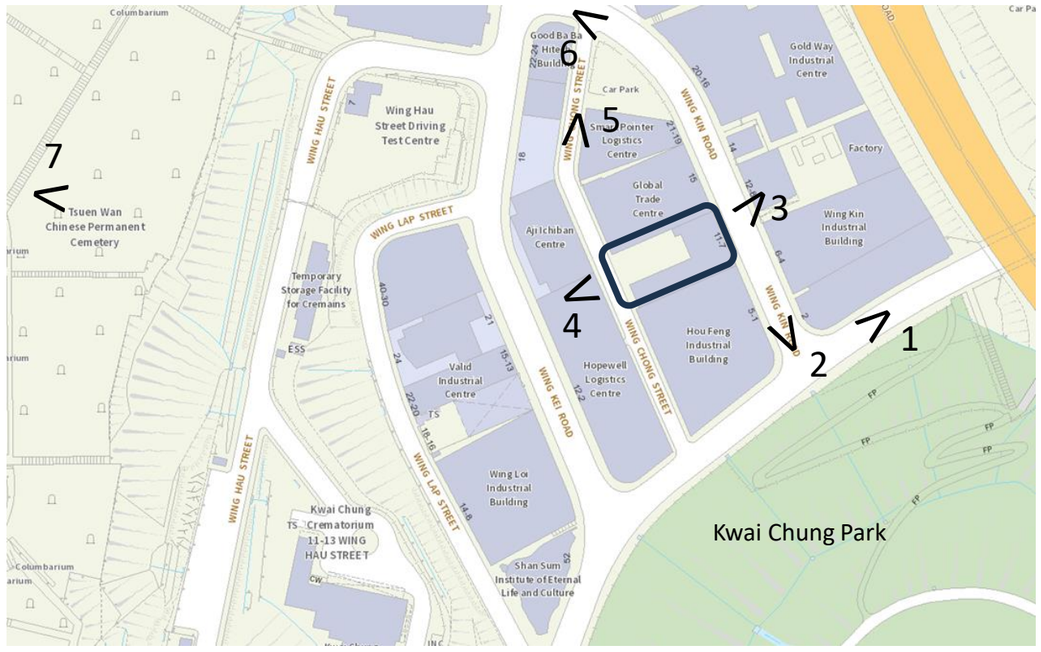
7. View from Tsuen Wan Chinese Cemetery



2. View from Wing Kin Road facing north



5. View from Wing Chong Street facing south





3. Application Site (view from Wing Kin Road)



6. View from the junction of Wing Kei Road/Wing Kin Road

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145)

Drawing Title:

Figure 2.1: Photographs of the Application Site

KJL Ltd.



NOTES:

DO NOT SCALE DRAWINGS.

ALL DIMENSIONS MUST BE VERIFIED AT THE WORK BY THE CONTRACTOR.

ALL PRINTS, SPECIFICATIONS AND THEIR COPYRIGHT ARE THE PROPERTY OF THE ARCHITECTS AND SHALL BE RETURNED AT THE COMPLETION OF THE WORK.

REVISION

NO	DATE	DESCRIPTION

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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

Figure 3.1A
BLOCK PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:500	2025.06.18
JOB No.	DRAWING No.
2208	A-01

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

M&E

LIFT PIT

LIFT PIT

F.S. & SPRINKLER
PUMP ROOM

SPRINKLER
WATER TANK

F.S. WATER
TANK

UNEXCAVATED AREA

HOU FENG INDUSTRIAL BUILDING

1—5

WING KIN ROAD
(15.84m WIDE)

12—8

6—4

NOTES:

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Tel: 3583-2000 | Fax: 8143-1130
Email: mail@studiorca.com

STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

Figure 3.1B

B2/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.18
JOB No.	DRAWING No.
2208	A-02

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

M&E

M&E

M&E

LIFT LOBBY

CP6 CP7 CP8 CP9 CP10 CP11

LGV2

LGV3

LOADING/ UNLOADING AREA

UNEXCAVATED AREA

+8.550

+8.155

2 NOS. 30,000L UNDERGROUND FUEL TANKS

CP2 CP3 CP4 CP5

M1 M2

CP1

HOU FENG INDUSTRIAL BUILDING

1—5

WING KIN ROAD
(15.84m WIDE)

12—8

6—4

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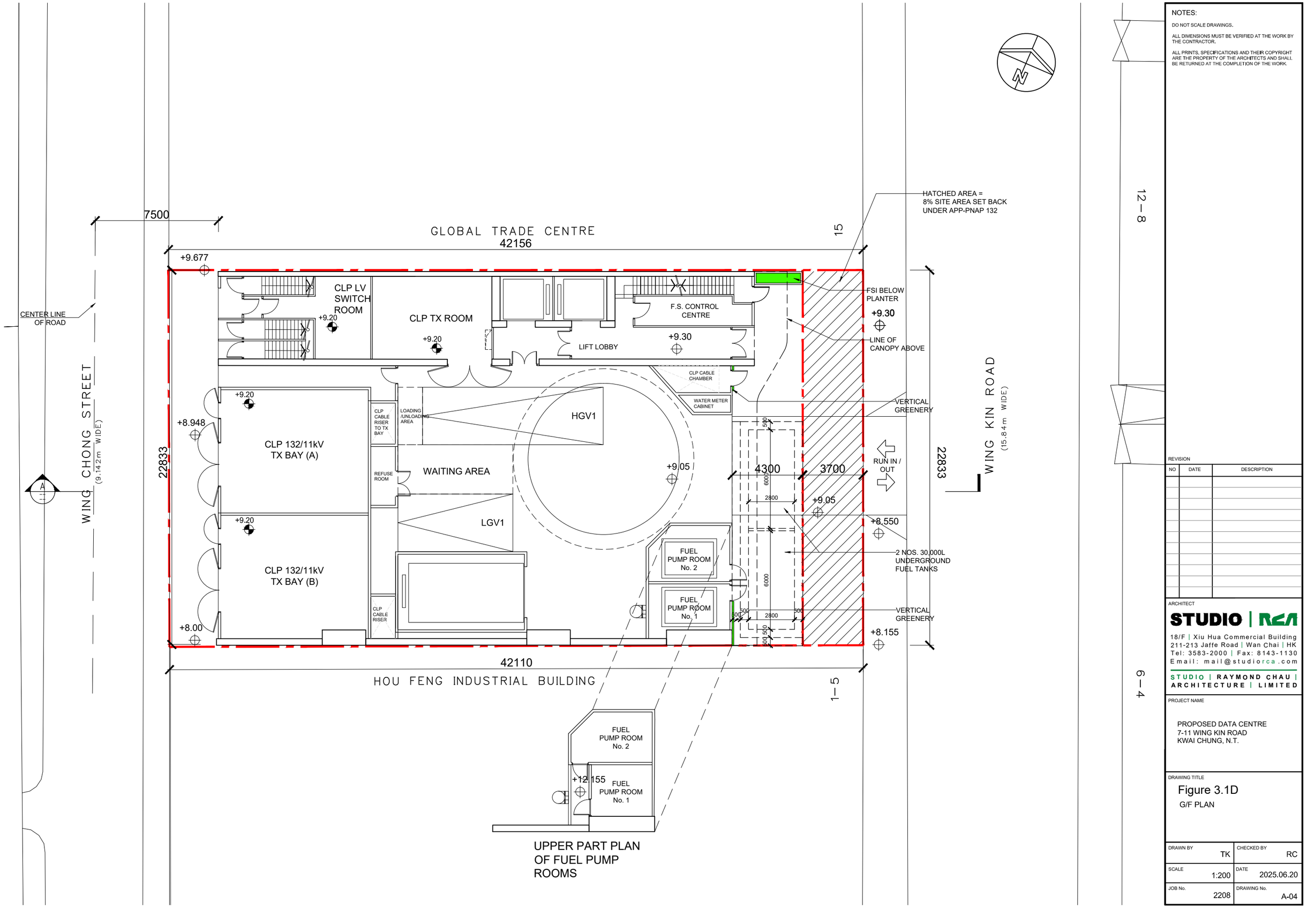
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

Figure 3.1C
B1/F PLAN

DRAWN BY	CHECKED BY
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SCALE	DATE
1:200	2025.06.25
JOB No.	DRAWING No.
2208	A-03



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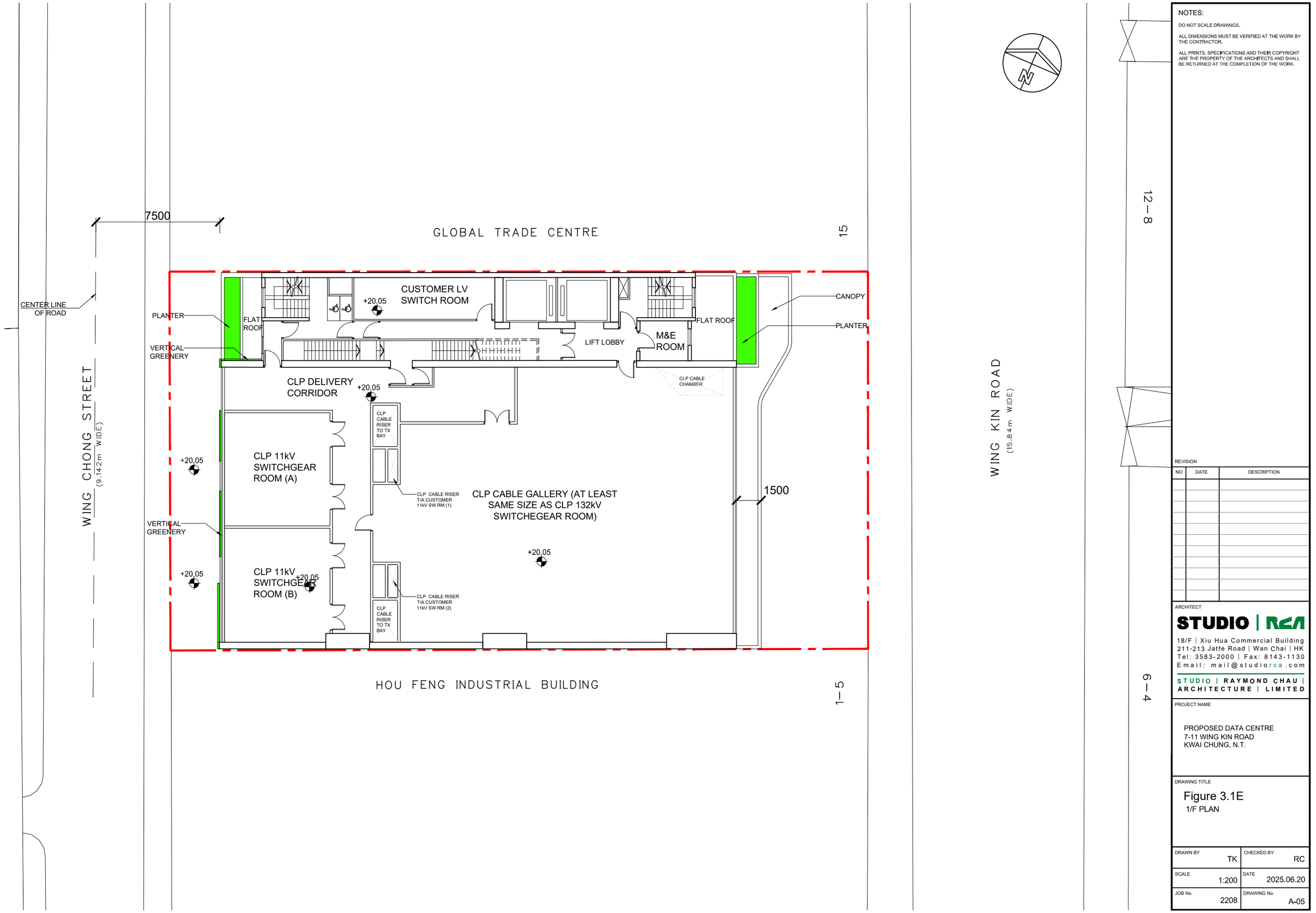
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

Figure 3.1D
G/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.20
JOB No.	DRAWING No.
2208	A-04



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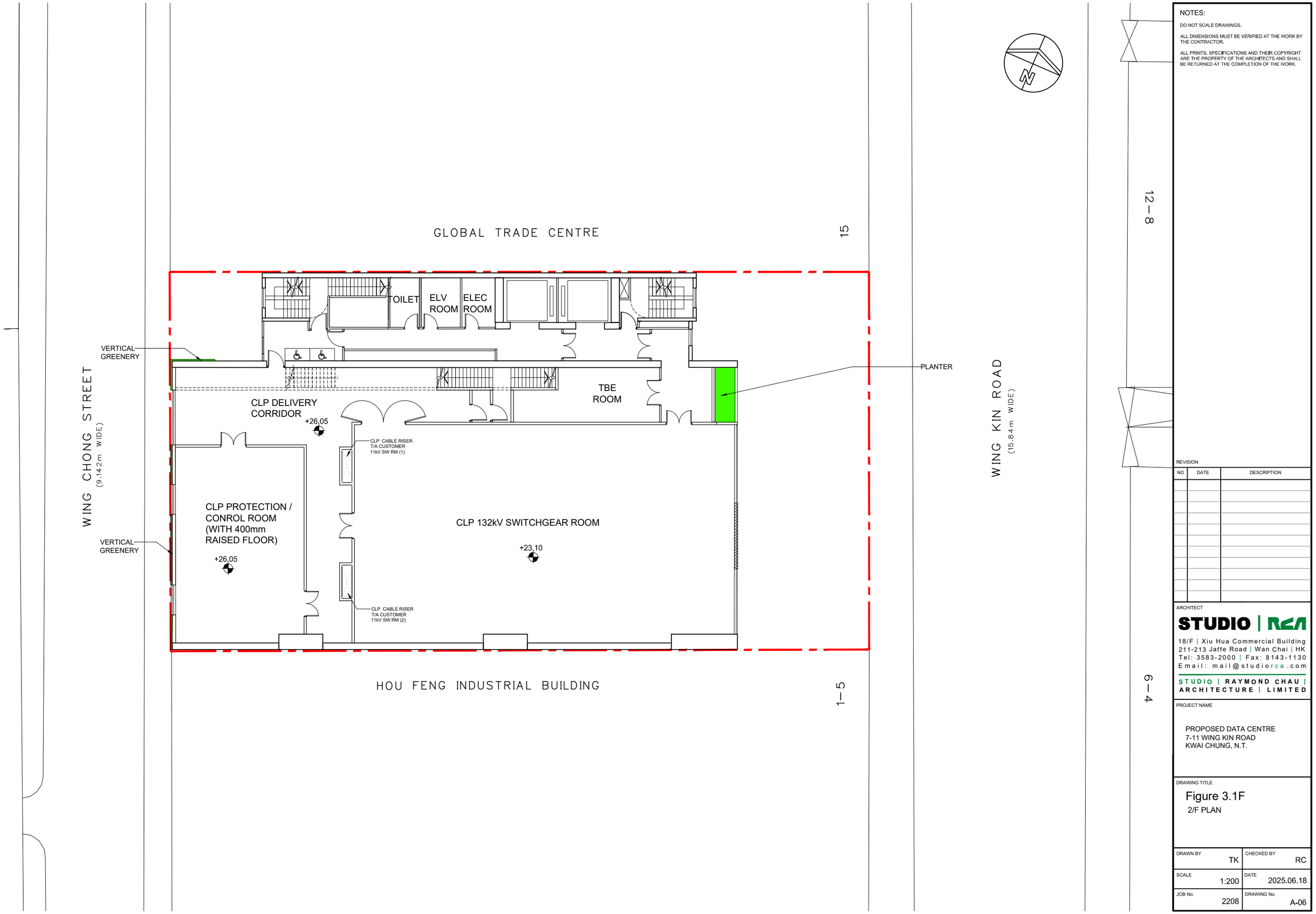
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

Figure 3.1E
1/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.20
JOB No.: 2208	DRAWING No.: A-05



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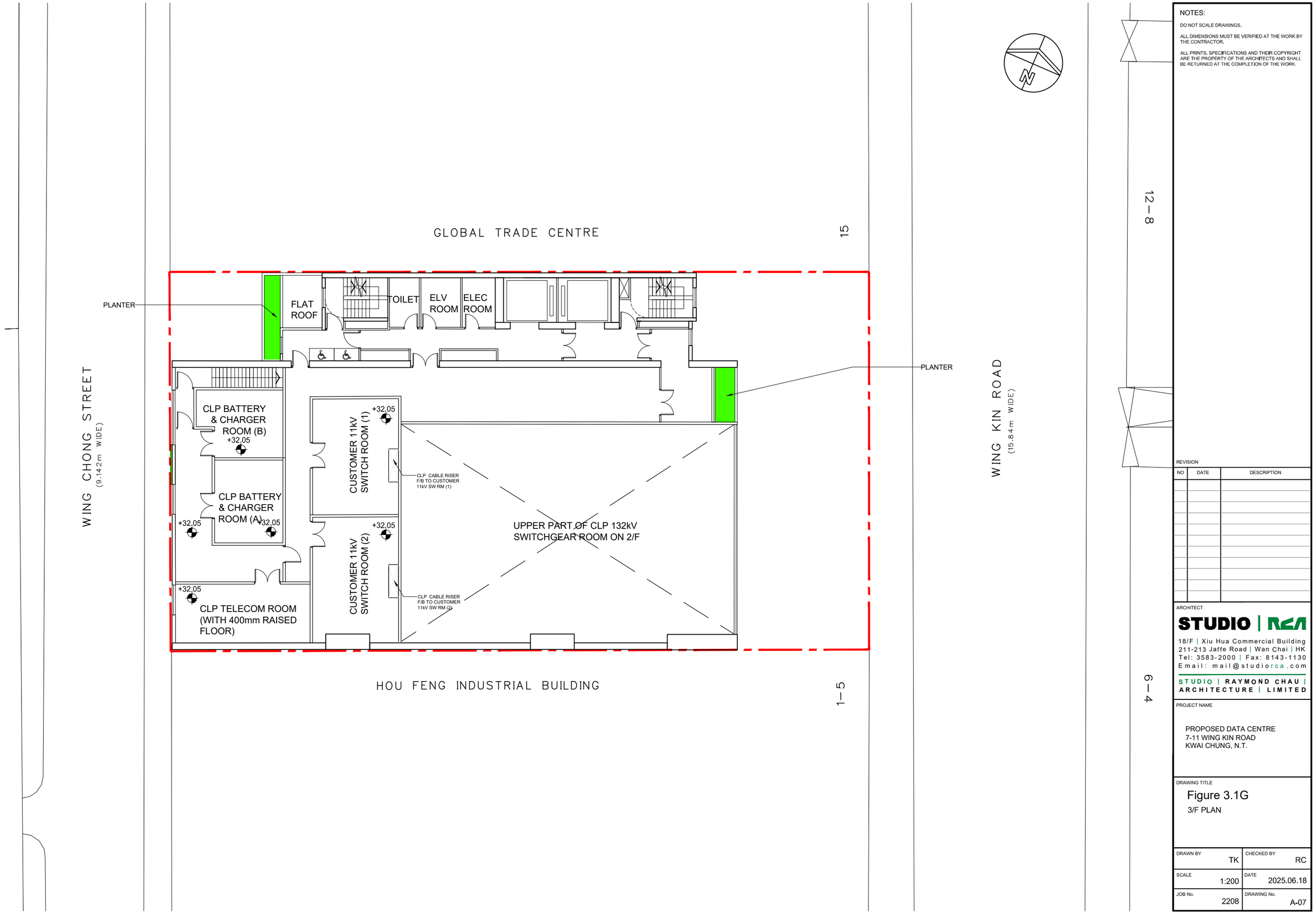
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

Figure 3.1F
2/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-06



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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

Figure 3.1G
3/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.18
JOB No.	DRAWING No.
2208	A-07

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

TOILET

ELV ROOM

ELEC ROOM

AC PLANT ROOM

DATA HALL

AC PLANT ROOM

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

NOTES:

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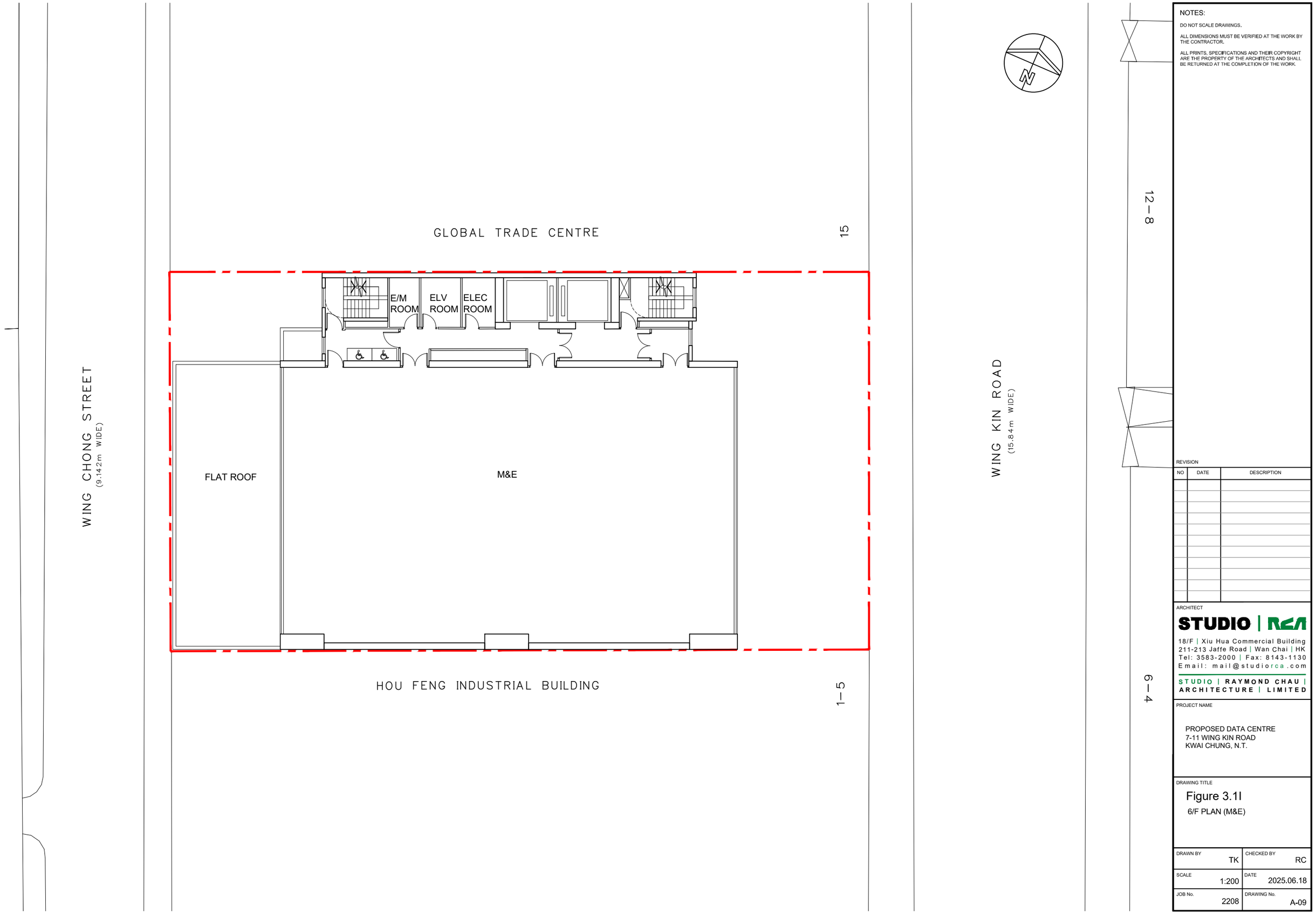
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

Figure 3.1H
4/F-5/F PLAN (DATA HALL)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-08



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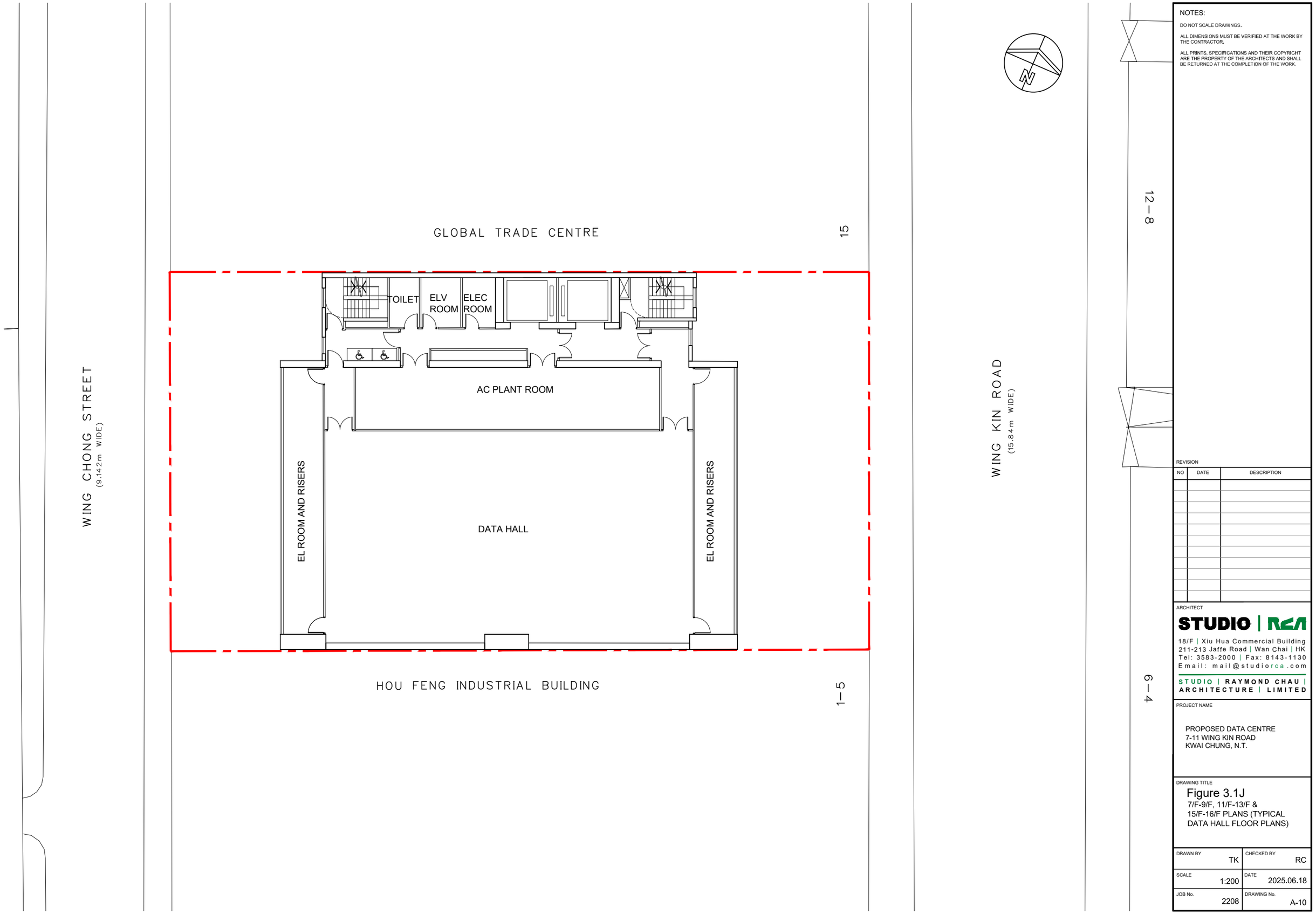
PROPOSED DATA CENTRE
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KWAI CHUNG, N.T.

DRAWING TITLE

Figure 3.1l

6/F PLAN (M&E)

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SCALE	DATE
1:200	2025.06.18
JOB No.	DRAWING No.
2208	A-09



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DRAWING TITLE

Figure 3.1J
7/F-9/F, 11/F-13/F &
15/F-16/F PLANS (TYPICAL
DATA HALL FLOOR PLANS)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-10

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

E/M ROOM | ELV ROOM | ELEC ROOM

M&E

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

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PROJECT NAME

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KWAI CHUNG, N.T.

DRAWING TITLE

Figure 3.1K
10/F & 14/F PLANS
(TYPICAL M&E FLOOR PLANS)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-11

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

FUEL TANK ROOM

LV SW. ROOM

FS GENERATOR ROOM

FLAT ROOF

AC WATER PUMP ROOM

AREA RESERVED FOR ACC

AREA RESERVED FOR COOLING TOWER

HOU FENG INDUSTRIAL BUILDING

1 – 5

WING KIN ROAD
(15.84m WIDE)

12 – 8

6 – 4

NOTES:

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DRAWING TITLE

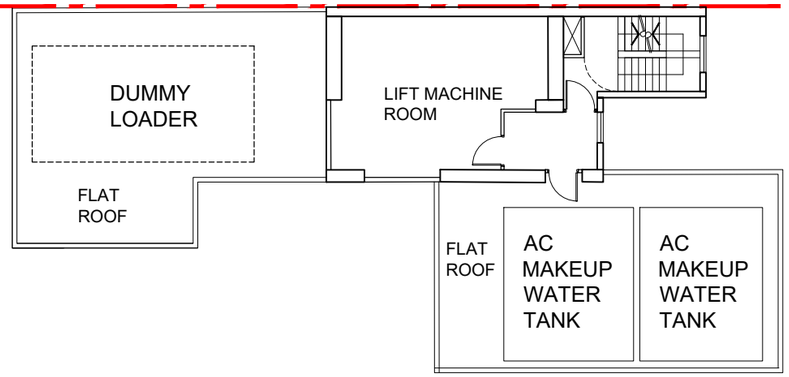
Figure 3.1L
R/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-12

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15



HOU FENG INDUSTRIAL BUILDING

1—5

WING KIN ROAD
(15.84m WIDE)

12—8

6—4

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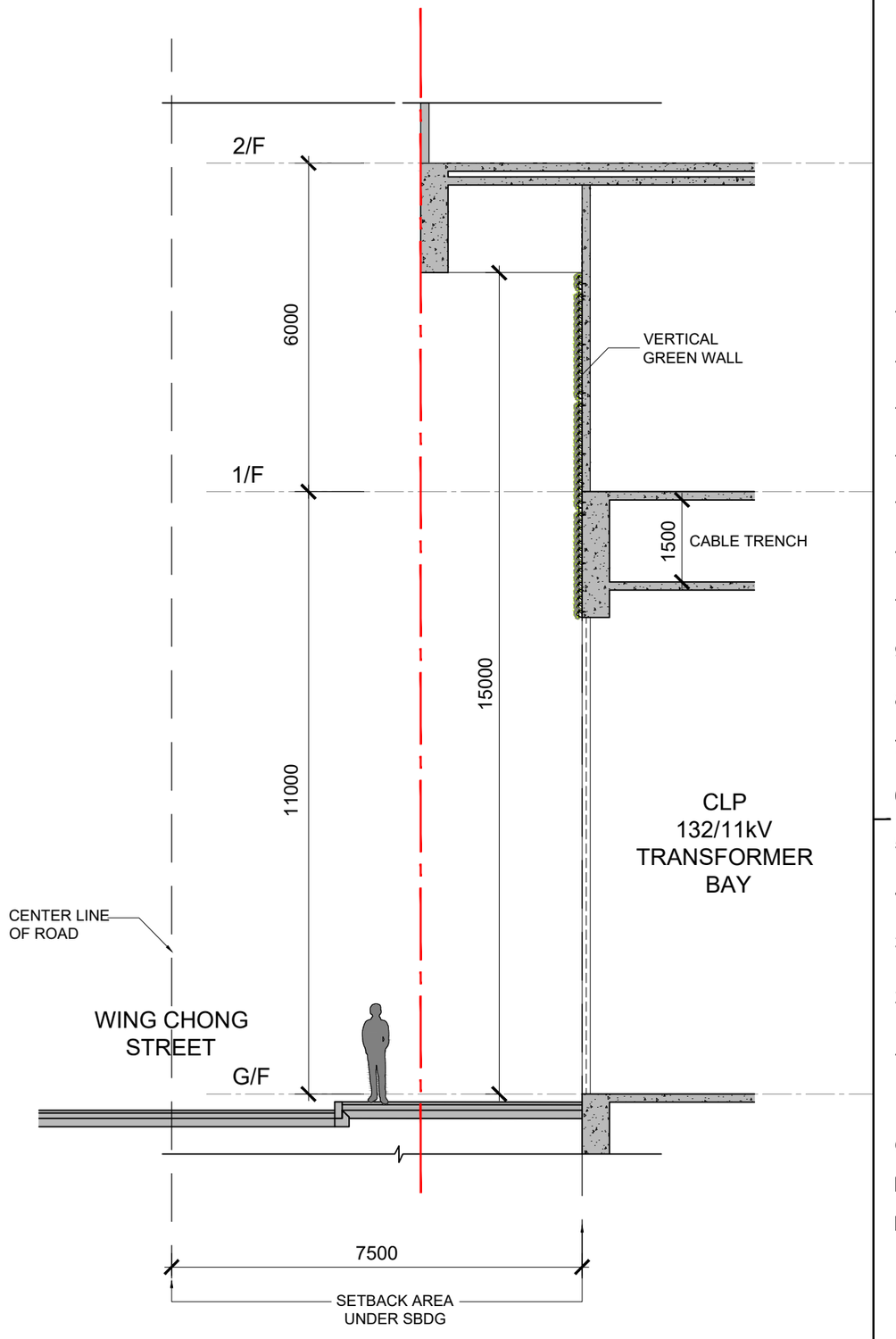
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7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

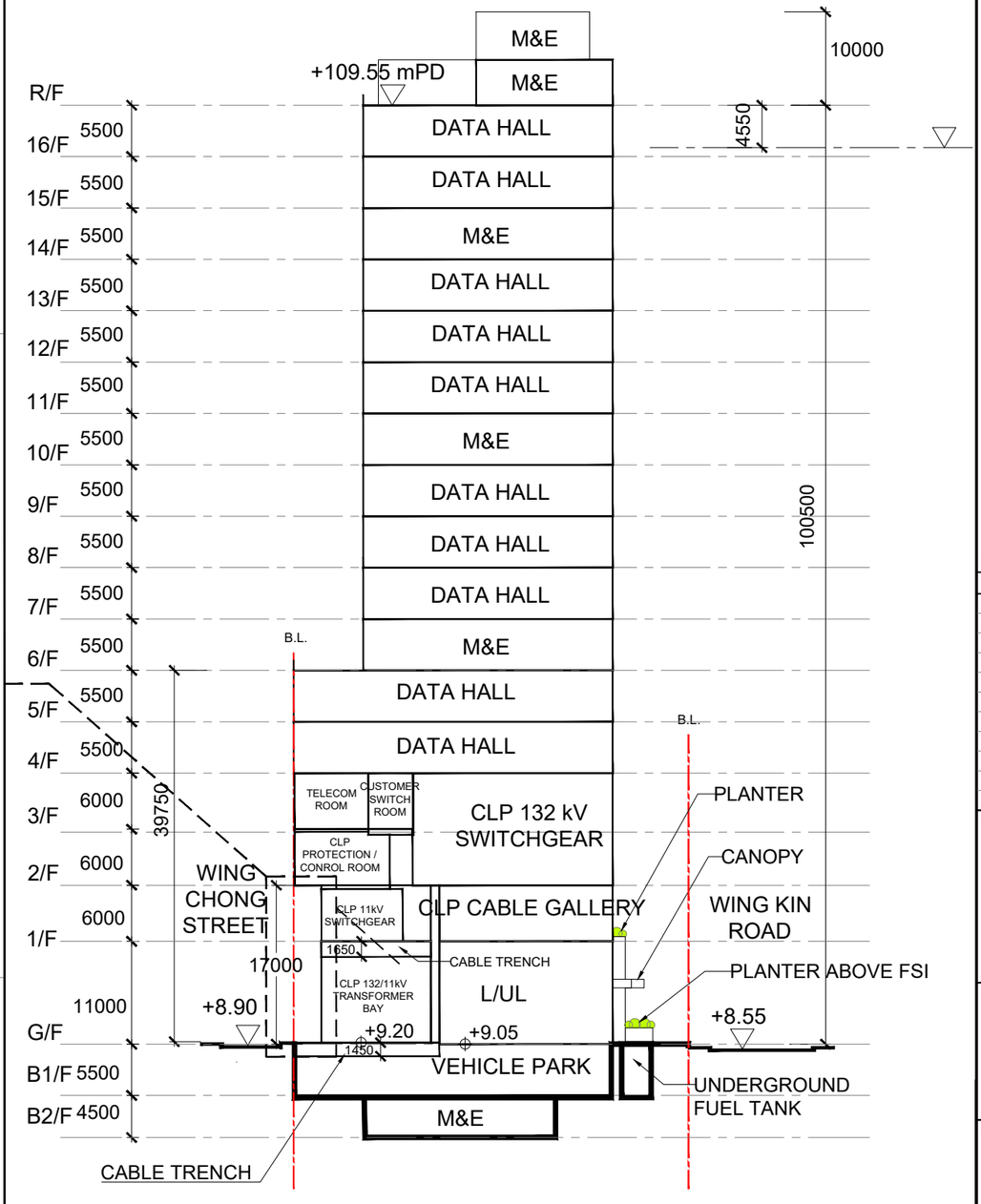
Figure 3.1M

UR/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.18
JOB No.	DRAWING No.
2208	A-13



SECTION OF VERTICAL GREEN WALL
SCALE: 1:100



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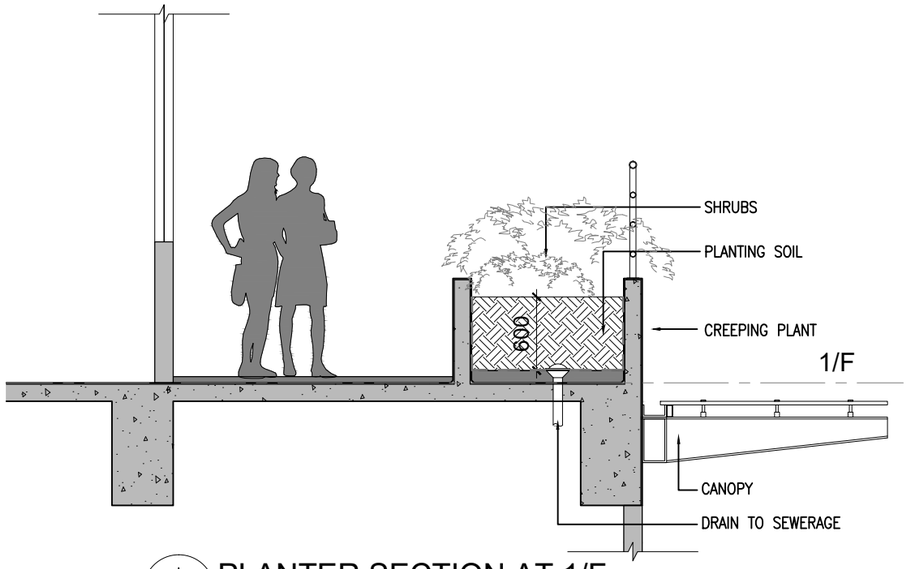
PROJECT NAME

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KWAI CHUNG, N.T.

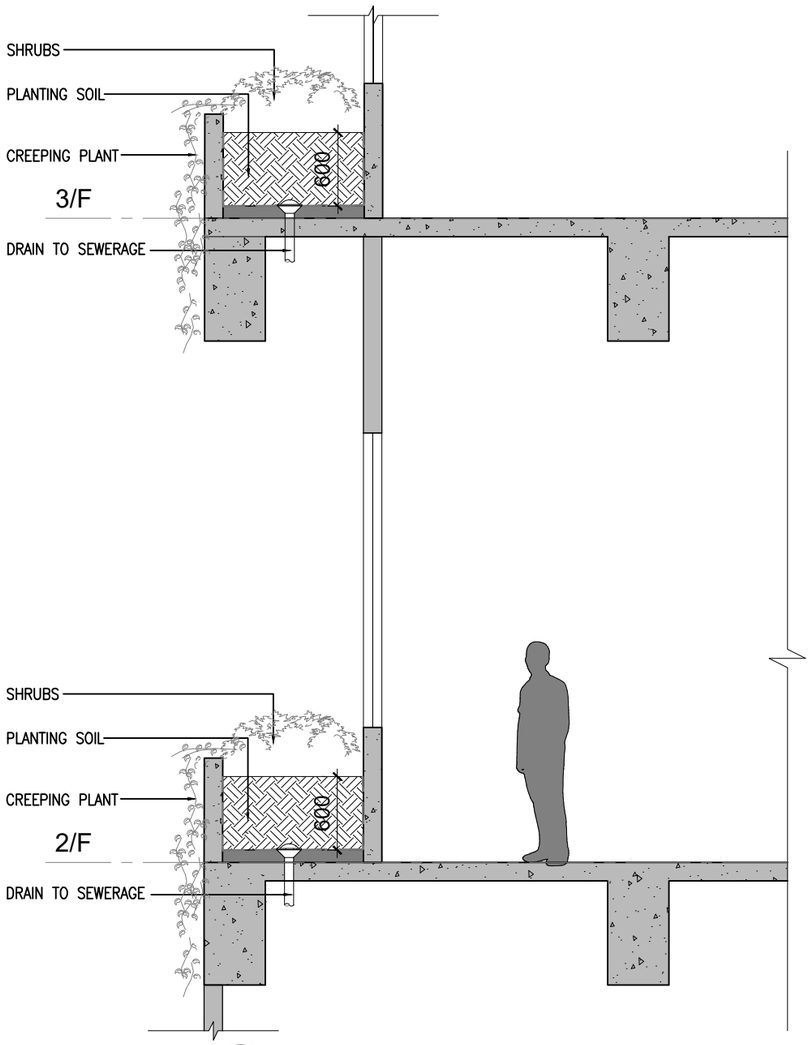
DRAWING TITLE

Figure 3.1N
SECTION A-A

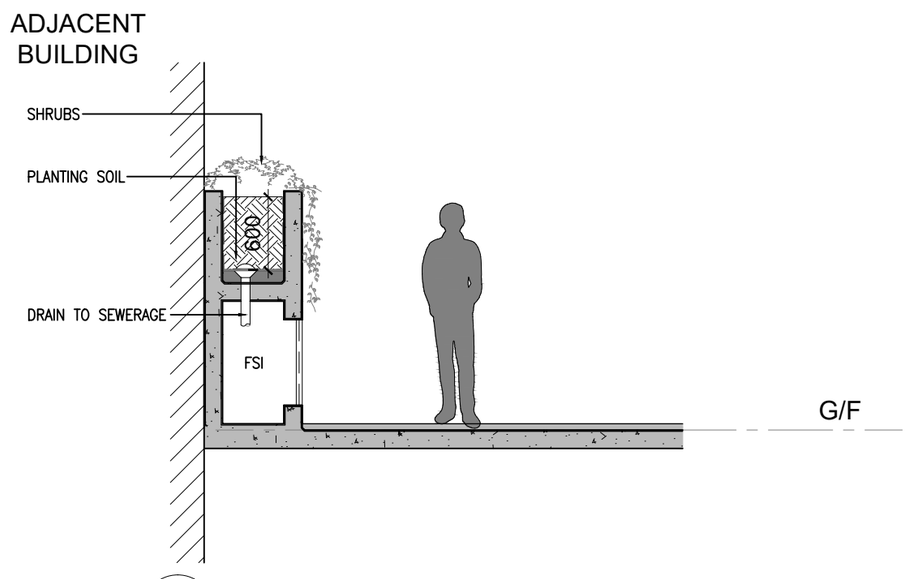
DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
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JOB No.	DRAWING No.
2208	A-14



A PLANTER SECTION AT 1/F
SCALE 1:50



B PLANTER SECTION AT 2/F & 3/F
SCALE 1:50



C PLANTER SECTION AT G/F
SCALE 1:50

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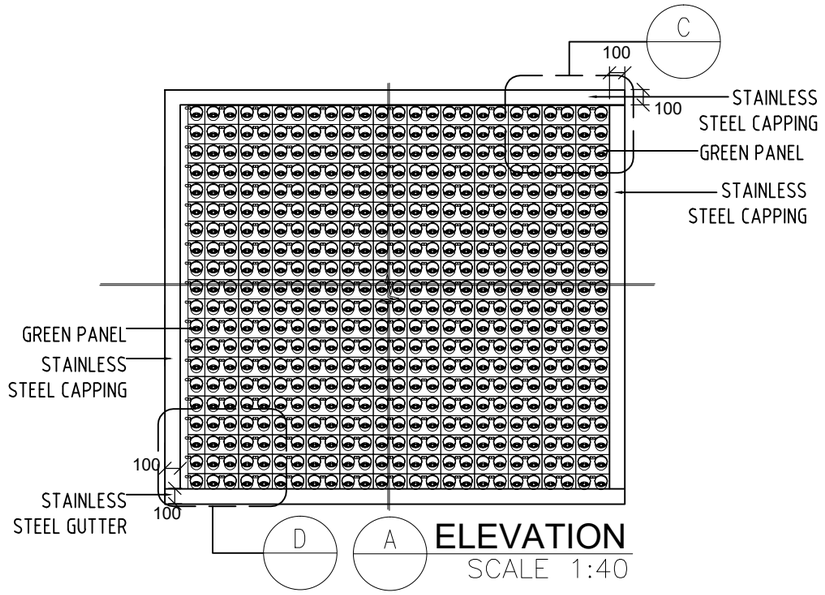
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KWAI CHUNG, N.T.

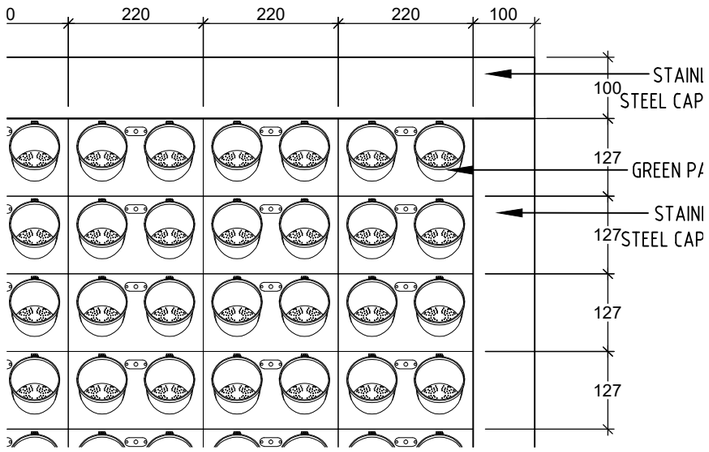
DRAWING TITLE

Figure 3.10
LANDSCAPE SECTIONS

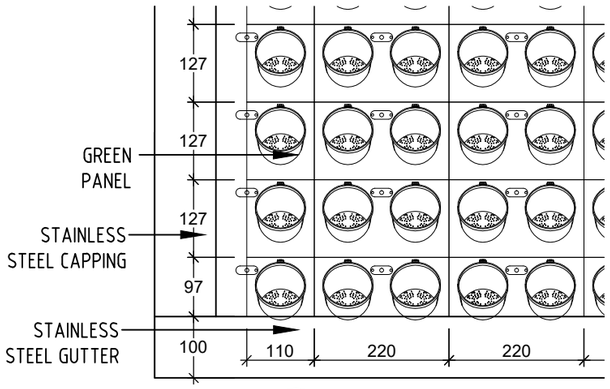
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TK	RC
SCALE	DATE
1:750	2025.06.18
JOB No.	DRAWING No.
2208	A-15



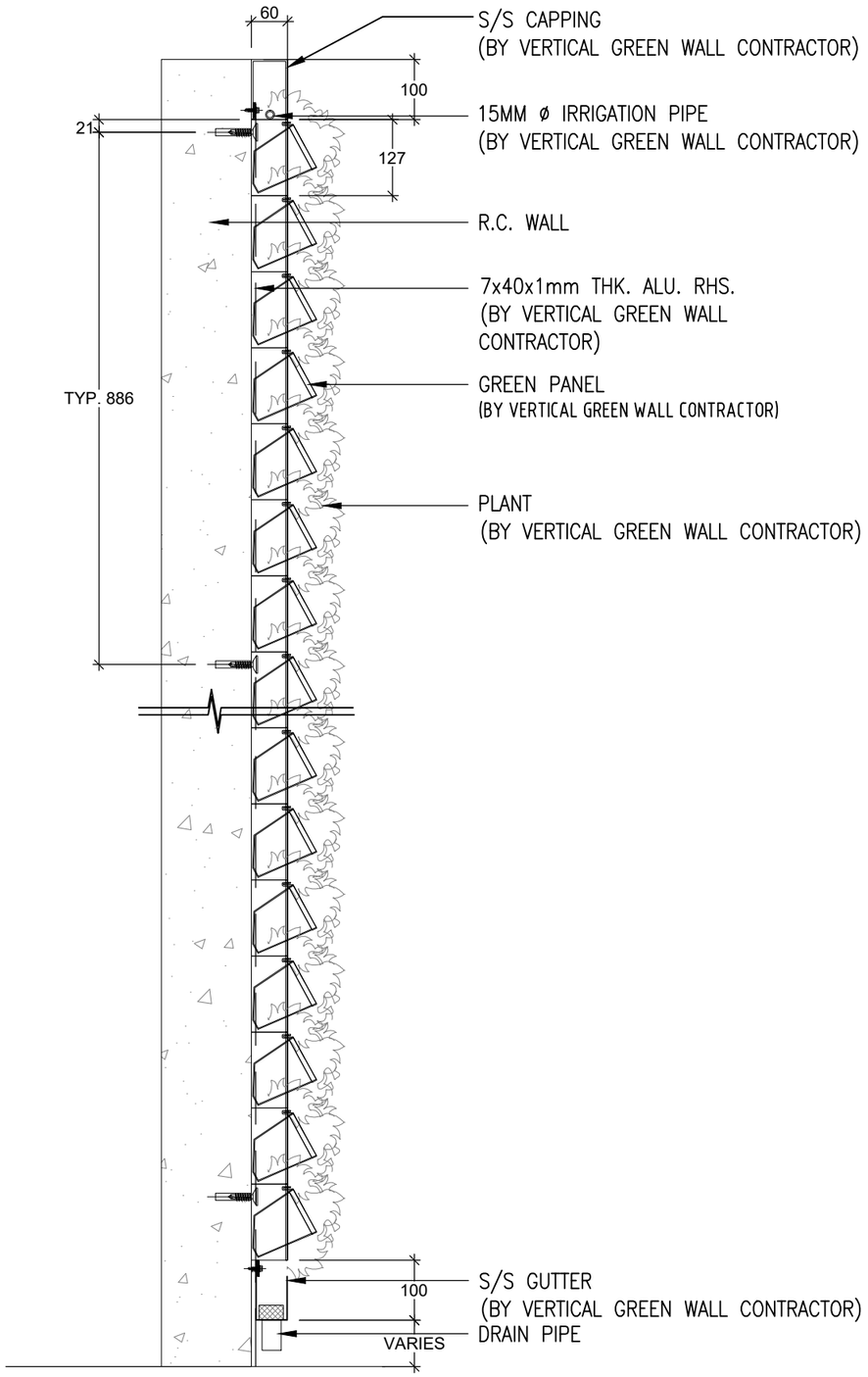
ELEVATION
SCALE 1:40



C BLOW UP DETAILS
SCALE 1:10



D BLOW UP DETAILS
SCALE 1:10



B SECTION
SCALE 1:10

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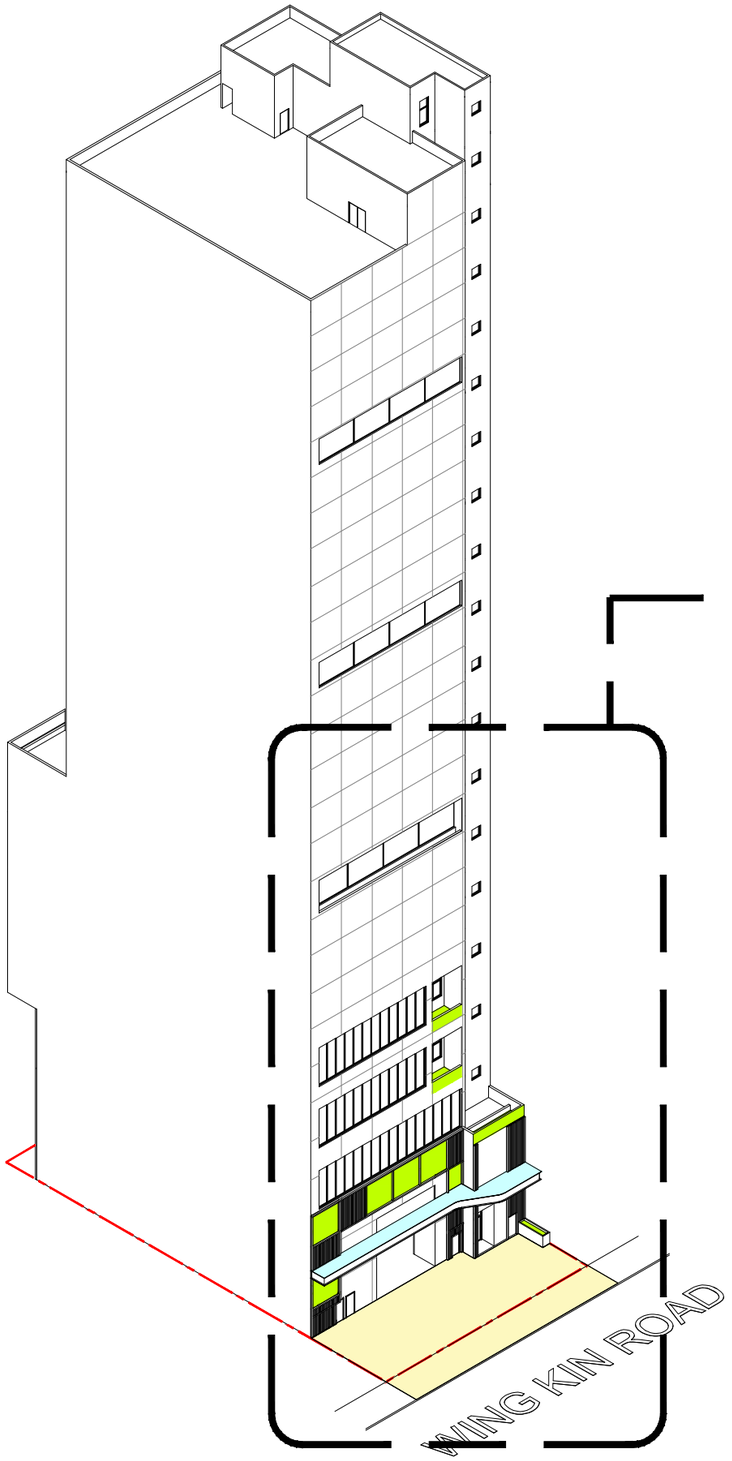
PROJECT NAME

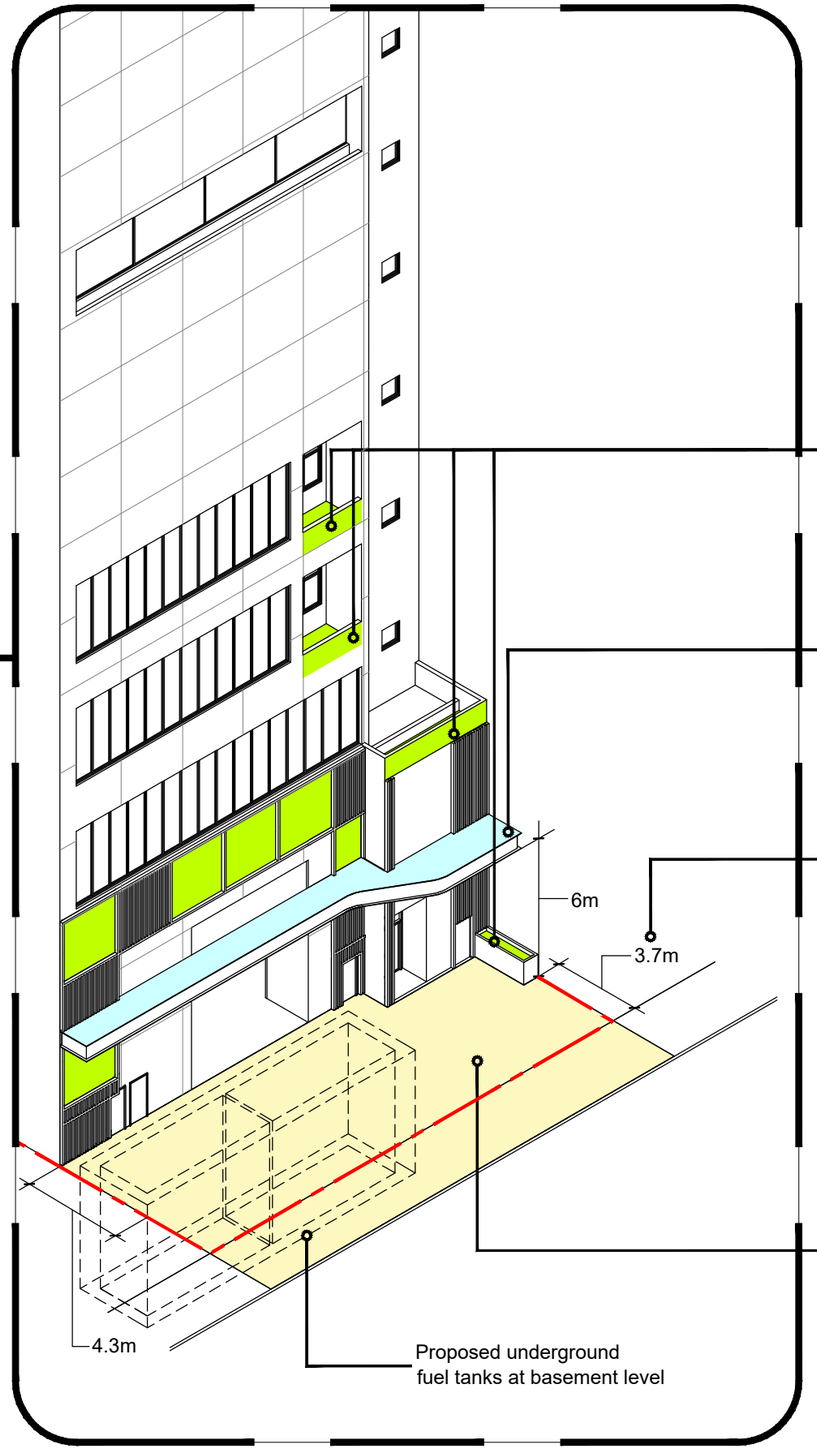
PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

Figure 3.1P
TYPICAL DETAILS OF
VERTICAL GREEN WALL

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
AS SHOWN	2025.06.18
JOB No.	DRAWING No.
2208	A-16





Planters with Creeping Plants at G/F to 3/F
As greening elements to enhance the visual and street environment

Canopy for Weather Protection
As a weather protection and shading element at building entrance

Building Setback
3.7m full-height setback from site boundary

Re-paved Footpath
Proposed upgrading of pavement with concrete paving block per HYD's standard (subject to HYD approval) and to improve streetscape (approx. paving area = 170m²)

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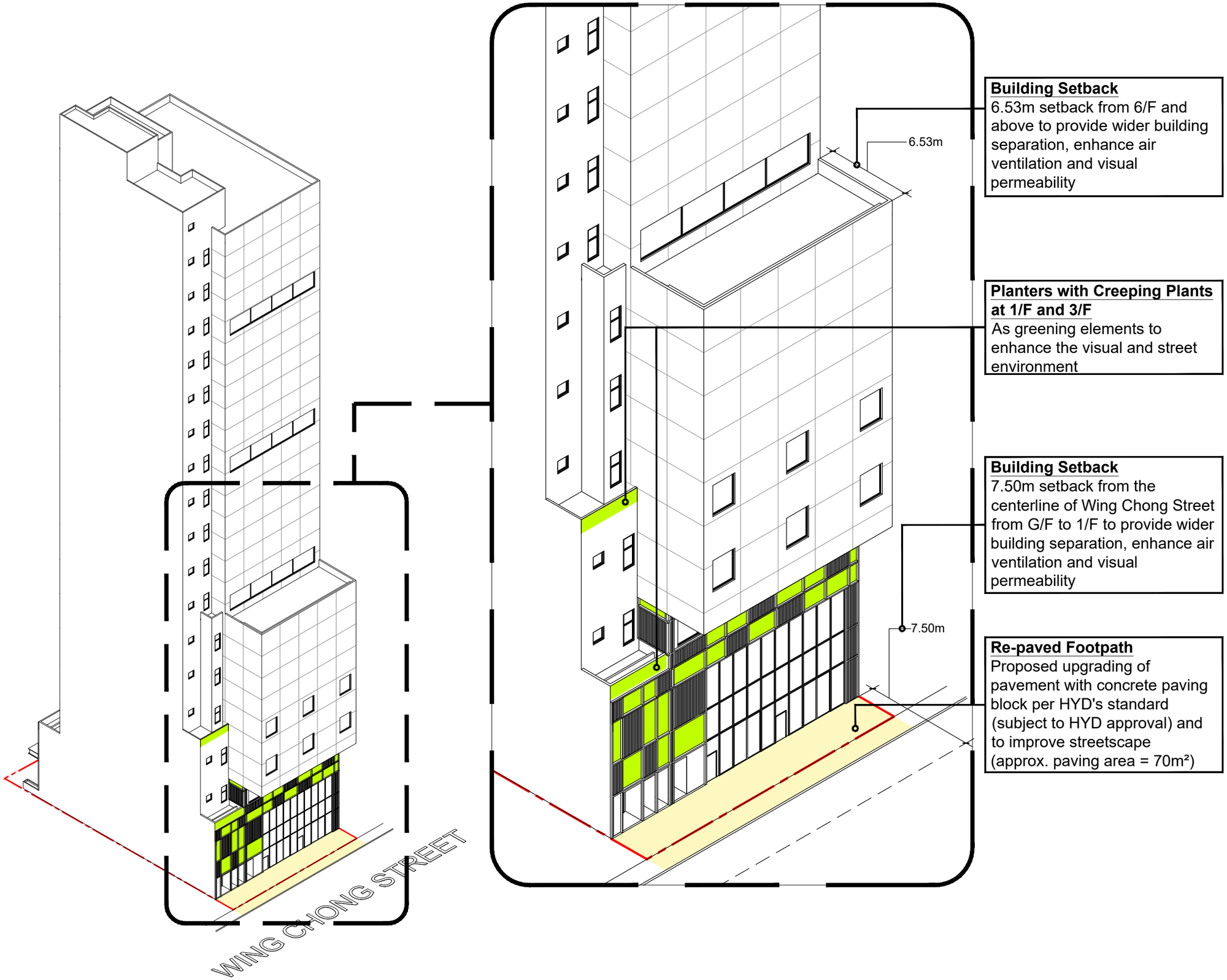
PROJECT NAME

REDEVELOPMENT OF
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

Figure 3.1Q
ISOMETRIC DRAWING A

DRAWN BY	CHECKED BY
MH	RC
SCALE	DATE
N/A	2025.06.20
JOB No.	DRAWING No.
2208	AR-10



Building Setback
6.53m setback from 6/F and above to provide wider building separation, enhance air ventilation and visual permeability

Planters with Creeping Plants at 1/F and 3/F
As greening elements to enhance the visual and street environment

Building Setback
7.50m setback from the centerline of Wing Chong Street from G/F to 1/F to provide wider building separation, enhance air ventilation and visual permeability

Re-paved Footpath
Proposed upgrading of pavement with concrete paving block per HYD's standard (subject to HYD approval) and to improve streetscape (approx. paving area = 70m²)

NOTES:

DO NOT SCALE DRAWINGS.

ALL DIMENSIONS MUST BE VERIFIED AT THE WORK BY THE CONTRACTOR.

ALL PRINTS, SPECIFICATIONS AND THEIR COPYRIGHT ARE THE PROPERTY OF THE ARCHITECTS AND SHALL BE RETURNED AT THE COMPLETION OF THE WORK.

REVISION

NO	DATE	DESCRIPTION

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PROJECT NAME

REDEVELOPMENT OF
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

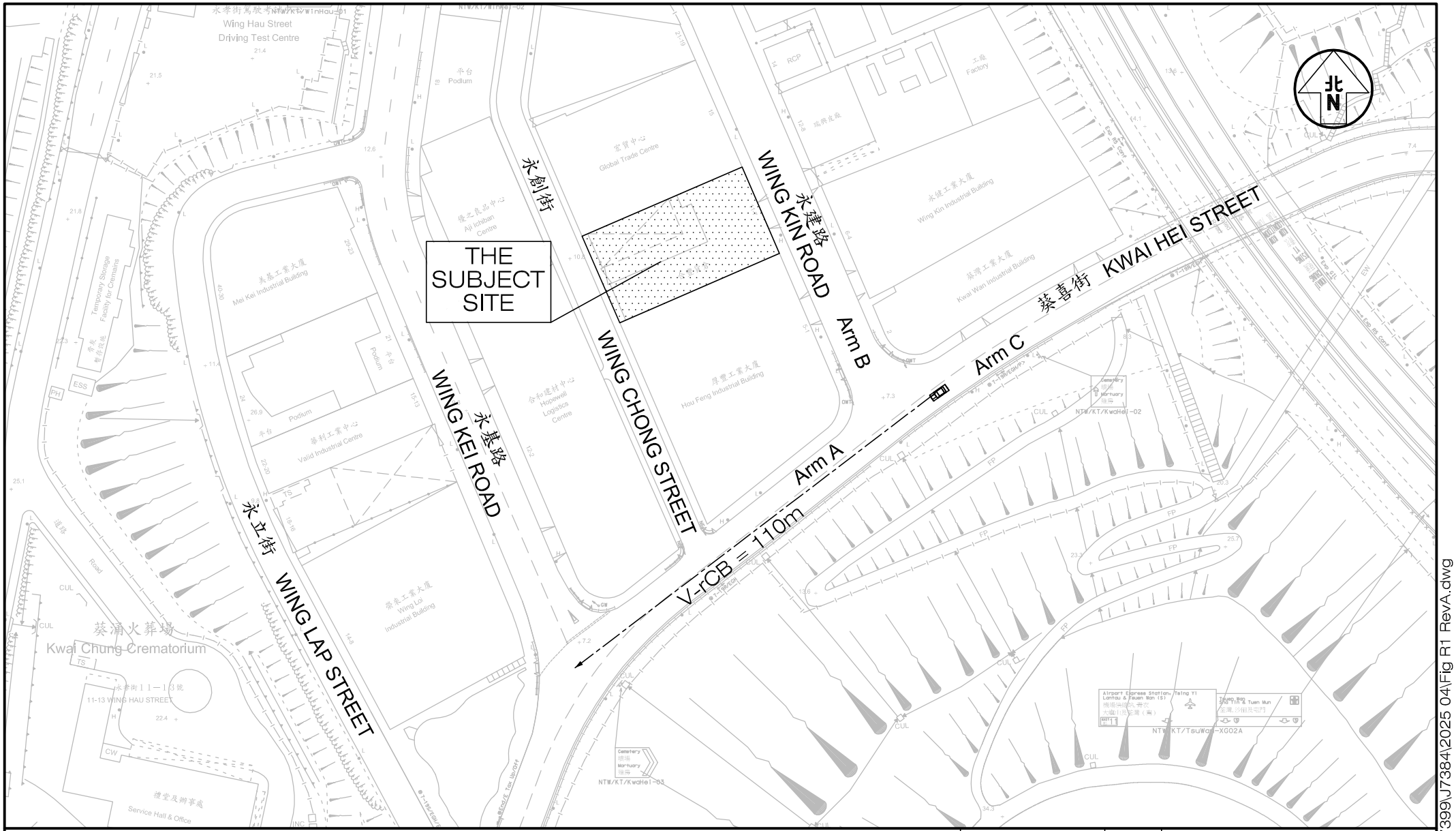
DRAWING TITLE

Figure 3.1R
ISOMETRIC DRAWING B

DRAWN BY	CHECKED BY
MH	RC
SCALE	DATE
N/A	2025.06.18
JOB No.	DRAWING No.
2208	AR-11

Attachment 7

Revised Figure R1



Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. R1 / Revision A
Figure Title	VISIBILITY V-RCB AT J4 KWAI HEI STREET / WING KIN ROAD	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 1250 / Date 23 APR 2025

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Email : mail@ckmasia.com.hk

T:\JOB\J7350-J7399\J7384\2025 04\Fig R1 RevA.dwg

Attachment 5
Sewerage Impact Assessment

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Sewerage Impact Assessment

(V2.0)

May 2025

Reviewed By _____

(Technical Director: K.S. Lee)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties.

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1 INTRODUCTION

1.1 Background

1.1.1 OXO YW Limited ("the Project Proponent") has proposed to develop a data centre located at No. 7-11 Wing Kin Road, Kwai Chung.

1.1.2 Cinotech Consultants Limited was commissioned by OXO YW Limited to carry out a Sewerage Impact Assessment (SIA) to assess and envisage any potential sewerage impact on the implementation of the Project and to recommend SIA mitigation measures.

1.1.3 This SIA is prepared to support the planning permission from the Town Planning Board (TPB) under Section 16 of the Town Planning Ordinance (CAP. 131) for a data centre with minor relaxation of plot ratio restriction from 9.5 to 11.4, and height restriction from 105mPD to 109.55mPD.

2 THE PROJECT

2.1 The Site

2.1.1 The Application Site (the "Site") is located in an industrial area in Kwai Chung, bordered by Wing Chong Street to the west, Wing Kin Road to the east, Global Trade Centre to the north, and Hou Feng Industrial Building to the south (see **Figure 2-1**). The Site and its surroundings fall within the industrial zone, as per the *Approved Kwai Chung Outline Zoning Plan No. S/KC/32* (see **Figure 2-2**).

2.1.2 The Site covers approximately 964 m² (about 929 m² excluding the additional area) and is currently occupied by a 2-storey industrial building. Planning applications have been submitted and approved with conditions in 2020 (Application No.: A/KC/457) and 2023 (Application No.: A/KC/496) for Offensive Trades use (Lard Boiling Factory) and Industrial use (Warehouse), respectively.

2.2 The Proposed Development

2.2.1 The Project Proponent proposes to redevelop the Application Site into a 17-storey data centre with a height of 109.55mPD and plot ratio of 11.4. The tentative layout of the proposed development is shown in **Appendix 2-1**, with a planned completion date of 2029.

3 SEWERAGE IMPACT ASSESSMENT

3.1 Methodology

3.1.1 *"Guidelines for Estimating Sewage Flows for Infrastructure Planning"* (GESF), version 1.0, March 2005, prepared by Environmental Protection Department (EPD) provides guidelines for the unit flow factor, catchment inflow factor and peaking factor. The daily sewage discharge and the peak sewage flow are estimated by population, unit flow factors and peaking factors.

3.1.2 *"Sewerage Manual – Key Planning Issues and Gravity Collection System"*, third edition, May 2013, (hereafter called "the DSD Manual") prepared by Drainage Services Department (DSD) provides guidelines for the design of the drainage system. The capacities of the public sewers are calculated by Colebrook-White Equation.

3.2 Sewage Discharge from the Proposed Development

3.2.1 The proposed development is intended solely for data centre use. Therefore, the sewage generated from the normal operation of the data centre and the discharge from the water-cooling tower system will be the primary sources.

3.2.2 Since the proposed development is expected to be unmanned and automatic, the number of staff will be limited. As advised by the project applicant, approximately 20 to 25 staff members will be hired; therefore, 25 staff have been adopted in the calculation of sewage discharge for conservatism.

3.2.3 During the operation of the proposed development, no non-staff personnel is expected to be on-site under normal circumstances. In the absence of water-consuming activities and non-staff personnel within the proposed development, the unit flow factor for Commercial Employees, as per EPD's GESF (0.08 m^3/day/person), is deemed appropriate for normal operations. For a conservative assessment, the unit flow factor for Community, Social & Personal Services (0.20 m^3/day/person) has also been adopted to account for potential events held within the proposed development, resulting in a total unit flow factor of 0.28 m^3/day/person.

3.2.4 A water-cooling tower system will be used as the primary cooling method for the equipment (computer server racks) during operation. According to the E&M Consultant, a maximum of 150 m^3/day of bleed-off water is expected to be discharged under worst-case scenarios (i.e., during peak design load in hot weather). The bleed-off water from the water-cooling tower system will be reused wherever practicable, such as for flushing, before being discharged into the public sewerage system. As a result, the amount of direct discharge of bleed-off water will be minimised.

3.2.5 The estimated daily dry weather flow from the project (157 m^3/day) is summarized in **Table 3-1**.

Table 3-1 Calculation of Sewage Discharge

Source	Unit Flow Factors [1] (m^3/day/person)	No. of Occupants / Employee	Flow Rate (m^3/day)
Staff from Data Centre	0.28[2]	25	7.0
Water from the Cooling System	-	-	150.0
Total	**-**	-	**157.0**

[1] EPD's Guidelines for Estimating Sewage Flows for Infrastructure Planning.
[2] The Unit Flow Factor for Commercial Employees, and Commercial activities J11 (Community, Social & Personal Services) in Table T-2 of GEFS has been adopted.
[3] Daily flow rate of the water-cooling tower system is provided by the project E&M consultant.

3.3 Sewage Discharge from the Vicinity

3.3.1 The public sewage network in the vicinity is illustrated in **Figure 3-1**. The surrounding developments near the Project is sectioned into different catchments (A-O) based on the existing sewage system.

3.3.2 The GFA of the catchments are based on the land lot size and maximum allowable plot ratio (9.5 for industrial buildings) in general unless the actual plot ratio is far from the maximum value[1]. As the warehouse in the vicinity also provide logistics service, the usage with higher sewage discharge per unit area, i.e.: logistics (transportation), has been adopted for conservative assessment. For industrial building of multiple type[2], manufacturing type has been assumed for conservative assessment.

3.3.3 Catchments N & O are columbarium and therefore, the number of visitors on Ching Ming Festival Day have been adopted for the sewage discharge calculation. Kwai Chung Columbarium (Catchment N) has 9,276 niches and 16,000 visitors during Ching Ming Festival in 2019 according to press release[3]. The columbarium at Wing Lap Street 2-6 (Catchment O) is allowed to provided 23,000 niches according to its approved planning application (Application No. A/KC/437[4]). As no visitor statistic for the ultimate scenario, when the 23,000 niches are fully occupied, is available, the number of visitors per niches ratio of Kwai Chung Columbarium has been adopted, resulting in 39,672 visitors on Ching Ming Festival Day. In addition, since the number of visitors outweigh the number of staff for the columbarium, the discharge from the staff has been ignored.

3.3.4 The sewage catchment areas in the vicinity are illustrated in **Figure 3-1** and summarised in **Table 3-2**. The detailed calculations are presented in **Appendix 3-1**.

Table 3-2 Sewage Discharge from Surrounding Catchments

Catchment ID	Development	Total Flowrate / catchment (m^3/day)
A	Wing Kin Road 22, Gold Way Industrial Centre, Refuse Collection Point	1,137.5
B	Global Trade Centre, Wing Kin Road 19-21	244.7
C	Wing Kin Road 8-12	31.4
D	Wing Kin Industrial Building	246.6

[1] For example, Wing Kin Road 8-12 in Catchment C consists of low-rise buildings only.
[2] For example, Wing Kin Road 22 consists of 5 floors for storage, and 13 floors for manufacturing according to layout plan
[3] Number of visitor (Kwai Chung Columbarium) - https://www.cso.gov.hk/eng/blog/blog20200315.htm
Number of niches (Kwai Chung Columbarium) - https://www.info.gov.hk/gia/general/202106/16/P2021061600496.htm
[4] Planning Application No. A/KC/437 - https://www2.ozp.tpb.gov.hk/gist/apply/en_tc/A_KC_437_TC.pdf

Catchment ID	Development	Total Flowrate / catchment (m^3/day)
E	Kwai Wan Industrial Building	166.4
F	Hou Feng Industrial Building	317.9
G	Hopewell Logistics Centre, Aji Ichiban Centre	372.1
H	Wing Loi Industrial Building, Valid Industrial Building, Mei Kei Industrial Building, Wing Lap Street 24-28	719.7
I	Good Ba Ba Hitech Building	51.7
J	Wing Hau Street Driving Test Centre	1.1
K	Kerry TC Warehouses 2	401.6
L	Wing Shing Industrial Building	325.4
M	38 Wing Kei Road	62.6
N	Kwai Chung Columbarium	640.0
O	Wing Lap Street 2-6 (columbarium)	1,586.9

[i] The calculation is detailed in **Appendix 3-1**.

3.4 Review of Sewage System

3.4.1 As the scale of the Proposed Project is larger than the existing 2-storey industrial building, the addition sewage discharge may induce potential sewerage impact to the existing public sewage system, thus the utilization of the downstream sewers shall be checked.

3.4.2 The sewage from the Site will be discharged to Public Sewer Manhole FMH4022807, flow along 400mm sewers (PS01 – PS04, **Figure 3-2**) along Wing Kin Road, then join with the 750mm sewers (PS05 – PS06, **Figure 3-2**) along Kwai Hei Street.

3.4.3 As the invert level and material of the 400mm sewer along Wing Kin Road are the key parameter to determine the potential sewerage impact from the Site, Castco Testing Centre Ltd. has been hired to conduct the manhole survey. The manhole survey report is provided in **Appendix 3-3**.

3.4.4 The capacities of the downstream sewer sections (PS01 – PS06, **Figure 3-2)** are calculated by Colebrook-White Equation and listed in **Table 3-3**. The detailed calculation is shown in **Table A of Appendix 3-2**. The adopted information of the sewers PS01 - PS06 are based on the manhole survey report (**Appendix 3-3**) and Geoinfo Map[5].

Table 3-3 Capacity of Existing Public Sewers

Pipe Section	Upstream Manhole	Downstream Manhole	Full Capacity (L/s)
PS01	FMH4022807	FMH4022808	299.9
PS02	FMH4022808	FMH4022809	468.5
PS03	FMH4022809	FMH4022810	444.6
PS04	FMH4022810	FMH4022768	239.0
PS05	FMH4022768	FMH4022769	788.8
PS06	FMH4022769	FMH4022770	695.3

3.4.5 **Table 3-4** shows a summary of the proportion of peak flow to full capacity from surrounding catchments areas to each segment of existing pipe sections. The detailed calculation is shown in **Table B of Appendix 3-2**.

[5] Geoinfo map - https://www.map.gov.hk/gm/

Table 3-4 Utilization of the Existing Sewer

Pipe Section	Full Capacity (L/s)	Peak Flow (L/s) [1-5]	Utilization (%)
PS01	299.9	100.0	33%
PS02	468.5	135.9	29%
PS03	444.6	146.5	33%
PS04	239.0	146.5	61%
PS05	788.8	329.1	42%
PS06	695.3	329.1	47%

[1] The contribution population = total catchment discharge (m^3/day) / 0.27(m^3/day/person)
[2] Peaking Factor of 8 for contribution population <1,000, 6 for contribution population of 1000 – 5000, 5 for contribution population of 5000-10000 and 4 for contribution population of 10000 – 50000 are adopted.
[3] The site is located within Kwai Chung District. The Catchment Inflow Factors of Kwai Chung (=1.1) has been adopted.
[4] Peak Flow = [Daily average dry weather flow × Peaking Factor (including stormwater allowance) / 24 / 3600] × Catchment Inflow Factor.

3.4.6 According to the calculation, the existing downstream sewers can cater for the expected sewage flow. No upgrading work is necessary.

3.5 Proposed New Sewer

3.5.1 The sewage discharge from Project is proposed to be collected by a terminal manhole (FTMH01) and discharged via a proposed pipe (PP01) to an existing public sewage manhole (FMH4022807). The 225mm PE sewer (PP01) is proposed with slope of 1:100. The information of the proposed new pipe is listed in **Table 3-5**; and detailed in **Appendix 3-2**.

3.5.2 The alignment of the proposed new sewer is illustrated in **Figure 3-3**. The precise alignment and invert levels will subject to detailed design. The Project Proponent will be responsible for constructing the proposed pipe PP01 and its associate works.

Table 3-5 Proposed New Sewer

Segment	Proposed New [1]			Full Capacity (L/s)	Total Peak Flow (L/s)	Total Discharge Loading to Pipe Capacity (%)
	Upstream Invert Level (mPD)	Downstream Invert Level (mPD)	Diameter (mm)			
Proposed New Sewer						
PP01	FTMH01	FMH4022807	225	56.4	16.0	28%

[1] The precise alignment and invert levels of the proposed pipes will be subject to detail design.

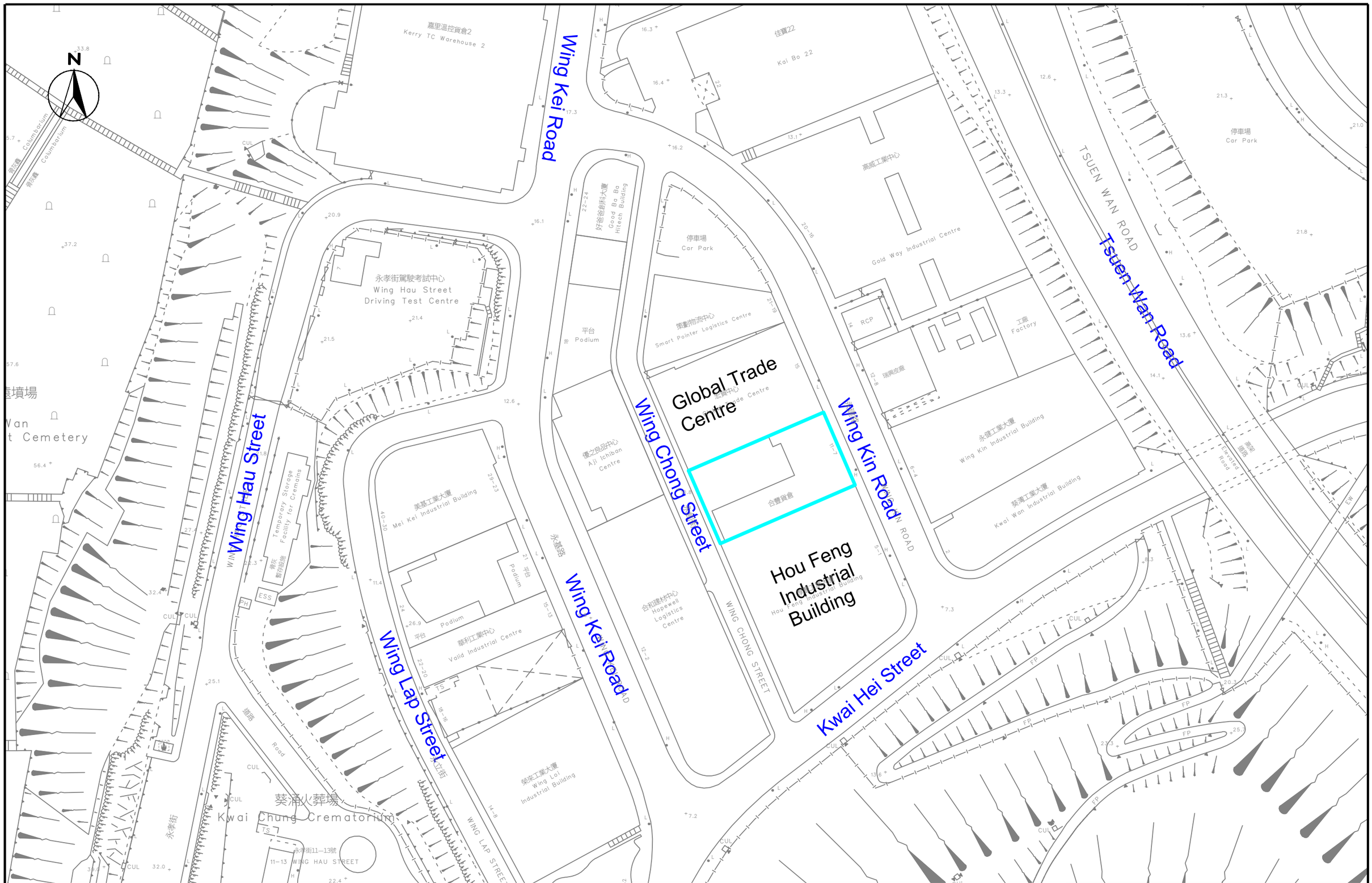
4 CONCLUSION

4.1.1 This sewage impact assessment (SIA) has been prepared to address all the potential adverse sewerage impacts arose from the proposed development of the lot, and to recommend mitigation measures and improvement works, if required.

4.1.2 The estimated daily sewage discharge from the Project is 157 m^3/day. Sewage from the Project will be collected by the new terminal sewage manhole FTMH01 and discharged to existing sewer manhole FMH4022807 via a proposed 225mm PE sewer (PP01) with slope of 1:100. Actual layout and invert levels of the proposed sewer are subject to detailed design.

4.1.3 The sewerage network is considered to have sufficient capacities to cater for the expected sewage flows from the Project and the surrounding catchments. Therefore, no adverse sewerage impact on the public sewage system is expected from the Project.

FIGURES

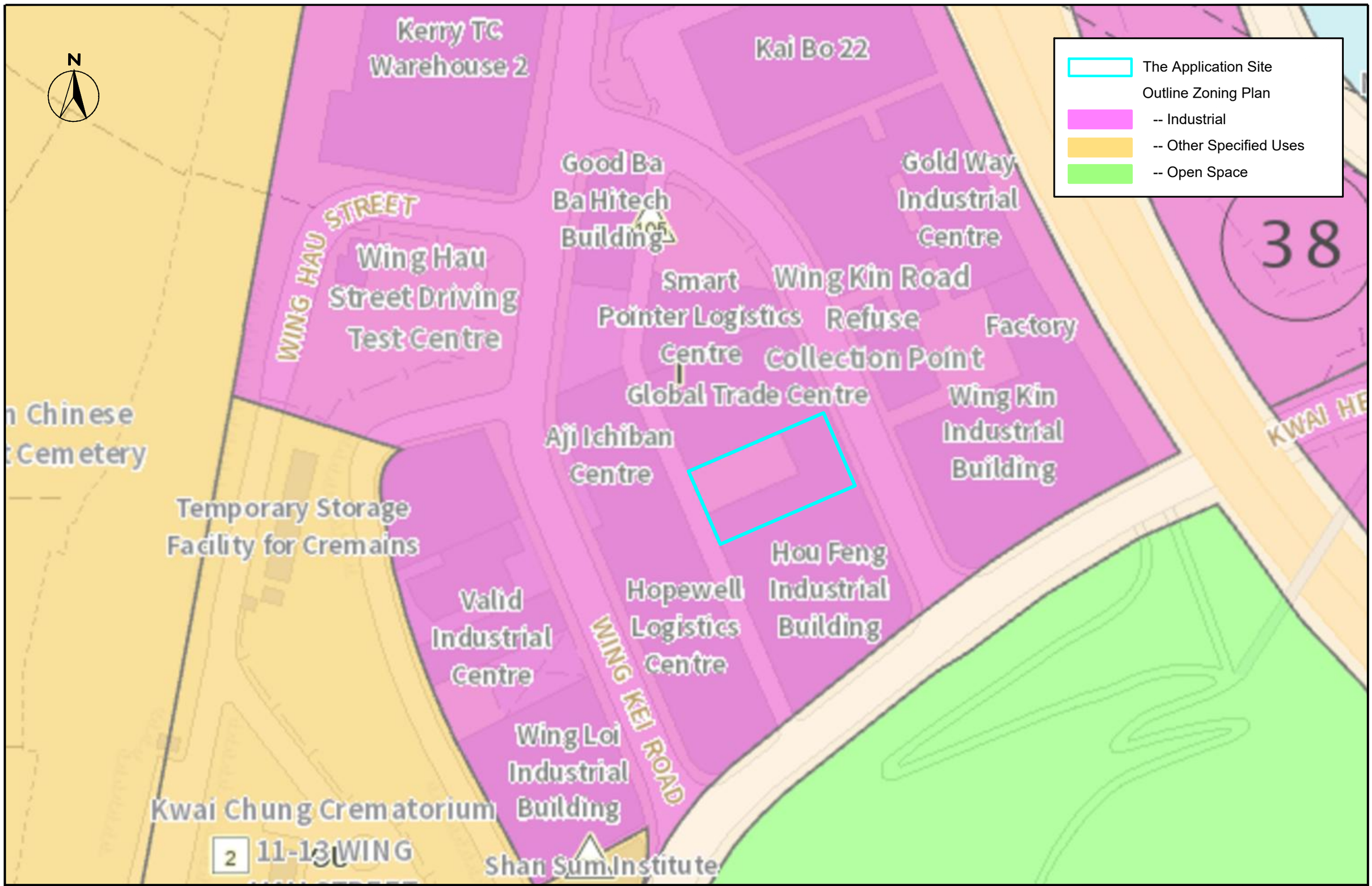


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Location of the Project Site

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JOB No.	IA23170	DRAWING No.	2-1
		REV	-

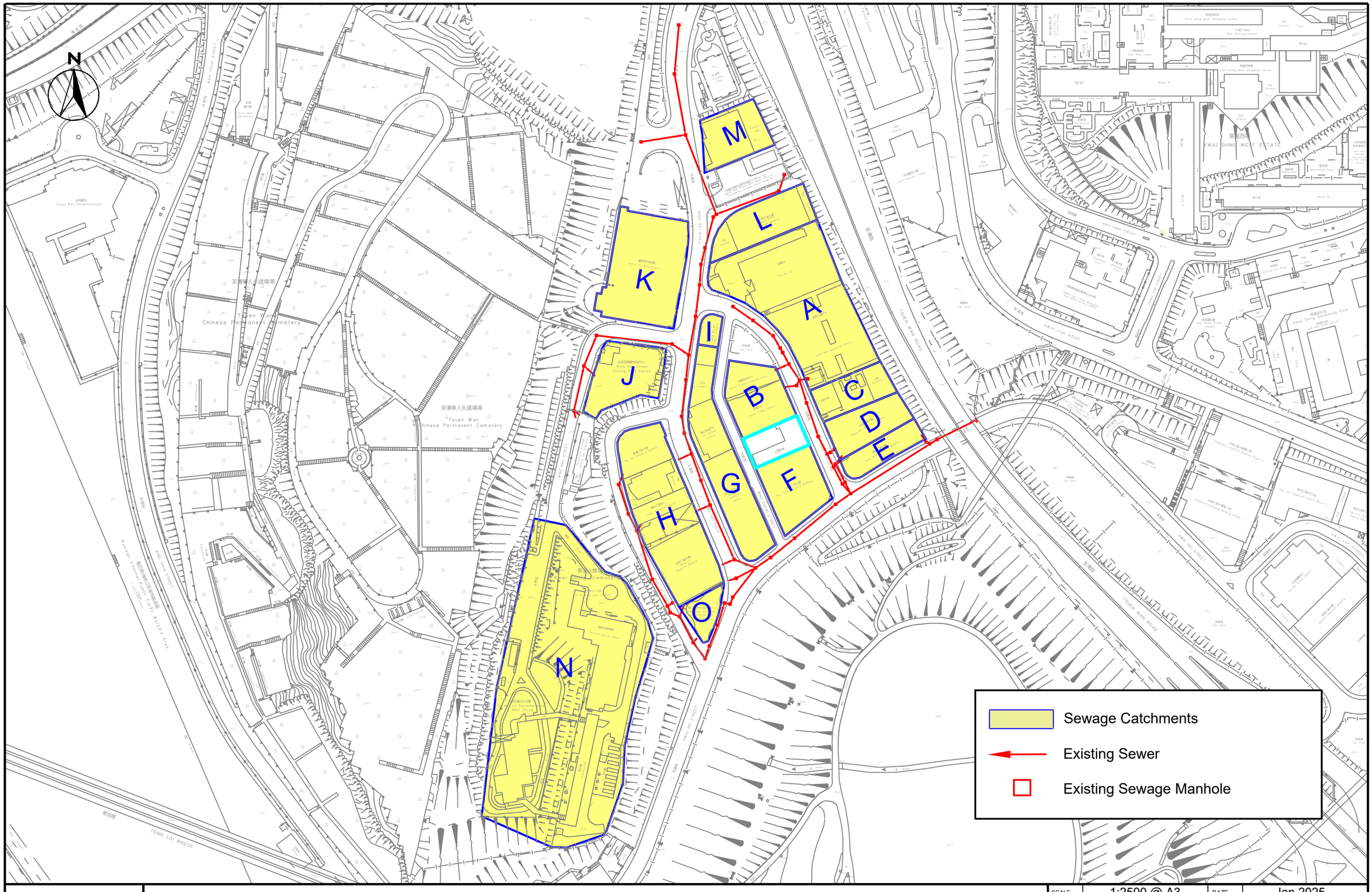


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Zoning in the Vicinity of the Project Site

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JOB No.	IA23170	DRAWING No.	2-2
		REV	-

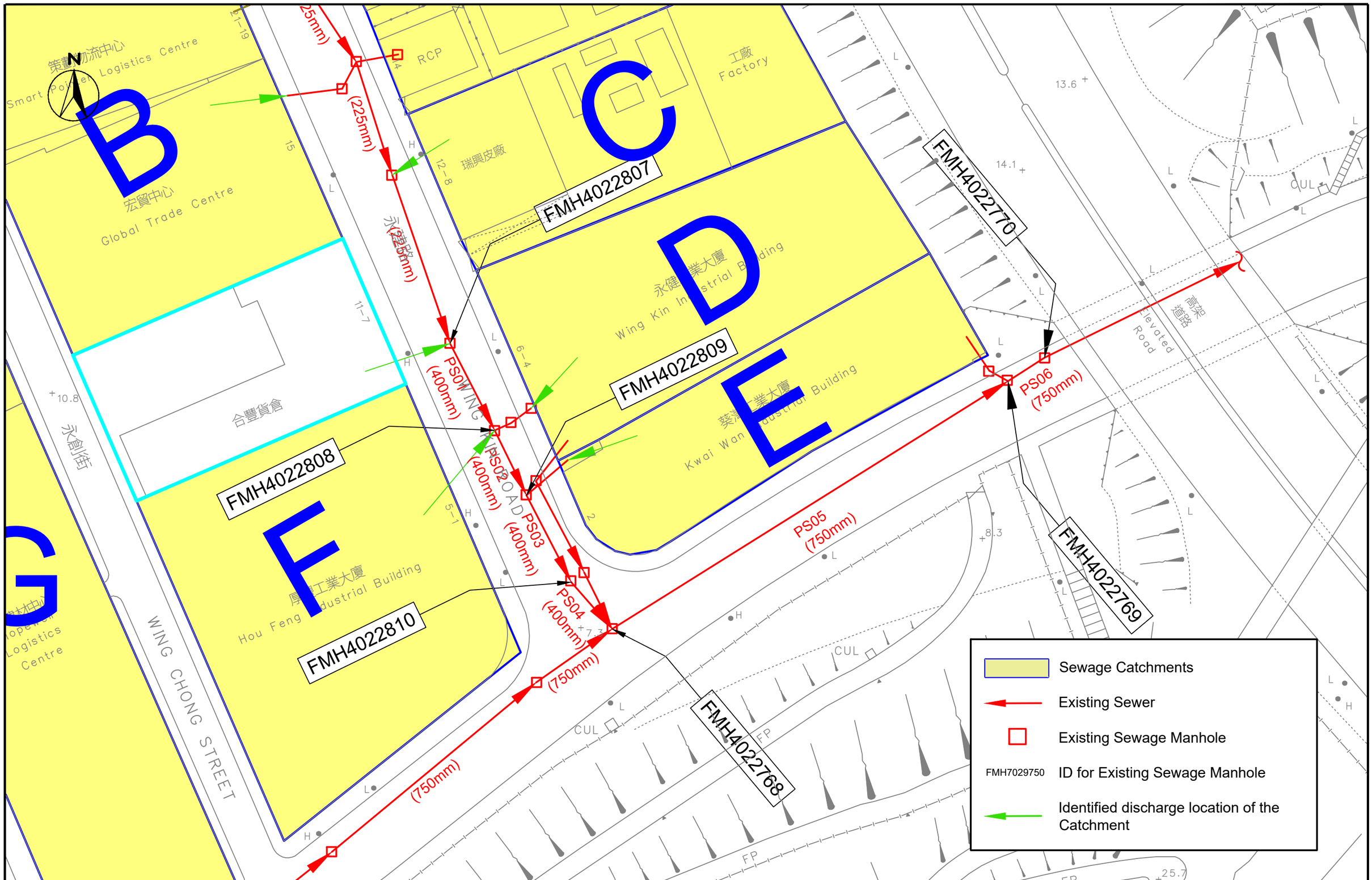


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Sewage Catchments and Existing Public Sewers in the Vicinity - Overview

SCALE	1:2500 @ A3	DATE	Jan 2025
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	3-1
		REV	-



CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Existing Sewers in the Vicinity

SCALE	1:500 @ A3	DATE	Jan 2025
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	3-2
		REV	-

N

宏貿中心
Global Trade Centre

永(325mm)

PP01
(225mm)

FTMH01

合豐貨倉

FMH4022808

PS01
(400mm)

WING KIN ROAD

PS02
(400mm)

PS03
(400mm)

FMH4022

瑞興皮廠

永健

永創街

15
12–8
11–7
6–4
5–1
2
10.8
H
L

	Sewage Catchments
	Existing Sewer
	Existing Sewage Manhole
FMH7029750	ID for Existing Sewage Manhole
	Identified discharge location of the Catchment
	Proposed New Sewer
	Proposed New Manhole

CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed New Sewer and Manhole

SCALE	1:250 @ A3	DATE	Jan 2025
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	3-3
		REV	-

APPENDIX 2-1
DEVELOPMENT PARAMETERS AND TENTATIVE SECTION PLANTENTATIVE SECTION PLAN

1.0	**PLOT RATIO & SITE COVERAGE CALCULATIONS**									
1.1	SITE AREA (UNDER LEASE)	929.031	m^2							
1.2	ADDITIONAL SITE AREA FACING WING CHONG STREET	35.169	m^2							
1.3	**SITE AREA FOR PR & SC CALCULATIONS**	**964.200**	**m^2**							
1.4	PERMITTED PLOT RATIO UNDER OZP	9.5								
1.5	ADDITIONAL PLOT RATIO UNDER PLANNING APPLICATION (20%)	1.9								
1.6	**PROPOSED PLOT RATIO**	**11.4**								
1.7	**PROPOSED TOTAL GROSS FLOOR AREA**	**10,991.880**	**m^2**							
1.8	CLASS OF SITE	A								
1.9	PERMITTED SITE COVERAGE UNDER 40m (82%) UNDER PNAP-132	790.644	m^2							
1.10	PERMITTED SITE COVERAGE ABOVE 61m (65%) UNDER PNAP-132	626.730	m^2							

2.0	**PROPOSED DEVELOPMENT CALCULATIONS**	**Accountable GFA**			**Mandatory Unaccountable GFA**		**CFA / Floor**		**Site Coverage**
2.1	BASEMENT 2 FLOOR		m^2		268.50	m^2	268.5	m^2	-
2.2	BASEMENT 1 FLOOR	51.03	m^2		778.97	m^2	830.0	m^2	-
2.3	GROUND FLOOR	658.20	m^2		436.40	m^2	782.0	m^2	81.104%
2.4	1st FLOOR (E&M FLOOR)	698.80	m^2		40.20	m^2	739.0	m^2	76.644%
2.5	2nd FLOOR (E&M FLOOR)	699.10	m^2		39.90	m^2	739.0	m^2	76.644%
2.6	3rd FLOOR (E&M FLOOR)	726.00	m^2		13.00	m^2	739.0	m^2	76.644%
2.7	4th FLOOR (DATA HALL)	726.00	m^2		13.00	m^2	739.0	m^2	76.644%
2.8	5th FLOOR (DATA HALL)	726.00	m^2		13.00	m^2	739.0	m^2	76.644%
2.9	6th FLOOR (E&M FLOOR)	606.00	m^2		13.00	m^2	619.0	m^2	64.198%
2.10	7th FLOOR (DATA HALL))	606.00	m^2		13.00	m^2	619.0	m^2	64.198%
2.11	8th FLOOR (DATA HALL)	606.00	m^2		13.00	m^2	619.0	m^2	64.198%
2.12	9th FLOOR (DATA HALL)	606.00	m^2		13.00	m^2	619.0	m^2	64.198%
2.13	10th FLOOR (E&M FLOOR)	506.00	m^2		113.00	m^2	619.0	m^2	64.198%
2.14	11th FLOOR (DATA HALL)	606.00	m^2		13.00	m^2	619.0	m^2	64.198%
2.15	12th FLOOR (DATA HALL)	606.00	m^2		13.00	m^2	619.0	m^2	64.198%
2.16	13th FLOOR (DATA HALL)	606.00	m^2		13.00	m^2	619.0	m^2	64.198%
2.17	14th FLOOR (E&M FLOOR)	606.00	m^2		13.00	m^2	619.0	m^2	64.198%
2.18	15th FLOOR (DATA HALL)	606.00	m^2		13.00	m^2	619.0	m^2	64.198%
2.19	16th FLOOR (DATA HALL)	606.00	m^2		13.00	m^2	619.0	m^2	64.198%
2.20	MAIN ROOF	140.75	m^2		94.25	m^2	235.0	m^2	-
2.21	UPPER ROOF	-	m^2		65.00	m^2	65.0	m^2	-
2.22	**PROPOSED TOTAL GROSS FLOOR AREA**	**10,991.88**	**m^2**		**2005.22**	**m^2**	**12,684.50**		
2.25	HEIGHT OF GROUND FLOOR	11.00	m						
2.26	HEIGHT OF 1st FLOOR	6.00	m						
2.27	HEIGHT OF 2nd FLOOR	6.00	m						
2.28	HEIGHT OF 3rd FLOOR	6.00	m						
2.29	HEIGHT OF 4th - 18th FLOOR (@5.5m PER FLOOR)	71.50	m						
2.30	**PROPOSED TOTAL HEIGHT**	**100.50**	**m**						
2.31	MEAN SITE STREET LEVEL	8.390	mPD						
2.32	HEIGHT OF GROUND FLOOR ABOVE MEAN STREET LEVEL	0.660	m						
2.33	PROPOSED HEIGHT ABOVE PRINCIPAL DATUM	109.550	mPD						
2.34	PERMITTED HEIGHT UNDER OZP	105.000	mPD						
2.35	**ADDITIONAL** HEIGHT UNDER PLANNING APPLICATION	4.550	mPD		4.15%				
3.1	Required Set Back Area at G/F under PNAP APP-132 (8% of Site Area)	77.136	m^2						
3.2	Planter Area at G/F	2.00	m^2						
3.3	Planter Area at 1/F	11.00	m^2						
3.4	Planter Area at 2/F	4.00	m^2						
3.5	Planter Area at 3/F	9.00	m^2						
3.6	Vertical Green Area	169.00	m^2						
3.7	**Total Greening Area**	**195.00**	m^2						
3.8	**Greenery Site Coverage - Primary Zone**	**17.73%**							
3.9	**Greenery Site Coverage - Overall**	**20.22%**							

NOTES:

DO NOT SCALE DRAWINGS.

ALL DIMENSIONS MUST BE VERIFIED AT THE WORK BY THE CONTRACTOR.

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REVISION

NO	DATE	DESCRIPTION

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18/F | Xiu Hua Commercial Building
211-213 Jaffe Road | Wan Chai | HK
Tel: 3583-2000 | Fax: 8143-1130
Email: mail@studiorca.com

STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

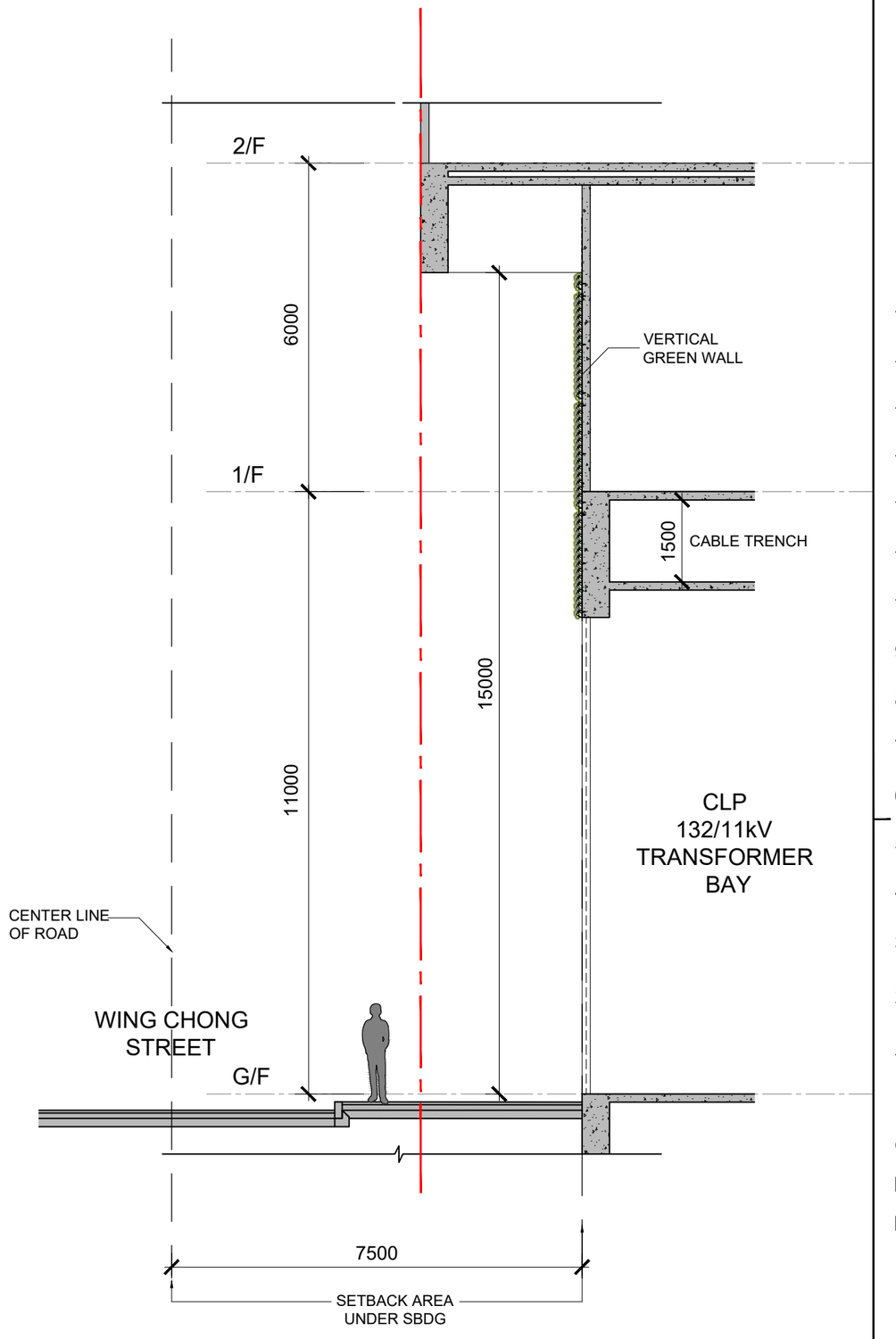
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

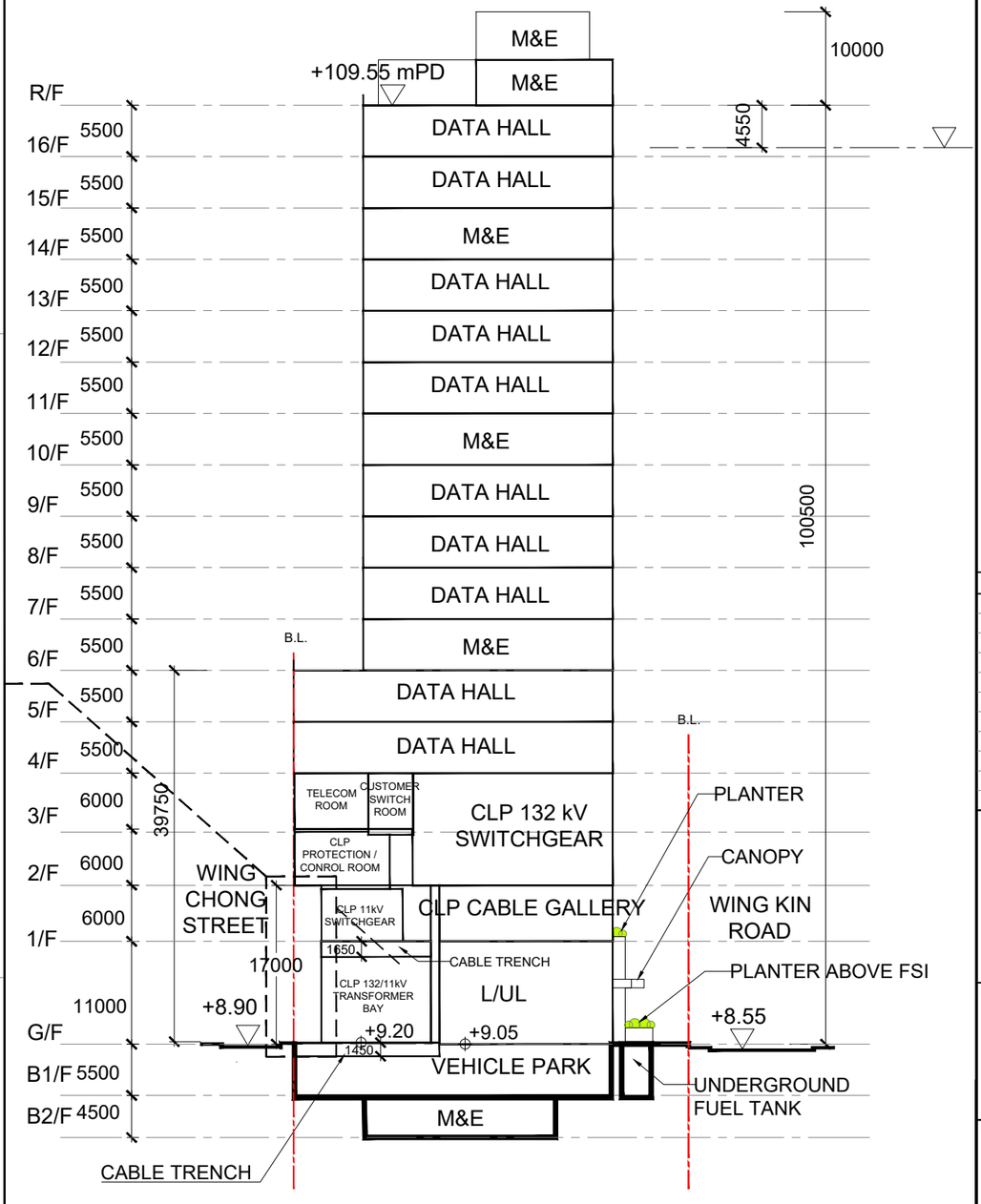
DRAWING TITLE

DEVELOPMENT SCHEDULE

DRAWN BY	CHECKED BY
TK	RC
SCALE	**DATE**
NIL	2025.06.18
JOB No.	**DRAWING No.**
2208	A-00



SECTION OF VERTICAL GREEN WALL
SCALE: 1:100



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REVISION

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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

SECTION A-A

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:750	2025.06.18
JOB No.	DRAWING No.
2208	A-14

APPENDIX 3-1
SEWAGE DISCHARGE FROM SURROUNDING CATCHMENTS

Appendix 3-1: Sewage Discharge from Surrounding Catchments

Catchment ID	Building	Total Office Area (m^2)	Total I/O Building Area (m^2)	Total Transport Area (m^2)	Total Manufacturing Area (m^2)	Other Employees [2]	Total Visitors [3]	Population / No. of Occupants (by worker density) [4]				Flowrate (m^3/day) [5]					Total Flowrate / catchment (m^3/day)
								Community, Social & Personal Services (staff)	Finance, Insurance, Real Estate & Business Services (Staff)	Transport (staff)	Manufacturing (staff)	Community, Social & Personal Services UFF = 0.28	Finance, Insurance, Real Estate & Business Services UFF = 0.08	Transport & Storage UFF=0.18	Manufacturing UFF=0.73	Visitor [6] UFF=0.04	
A	Wing Kin Road 22, Gold Way Industrial Centre, Refuse Collection Point	0	0	0	67650	6	0	6	0	0	1556	1.7	0.0	0.0	1135.8	0.0	**1137.5**
B	Global Trade Centre, Wing Kin Road 19-21	0	0	6527	11913	0	0	0	0	248	274	0.0	0.0	44.6	200.0	0.0	**244.7**
C	Wing Kin Road 8-12	0	0	0	1873	0	0	0	0	0	43	0.0	0.0	0.0	31.4	0.0	**31.4**
D	Wing Kin Industrial Building	0	0	0	14687	0	0	0	0	0	338	0.0	0.0	0.0	246.6	0.0	**246.6**
E	Kwai Wan Industrial Building	0	0	0	9909	0	0	0	0	0	228	0.0	0.0	0.0	166.4	0.0	**166.4**
F	Hou Feng Industrial Building	0	0	0	18934	0	0	0	0	0	435	0.0	0.0	0.0	317.9	0.0	**317.9**
G	Hopewell Logistics Centre, Aji Ichiban Centre	0	0	18440	14649	0	0	0	0	701	337	0.0	0.0	126.1	246.0	0.0	**372.1**
H	Wing Loi Industrial Building, Valid Industrial Building, Mei Kei Industrial Building, Wing Lap Street 24-28	0	0	0	42864	0	0	0	0	0	986	0.0	0.0	0.0	719.7	0.0	**719.7**
I	Good Ba Ba Hitech Building	0	0	0	3078	0	0	0	0	0	71	0.0	0.0	0.0	51.7	0.0	**51.7**
J	Wing Hau Street Driving Test Centre	121	0	0	0	0	0	4	0	0	0	1.1	0.0	0.0	0.0	0.0	**1.1**
K	Kerry TC Warehouses 2	0	0	58720	0	0	0	0	0	2231	0	0.0	0.0	401.6	0.0	0.0	**401.6**
L	Wing Shing Industrial Building	0	0	0	19380	0	0	0	0	0	446	0.0	0.0	0.0	325.4	0.0	**325.4**
M	38 Wing Kei Road	0	17772	0	0	0	0	0	782	0	0	0.0	62.6	0.0	0.0	0.0	**62.6**
N	Kwai Chung Columbarium	0	0	0	0	0	16000	0	0	0	0	0.0	0.0	0.0	0.0	640.0	**640.0**
O	Wing Lap Street 2-6 (columbarium)	0	0	0	0	0	39672	0	0	0	0	0.0	0.0	0.0	0.0	1586.9	**1586.9**

Notes:

[1] Total Area = land lot size x maximum allowable plot ratio (9.5)

[2] Other employees include the staffs of Refuse Collection Point (classified as community services).

[3] The total visitors is the number of grave sweepers on Ching Ming Festival Day.

[4] The worker density for Community, Social & Personal Services Area (5.9 employee per 100 m^2), Transport Area (3.8 employee per 100 m^2), Manufacturing Area (2.3 employee per 100 m^2) and I/O Building (4.4 employee per 100 m^2)employee are from Figure 9 & 15 of Commercial and Industrial Floor Space Utilization Survey 2005.

[5] The Unit Flow Factors are 0.28, 0.18, 0.73, 0.04 m^3/person/day for "Community, Social & Personal Service", "Transport & storage", "Manufacturing", "Visitor" respectively.

[6] The Unit Flow Factor of student has been adopted as the visitors.

Supplementary Note for the Estimated GFA Breakdown

Catchment ID	Address	Estimated Land lot area	Estimated GFA(m^2)	GFA Breakdown (m^2)					Type	Remark
				Office	I/O Building	Transport	Storage	Manufacturing		
Project Site	Wing Kin Road 7-11	967	11024		10992				Data Centre	
A	Wing Kin Road 22	3697	35121.5					35121.5	5 floors for storage, and 13 floors for manufacturing according to layout plan	Assume 100% manufacturing for conservative assessment
	Refuse Collection Point	--	--						Special	Assume 6 staff
	Gold Way Industrial Centre	3424	32528					32528	Manufacturing	
B	Gobal Trade Centre	1254	11913					11913	Manufacturing	
	Wing Kin Road 19-21	687	6526.5			6526.5			Transport & storage	
C	Wing Kin Road 8-12	1391	1873					1873	Manufacturing	GFA from layout
D	Wing Kin Industrial Building	1546	14687					14687	Manufacturing	
E	Kwai Wan Industrial Building	1043	9908.5					9908.5	Manufacturing	
F	Hou Feng Industrial Building	1993	18933.5					18934	Manufacturing & storage & transport	Assume 100% manufacturing for conservative assessment
G	Hopewell Logistics Centre	1941	18439.5			18439.5			Transport & storage	
	Aji Ichiban Centre	1542	14649					14649	Manufacturing	
H	Wing Loi Industrial Building	1962	18639					18639	Manufacturing	
	Valid Industrial Building	523	4968.5					4969	Manufacturing	
	Mei Kei Industrial Building	1100	10450					10450	Manfacturing	
	Wing Lap Street 24	927	8806.5					8806.5	Manfacturing	
I	Good Ba Ba Hitech Building	324	3078					3078	Manufacturing	
J	Wing Hau Street Driving Test Centre	2762	121	121					Office	GFA from layout
K	Kerry TC Warehouses 2	6181	58719.5			58719.5			Storage	
L	Wing Shing Industrial Building	2040	19380					19380	Manufacturing	
M	38 Wing Kei Road	--	17772.4		17772				Data Centre	https://www.leasinghub.com/zh/building/38-wing-kei-road/17828

Note:

[1] For warehouse, ratio of the area has been assumed to be 100% of transport for conservative assessment.

[2] Manufacturing has been assumed for the industiral buildings with multiple usage.

[3] Estimated GFA is calculated by estimated land lot area and maximum allowable plot ratio (9.5) for industrial buildings, except for the buildings with specified remark.

APPENDIX 3-2
DETAILED CALCULATION OF THE SEWERS

Appendix 3-2: Detailed Calculation of the Sewers

Table A: Calculation of Sewer Capacity

Segment	Upstream Manhole	Downstream Manhole	Upstream Invert Level (mPD)	Downstream Invert Level (mPD)	Length (m)	Diameter (mm)	Area (m^2)	Hydraulic Radius (m)	Slope	Kinematic Viscosity (m^2/s)	Pipe material	Hydraulic Pipeline Roughness (m) [1]	Velocity (m/s)	Full Capacity (l/s)
Existing Downstream Sewers														
PS01	FMH4022807	FMH4022808	**6.400**	**6.176**	14.0	**400**	0.126	0.1	0.0160	0.00000114	**Slimed Clayware**	0.0006	2.39	299.9
PS02	FMH4022808	FMH4022809	**6.086**	**5.682**	10.4	**400**	0.126	0.1	0.0388	0.00000114	**Slimed Clayware**	0.0006	3.73	468.5
PS03	FMH4022809	FMH4022810	**5.597**	**5.106**	14.0	**400**	0.126	0.1	0.0350	0.00000114	**Slimed Clayware**	0.0006	3.54	444.6
PS04	FMH4022810	FMH4022768	**5.105**	**5.014**	8.9	**400**	0.126	0.1	0.0102	0.00000114	**Slimed Clayware**	0.0006	1.90	239.0
PS05	FMH4022768	FMH4022769	**4.584**	3.860	67.1	**675**	0.358	0.16875	0.0108	0.00000114	**Slimed Concrete**	0.003	2.20	788.8
PS06	FMH4022769	FMH4022770	3.860	3.830	6.2	750	0.442	0.1875	0.0048	0.00000114	Slimed Concrete	0.003	1.57	695.3
Proposed New Sewer														
PP01	FTMH01	FMH4022807	--	--	12.2	225	0.040	0.05625	0.0100	0.00000114	PE	0.0003	1.42	56.4

Note:

[1] The roughness coefficient for slimed clayware sewer under poor condition has been adopted; the ks values are 0.6mm for velocities greater than 1.2m/s, otherwise 3mm.
The roughness coefficient for slimed concrete sewer under poor condition has been adopted; the ks values are 3mm for velocities greater than 1.2m/s, otherwise 6mm.
The roughness coefficient for slimed uPVC sewer under poor condition has been adopted for the proposed PE sewer; the ks values are 0.3mm for velocities greater than 1.2m/s, otherwise 1.5mm.

[2] The **bolded underlined information** are based on the Manhole Survey.

[3] The alignment and invert levels of the proposed new sewers are subject to detailed design.

Appendix 3-2: Detailed Calculation of the Sewers

Table B: Utilization of the Sewers

Segment	Upstream Manhole	Downstream Manhole	Full Capacity (L/s)	Catchment	Total catchment discharge (m^3 /day)	Catchment Inflow Factors, P_{CIF} [3]	Total catchment discharge with P_{cif}(m^3/day)	Contribution Population[1]	Peaking Factor[2]	Peak Flow [4] (L/s)	% of full capacity
Existing Downstream Sewers											
PS01	FMH4022807	FMH4022808	299.9	The Site + Catchment A - C	1570.6	1.1	1727.7	5817	5	100.0	33%
PS02	FMH4022808	FMH4022809	468.5	The Site + Catchment A - D & F	2135.1	1.1	2348.6	7908	5	135.9	29%
PS03	FMH4022809	FMH4022810	444.6	The Site + Catchment A - F	2301.5	1.1	2531.6	8524	5	146.5	33%
PS04	FMH4022810	FMH4022768	239.0	The Site + Catchment A - F	2301.5	1.1	2531.6	8524	5	146.5	61%
PS05	FMH4022768	FMH4022769	788.8	The Site + Catchment A - O	6462.5	1.1	7108.8	23935	4	329.1	42%
PS06	FMH4022769	FMH4022770	695.3	The Site + Catchment A - O	6462.5	1.1	7108.8	23935	4	329.1	47%
Proposed New Sewer											
PP01	FTMH01	FMH4022807	56.4	The Site	157.0	1.1	172.7	581	8	16.0	28%

Note:

[1] The contribution population = total catchment discharge (m^3/day) / 0.27(m^3/day/person)

[2] Peaking Factor of 8 for contribution population <1,000 , 6 for contribution population of 1000 - 5000, 5 for contribution population of 5000-10000, 4 for contribution population of 10000-50000 are adopted.

[3] The site is located within Kwai Chung District. The Catchment Inflow Factors of Kwai Chung (=1.1) has been adopted.

[4] Peak Flow = Daily average dry weather flow × Peaking Factor (including stormwater allowance) × Catchment Inflow Factor / 24 / 3600, the operation hour is assumed to be 24 hours.

APPENDIX 3-3
MANHOLE INTERNAL CONDITION SURVEY (MHICS) REPORT

佳力高試驗中心有限公司
CASTCO TESTING CENTRE LTD.

Manhole Internal Condition Survey (MHICS) REPORT

Manhole Internal Condition Survey at

Wing Kin Road

Project No.: Y22-US-P-103-002
Report No.: Y22-US-P-103-002-R0_00
CASTCO LRN: US0220618-1
Version: 00
June 2022

Prepared by:

Castco Testing Centre Ltd.

Issue Date:

20th June, 2022

6/F, 33 On Kui Street, Fanling, N.T.
29A On Chuen Street, Fanling, N.T.
1/F, 30 On Kui Street, Fanling, N.T.

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E-mail: info@castco.com.hk / pinky.lee@castco.com.hk
Website: www.castco.com.hk

FOREWORD

This report presents the results of Manhole Internal Condition Survey (MHICS) at Wing Kin Road.

The report is prepared by our specialist in Underground Utility Industry. According to the findings of the survey on site, it has been checked by well-experienced professional to ensure all data and records are in order and accurate.

Prepared by:

Ki HO BEng
Project Coordinator

Checked by:

Pinky LEE
BSc in Surveying, OMHKIUS
Project Manager

Endorsed by:

Stanley CHAN MScSurv
Senior Manager

TABLE OF CONTENT

1. INTRODUCTION 1
1.1 Client Information 1
1.2 Background 1
1.3 Scope of Survey 1
2. SURVEY DETAILS AND SITE DESCRIPTION 3
3. SUMMARY OF SURVEY RESULTS 4
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APPENDIX C – SURVEY METHODOLOGY 9
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1. INTRODUCTION

Client information, background and Scope of Survey will be briefed in this Section 1.

1.1 Client Information

Client information is shown in below ***Table 1.1.1***.

Table 1.1.1 – Client information

Project Client:	***KJL Limited***
Project Client's Representative:	Kenneth Li
E-mail:	kjl@kjlpd.com

1.2 Background

Castco Testing Centre Ltd. was appointed by ***KJL Limited*** as their Utility Specialist Contractor to carry out *Manhole Internal Condition Survey (MHICS) at Wing Kin Road, Kwai Chung.*

1.3 Scope of Survey

The work under this contract aims to evaluate the internal condition of manhole at ***Wing Kin Road*** for client's design and construction. The result of manhole survey shall be treated as a reliable base for manhole rehabilitation work including repairing structural defects, satisfying maintenance requirements and eliminating inflow and infiltration.

The service of works shall include all administration and management and field works on all aspects of the utility investigation works within the survey area to identify and locate specified ground and underground utilities, it can be summarized as followed:

Part A - Preparation and operation

1. To preliminary study the site condition and to propose for methods to be adopted
2. To coordinate and liaise with client and other parties involved if needed
3. To carry out Manhole Survey by assets identified within the survey extent with the latest available information from various sources including reconnaissance survey, manhole survey and pipeline investigations (Detailed Methodology is presented in Appendix D – Survey Methodology)
4. QA/QC checks to be conducted by the Project Manager and Survey Crew Leader in house and on site
5. All results generated shall be reviewed and checked by the Project Manager

Part B - Reporting

1. To submit preliminary survey drawing and relevant information if requested to present preliminary result in the interim data analysis period
2. To submit final survey report with drawing to present overall survey result
3. To attend the meeting by our project manager to keep client and consultant updated about the survey progress and preliminary result

2. SURVEY DETAILS AND SITE DESCRIPTION

Details of survey and site location are shown in ***Table 2.1 – Details of Survey***.

Table 2.1 – Details of Survey

Surveyed Location:	Wing Kin Road ***(Figure 2.1)***
Crew Leader:	Mr. C. F. WONG
Survey Duration of Utility Survey:	18th June, 2022

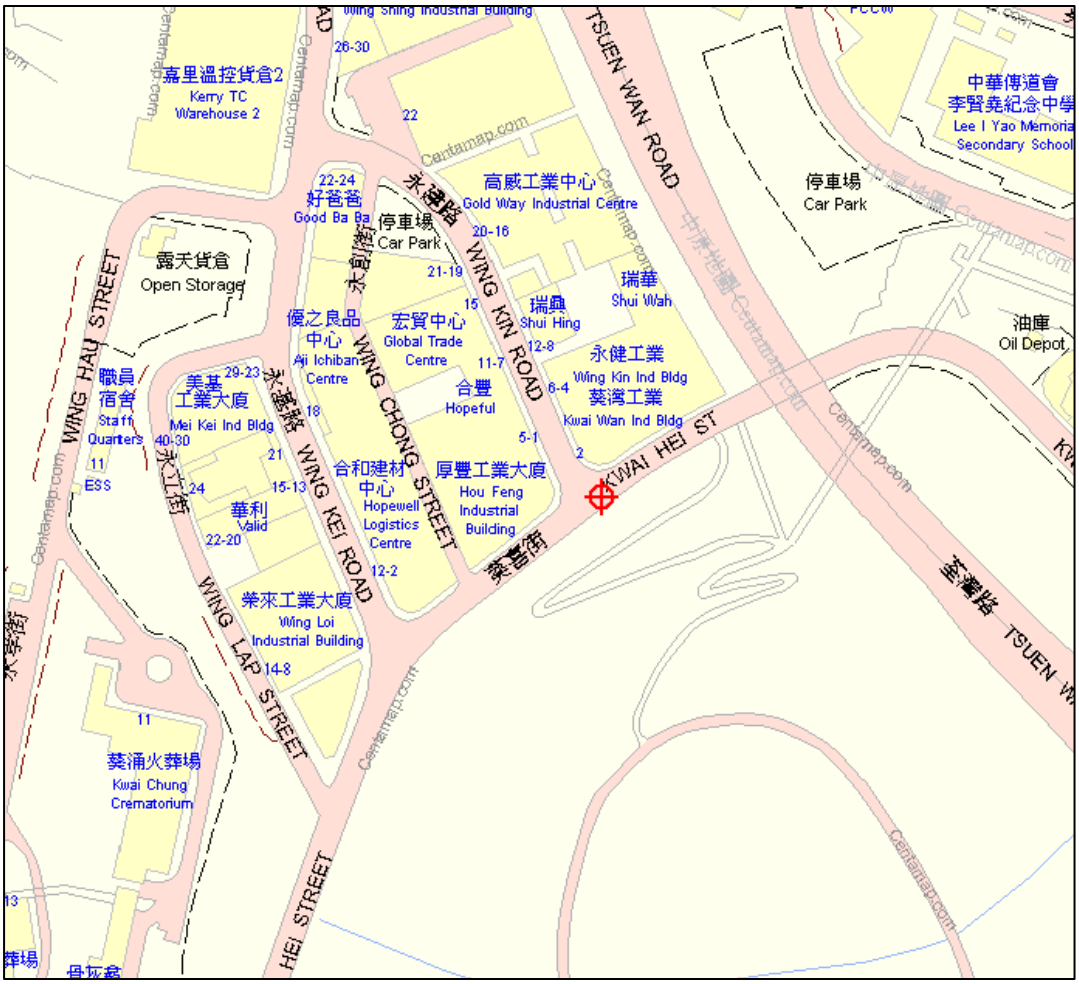


Figure 2.1 – Location plan (Source: CentaMap)

3. SUMMARY OF SURVEY RESULTS

There are ***5*** visible manholes including ***0*** Storm water manholes and ***5*** Foul Water Manholes within the survey boundary and ***5*** no. of manholes had been inspected. Survey location plan has been enclosed in ***Appendix A – Survey Result Drawing*** to present the manholes location and relevant connections. The summary of manhole survey with specified findings is shown in ***Table 3.1 - Summary of Manhole Survey***. Due to the limitation of the condition of site, some of manholes may not be located, inspected satisfactorily or only inspected partially, the reasons or site conditions causing in comprehensive result will be briefed in ***Table 3.1*** as well. More detailed manholes information about its conditions, dimensions and photo records can be found in Manhole Record Forms in ***Appendix B – Manhole Record Forms***.

Table 3.1 – Summary of Manhole Survey

No.	Manhole Ref.	Service Type	Manhole Record Form in Appendix D	Specified findings
1.	FMH4022768	Foul	Y	Broken chamber
2.	FMH4022810	Foul	Y	Broken shaft
3.	FMH4022809	Foul	Y	Broken chamber, benching and iron (4 nos.)
4.	FMH4022808	Foul	Y	Broken benching
5.	FMH4022807	Foul	Y	Broken iron (2 nos.)

4. REFERENCES

- ETWB, 2006, Code of Practice on Monitoring and Maintenance of Water-Carrying Services Affecting Slopes
- Wong King & R.J. Allen, Hong Kong Conduit Condition Evaluation Codes, HKCCEC 2009 (4th Edition), UTI. The Code of Practice on Conduit Condition Evaluation using CCTV in Hong Kong
- Hong Kong Institute of Utility Specialists, Specification for Conduit Condition Evaluation, CCE (CCTV&ME), 2011 Edition
- Hong Kong Institute of Utility Specialists, Specification for Manhole Internal Condition Survey (MHICS), 2011 Edition

5. JOB REFERENCES[1]

- SSE517 – Underground Utility Survey for Construction of a 30-Classroom Secondary School at Site 1A-2, Kai Tak Development – Architectural Services Department
- SSF513 – Underground Utility Survey for Construction of Avenue Park at Kai Tak – Architectural Services Department
- SSF516 – Underground Utility Survey for Construction of a 30-Classroom Primary School at Tonkin Street, Cheung Sha Wan – Architectural Services Department
- HY/2014/09 – Underground Utility Survey for Central Kowloon Route – Ho Man Tin Access Shaft – Highways Department
- K&T C1 of 2017 – Term Contract for Site Investigation for DMW Project in Kwai Tsing (2017-18) – Home Affairs Department
- K&T C2 of 2018 – Term Contract for Site Investigation for DMW Project in Kwai Tsing (2018-19) – Home Affairs Department
- 20150364 – Underground Utility Survey at Construction of Public Rental Housing Development at Choi Yuen Road Site 3 & 4, Sheung Shui – Hong Kong Housing Authority
- 20160605 – Underground Utility Survey for Construction of Public Rental Housing Development of Tung Tau Estate Phase 8 – Hong Kong Housing Authority
- 20170225 – Construction of Public Rental Housing Development Phases 1 & 2 and Subsidised Sale Flats Development at Diamond Hill Comprehensive Development Area – Hong Kong Housing Authority
- 15/WSD/10 – Underground Utility Survey for Expansion of Tai Po Water Treatment Works and Ancillary Raw Water and Fresh Water Transfer Facilities - Design and Build of New Stream II – Water Supplies Department

[1] Only Part of Job References was presented, Full Job References could be provided if requested.

APPENDIX A – SURVEY RESULT DRAWING



GENERAL NOTES :

1. Unit of depth is in metres (m), indicated as #d.
2. Unit of diameter of pipes/cables is in millimeter (mm), indicated as #Ø.
3. Symbols are indicative, and not to scale.
4. Coordinates and Levels are according to the Hong Kong 1980 Grid System and the Hong Kong Principal Datum (HKPD).
5. Width of the line in the drawing is not presenting the actual size of pipes/cables or the width of cables' bundle. Actual width is presented in the table "Summary of Pipes & Cables".
6. The assigned number of each utility alignments with its cable's/pipe's size, range of depth, reference point of presented pipe's/cable's depth and remarks for additional information are summarized and shown in the table "Summary of Pipes & Cables" on the drawing.
7. The assigned number of each utility manholes, pits, valves or gullies with its Cover Level (C.L.) in Metres above Principal Datum (m.P.D.), Invert Level (I.L.), depth and remarks for additional information are summarized and shown in the table "Summary of Manholes, Pits & Valves" on the drawing.
8. The basemap feature is for reference only, additional topographic survey should be carried out if detailed topographical features on ground requested.
9. The size of Pipes/Manholes/Pits/Chambers is from the internal dimension; its thickness is not counted.
10. Survey report shall be reviewed with drawing together as comprehensive survey result presentation.
11. Alignment of power cable located by passive detection is for reference only. Depth measurement from this detection mode is not accurate and should not be relied on. The Electricity Supply Lines (Protection) Regulation requires that all reasonable steps including trial pit shall be taken to ascertain the existence of these electricity cables or lines.

LEGEND :

Foul Manhole

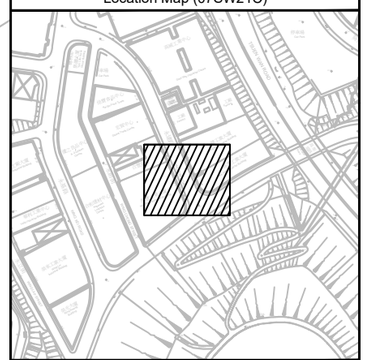
FOUL Foul Water Pipe

Cover

Chamber

Rev.	Date	Drawn by	Description
00	06/2022	Ki Ho	First Issue

Location Map (07SW21C)



PROJECT CLIENT:

KJL Limited

SPECIALIST CONTRACTOR :

CASTCO
佳力高試驗中心有限公司
CASTCO TESTING CENTRE LTD.
Tel: (852) 2597-8333 / 2597-8002 Fax: (852) 2597-8399/ 2602-3662
E-mail: info@castco.com.hk Website: http://www.castco.com.hk/

PROJECT TITLE :

Manhole Internal Condition Survey
at Wing Kin Road

DRAWING TITLE : Manhole Survey Drawing

A3 Size	Scale: 1:100	Survey Date	June 2022
Prepared By	Pinky Lee	Approved By	Pinky Lee
Project No.	Y22-US-P-103-002		
Drawing No.	Y22-US-P-103-002-D_00		

APPENDIX B – MANHOLE RECORD FORMS

CASTCO

佳力高試驗中心有限公司
CASTCO TESTING CENTRE LTD.

Manhole Record

(1) NODE REF. 井序號	FMH4022768														
(6) PROJECT NO. 項目序號	Y22-US-P-103-002			-				(2) GRID REF.	N 824325.801 E 830368.466						
(7) WO NO. 工作單號	--		(9) DSD REF. 渠務署編號	FMH4022768				(3) DRAINAGE AREA CODE	07SW21C						
(10) LOCATION 位置	Wing Kin Road							(4) SURVEYED BY	C. F. WONG						
(11) YEAR LAID 何時造(YYYY)	Unknown	(12) STATUS 狀況*	PU	(13)FUNCTION 用途*	F	(14) NODE TYPE 類別*	M	(5) SURVEY DATE (DD/MM/YYYY)	18/6/2022						
COVER 井蓋	(15) SHAPE 井蓋形狀	S	(16) HINGED 鉸	N	(17) LOCK 鎖	N	(18) DUTY 井蓋厚度*	H	(19) COVER SIZE井蓋大小 (dia.) (mm)	580	X	580	(29)TOXIC ATMOSPHERE毒氣	N	
SHAFT 井頸	(20) SIDE ENTRY 側邊入口	N	(21) REGULAR COURSES 磚	0	(22) DEPTH 井頸深(mm)	615			(23) SHAFT SIZE 井頸大小	575	X	575	(30)EVIDENCE OF VERMIN蟲害	N	
CHAMBER 井膽	(24) SOFFIT 膽頂形狀*	S	(25) STEPS 腳踏級數	4	(26) LADDERS 爬梯級數	0	(27) LNDGS 平台層數	0	(28)CHAMBER SIZE 井膽大小	1980	X	1510	(31)CONSTRUCT CODE 建築方法*	I	

(32) DEPTH OF FLOW 水流深 (mm)	(33) DEPTH OF SILT 泥深 (mm)	(34) HEIGHT SURCH 浸水深(mm)	(61) MH DEPTH 井深(m)	(35) COVER LEVEL (mPD)
300	250	0	2.805	7.391

INCOMING PIPES入水渠務

	(36) UPSTREAM REF. 上游井編號	(37) PIPE SHAPE* 渠筒型狀	(38) PIPE SIZE渠筒大小 (dia.\W) (mm)		(H) (mm)	(39) BACKDROP 跌級 (mm)	(40) PIPE MATERIAL*物料	(41) LINING 內補	(42) PIPE DEPTH 渠筒底深(m)	(43)INVERT LEVEL (m)
A	FMH4022767	C	225	X			CO	N	2.715	4.674
B	FMH4022810	C	400	X			VC	N	2.375	5.014
C	FMH4052921	C	300(270)	X			LINING	Y	2.105	5.284
D				X						
E				X						
F				X						
G				X						
H				X						

OUTGOING PIPES出水渠務

	(36) DOWNSTREAM REF. 下游井編號					(44) CCTV COND 是否做過CCTV				
X	FMH4022769	C	750(675)	X			LINING	Y	2.805	4.584
Y				X						

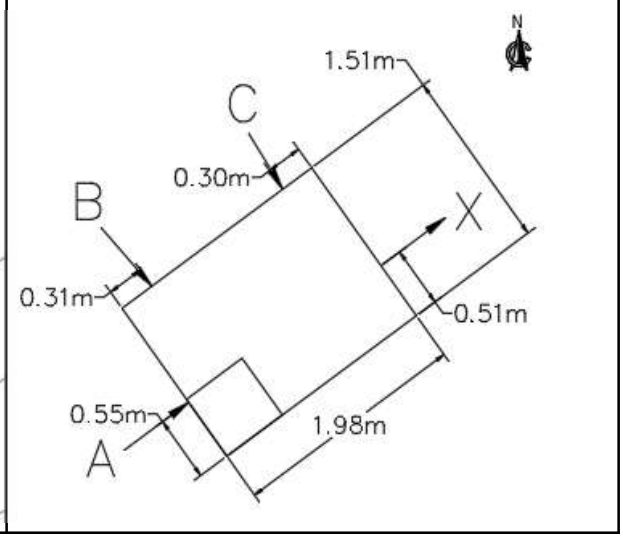
CONDITIONS 有損壞 (Y if attention required)	(46) COVER 井蓋	(47) IRON/ LADDER 腳踏/爬梯/平台	(48) SHAFT 井頸	(49) CHAMBER 井膽	(50) BENCHING 馬枕	(51) OTHER 其他
	N	N	N	Y	N	N
(52) PHOTO NO.	--	--	--	P7-8	--	--

(53) UTR	N	(59) LOACTION PHOTO No. 位置相	P1	(63) REMARKS: Broken chamber. Cover level of lowest reference point for manhole measurement is 7.389mPD.
(54) UTL	N			
(55) UTGA	N	(60) INTERNAL PHOTO No.內部相	P2-6	(64) RECORD PLAN DIFFERENCE 測量結果與已有資料不同: Y — (Y if attention required) 如有: - GNC is a 300mm dia Incoming pipe instead of 375mm dia indicated in record plan.
(56) UTS	N			
(57) JETTING	N	SLOPE NO斜坡編號.: (If slope involved in project)	--	(65) COVER TYPE: ~~STANDARD 二人井~~ STANDARD-LARGE大二人井 ~~MULTIPLE COVER 九宮格~~ ~~LARGE 四人井~~ ~~WITH DECORATION COVER裝飾蓋~~ ~~OTHERS: ( )~~
(58) ON-SLOPE 位於斜坡	N			

(66) Location Sketch



(67) Plan of MH



(68) With Risk Assessment	N
(69) With Permit to Work	N
(70) With Traffic Permit	N

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022768 -P1
Location : Wing Kin Road
Manhole Reference : FMH4022768
Description : Manhole Location Photo
Remark :



Photograph No. : FMH4022768 -P2
Location : Wing Kin Road
Manhole Reference : FMH4022768
Description : Internal Condition Photo
Remark :

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022768 -P3
Location : Wing Kin Road
Manhole Reference : FMH4022768
Description : Internal Condition Photo
Remark : Incoming pipe A



Photograph No. : FMH4022768 -P4
Location : Wing Kin Road
Manhole Reference : FMH4022768
Description : Internal Condition Photo
Remark : Incoming pipe B

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022768 -P5
Location : Wing Kin Road
Manhole Reference : FMH4022768
Description : Internal Condition Photo
Remark : Incoming pipe C



Photograph No. : FMH4022768 -P6
Location : Wing Kin Road
Manhole Reference : FMH4022768
Description : Internal Condition Photo
Remark : Outgoing pipe X

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022768 -P7
Location : Wing Kin Road
Manhole Reference : FMH4022768
Description : Internal Condition Photo
Remark : Broken chamber



Photograph No. : FMH4022768 -P8
Location : Wing Kin Road
Manhole Reference : FMH4022768
Description : Internal Condition Photo
Remark : Broken chamber

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佳力高試驗中心有限公司
CASTCO TESTING CENTRE LTD.

Manhole Record

(1) NODE REF. 井序號	FMH4022810														
(6) PROJECT NO. 項目序號	Y22-US-P-103-002			-					(2) GRID REF.	N 824332.557 E 830362.607					
(7) WO NO. 工作單號	--		(9) DSD REF. 渠務署編號	FMH4022810					(3) DRAINAGE AREA CODE	07SW21C					
(10) LOCATION 位置	Wing Kin Road								(4) SURVEYED BY	C. F. WONG					
(11) YEAR LAID 何時造(YYYY)	Unknown	(12) STATUS 狀況*	PU	(13)FUNCTION 用途*	F	(14) NODE TYPE 類別*	M		(5) SURVEY DATE (DD/MM/YYYY)	18/6/2022					
									(dia.) (mm)						
COVER 井蓋	(15) SHAPE 井蓋形狀	S	(16) HINGED 鉸	N	(17) LOCK 鎖	N	(18) DUTY 井蓋厚度*	H	(19) COVER SIZE井蓋大小	580	X	580	(29)TOXIC ATMOSPHERE毒氣	N	
SHAFT 井頸	(20) SIDE ENTRY 側邊入口	N	(21) REGULAR COURSES 磚	0	(22) DEPTH 井頸深(mm)	745			(23) SHAFT SIZE 井頸大小	570	X	550	(30)EVIDENCE OF VERMIN蟲害	N	
CHAMBER 井膽	(24) SOFFIT 膽頂形狀*	S	(25) STEPS 腳踏級數	3	(26) LADDERS 爬梯級數	0	(27) LNDGS 平台層數	0	(28)CHAMBER SIZE 井膽大小	980	X	1260	(31)CONSTRUCT CODE 建築方法*	I	

(32) DEPTH OF FLOW 水流深 (mm)	(33) DEPTH OF SILT 泥深 (mm)	(34) HEIGHT SURCH 浸水深(mm)	(61) MH DEPTH 井深(m)	(35) COVER LEVEL (mPD)
300	0	0	2.419	7.540

INCOMING PIPES入水渠道

	(36) UPSTREAM REF. 上游井編號	(37) PIPE SHAPE* 渠筒型狀	(38) PIPE SIZE渠筒大小 (dia. \ W) (mm)	(H) (mm)	(39) BACKDROP 跌級 (mm)	(40) PIPE MATERIAL*物料	(41) LINING 內補	(42) PIPE DEPTH 渠筒底深(m)	(43)INVERT LEVEL (m)
A	FMH4022809	C	400 X			VC	N	2.418	5.106
B			X						
C			X						
D			X						
E			X						
F			X						
G			X						
H			X						

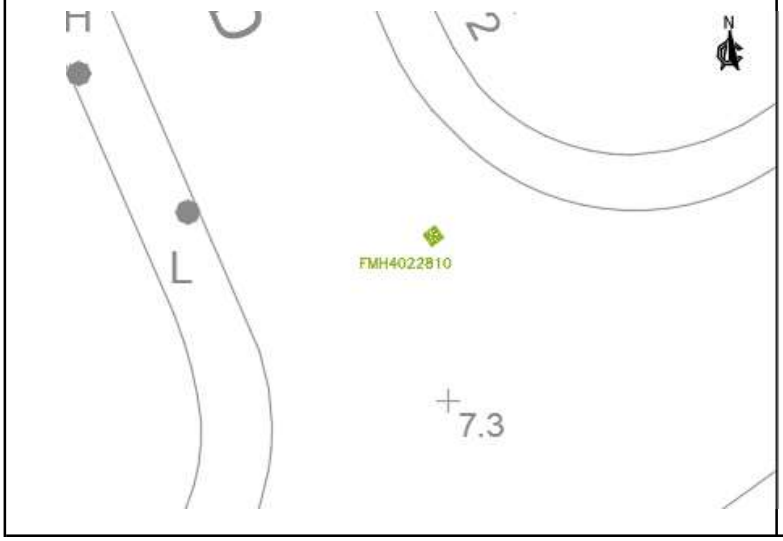
OUTGOING PIPES出水渠道

	(36) DOWNSTREAM REF. 下游井編號				(44) CCTV COND 是否做過CCTV				
X	FMH4022768	C	400 X			VC	N	2.419	5.105
Y			X						

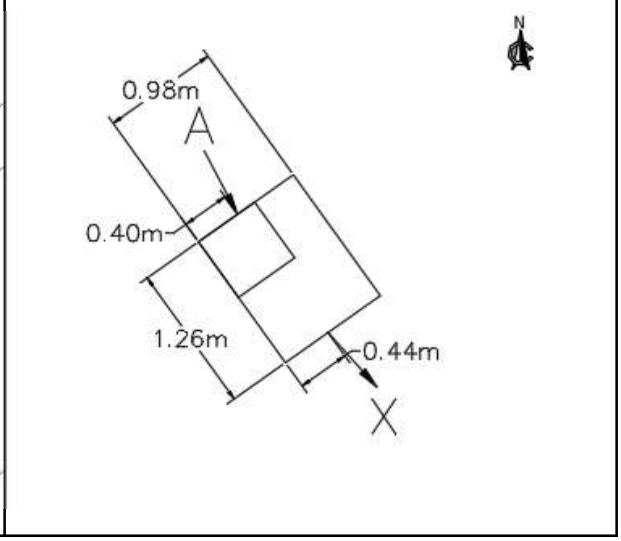
CONDITIONS 有損壞 (Y if attention required)	(46) COVER 井蓋	(47) IRON/ LADDER 腳踏/爬梯/平台	(48) SHAFT 井頸	(49) CHAMBER 井膽	(50) BENCHING 馬枕	(51) OTHER 其他
	N	N	Y	N	N	N
(52) PHOTO NO.	--	--	P5	--	--	--

(53) UTR	N	(59) LOACTION PHOTO No. 位置相	P1	(63) REMARKS Broken shaft. Cover level of lowest reference point for manhole measurement is 7.524mPD.
(54) UTL	N			
(55) UTGA	N	(60) INTERNAL PHOTO No.內部相	P2-4	(64) RECORD PLAN DIFFERENCE 測量結果與已有資料不同: N (Y if attention required) 如有:
(56) UTS	N			
(57) JETTING	N	SLOPE NO斜坡編號.: (If slope involved in project)	--	(65) COVER TYPE STANDARD 二人井 / STANDARD-LARGE大二人井 / MULTIPLE COVER 九宮格 / LARGE 四人井 / WITH DECORATION COVER裝飾蓋 / OTHERS: ( )
(58) ON-SLOPE 位於斜坡	N			

(66) Location Sketch



(67) Plan of MH



(68) With Risk Assessment	N
(69) With Permit to Work	N
(70) With Traffic Permit	N

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022810 -P1
Location : Wing Kin Road
Manhole Reference : FMH4022810
Description : Manhole Location Photo
Remark :



Photograph No. : FMH4022810 -P2
Location : Wing Kin Road
Manhole Reference : FMH4022810
Description : Internal Condition Photo
Remark :

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022810 -P3
Location : Wing Kin Road
Manhole Reference : FMH4022810
Description : Internal Condition Photo
Remark : Incoming pipe A



Photograph No. : FMH4022810 -P4
Location : Wing Kin Road
Manhole Reference : FMH4022810
Description : Internal Condition Photo
Remark : Outgoing pipe X

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. :	FMH4022810 -P5
Location :	Wing Kin Road
Manhole Reference :	FMH4022810
Description :	Internal Condition Photo
Remark :	Broken shaft

BLANK

Photograph No. :	
Location :	
Manhole Reference :	
Description :	
Remark :	

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CASTCO TESTING CENTRE LTD.

Manhole Record

(1) NODE REF. 井序號	FMH4022809														
(6) PROJECT NO. 項目序號	Y22-US-P-103-002			-				(2) GRID REF.	N 824344.777 E 830356.293						
(7) WO NO. 工作單號	--		(9) DSD REF. 渠務署編號	FMH4022809				(3) DRAINAGE AREA CODE	07SW21C						
(10) LOCATION 位置	Wing Kin Road							(4) SURVEYED BY	C. F. WONG						
(11) YEAR LAID 何時造(YYYY)	Unknown	(12) STATUS 狀況*	PU	(13)FUNCTION 用途*	F	(14) NODE TYPE 類別*	M	(5) SURVEY DATE (DD/MM/YYYY)	18/6/2022						
COVER 井蓋	(15) SHAPE 井蓋形狀	S	(16) HINGED 鉸	N	(17) LOCK 鎖	N	(18) DUTY 井蓋厚度*	H	(19) COVER SIZE井蓋大小 (dia.) (mm)	580	X	580	(29)TOXIC ATMOSPHERE毒氣	N	
SHAFT 井頸	(20) SIDE ENTRY 側邊入口	N	(21) REGULAR COURSES 磚	20	(22) DEPTH 井頸深(mm)	505			(23) SHAFT SIZE 井頸大小	600	X	610	(30)EVIDENCE OF VERMIN蟲害	N	
CHAMBER 井膽	(24) SOFFIT 膽頂形狀*	S	(25) STEPS 腳踏級數	4	(26) LADDERS 爬梯級數	0	(27) LNDGS 平台層數	0	(28)CHAMBER SIZE 井膽大小	1365	X	955	(31)CONSTRUCT CODE 建築方法*	I	

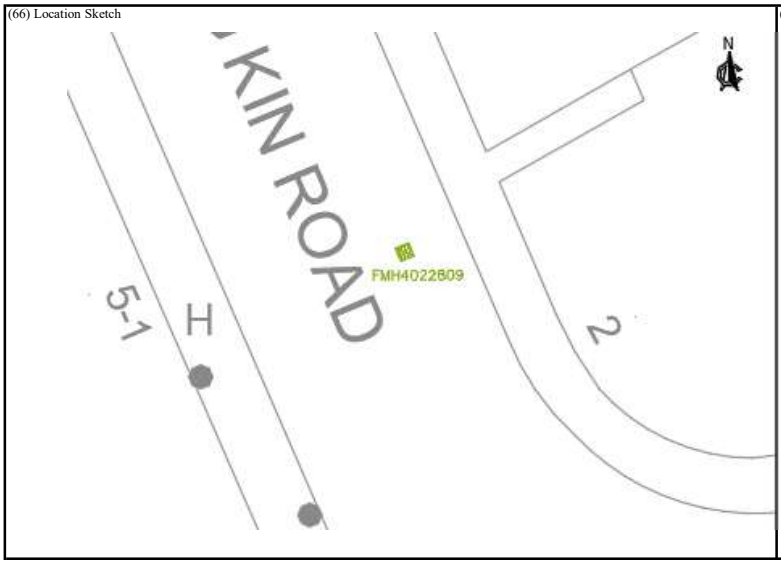
(32) DEPTH OF FLOW 水流深 (mm)	(33) DEPTH OF SILT 泥深 (mm)	(34) HEIGHT SURCH 浸水深(mm)	(61) MH DEPTH 井深(m)	(35) COVER LEVEL (mPD)
300	0	0	2.545	8.163

	(36) UPSTREAM REF. 上游井編號	(37) PIPE SHAPE* 渠筒型狀	(38) PIPE SIZE渠筒大小 (dia. \ W) (mm)		(H) (mm)	(39) BACKDROP 跌級 (mm)	(40) PIPE MATERIAL*物料	(41) LINING 內補	(42) PIPE DEPTH 渠筒底深(m)	(43)INVERT LEVEL (m)
INCOMING PIPES入水渠筒 A	FMH4022808	C	400	X			VC	N	2.460	5.682
B	GNB	C	150	X			VC	N	1.725	6.417
C				X						
D				X						
E				X						
F				X						
G				X						
H				X						
	(36) DOWNSTREAM REF. 下游井編號					(44) CCTV COND 是否做過CCTV				
OUTGOING PIPES出水渠筒 X	FMH4022810	C	400	X			VC	N	2.545	5.597
Y				X						

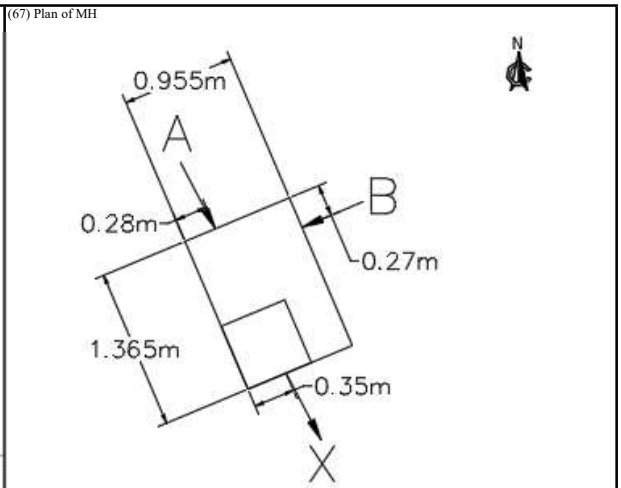
CONDITIONS 有損壞 (Y if attention required)	(46) COVER 井蓋	N	(47) IRON/ LADDER 腳踏/爬梯/平台	Y	(48) SHAFT 井頸	N	(49) CHAMBER 井膽	Y	(50) BENCHING 馬枕	Y	(51) OTHER 其他	N
(52) PHOTO NO.	--		P6		--		P8		P7		--	

(53) UTR	N	(59) LOACTION PHOTO No. 位置相	P1	(63) REMARKS: Broken, chamber, benching and iron (4 nos.). Cover level of lowest reference point for manhole measurement is 8.142mPD.
(54) UTL	N			
(55) UTGA	N	(60) INTERNAL PHOTO No.內部相	P2-5	(64) RECORD PLAN DIFFERENCE 測量結果與已有資料不同: Y — (Y if attention required) 如有:- GNB is a 150mm dia Outgoing pipe instead of 225mm dia indicated in record plan.
(56) UTS	N			
(57) JETTING	N	SLOPE NO斜坡編號.: (If slope involved in project)	--	(65) COVER TYPE: ~~STANDARD 二人井~~ STANDARD-LARGE大二人井 ~~MULTIPLE COVER 九宮格~~ ~~LARGE 四人井~~ ~~WITH DECORATION COVER裝飾蓋~~ ~~OTHERS: ( )~~
(58) ON-SLOPE 位於斜坡	N			

(66) Location Sketch



(67) Plan of MH



(68) With Risk Assessment	N
(69) With Permit to Work	N
(70) With Traffic Permit	N

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022809 -P1
Location : Wing Kin Road
Manhole Reference : FMH4022809
Description : Manhole Location Photo
Remark :



Photograph No. : FMH4022809 -P2
Location : Wing Kin Road
Manhole Reference : FMH4022809
Description : Internal Condition Photo
Remark :

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022809 -P3
Location : Wing Kin Road
Manhole Reference : FMH4022809
Description : Internal Condition Photo
Remark : Incoming pipe A



Photograph No. : FMH4022809 -P4
Location : Wing Kin Road
Manhole Reference : FMH4022809
Description : Internal Condition Photo
Remark : Incoming pipe B

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. :	FMH4022809 -P5
Location :	Wing Kin Road
Manhole Reference :	FMH4022809
Description :	Internal Condition Photo
Remark :	Outgoing pipe X



Photograph No. :	FMH4022809 -P6
Location :	Wing Kin Road
Manhole Reference :	FMH4022809
Description :	Internal Condition Photo
Remark :	Broken iron

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022809 -P7
Location : Wing Kin Road
Manhole Reference : FMH4022809
Description : Internal Condition Photo
Remark : Broken benching



Photograph No. : FMH4022809 -P8
Location : Wing Kin Road
Manhole Reference : FMH4022809
Description : Internal Condition Photo
Remark : Broken chamber

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佳力高試驗中心有限公司
CASTCO TESTING CENTRE LTD.

Manhole Record

(1) NODE REF. 井序號	FMH4022808														
(6) PROJECT NO. 項目序號	Y22-US-P-103-002			-						(2) GRID REF.	N 824354.119 E 830351.744				
(7) WO NO. 工作單號	--		(9) DSD REF. 渠務署編號	FMH4022808						(3) DRAINAGE AREA CODE	07SW21C				
(10) LOCATION 位置	Wing Kin Road									(4) SURVEYED BY	C. F. WONG				
(11) YEAR LAID 何時造(YYYY)	Unknown	(12) STATUS 狀況*	PU	(13)FUNCTION 用途*	F	(14) NODE TYPE 類別*	M			(5) SURVEY DATE (DD/MM/YYYY)	18/6/2022				
COVER 井蓋	(15) SHAPE 井蓋形狀	S	(16) HINGED 鉸	N	(17) LOCK 鎖	N	(18) DUTY 井蓋厚度*	H	(19) COVER SIZE井蓋大小 (dia.) (mm)	580	X	580	(29)TOXIC ATMOSPHERE毒氣	N	
SHAFT 井頸	(20) SIDE ENTRY 側邊入口	N	(21) REGULAR COURSES 磚	5	(22) DEPTH 井頸深(mm)	450			(23) SHAFT SIZE 井頸大小	555	X	550	(30)EVIDENCE OF VERMIN蟲害	N	
CHAMBER 井膽	(24) SOFFIT 膽頂形狀*	S	(25) STEPS 腳踏級數	3	(26) LADDERS 爬梯級數	0	(27) LNDGS 平台層數	0	(28)CHAMBER SIZE 井膽大小	990	X	1400	(31)CONSTRUCT CODE 建築方法*	I	

(32) DEPTH OF FLOW 水流深 (mm)	(33) DEPTH OF SILT 泥深 (mm)	(34) HEIGHT SURCH 浸水深(mm)	(61) MH DEPTH 井深(m)	(35) COVER LEVEL (mPD)
300	0	0	2.600	8.712

INCOMING PIPES入水渠務

	(36) UPSTREAM REF. 上游井編號	(37) PIPE SHAPE* 渠筒型狀	(38) PIPE SIZE渠筒大小 (dia.\W) (mm)		(H) (mm)	(39) BACKDROP 跌級 (mm)	(40) PIPE MATERIAL*物料	(41) LINING 內補	(42) PIPE DEPTH 渠筒底深(m)	(43)INVERT LEVEL (m)
A	FMH4022807	C	400	X			VC	N	2.510	6.176
B	GNB	C	225	X			VC	N	1.884	6.802
C	FMH4022812	C	300(250)	X			LINING	Y	2.502	6.184
D				X						
E				X						
F				X						
G				X						
H				X						

OUTGOING PIPES出水渠務

	(36) DOWNSTREAM REF. 下游井編號					(44) CCTV COND 是否做過CCTV				
X	FMH4022809	C	400	X			VC	N	2.600	6.086
Y				X						

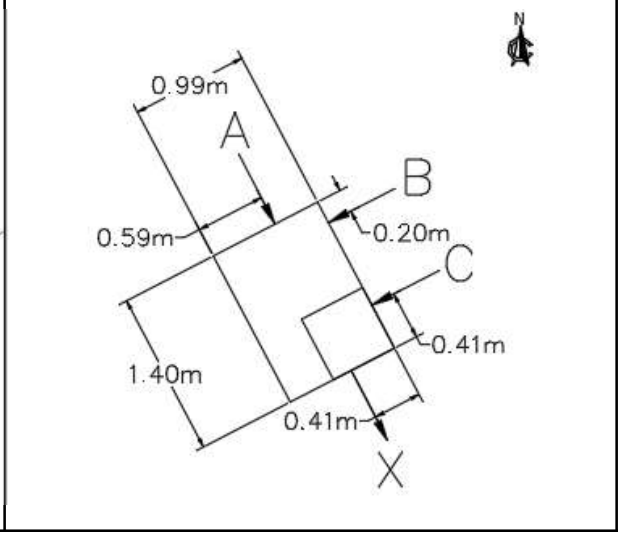
CONDITIONS 有損壞 (Y if attention required)	(46) COVER 井蓋	(47) IRON/ LADDER 腳踏/爬梯/平台	(48) SHAFT 井頸	(49) CHAMBER 井膽	(50) BENCHING 馬枕	(51) OTHER 其他
	N	N	N	N	Y	N
(52) PHOTO NO.	--	--	--	--	P7	--

(53) UTR	N	(59) LOACTION PHOTO No. 位置相	P1	(63) REMARKS: Broken benching. Cover level of lowest reference point for manhole measurement is 8.686mPD.
(54) UTL	N			
(55) UTGA	N	(60) INTERNAL PHOTO No.內部相	P2-6	(64) RECORD PLAN DIFFERENCE 測量結果與已有資料不同: N (Y if attention required) 如有:
(56) UTS	N			
(57) JETTING	N	SLOPE NO斜坡編號.: (If slope involved in project)	--	(65) COVER TYPE: ~~STANDARD 二人井~~ / STANDARD-LARGE大二人井 / ~~MULTIPLE COVER 九宮格~~ / ~~LARGE 四人井~~ / ~~WITH DECORATION COVER裝飾蓋~~ / ~~OTHERS: ( )~~
(58) ON-SLOPE 位於斜坡	N			

(66) Location Sketch



(67) Plan of MH



(68) With Risk Assessment	N
(69) With Permit to Work	N
(70) With Traffic Permit	N

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022808 -P1
Location : Wing Kin Road
Manhole Reference : FMH4022808
Description : Manhole Location Photo
Remark :



Photograph No. : FMH4022808 -P2
Location : Wing Kin Road
Manhole Reference : FMH4022808
Description : Internal Condition Photo
Remark :

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022808 -P3
Location : Wing Kin Road
Manhole Reference : FMH4022808
Description : Internal Condition Photo
Remark : Incoming pipe A



Photograph No. : FMH4022808 -P4
Location : Wing Kin Road
Manhole Reference : FMH4022808
Description : Internal Condition Photo
Remark : Incoming pipe B

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022808 -P5
Location : Wing Kin Road
Manhole Reference : FMH4022808
Description : Internal Condition Photo
Remark : Incoming pipe C



Photograph No. : FMH4022808 -P6
Location : Wing Kin Road
Manhole Reference : FMH4022808
Description : Internal Condition Photo
Remark : Outgoing pipe X

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022808 -P7
Location : Wing Kin Road
Manhole Reference : FMH4022808
Description : Internal Condition Photo
Remark : Broken benching

BLANK

Photograph No. :
Location :
Manhole Reference :
Description :
Remark :

CASTCO

佳力高試驗中心有限公司
CASTCO TESTING CENTRE LTD.

Manhole Record

(1) NODE REF. 井序號	FMH4022807														
(6) PROJECT NO. 項目序號	Y22-US-P-103-002			-					(2) GRID REF.	N 824366.984 E 830345.076					
(7) WO NO. 工作單號	--		(9) DSD REF. 渠務署編號	FMH4022807					(3) DRAINAGE AREA CODE	07SW21C					
(10) LOCATION 位置	Wing Kin Road								(4) SURVEYED BY	C. F. WONG					
(11) YEAR LAID 何時造(YYYY)	Unknown	(12) STATUS 狀況*	PU	(13)FUNCTION 用途*	F	(14) NODE TYPE 類別*	M		(5) SURVEY DATE (DD/MM/YYYY)	18/6/2022					
COVER 井蓋	(15) SHAPE 井蓋形狀	S	(16) HINGED 鉸	N	(17) LOCK 鎖	N	(18) DUTY 井蓋厚度*	H	(19) COVER SIZE井蓋大小 (dia.) (mm)	580	X	580	(29)TOXIC ATMOSPHERE毒氣	N	
SHAFT 井頸	(20) SIDE ENTRY 側邊入口	N	(21) REGULAR COURSES 磚	0	(22) DEPTH 井頸深(mm)	1825			(23) SHAFT SIZE 井頸大小	540	X	540	(30)EVIDENCE OF VERMIN蟲害	N	
CHAMBER 井膽	(24) SOFFIT 膽頂形狀*	S	(25) STEPS 腳踏級數	4	(26) LADDERS 爬梯級數	0	(27) LNDGS 平台層數	0	(28)CHAMBER SIZE 井膽大小	1530	X	1210	(31)CONSTRUCT CODE 建築方法*	I	

(32) DEPTH OF FLOW 水流深 (mm)	(33) DEPTH OF SILT 泥深 (mm)	(34) HEIGHT SURCH 浸水深(mm)	(61) MH DEPTH 井深(m)	(35) COVER LEVEL (mPD)
300	0	0	3.180	9.602

INCOMING PIPES入水渠務

	(36) UPSTREAM REF. 上游井編號	(37) PIPE SHAPE* 渠筒型狀	(38) PIPE SIZE渠筒大小 (dia. \ W) (mm)		(H) (mm)	(39) BACKDROP 跌級 (mm)	(40) PIPE MATERIAL*物料	(41) LINING 內補	(42) PIPE DEPTH 渠筒底深(m)	(43)INVERT LEVEL (m)
A	GNA	C	225	X			VC	N	2.825	6.755
B	FMH4052922	C	225	X			VC	N	2.380	7.200
C	GNC	C	150	X			VC	N	1.610	7.970
D				X						
E				X						
F				X						
G				X						
H				X						

OUTGOING PIPE出水渠務

	(36) DOWNSTREAM REF. 下游井編號					(44) CCTV COND 是否做過CCTV				
X	FMH4022808	C	400	X			VC	N	3.180	6.400
Y				X						

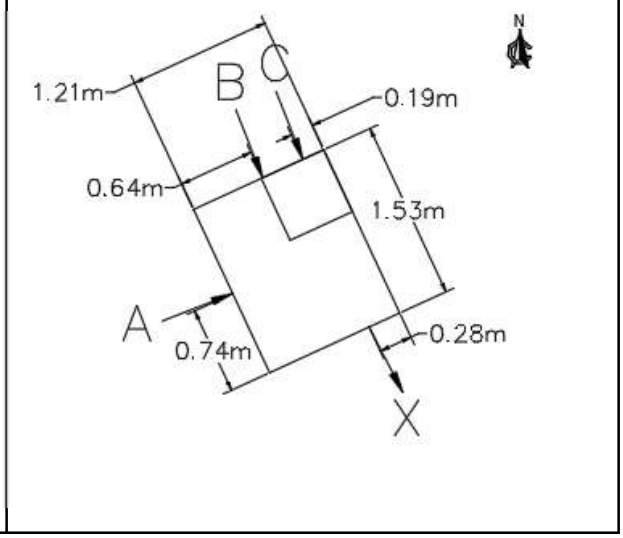
CONDITIONS 有損壞 (Y if attention required)	(46) COVER 井蓋	(47) IRON/ LADDER 腳踏/爬梯/平台	(48) SHAFT 井頸	(49) CHAMBER 井膽	(50) BENCHING 馬枕	(51) OTHER 其他
	N	Y	N	N	N	N
(52) PHOTO NO.	--	P7	--	--	--	--

(53) UTR	N	(59) LOACTION PHOTO No. 位置相	P1	(63) REMARKS: Broken iron (2 nos.). Cover level of lowest reference point for manhole measurement is 9.580mPD.
(54) UTL	N			
(55) UTGA	N	(60) INTERNAL PHOTO No.內部相	P2-6	(64) RECORD PLAN DIFFERENCE 測量結果與已有資料不同: Y — (Y if attention required) 如有: -Additional one 225mm dia. Incoming pipe A & one 150mm dia. Incoming pipe C in plan of MH existed.
(56) UTS	N			
(57) JETTING	N	SLOPE NO斜坡編號.: (If slope involved in project)	--	(65) COVER TYPE: ~~STANDARD 二人井~~ STANDARD-LARGE大二人井 ~~MULTIPLE COVER 九宮格~~ ~~LARGE 四人井~~ ~~WITH DECORATION COVER裝飾蓋~~ ~~OTHERS: ( )~~
(58) ON-SLOPE 位於斜坡	N			

(66) Location Sketch



(67) Plan of MH



(68) With Risk Assessment	N
(69) With Permit to Work	N
(70) With Traffic Permit	N

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022807 -P1
Location : Wing Kin Road
Manhole Reference : FMH4022807
Description : Manhole Location Photo
Remark :



Photograph No. : FMH4022807 -P2
Location : Wing Kin Road
Manhole Reference : FMH4022807
Description : Internal Condition Photo
Remark :

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. :
FMH4022807 -P3

Location :
Wing Kin Road

Manhole Reference :
FMH4022807

Description :
Internal Condition Photo

Remark :
Incoming pipe A



Photograph No. :
FMH4022807 -P4

Location :
Wing Kin Road

Manhole Reference :
FMH4022807

Description :
Internal Condition Photo

Remark :
Incoming pipe B

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. :
FMH4022807 -P5

Location :
Wing Kin Road

Manhole Reference :
FMH4022807

Description :
Internal Condition Photo

Remark :
Incoming pipe C



Photograph No. :
FMH4022807 -P6

Location :
Wing Kin Road

Manhole Reference :
FMH4022807

Description :
Internal Condition Photo

Remark :
Outgoing pipe X

CASTCO 佳力高試驗中心有限公司 CASTCO TESTING CENTRE LTD.

Manhole Survey Photographs

Contract No.: Y22-US-P-103-002
Location: Wing Kin Road



Photograph No. : FMH4022807 -P7
Location : Wing Kin Road
Manhole Reference : FMH4022807
Description : Internal Condition Photo
Remark : Broken iron

BLANK

Photograph No. :
Location :
Manhole Reference :
Description :
Remark :

APPENDIX C – SURVEY METHODOLOGY

Dimensional Requirements

All dimensions should be measured in accordance with the description stated in ***Figure A & B.*** Leader should counter check this for accuracy and logicality before leaving the site.

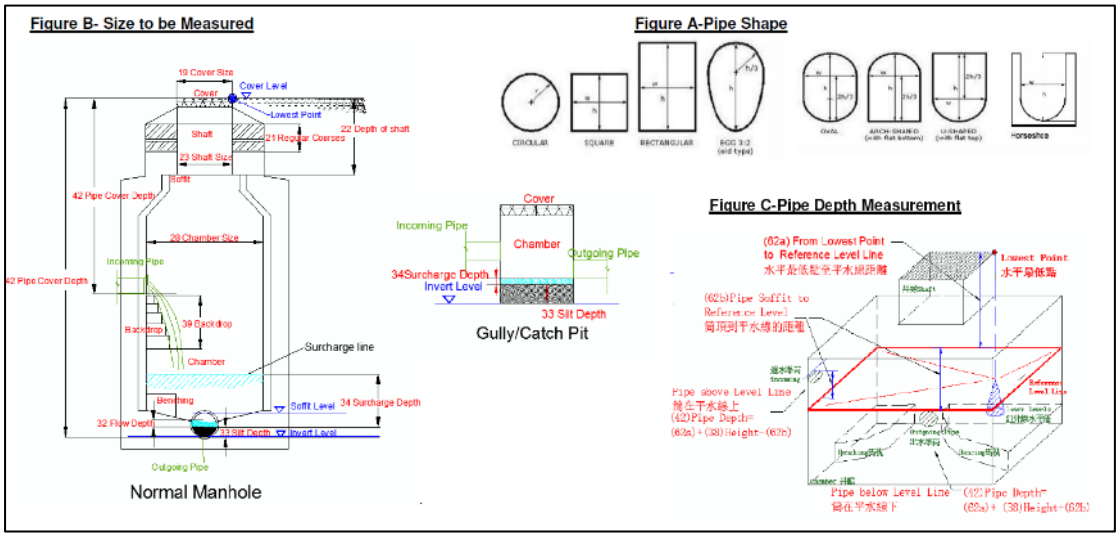


Figure A – Manholes dimensions to be measured

APPENDIX D – QUICK REFERENCE FOR MANHOLE CODES

Quick Reference for Manhole Survey Record Form (Site Record)

Field No.	Description		Code			Remarks
9	DSD Reference	渠務署編號（井內標牌）	-	-	-	井內標識牌
12	Status	井狀況	PU	Public	位於公眾地方	
			PR	Private	位於私人地方	
			HD	Highway drain	位於高速公路	
			WA	Watercourse	位於河道	
			TR	Trunk	位於幹渠	
			AB	Abandoned	廢棄	
			TC	To be constructed	待建	
			HC	Housing Committee	房屋署	
			WA	Water Company Maintained	水務署	
			U	Unspecified	不清楚	
13	Function	井用途	F	Foul	污水	
			S	Surface	清水	
			C	Combined	混合	
			O	Overflow	溢流	
			U	Unspecified	不清楚	
14	Node Type	井類別	A	Catch Pit	隔沙井	
			B	Hydrobrake	攔水膽	
			C	Cascade	跌級	
			D	Dual function Manhole	雙功能井	
			E	Ejector		
			F	Outfall	排水口	
			G	Ghost	暗井	
			H	Hatchbox		
			I	Inlet	明渠駁入口	
			J	Junction(Saddle)	渠筒打針位	
			K	Combined	混合	
			L	Lamphole	燈柱	
			M	Manhol	沙井	
			N	Dead End	非正常中斷點	
			O	Oil Inteerceptor	隔油	
			P	Pumping Station	泵站	
			Q	Transition	中途井	
			R	Rodding eye	疏通蓋	
			S	Soak-away	污水滲透坑	
			T	Vent Column	沼氣通風柱	
			U	Unspecified	不清楚	
			V	Storm Overflow	雨水溝道（救命井）	
			W	Treatment works	污水處理廠	
			X	Unreliable	不可信	
			Y	Gully	讀羅	
			Z	Ghost in rising main	泵送壓力管道閘井	
15	Cover Shape	井蓋形狀	S	Square	正方形	
			R	Retangular	長方形	
			T	Triangular	三角形	
			D	Dobule Triangular	雙三角	
			C	Circular	圓形	
			U	Unspecified	不規則	
18	Cover Duty	井蓋厚度	L	Light	輕	
			M	Medium	中	
			H	Heavy	重	
			U	Unspecified	不清楚	
21	Regular Courses	磚	-	-	-	井頸表面鋪磚有幾層（一滿圈為一層，不滿圈不計）

Field No.	Description		Code			Remarks
24	Soffit	腰頂形狀	S	Reducing Slab	平	
			T	Taper	漸尖	
			A	Arch	拱	
			C	Corbel	坎梁	
			N	None	無腰頂	
			U	Unspecified	不規則	
31	Construct Code	井體建築方法	B	Brick	磚	
			P	Pre-cast Units	混凝土預製件	
			I	In-Situ	現場澆築	
			S	Segmental	節段	
			R	Rendered		
			U	Unspecified	不清楚	
37	Pipe Shape	渠筒形狀	A	Arch(with flat-bottom)	拱形（平底）	
			B	Barrel	水桶形	
			C	Circular	圓形	
			E	Egg	蛋形	
			F	U-shaped(with flat-top)	U形（平頂）	
			H	Horseshoe，inverted	馬蹄鐵形	
			O	Oval	橢圓形	
			R	Rectangular	長方形	
			S	Square	正方形	
			T	Trapezodial	梯形	
			U	Unspecified	不規則	
40	Pipe Material	渠筒物料	AK	Alkathene	高壓聚乙烯	
			AC	Asbestos Cement	石綿	
			BR	Brick	磚	
			CI	Cast Iron	生鐵	
			CO	Concrete	混凝土	
			CSB	Concrete Segemnts Bolted	混凝土製分節段（有鎖釘）	
			CSU	Concrete Segemnts	混凝土製分節段（無鎖釘）	
			CC	Concrete Box Culvert	混凝土製方形渠箱	
			DI	Ductile Iron	球墨鑄鐵	
			GRC	Glass Reinforced	玻璃纖維增強混凝土	
			GRP	Glass Reinforced	玻璃纖維增強塑膠	
			PSC	Plastic/Steel Composite	塑膠/鋼複合材料	
			PVC	Polyvinyl Chloride	聚氯乙烯	
			PE	Polyethylene	聚乙烯	
			RPM	Reinforced Plastic Matrix	強化塑膠複合材料	
			SI	Spun Iron	離心精鑄鐵	
			ST	Steel	鋼	
			VC	Vitrified Clay	瓦	
			PP	Polypropylene	聚丙烯	
			PF	Pitch Fibre	瀝青纖維	
			MAC	Masonry, coursed	特定石圍	
			MAR	Masonry, random	石圍,沒特定	
			U	Unspecified	不清楚	
62a	平水線深度					Figure C
62b	渠筒到平水線距離					
65	Cover Type	井蓋類型		Standard	二人井	520x520mm
				Standard-Large	大二人井	580x580mm
				Multiple Cover	九宮格	
				Large	四人井	
				With Decoration Cover	裝飾蓋	
				Others	其他	

Figure B - Manholes coding

Survey Field Record

The Manhole record card should be filled in by the team leader or by well experienced staff in accordance with the format as shown in ***Figure C***

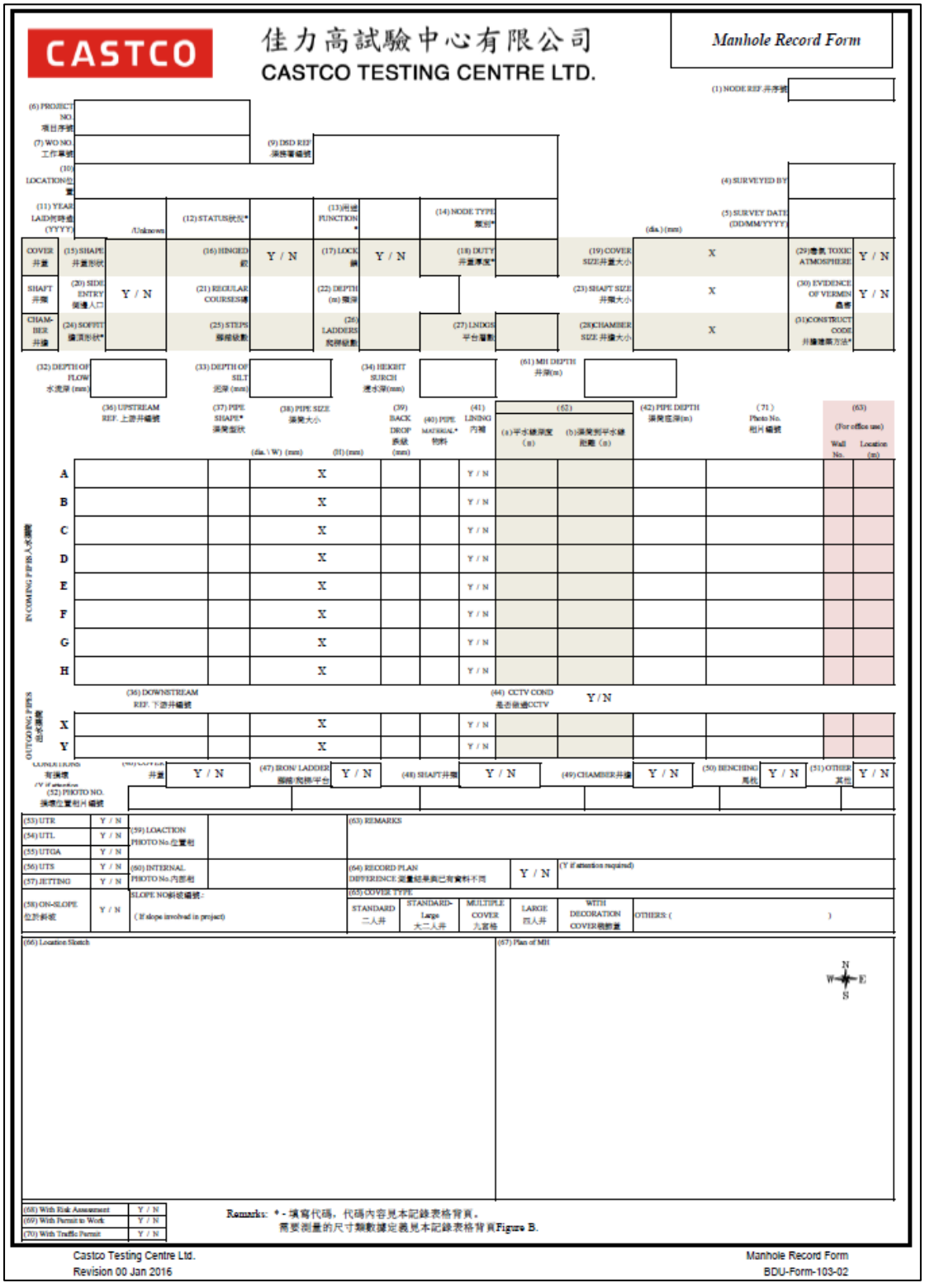


Figure C – Survey form

APPENDIX E – ELECTRONIC COPY OF SURVEY RESULT

Attachment 6
Traffic Impact Assessment

Proposed Information Technology and Telecommunication Industries (Data Centre) Development at 7 – 11 Wing Kin Road Kwai Chung New Territories

Traffic Impact Assessment
Final Report
June 2025

Prepared by: CKM Asia Limited

Proposed Information Technology and Telecommunication Industries (Data Centre) Development at 7 – 11 Wing Kin Road, Kwai Chung

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CHAPTER		PAGE
1.0	INTRODUCTION Background Structure of the Report	1
2.0	THE EXISTING SITUATION The Subject Site Existing Road Network Traffic Survey Operational Performance of the Surveyed Junctions Traffic Generation of the Surveyed Data Centres Pedestrian Generation Rates for Surveyed Data Centres Public Transport Facilities Utilisation of Existing Bus Stops Link Capacity Assessment for the Existing Condition	2
3.0	THE PROPOSED DATA CENTRE Development Schedule Provision of Internal Transport Facilities Vehicle Lift Analysis Swept Path Analysis	6
4.0	TRAFFIC IMPACT Design Year Traffic Forecasting 2032 Traffic Flows 2032 Junction Operational Performance 2032 Link Capacity Assessment Impact on Utilisation of 5 Surveyed Bus Stops	9
5.0	PEDESTRIAN ASSESSMENT Location of Surveyed Footpaths Estimation of Future Pedestrian Flows 2032 Pedestrian Flows Level-of-Service	13
6.0	CONCLUSION	16

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FIGURES
Appendix 1 – Calculation
Appendix 2 – Bus Stops Utilisation
Appendix 3 – Draft PBTO
Appendix 4 – Car Lift Analysis
Appendix 5 – Swept Path Analysis

Proposed Information Technology and Telecommunication Industries (Data Centre) Development at 7 – 11 Wing Kin Road, Kwai Chung

TABLES

NUMBER

2.1 Existing junction operational performance

2.2 Details of the surveyed data centres

2.3 Trip rates of the surveyed data centres

2.4 Pedestrian trip rates of the surveyed data centres

2.5 Franchised bus and GMB services operating close to the Subject Site

2.6 The location of surveyed bus stops

2.7 The existing utilisation of the public transport services at the 5 surveyed stops

2.8 Link capacity assessment for the existing condition

3.1 Internal transport facilities of the Proposed Data Centre

4.1 2021-based TPEDM data produced for Kwai Tsing District

4.2 Hong Kong Population Projections 2022 – 2046

4.3 AADT of the station in the vicinity of the Subject Site

4.4 Comparison of traffic generation between Approved A/KC/496 and the Proposed Data Centre

4.5 2032 Junction operational performance

4.6 2032 Link capacity assessment

4.7 Comparison of pedestrian generation between Approved A/KC/496 and the Proposed Data Centre

4.8 The utilisation of the public transport services for the case with the Proposed Data Centre

Proposed Information Technology and Telecommunication Industries (Data Centre) Development at 7 – 11 Wing Kin Road, Kwai Chung

TABLES (CONT'D)

NUMBER

5.1 Description of pedestrian facility LOS

5.2 Effective width of the surveyed footpaths

5.3 2032 LOS without and with the Proposed Data Centre

Proposed Information Technology and Telecommunication Industries (Data Centre) Development at 7 – 11 Wing Kin Road, Kwai Chung

FIGURES

NUMBER

1.1 Location of Subject Site

2.1 Location of surveyed junctions

2.2 Layout of junction of Wing Kei Road / Wing Kin Road

2.3 Layout of junction of Kwai Hei Street / Wing Kei Road

2.4 Layout of junction of Kwai Hei Street / Wing Chong Street

2.5 Layout of junction of Kwai Hei Street / Wing Kin Road

2.6 Layout of junction of Wing Kei Road / Kwai Fuk Road

2.7 Layout of junction of Shing Yiu Street / Wing Kei Road

2.8 Layout of junction of Kwai Fuk Road / Kwai Hei Street

2.9 Layout of junction of Kwai Hei Street / Tsuen Wan Road

2.10 Existing peak hour traffic flows

2.11 The public transport services provided in the vicinity of the Subject Site

2.12 Location of the surveyed public transport stops

3.1 G/F layout plan

3.2 B1/F layout plan

4.1 Ingress / egress route for traffic generated by the Proposed Data Centre

4.2 Year 2032 peak hour traffic flows without the Proposed Data Centre

4.3 Year 2032 peak hour traffic flows with the Proposed Data Centre

Proposed Information Technology and Telecommunication Industries (Data Centre) Development at 7 – 11 Wing Kin Road, Kwai Chung

FIGURES (CONT'D)

NUMBER

5.1 Location of surveyed footpaths

5.2 Existing peak 15-minute two-way pedestrian flows

5.3 Year 2032 pedestrian flows without the Proposed Data Centre

5.4 Year 2032 pedestrian flows with the Proposed Data Centre

1.0 INTRODUCTION

Background

1.1 The Subject Site is located at 7 – 11 Wing Kin Road in Kwai Chung. Figure 1.1 shows the location of the Subject Site.

1.2 On 28 July 2023, the Town Planning Board ("TPB") approved the application for the Industrial Use at 7 – 11 Wing Kin Road (TPB ref.: A/KC/496) (the "Approved A/KC/496"). The owner has the intention to redevelop the Subject Site into Information Technology and Telecommunication Industries (Data Centre) with the total GFA of 10,991.880m^2 (the "Proposed Data Centre").

1.3 Against this background, CKM Asia Limited, a traffic and transportation planning consultancy firm, was commissioned by the owner to conduct a traffic impact assessment in support of the Proposed Data Centre. This report describes the traffic study undertaken.

Structure of the Report

1.4 The report is structured as follows:

Chapter One	-	Gives the background of the project;
Chapter Two	-	Describes the existing situation;
Chapter Three	-	Explains the Proposed Data Centre and presents the internal transport facilities provided;
Chapter Four	-	Describes the traffic impact analysis;
Chapter Five	-	Describes the pedestrian impact analysis; and
Chapter Six	-	Gives the overall conclusion.

2.0 THE EXISTING SITUATION

The Subject Site

2.1 The Subject Site fronts onto Wing Kin Road to the east and Wing Chong Street to the west. It is bounded by other industrial developments, including the Global Trade Centre to the north and the Hou Feng Industrial Building to the south. The existing building has 2 run-in/outs and these are located at Wing Kin Road and Wing Chong Street. This building is vacant when this Traffic Impact Assessment is being prepared.

Existing Road Network

2.2 Wing Kin Road is a local distributor. It is of single carriageway standard and is 1-way northbound from Kwai Hei Street to Wing Kei Road.

2.3 Wing Chong Street is a local distributor. It is of a single carriageway standard and is 1-way southbound from Wing Kin Road to Kwai Hei Street.

2.4 Wing Kei Road is a local distributor. It is of single carriageway standard with 2 lanes road connecting between Wing Kin Road and Kwai Hei Street.

Traffic Survey

2.5 To reflect the latest traffic condition, manual classified count was re-conducted on Friday, 29 November 2024 during the AM and PM peak periods. The locations of the surveyed junctions are presented in Figure 2.1 and their layouts are shown in Figures 2.2 to 2.9.

2.6 The surveyed junctions include the following:

- J1: Priority Junction of Wing Kei Road / Wing Kin Road;
- J2: Priority Junction of Kwai Hei Street / Wing Kei Road;
- J3: Priority Junction of Kwai Hei Street / Wing Chong Street;
- J4: Priority Junction of Kwai Hei Street / Wing Kin Road;
- J5: Signalised Junction of Wing Kei Road / Kwai Fuk Road;
- J6: Priority Junction of Shing Yiu Street / Wing Kei Road;
- J7: Signalised Junction of Kwai Fuk Road / Kwai Hei Street; and
- J8: Priority Junction of Kwai Hei Street / Tsuen Wan Road

2.7 The counts were classified by vehicle type to enable traffic flows in passenger car units ("pcu") to be calculated. From the survey, the AM and PM peak hours were found to be between 0800 - 0900 and 1700 – 1800 hours respectively, and the existing AM and PM peak hour traffic flows are presented in Figure 2.10.

Operational Performance of the Surveyed Junctions

2.8 The existing operational performance of the surveyed junctions is calculated based on the observed traffic counts and the analysis is undertaken using the methods outlined in Volume 2 of Transport Planning and Design Manual ("TPDM"). The existing operational performance of the junctions are summarised in Table 2.1 and the detailed calculations are found in Appendix 1.

TABLE 2.1 EXISTING JUNCTION OPERATIONAL PERFORMANCE

Ref.	Junction	Type of Junction	Parameter[1]	AM Peak Hour	PM Peak Hour
J1	Wing Kei Road / Wing Kin Road	Priority	RFC	0.341	0.460
J2	Kwai Hei Street / Wing Kei Road	Priority	RFC	0.392	0.227
J3	Kwai Hei Street / Wing Chong Street	Priority	RFC	0.075	0.143
J4	Kwai Hei Street / Wing Kin Road	Priority	RFC	0.127	0.227
J5	Wing Kei Road / Kwai Fuk Road	Signalised	RC	84%	112%
J6	Shing Yiu Street / Wing Kei Road	Priority	RFC	0.281	0.107
J7	Kwai Fuk Road / Kwai Hei Street	Signalised	RC	70%	97%
J8	Kwai Hei Street / Tsuen Wan Road	Priority	RFC	0.257	0.232

Notes: [1] RC – reserve capacity RFC – Ratio of Flow to Capacity

Traffic Generation of the Surveyed Data Centres

2.9 The TPDM does not have trip generation information for data centre, and to estimate the traffic generation of the Proposed Data Centre, trip generation surveys were conducted during the weekday AM and PM peak periods at 3 data centres. Details of the surveyed data centres and the derived trip rates are presented in Tables 2.2 and 2.3.

TABLE 2.2 DETAILS OF THE SURVEYED DATA CENTRES

Ref.	Data Centre	Address	Approximate GFA (m^2)	Survey Date
1	iTech Tower	28 Pak Tin Par Street, Tsuen Wan	18,300	Thursday, 25th May 2023
2	NTT Com Tai Po Data Centre	2 Dai Hei Street, Tai Po Industrial Estate, Tai Po	19,700	Tuesday, 13th June 2023
3	HKG3 Kwai Chung Data Center	43 Container Port Road, Kwai Chung	25,300	Tuesday, 13th June 2023

TABLE 2.3 TRIP RATES OF THE SURVEYED DATA CENTRES

Ref.	Data Centre	AM Peak Hour		PM Peak Hour	
		IN	OUT	IN	OUT
Traffic Generation (pcu/hr)					
1	iTech Tower	2	2	2	2
2	NTT Com Tai Po Data Centre	9	6	7	13
3	HKG3 Kwai Chung Data Center	10	3	4	9
Trip Rates (pcu/hour/100m^2)					
1	iTech Tower	0.0109	0.0109	0.0109	0.0109
2	NTT Com Tai Po Data Centre	0.0457	0.0305	0.0355	0.0660
3	HKG3 Kwai Chung Data Center	0.0395	0.0119	0.0158	0.0356
	Adopted (maximum rates) =	0.0457	0.0305	0.0355	0.0660

Pedestrian Generation Rates for Surveyed Data Centres

2.10 The TPDM does not have pedestrian generation information for data centre, and to estimate the pedestrian generation of the Proposed Data Centre, pedestrian generation surveys were conducted during the weekday AM and PM peak periods at the 3 data centres listed in Table 2.2. The derived pedestrian trip rates from the surveys are presented in Table 2.4.

TABLE 2.4 PEDESTRIAN TRIP RATES OF THE SURVEYED DATA CENTRES

Ref.	RCHE	AM Peak Hour		PM Peak Hour	
		IN	OUT	IN	OUT
Pedestrian Generation (pedestrian/15 min)					
1	iTech Tower	12	2	3	12
2	NTT Com Tai Po Data Centre	13	2	3	13
3	HKG3 Kwai Chung Data Center	15	1	3	14
Pedestrian Trip Rates (pedestrian/15 min/100m^2)					
1	iTech Tower	0.0656	0.0109	0.0164	0.0656
2	NTT Com Tai Po Data Centre	0.0660	0.0102	0.0152	0.0660
3	HKG3 Kwai Chung Data Center	0.0595	0.0040	0.0119	0.0555
	Adopted (maximum rates) =	0.0660	0.0109	0.0164	0.0660

Public Transport Facilities

2.11 The Subject Site is located close to public transport services. Details of the franchised bus and green minibus ("GMB") routes operating in the vicinity of the Subject Site are presented in Figure 2.11 and Table 2.5.

TABLE 2.5 FRANCHISED BUS AND GMB SERVICES OPERATING CLOSE TO THE SUBJECT SITE

Route	Routing	Frequency (minutes)
KMB 32H	Cheung Shan – Lai Chi Kok	30 – 60
KMB 34	Kwai Shing (Central) – Tsuen Wan (Bayview Garden)	12 – 25
KMB 38	Kwai Shing (East) – Ping Tin	6 – 25
KMB 43D	Tsing Yi (Cheung Wang Estate) – Kwai Shing	AM Peak(1)
KMB 73P	Tai Mei Tuk – Tsuen Wan (Nina Tower)	AM, PM Peak(1)
GMB 87	Tsuen Wan (Ham Tin Street) – Kwai Shing (Shing Fong Street)	8 – 10
GMB 87K	Kwai Fong Station – Hoi Kwai Road Public Transport Interchange	6 – 10
GMB 89B	Kwai Shing North (Kwai Hau Street) – Hoi Kwai Road Public Transport Interchange	10 – 12
GMB 91	Tsuen Wan (Ham Tin Street) – Lai Kong Street	5 – 13
GMB 93	Tsuen Wan (Ham Tin Street) – Wah Yuen Chuen	6 – 15
GMB 93A	Wonderland Villas – Tsuen Wan (Ham Tin Street)	15 – 25
GMB 94	Shek Wai Kok – Kwai Shing	8 – 15
GMB 94A	Lei Muk Shue Estate Public Transport Interchange – Kwai Shing	10 – 15(1)
GMB 98	Tsuen Wan (Ho Pui Street) – High Prosperity Terrance (Circular)	10
GMB 404M	Kwai Fong Station – Riviera Gardens (Circular)	10 - 12
GMB 406	Shek Lei – Kwai Shing (Circular)	AM, PM Peak(1)
GMB 407	Cheung Wang Estate – Princess Margaret Hospital	4 - 10

Note: KMB – Kowloon Motor Bus GMB – Green Minibus
(1) Mondays – Fridays only (2) Sunday and Public Holiday

Utilisation of Existing Bus Stops

2.12 Utilisation surveys were conducted during the weekday AM and PM peak periods at 5 bus stops. Details of the bus stops are presented in Table 2.6 and their locations are found in Figure 2.12.

TABLE 2.6 THE LOCATION OF SURVEYED BUS STOPS

No.	Location	Walking Distance	Route
1	Wing Kei Road Southbound	100m (1 minute's walk)	GMB: 404M
2	Kwai Fuk Road Westbound	600m (8 minutes' walk)	KMB: 73P GMB: 87, 87K, 91, 93, 93A, 98, 404M, 406, 407
3	Kwai Fuk Road Eastbound	650m (9 minutes' walk)	KMB: 73P GMB: 87, 87K, 91,93, 93A, 98, 404M, 406, 407
4	Kwai Shing Swimming Pool Eastbound	600m (10 minutes' walk)	KMB: 32H, 34, 43D GMB: 87, 87K, 89B, 406, 407, 94, 94A
5	Kwai Shing Swimming Pool Westbound	600m (10 minutes' walk)	KMB: 32H, 38 GMB: 87, 87K, 89B, 407, 94, 94A

Note: KMB – Kowloon Motor Bus GMB – Green Minibus

2.13 The existing utilisation of the public transport services at 5 surveyed bus stops are summarised in Table 2.7 and the detailed calculations are found in Appendix 2.

TABLE 2.7 THE EXISTING UTILISATION OF THE PUBLIC TRANSPORT SERVICES AT THE 5 SURVEYED STOPS

No.	Location	Occupancy of Public Transport Service	
		AM Peak	PM Peak
1	Wing Kei Road Southbound	67.1%	77.3%
2	Kwai Fuk Road Northbound	67.1%	77.0%
3	Kwai Fuk Road Southbound	65.6%	80.1%
4	Kwai Shing Swimming Pool Eastbound	50.5%	38.0%
5	Kwai Shing Swimming Pool Westbound	45.0%	51.2%

Link Capacity Assessment for the Existing Condition

2.14 The existing link capacity of Wing Kei Road, Wing Kin Road and Kwai Hei Street are assessed and the results are shown in Table 2.8.

TABLE 2.8 LINK CAPACITY ASSESSMENT FOR THE EXISTING CONDITION

Ref	Links	Design Flow (veh/hr)	Traffic Flow (veh/hr)		V/C Ratio	
			AM Peak	PM Peak	AM Peak	PM Peak
L1	Wing Kei Road	800	311	188	0.389	0.235
L2	Wing Kin Road	400	203	260	0.508	0.650
L3	Kwai Hei Street	800	383	311	0.479	0.389

3.0 THE PROPOSED DATA CENTRE

Development Schedule

3.1 The Proposed Data Centre has total GFA of 10,991.880m^2, and run-in/out is provided at Wing Kin Road, which is at the same location as the Approved A/KC/496.

Provision of Internal Transport Facilities

3.2 The internal transport facilities for the Proposed Data Centre are provided in accordance to the provision rates found in the draft Provisional Basic Terms Offer ("draft PBTO") and these are presented in Table 3.1. The draft PBTO is found in Appendix 3.

TABLE 3.1 INTERNAL TRANSPORT FACILITIES OF THE PROPOSED DATA CENTRE

Draft PBTO	Proposed Provision (Data Centre GFA 10,991.880m^2)
Car Parking Space	
Clause 22(a)(i)(I) one space for every 1,000 square metres or part thereof the gross floor area of the building or buildings erected or to be erected on the lot or part or parts of the building or buildings for the purpose of data centre Calculation: 10,991.880 / 1,000 = 10.99, say 11 nos.	11 nos. comprising of: (i) 10 nos. @ 5m (L) x 2.5m (W) x 2.4m, (ii) 1 no. @ 5m (L) x 3.5m (W) x 2.4m (H) for persons with disabilities = requirement of Draft PBTO, OK
Motorcycle Parking Space	
Clause 22(c)(i)(I) 10% of the total number of the Data Centre Parking Spaces Calculation: 11 x 10% = 1.10, say 2 nos.	2 nos. @ 2.4m (L) x 1m (W) x 2.4m (H) = requirement of Draft PBTO, OK

TABLE 3.1 PROPOSED INTERNAL TRANSPORT FACILITIES (CONT'D)

Draft PBTO	Proposed Provision (Data Centre GFA 10,991.880m^2)
Goods Vehicle Loading / Unloading Bay	
Clause 22(e)(i)(I) one space for every 3,400 square metres or part thereof of the gross floor area of the building or buildings erected or to be erected on the lot or part or parts of the building or buildings for the purpose of data centre Calculation: 10,991.880 / 3,400 = 3.23, say 4 nos. Clause 22(e)(ii)(I)(A) the first 65% of the total number of spaces shall each measure 3.5 metres in width and 7.0 metres in length with a minimum headroom of 3.6 metres provided that if the number of spaces so calculated is a decimal number, the C for T may at his absolute discretion round up or down the number to a whole number; and Clause 22(e)(ii)(I)(B) the remaining number of spaces shall each measure 3.5 metres in width and 11.0 metres in length with a minimum headroom of 4.7 metres. Calculation: LGV = 4 x 65% = 2.6, say 3 nos. HGV = 4 – 3 = 1 no. Clause 22(e)(iii)(I) the first 60% of the spaces of the respective dimensions as provided under sub-clauses (e)(ii)(I)(A) and (e)(ii)(I)(B) of this Special Condition (as may be varied under Special Condition No. (23) hereof) shall be used for the loading and unloading of goods vehicles.....and the remaining number of spaces shall be used for parking of goods vehicles. Calculation: 3 nos. LGV L/UL = 3 x 60% = 1.8, say 2 nos. Parking = 3 – 2 = 1 no. 1 no. HGV L/UL = 1 x 60% = 0.6, say 1no. Parking = 0	4 nos. comprising of: (i) 1 no. HGV @ 11m (L) x 3.5m (W) x 4.7m (H) & (ii) 3 nos. LGV@ 7m (L) x 3.5m (W) x 3.6m (H) = requirement of Draft PBTO, OK

3.3 Table 3.1 shows that the internal transport facilities provided comply with the requirement of draft PBTO.

3.4 The carpark layout plans for G/F and B1/F are shown in Figures 3.1 – 3.2.

Vehicle Lift Analysis

3.5 A light goods vehicle lift is provided to access B1/F from G/F. A vehicle lift analysis was conducted to check on the operation of the vehicle lift system, and it was found that the vehicle lift system is acceptable and can serve the Proposed Data Centre. The vehicle lift analysis is attached in Appendix 4.

Swept Path Analysis

3.6 The CAD-based swept path analysis program, Autodesk Vehicle Tracking, was used to check the ease of vehicle manoeuvring. Vehicles are found to have no manoeuvring problems and all vehicles could enter and leave the spaces with ease. The swept path analysis drawings for critical movements are found in Appendix 5.

4.0 TRAFFIC IMPACT

Design Year

4.1 The Proposed Data Centre is expected to be completed by 2029, and the design year adopted for the capacity analysis is 2032, i.e. 3 years after the completion of the Proposed Data Centre.

Traffic Forecasting

4.2 The 2032 traffic flows used for the junction analysis are produced with reference to the following:

1. 2031 traffic flows derived with reference to Base District Traffic Model ("BDTM");
2. estimated traffic growth from 2031 to 2032 based on the higher of the (a) 2021 – based Territorial Population and Employment Data Matrix ("TPEDM") data produced by Planning Department ("PlanD") for Kwai Tsing District, (b) Hong Kong Population Projections 2022 – 2046 published by Census and Statistics Department ("C&SD"), or (c) historic Annual Average Daily Traffic Growth ("AADT") produced by TD; and
3. traffic generated by the Proposed Data Centre.

Estimated Traffic Growth Rate from 2031 to 2032

4.3 The (a) 2021 – based TPEDM data for Kwai Tsing District, and the (b) Hong Kong Population Projections 2022 – 2046, and (c) historic AADT are summarised in Tables 4.1 – 4.3 respectively.

TABLE 4.1 2021-BASED TPEDM DATA FOR KWAI TSING DISTRICT

Item	TPEDM Estimation / Projection			Annual Growth Rate		
	2021	2026	2031	2021 to 2026	2026 to 2031	2021 to 2031
Population	495,800	488,750	483,050	-0.20%	-0.23%	-0.22%
Employment	226,350	223,400	227,800	-0.19%	0.39%	0.05%

TABLE 4.2 HONG KONG POPULATION PROJECTIONS 2022 – 2046

Whole Territory Population		Annual Growth Rate
Year 2031	Year 2032	2031 to 2032
7,820,200	7,862,100	+0.54%

TABLE 4.3 AADT OF THE STATION IN THE VICINITY OF THE SUBJECT SITE

Station	5224	6022	6645
Road	Kwai Fuk Road	Kwai Fuk Road	Wing Kei Road
From	Shing Fuk Street	Shing Fuk Street	Wing Kin Road
To	Texaco Road	Hing Fong Road	Kwai Hei Street
2014	15,660	25,720	3,830
2015	15,960	26,200	3,690
2016	16,400	26,930	3,990
2017	16,700	24,700	3,800
2018	12,760	24,160	2,690
2019	15,370	24,070	3,180
2020	15,220	23,840	3,790
2021	15,800	24,760	3,600
2022	15,640	29,760	3,560
2023	15,680	26,420	3,600

Average Annual Growth	-0.01%	-0.30%	-0.69%

4.4 Table 4.1 shows that the highest annual growth rate for population is -0.20% and for employment is +0.39%. Table 4.2 shows that the annual growth rate from 2031 to 2032 is +0.54%. Table 4.3 shows that in the historic AADT of the stations between 2014 and 2023 in the vicinity has highest growth rate of only -0.30% per annum. To be conservative, the growth rate of +1% per annum is adopted to estimate the traffic growth from 2031 to 2032.

Traffic Generated by the Proposed Data Centre

4.5 Traffic generation associated with the Proposed Data Centre is calculated based on results presented in Table 2.3, and the calculation is presented in Table 4.4. The comparison of traffic generation between Approved A/KC/496 and the Proposed Data Centre is presented in Table 4.4.

TABLE 4.4 COMPARISON OF TRAFFIC GENERATION BETWEEN APPROVED A/KC/496 AND THE PROPOSED DATA CENTRE

Item	AM Peak Hour			PM Peak Hour		
	In	Out	2-way	In	Out	2-way
Trip Generation Rates (pcu/hour/100m^2 GFA) in Table 2.3						
Data Centre	0.0457	0.0305	NA	0.0355	0.0660	NA
Traffic Generation of Proposed Data Centre (pcu/hour)						
The Proposed Data Centre: 10,991.880m^2 [a]	6	4	10	4	8	12
Approved A/KC/496 [b]	19	13	32	14	19	33
Difference [a] – [b]	-13	-9	-22	-10	-11	-21

4.6 Table 4.4 shows that compared with the Approved A/KC/496, the Proposed Data Centre generates 22 and 21 pcu (2-way) less during the AM and PM peak hours. It can be concluded from traffic generation aspect that compared with the Approved A/KC/496, the Proposed Data Centre is better-off scheme.

4.7 The ingress / egress route for traffic generated by the Proposed Data Centre is shown in Figure 4.1.

2032 Traffic Flows

4.8 Year 2032 traffic flows for the following cases are derived:

2032without the Proposed Data Centre [A] = (i) 2031 traffic flows derived with reference to BDTM + (ii) estimated total growth from 2031 to 2032

2032 with the Proposed Data Centre [B] = [A] + (iii) Traffic generated by the Proposed Data Centre (Table 4.4)

4.9 The 2032 peak hour traffic flows for the cases without and with the Proposed Data Centre, are shown in Figures 4.2 - 4.3, respectively.

2032 Junction Operational Performance

4.10 Year 2032 capacity analysis for the cases without and with the Proposed Data Centre are summarised in Table 4.5 and detailed calculations are found in the Appendix 1.

TABLE 4.5 2032 JUNCTION OPERATIONAL PERFORMANCE

Ref.	Junction	Type of Junction / Parameter[1]	Without the Proposed Data Centre		With the Proposed Data Centre	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Wing Kei Road / Wing Kin Road	Priority / RFC	0.363	0.497	0.367	0.505
J2	Kwai Hei Street / Wing Kei Road	Priority / RFC	0.426	0.246	0.433	0.254
J3	Kwai Hei Street / Wing Chong Street	Priority / RFC	0.084	0.157	0.084	0.157
J4	Kwai Hei Street / Wing Kin Road	Priority / RFC	0.139	0.244	0.143	0.247
J5	Wing Kei Road / Kwai Fuk Road	Signalised / RC	66%	96%	66%	96%
J6	Shing Yiu Street / Wing Kei Road	Priority / RFC	0.305	0.119	0.305	0.119
J7	Kwai Fuk Road / Kwai Hei Street	Signalised / RC	57%	83%	57%	82%
J8	Kwai Hei Street / Tsuen Wan Road	Priority / RFC	0.285	0.250	0.285	0.251

Notes: [1] RC – reserve capacity RFC – Ratio of Flow to Capacity

4.11 Table 4.5 shows that the junctions operate with capacities during the AM and PM peak hours for the cases without and with the Proposed Data Centre.

2032 Link Capacity Assessment

4.12 2032 link capacity of Wing Kei Road, Wing Kin Road and Kwai Hei Street are assessed and the results are shown in Table 4.6.

TABLE 4.6 2032 LINK CAPACITY ASSESSMENT

Ref	Links	Design Flow (veh/hr)	Scenario (Without / With Proposed Data Centre)	Traffic Flow (veh/hr)		V/C Ratio	
				AM Peak	PM Peak	AM Peak	PM Peak
L1	Wing Kei Road	800	Without	335	203	0.419	0.254
			With	338	206	0.423	0.258
L2	Wing Kin Road	400	Without	217	280	0.543	0.700
			With	222	283	0.555	0.708
L3	Kwai Hei Street	800	Without	409	339	0.511	0.424
			With	412	342	0.515	0.428

4.13 Table 4.6 shows that the traffic generation associated with the Proposed Data Centre has negligible traffic impact to the road link analysed.

Impact on Utilisation of 5 Surveyed Bus Stops

4.14 The number of passengers associated with the Proposed Data Centre using public transport is calculated based on the pedestrian generation of the Proposed Data Centre. The comparison of pedestrian generation between Approved A/KC/496 and the Proposed Data Centre is presented in Table 4.7.

TABLE 4.7 COMPARISON OF PEDESTRAIN GENERATION BETWEEN APPROVED A/KC/496 AND THE PROPOSED DATA CENTRE

Item	AM Peak Hour			PM Peak Hour		
	In	Out	2-way	In	Out	2-way
Pedestrian Generation Rates (ped/15 min/100m^2) in Table 2.4						
Data Centre	0.0660	0.0109	NA	0.0164	0.0660	NA
Pedestrian Generation of Proposed Data Centre (ped/15 min)						
The Proposed Data Centre: 10,991.880m^2	8	2	10	2	8	10
Pedestrian Generation of Proposed Data Centre (ped/1 hour)						
The Proposed Data Centre: 10,991.880m^2 [a]	32	8	40	8	32	40
Approved A/KC/496 [b]	40	12	52	12	36	48
Difference [a] – [b]	-8	-4	-12	-4	-4	-8

4.15 Table 4.7 shows that compared with the Approved A/KC/496, the Proposed Data Centre generates 12 and 8 pedestrians (2-way) less during the AM and PM peak hours. It can be concluded from traffic generation aspect that compared with the Approved A/KC/496, the Proposed Data Centre is better-off scheme.

4.16 To be conservative, it is assumed that all pedestrians generated by the Proposed Data Centre use public transport services and the public transport utilisation analysis is presented in Table 4.8.

TABLE 4.8 THE UTILISATION OF THE PUBLIC TRANSPORT SERVICES FOR THE CASE WITH THE PROPOSED DATA CENTRE

No.	Location	Occupancy of Public Transport Service	
		AM Peak	PM Peak
1	Wing Kei Road Southbound	70.6%	82.9%
2	Kwai Fuk Road Northbound	67.4%	77.4%
3	Kwai Fuk Road Southbound	66.0%	80.5%
4	Kwai Shing Swimming Pool Eastbound	51.0%	38.5%
5	Kwai Shing Swimming Pool Westbound	45.7%	51.9%

4.17 Table 4.9 shows that the public transport service have capacity to accommodate the passenger demand generated by the Proposed Data Centre.

5.0 PEDESTRIAN ASSESSMENT

Location of Surveyed Footpaths

5.1 The pedestrian assessment is undertaken for footpaths likely used by the occupants and visitors to the Proposed Data Centre. The location of the surveyed footpaths is shown in Figure 5.1.

Estimation of Future Pedestrian Flows

5.2 The year 2032 pedestrian flow is estimated based on the following:

(i) Existing pedestrian flows;
(ii) Estimated annual pedestrian growth rates from 2024 to 2032; and
(iii) Pedestrian generated by the Proposed Data Centre in Table 4.7.

Existing Pedestrian Flows

5.3 To quantify the existing pedestrian flows using the footpaths presented in Figure 5.1, pedestrian counts were conducted during the AM and PM peak periods on Friday, 29 November 2024. The existing peak 15-minute two-way pedestrian flows, which are obtained from the pedestrian counts, are presented in Figure 5.2.

Estimated Annual Pedestrian Growth Rates from 2024 to 2032

5.4 The 2032 reference pedestrian flow is estimated based on the 2024 observed pedestrian flows and the annual pedestrian growth rate from 2024 to 2032. The pedestrian growth rate from 2024 to 2033 is assumed to be +1% annum which is taken from Paragraph 4.4.

2032 Pedestrian Flows

5.5 The 2032 pedestrian flows without and with the Proposed Data Centre are derived using the following method:

2032 without the Proposed Data Centre [A]	=	(i) existing pedestrian flows + (ii) estimated annual pedestrian growth rates from 2023 to 2032
2032 with the Proposed Data Centre [B]	=	[A] + (iii) pedestrian generated by the Proposed Data Centre (Table 4.7)

5.6 The 2032 pedestrian flows without and with the Proposed Data Centre are presented in Figures 5.3 and 5.4.

Level-of-Service

5.7 The level-of-service (LOS) of a pedestrian facility is dependent on its width and the number of pedestrians using the facility. Description of the LOS is obtained from the TPDM, and is given in Table 5.1.

TABLE 5.1 DESCRIPTION OF PEDESTRIAN FACILITY LOS

LOS	Maximum Pedestrian Flow Rate - ped/min/m	Description
A	< = 16	Pedestrians basically move in desired paths without altering their movements in response to other pedestrians. Walking speeds are freely selected and conflicts between pedestrians are unlikely.
B	> 16 - 23	Sufficient space is provided for pedestrians to freely select walking speeds, to bypass other pedestrians and to avoid crossing conflicts with others. At this level, pedestrians begin to be aware of other pedestrians and to respond to their presence in the selection of walking paths.
C	> 23 – 33	Sufficient space is available to select normal walking speeds and to bypass other pedestrians primarily in unidirectional streams. Where reverse directions or crossing movements exist, minor conflicts will occur, and speed and volume will be somewhat lower.
D	> 33 - 49	Freedom to select individual walking speed and bypass other pedestrians is restricted. Where crossing or reverse-flow movements exist, the probability of conflict is high and its avoidance requires frequent changes in speed and position. The LOS provides reasonably fluid flow; however considerable friction and interaction between pedestrians is likely to occur.
E	> 49 – 75	Virtually, all pedestrians would have their normal walking speed restricted. At the lower range of this LOS, forward movement is possible only by shuffling. Space is insufficient to pass over slower pedestrians. Cross- or reverse-flow movements are possible only with extreme difficulties. Design volumes approach the limit of walkway capacity with resulting stoppages and interruptions to flow.
F	> 75	Walking speeds are severely restricted. Forward progress is made only by "shuffling". There is frequent and unavoidable contact with other pedestrians. Cross- and reverse-flow movements are virtually impossible. Flow is sporadic and unstable. Space is more characteristic of queued pedestrians than of moving pedestrian streams.

Source: Transport Planning & Design Manual Volume 6, Transport Department

5.8 The effective width of the surveyed footpaths is presented in Table 5.2.

TABLE 5.2 EFFECTIVE WIDTH OF THE SURVEYED FOOTPATHS

Ref.	Location		Footpath Width (m)	Effective Width (m)
1	Wing Kin Road between Wing Kei Road and Kwai Hei Street	Western footpath	2.6	1.6
2	Wing Kei Road between Wing Kin Road and Kwai Hei Street	Eastern footpath	3.7	2.7
3	Kwai Hei Street between Wing King Road and Wing Kei Road	Northern footpath	2.3	1.3

5.9 The 2032 weekday LOS at the surveyed footpaths for the cases without and with the Proposed Data Centre is presented in Table 5.3.

TABLE 5.3 2032 LOS WITHOUT AND WITH THE PROPOSED DATA CENTRE

Ref.	Location		Peak Period	Year 2032 without the Proposed Data Centre			Year 2032 with the Proposed Data Centre		
				Ped / 15 min	Ped / min/m	LOS	Ped / 15 min	Ped / min/m	LOS
1	Wing Kin Road between Wing Kei Road and Kwai Hei Street	Western footpath	AM	19	0.8	A	29	1.2	A
			PM	45	1.9	A	55	2.3	A
2	Wing Kei Road between Wing Kin Road and Kwai Hei Street	Eastern footpath	AM	16	0.4	A	21	0.5	A
			PM	15	0.4	A	20	0.5	A
3	Kwai Hei Street between Wing King Road and Wing Kei Road	Northern footpath	AM	17	0.9	A	22	1.1	A
			PM	22	1.1	A	27	1.4	A

5.10 Table 5.3 shows that all surveyed footpaths achieve LOS A, which concludes that the Proposed Data Centre will have no adverse impact to the footpaths in the vicinity.

6.0 CONCLUSION

6.1 The Subject Site is located at 7 – 11 Wing Kin Road in Kwai Chung. The existing building is vacant when this Traffic Impact Assessment is being prepared.

6.2 On 28 July 2023, the TPB approved the application for the Industrial Use at 7 – 11 Wing Kin Road (TPB ref.: A/KC/496). The owner now intends to redevelop the Subject Site into a Data Centre with a total GFA of 10,991.880m^2.

6.3 Manual classified counts were conducted at the key junctions located in the vicinity of the Proposed Data Centre in order to establish the peak hour traffic flows. Currently, the key junctions operate with capacities during the AM and PM peak hours.

6.4 The internal transport facilities provided for the Proposed Data Centre comply with the requirement of draft PBTO. A light goods vehicle lift is provided to access B1/F from G/F. All vehicles could enter and leave the Proposed Data Centre and their respective space / bay with ease.

6.5 The run-in/out is provided at Wing Kin Road, which is at the same location as the Approved A/KC/496.

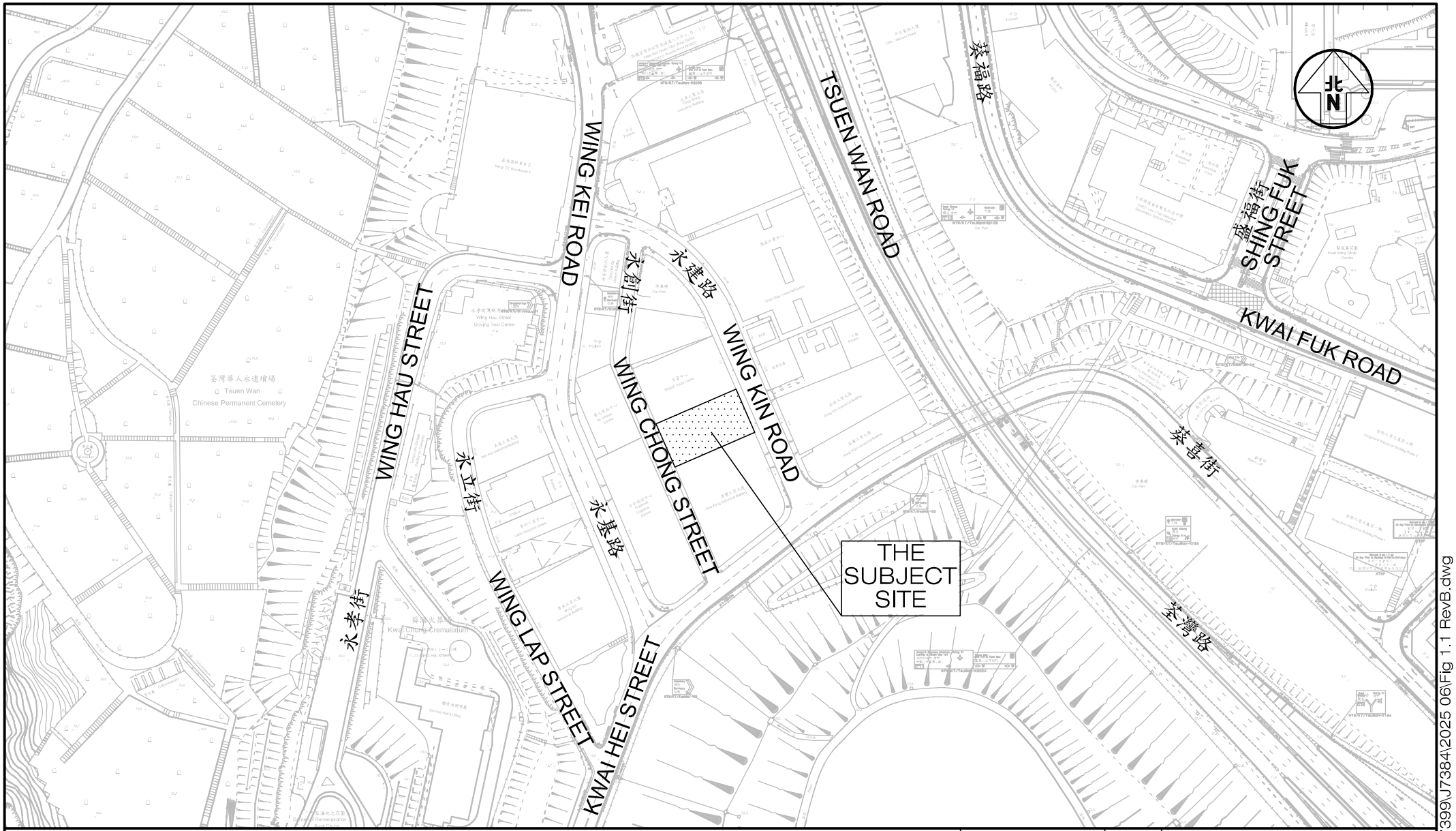
6.6 The Proposed Data Centre is expected to be completed by 2029, and the junction capacity analysis and link capacity analysis are undertaken for year 2032. For the design year 2032, the junctions and road links analysed are expected to operate with capacities during the peak hours for the case without and with the Proposed Data Centre.

6.7 The public transport services at the 5 surveyed bus stops have capacity to accommodate the passenger demand generated by the Proposed Data Centre.

6.8 The pedestrian assessment conducted found that the surveyed footpaths would operate with LOS A in 2032 for the cases without and with the Proposed Data Centre.

6.9 It is concluded that the Proposed Data Centre will result in no adverse traffic impact to the surrounding road network and the footpaths in the vicinity. From traffic engineering grounds, the Proposed Data Centre is acceptable.

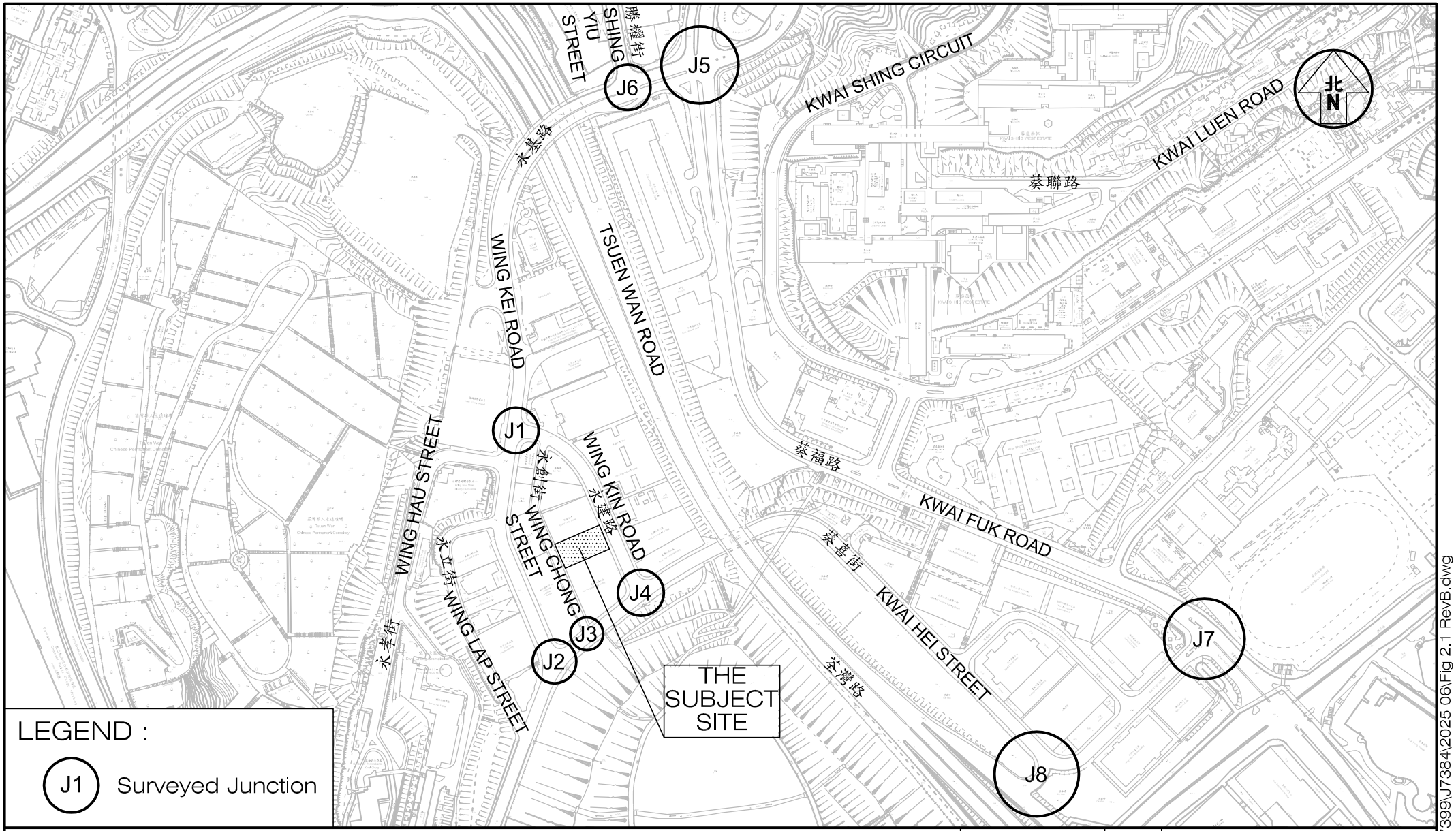
Figures



Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 1.1 / Revision B
Figure Title	LOCATION OF SUBJECT SITE	Designed by L C H / Drawn by N C M / Checked by K C	Scale in A4 1 : 2500 / Date 26 JUN 2025

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Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 2.1 / Revision B
Figure Title	LOCATION OF SURVEYED JUNCTIONS	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 4500 / Date 26 JUN 2025

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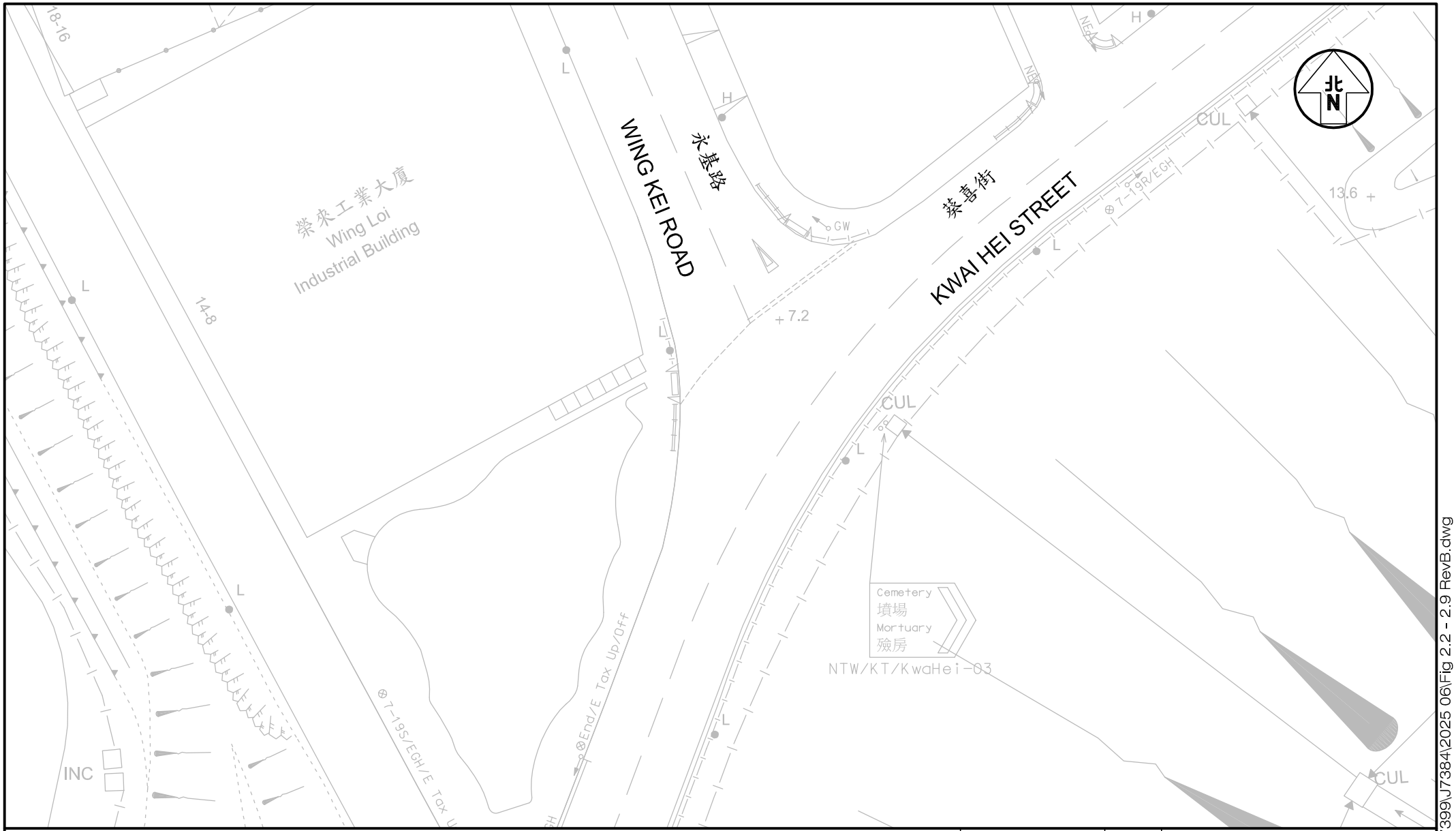
T:\JOB\J7350-J7399\J7384\2025 06\Fig 2.1 RevB.dwg



Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 2.2 / Revision B
Figure Title	LAYOUT OF JUNCTION OF WING KEI ROAD / WING KIN ROAD	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 500 / Date 26 JUN 2025

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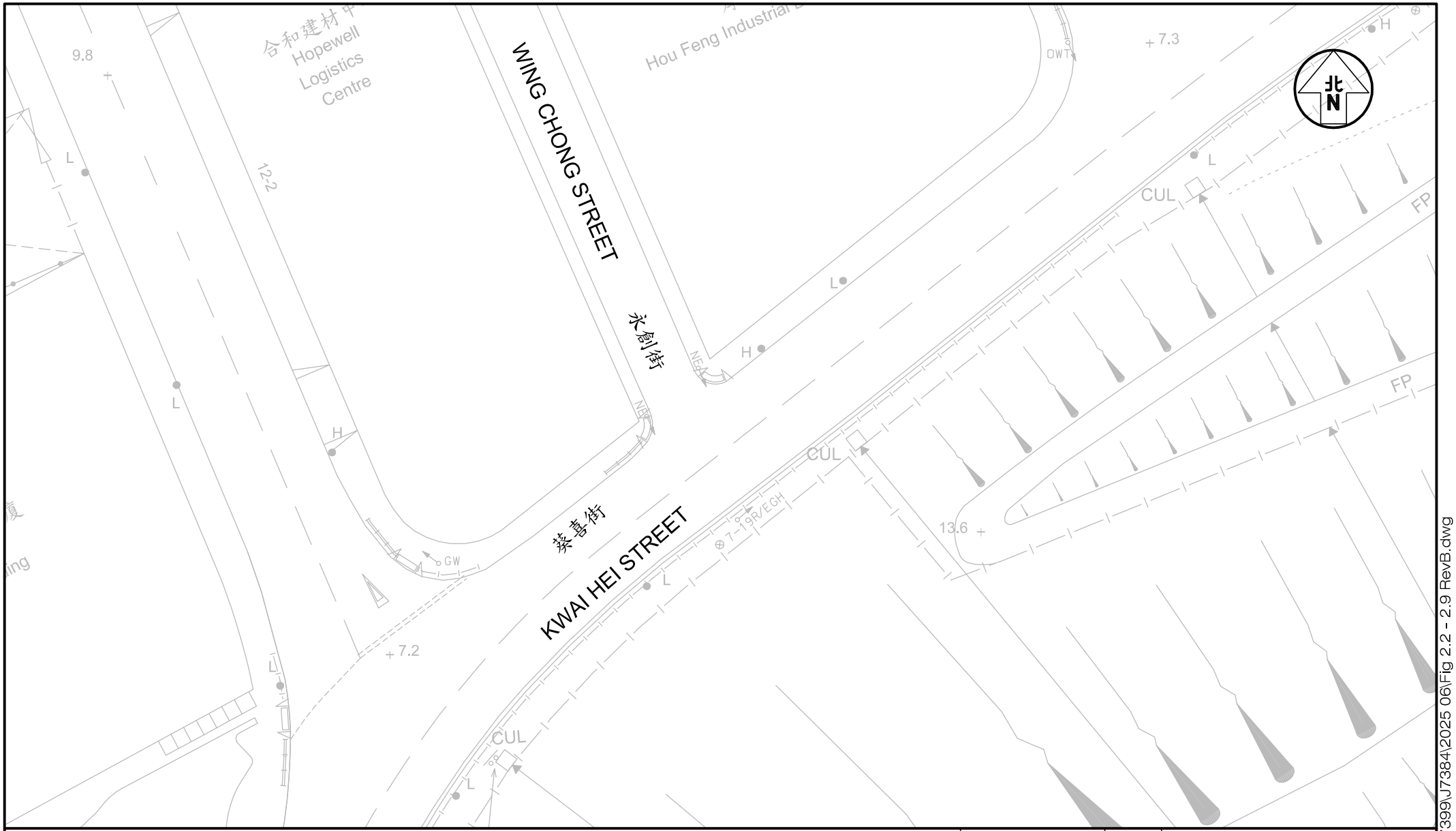
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Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 2.3 / Revision B
Figure Title	LAYOUT OF JUNCTION OF KWAI HEI STREET / WING KEI ROAD	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 500 / Date 26 JUN 2025

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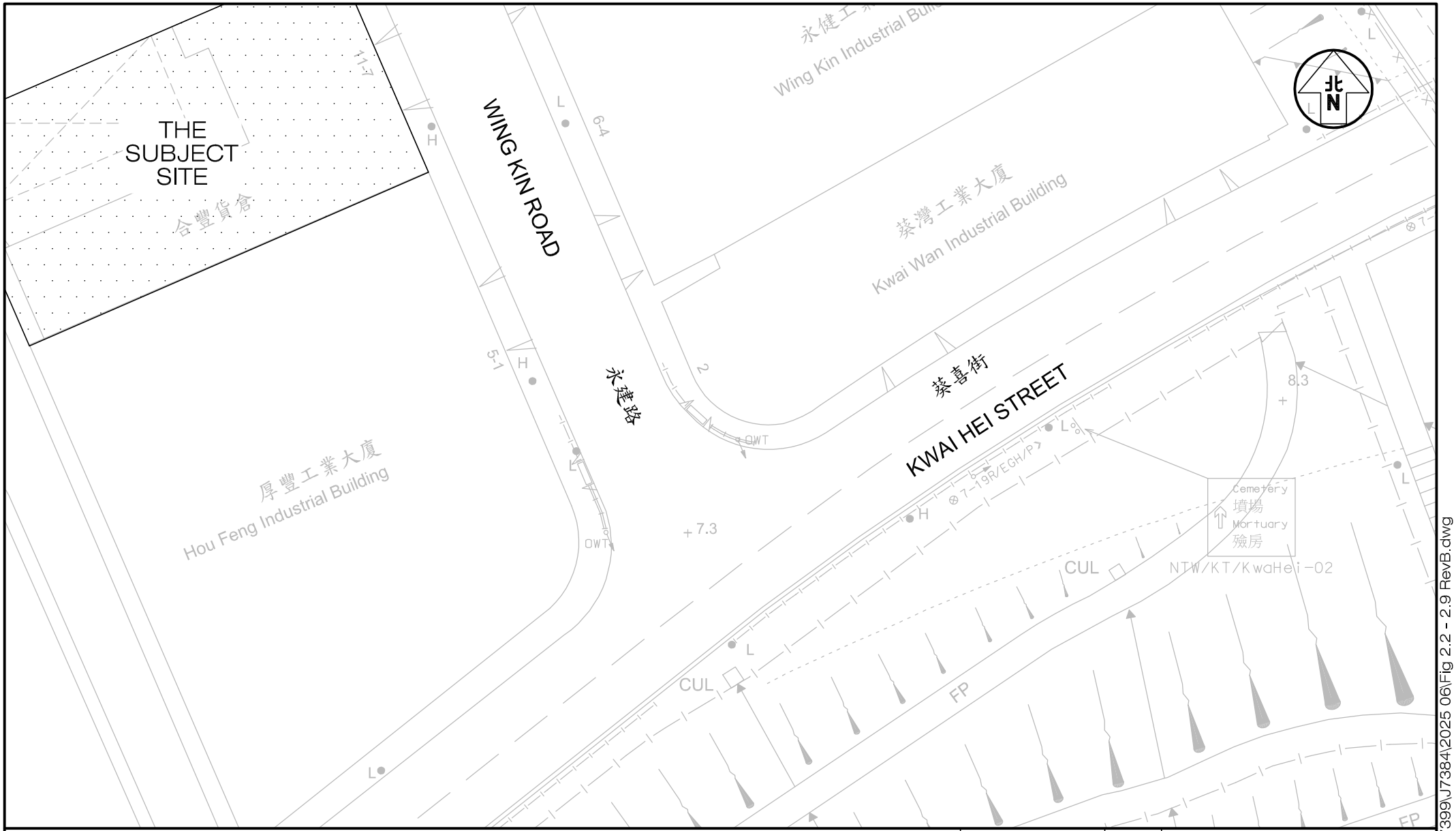
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Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 2.4 / Revision B
Figure Title	LAYOUT OF JUNCTION OF KWAI HEI STREET / WING CHONG STREET		Designed by C Y Y / Drawn by N C M / Checked by K C
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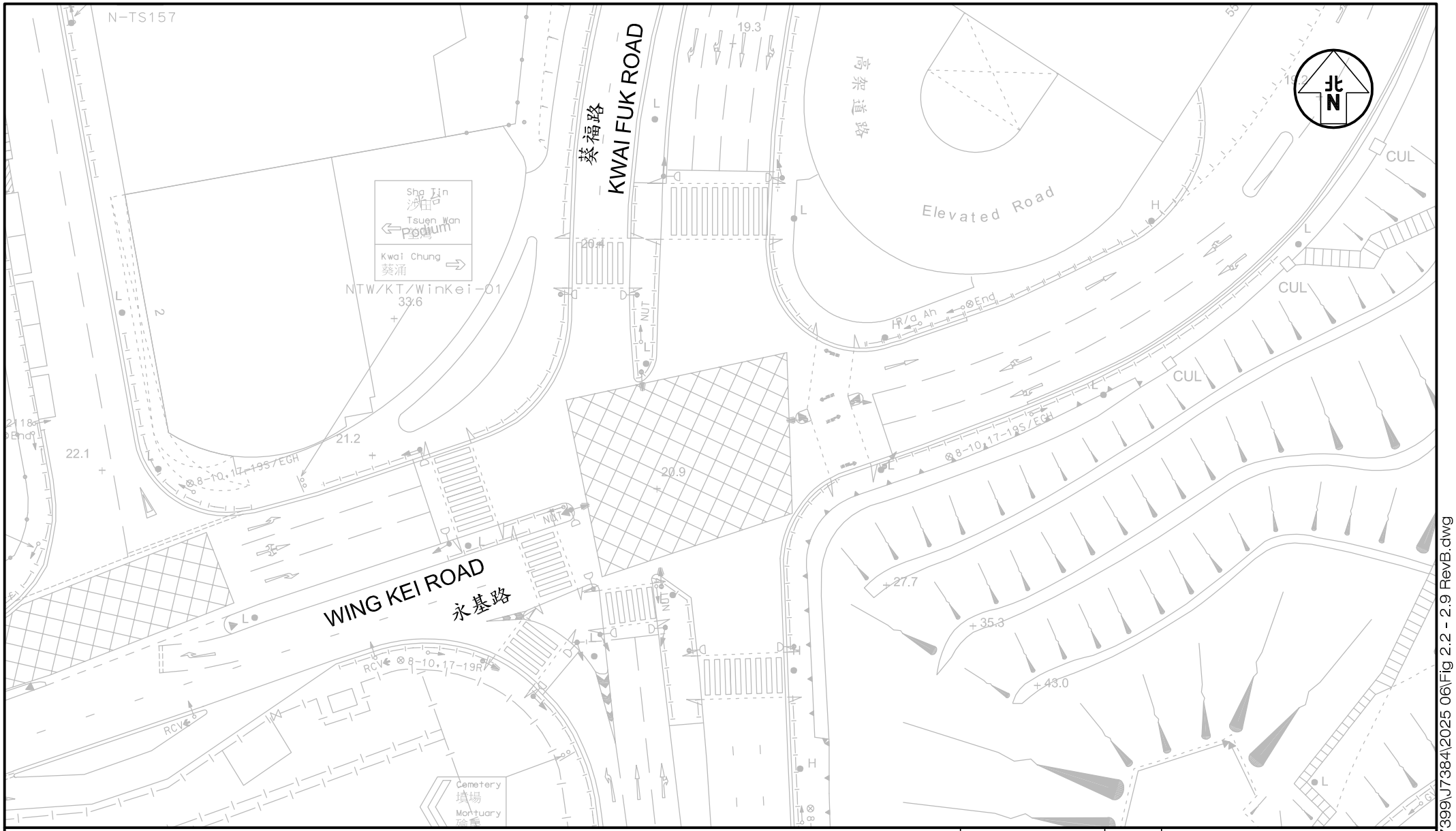
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Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 2.5 / Revision B
Figure Title	LAYOUT OF JUNCTION OF KWAI HEI STREET / WING KIN ROAD	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 500 / Date 26 JUN 2025

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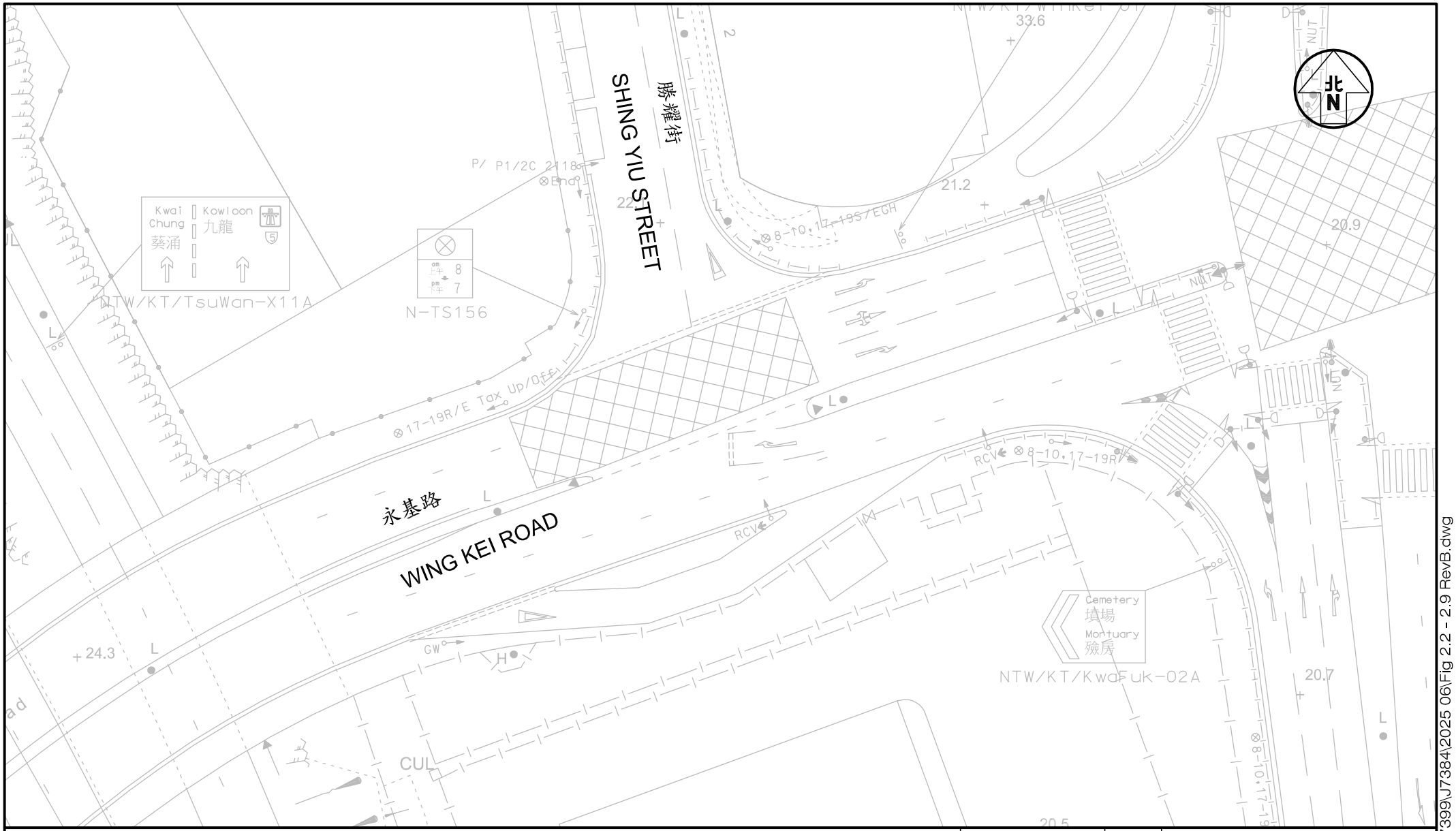
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Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 2.6 / Revision B
Figure Title	LAYOUT OF JUNCTION OF WING KEI ROAD / KWAI FUK ROAD	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 600 / Date 26 JUN 2025

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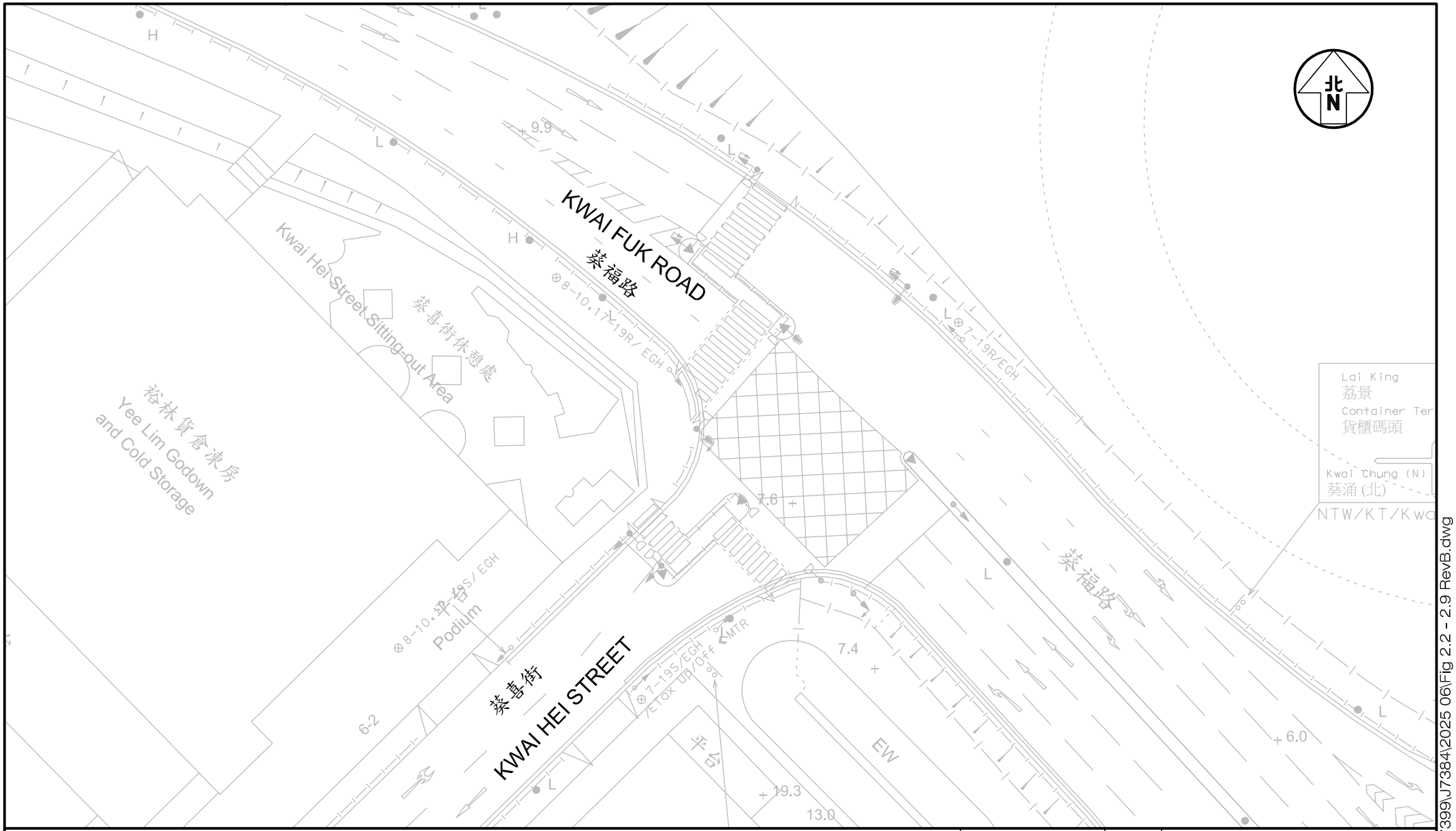
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Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 2.7	Revision B
Figure Title	LAYOUT OF JUNCTION OF SHING YIU STREET / WING KEI ROAD		Designed by C Y Y / Drawn by N C M / Checked by K C	
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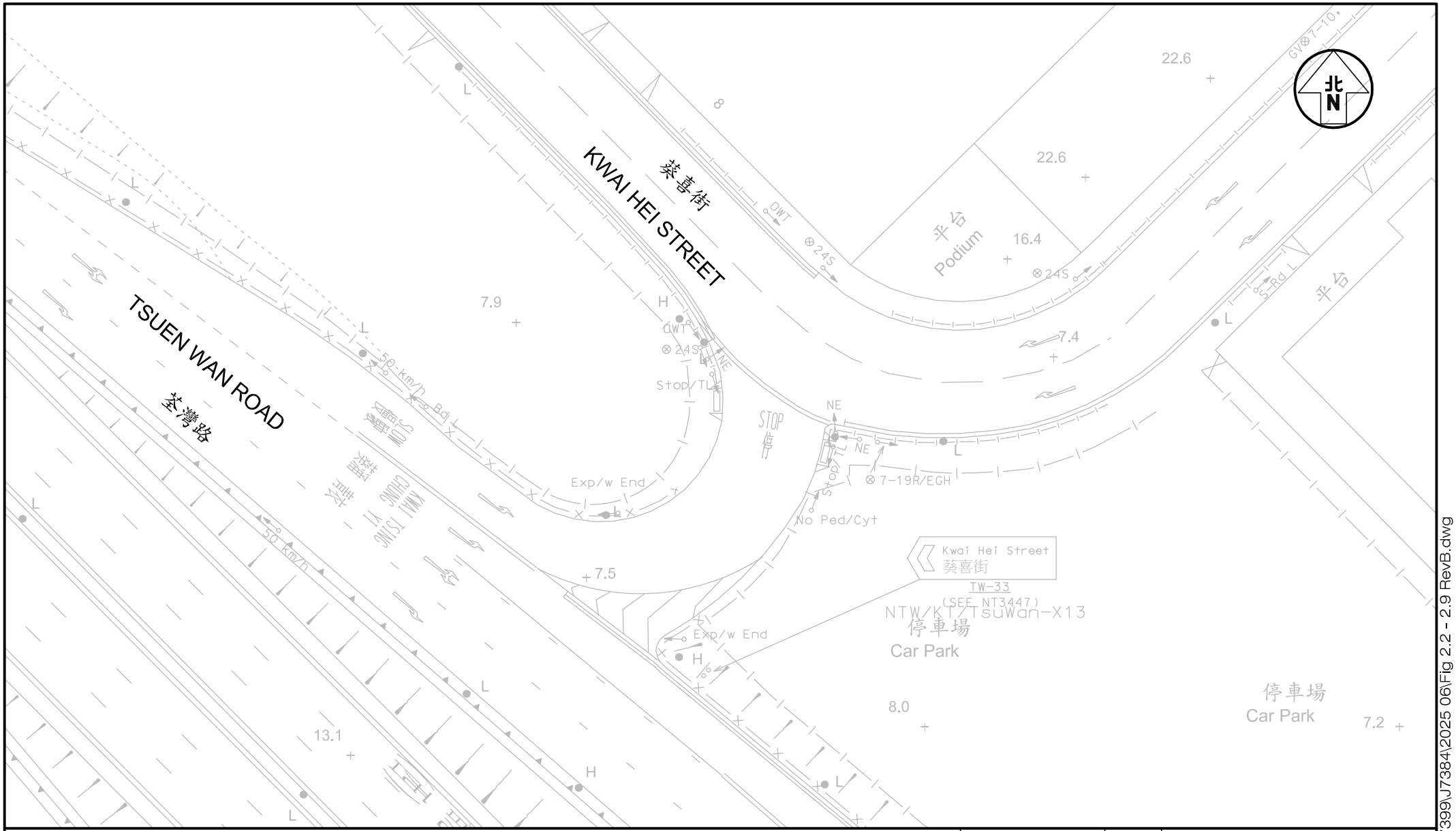
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Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 2.8	Revision B
Figure Title	LAYOUT OF JUNCTION OF KWAI FUK ROAD / KWAI HEI STREET		Designed by C Y Y / Drawn by N C M / Checked by K C	
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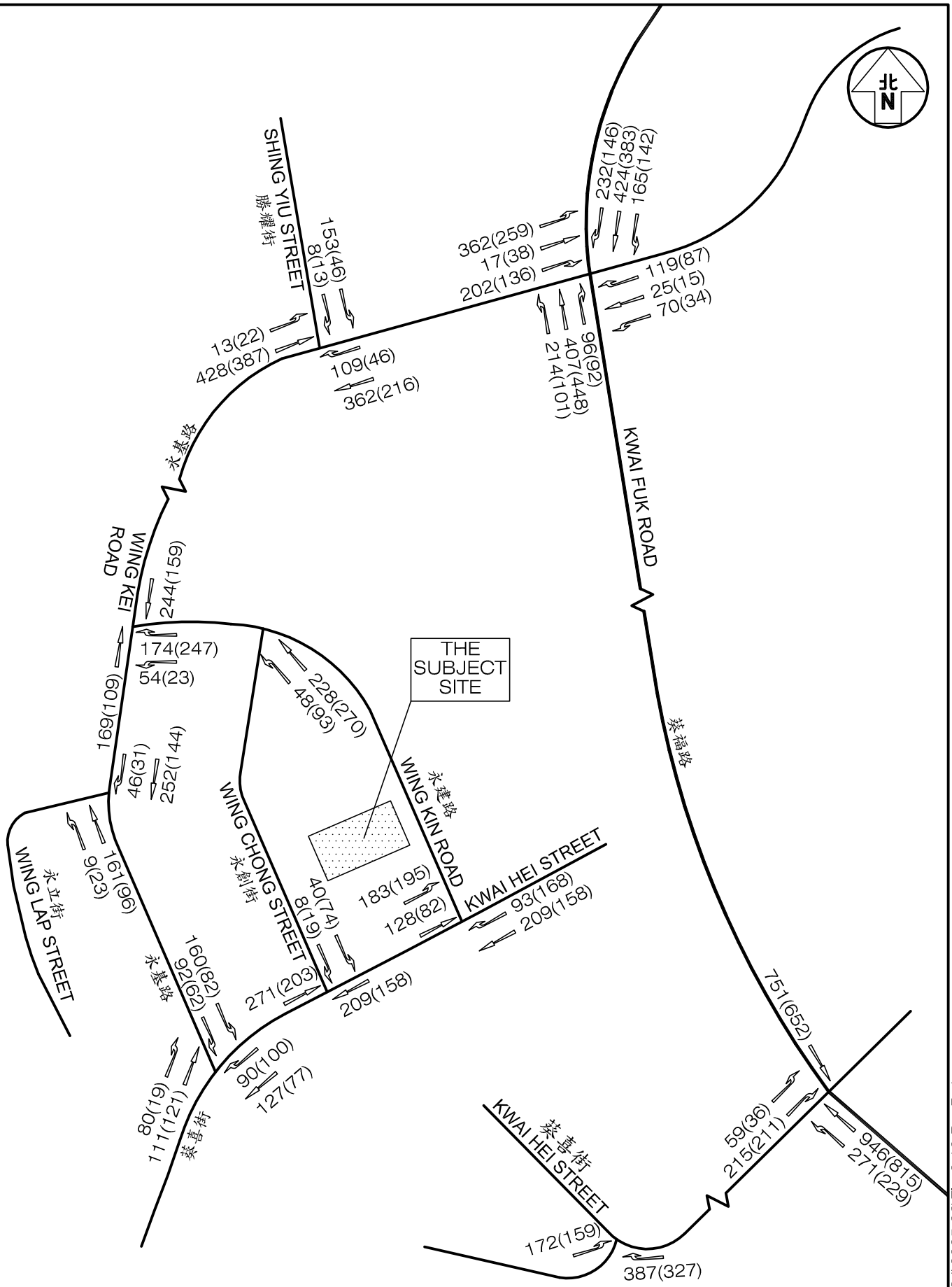
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Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 2.9	Revision B
Figure Title	LAYOUT OF JUNCTION OF KWAI HEI STREET / TSUEN WAN ROAD		Designed by C Y Y / Drawn by N C M / Checked by K C	
			Scale in A4 1 : 500 / Date 26 JUN 2025	

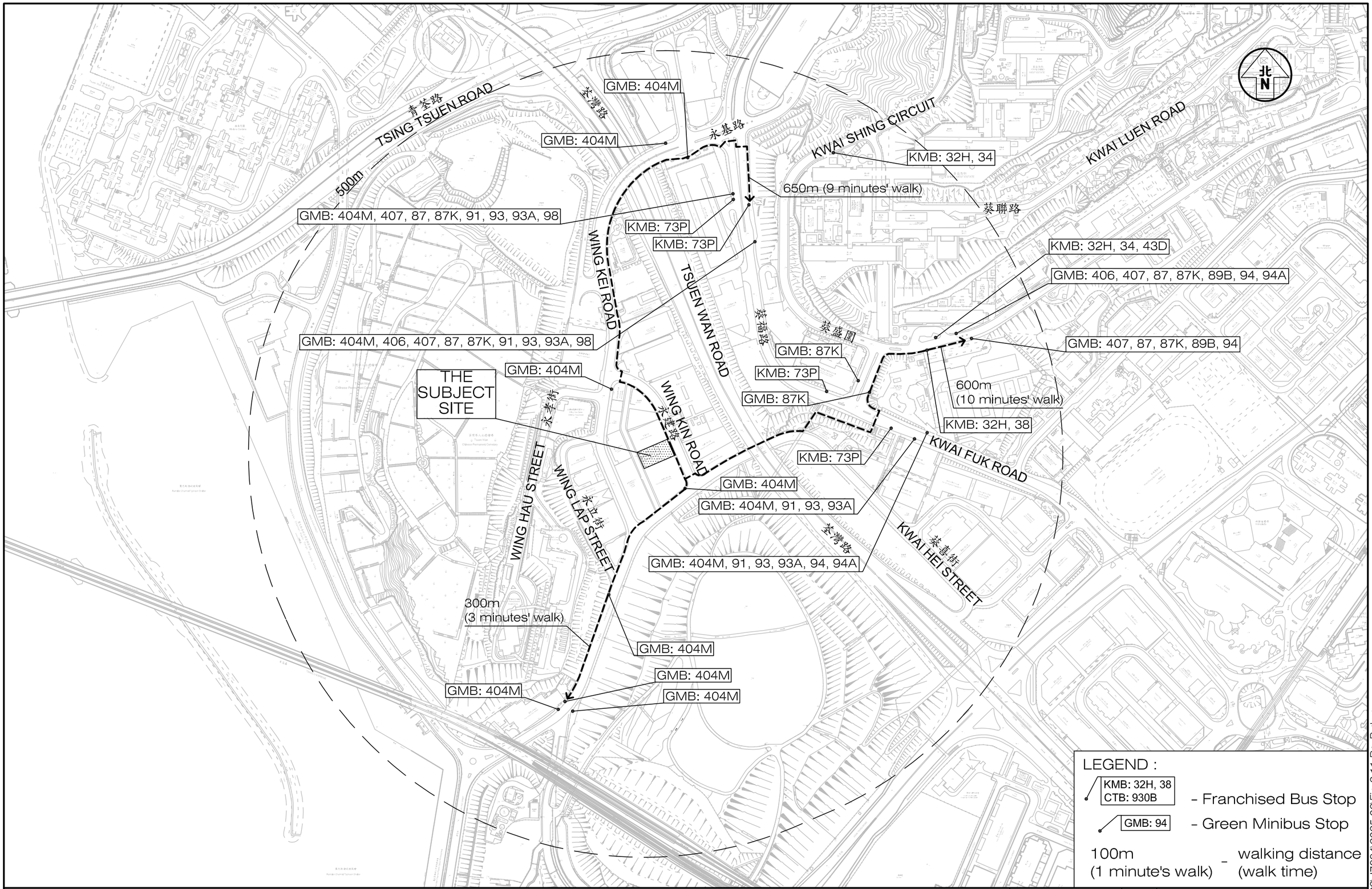
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Project Title: PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	Job No. J7384	Figure No. 2.10			Scale in A4 N.T.S.
	Designed by C Y Y	Drawn by N C M	Checked by K C	Revision B	Date 26 JUN 2025
Figure Title: EXISTING PEAK HOUR TRAFFIC FLOWS	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk				

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Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 2.11 / Revision B
Figure Title	THE PUBLIC TRANSPORT SERVICES PROVIDED IN THE VICINITY OF THE SUBJECT SITE	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A3 1 : 4500 / Date 26 JUN 2025

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永基路

KWAI SHING CIRCUIT

650m (9 minutes' walk)

600m
(8 minutes' walk)

STOP 3

STOP 2

WING KEI ROAD

TSUEN WAN ROAD

葵福路

葵盛圍

STOP 5

600m
(10 minutes' walk)

STOP 4

100m (1 minute's walk)

STOP 1

WING KIN ROAD

永建路

600m
(10 minutes' walk)

THE SUBJECT SITE

KWAI FUK ROAD

KWAI HEI STREET

葵喜街

荃灣路

永基路

LEGEND :

100m (1 minute's walk) - walking distance (walk time)

STOP 1 - Wing Kei Road Southbound

STOP 2 - Kwai Fuk Road Westbound

STOP 3 - Kwai Fuk Road Eastbound

STOP 4 - Kwai Shing Swimming Pool Eastbound

STOP 5 - Kwai Shing Swimming Pool Westbound

Project Title

PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES

J7384

Figure Title

LOCATION OF THE SURVEYED PUBLIC TRANSPORT STOPS

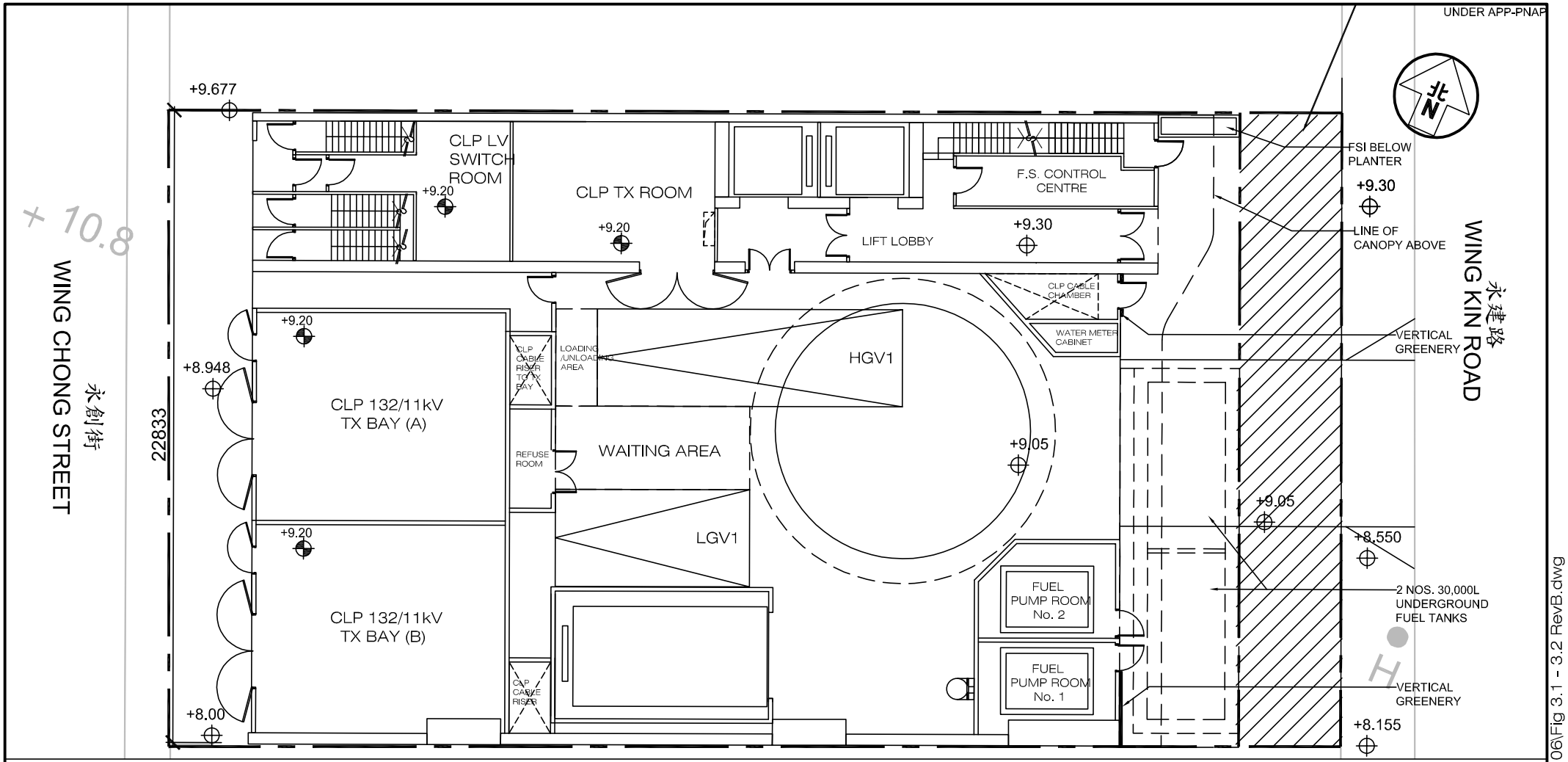
Figure No.	Revision
2.12	B

Designed by	Drawn by	Checked by
L C H	N C M	K C

Scale in A3	Date
1 : 2500	26 JUN 2025

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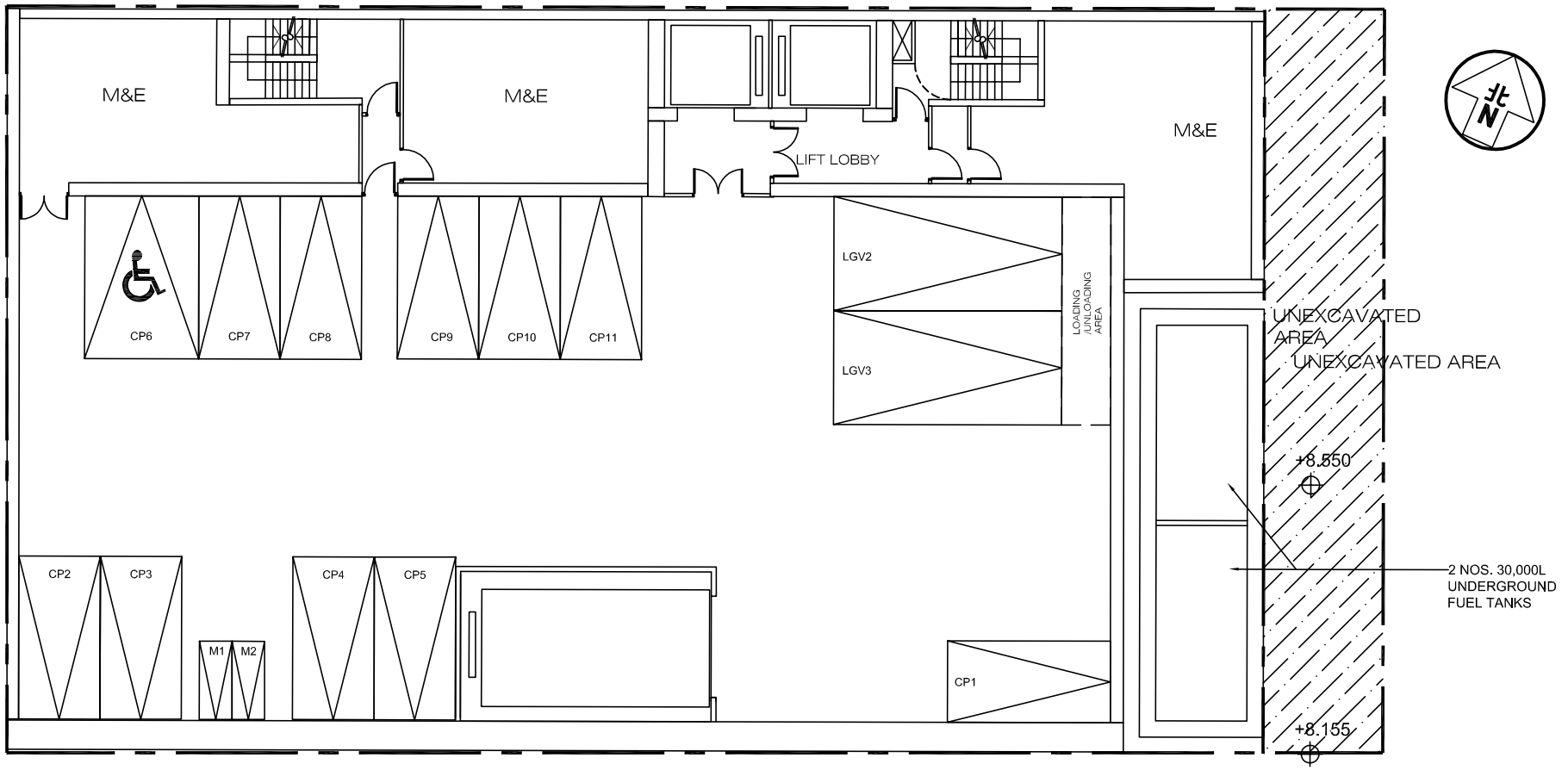
HGV1 — HGV loading / unloading bay @11m(L) X 3.5m(W) X 4.7m(H)

LGV1 — LGV loading / unloading bay @7m(L) X 3.5m(W) X 3.6m(H)

Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 3.1 / Revision B
Figure Title	G/F LAYOUT PLAN	Designed by L C H / Drawn by N C M / Checked by K C	Scale in A4 1 : 200 / Date 26 JUN 2025

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LEGEND :

LGV2 — LGV loading / unloading bay
@7m(L) X 3.5m(W) X 3.6m(H)

CP6 — Accessible car parking space
@5m(L) X 3.5m(W) X 2.4m(H)

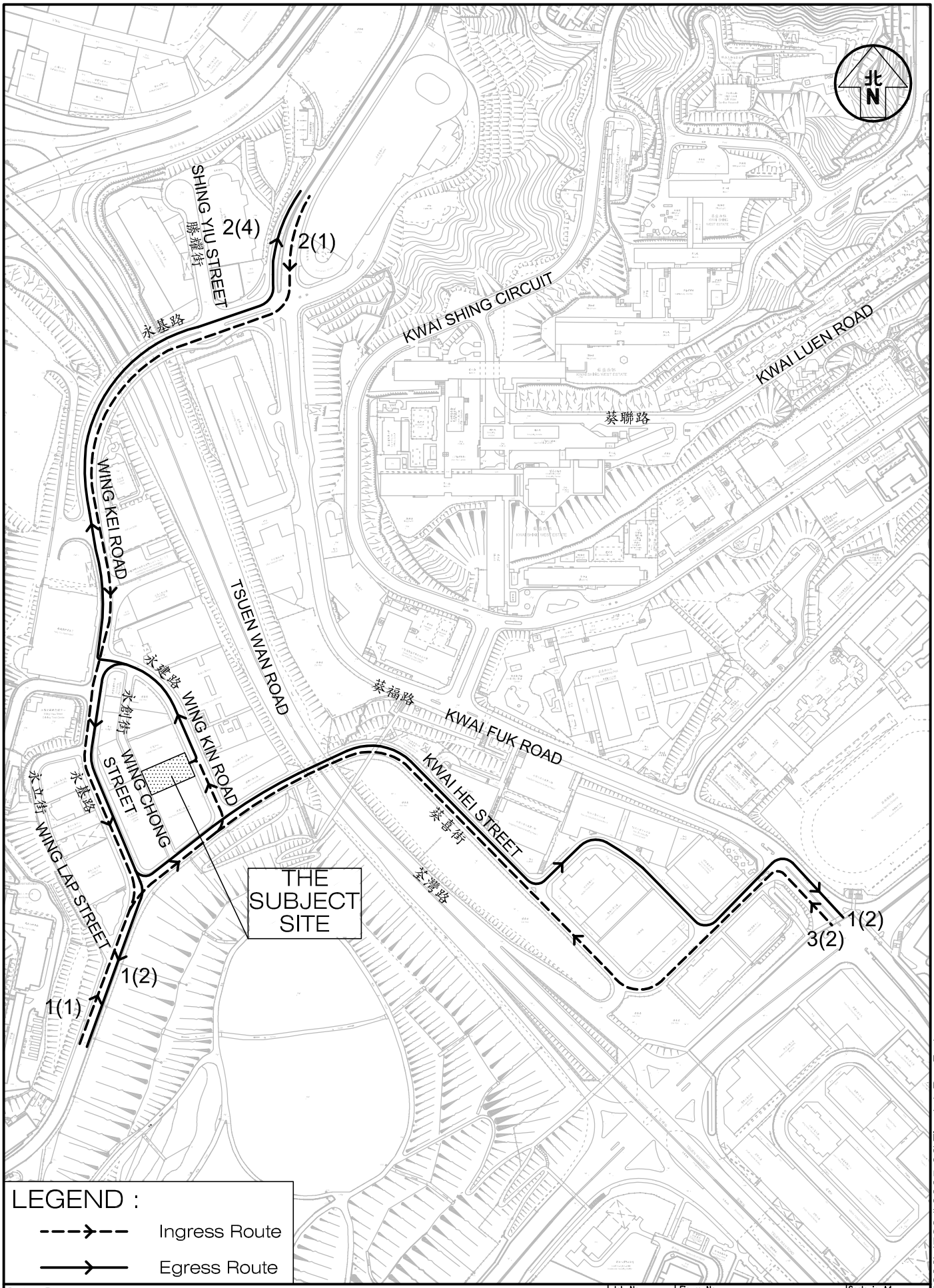
M1 — Motorcycle parking space
@2.4m(L) X 1m(W) X 2.4m(H)

CP1 — Private car parking space
@5m(L) X 2.5m(W) X 2.4m(H)

Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 3.2 / Revision B
Figure Title	B1/F LAYOUT PLAN	Designed by L C H / Drawn by N C M / Checked by K C	Scale in A4 1 : 200 / Date 26 JUN 2025

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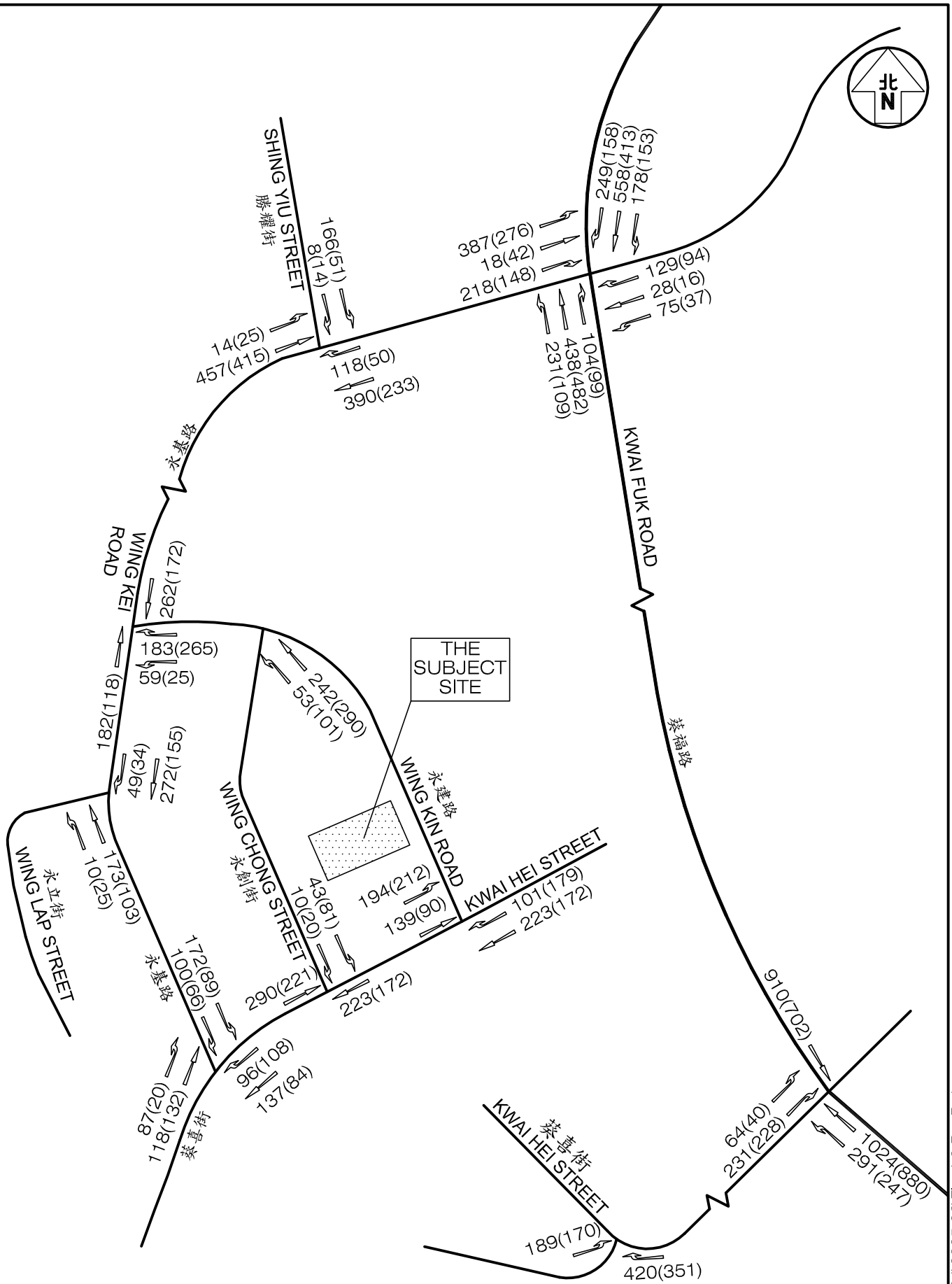
Project Title: PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	Job No. J7384	Figure No. 4.1			Scale in A4 N.T.S.
	Designed by C Y Y	Drawn by N C M	Checked by K C	Revision B	Date 26 JUN 2025

Figure Title

INGRESS / EGRESS ROUTE FOR TRAFFIC GENERATED BY THE PROPOSED DATA CENTRE

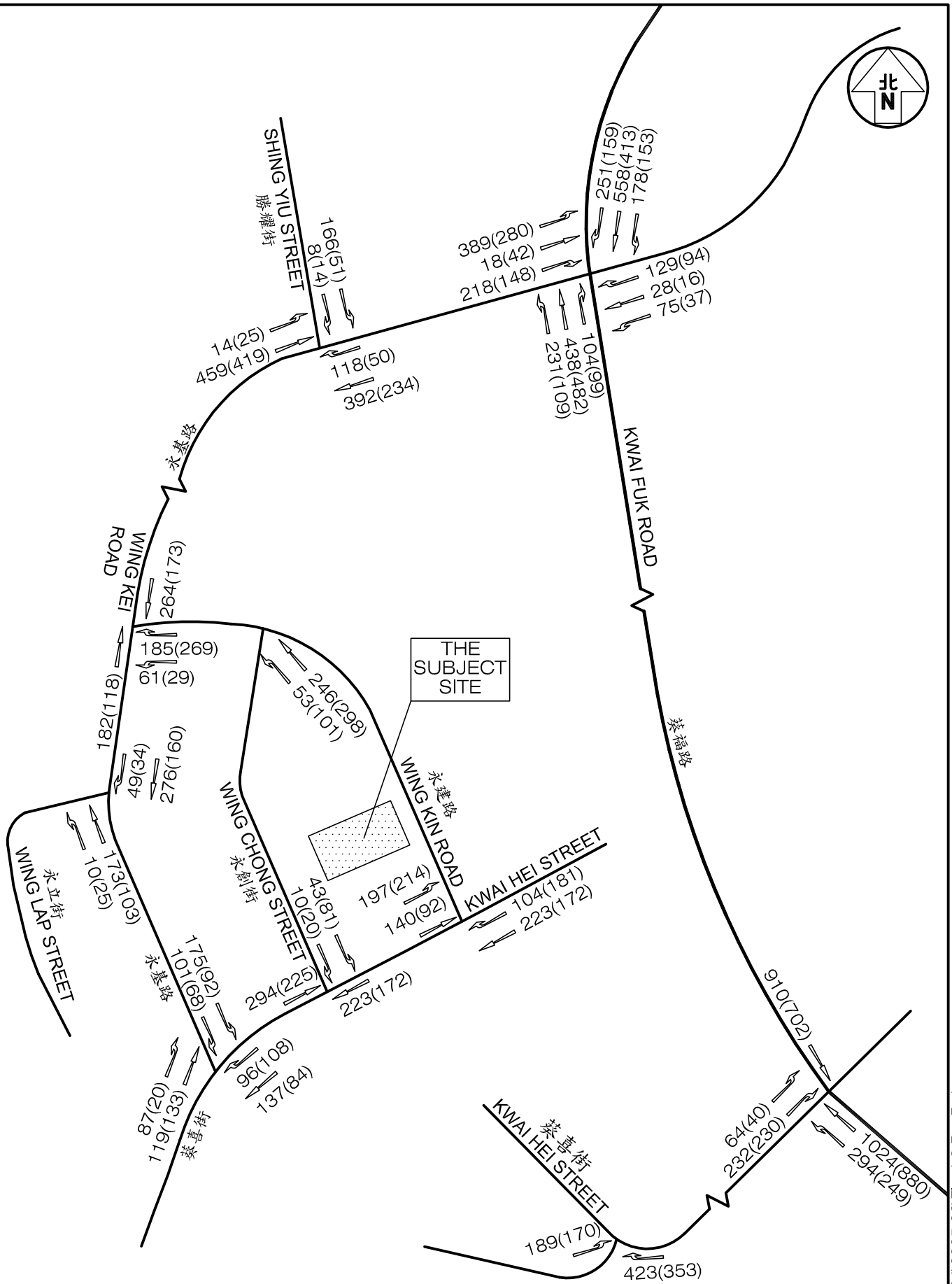
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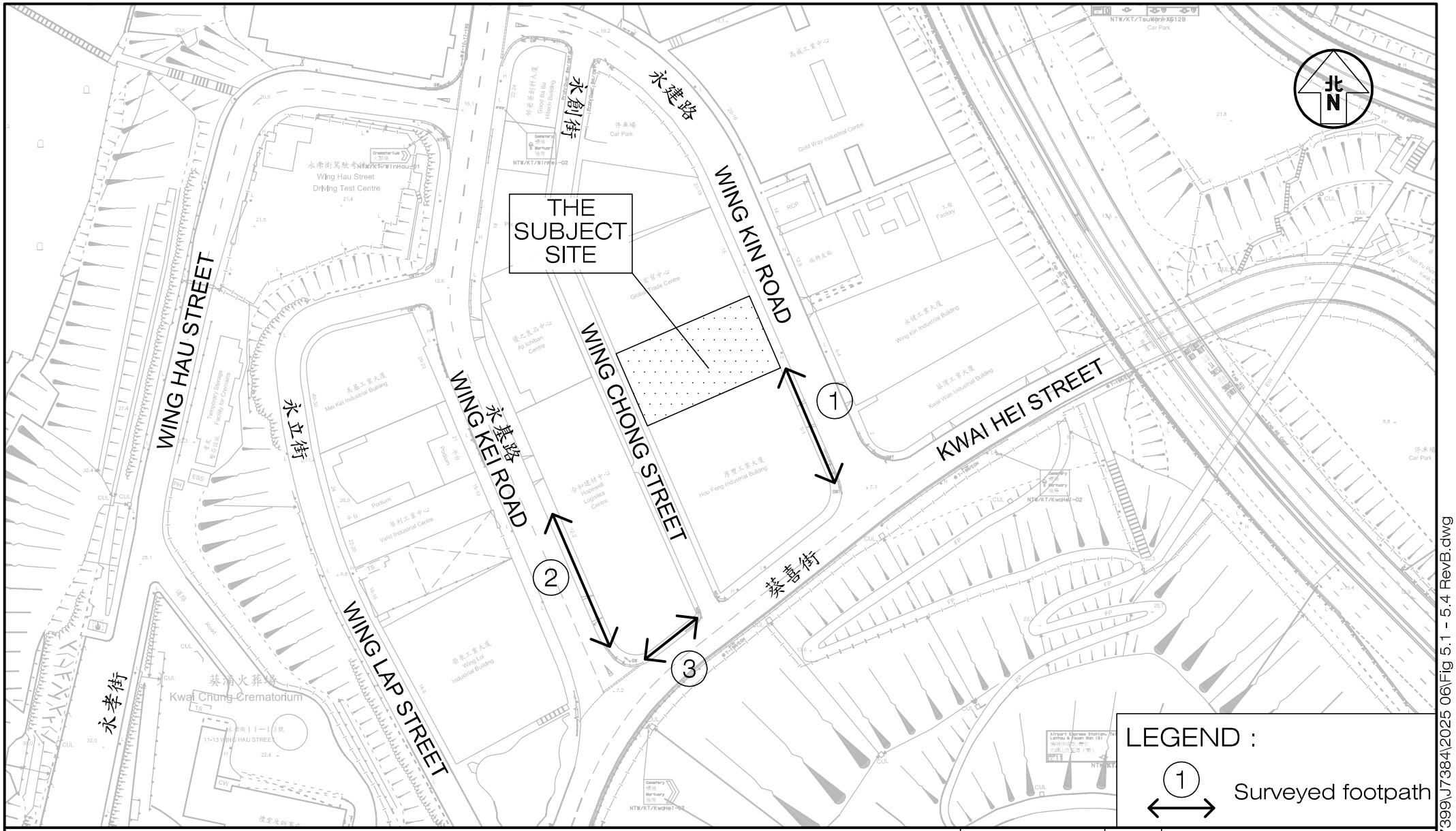
Project Title: PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	Job No. J7384	Figure No. 4.2			Scale in A4 N.T.S.
	Designed by C Y Y	Drawn by N C M	Checked by K C	Revision B	Date 26 JUN 2025
Figure Title: YEAR 2032 PEAK HOUR TRAFFIC FLOWS WITHOUT THE PROPOSED DATA CENTRE	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk				

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	Designed by C Y Y	Drawn by N C M	Checked by K C	Revision B	Date 26 JUN 2025
Figure Title: YEAR 2032 PEAK HOUR TRAFFIC FLOWS WITH THE PROPOSED DATA CENTRE	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk				

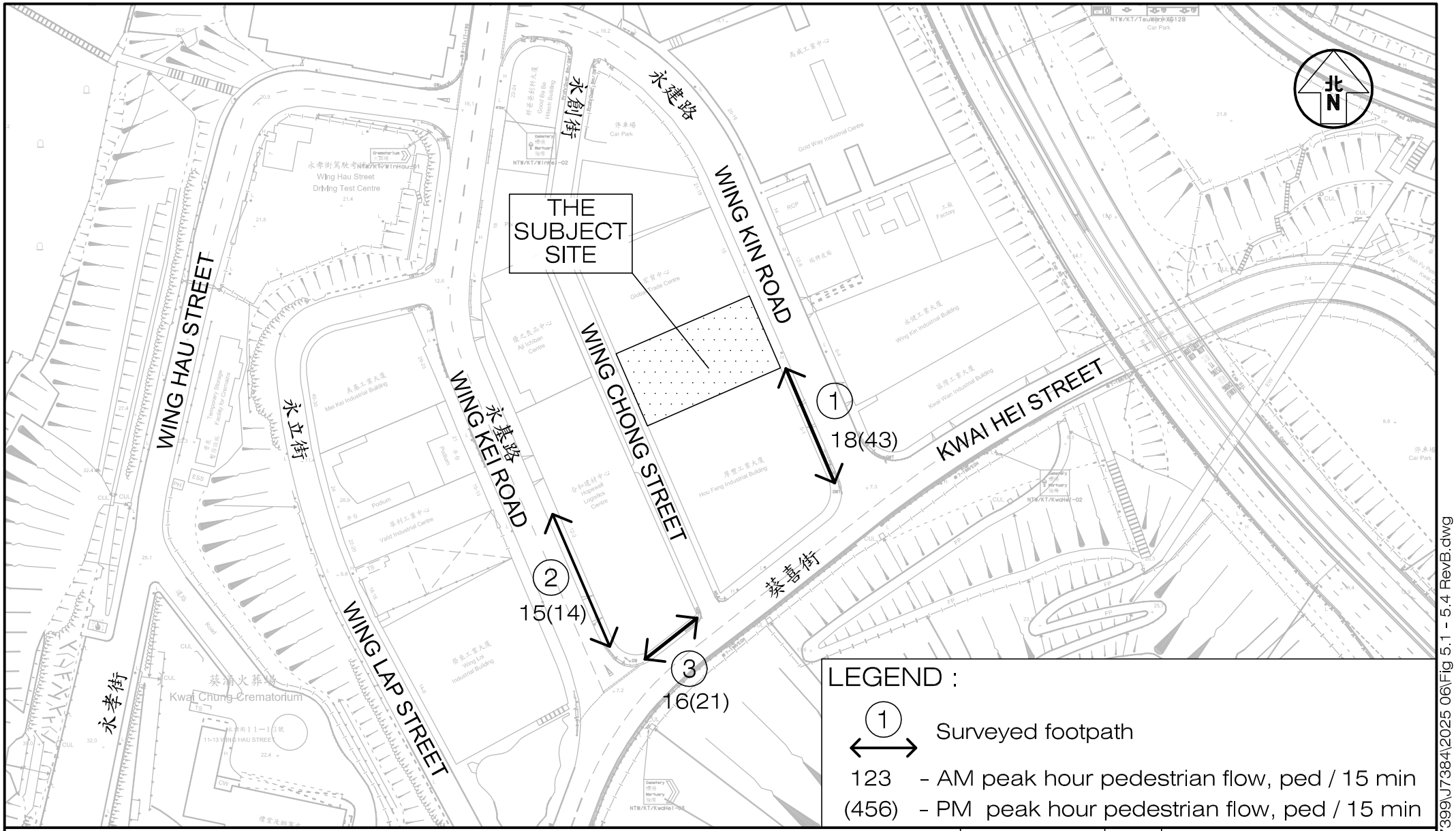
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Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	
Figure Title	LOCATION OF SURVEYED FOOTPATHS	Figure No. 5.1	Revision B
		Designed by C Y Y / Drawn by N C M / Checked by K C	
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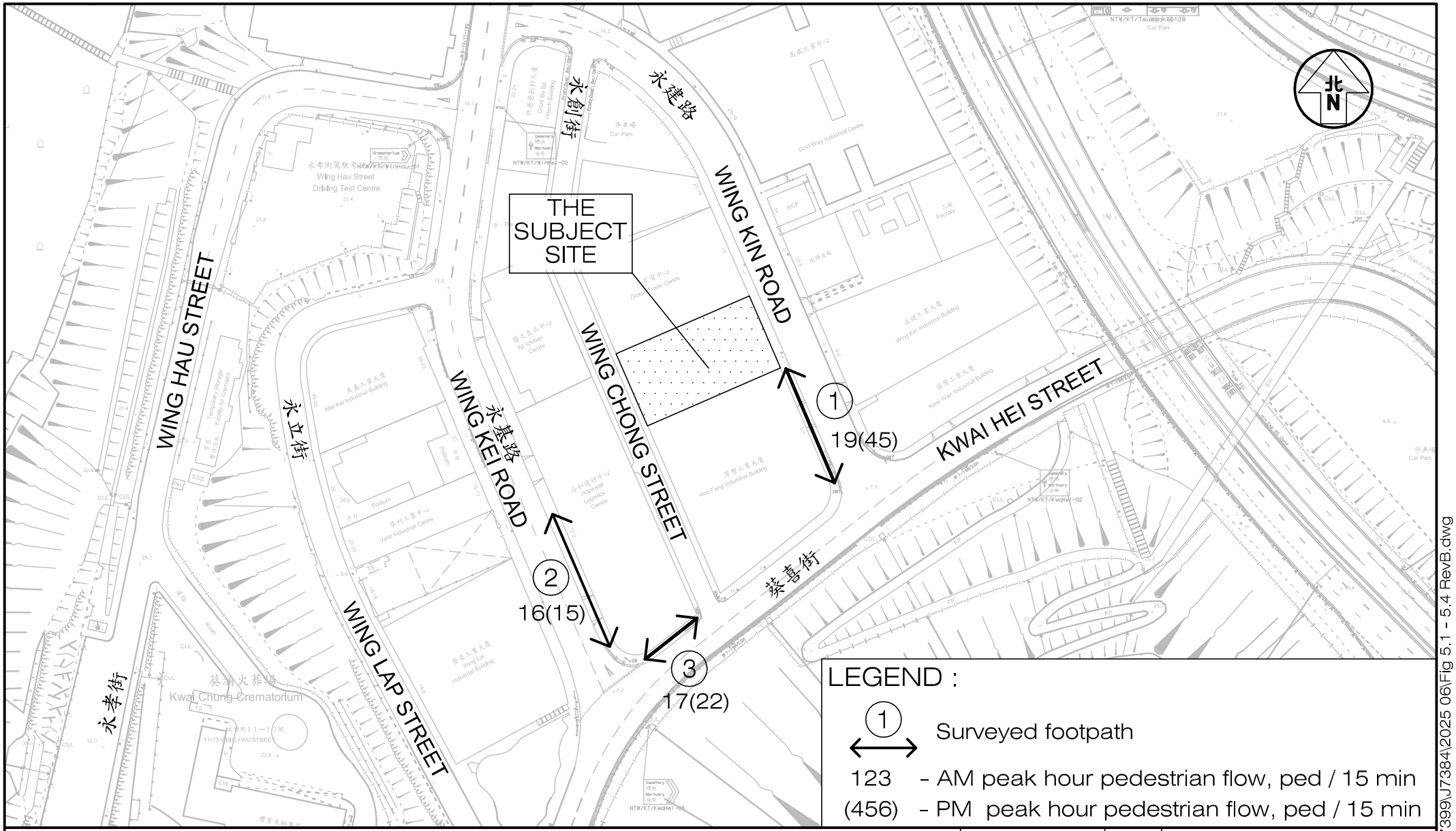
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Figure Title	EXISTING PEAK 15-MINUTE TWO-WAY PEDESTRIAN FLOWS	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 1500 / Date 26 JUN 2025

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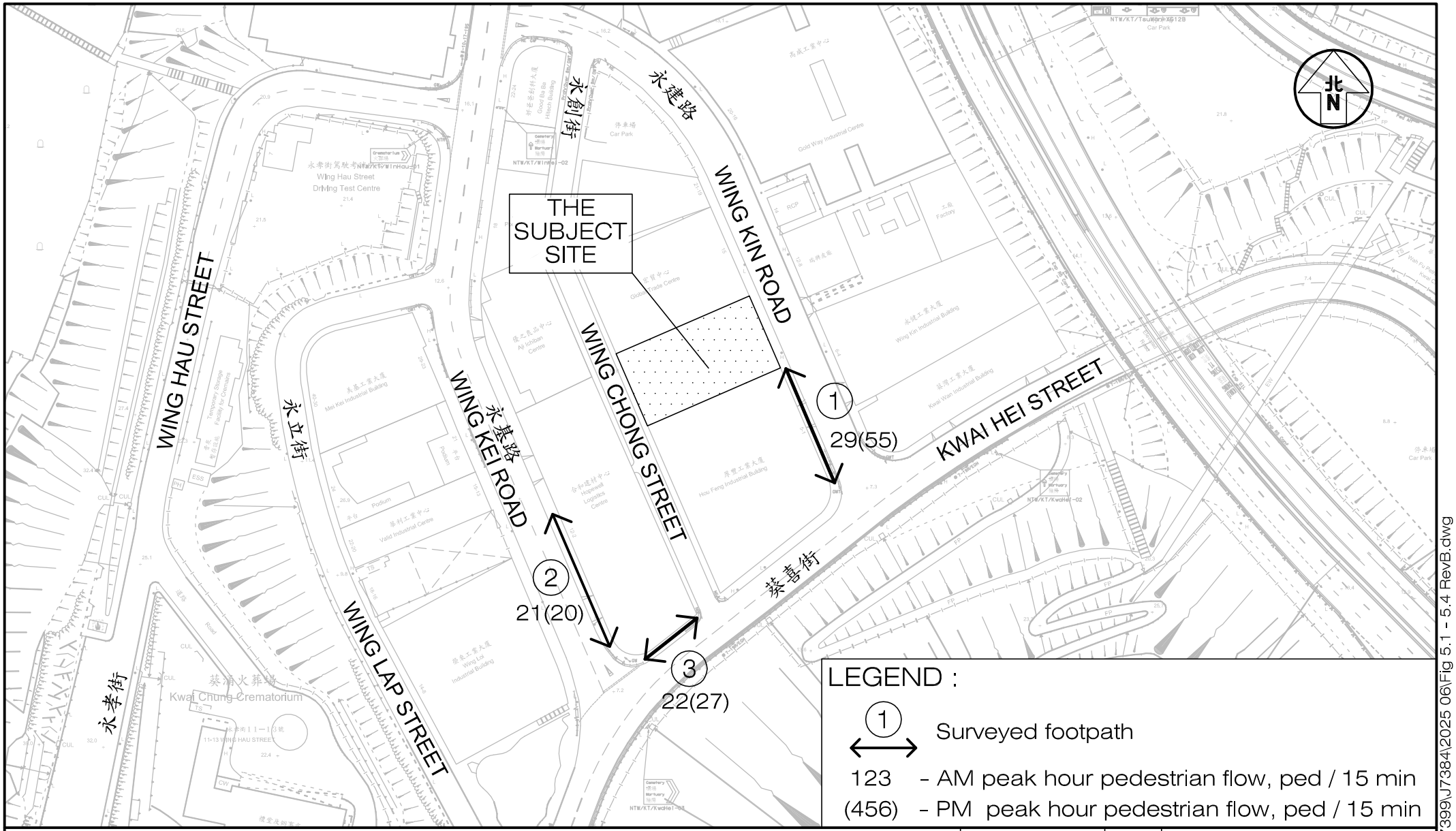
T:\JOB\J7350-J7399\J7384\2025 06\Fig 5.1 - 5.4 RevB.dwg



Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 5.3 / Revision B
Figure Title	YEAR 2032 PEDESTRIAN FLOWS WITHOUT THE PROPOSED DATA CENTRE	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 1500 / Date 26 JUN 2025

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T:\JOB\J7350-J7399\J7384\2025 06\Fig 5.1 - 5.4 RevB.dwg



Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. 5.4 / Revision B
Figure Title	YEAR 2032 PEDESTRIAN FLOWS WITH THE PROPOSED DATA CENTRE	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 1500 / Date 26 JUN 2025

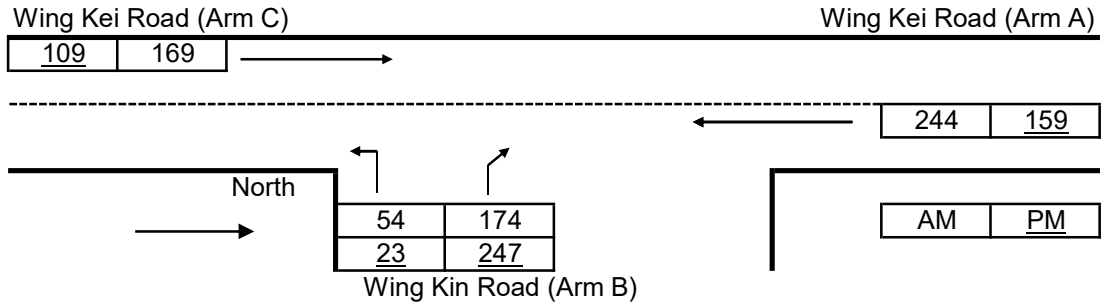
CKM Asia Limited
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Appendix 1 – Calculation

Priority Junction Analysis

Junction:	Wing Kei Road / Wing Kin Road				
Design Year:	2024	Job Number:	J7384	Date:	24 June 2025
Scenario:	Existing Condition				P. 1



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	10.50	V-rBA	25	w-BA	4.70	D	0.9354
	W-CR		V-lBA	35	w-BC	4.70	E	1.0196
			V-rBC	40	w-CB		F	0.5860
			V-rCB				Y	0.6378

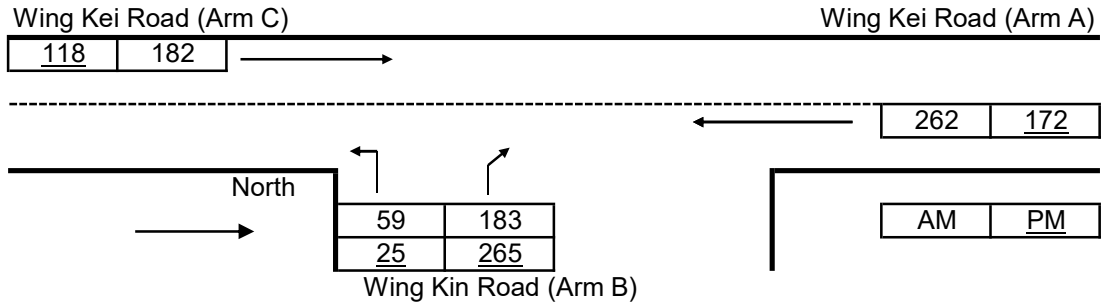
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	169	109	Q-BA	510	537
q-CB	0	0	Q-BC	702	722
q-AB	0	0	Q-CB	403	415
q-AC	244	159	Q-BAC	546	549
q-BA	174	247			
q-BC	54	23			
f	0.237	0.085			

Ratio-of-flow to Capacity	AM	PM
B-A	0.341	0.460
B-C	0.077	0.032
C-B	0.000	0.000

Priority Junction Analysis

Junction:	Wing Kei Road / Wing Kin Road				
Design Year:	2032	Job Number:	J7384	Date:	24 June 2025
Scenario:	Without Proposed Data Centre				P. 2



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	10.50	V-rBA	25	w-BA	4.70	D	0.9354
	W-CR		V-lBA	35	w-BC	4.70	E	1.0196
			V-rBC	40	w-CB		F	0.5860
			V-rCB				Y	0.6378

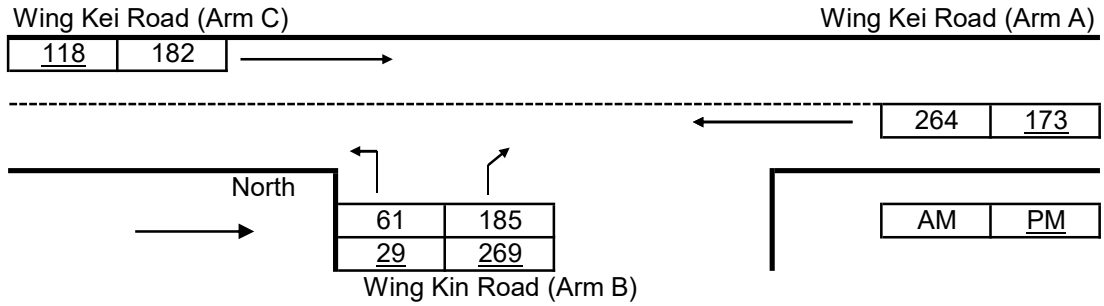
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	182	118	Q-BA	505	533
q-CB	0	0	Q-BC	698	719
q-AB	0	0	Q-CB	401	413
q-AC	262	172	Q-BAC	541	545
q-BA	183	265			
q-BC	59	25			
f	0.244	0.086			

Ratio-of-flow to Capacity	AM	PM
B-A	0.363	0.497
B-C	0.085	0.035
C-B	0.000	0.000

Priority Junction Analysis

Junction:	Wing Kei Road / Wing Kin Road				
Design Year:	2032	Job Number:	J7384	Date:	24 June 2025
Scenario:	With Proposed Data Centre				P. 3



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	10.50	V-rBA	25	w-BA	4.70	D	0.9354
	W-CR		V-lBA	35	w-BC	4.70	E	1.0196
			V-rBC	40	w-CB		F	0.5860
			V-rCB				Y	0.6378

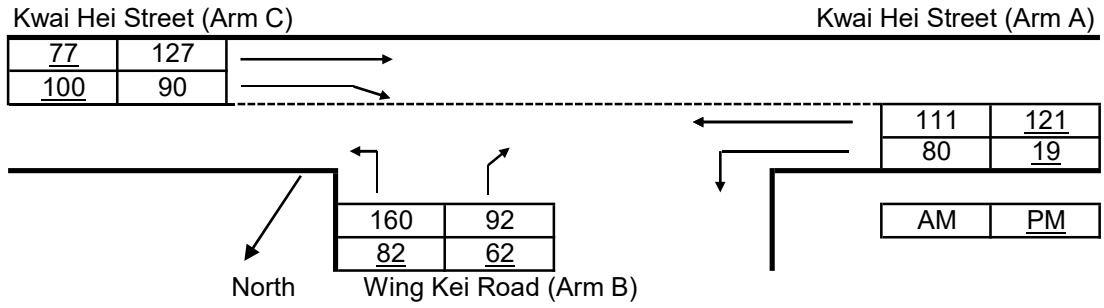
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	182	118	Q-BA	504	533
q-CB	0	0	Q-BC	697	719
q-AB	0	0	Q-CB	401	413
q-AC	264	173	Q-BAC	541	547
q-BA	185	269			
q-BC	61	29			
f	0.248	0.097			

Ratio-of-flow to Capacity	AM	PM
B-A	0.367	0.505
B-C	0.088	0.040
C-B	0.000	0.000

Priority Junction Analysis

Junction:	Kwai Hei Street / Wing Kei Road				
Design Year:	2024	Job Number:	J7384	Date:	24 June 2025
Scenario:	Existing Condition				P. 4



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	10.00	V-rBA	60	w-BA	4.70	D	0.9645
	W-CR		V-lBA	30	w-BC	4.70	E	1.0394
			V-rBC	60	w-CB	4.70	F	1.1185
			V-rCB	140			Y	0.6550

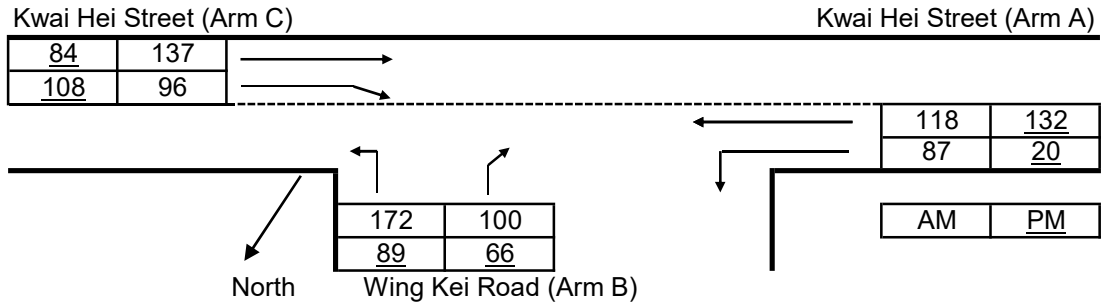
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	127	77	Q-BA	524	531
q-CB	90	100	Q-BC	739	742
q-AB	80	19	Q-CB	782	796
q-AC	111	121	Q-BAC	643	634
q-BA	92	62			
q-BC	160	82			
f	0.635	0.569			

Ratio-of-flow to Capacity	AM	PM	
B-A	0.176	0.117	
B-C	0.217	0.110	
C-B	0.115	0.126	
B-AC	0.392	0.227	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Kwai Hei Street / Wing Kei Road				
Design Year:	2032	Job Number:	J7384	Date:	24 June 2025
Scenario:	Without Proposed Data Centre				P. 5



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	10.00	V-rBA	60	w-BA	4.70	D	0.9645
	W-CR		V-lBA	30	w-BC	4.70	E	1.0394
			V-rBC	60	w-CB	4.70	F	1.1185
			V-rCB	140			Y	0.6550

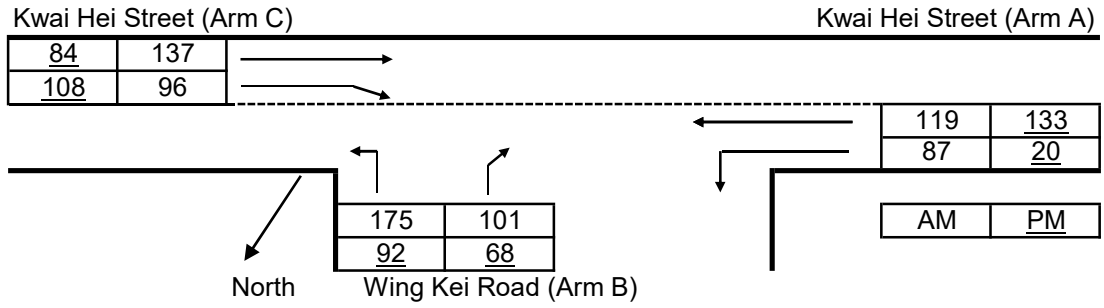
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	137	84	Q-BA	518	525
q-CB	96	108	Q-BC	737	740
q-AB	87	20	Q-CB	779	793
q-AC	118	132	Q-BAC	638	630
q-BA	100	66			
q-BC	172	89			
f	0.632	0.574			

Ratio-of-flow to Capacity	AM	PM	
B-A	0.193	0.126	
B-C	0.234	0.120	
C-B	0.123	0.136	
B-AC	0.426	0.246	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Kwai Hei Street / Wing Kei Road				
Design Year:	2032	Job Number:	J7384	Date:	24 June 2025
Scenario:	With Proposed Data Centre				P. 6



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	10.00	V-rBA	60	w-BA	4.70	D	0.9645
	W-CR		V-lBA	30	w-BC	4.70	E	1.0394
			V-rBC	60	w-CB	4.70	F	1.1185
			V-rCB	140			Y	0.6550

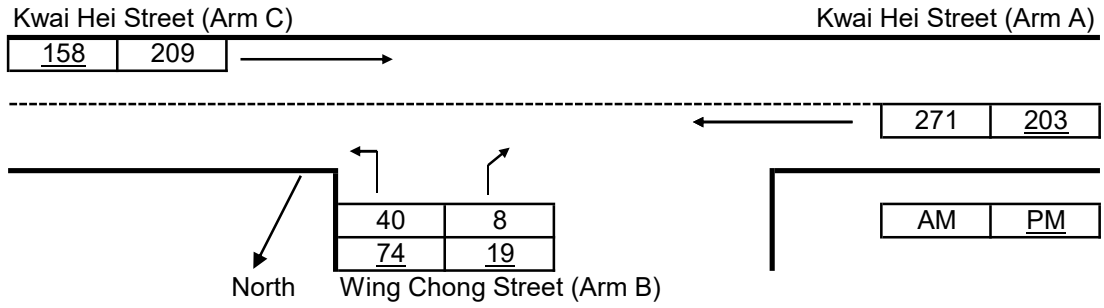
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	137	84	Q-BA	518	525
q-CB	96	108	Q-BC	736	739
q-AB	87	20	Q-CB	778	792
q-AC	119	133	Q-BAC	638	630
q-BA	101	68			
q-BC	175	92			
f	0.634	0.575			

Ratio-of-flow to Capacity	AM	PM	
B-A	0.195	0.130	
B-C	0.238	0.124	
C-B	0.123	0.136	
B-AC	0.433	0.254	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Kwai Hei Street / Wing Chong Street				
Design Year:	2024	Job Number:	J7384	Date:	24 June 2025
Scenario:	Existing Condition				P. 7



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	10.00	V-rBA	20	w-BA	4.70	D	0.9218
	W-CR		V-lBA	20	w-BC	4.70	E	0.9998
			V-rBC	20	w-CB		F	0.5860
			V-rCB				Y	0.6550

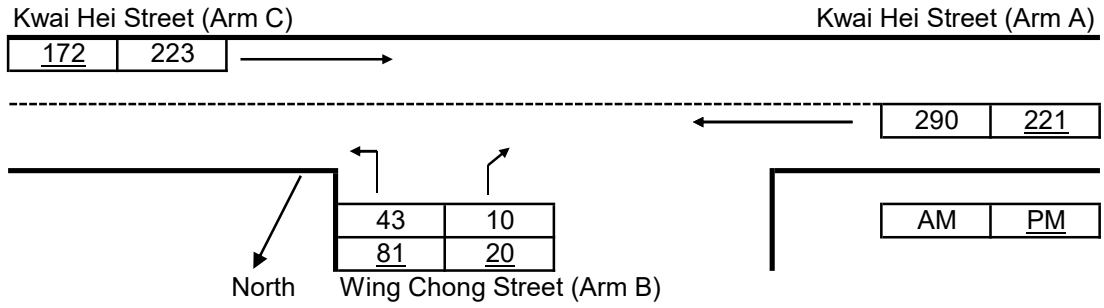
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	209	158	Q-BA	490	512
q-CB	0	0	Q-BC	680	696
q-AB	0	0	Q-CB	399	408
q-AC	271	203	Q-BAC	639	649
q-BA	8	19			
q-BC	40	74			
f	0.833	0.796			

Ratio-of-flow to Capacity	AM	PM	
B-A	0.016	0.037	
B-C	0.059	0.106	
C-B	0.000	0.000	
B-AC	0.075	0.143	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Kwai Hei Street / Wing Chong Street				
Design Year:	2032	Job Number:	J7384	Date:	24 June 2025
Scenario:	Without Proposed Data Centre				P. 8



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	10.00	V-rBA	20	w-BA	4.70	D	0.9218
	W-CR		V-lBA	20	w-BC	4.70	E	0.9998
			V-rBC	20	w-CB		F	0.5860
			V-rCB				Y	0.6550

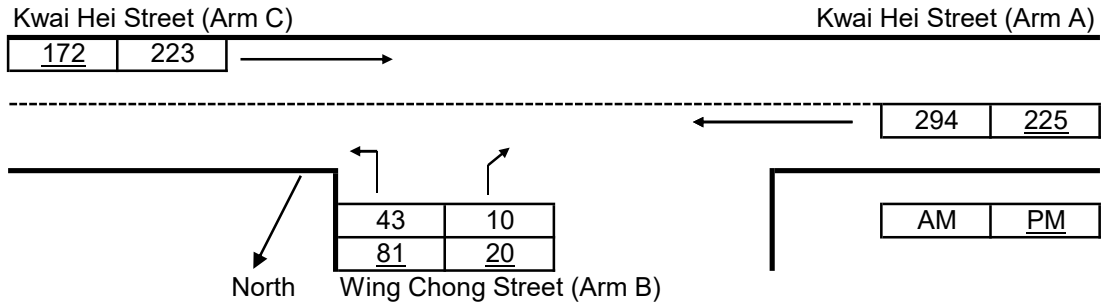
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	223	172	Q-BA	483	506
q-CB	0	0	Q-BC	676	692
q-AB	0	0	Q-CB	396	406
q-AC	290	221	Q-BAC	629	645
q-BA	10	20			
q-BC	43	81			
f	0.811	0.802			

Ratio-of-flow to Capacity	AM	PM	
B-A	0.021	0.040	
B-C	0.064	0.117	
C-B	0.000	0.000	
B-AC	0.084	0.157	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Kwai Hei Street / Wing Chong Street				
Design Year:	2032	Job Number:	J7384	Date:	24 June 2025
Scenario:	With Proposed Data Centre				P. 9



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	10.00	V-rBA	20	w-BA	4.70	D	0.9218
	W-CR		V-lBA	20	w-BC	4.70	E	0.9998
			V-rBC	20	w-CB		F	0.5860
			V-rCB				Y	0.6550

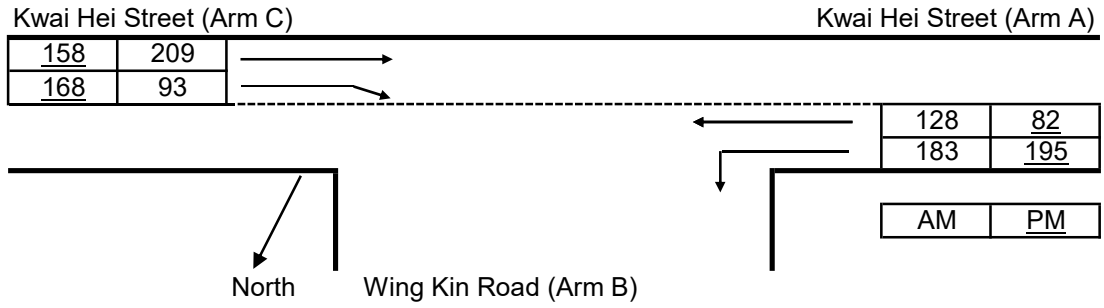
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	223	172	Q-BA	483	505
q-CB	0	0	Q-BC	675	691
q-AB	0	0	Q-CB	395	405
q-AC	294	225	Q-BAC	628	644
q-BA	10	20			
q-BC	43	81			
f	0.811	0.802			

Ratio-of-flow to Capacity	AM	PM	
B-A	0.021	0.040	
B-C	0.064	0.117	
C-B	0.000	0.000	
B-AC	0.084	0.157	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Kwai Hei Street / Wing Kin Road				
Design Year:	2024	Job Number:	J7384	Date:	24 June 2025
Scenario:	Existing Condition				P. 10



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	10.40	V-rBA		w-BA		D	0.5332
	W-CR		V-lBA		w-BC		E	0.5860
			V-rBC		w-CB	4.70	F	1.0888
			V-rCB	110			Y	0.6412

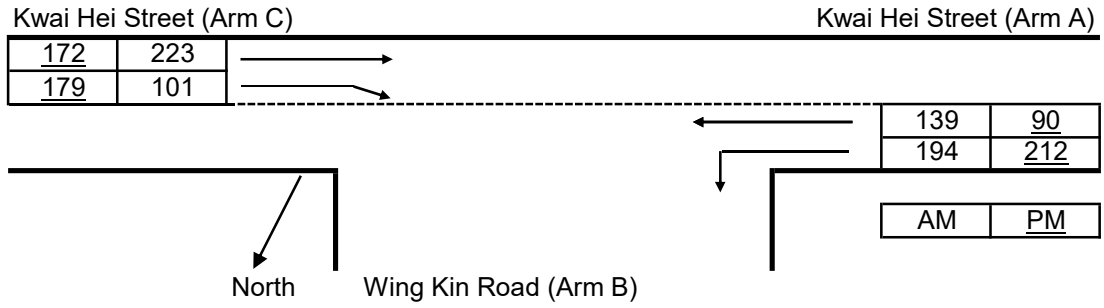
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	209	158	Q-BA	276	272
q-CB	93	168	Q-BC	409	415
q-AB	183	195	Q-CB	732	741
q-AC	128	82	Q-BAC	276	272
q-BA	0	0			
q-BC	0	0			
f	0.000	0.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.000	0.000
C-B	0.127	0.227

Priority Junction Analysis

Junction:	Kwai Hei Street / Wing Kin Road				
Design Year:	2032	Job Number:	J7384	Date:	24 June 2025
Scenario:	Without Proposed Data Centre				P. 11



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	10.40	V-rBA		w-BA		D	0.5332
	W-CR		V-lBA		w-BC		E	0.5860
			V-rBC		w-CB	4.70	F	1.0888
			V-rCB	110			Y	0.6412

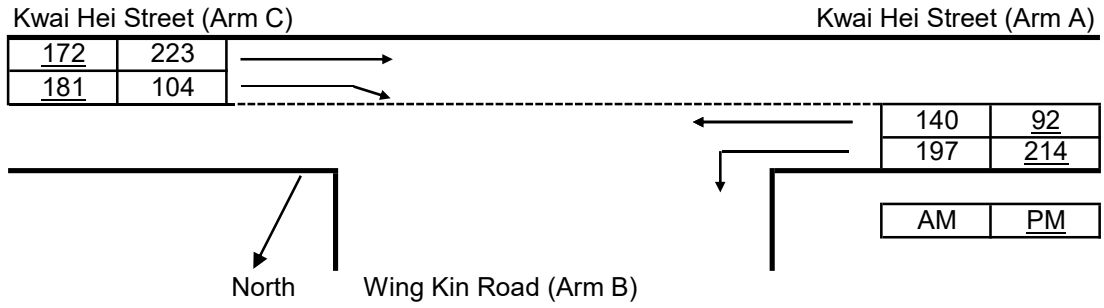
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	223	172	Q-BA	272	267
q-CB	101	179	Q-BC	407	413
q-AB	194	212	Q-CB	727	734
q-AC	139	90	Q-BAC	272	267
q-BA	0	0			
q-BC	0	0			
f	0.000	0.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.000	0.000
C-B	0.139	0.244

Priority Junction Analysis

Junction:	Kwai Hei Street / Wing Kin Road				
Design Year:	2032	Job Number:	J7384	Date:	24 June 2025
Scenario:	With Proposed Data Centre				P. 12



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	10.40	V-rBA		w-BA		D	0.5332
	W-CR		V-lBA		w-BC		E	0.5860
			V-rBC		w-CB	4.70	F	1.0888
			V-rCB	110			Y	0.6412

Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	223	172	Q-BA	271	267
q-CB	104	181	Q-BC	407	412
q-AB	197	214	Q-CB	726	733
q-AC	140	92	Q-BAC	271	267
q-BA	0	0			
q-BC	0	0			
f	0.000	0.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.000	0.000
C-B	0.143	0.247

Signal Junction Analysis

Junction: Wing Kei Road / Kwai Fuk Road Job Number: J7384

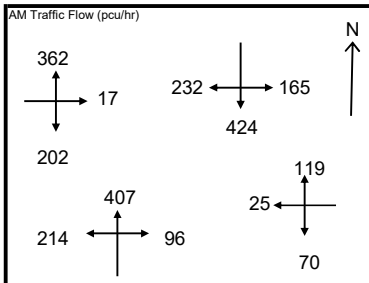
Scenario: Existing Condition Page 13

Design Year: 2024 Designed By: Checked By: Date: 24 June 2025

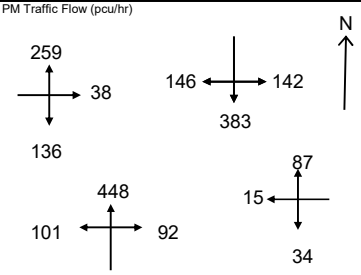
Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak y value	PM Peak Critical y
Kwai Fuk Road SB	LT+SA	A1	1	3.10	16.0		85	1783	195	0.109		90	1775	158	0.089	0.089
	SA	A2	1	3.10				2065	226	0.109			2065	184	0.089	
	SA+RT	A3	1	3.10	17.0		24	2022	221	0.109		1	2063	184	0.089	
	RT	A4*	1	3.10	20.0		100	1633	179	0.110	0.110	100	1633	145	0.089	
Wing Kei Road EB	LT	B1	2	3.20	20.0		100	1800	183	0.102		100	1800	141	0.078	
	LT+SA+RT	B2	2	3.20	26.0		92	1970	200	0.102	0.102	76	1988	156	0.078	0.078
	RT	B3	2	3.20	23.0		100	1948	198	0.102		100	1948	136	0.070	
Kwai Fuk Road NB	LT	C1	3	3.90	20.0		100	1865	214	0.115		100	1865	101	0.054	
	SA	C2	3	3.20				2075	255	0.123	0.123		2075	273	0.132	0.132
	SA+RT	C3	3	3.20	24.0		39	2026	248	0.122		34	2032	267	0.131	
Wing Kei Road WB	LT+SA	D1	4	3.60	15.0		67	1851	105	0.057		69	1848	49	0.027	
	SA+RT	D2	4	3.60	16.0		100	1934	119	0.062	0.062	100	1934	87	0.045	0.045

pedestrian phase	P1	2,3,4		min crossing time =	5	sec GM +	12	sec FGM =	17	sec
	P2	1,2,4		min crossing time =	5	sec GM +	8	sec FGM =	13	sec
	P3	1,3,4		min crossing time =	5	sec GM +	9	sec FGM =	14	sec
	P4	1		min crossing time =	5	sec GM +	8	sec FGM =	13	sec
	P5	3		min crossing time =	5	sec GM +	8	sec FGM =	13	sec
	P6	2,3		min crossing time =	5	sec GM +	8	sec FGM =	13	sec

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)



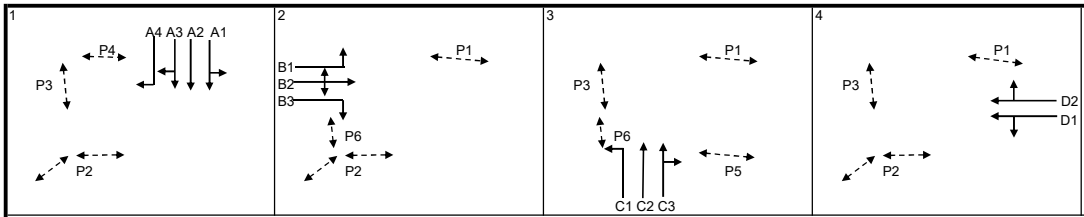
S = 1940+100(W-3.25) S = 2080+100(W-3.25)

S_M = S / (1 + 1.5 f/r) S_M = (S - 230) / (1 + 1.5 f/r)

	AM Peak 1+2+3+4		PM Peak 1+2+3+4	
Sum y	0.396		0.344	
L (s)	19		19	
C (s)	100		100	
practical y	0.729		0.729	
R.C. (%)	84%		112%	

Note:

* According to section 2.4.10.4 in chapter 2.4 in volume 4 of TPDM, site factor of 85% is applied on the saturation flow of A4 due to the short lane effect



AM	G =	I/G = 6	G =	I/G = 6	G =	I/G = 5	G =	I/G = 6	G =	
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	
PM	G =	I/G = 6	G =	I/G = 6	G =	I/G = 5	G =	I/G = 6	G =	
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	

Signal Junction Analysis

Junction: Wing Kei Road / Kwai Fuk Road — Job Number: J7384

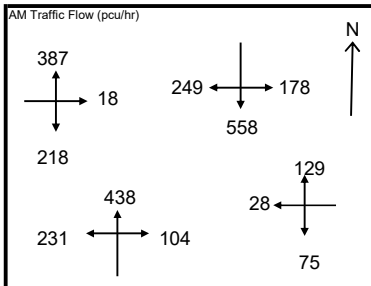
Scenario: Without Proposed Data Centre — Page 14

Design Year: 2032 — Designed By: — Checked By: — Date: 24 June 2025

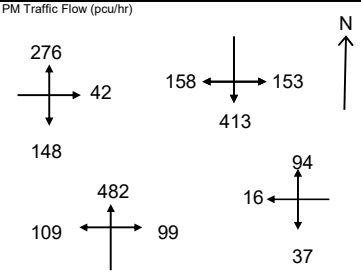
Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak y value	PM Peak Critical y
Kwai Fuk Road SB	LT+SA	A1	1	3.10	16.0		76	1797	235	0.131		90	1775	170	0.096	
	SA	A2	1	3.10				2065	270	0.131	0.131		2065	198	0.096	
	SA+RT	A3	1	3.10	17.0		13	2042	267	0.131		0	2065	198	0.096	
	RT	A4*	1	3.10	20.0		100	1633	213	0.130		100	1633	158	0.097	0.097
Wing Kei Road EB	LT	B1	2	3.20	20.0		100	1800	196	0.109		100	1800	151	0.084	
	LT+SA+RT	B2	2	3.20	26.0		92	1970	215	0.109		75	1989	167	0.084	0.084
	RT	B3	2	3.20	23.0		100	1948	212	0.109	0.109	100	1948	148	0.076	
Kwai Fuk Road NB	LT	C1	3	3.90	20.0		100	1865	231	0.124		100	1865	109	0.058	
	SA	C2	3	3.20				2075	274	0.132	0.132		2075	294	0.142	0.142
	SA+RT	C3	3	3.20	24.0		39	2026	268	0.132		34	2032	287	0.141	
Wing Kei Road WB	LT+SA	D1	4	3.60	15.0		73	1841	103	0.056		70	1846	53	0.029	
	SA+RT	D2	4	3.60	16.0		100	1934	129	0.067	0.067	100	1934	94	0.049	0.049

pedestrian phase	P1	2,3,4		min crossing time =	5	sec GM +	12	sec FGM =	17	sec
	P2	1,2,4		min crossing time =	5	sec GM +	8	sec FGM =	13	sec
	P3	1,3,4		min crossing time =	5	sec GM +	9	sec FGM =	14	sec
	P4	1		min crossing time =	5	sec GM +	8	sec FGM =	13	sec
	P5	3		min crossing time =	5	sec GM +	8	sec FGM =	13	sec
	P6	2,3		min crossing time =	5	sec GM +	8	sec FGM =	13	sec

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)



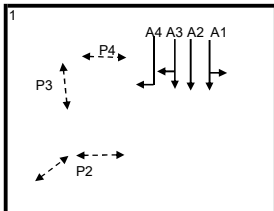
S = 1940+100(W-3.25) S = 2080+100(W-3.25)

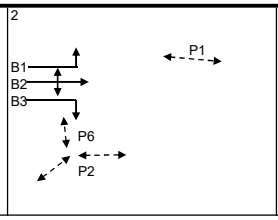
S_M = S / (1 + 1.5 f/r) S_M = (S - 230) / (1 + 1.5 f/r)

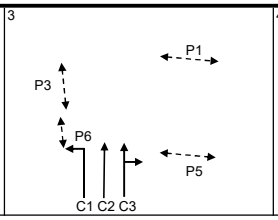
	AM Peak 1+2+3+4		PM Peak 1+2+3+4	
Sum y	0.439		0.371	
L (s)	19		19	
C (s)	100		100	
practical y	0.729		0.729	
R.C. (%)	66%		96%	

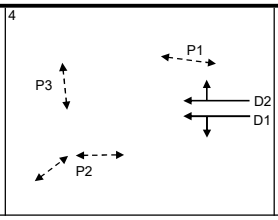
Note:

* According to section 2.4.10.4 in chapter 2.4 in volume 4 of TPDM, site factor of 85% is applied on the saturation flow of A4 due to the short lane effect









AM	G =	I/G = 6	G =	I/G = 6	G =	I/G = 5	G =	I/G = 6	G =	
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	
PM	G =	I/G = 6	G =	I/G = 6	G =	I/G = 5	G =	I/G = 6	G =	
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	

Signal Junction Analysis

Junction: Wing Kei Road / Kwai Fuk Road — Job Number: J7384

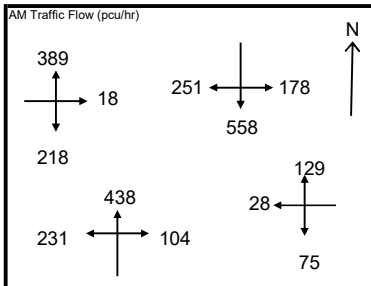
Scenario: With Proposed Data Centre — Page 15

Design Year: 2032 — Designed By: — Checked By: — Date: 24 June 2025

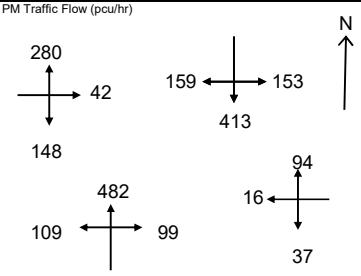
Approach		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak y value	PM Peak Critical y
Kwai Fuk Road SB	LT+SA	A1	1	3.10	16.0		76	1797	235	0.131		89	1777	171	0.096	
	SA	A2	1	3.10				2065	270	0.131			2065	199	0.096	
	SA+RT	A3	1	3.10	17.0		13	2042	267	0.131		1	2063	198	0.096	
	RT	A4*	1	3.10	20.0		100	1633	215	0.132	0.132	100	1633	157	0.096	0.096
Wing Kei Road EB	LT	B1	2	3.20	20.0		100	1800	197	0.109		100	1800	153	0.085	
	LT+SA+RT	B2	2	3.20	26.0		92	1970	215	0.109		75	1989	169	0.085	0.085
	RT	B3	2	3.20	23.0		100	1948	213	0.109	0.109	100	1948	148	0.076	
Kwai Fuk Road NB	LT	C1	3	3.90	20.0		100	1865	231	0.124		100	1865	109	0.058	
	SA	C2	3	3.20				2075	274	0.132	0.132		2075	294	0.142	0.142
	SA+RT	C3	3	3.20	24.0		39	2026	268	0.132		34	2032	287	0.141	
Wing Kei Road WB	LT+SA	D1	4	3.60	15.0		73	1841	103	0.056		70	1846	53	0.029	
	SA+RT	D2	4	3.60	16.0		100	1934	129	0.067	0.067	100	1934	94	0.049	0.049

pedestrian phase	P1	2,3,4		min crossing time =	5	sec GM +	12	sec FGM =	17	sec
	P2	1,2,4		min crossing time =	5	sec GM +	8	sec FGM =	13	sec
	P3	1,3,4		min crossing time =	5	sec GM +	9	sec FGM =	14	sec
	P4	1		min crossing time =	5	sec GM +	8	sec FGM =	13	sec
	P5	3		min crossing time =	5	sec GM +	8	sec FGM =	13	sec
	P6	2,3		min crossing time =	5	sec GM +	8	sec FGM =	13	sec

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)



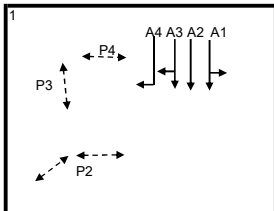
$S = 1940+100(W-3.25)$ $S = 2080+100(W-3.25)$

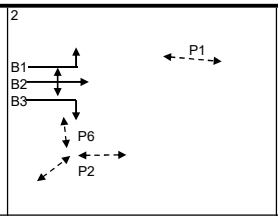
$S_M = S / (1 + 1.5\ f/r)$ $S_M = (S - 230) / (1 + 1.5\ f/r)$

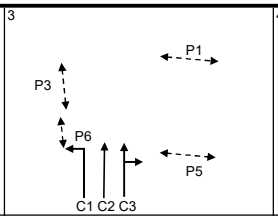
	AM Peak 1+2+3+4		PM Peak 1+2+3+4	
Sum y	0.440		0.372	
L (s)	19		19	
C (s)	100		100	
practical y	0.729		0.729	
R.C. (%)	66%		96%	

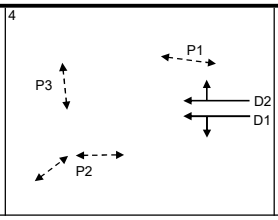
Note:

* According to section 2.4.10.4 in chapter 2.4 in volume 4 of TPDM, site factor of 85% is applied on the saturation flow of A4 due to the short lane effect





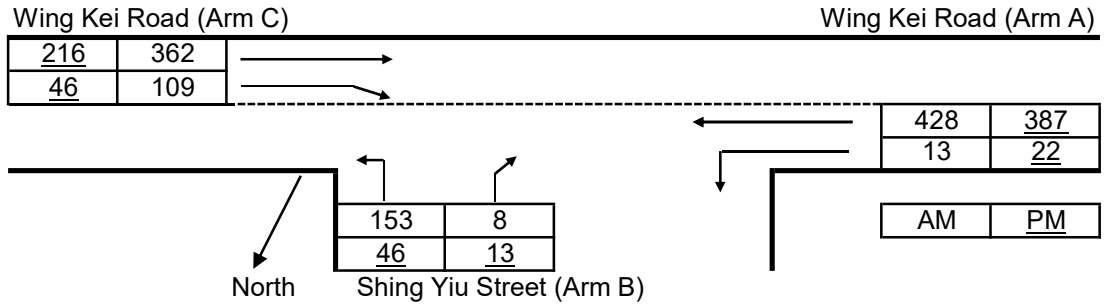




AM	G =	I/G = 6	G =	I/G = 6	G =	I/G = 5	G =	I/G = 6	G =	
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	
PM	G =	I/G = 6	G =	I/G = 6	G =	I/G = 5	G =	I/G = 6	G =	
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =	

Priority Junction Analysis

Junction:	Shing Yiu Street / Wing Kei Road				
Design Year:	2024	Job Number:	J7384	Date:	24 June 2025
Scenario:	Existing Condition				P. 16



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	17.20	V-rBA	35	w-BA	2.90	D	0.8043
	W-CR	1.60	V-lBA	45	w-BC	2.90	E	0.8584
			V-rBC	35	w-CB	4.00	F	1.0143
			V-rCB	100			Y	0.4066

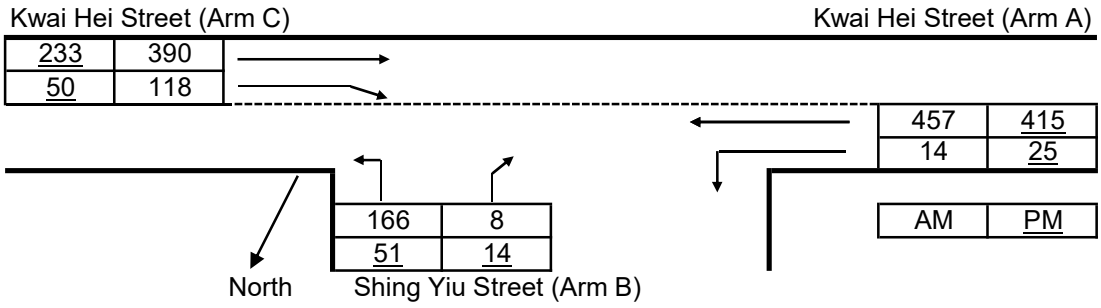
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	362	216	Q-BA	425	451
q-CB	109	46	Q-BC	584	589
q-AB	13	22	Q-CB	689	694
q-AC	428	387	Q-BAC	574	552
q-BA	8	13			
q-BC	153	46			
f	0.950	0.780			

Ratio-of-flow to Capacity	AM	PM	
B-A	0.019	0.029	
B-C	0.262	0.078	
C-B	0.158	0.066	
B-AC	0.281	0.107	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Shing Yiu Street / Wing Kei Road				
Design Year:	2032	Job Number:	J7384	Date:	24 June 2025
Scenario:	Without Proposed Data Centre				P. 17



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	17.20	V-rBA	35	w-BA	2.90	D	0.8043
	W-CR	1.60	V-lBA	45	w-BC	2.90	E	0.8584
			V-rBC	35	w-CB	4.00	F	1.0143
			V-rCB	100			Y	0.4066

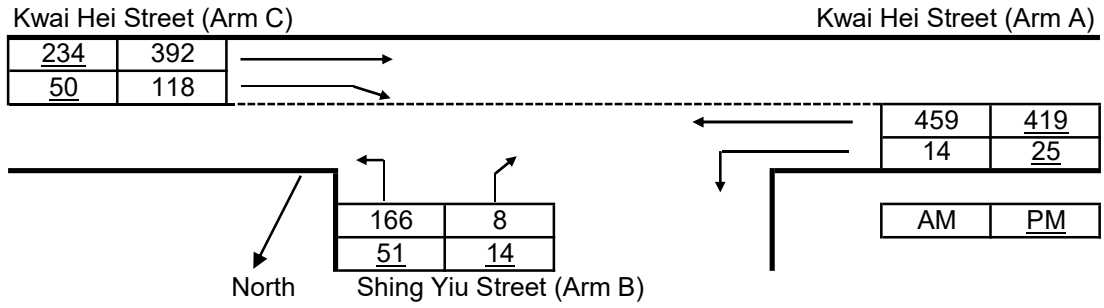
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	390	233	Q-BA	418	446
q-CB	118	50	Q-BC	581	586
q-AB	14	25	Q-CB	685	690
q-AC	457	415	Q-BAC	571	548
q-BA	8	14			
q-BC	166	51			
f	0.954	0.785			

Ratio-of-flow to Capacity	AM	PM	
B-A	0.019	0.031	
B-C	0.286	0.087	
C-B	0.172	0.073	
B-AC	0.305	0.119	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Shing Yiu Street / Wing Kei Road				
Design Year:	2032	Job Number:	J7384	Date:	24 June 2025
Scenario:	With Proposed Data Centre				P. 18



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	17.20	V-rBA	35	w-BA	2.90	D	0.8043
	W-CR	1.60	V-lBA	45	w-BC	2.90	E	0.8584
			V-rBC	35	w-CB	4.00	F	1.0143
			V-rCB	100			Y	0.4066

Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	392	234	Q-BA	418	445
q-CB	118	50	Q-BC	580	585
q-AB	14	25	Q-CB	685	689
q-AC	459	419	Q-BAC	570	548
q-BA	8	14			
q-BC	166	51			
f	0.954	0.785			

Ratio-of-flow to Capacity	AM	PM	
B-A	0.019	0.031	
B-C	0.286	0.087	
C-B	0.172	0.073	
B-AC	0.305	0.119	(for shared lane BA, BC)

Signal Junction Analysis

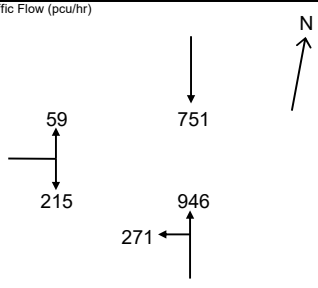
Junction: Kwai Fuk Road / Kwai Hei Street — Job Number: J7384

Scenario: Existing Condition — Page 19

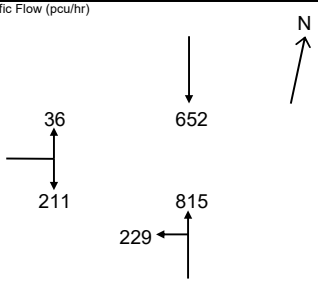
Design Year: 2024 — Designed By: — Checked By: — Date: 24 June 2025

Approach Opposed Turni Nearside		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak y value	PM Peak Critical y
Kwai Fuk Road SB	SA	A1	2,3	3.30				1945	362	0.186			1945	315	0.162	
	SA	A2	2,3	3.30				2085	389	0.187			2085	337	0.162	
Kwai Hei Street EB	LT+RT	B1	1	3.20	15.0		100	1759	274	0.156	0.156	100	1759	247	0.140	0.140
Kwai Fuk Road NB	LT	C1	1,2	3.50	18.0		100	1943	271	0.139		100	1943	229	0.118	
	SA	C2	2	3.50				2105	473	0.225	0.225		2105	408	0.194	0.194
	SA	C3	2	3.50				2105	473	0.225			2105	407	0.193	
pedestrian phase		P1	3		min crossing time =		5	sec GM +		7	sec FGM =		12	sec		
		P2	2,3		min crossing time =		5	sec GM +		4	sec FGM =		9	sec		
		P3	3		min crossing time =		5	sec GM +		10	sec FGM =		15	sec		
		P4	1		min crossing time =		5	sec GM +		7	sec FGM =		12	sec		

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)

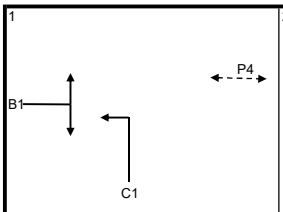


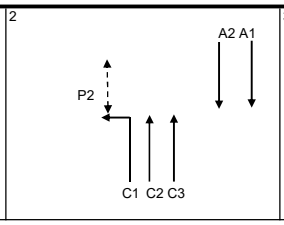
$S = 1940 + 100\ (W-3.25)$ $S = 2080 + 100\ (W-3.25)$

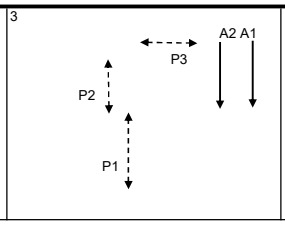
$S_M = S / (1 + 1.5\ f/r)$ $S_M = (S - 230) / (1 + 1.5\ f/r)$

	AM Peak 1+2	AM Peak 1+2,3	PM Peak 1+2	PM Peak 1+2,3
Sum y	0.380	0.342	0.334	0.302
L (s)	34	11	32	11
C (s)	120	120	120	120
practical y	0.645	0.818	0.660	0.818
R.C. (%)	70%	139%	97%	170%

Note:







AM	G =	I/G = 7	G =	I/G = 3	G = 24	I/G = 2	G =	I/G =	G =	
	G =	I/G = 7	G =	I/G =	G =	I/G = 6	G =	I/G =	G =	
PM	G =	I/G = 7	G =	I/G = 3	G = 22	I/G = 2	G =	I/G =	G =	
	G =	I/G = 7	G =	I/G =	G =	I/G = 6	G =	I/G =	G =	

Signal Junction Analysis

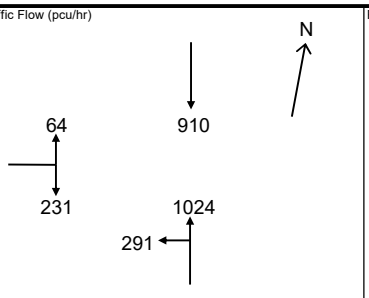
Junction: Kwai Fuk Road / Kwai Hei Street — Job Number: J7384

Scenario: Without Proposed Data Centre — Page 20

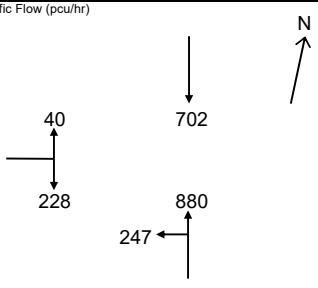
Design Year: 2032 — Designed By: — Checked By: — Date: 24 June 2025

Approach Opposed Turni Nearside		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak y value	PM Peak Critical y
Kwai Fuk Road SB	SA	A1	2,3	3.30				1945	439	0.226			1945	339	0.174	
	SA	A2	2,3	3.30				2085	471	0.226			2085	363	0.174	
Kwai Hei Street EB	LT+RT	B1	1	3.20	15.0		100	1759	295	0.168	0.168	100	1759	268	0.152	0.152
Kwai Fuk Road NB	LT	C1	1,2	3.50	18.0		100	1943	291	0.150		100	1943	247	0.127	
	SA	C2	2	3.50				2105	512	0.243	0.243		2105	440	0.209	0.209
	SA	C3	2	3.50				2105	512	0.243			2105	440	0.209	
pedestrian phase		P1	3		min crossing time =		5	sec GM +		7	sec FGM =		12	sec		
		P2	2,3		min crossing time =		5	sec GM +		4	sec FGM =		9	sec		
		P3	3		min crossing time =		5	sec GM +		10	sec FGM =		15	sec		
		P4	1		min crossing time =		5	sec GM +		7	sec FGM =		12	sec		

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)

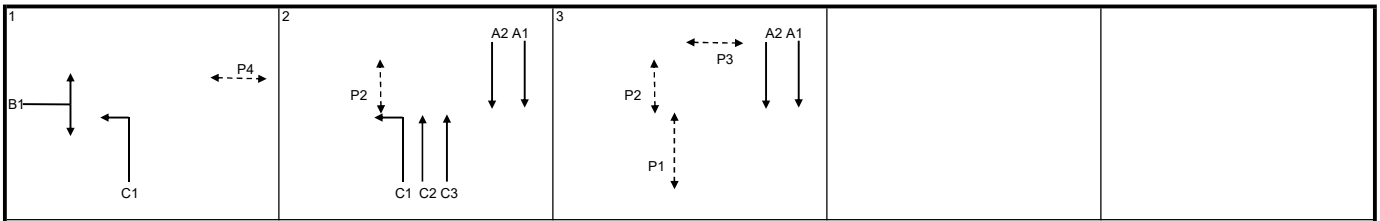


S = 1940 + 100 (W-3.25) S = 2080 + 100 (W-3.25)

S_M = S / (1 + 1.5 f/r) S_M = (S - 230) / (1 + 1.5 f/r)

	AM Peak 1+2	AM Peak 1+2,3	PM Peak 1+2	PM Peak 1+2,3
Sum y	0.411	0.394	0.361	0.327
L (s)	34	11	32	11
C (s)	120	120	120	120
practical y	0.645	0.818	0.660	0.818
R.C. (%)	57%	108%	83%	150%

Note:



AM	G =	I/G = 7	G =	I/G = 3	G = 24	I/G = 2	G =	I/G =	G =	
	G =	I/G = 7	G =	I/G =	G =	I/G = 6	G =	I/G =	G =	
PM	G =	I/G = 7	G =	I/G = 3	G = 22	I/G = 2	G =	I/G =	G =	
	G =	I/G = 7	G =	I/G =	G =	I/G = 6	G =	I/G =	G =	

Signal Junction Analysis

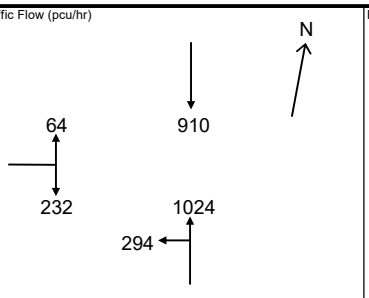
Junction: Kwai Fuk Road / Kwai Hei Street — Job Number: J7384

Scenario: With Proposed Data Centre — Page 21

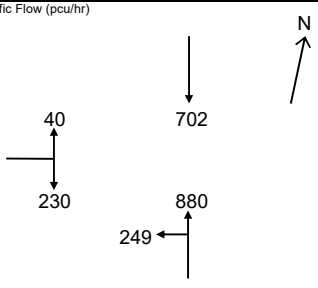
Design Year: 2032 — Designed By: — Checked By: — Date: 24 June 2025

Approach / Opposed Turni / Nearside		Phase	Stage	Width (m)	Radius (m)	% Up-hill Gradient	AM Peak Turning %	AM Peak Sat. Flow (pcu/hr)	AM Peak Flow (pcu/hr)	AM Peak y value	AM Peak Critical y	PM Peak Turning %	PM Peak Sat. Flow (pcu/hr)	PM Peak Flow (pcu/hr)	PM Peak y value	PM Peak Critical y
Kwai Fuk Road SB	SA	A1	2,3	3.30				1945	439	0.226			1945	339	0.174	
	SA	A2	2,3	3.30				2085	471	0.226			2085	363	0.174	
Kwai Hei Street EB	LT+RT	B1	1	3.20	15.0		100	1759	296	0.168	0.168	100	1759	270	0.153	0.153
Kwai Fuk Road NB	LT	C1	1,2	3.50	18.0		100	1943	294	0.151		100	1943	249	0.128	
	SA	C2	2	3.50				2105	512	0.243	0.243		2105	440	0.209	0.209
	SA	C3	2	3.50				2105	512	0.243			2105	440	0.209	
pedestrian phase		P1	3		min crossing time =		5	sec GM +		7	sec FGM =		12	sec		
		P2	2,3		min crossing time =		5	sec GM +		4	sec FGM =		9	sec		
		P3	3		min crossing time =		5	sec GM +		10	sec FGM =		15	sec		
		P4	1		min crossing time =		5	sec GM +		7	sec FGM =		12	sec		

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)

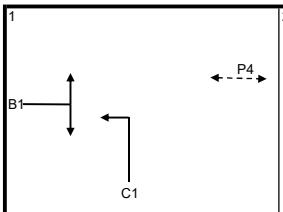


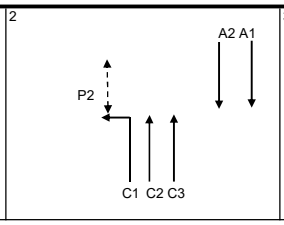
S = 1940 + 100 (W-3.25) S = 2080 + 100 (W-3.25)

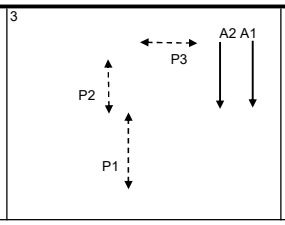
S_M = S / (1 + 1.5 f/r) S_M = (S - 230) / (1 + 1.5 f/r)

	AM Peak 1+2	AM Peak 1+2,3	PM Peak 1+2	PM Peak 1+2,3
Sum y	0.412	0.394	0.363	0.328
L (s)	34	11	32	11
C (s)	120	120	120	120
practical y	0.645	0.818	0.660	0.818
R.C. (%)	57%	107%	82%	149%

Note:



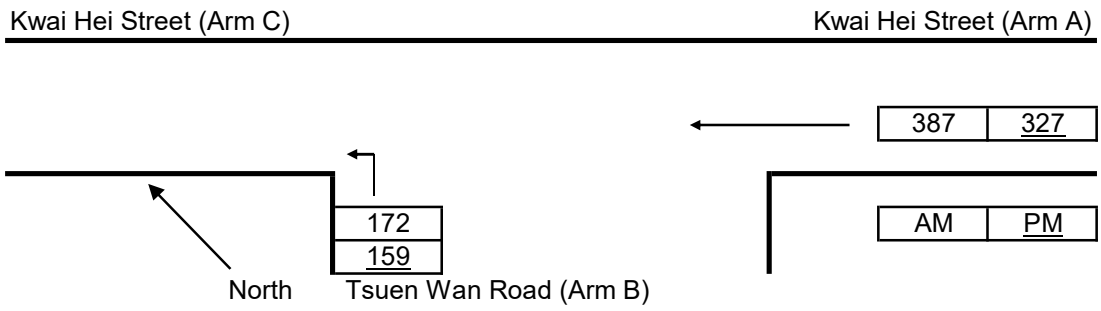




AM	G =	I/G = 7	G =	I/G = 3	G = 24	I/G = 2	G =	I/G =	G =	
	G =	I/G = 7	G =	I/G =	G =	I/G = 6	G =	I/G =	G =	
PM	G =	I/G = 7	G =	I/G = 3	G = 22	I/G = 2	G =	I/G =	G =	
	G =	I/G = 7	G =	I/G =	G =	I/G = 6	G =	I/G =	G =	

Priority Junction Analysis

Junction:	Kwai Hei Street / Tsuen Wan Road				
Design Year:	2024	Job Number:	J7384	Date:	24 June 2025
Scenario:	Existing Condition				P. 22



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	11.00	V-rBA	0	w-BA	0.00	D	0.5332
	W-CR	0.00	V-lBA	0	w-BC	4.70	E	1.0196
			V-rBC	40	w-CB	0.00	F	0.5860
			V-rCB	0			Y	0.6205

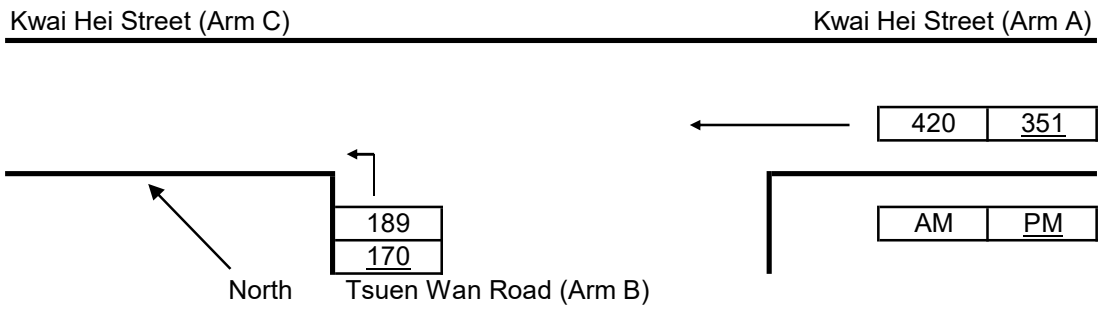
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	0	0	Q-BA	288	295
q-CB	0	0	Q-BC	670	684
q-AB	0	0	Q-CB	385	393
q-AC	387	327	Q-BAC	670	684
q-BA	0	0			
q-BC	172	159			
f	1.000	1.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.257	0.232
C-B	0.000	0.000

Priority Junction Analysis

Junction:	Kwai Hei Street / Tsuen Wan Road				
Design Year:	2032	Job Number:	J7384	Date:	24 June 2025
Scenario:	Without Proposed Data Centre				P. 23



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	11.00	V-rBA	0	w-BA	0.00	D	0.5332
	W-CR	0.00	V-lBA	0	w-BC	4.70	E	1.0196
			V-rBC	40	w-CB	0.00	F	0.5860
			V-rCB	0			Y	0.6205

Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	0	0	Q-BA	284	292
q-CB	0	0	Q-BC	663	679
q-AB	0	0	Q-CB	381	390
q-AC	420	351	Q-BAC	663	679
q-BA	0	0			
q-BC	189	170			
f	1.000	1.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.285	0.250
C-B	0.000	0.000

Priority Junction Analysis

Junction:	Kwai Hei Street / Tsuen Wan Road				
Design Year:	2032	Job Number:	J7384	Date:	24 June 2025
Scenario:	With Proposed Data Centre				P. 24



The predictive equations of capacity of movement are:

Q-BA = D[627 + 14W-CR - Y(0.364q-AC + 0.144q-AB + 0.229q-CA + 0.52q-CB)]

Q-BC = E[745 - Y(0.364q-AC + 0.144q-AB)]

Q-CB = F[745 - 0.364Y(q-AC + q-AB)]

The geometric parameters represented by D, E, F are:

D = [1 + 0.094(w-BA - 3.65)][1 + 0.0009(V-rBA - 120)][1 + 0.0006(V-lBA - 150)]

E = [1 + 0.094(w-BC - 3.65)][1 + 0.0009(V-rBC - 120)]

F = [1 + 0.094(w-CB - 3.65)][1 + 0.0009(V-rCB - 120)]

where Y = 1 - 0.0345W

q-AB, etc = the design flow of movement AB, etc

W = major road width

W-CR = central reserve width

w-BA, etc = lane width to vehicle

v-rBA, etc = visibility to the right for waiting vehicles in stream BA, etc

v-lBA, etc = visibility to the left for waiting vehicles in stream BA, etc

Geometry :	Input		Input		Input		Calculated	
	W	11.00	V-rBA	0	w-BA	0.00	D	0.5332
	W-CR	0.00	V-lBA	0	w-BC	4.70	E	1.0196
			V-rBC	40	w-CB	0.00	F	0.5860
			V-rCB	0			Y	0.6205

Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	0	0	Q-BA	283	292
q-CB	0	0	Q-BC	662	678
q-AB	0	0	Q-CB	381	390
q-AC	423	353	Q-BAC	662	678
q-BA	0	0			
q-BC	189	170			
f	1.000	1.000			

Ratio-of-flow to Capacity	AM	PM
B-A	0.000	0.000
B-C	0.285	0.251
C-B	0.000	0.000

Appendix 2 –
Bus Stop Utilisation

The results of utilisation survey conducted at the 5 bus stops during AM and PM peak on Friday, 28 April 2023, are presented in **Tables A1 – A5**. The 5 bus stops are:

STOP 1 – Wing Kei Road Southbound
STOP 2 – Kwai Fuk Road Westbound
STOP 3 – Kwai Fuk Road Eastbound
STOP 4 – Kwai Shing Swimming Pool Eastbound
STOP 5 – Kwai Shing Swimming Pool Westbound

TABLE A1 RESULTS OF THE UTILIZATION SURVEY OF PUBLIC TRANSPORT SERVICES AT STOP 1 - WING KEI ROAD SOUTHBOUND

Route[1]	**No. of Vehicle**	**No. of Passenger on Vehicle[2] [a]**	**Capacity [b]**	**Vacant [b] – [a]**	**Occupancy [a] / [b]**
AM Peak					
GMB 404M	**16**	**194**	**289**	**95**	**67.1%**
PM Peak					
GMB 404M	**10**	**140**	**181**	**41**	**77.3%**

Note: [1] GMB – Green Minibus
[2] Passenger was counted at the moment before the bus arrived

TABLE A2 RESULTS OF THE UTILIZATION SURVEY OF PUBLIC TRANSPORT SERVICES AT STOP 2 - KWAI FUK ROAD WESTBOUND

Route[1]	**No. of Vehicle**	**No. of Passenger on Vehicle[2] [a]**	**Capacity [b]**	**Vacant [b] – [a]**	**Occupancy [a] / [b]**
AM Peak					
KMB 73P	2	77	272	195	28.3%
GMB 87	7	107	121	14	88.4%
GMB 87K	13	210	226	16	92.9%
GMB 91	8	93	146	53	63.7%
GMB 93	4	49	64	15	76.6%
GMB 93A	4	50	67	17	74.6%
GMB 98	10	129	181	52	71.3%
GMB 404M	16	219	289	70	75.8%
GMB 407	6	51	102	51	50.0%
Total	**70**	**985**	**1468**	**483**	**67.1%**
PM Peak					
GMB 87	11	137	188	51	72.9%
GMB 87K	12	179	216	37	82.9%
GMB 91	5	65	83	18	78.3%
GMB 93	4	47	64	17	73.4%
GMB 93A	3	45	51	6	88.2%
GMB 98	10	149	184	35	81.0%
GMB 404M	10	126	181	55	69.6%
GMB 407	10	129	172	43	75.0%
Total	**65**	**877**	**1139**	**262**	**77.0%**

Note: [1] KMB – Kowloon Motor Bus GMB – Green Minibus
[2] Passenger was counted at the moment before the bus arrived

TABLE A3 RESULTS OF THE UTILIZATION SURVEY OF PUBLIC TRANSPORT SERVICES AT STOP 3 - KWAI FUK ROAD EASTBOUND

Route[1]	No. of Vehicle	No. of Passenger on Vehicle[2] [a]	Capacity [b]	Vacant [b] – [a]	Occupancy [a] / [b]
AM Peak					
GMB 87	7	93	121	28	76.9%
GMB 87K	14	171	251	80	68.1%
GMB 91	8	99	143	44	69.2%
GMB 93	4	33	67	34	49.3%
GMB 93A	4	40	67	27	59.7%
GMB 98	15	117	267	150	43.8%
GMB 404M	13	160	238	78	67.2%
GMB 406	2	25	32	7	78.1%
GMB 407	18	243	309	66	78.6%
Total	**85**	**981**	**1495**	**514**	**65.6%**
PM Peak					
KMB 73P	1	17	136	119	12.5%
GMB 87	10	157	172	15	91.3%
GMB 87K	13	206	232	26	88.8%
GMB 91	6	97	108	11	89.8%
GMB 93	4	47	64	17	73.4%
GMB 93A	3	45	51	6	88.2%
GMB 98	14	248	254	6	97.6%
GMB 404M	10	171	178	7	96.1%
GMB 407	8	79	137	58	57.7%
Total	**69**	**1067**	**1332**	**265**	**80.1%**

Note: [1] KMB – Kowloon Motor Bus GMB – Green Minibus
[2] Passenger was counted at the moment before the bus arrived

TABLE A4 RESULTS OF THE UTILIZATION SURVEY OF PUBLIC TRANSPORT SERVICES AT STOP 4 - KWAI SHING SWIMMING POOL EASTBOUND

Route[1]	No. of Vehicle	No. of Passenger on Vehicle[2] [a]	Capacity [b]	Vacant [b] – [a]	Occupancy [a] / [b]
AM Peak					
KMB 32H	2	51	152	101	33.6%
KMB 34	7	303	952	649	31.8%
GMB 87	7	93	121	28	76.9%
GMB 87K	14	161	251	90	64.1%
GMB 89B	4	57	64	7	89.1%
GMB 406	2	25	32	7	78.1%
GMB 407	18	248	309	61	80.3%
GMB 94	8	59	131	72	45.0%
GMB 94A	4	51	64	13	79.7%
Total	**66**	**1048**	**2076**	**1028**	**50.5%**
PM Peak					
KMB 32H	1	15	76	61	19.7%
KMB 34	8	263	1088	825	31.9%
GMB 87	10	121	172	51	70.3%
GMB 87K	13	201	232	31	86.6%
GMB 89B	3	6	48	42	12.5%
GMB 407	8	95	137	42	69.3%
GMB 94	8	13	128	115	10.2%
Total	**51**	**714**	**1881**	**1167**	**38.0%**

Note: [1] KMB – Kowloon Motor Bus GMB – Green Minibus
[2] Passenger was counted at the moment before the bus arrived

TABLE A5 RESULTS OF THE UTILIZATION SURVEY OF PUBLIC TRANSPORT SERVICES AT STOP 5 - KWAI SHING SWIMMING POOL WESTBOUND

Route[1]	No. of Vehicle	No. of Passenger on Vehicle[2] [a]	Capacity [b]	Vacant [b] – [a]	Occupancy [a] / [b]
AM Peak					
KMB 38	7	314	934	620	33.6%
GMB 87	7	92	121	29	76.0%
GMB 87K	13	146	226	80	64.6%
GMB 89B	3	34	48	14	70.8%
GMB 407	6	59	102	43	57.8%
GMB 94	7	50	112	62	44.6%
Total	**43**	**695**	**1543**	**848**	**45.0%**
PM Peak					
KMB 32H	1	38	76	38	50.0%
KMB 38	5	243	685	442	35.5%
GMB 87	11	122	188	66	64.9%
GMB 87K	12	166	216	50	76.9%
GMB 89B	3	6	48	42	12.5%
GMB 407	10	115	172	57	66.9%
GMB 94	8	85	128	43	66.4%
GMB 94A	1	38	76	38	50.0%
Total	**50**	**775**	**1513**	**738**	**51.2%**

Note: [1] KMB – Kowloon Motor Bus GMB – Green Minibus
[2] Passenger was counted at the moment before the bus arrived

The existing utilisation of the public transport services at the 5 stops is summarised in **Table A6**.

TABLE A6 THE EXISTING UTILISATION OF THE PUBLIC TRANSPORT SERVICES at the 5 surveyed stops

No.	Location	Occupancy	
		AM Peak	PM Peak
1	Wing Kei Road Southbound	67.1%	77.3%
2	Kwai Fuk Road Northbound	67.1%	77.0%
3	Kwai Fuk Road Southbound	65.6%	80.1%
4	Kwai Shing Swimming Pool Eastbound	50.5%	38.0%
5	Kwai Shing Swimming Pool Westbound	45.0%	51.2%

The pedestrians generated by the Proposed Data Centre is estimated using the pedestrian generation rates in Table 5.2 of the Traffic Impact Assessment Report and is presented in **Table A7**.

TABLE A7 PEDESTRIAN GNERATION OF PROPOSED DATA CENTRE

Item	AM Peak			PM Peak		
	In	Out	2-way	In	Out	2-way
Proposed Data Centre (10,991.880m^2 GFA)	Pedestrian Generation Rates, ped / 15min / 100m^2					
	0.0660	0.0109	NA	0.0164	0.0660	NA
	Pedestrian Generation, ped / hour					
	32	**8**	**40**	**8**	**32**	**40**

To be conservative, it is assumed that all pedestrians generated use public transport services and the analysis is presented in **Table A8**.

TABLE A8 THE UTILISATION OF THE PUBLIC TRANSPORT SERVICES FOR THE CASE WITH THE PROPOSED DATA CENTRE

No.	Location	Occupancy	
		AM Peak	PM Peak
1	Wing Kei Road Southbound	70.6%	82.9%
2	Kwai Fuk Road Northbound	67.4%	77.4%
3	Kwai Fuk Road Southbound	66.0%	80.5%
4	Kwai Shing Swimming Pool Eastbound	51.0%	38.5%
5	Kwai Shing Swimming Pool Westbound	45.7%	51.9%

Table A8 shows that the public transport service have capacity to accommodate the passenger demand generated by the Proposed Data Centre.

Appendix 3 – Draft PBTO

Restriction on partitioning

(21) Except for the surrender and carving out of the Pink Hatched Blue Area in accordance with Special Condition No. (9)(f)(i) hereof, the Grantee shall not, without the prior written consent of the Director, partition (whether by way of assignment or other disposal or by any other means) the lot or any part thereof or any section which has been partitioned with the prior written consent of the Director under this Special Condition.

Parking requirements

(22) (a) (i) Spaces shall be provided within the lot to the satisfaction of the Commissioner for Transport (hereinafter referred to as "the C for T") for the parking of motor vehicles licensed under the Road Traffic Ordinance, any regulations made thereunder and any amending legislation (hereinafter referred to as "the Road Traffic Ordinance") at the following rates–

Data Centre Parking Spaces

(I) one space for every 1,000 square metres or part thereof of the gross floor area of the building or buildings erected or to be erected on the lot or part or parts of the building or buildings for the purpose of data centre (the spaces to be provided under this sub-clause (a)(i)(I) (as may be varied under Special Condition No. (23) hereof) are hereinafter referred to as "the Data Centre Parking Spaces"); and

Industrial Parking Spaces

(II) one space for every 1,000 square metres or part thereof of the gross floor area of the building or buildings erected or to be erected on the lot or part or parts of the building or buildings for purposes permitted under Special Condition No. (11) hereof excluding data centre (the spaces to be provided under this sub-clause (a)(i)(II) (as may be varied under Special Condition No. (23) hereof) are hereinafter referred to as "the Industrial Parking Spaces").

(ii) For the purpose of calculating the number of the Data Centre Parking Spaces and the Industrial Parking Spaces to be provided under sub-clauses (a)(i)(I) and (a)(i)(II) of this Special Condition, any floor area to be used for parking, loading and unloading purposes shall be excluded. For the purposes of these Conditions, "motor vehicle" shall be as defined in the Road Traffic Ordinance.

(iii) The Data Centre Parking Spaces and the Industrial Parking Spaces shall not be used for any purpose other than for the parking of motor vehicles licensed under the Road Traffic Ordinance and in particular the said

spaces shall not be used for the storage, display or exhibiting of motor vehicles for sale or otherwise or for the provision of motor vehicle cleaning and beauty services.

Parking Spaces for Disabled Persons

(b) (i) Out of the Data Centre Parking Spaces and the Industrial Parking Spaces, the Grantee shall reserve and designate such number of spaces for the parking of motor vehicles by disabled persons (which spaces to be so reserved and designated are hereinafter referred to as "the Parking Spaces for Disabled Persons") as the Building Authority may require or approve. For the purpose of these Conditions, "disabled persons" shall be as defined in the Road Traffic Ordinance.

(ii) The Parking Spaces for Disabled Persons shall not be used for any purpose other than for the parking of motor vehicles licensed under the Road Traffic Ordinance by disabled persons and in particular the said spaces shall not be used for the storage, display or exhibiting of motor vehicles for sale or otherwise or for the provision of motor vehicle cleaning and beauty services.

Motor Cycle Parking Spaces

(c) (i) Spaces shall be provided within the lot to the satisfaction of the C for T for the parking of motor cycles licensed under the Road Traffic Ordinance at at the following rates–

Data Centre Motor Cycle Parking Spaces

(I) 10% of the total number of the Data Centre Parking Spaces (the spaces to be provided under this sub-clause (c)(i)(I) (as may be varied under Special Condition No. (23) hereof) are hereinafter referred to as "the Data Centre Motor Cycle Parking Spaces"); and

Industrial Motor Cycle Parking Spaces

(II) 10% of the total number of the Industrial Parking Spaces (the spaces to be provided under this sub-clause (c)(i)(II) (as may be varied under Special Condition No. (23) hereof) are hereinafter referred to as "the Industrial Motor Cycle Parking Spaces").

If the number of the Data Centre Motor Cycle Parking Spaces or the Industrial Motor Cycle Parking Spaces to be provided under sub-clauses (c)(i)(I) and (c)(i)(II) of this Special Condition is a decimal number, the same shall be rounded up to the next whole number. For the purposes of these Conditions, "motor cycle" shall be as defined in the Road Traffic Ordinance.

(ii) The Data Centre Motor Cycle Parking Spaces and the Industrial Motor Cycle Parking Spaces shall not be used for any purpose other than for the parking of motor cycles licensed under the Road Traffic Ordinance and in particular the said spaces shall not be used for the storage, display or exhibiting of motor vehicles for sale or otherwise or for the provision of motor vehicle cleaning and beauty services.

Dimensions of parking spaces

(d) (i) Except for the Parking Spaces for Disabled Persons, each of the Data Centre Parking Spaces and the Industrial Parking Spaces shall measure 2.5 metres in width and 5.0 metres in length with a minimum headroom of 2.4 metres.

(ii) The dimensions of each of the Parking Spaces for Disabled Persons shall be as the Building Authority may require or approve.

(iii) Each of the Data Centre Motor Cycle Parking Spaces and the Industrial Motor Cycle Parking Spaces shall measure 1.0 metre in width and 2.4 metres in length with a minimum headroom of 2.4 metres.

Spaces for goods vehicles (excluding goods vehicles with trailers with their prime movers attached)

(e) (i) Spaces shall be provided within the lot to the satisfaction of the C for T for the parking, loading and unloading of goods vehicles (excluding goods vehicles with trailer with their prime movers attached) licensed under the Road Traffic Ordinance at the following rates–

(I) one space for every 3,400 square metres or part thereof of the gross floor area of the building or buildings erected or to be erected on the lot or part or parts of the building or buildings for the purpose of data centre; and

(II) one space for every 700 square metres or part thereof of the gross floor area of the building or buildings erected or to be erected on the lot or part or parts of the building or buildings for purposes permitted under Special Condition No. (11) hereof excluding data centre.

For the purposes of these Conditions, "goods vehicles" shall be as defined in the Road Traffic Ordinance.

(ii) (I) Out of the total number of spaces provided under sub-clause (e)(i)(I) of this Special Condition (as

may be varied under Special Condition No. (23) hereof),

(A) the first 65% of the total number of spaces shall each measure 3.5 metres in width and 7.0 metres in length with a minimum headroom of 3.6 metres provided that if the number of spaces so calculated is a decimal number, the C for T may at his absolute discretion round up or down the number to a whole number; and

(B) the remaining number of spaces shall each measure 3.5 metres in width and 11.0 metres in length with a minimum headroom of 4.7 metres.

(II) Out of the total number of spaces provided under sub-clause (e)(i)(II) of this Special Condition (as may be varied under Special Condition No. (23) hereof),

(A) the first 65% of the total number of spaces shall each measure 3.5 metres in width and 7.0 metres in length with a minimum headroom of 3.6 metres provided that if the number of spaces so calculated is a decimal number, the C for T may at his absolute discretion round up or down the number to a whole number; and

(B) the remaining number of spaces shall each measure 3.5 metres in width and 11.0 metres in length with a minimum headroom of 4.7 metres.

(iii) (I) The first 60% of the spaces of the respective dimensions as provided under sub-clauses (e)(ii)(I)(A) and (e)(ii)(I)(B) of this Special Condition (as may be varied under Special Condition No. (23) hereof) shall be used for the loading and unloading of goods vehicles (excluding goods vehicles with trailers with their prime movers attached) (the loading and unloading spaces to be provided under this sub-clause (e)(iii)(I) (as may be varied under Special Condition No. (23) hereof) are hereinafter referred as "the Data Centre Goods Vehicle Loading and Unloading Spaces") provided that if the number of spaces so calculated is a decimal

number, the C for T may at his absolute discretion round up or down the number to a whole number and the remaining number of spaces shall be used for the parking of goods vehicles (excluding goods vehicles with trailers with their prime movers attached) (the parking spaces to be provided under this sub-clause (e)(iii)(I) (as may be varied under Special Condition No. (23) hereof) are hereinafter referred as "the Data Centre Goods Vehicle Parking Spaces").

(II) The first 50% of the spaces of the respective dimensions as provided under sub-clauses (e)(ii)(II)(A) and (e)(ii)(II)(B) of this Special Condition (as may be varied under Special Condition No. (23) hereof) shall be used for the loading and unloading of goods vehicles (excluding goods vehicles with trailers with their prime movers attached) (the loading and unloading spaces to be provided under this sub-clause (e)(iii)(II) (as may be varied under Special Condition No. (23) hereof) are hereinafter referred as "the Industrial Goods Vehicle Loading and Unloading Spaces") provided that if the number of spaces so calculated is a decimal number, the C for T may at his absolute discretion round up or down the number to a whole number and the remaining number of spaces shall be used for the parking of goods vehicles (excluding goods vehicles with trailers with their prime movers attached) (the parking spaces to be provided under this sub-clause (e)(iii)(II) (as may be varied under Special Condition No. (23) hereof) are hereinafter referred as "the Industrial Goods Vehicle Parking Spaces").

(iv) The Data Centre Goods Vehicle Loading and Unloading Spaces and the Industrial Goods Vehicle Loading and Unloading Spaces shall abut a goods handling platform or area which shall be provided and laid out in such a manner that goods loaded or unloaded from or to such platform or area may be transported to all parts of the building or buildings erected or to be erected on the lot vertically and horizontally. The design and layout of the goods handling platform or area giving such access to the building or buildings erected or to be erected on the lot shall comply with the Code of Practice issued by the

Building Authority on provision of means of escape in case of fire and any related requirements which are or may at any time be made by the Building Authority under the Buildings Ordinance.

(v) For the purpose of calculating the number of spaces to be provided under sub-clauses (e)(i)(I) and (e)(i)(II) of this Special Condition (as may be respectively varied under Special Condition No. (23) hereof), any floor area to be used for parking, loading and unloading purposes shall be excluded.

(vi) The Data Centre Goods Vehicle Parking Spaces and the Industrial Goods Vehicle Parking Spaces shall not be used for any purpose other than for the parking of goods vehicles (excluding containers on trailers with their prime movers attached) licensed under the Road Traffic Ordinance and in particular the said spaces shall not be used for the storage, display or exhibiting of motor vehicles for sale or otherwise or for the provision of motor vehicle cleaning and beauty services.

(vii) The Data Centre Goods Vehicle Loading and Unloading Spaces shall not be used for any purpose other than for the loading and unloading of goods vehicles (excluding goods vehicles with trailers with their prime movers attached) licensed under the Road Traffic Ordinance in connection with the building or buildings or part or parts of the building or buildings erected or to be erected on the lot for the purpose of data centre.

(viii) The Industrial Goods Vehicle Loading and Unloading Spaces shall not be used for any purpose other than for the loading and unloading of goods vehicles (excluding goods vehicles with trailers with their prime movers attached) licensed under the Road Traffic Ordinance in connection with the building or buildings or part or parts of the building or buildings erected or to be erected on the lot for purposes permitted under Special Condition No. (11) hereof excluding data centre.

(f) The spaces provided for vehicle manoeuvring and the parking, loading and unloading of vehicles shall be laid out in such manner that on entering and leaving the lot, no reversing movement of vehicles including containers on trailers with their prime movers attached from or onto the road or roads abutting the lot will be necessary.

Flexibility in parking, loading and unloading provisions

(23) Notwithstanding Special Conditions Nos. (22)(a)(i), (22)(c)(i), (22)(d)(i), (22)(d)(iii) (22)(e)(i), (22)(e)(ii) and (22)(e)(iii) hereof, the

Grantee may increase or reduce the respective numbers and dimensions of spaces required to be provided under the said sub-clauses to such other numbers and dimensions as may be approved in writing by the C for T, and such increase or reduction shall also be subject to the prior written approval of the Director, who may, at his sole and absolute discretion, give his approval subject to such terms and conditions as he sees fit, including the payment by the Grantee of any premium and administrative fee as shall be determined by the Director.

Access for inspection

(24) (a) The Grantee shall at all times throughout the term hereby agreed to be granted permit the Government, the C for T, their officers, contractors, agents, workmen and any other persons authorized by any of them, with or without tools, equipment, plant, machinery or motor vehicles free of charge to have the right of free and unrestricted ingress, egress and regress to, from and through the lot and the Green Area (while the Grantee is in possession of the same) or any part of any of them and any building erected or to be erected thereon for the purposes of inspecting, checking or ascertaining that there is no breach of or failure to comply with Special Conditions Nos. (22) and (23) hereof by the Grantee.

(b) The Government shall have no responsibility or liability for any loss, damage, nuisance or disturbance whatsoever and howsoever caused to or suffered by the Grantee or any other person arising whether directly or indirectly out of, in connection with or incidental to the exercise or non-exercise by the Government, the C for T, their officers, contractors, agents, workmen or any other persons authorized by any of them of the rights conferred under sub-clause (a) of this Special Condition, and no claim whatsoever shall be made against the Government by the Grantee in respect of any such loss, damage, nuisance or disturbance.

(c) The Grantee shall indemnify and keep indemnified the Government from and against all liabilities, claims, losses, damages, expenses, charges, costs, demands, actions and proceedings whatsoever and howsoever arising whether directly or indirectly out of, in connection with or incidental to the exercise or non-exercise by the Government, the C for T, their officers, contractors, agents, workmen or any other persons authorized by any of them of the rights conferred under sub-clause (a) of this Special Condition.

Parking, loading and unloading spaces etc. excluded from gross floor area calculation

(25) (a) For the purpose of calculating the total gross floor area stipulated in Special Condition No. (16)(c) hereof,

(i) there shall not be taken into account

(I) the Data Centre Parking Spaces, the Industrial Parking Spaces, the Data Centre Motor Cycle Parking Spaces, the Industrial Motor Cycle Parking Spaces, the Data Centre Goods Vehicle

Parking Spaces and the Industrial Goods Vehicle Parking Spaces (hereinafter collectively referred to as "the Spaces"), if they are provided below the ground level;

(II) the Data Centre Goods Vehicle Loading and Unloading Spaces and the Industrial Goods Vehicle Loading and Unloading Spaces, if they are provided at or below the ground level; and

(III) the Spaces, provided in any one (but not more than one) floor at or above the ground level of any building erected or to be erected on the lot if there are at least two floors below the ground level of such building, which in the opinion of the Building Authority fully utilize the lot (as to which the opinion of the Building Authority shall be conclusive), and are provided for the purpose of parking, loading and unloading of motor vehicles, and the Spaces, for that reason, have been excluded by the Building Authority from calculation of gross floor area under the Buildings Ordinance; and

(ii) other than the spaces referred to in sub-clause (a)(i)(III) of this Special Condition, if the Spaces are provided at or above the ground level or the Data Centre Goods Vehicle Loading and Unloading Spaces and the Industrial Goods Vehicle Loading and Unloading Spaces are provided above the ground level, 50% of such spaces together with 50% of the other areas including but not limited to lift lobbies, landings, pedestrian access routes, manoeuvring and circulation areas and plant rooms serving such spaces shall be taken into account for the calculation of the total gross floor area stipulated in Special Condition No. (16)(c) hereof as to which the decision of the Director shall be final and binding on the Grantee.

(b) Notwithstanding sub-clause (a)(ii) of this Special Condition, the Director at his sole discretion may subject to the payment by the Grantee of any premium and administrative fee as shall be determined by the Director exclude any spaces and other areas referred to in sub-clause (a)(ii) of this Special Condition from the calculation of total gross floor area stipulated in Special Condition No. (16)(c) hereof as to which the decision of the Director shall be final and binding on the Grantee.

(c) For the purpose of this Special Condition, the decision of the Director as to what constitutes the ground level or whether any space is at, above or below the ground level shall be final and binding on the

Appendix 4 –
Car Lift Analysis

Vehicle Lift Analysis

Job Title Proposed Information Technology and Telecommunication Industries (Data Centre) Development at 7 – 11 Wing Kin Road, Kwai Chung, New Territories

Ground floor to typical car park floor (m)	4.50
Average Speed (m/s)	0.50
Travel time (s)	9.00

Activity	**Time (s)**
Car lift travels from ground floor to typical car park floor	9
Lift door opens	5
Car exits lift in foward gear on typical car park floor	5
Car enters lift in reverse gear on typical car park floor	15
Door closes	5
Car lift travels from typical car park floor to ground floor	9
Lift door opens	5
Car exits lift in forward gear on ground floor	5
Car enters lift in reverse gear on ground floor	15
Door closes	5
Total	78

Number of lift servers, **k**	1
Number of waiting space(s)	1
Cycle time ω (s)	78
Arrival rate λ (veh / hr)	4
Service rate μ of one lift server (veh / hr)	46

Number of Cars N	**Probability of Exact N Cars in the Lift System**	**Probability of N Cars or Less in the Lift System**	**Probability of More Than N Cars in the Lift System**
0	91.33%	91.33%	8.67%
1	7.92%	99.25%	0.75%
2	**0.69%**	**99.93%**	**0.07%**
3	0.06%	99.99%	0.01%
4	0.01%	100.00%	0.00%
5	0.00%	100.00%	0.00%
6	0.00%	100.00%	0.00%
7	0.00%	100.00%	0.00%

Conclusion

The probability of 1 car arriving when 1 car lift and 1 waiting space being occupied is 0.07%. The provision of 1 waiting space is sufficient.

Formulae:		[A]	[B]	
Floor	Level (m)	Distance from G/F	No. of parking spaces	[A] * [B]
8/F		0		0
7/F		0		0
6/F		0		0
5/F		0		0
4/F		0		0
3/F		0		0
2/F		0		0
1/F		0		0
G/F	0.00	0		0
B1	-4.50	4.5	15	67.5
B2		0.0		0
B3		0		0
B4		0		0
B5		0		0
B6		0		0
B7		0		0
B8		0		0
			total parking spaces	typical floor distance
			15	4.5

Note:
k is the number of lift servers.
λ is the arrival rate in vehicles per hour.
μ is the service rate of a lift server in vehicles per hour.

N	1/N!*(λ/μ)^	summation from N=0 to N=k-1
0	1	1
1	0	1
2	0	1
3	0	1
4	0	1
5	0	1
6	0	1
7	0	1
8	0	1
9	0	1
10	0	1

The assessment is based on the mutli-server queuing (M/M/N) theory, and the equations applied are listed below :

Probability of having exactly zero cars in the lift system:

$$P(0) = \frac{1}{\left[\sum_{N=0}^{k-1} \frac{1}{N!}\left(\frac{\lambda}{\mu}\right)^N\right] + \frac{1}{k!}\left(\frac{\lambda}{\mu}\right)^k \frac{k\mu}{k\mu - \lambda}}$$

Probability of having exactly N cars in the lift system:

For $N < k$:

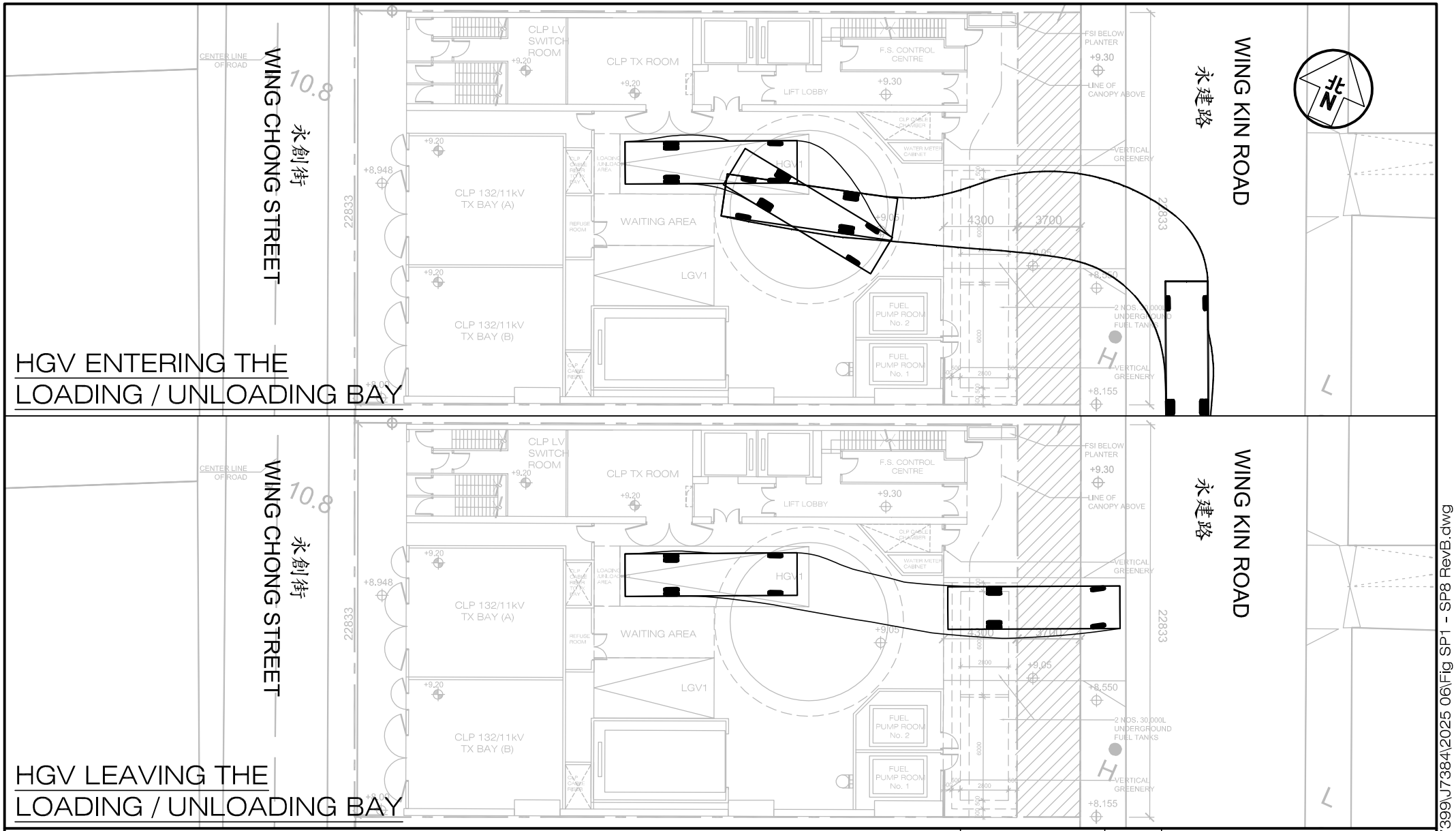
$$P(N) = \frac{1}{N!}\left(\frac{\lambda}{\mu}\right)^N P(0)$$

For $N \geq k$:

$$P(N) = \frac{1}{k!\,k^{N-k}}\left(\frac{\lambda}{\mu}\right)^N P(0)$$

k - -number of lift servers
λ - -arrival rate
μ - -service rate

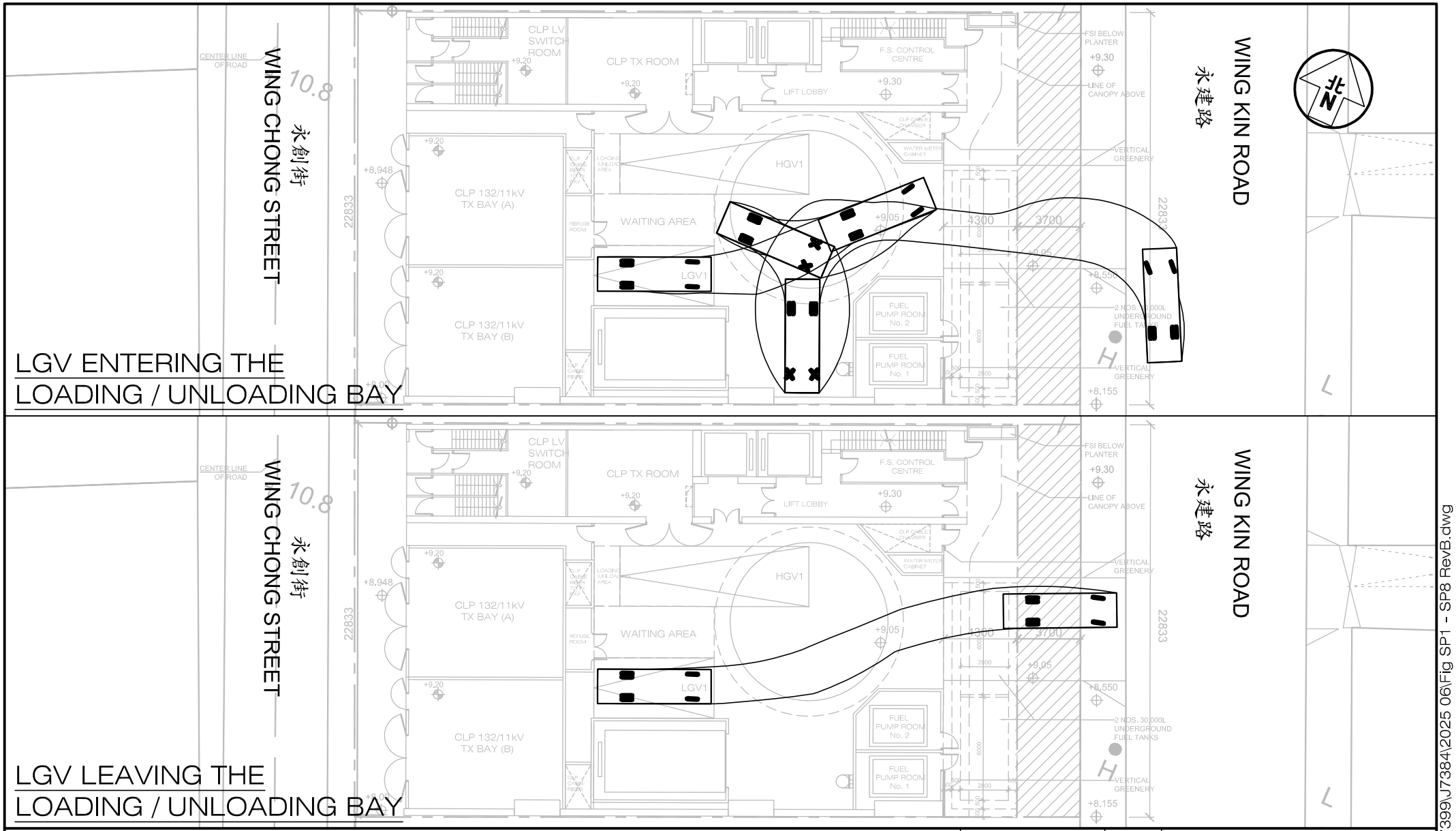
Appendix 5 –
Swept Path Analysis



Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. SP1 / Revision B
Figure Title	SWEPT PATH OF HGV ENTERING AND LEAVING THE LOADING / UNLOADING BAY HGV1 ON G/F	Designed by L C H / Drawn by N C M / Checked by K C	Scale in A4 1 : 300 / Date 26 JUN 2025

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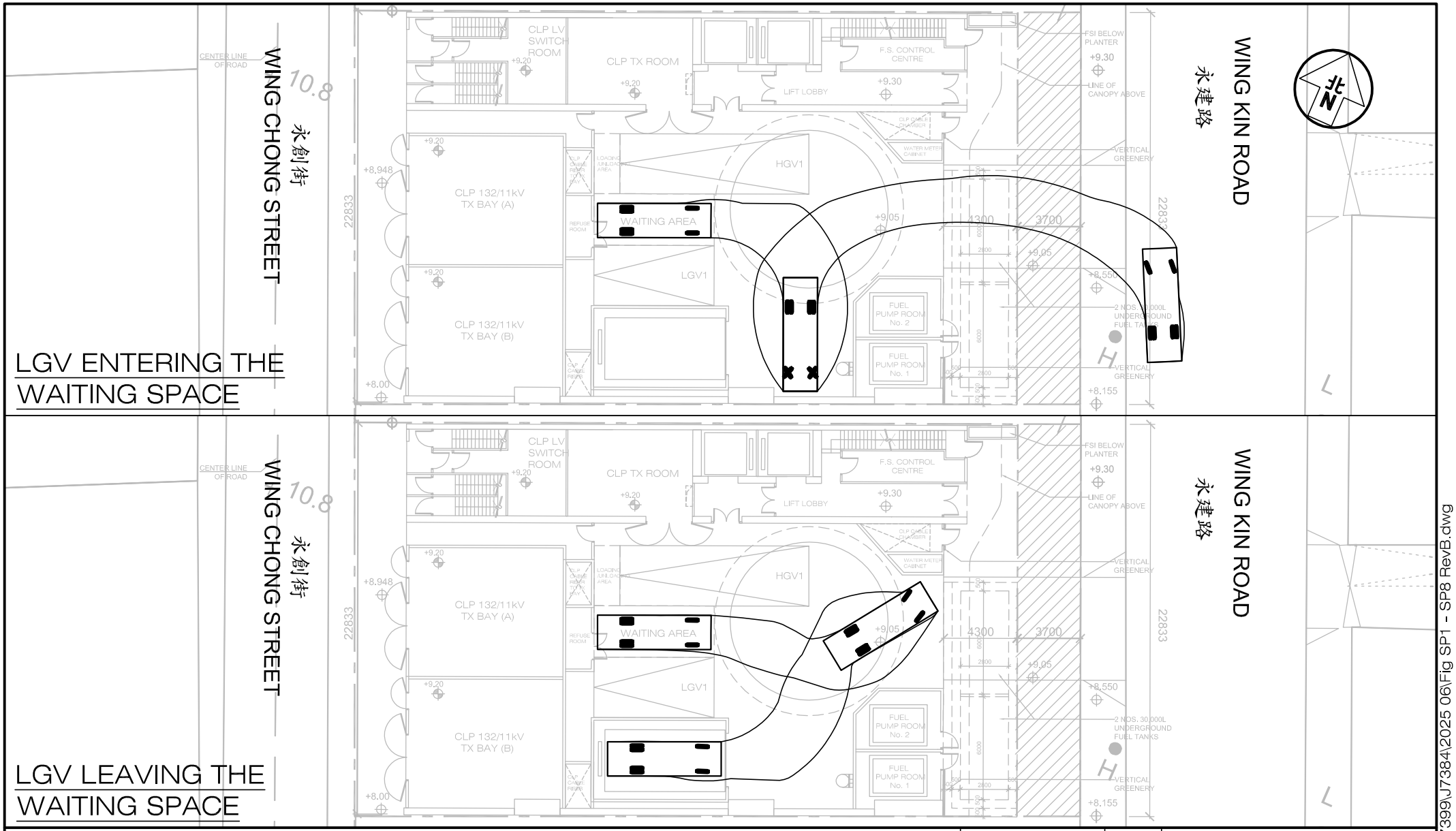
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Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. SP2 / Revision B
Figure Title	SWEPT PATH OF LGV ENTERING AND LEAVING THE LOADING / UNLOADING BAY LGV1 ON G/F		Designed by L C H / Drawn by N C M / Checked by K C
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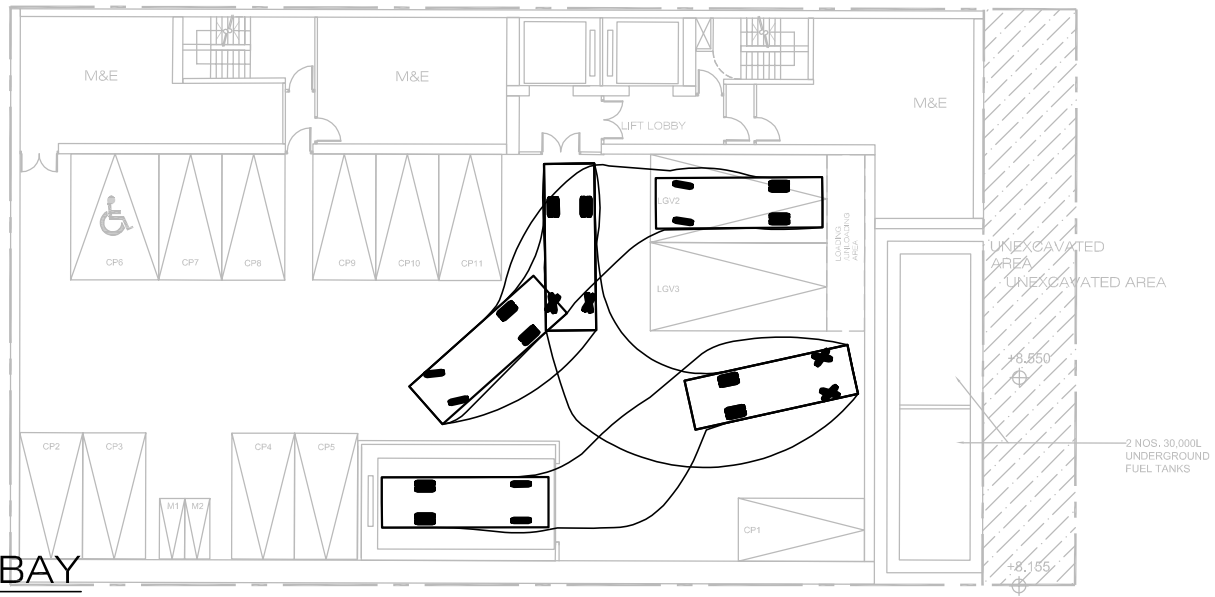
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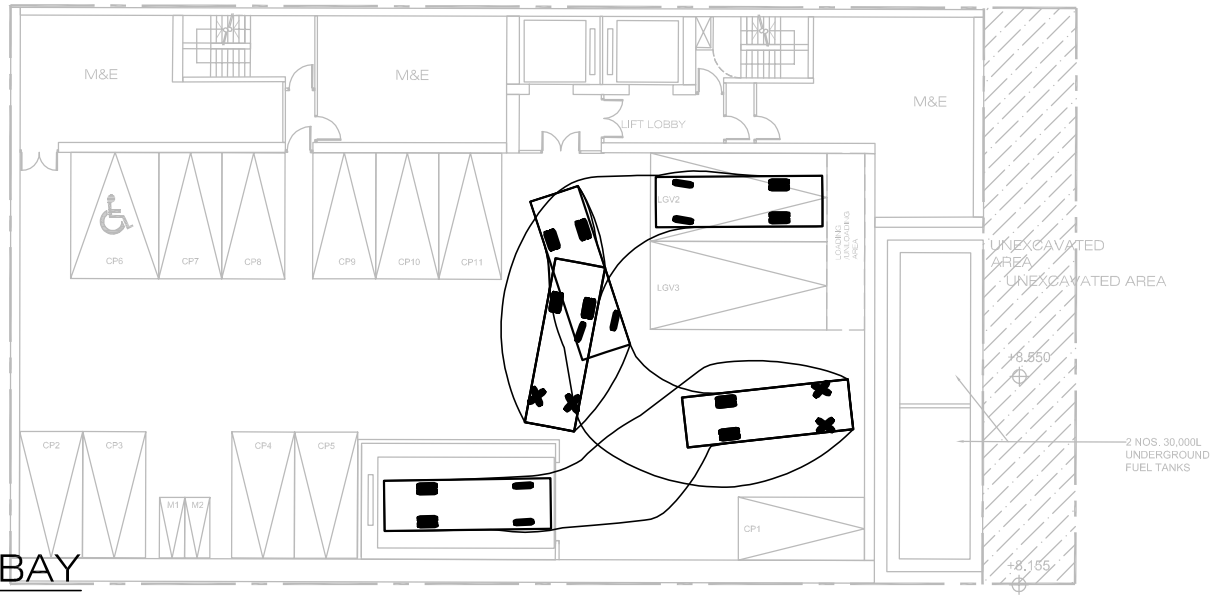
Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. SP3 / Revision B
Figure Title	SWEPT PATH OF LGV ENTERING AND LEAVING THE WAITING SPACE ON G/F		Designed by L C H / Drawn by N C M / Checked by K C
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LGV ENTERING THE LOADING / UNLOADING BAY

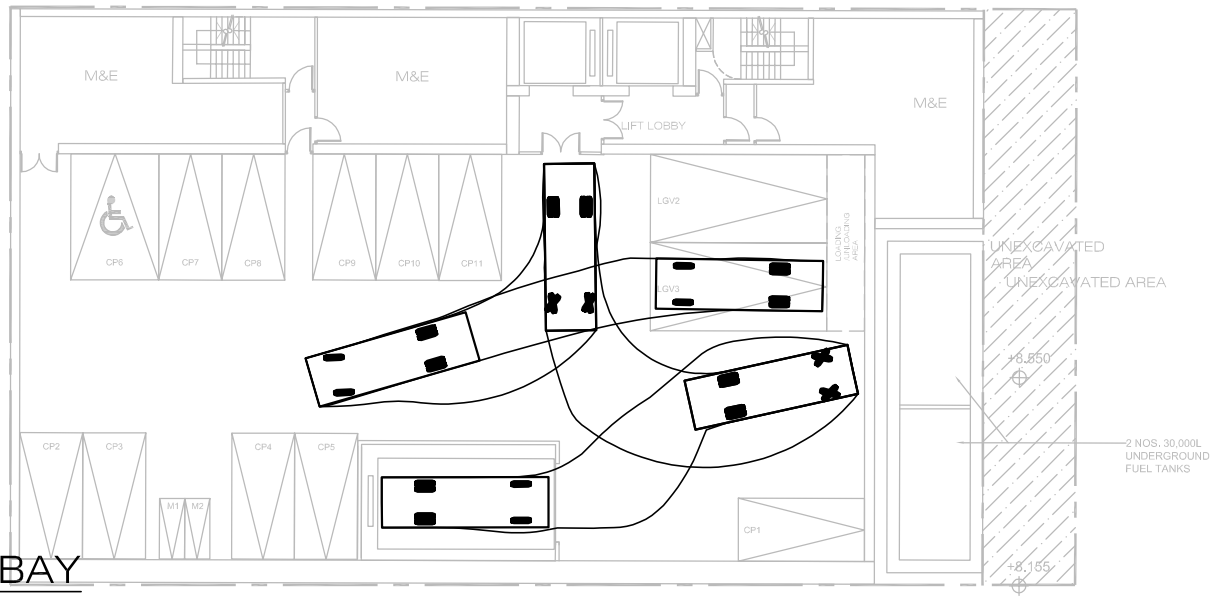


LGV LEAVING THE LOADING / UNLOADING BAY

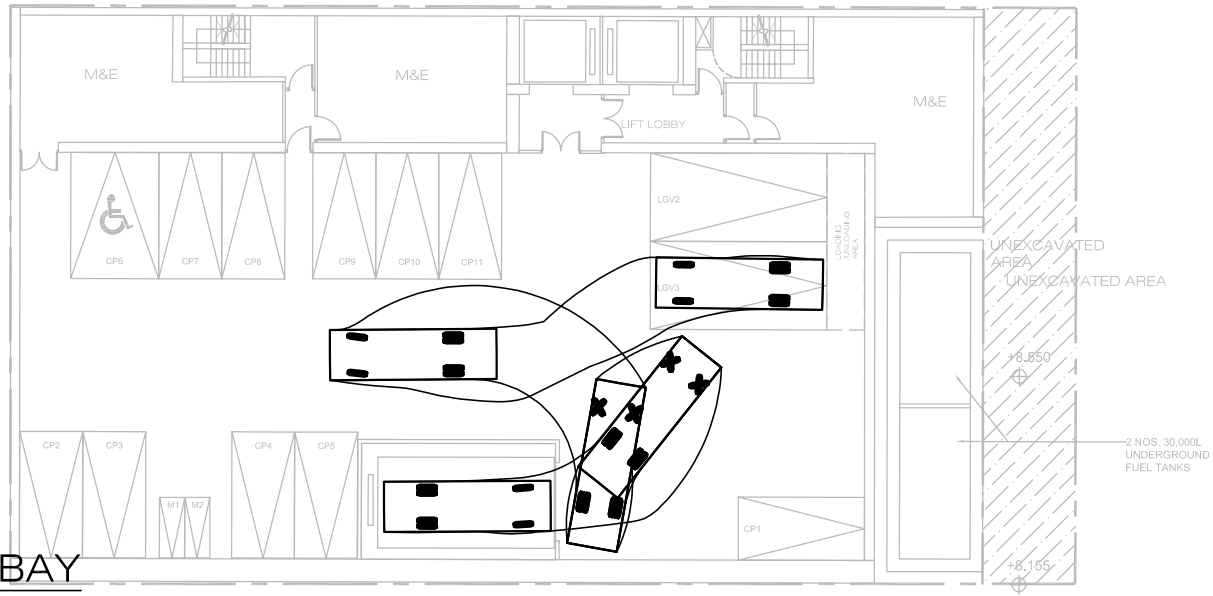
Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. SP4 / Revision B
Figure Title	SWEPT PATH OF LGV ENTERING AND LEAVING THE LOADING / UNLOADING BAY LGV2 ON B1/F		Designed by L C H / Drawn by N C M / Checked by K C
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LGV ENTERING THE LOADING / UNLOADING BAY

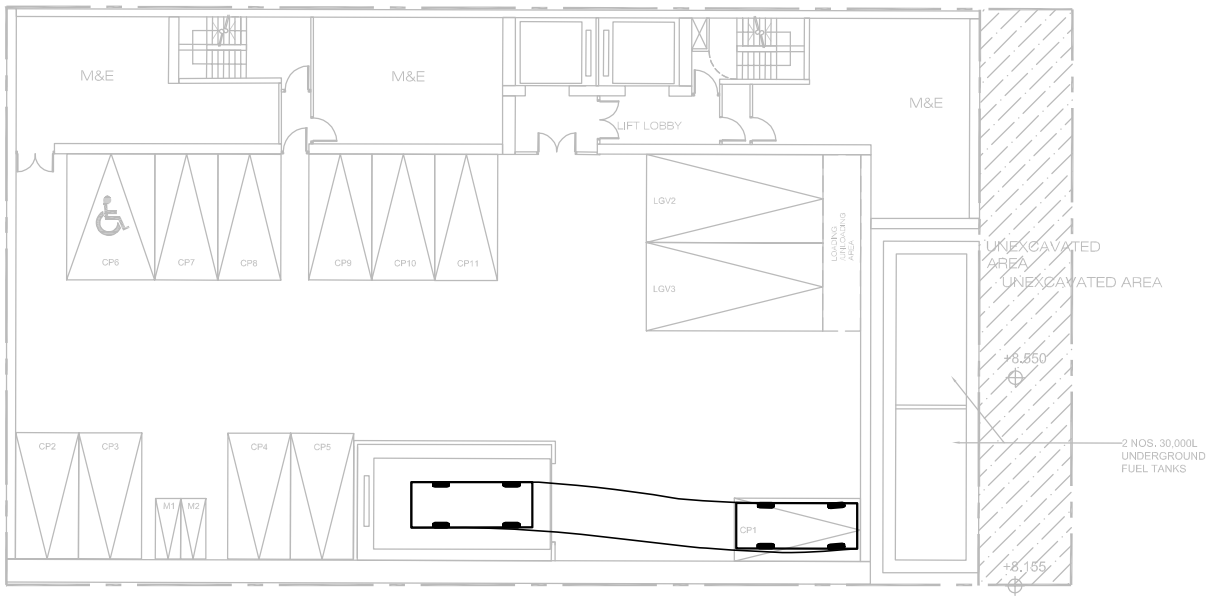


LGV LEAVING THE LOADING / UNLOADING BAY

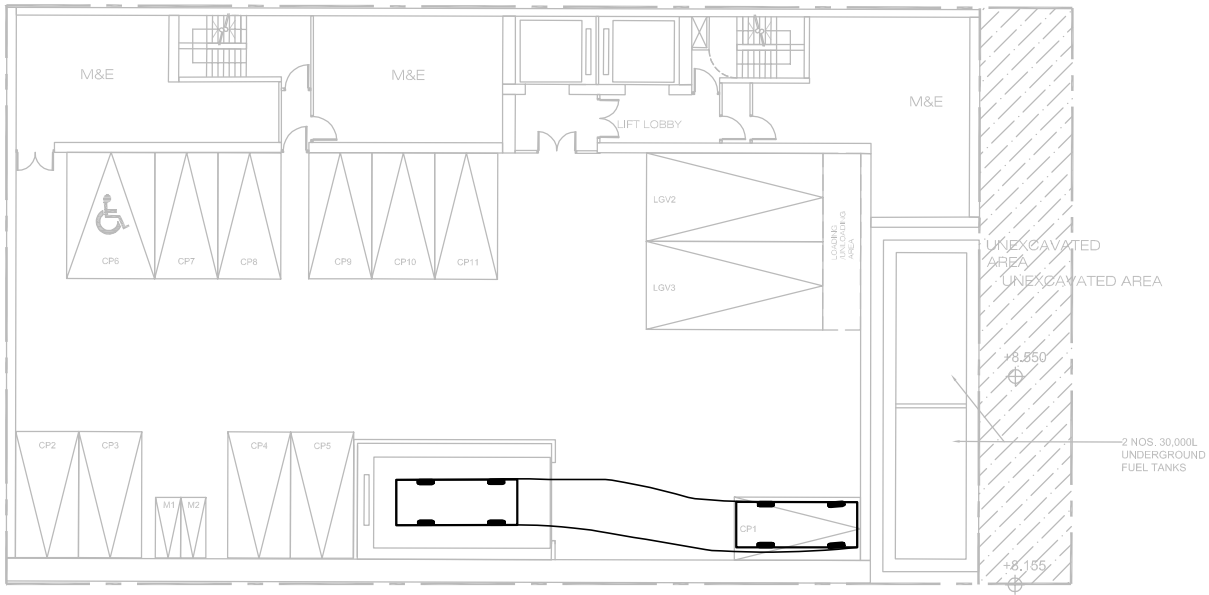
Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. SP5 / Revision B
Figure Title	SWEPT PATH OF LGV ENTERING AND LEAVING THE LOADING / UNLOADING BAY LGV3 ON B1/F		Designed by L C H / Drawn by N C M / Checked by K C
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CAR ENTERING THE CAR PARKING SPACE



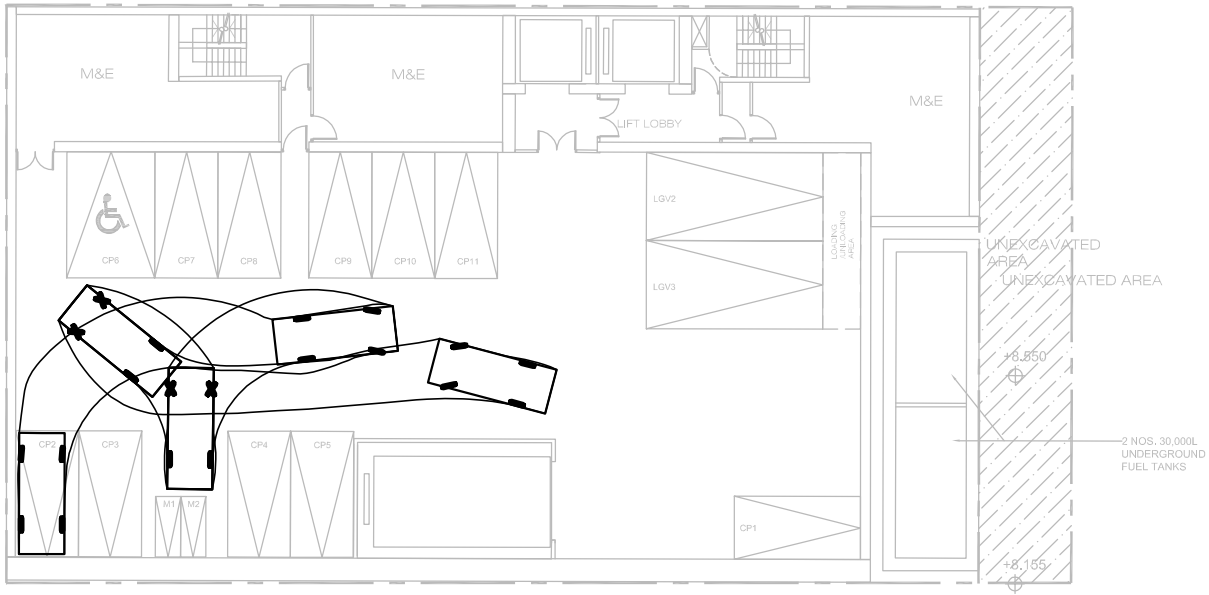
CAR LEAVING THE CAR PARKING SPACE

Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. SP6 / Revision B
Figure Title	SWEPT PATH OF PRIVATE CAR ENTERING AND LEAVING THE PARKING SPACE CP1 ON B1/F		Designed by L C H / Drawn by N C M / Checked by K C; Scale in A4 1 : 300 / Date 26 JUN 2025

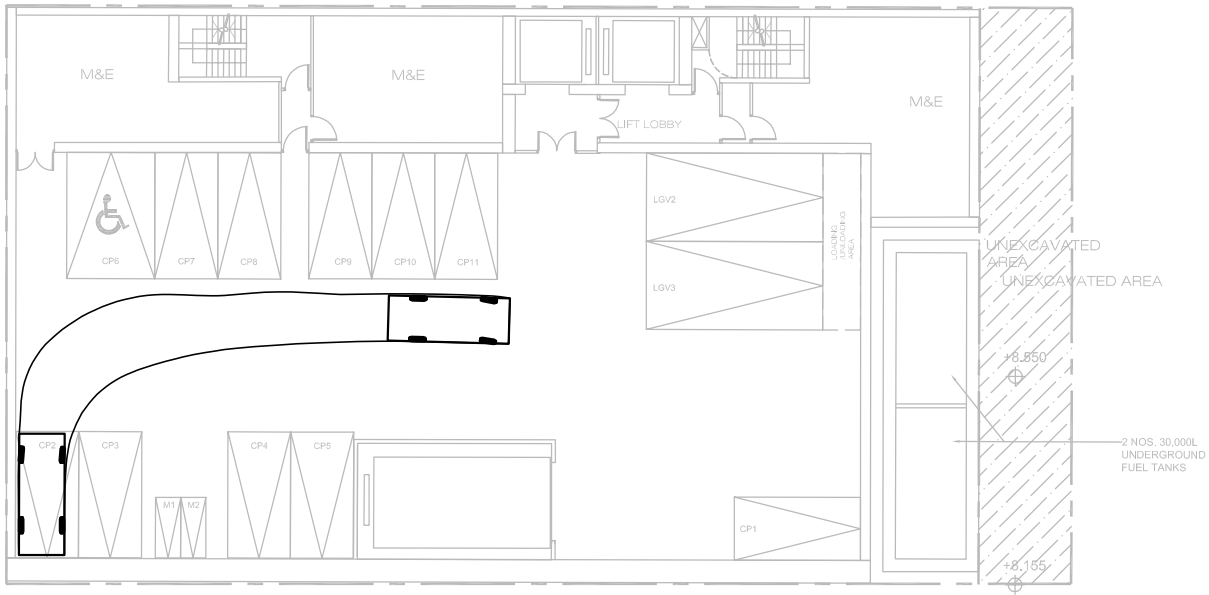
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CAR ENTERING THE
CAR PARKING SPACE



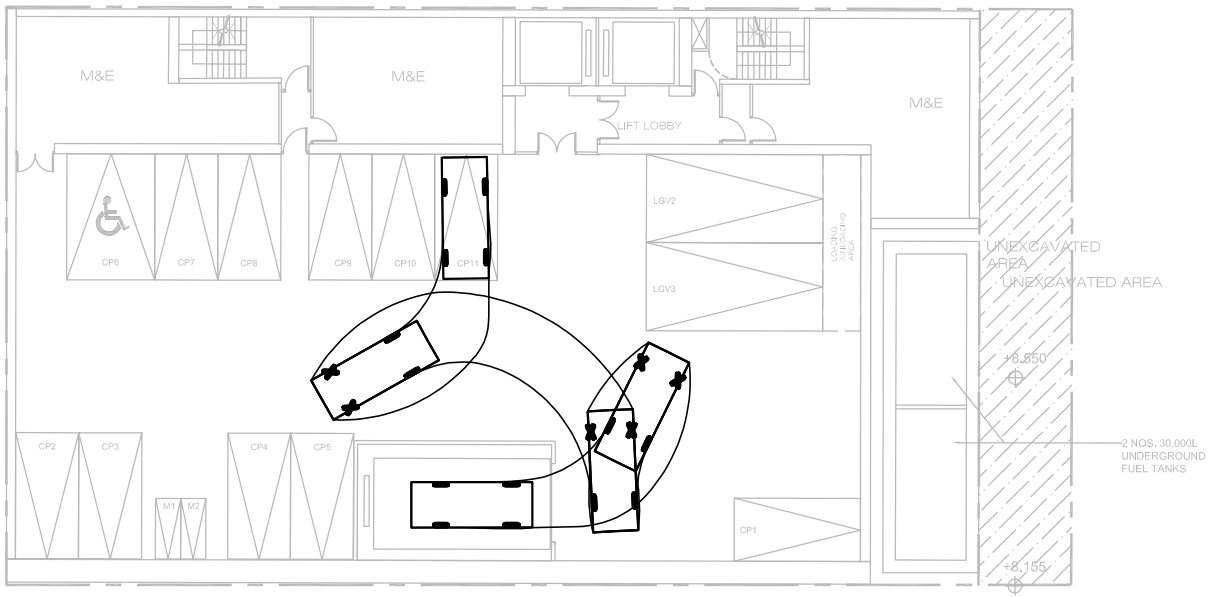
CAR LEAVING THE
CAR PARKING SPACE



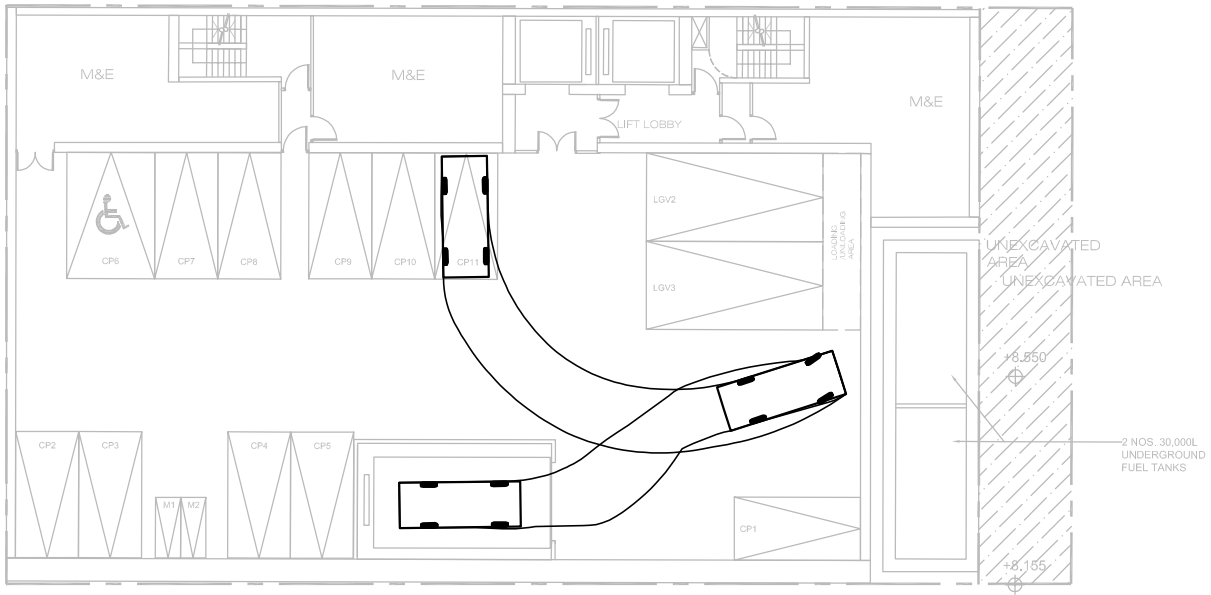
Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. SP7 / Revision B
Figure Title	SWEPT PATH OF PRIVATE CAR ENTERING AND LEAVING THE PARKING SPACE CP2 ON B1/F		Designed by L C H / Drawn by N C M / Checked by K C
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CAR ENTERING THE CAR PARKING SPACE



CAR LEAVING THE CAR PARKING SPACE

Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. SP8 / Revision B
Figure Title	SWEPT PATH OF PRIVATE CAR ENTERING AND LEAVING THE PARKING SPACE CP11 ON B1/F		Designed by L C H / Drawn by N C M / Checked by K C
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Attachment 2
Visual Impact Assessment

Section 16 Planning Application

for Proposed Minor Relaxation of Plot Ratio and Building Height for Information Technology and Telecommunication Industries (Data Centre) Use at 7-11 Wing Kin Road, Kwai Chung, New Territories

VISUAL IMPACT ASSESSMENT

Prepared by

KJL Limited

June 2025

Content

1. Background
2. Assessment Methodology
3. Assessment Area
4. Proposed Development
5. Viewing Points
6. Visual Assessment
7. Evaluation of Overall Visual Impact

Figures

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Figure 2: Photomontage of VP1 – Wing Kin Road
Figure 3: Photomontage of VP2 – Wing Chong Street
Figure 4: Photomontage of VP3 – Tsuen Wan Chinese Permanent Cemetery
Figure 5: Photomontage of VP4 – Kwai Chung Crematorium
Figure 6: Photomontage of VP5 – Footbridge linking Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road
Figure 7: Photomontage of VP6 – Kwai Chung Sports Ground
Figure 8: Photomontage of VP7 – Former Wing Kei Road Trucks Car Park
Figure 9: Photomontage of VP8 – Temporary Cricket Gound in Kwai Chung Park
Figure 10: Photomontage of VP9 – Tsing Yi Waterfront Promenade

1. Background

1.1 This application is submitted on behalf of OXO YW Limited, the registered owner of 7-11 Wing Kin Road, Kwai Chung, to seek the Town Planning Board's permission for the proposed minor relaxation of plot ratio restriction from 9.5 to 11.4 and building height restriction from 105mPD to 109.55mPD for permitted information technology and telecommunication industries (data centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145) and adjoining Government Land at Wing Chong Street (i.e., the application site).

2. Assessment Methodology

2.1 The assessment of visual impacts is prepared with reference to the Town Planning Board Guidelines No. 41, which includes the following procedures:

a. Identify the visual context and character in the vicinity of the application site;

b. Identify and select viewpoints (VPs) to assess the visual impact. The VPs should be easily accessible and popular with the public and/or visitors. Important viewpoints, such as popular areas used by the public for outdoor activities, recreation, special landmarks, valued landscape features etc., should be assessed where possible.

c. Illustrate the visual impact of the proposed development by using computer-generated photomontages.

d. Appraise the visual changes in respect of the aspects, including visual composition, visual obstruction, effect on public viewers and visual resources.

e. Evaluate the overall visual impact of the proposed development. Any design features or mitigation measures that help alleviate the visual impact will be proposed.

3. Assessment Area

3.1 The application site is located southwest of the Kwai Chung industrial area.

3.2 The visual envelope of the proposed development defines the assessment area for the visual impact assessment. The visual envelope generally covers an area of about 303m in radius from the proposed development (i.e. about three times the proposed building height). Major sensitive viewers in direct sight of the Proposed Development are identified for visual impact assessment (**Figure 1**). Kwai Chung Sports Ground and Tsing Yi Waterfront Promenade though located outside the 350m radius assessment area are included in this visual impact assessment due to their popular use by the public for outdoor activities.

3.3 To the west of the application site located the Tsuen Wan Chinese Permanent Cemetery, and southwest, the Kwai Chung Crematorium. A cluster of industrial buildings is situated

east of the application site across Tsuen Wan Road, while the Kwai Chung Sports Ground is further southeast and Kwai Chung Park to the south.

4. Proposed Development

4.1 The application site, with an area of about 964.2m^2, is proposed to redevelop an existing industrial building into an information technology and telecommunication industries (data centre). The proposed building is about 109.55mPD with 2 basement levels for parking and M&E facilities. In addition, a 3.7m full-height building setback fronting Wing Kin Road, and building setback from 6/F and above facing Wing Chong Street are proposed with the provision of planters and vertical greening to enhance visual amenities.

5. Viewing Points

5.1 A total of nine VPs are selected for this visual impact assessment. The nine VPs, same as those selected under the previous approved planning application (A/KC/496), are selected from different directions and distances (**Figure 1**). These VPs represent views from key pedestrian nodes, popular areas used by the public for outdoor activities and public open spaces: -

a. VP1: Wing Kin Road

b. VP2: Wing Chong Street

c. VP3: Tsuen Wan Chinese Permanent Cemetery

d. VP4: Kwai Chung Crematorium

e. VP5: Footbridge connecting Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road

f. VP6: Kwai Chung Sports Ground

g. VP7: Former Wing Kei Road Trucks Car Park

h. VP8: Temporary Cricket Gound in Kwai Chung Park

i. VP9: Tsing Yi Waterfront Promenade

6. Visual Assessment

6.1 VP1: Wing Kin Road (**Figure 2**)

6.1.1 VP1, located around 20m from the application site, is a short-distance view. VP1 consists of a 2-storey industrial building at the application site, situated between two existing industrial buildings, i.e. Global Trade Centre and Hou Feng Industrial Building. Since VP1 is a short-distance view, only the lower portions of the existing industrial buildings are visible. Therefore, industrial buildings dominate this VP1 without key visual resources. It represents a typical view of workers in the area. As the viewer population is low and the duration of view is short, the sensitivity of this VP is considered low.

6.1.2 As shown in the photomontage (Figure 2), only the lower portion of the proposed development will be visible from this VP. The proposed development will not cause any visual obstruction or create any visual incompatibility with the surroundings. Hence the effects on public viewers are considered negligible. With the replacement of the old industrial building by a modern-day development, the provision of a full length canopy as a shading element, planters and vertical greening on the lower floors, there will be a visual enhancement in the area. The planter proposed on G/F, 1/F and 2/F as a visual amenity softens the building edge.

6.1.3 Based on the comparison between the existing condition and the proposed scenario, there will be visual enhancement as stated in the aforesaid. However, there will also be an increase in building bulk due to the proposed development. The visual impact from this VP is therefore considered partly enhanced/partly adverse.

6.2 VP2: Wing Chong Street (**Figure 3**)

6.2.1 VP2, located around 20m from the application site, is a short-distance view. VP2 consists of a 1-storey structure at the application site with Hou Feng Industrial Building at the back. A portion of the sky view and tree plantings in Kwai Chung Park are visible at the end of Wing Chong Street, the key visual resource. Similar to VP1, VP2 represents a typical view of workers in the industrial area. However, as the viewer population is low and the duration of view is short, the sensitivity of this VP is considered low.

6.2.2 Similar to VP1, only the lower portion of the proposed development will be visible from the photomontage of VP2 (Figure 3). The proposed development will shield a part of the Hou Feng Industrial Building. There will be no changes to the visual composition and resources, i.e. the sky view and park trees. As shown in the photomontage, the proposed development will replace the old industrial building structure with a modern-day building and vertical greening, considered a visual enhancement in the area.

6.2.3 Based on the comparison between the existing condition and the proposed scenario, there will be visual enhancement as stated in the aforesaid. However, there will also be an increase in building bulk due to the proposed development. With the proposed vertical greening along the building façade, there will be a visual enhancement along Wing Chong Street. Therefore, the visual impact from this VP is considered partly enhanced/partly adverse.

6.3 VP3: Tsuen Wan Chinese Permanent Cemetery (**Figure 4**)

6.3.1 VP3 provides a distant view at around 300m west of the application site. The photo of VP3 is taken from the Tsuen Wan Chinese Permanent Cemetery, which provides a view overlooking the graveyard and existing tree plantings, the industrial buildings in the background, such as Kerry Tc Warehouse 2, Global Trade Centre, Mei Kei Industrial Building. In addition, a small portion of the mountain top near Woodland Villas is visible

from this VP with an open sky view as a backdrop. Grave sweepers and graveyard keepers usually visit where VP3 is located. However, considering visitors to the cemetery are generally limited to short stays, mainly during the Ching Ming and Chung Yeung Festivals, the visual sensitivity of this VP is considered low.

6.3.2 As shown in the photomontage (Figure 4), the proposed development will partially block a portion of the Wonderland Villas, a small portion of the mountain top and a very insignificant portion of the open sky view. Nevertheless, the proposed development of 109.55mPD blends well with the existing built environment and is visually compatible with the surrounding industrial developments. The proposed development will be of comparable height to the Kerry Tc Warehouse 2 (108.58mPD), Global Trade Centre (93.4mPD), Mei Kei Industrial Building (91.58mPD), and Ever Gain Plaza (140.4mPD). Though the proposed development will block a very small portion of the open sky view, such a blockage is considered slight with insignificant visual changes. Furthermore, the effects on the public viewers i.e. grave sweepers and graveyard keepers, are considered slight due to their short stay. Based on the comparison between the existing condition and the proposed scenario, the visual impact from this VP is considered negligible to slightly adverse.

6.4 VP4: Kwai Chung Crematorium (**Figure 5**)

6.4.1 VP4 provides a medium-range view at about 170m to the southwest of the application site. The photo is taken in front of the Kwai Chung Crematorium building. Industrial buildings with roadside trees in the foreground dominate the view. A portion of an open sky view and the roadside trees are the key visual resources in this VP. VP4 is normally visited by the deceased and those who attended funerals. The viewer population is low, and the duration of view is generally short. Therefore, the visual sensitivity of this VP is considered low.

6.4.2 As shown in the photomontage (Figure 5), only the middle portion of the proposed development can be seen from this VP. The proposed development will be largely blocked by Valid Industrial Centre and Wing Loi Industrial Building. Nevertheless, the proposed development will inevitably block a small portion of the sky view. The proposed development blends in well with the surrounding development with slight visual changes on public viewers. Based on the comparison between the existing condition and the proposed scenario, the visual impact from this VP is considered moderately adverse.

6.5 VP5: Footbridge connecting Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road (**Figure 6**)

6.5.1 VP5 is taken at the footbridge connecting Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road. The views along Kwai Fuk Road towards the application site are either blocked by roadside plantings or existing buildings, thus, the view from the footbridge is chosen because it is the closest means for pedestrians coming and leaving the area. VP5 is located

about 160m to the east of the application site. A portion of the Tsuen Wan Road flyover with Kwai Hei Street underneath and roadside plantings can be viewed in the foreground. Industrial Buildings are situated further back behind Tsuen Wan Road. The view from this footbridge is limited, and the duration of the view is short. Therefore, the visual sensitivity of this VP is considered low.

6.5.2 As shown in the photomontage (Figure 6), the proposed development will be entirely blocked by the existing industrial developments and roadside plantings. There will be no visual changes due to the proposed development. Based on the comparison between the existing condition and the proposed scenario, the overall visual impact is rated negligible.

6.6 VP6: Kwai Chung Sports Ground (**Figure 7**)

6.6.1 VP6 is located about 720m to the southeast of the application site. Kwai Chung Sports Ground is one of the major sports grounds in the Kwai Tsing District, providing facilities for track and field and football. Since there is a covered grandstand, the Sports Ground is also popular for school sports days. This VP is dominated by the football ground and running track with an open sky view. Clusters of industrial buildings are located behind the Sports Ground. The running track of the sports ground is opened for the public in the morning. Athletes and the public frequently visit it; hence, the viewer population is considered medium. Since the park users are normally occupied with different sports activities, the view duration is short. Therefore, the visual sensitivity of this VP is considered medium.

6.6.2 As shown in the photomontage (Figure 7), the proposed development is not visible from this VP since it is blocked by Kingsford Industrial Building (99.8mPD). There will be no visual changes due to the proposed development. Based on the comparison between the existing condition and the proposed scenario, the overall visual impact is rated negligible.

6.7 VP7: Former Wing Kei Road Trucks Car Park (**Figure 8**)

6.7.1 VP7 is located about 320m to the north of the application site. The former trucks car park site is currently under works. It is zoned "OU (Columbarium)" and intended to be used as columbarium and garden of remembrance in future. VP7 represents the viewer of the columbarium users in future. This view is predominated by the vacant ground in the foreground and industrial buildings with a sky view at the back. Similar to the Tsuen Wan Chinese Permanent Cemetery, visitors to the columbarium are generally limited to short stays and mainly during the Ching Ming and Chung Yeung Festivals. Therefore, the sensitivity of this VP is considered low.

6.7.2 As shown in the photomontage (Figure 8), only the upper portion of the proposed development is visible from this VP. Apart from blocking a small part of the sky view, there will be slight visual changes caused by the proposed development. The proposed development is of comparable height as the adjacent industrial buildings such as Kai Bo 22 (105mPD) and Kerry TC Warehouse 2 (108.58mPD). Since the duration of view is short, the effect on visual changes is considered not significant. Based on the comparison between the existing condition and the proposed scenario, the proposed development

blends in well with the surroundings. Therefore, the overall visual impact is rated slightly adverse.

6.8 VP8: Temporary Cricket Ground in Kwai Chung Park (**Figure 9**)

6.8.1 VP8 is located at about 300m to the south of the application site. This VP is taken from the temporary cricket ground in Kwai Chung Park. VP8 represents the users of the cricket ground. This view is dominated by the cricket field in the foreground with industrial buildings and open sky view in the back. The cricket ground is only opened for cricket players hence the viewer population is considered low. Since the viewer is in transient nature, the sensitivity of this VP is considered low.

6.8.2 As shown in the photomontage (Figure 9), the proposed development will be blocked by the existing industrial buildings in the area. Only the upper portion of the proposed development is visible from this VP. Apart from blocking a small part of the sky view, there will be insignificant visual changes caused by the proposed development. The proposed development is of comparable height as the adjacent industrial buildings such as Citic Telecom Tower (132.365mPD) and Kerry TC Warehouse 2 (108.58mPD). Based on the comparison between the existing condition and the proposed scenario, the proposed development blends in well with the surrounding buildings. Therefore, the overall visual impact is rated slightly adverse.

6.9 VP9: Tsing Yi waterfront Promenade (**Figure 10**) (1100m)

6.9.1 VP9 is taken from the Tsing Yi waterfront promenade across Rambler Channel. It provides a long-range view at about 1,100m to the west of the application site. The promenade is a popular place for leisure walk, jogging or sightseeing by the public and the residents in the area. The sea and an open sky view dominate the visual context of this VP. High-rise development such as Metro Plaza (173.4mPD) and Wonderland Villas (233.3-339.2mPD) can be viewed behind the Tsuen Wan Chinese Permanent Cemetery and Kwai Chung Park. View duration would be long as people would stop by the waterfront and enjoy the sea view. Therefore, the viewer population is high and visual sensitivity is considered high.

6.9.2 As shown in the photomontage (Figure 8), the proposed development will be completed shielded by the Tsuen Wan Chinese Permanent Cemetery. Based on the comparison between the existing condition and the proposed scenario, there will be no visual changes due to the proposed development. Therefore, the overall visual impact is rated negligible.

7. Evaluation of Overall Visual Impact

7.1 A total of 9 VPs are selected for this visual impact assessment. Based on the comparison between the existing condition and the proposed scenario, one will cause a moderately adverse visual impact by the proposed development, two cause a slightly adverse visual impact, two cause partly enhanced/partly adverse, one has negligible to slightly adverse and three have negligible visual impact. The overall visual impact is therefore envisaged to be negligible to slightly adverse.

7.2 The massing and disposition of the proposed development will not create a significant visual blockage or cause significant changes for public viewers. The proposed building height has been reduced by about 5% from 115.2mPD to 109.55mPD as compare to the previous approved scheme (A/KC/496). In conclusion, the scale and building height of the proposed development is considered visually compatible with the surrounding industrial developments. Furthermore, vertical greening and planters at lower levels of the building façade are proposed to minimise the likely visual impact and soften the proposed building structure. The area's street environment and visual amenities will be enhanced by replacing the old industrial building with a modern-day development and greening provision.

Figures

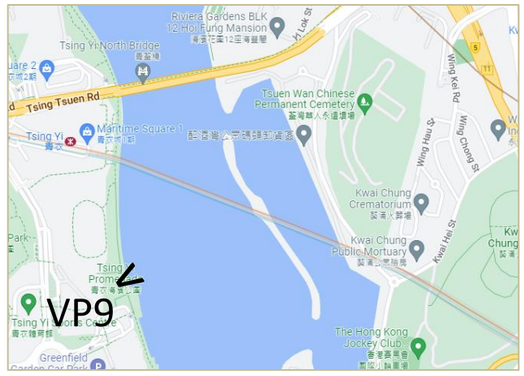


Legend

VP1 Wing Kin Road (**20m**)
VP2 Wing Chong Street (**20m**)
VP3 Tsuen Wan Chinese Permanent Cemetery (**300m**)
VP4 Kwai Chung Crematorium (**170m**)
VP5 Footbridge connecting Kwai Chung Park and Kwai Fuk Rd across Tsuen Wan Rd (**160m**)
VP6 Kwai Chung Sports Ground (**650m**)
VP7 Former Wing Kei Road Trucks Car Park (320m)
VP8 Temporary Cricket Ground in Kwai Chung Park (300m)
VP9 Tsing Yi waterfront Promenade (**1100m**)

Application Site

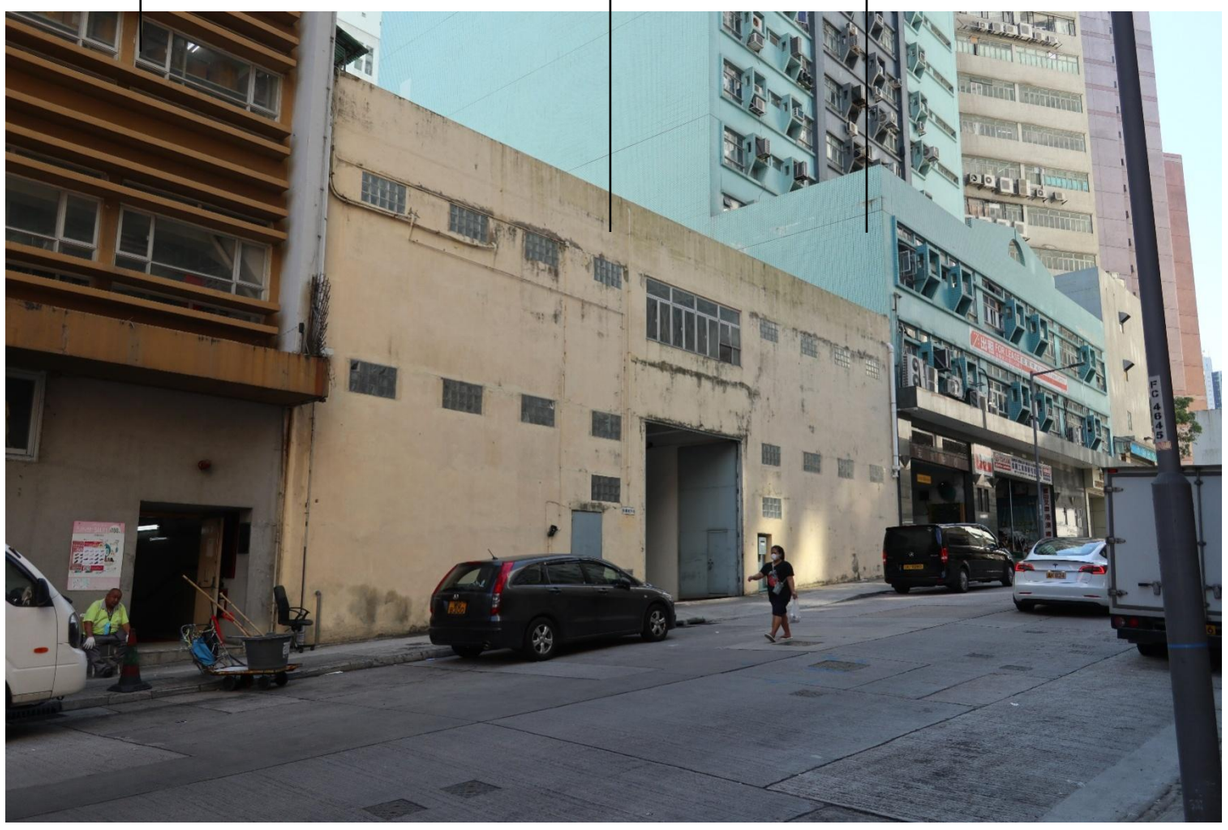
Visual Envelope



Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (DD446 Kwai Chung Town Lot 145)

Drawing Title:
Figure 1: Site Location with Viewing Points and Visual Envelope

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Existing Condition



With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145)

Drawing Title:
Figure 2: Photomontage of VP1 - Wing Kin Road

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Existing Condition



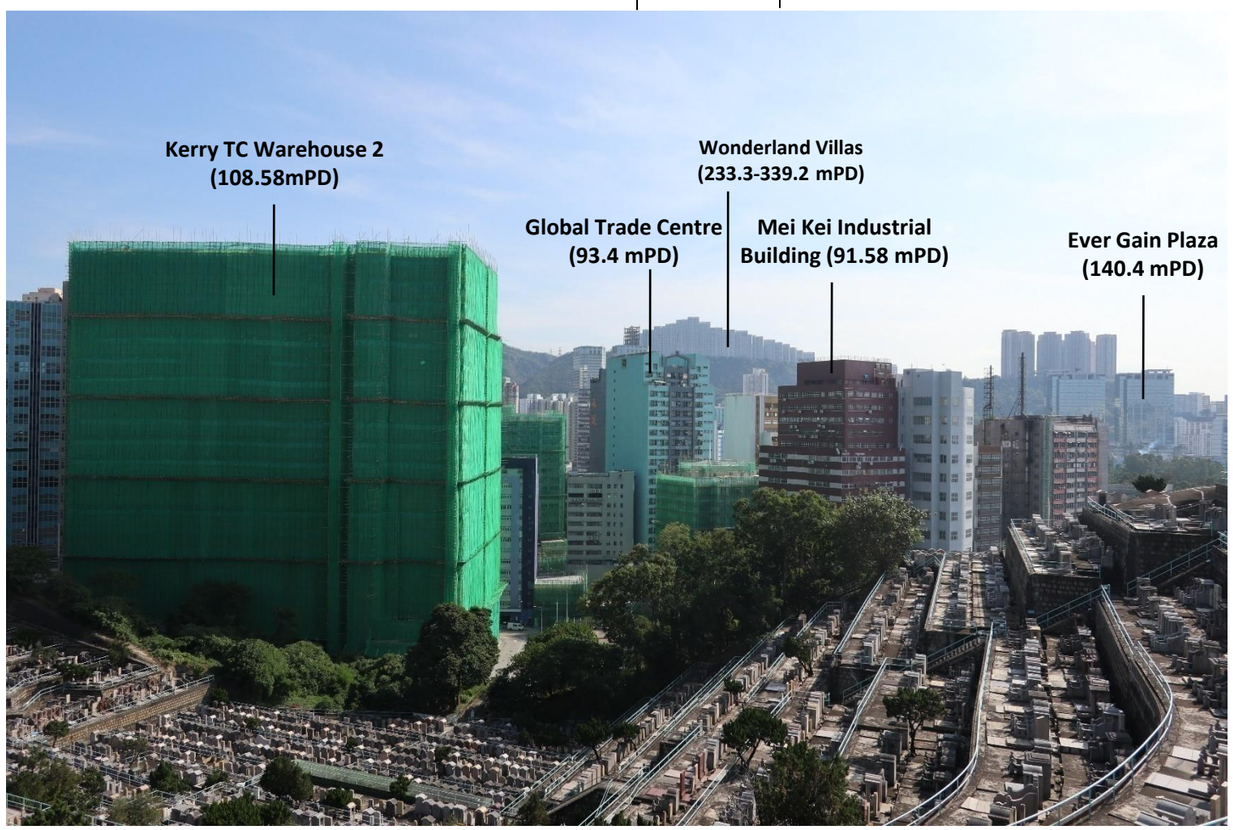
With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145)

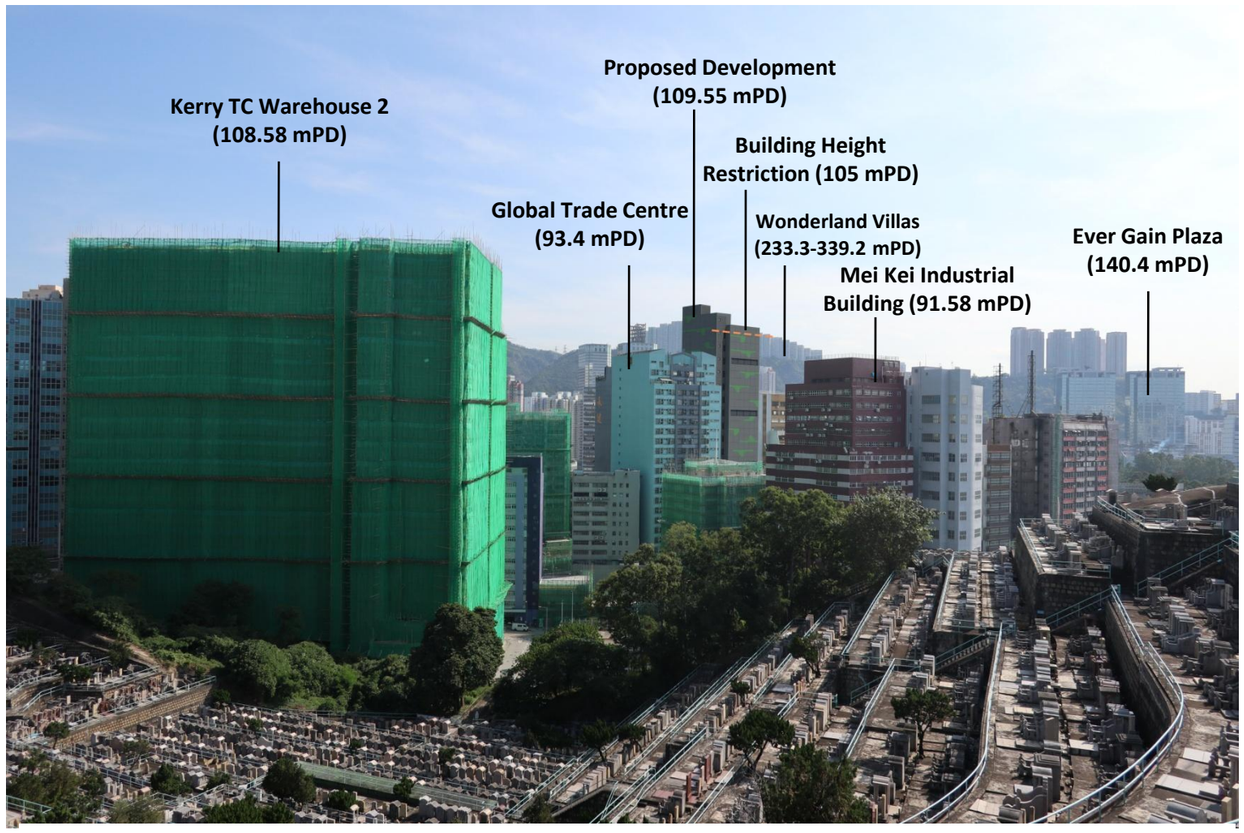
Drawing Title:
Figure 3: Photomontage of VP2 - Wing Chong Street

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Existing Condition



With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145)

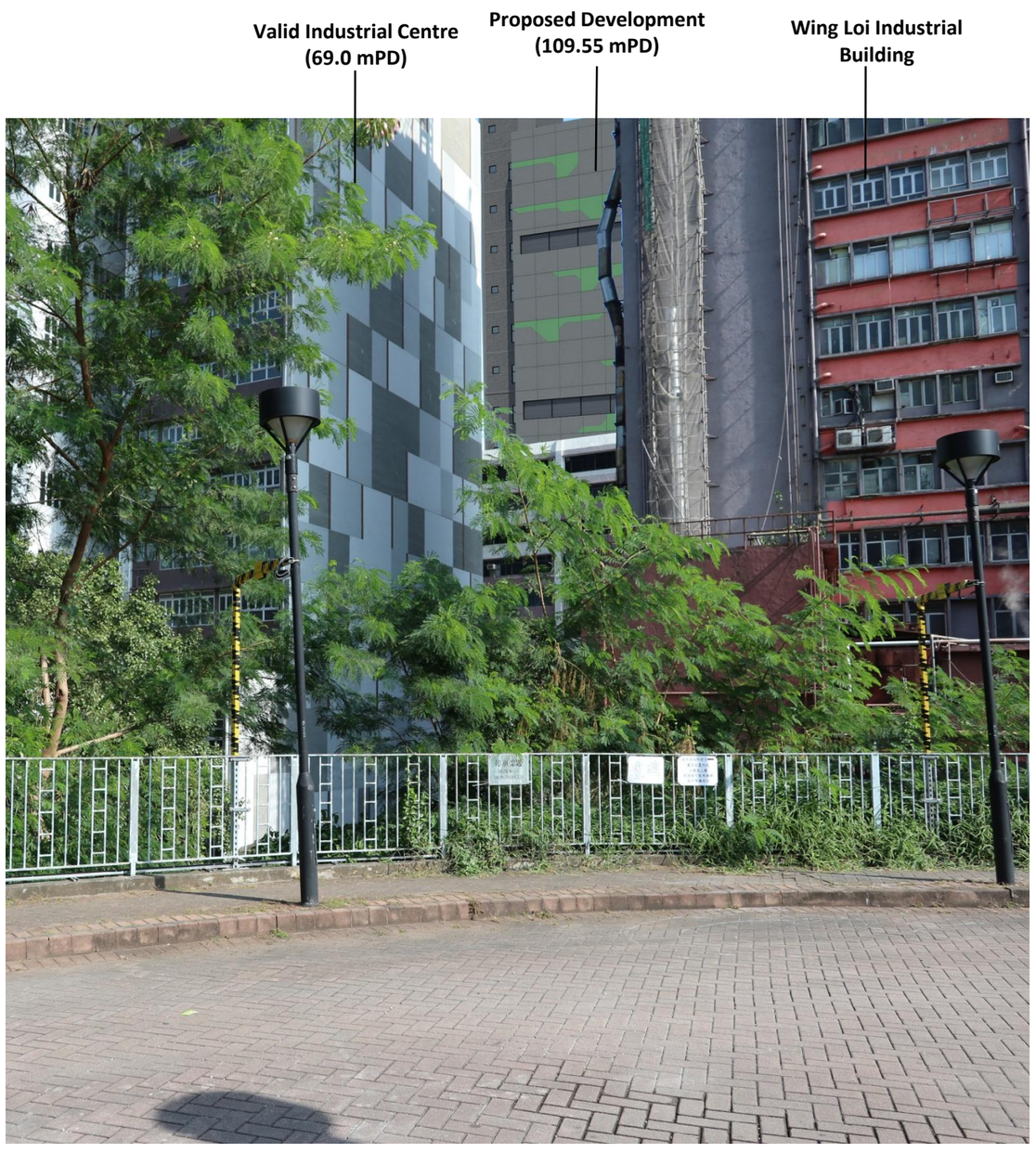
Drawing Title:
Figure 4: Photomontage of VP3 - Tsuen Wan Chinese Permanent Cemetery

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Existing Condition



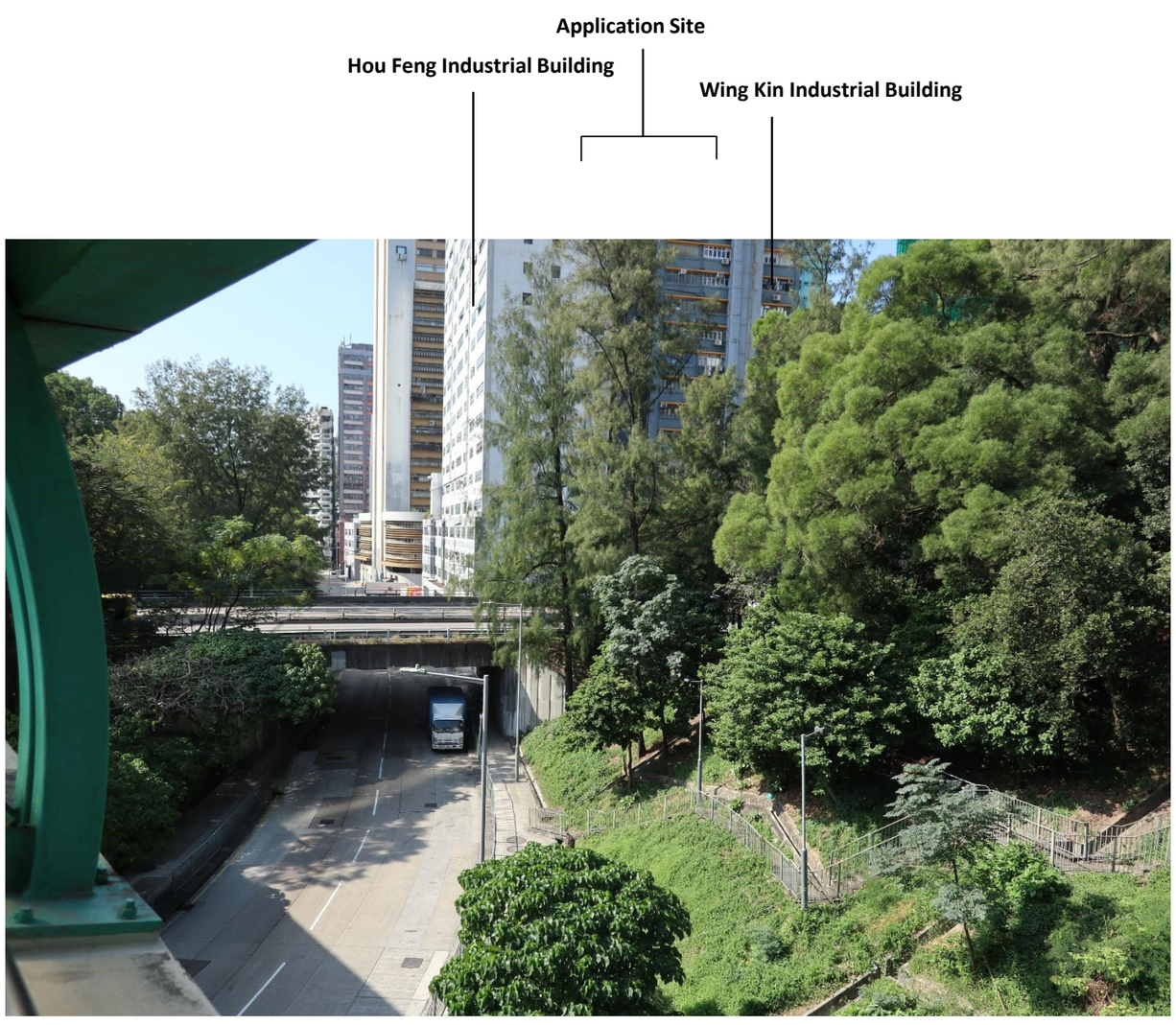
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Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145)

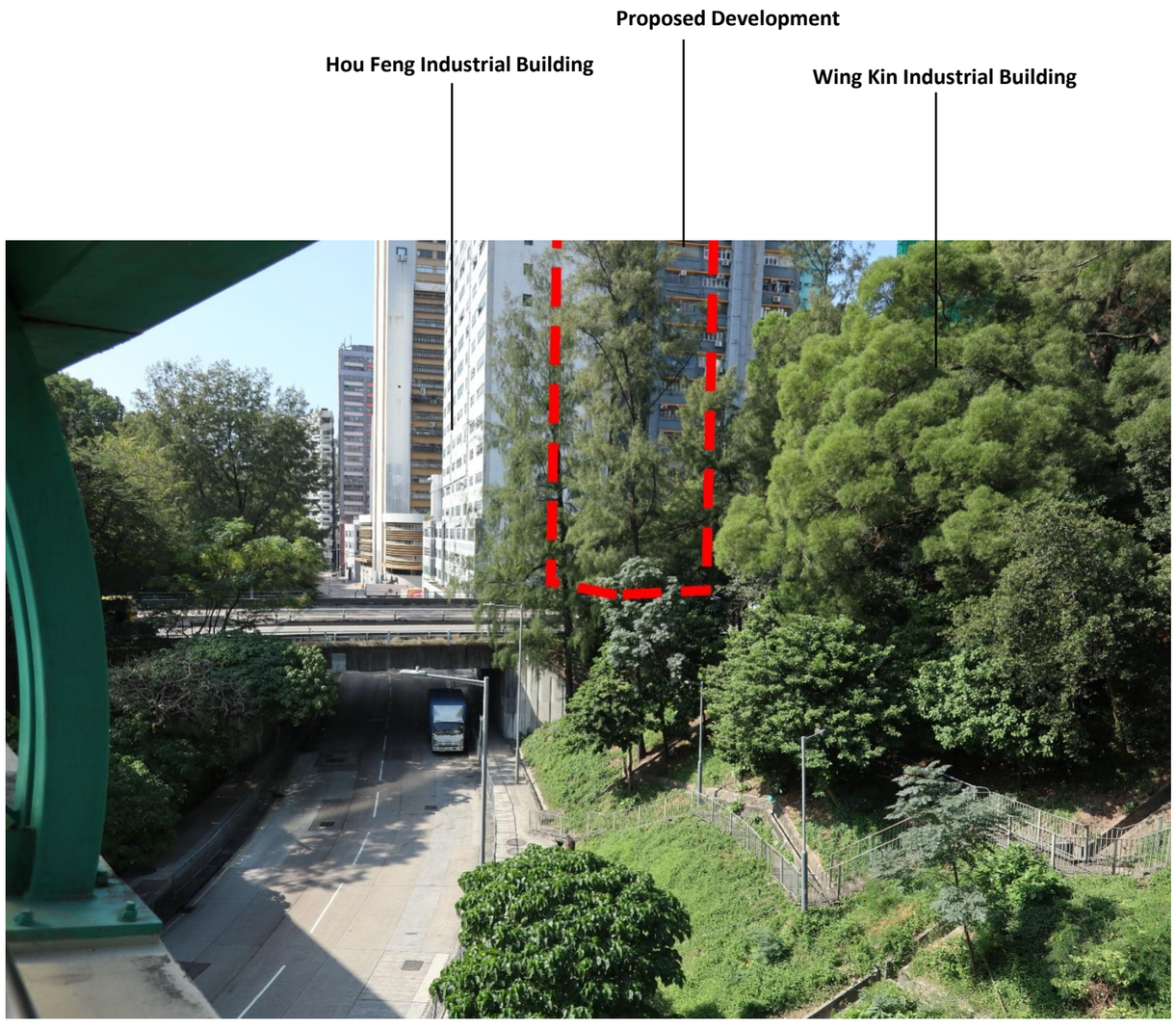
Drawing Title:
Figure 5: Photomontage of VP4 - Kwai Chung Crematorium

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Existing Condition



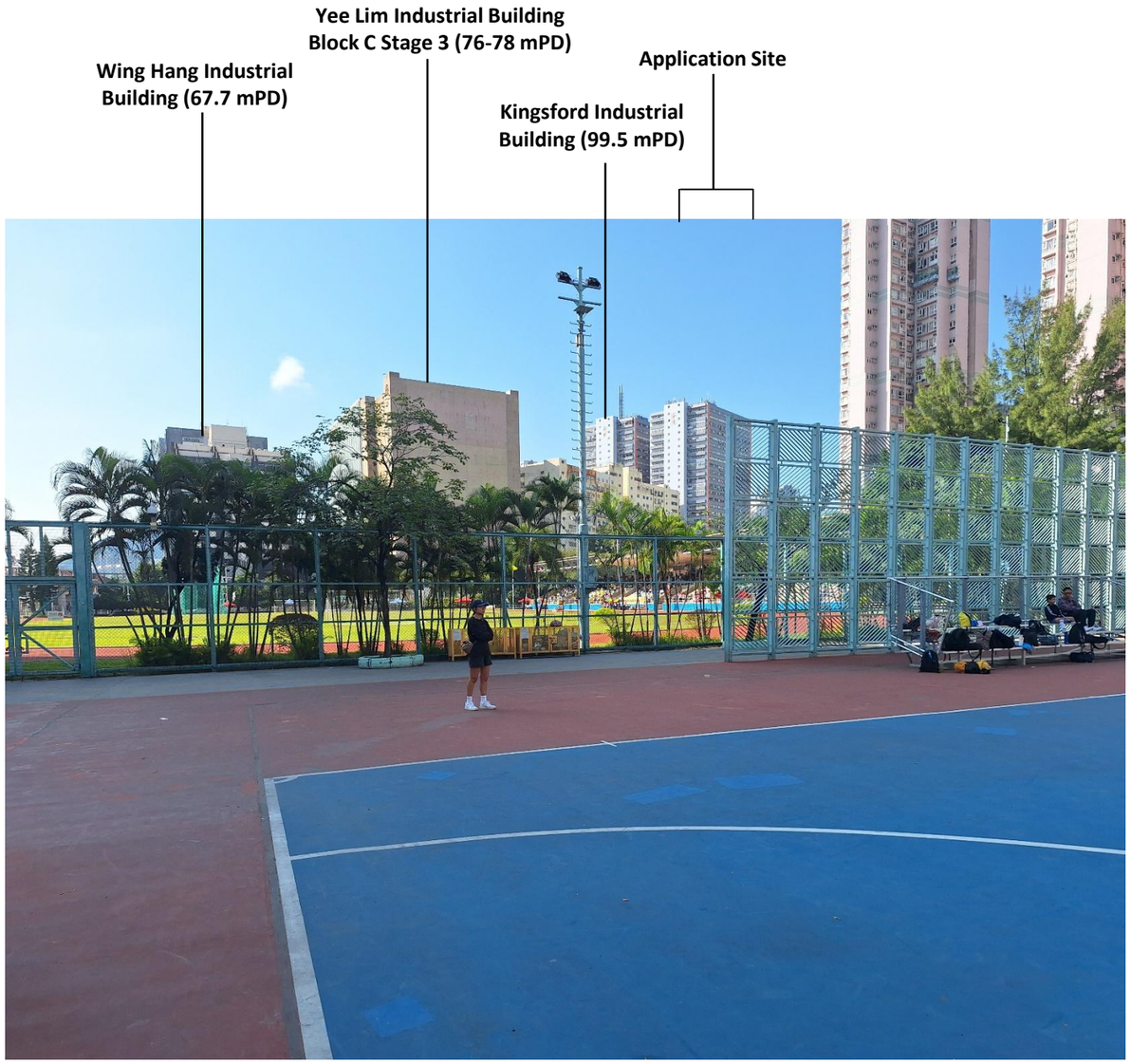
With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145)

Drawing Title:
Figure 6: Photomontage of VP5 - Footbridge linking Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road and Kwai Hei Street

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Existing Condition



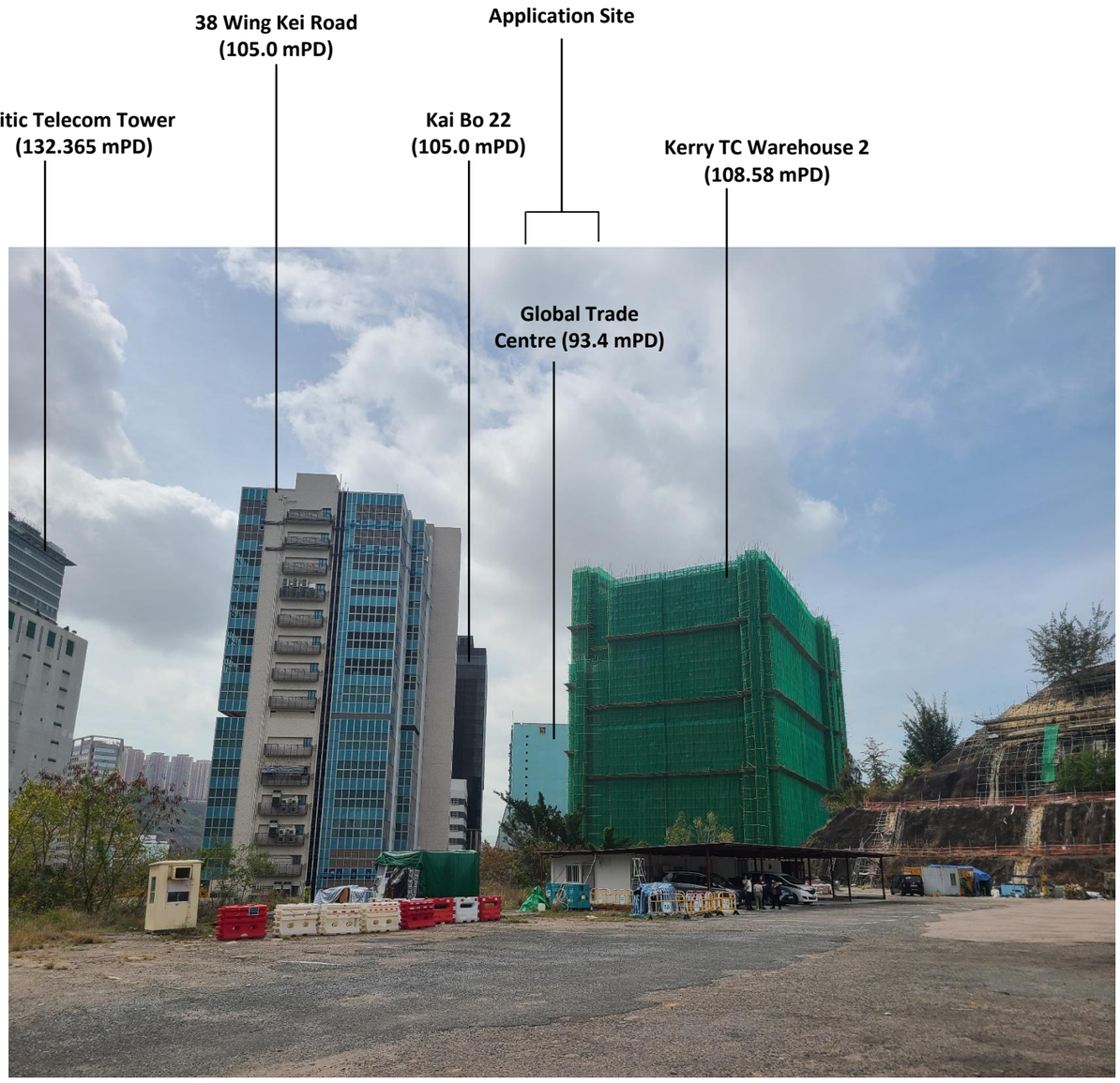
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Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145)

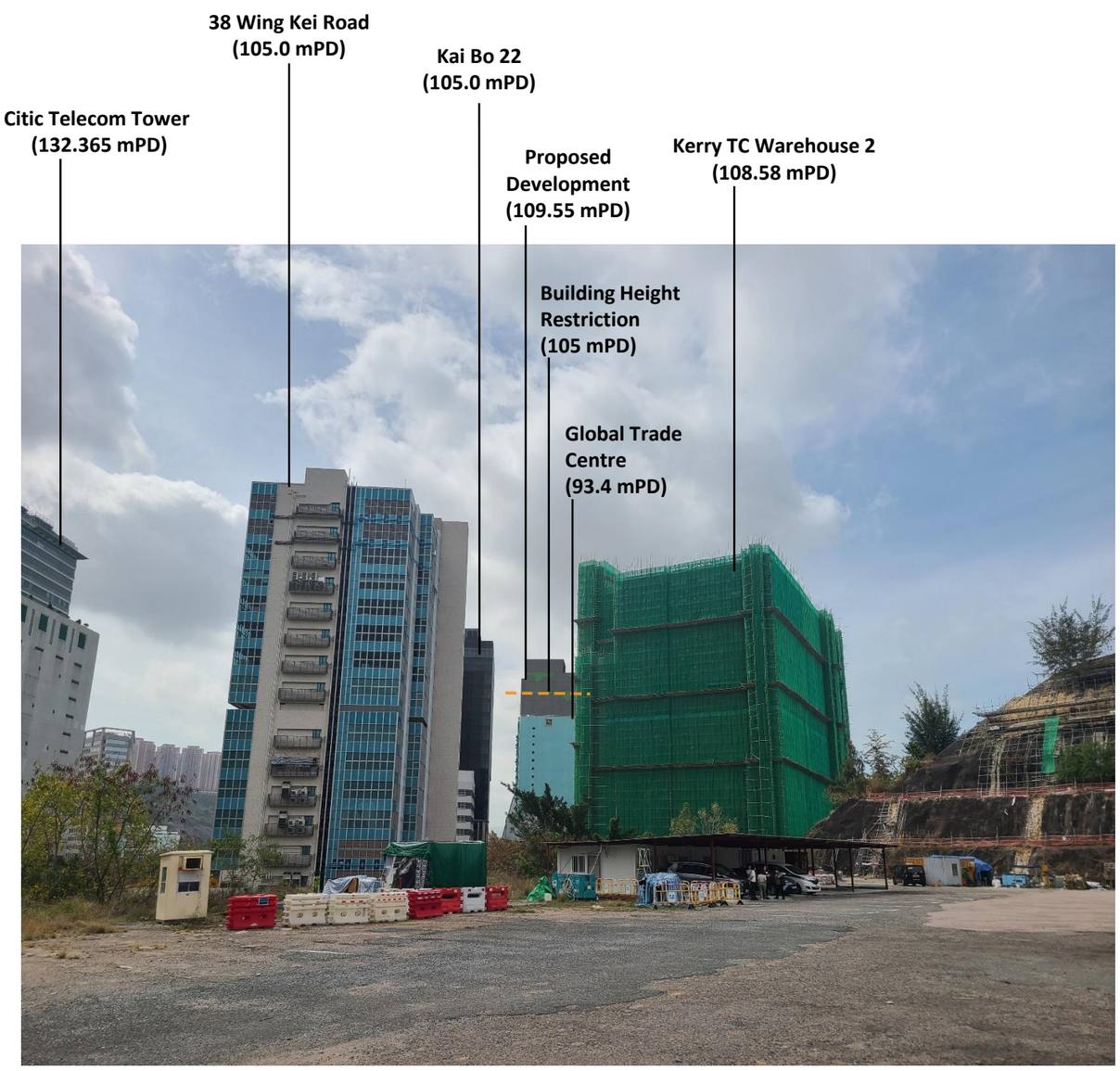
Drawing Title:
Figure 7: Photomontage of VP6 - Kwai Chung Sports Ground

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Existing Condition



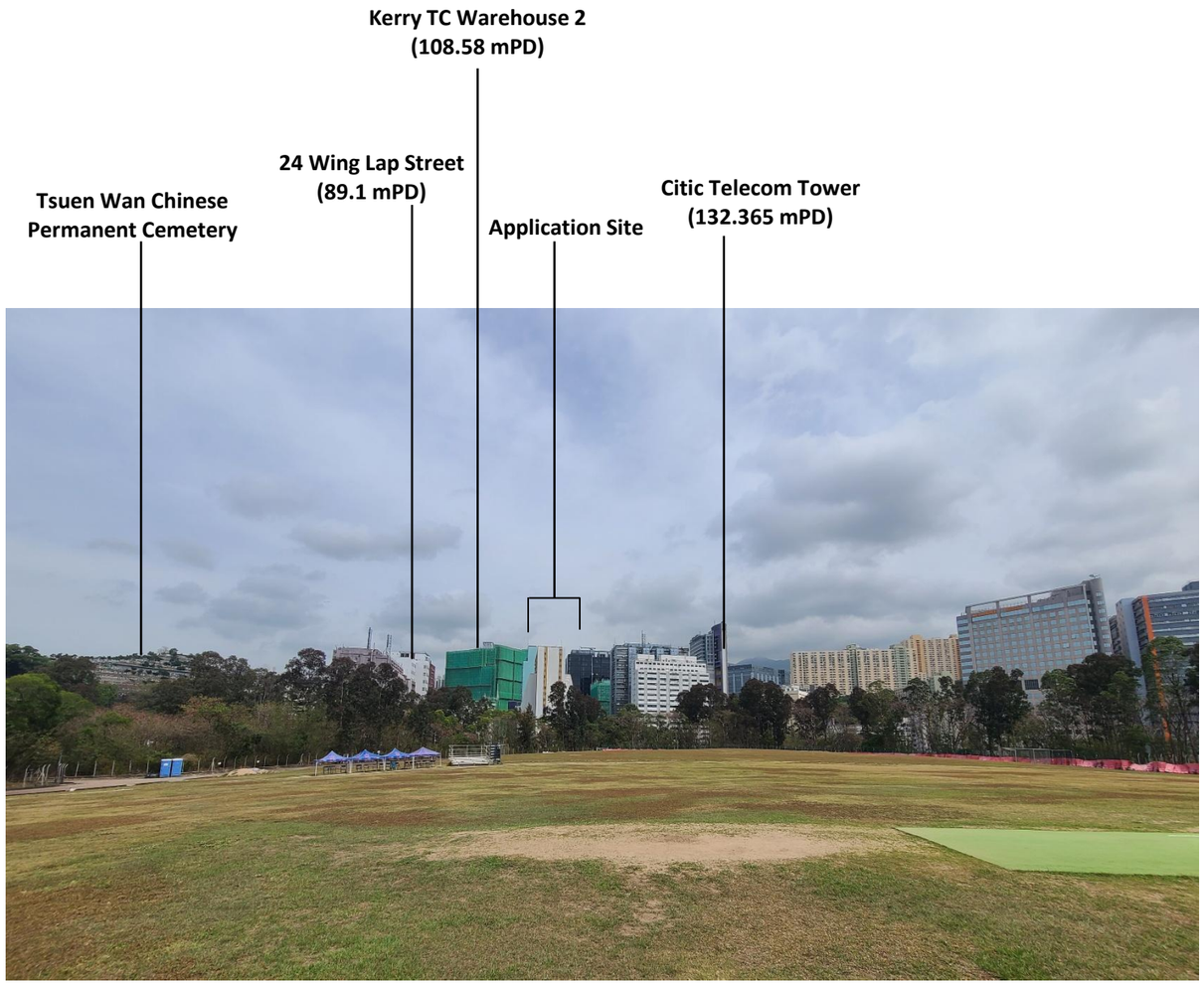
With Proposed Development

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Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145)

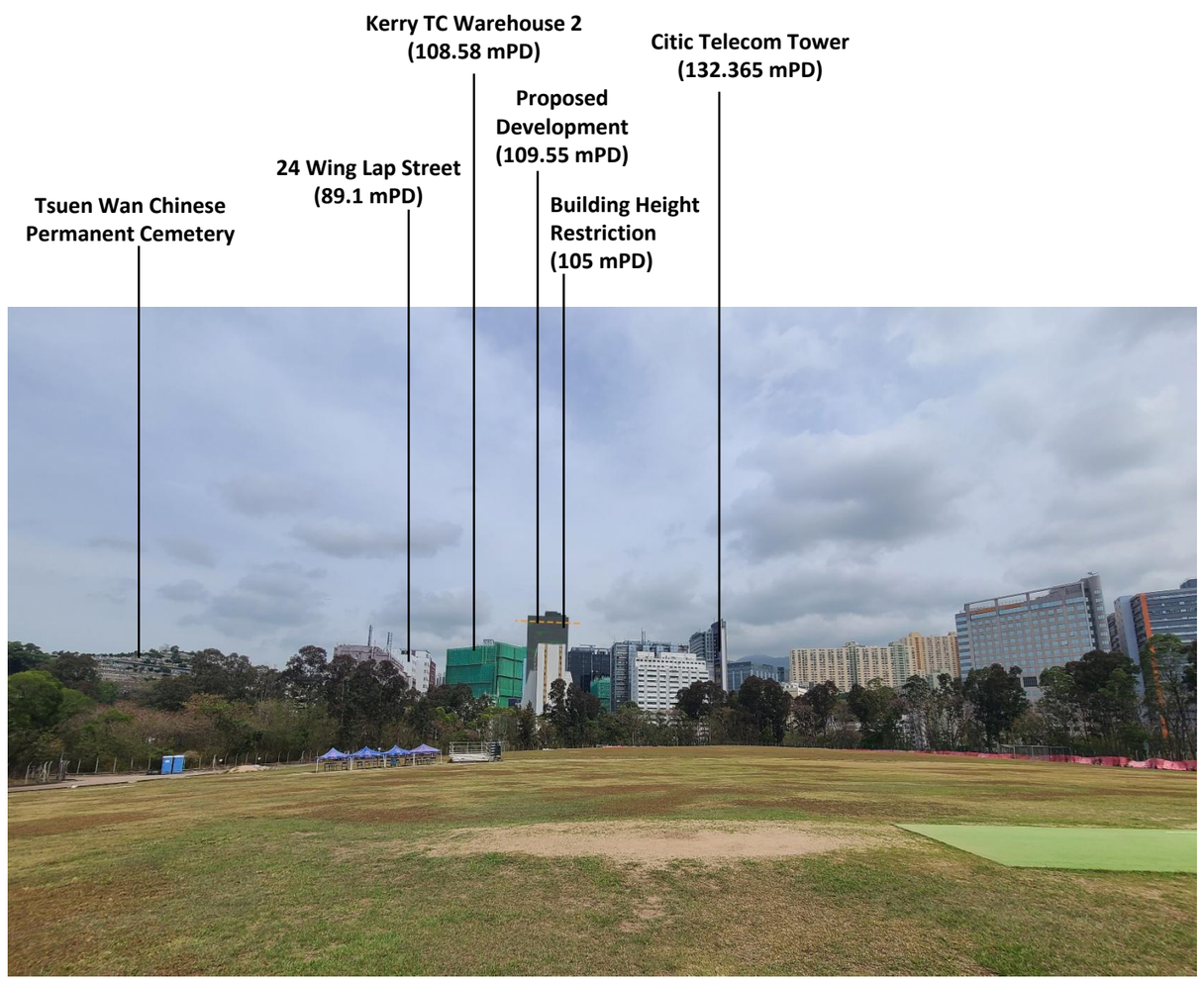
Drawing Title:
Figure 8: Photomontage of VP7 – Former Wing Kei Road Trucks Car Park

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Existing Condition



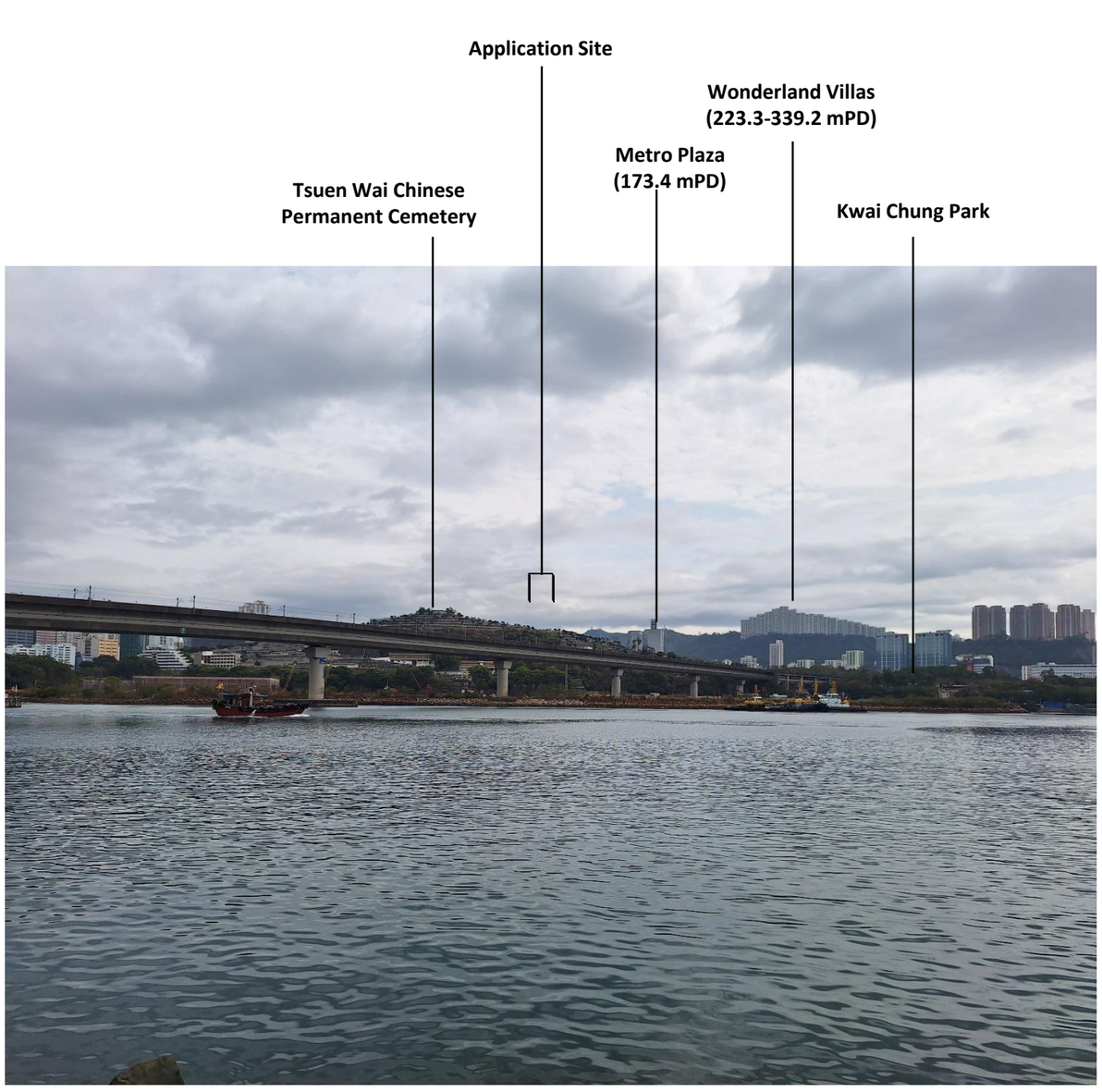
With Proposed Development

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Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145)

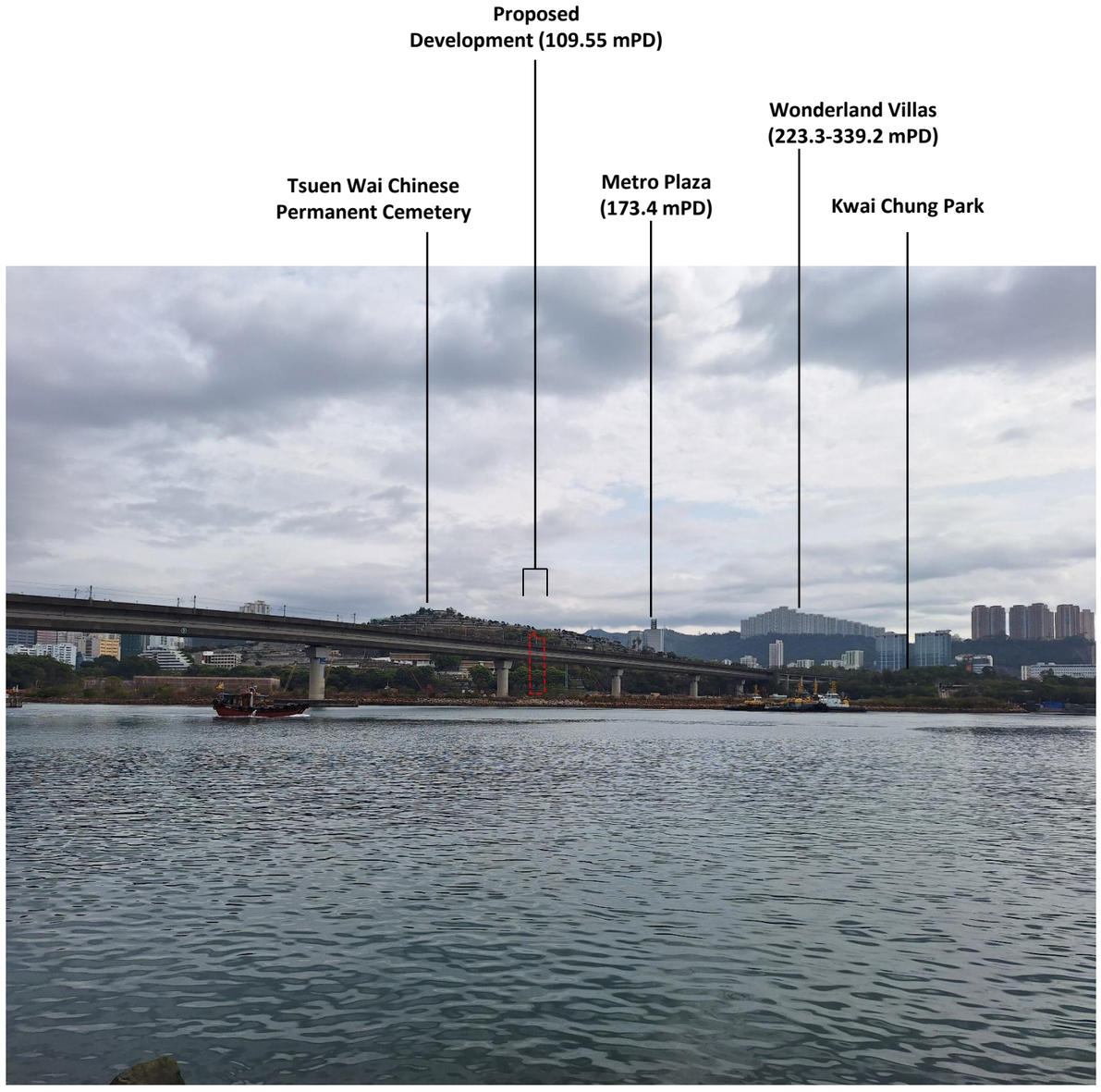
Drawing Title:
Figure 9: Photomontage of VP8 – Temporary Cricket Ground in Kwai Chung Park

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Existing Condition



With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Warehouse Use at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145)

Drawing Title:
Figure 10: Photomontage of VP9 - Tsing Ying Waterfront Promenade

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Attachment 3
Water Supply Impact Assessment

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Water Supply Impact Assessment

(V1.0)

May 2025

Approved By 

(Project Manager: K.S. Lee)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties.

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1 INTRODUCTION

1.1 Background

1.1.1 OXO YW Limited ("the Project Proponent") has proposed to develop a data centre located at No. 7-11 Wing Kin Road, Kwai Chung.

1.1.2 Cinotech Consultants Limited was commissioned by OXO YW Limited to carry out a Water Supply Impact Assessment (WSIA) to assess and envisage any potential water supply impact on the implementation of the Project and to recommend improvement / modification works on the existing water supply system.

2 DESCRIPTION OF THE ENVIRONMENT

2.1 Existing Environment

2.1.1 The Application Site (the "Site") is located in an industrial area in Kwai Chung, bordered by Wing Chong Street to the west, Wing Kin Road to the east, Global Trade Centre to the north, and Hou Feng Industrial Building to the south (see **Figure 2-1**). The Site and its surroundings fall within the industrial zone, as per the *Approved Kwai Chung Outline Zoning Plan No. S/KC/32* (see **Figure 2-2**).

2.1.2 The Site covers approximately 964 m² (about 929 m² excluding the additional area) and is currently occupied by a 2-storey industrial building. Planning applications have been submitted and approved with conditions in 2020 (Application No.: A/KC/457) and 2023 (Application No.: A/KC/496) for Offensive Trades use (Lard Boiling Factory) and Industrial use (Warehouse), respectively.

2.2 The Proposed Development

2.2.1 The Project Proponent proposes to redevelop the Application Site into a 17-storey data centre with a height of 109.55 mPD and a plot ratio of 11.4. The tentative section plan of the proposed development is shown in **Appendix I**, with a planned completion date of 2029.

2.2.2 It should be noted that the proposed development is intended for Data Processing Centre use, and its water consumption behavior will differ significantly from typical industrial and commercial uses.

2.2.3 The major water consumption sources for the proposed development include:

- Water usage by staff
    - The proposed development is expected to be unmanned and automated, with a limited number of staff. As advised by the project applicant, up to 25 staff members will be employed.
- Water consumption for the water cooling tower system

  - A water cooling tower system will be implemented to meet the significant cooling demand, which will predominantly influence the fresh water requirements.
- Irrigation of planters

2.2.4 On the other hand, no other water consumption activities within the proposed development are anticipated.

2.2.5 During operation, the bleed-off water from the water cooling tower system will be reused as much as practicable, with the expectation that all salt water demand for the proposed development will be met.

Development Parameters

2.2.6 This assessment is prepared based on the following development parameters (**Table 2-1**) of the notional design, which are subject to changes at detailed design stage:

Table 2-1 Development Parameters

	Existing	**Proposed Development**
Zoning	Industrial	
Site Area	About 964.2 m^2	
Use	Industrial	Data Processing Centre
Domestic GFA	0 m^2	0 m^2
Non-Domestic GFA (Industrial)	941.21 m^2	About 10,991.88 m^2
Building Height	60 mPD	109.55 mPD

Remarks: Development Parameters of the proposed development subject to detailed design.

3 WATER SUPPLY IMPACT ASSESSMENT – FRESH WATER

3.1 Existing Fresh Water Supply

3.1.1 The Application Site is currently served by the Lai Chi Kok Fresh Water Supply Reservoir (FWSR) (Capacity: 93,702 m^3).

3.1.2 The Application Site is currently served by the 25 mm and 50 mm branches from the 300 mm fresh water main along Wing Kin Road, which originates from the 400 mm fresh water main along Kwai Hei Street.

3.1.3 The simplified fresh water mains records are illustrated in **Figures 3-1 and 3-2**. The Water Supplies Department (WSD) Fresh Water Mains Record Plan is provided in **Appendix II**.

3.2 Fresh Water Demand

3.2.1 The calculations of fresh water demand are generally following Departmental Instruction (DI) No. 1309 "Design Criteria,", which adopted a per person or per GFA water consumption rate. The fresh water demand of the existing development is calculated in **Table 3-1** and detailed in **Table B of Appendix IV**.

Table 3-1 Fresh Water Demand of the Existing Development

	Category	GFA (ha)	Unit Demand Fresh Water (m^3/ha/day)	Daily Demand Fresh Water (m^3/day)
Industrial (Tsuen Wan)	I	0.094	1600	150.594

3.2.2 As stated in **Section 2.2**, the water consumption behavior of the proposed development will differ significantly from typical industrial and commercial uses. Therefore, the water usage for staff, the water cooling tower system, and irrigation will be calculated separately, rather than using a GFA-based broad-brush estimation. Since the staff will not serve any customers, the water consumption figures for residents have been adopted. The fresh water demand of the proposed development is provided in **Table 3-2 & Table 3-3**, and detailed in **Tables C1 & C2 of Appendix IV**.

Table 3-2 Fresh Water Demand of the Proposed Water Cooling Tower System

		Unit	Remark
Designed Cooling load (Nominal)	14	MW	
Working Hour	24	hour/day	
Peak and Design Factor	1.45		
Water evaporating rate under nominal load (with Peak and Design Factor)	8.9942	kg/s	Heat of vaporization for water is 2,257 kJ/kg
	777.10	m^3/day	
Ratio of bleed-off water	20%	%	A ratio 5:1 for evaporating : discharging has been adopted.
Amount of bleed-off water	155.42	m^3/day	
Total water requirement	**932.52**	**m^3/day**	

Table 3-3 Fresh Water Demand of the Proposed Development

	Category	Population or/ GFA (ha)	Unit Demand Fresh Water (m^3/head/day) or (m^3/ha/day)	Daily Demand Fresh Water (m^3/day)
Staff	R	25 (Population)	0.35	8.750
Water Cooling Tower system	N/A	N/A	N/A	932.523
Planter	IRR	0.029 (GFA) [1]	700	20.248

Noted:
[1] 30% of the Site area has been adopted for conservative assessment.

3.2.3 The fresh water demand for the site is expected to increase significantly from 150.594 m³/day to 961.521 m³/day, representing an increase of 810.927 m³/day (or 0.811 MLD). The calculations for fresh water demand in both existing and proposed scenarios are summarized in **Table 3-4**.

Table 3-4 Summary of Fresh Water Demand

Daily Demand - Fresh Water (m^3/day)		
Existing	***Proposed***	***Net Increase***
150.594	961.521	810.927

3.3 Fresh Water Supply Impact - Fresh water service reservoir

3.3.1 As shown in **Table D of Appendix IV**, there is substantially greater spare capacity (63.1 MLD) in Lai Chi Kok FWSR. The expected increase in demand (0.811 MLD) can therefore be accommodated by the existing Fresh Water Service Reservoirs. No adverse impact to the fresh water service reservoirs is anticipated.

3.4 Fresh Water Supply Impact – Fresh Water Mains

3.4.1 The Application Site is currently served by the 25 mm and 50 mm branches from the 300 mm fresh water main along Wing Kin Road, which originates from the 400 mm fresh water main along Kwai Hei Street as shown in **Figures 3-1 & 3-2**.

3.4.2 According to Departmental Instruction (DI) No. 1309 "Design Criteria," (DI 1309) the peak flow rate in the distribution mains for fresh water should be three times the daily demand. Based on this criterion, the estimated peak daily fresh water demand for the proposed development is approximately 2,884.6 m^3/day. By following the maximum sustained flow velocity as suggested in DI 1309 (**Table A2 of Appendix IV**), the capacities of the 150 mm, 200 mm, 300 mm & 400 mm fresh water mains are determined to be 2,290 m^3/day, 4,072 m^3/day, 9,161 m^3/day, & 21,715 m^3/day respectively.

3.4.3 Taking into account the fresh water consumption of the proposed development, it has been determined that the existing 50 mm and 25 mm branches cannot meet the fresh water demand of the Site.

3.4.4 Therefore, a new 200 mm fresh water main connected to the existing 400 mm fresh water main along Kwai Hei Street has been proposed, as shown in **Figure 3-2**. Meanwhile, the existing 50 mm and 25 mm branches will be removed. The specific alignment and connection points of the proposed new water pipes will be determined during the detailed design phase of the development.

4 WATER SUPPLY IMPACT ASSESSMENT – SALT WATER

4.1 Existing Salt Water Supply

4.1.1 The Application Site is currently served by Tsuen Wan Salt Water Pumping Station (SWPS) (Design Pumping Capacity: 93 MLD).

4.1.2 The Application Site is currently served by a 25 mm branch from the 150 mm salt water main along Wing Kin Road.

4.1.3 The simplified salt water mains records are illustrated in **Figure 4-1**. The Water Supplies Department (WSD) Salt Water Mains Record Plan is provided in **Appendix III**, and detailed in **Table B of Appendix IV**.

4.2 Saltwater Supply Demand

4.2.1 The calculations of salt water demand are generally following Departmental Instruction (DI) No. 1309 "Design Criteria,", which adopted a per person or per GFA water consumption rate. The fresh water demand of the existing development is calculated in **Table 3-4**.

Table 4-1 Salt Water Demand of the Existing Development

	Category	GFA (ha)	Unit Demand Salt Water (m^3/ha/day)	Daily Demand Salt Water (m^3/day)
Industrial (Tsuen Wan)	I	0.094	210	19.765

4.2.2 Similar to the calculation of fresh water demand for the proposed development, the salt water consumption figures for residents have been adopted for staff. It should be noted that there is no salt water demand from the water cooling tower system or irrigation. The salt water demand of the proposed development is provided in **Table 4-2**, and detailed in **Table C2 of Appendix IV**.

Table 4-2 Salt Water Demand of the Proposed Development

	Category	Population	Unit Demand Salt Water (m^3/head/day)	Daily Demand Salt Water (m^3/day)
Staff	R	25	0.110	2.750

4.2.3 The salt water demand for the site is expected to reduce from 19.765 m³/day to 2.750 m³/day, representing a decrease of 17.015 m³/day (or 0.017 MLD). The calculations for salt water demand in both existing and proposed scenarios are summarized in **Table 4-3**.

Table 4-3 Summary of Salt Water Demand

Daily Demand - Salt Water (m^3/day)		
Existing	***Proposed***	***Net Increase***
19.765	2.750	-17.015

4.3 Saltwater Supply Impact – Salt Water Pumping Station

4.3.1 It should be noted that the existing daily consumption of the Tsuen Wan SWPS is close to its capacity. However, as shown in **Table 4-3**, the salt water demand is expected to decrease in the proposed development compared to the existing situation. Additionally, since the bleed-off water from the water cooling tower system will be reused as flushing water, no salt water demand is anticipated once the water reuse system of the cooling tower is properly implemented. No adverse impact to the salt water pumping station is anticipated.

4.4 Saltwater Supply Impact – Salt Water Mains

4.4.1 The Application Site is currently served by a 25 mm branch from the 150 mm salt water main along Wing Kin Road, as shown in **Figure 4-1**.

4.4.2 According to Departmental Instruction (DI) No. 1309 "Design Criteria," the peak flow rate in the distribution mains for salt water should be two times the daily demand. Based on this criterion, the estimated peak daily salt water demand for the proposed development is approximately 5.5 m^3/day. By following the maximum sustained flow velocity as suggested in Departmental Instruction (DI) No. 1309 "Design Criteria" (**Table A2 of Appendix IV**), the capacities of the 25 mm and 150 mm salt water mains are determined to be 64 m^3/day and 2,290 m^3/day, respectively.

4.4.3 Taking into consideration the reduced salt water consumption of the proposed development, it has been determined that the existing 25 mm salt water main can meet the salt water demand of the Site, even when the water reuse system of the cooling tower is out of order. Therefore, no modifications to the salt water mains are required.

5 CONSTRUCTION AND MAINTENANCE

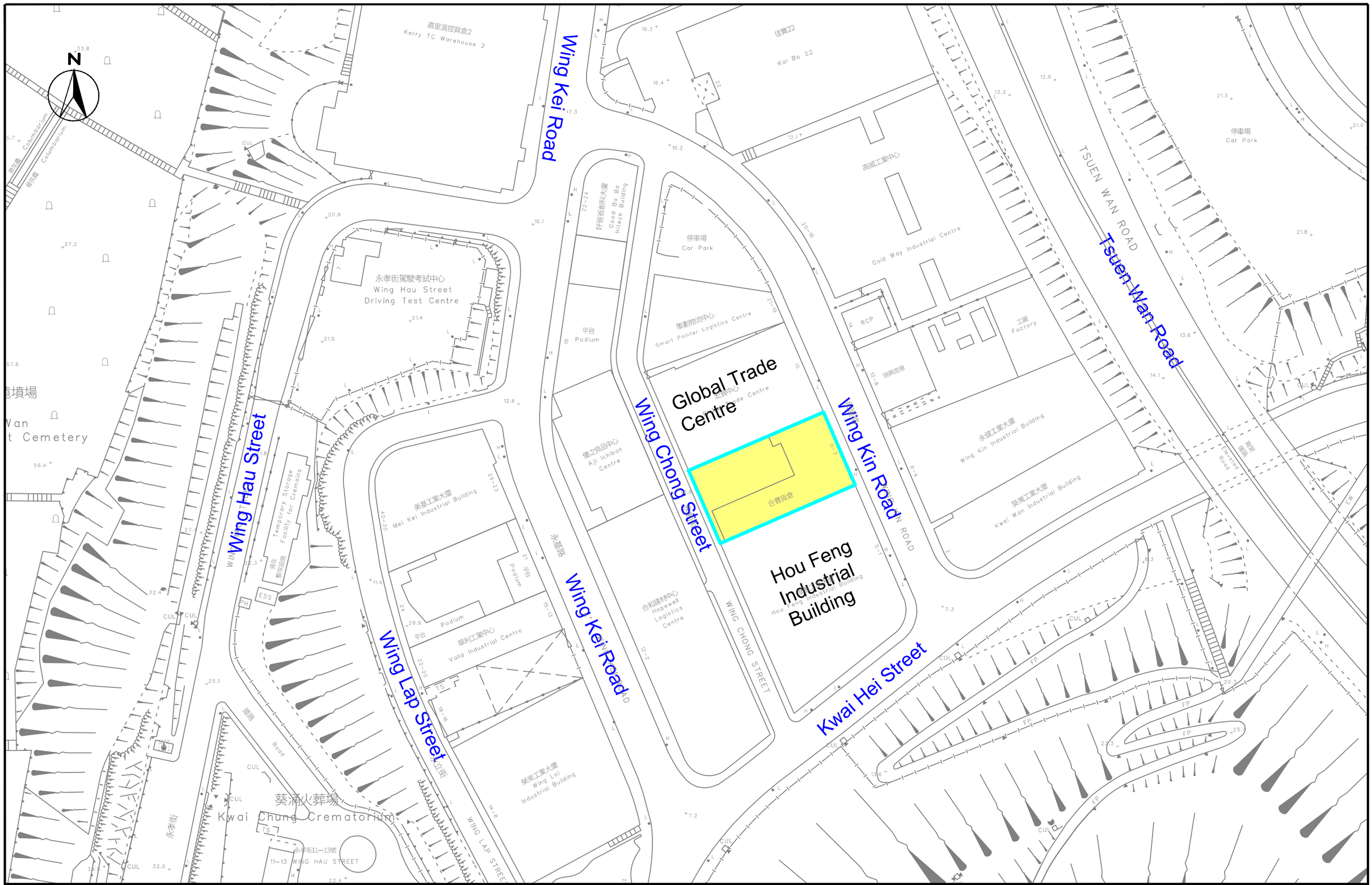
5.1.1 The detailed connection arrangements, responsibilities for the investigation, design, construction, repair and maintenance of the proposed modification to the fresh water mains system will be discussed among the Project Proponent and relevant Government departments in detailed design stage.

6 CONCLUSION

6.1.1 The potential water supply impact under the worst-case scenario of the proposed development has been reviewed. The assessment conducted concludes that no upgrading works on the water supply infrastructure will be required.

6.1.2 For the local water supply network, although the proposed development will result in additional fresh water demand, the increases can be accommodated by the existing main supply facilities and the proposed new pipes. Therefore, no adverse water supply impact is anticipated from the proposed development.

FIGURES

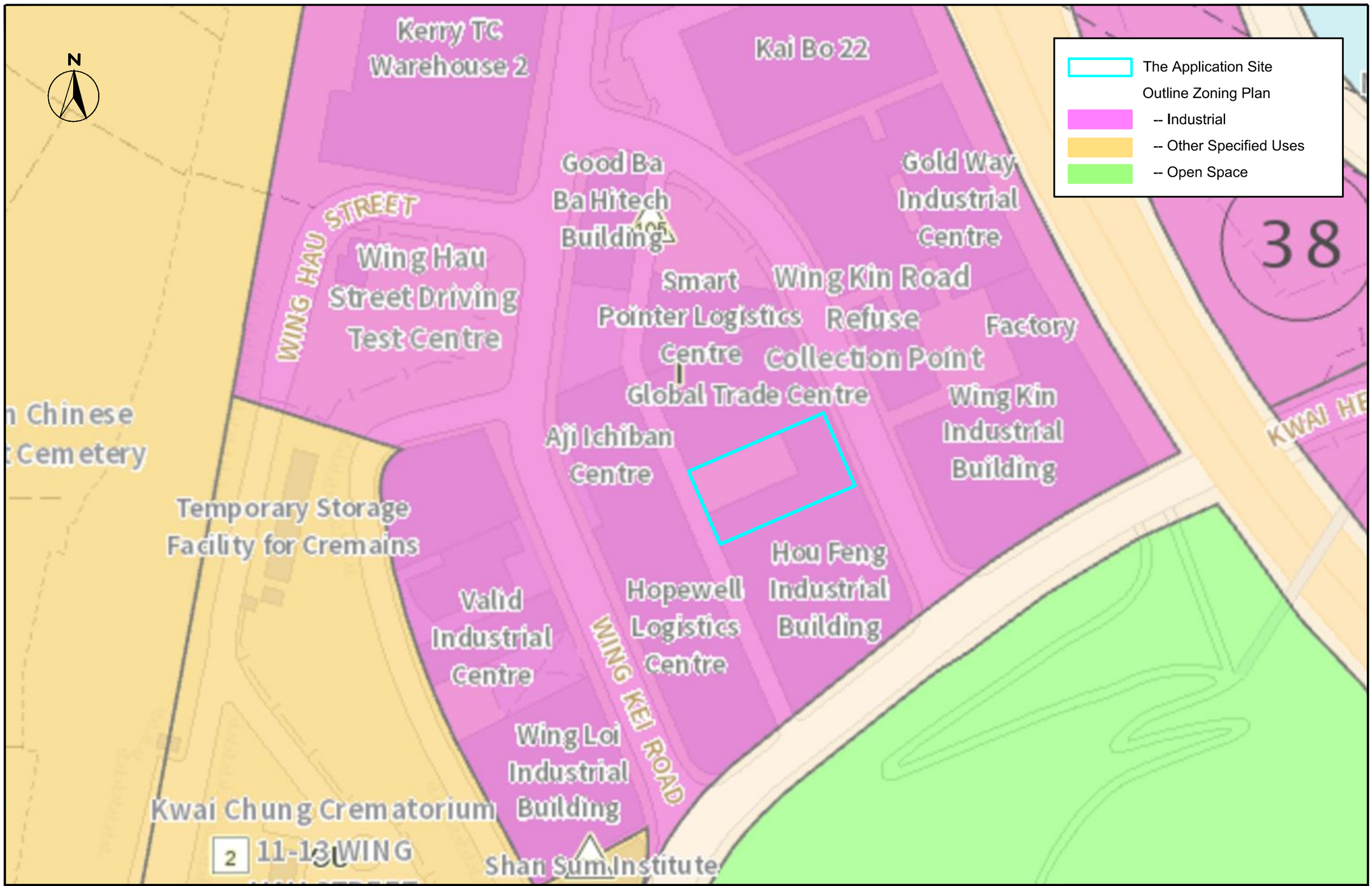


Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Location of the Project Site

CINOTECH
Cinotech Consultants Limited

SCALE	1:1000 @ A3	DATE	Jan 2025
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	2-1
		REV	-



CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Zoning in the Vicinity of the Project Site

SCALE	1:1000 @ A3	DATE	Jan 2025
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JOB No.	IA23170	DRAWING No.	2-2
		REV	-

The Application Site

Existing Fresh Water Main

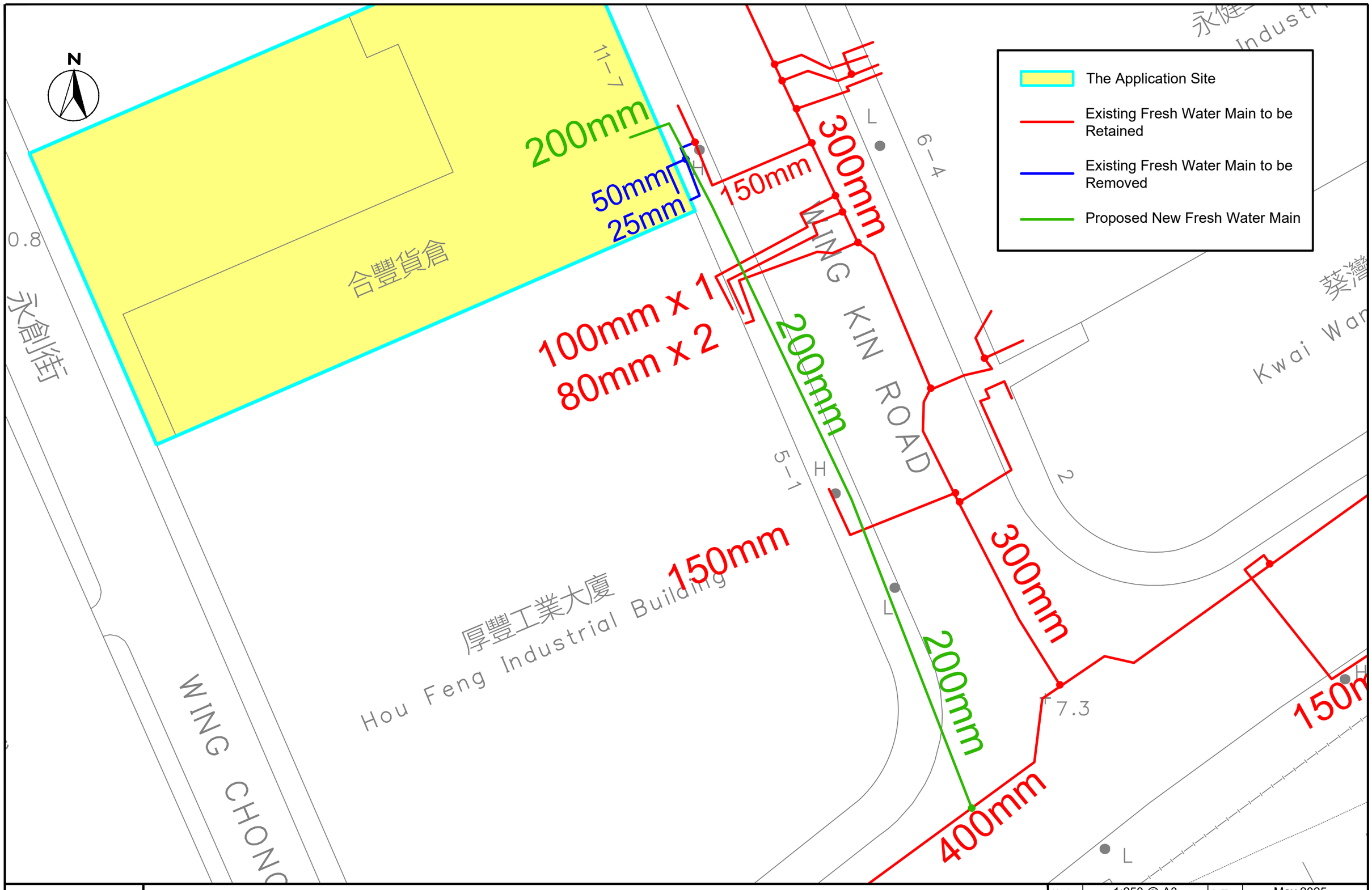
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200mm

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Fresh Water Mains in the Vicinity

CINOTECH
Cinotech Consultants Limited

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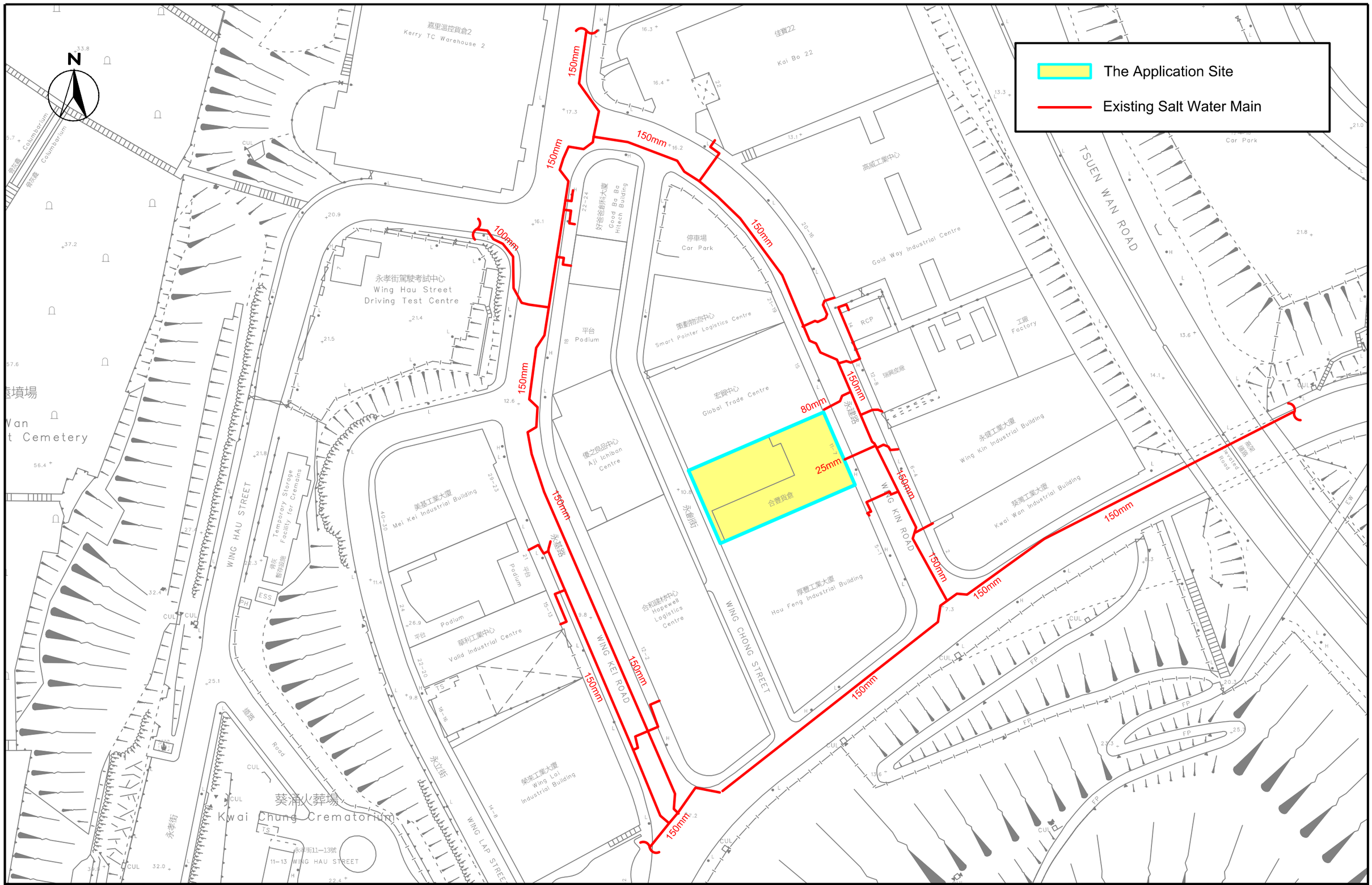


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Modification of Fresh Water Mains

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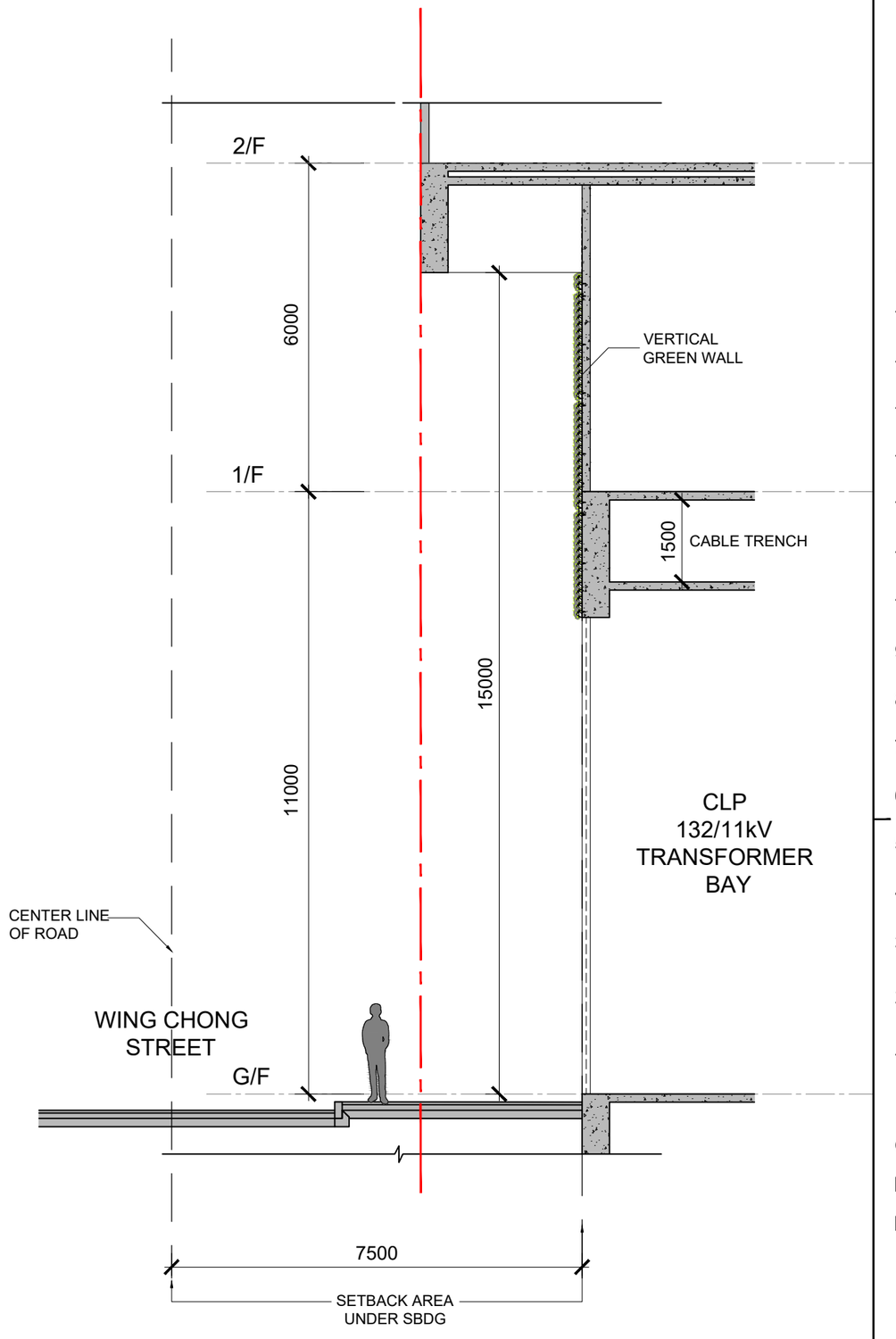
CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

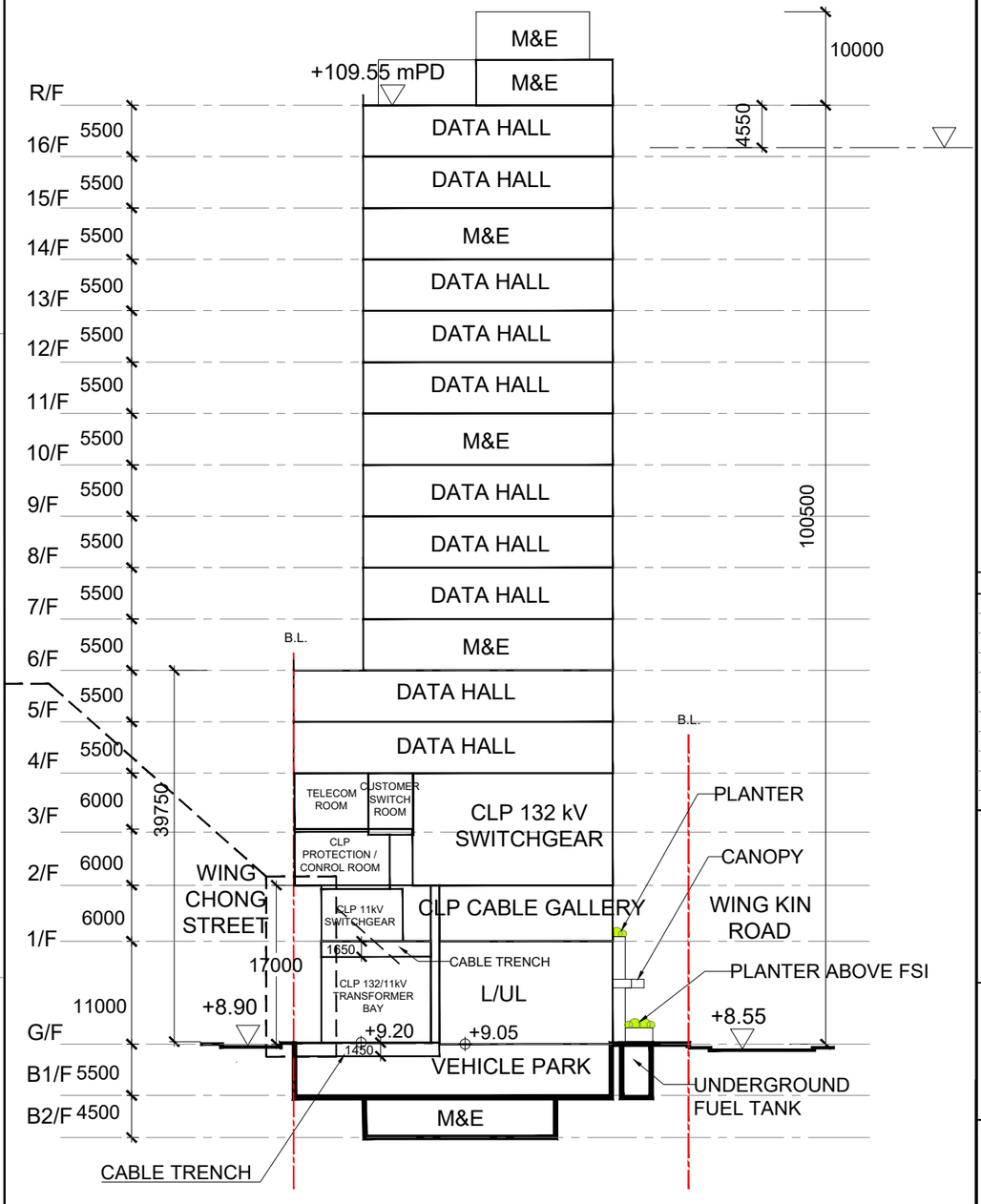
Salt Water Mains in the Vicinity

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		REV	-

APPENDIX I
TENTATIVE SECTION PLAN



SECTION OF VERTICAL GREEN WALL
SCALE: 1:100



NOTES:

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NO	DATE	DESCRIPTION

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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

SECTION A-A

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:750	2025.06.18
JOB No.	DRAWING No.
2208	A-14

APPENDIX II
FRESH WATER MAINS RECORD PLAN


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830300E
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830400E
830450E
830500E
824600N
824550N
824500N
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824350N
824300N
824250N
824200N
824150N
824100N
Football Field
Podium
Kerry TC Warehouse 2
Kai Bo 22
Car Park
Wing Hau Street Driving Test Centre
Cemetery
Temporary Storage Facility for Cremains
Kwai Chung Crematorium
Garden of Remembrance Kwai Chung
Service Hall & Office
Shan Sum Institute of Eternal Life and Culture
Wing Shing Industrial Building
Wing Kin Industrial Building
Kwai Wan Industrial Building
Hou Feng Industrial Building
Wing Loi Industrial Building
Mei Kei Industrial Building
Aji Ichiban Centre
Valid Industrial Centre
Hopewell Logistics Centre
Smart Pointer Logistics
Global Trade Centre
Gold Way Industrial Centre
Factory
Citic Telecom Tower
Car Park
West Rail Tsuen Wan West Station Emergency Access Point No.9/10
WING HAU STREET
WING KEI ROAD
WING CHONG STREET
KWAI HEI STREET
TSUEN WAN ROAD
KWAI FUK RO
Columbarium
Nullah
Road
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APPENDIX III
SALT WATER MAINS RECORD PLAN



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
2. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.
3. INFORMATION ON ALIGNMENT OF MAINS IS OF INDICATIVE VALUE ONLY. WHERE POSITIONAL ACCURACY MAY BE OF IMPORTANCE, DETAILS SHOULD BE SITE CHECKED.
4. FOR MAINS RECORDS SIGN CONVENTIONS AND DESIGNATIONS SEE SKETCH NO. 3988.
5. NO PROPOSED WATER MAINS IN THE VICINITY OF THE SITE.
6. NO EXISTING WSD CABLE IN THE VICNITY OF THE SITE.
7. NO PROPOSED WSD CABLE IN THE VICNITY OF THE SITE.
8. THE SITE IS NOT WITHIN WSD GATHERING GROUNDS.
9. NO WSD LAND ALLOCATION / WWR WITHIN THE SITE AREA.
10. NO WSD SLOPES ARE AFFECTED IN THE VICINITY OF THE SITE.
11. ASBESTOS CEMENT / UNKNOWN MATERIALS MAINS WAS FOUND IN THE VICINITY OF THE SITE.
12. NO CATHODIC PROTECTION MAINS ON THE VICINITY OF THE SITE.

SUBJECT SITE

PART COPY OF SALT WATER MAINS RECORD PLAN(S)

W67881/7-SW-21A & 21C

FILE REF: A/KC/510

REF. CODE: 18W25M	SHEET 1 OF 1	SCALE 1:800

水 務 署
Water Supplies Department

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APPENDIX IV
DETAILED WATER DEMAND CALCULATION

Table A1 - Unit Daily Demand

Zone Type		Unit Demand Fresh Water [1]	Unit Demand Salt Water [2]	(unit)
Staff	R	0.35	0.11	m^3/head/day
Industrial (Tsuen Wan)	I	1600	210	m^3/ha/day
Planter (Irrigation)	IRR	700	0	m^3/ha/day

[1] Unit Demand Fresh Water*:*

- Residential - 0.35 m^3/head/day, including service trade allowance, has been adopted for Staff.
- Industrial (Tsuen Wan) - 1600 m^3/ha/day.
- Irrigation Area - 70 litre / sq. meters of irrigation area / day.

[2] Unit Demand Salt Water*:*

- Residential - 0.11 m^3/head/day, including service trade allowance, has been adopted for Staff.
- Industrial (Tsuen Wan) - 210 m^3/ha/day.

Table A2 - Flow Velocity Limit

Pipe Diameter	Fresh Water Distribution Mains	(unit)
> DN700	≤ 3	m/s
DN700 - DN525	≤ 2.5	m/s
DN450 - DN375	≤ 2	m/s
DN300 - DN200	≤ 1.5	m/s
< DN200	≤ 1.5	m/s
Pipe Diameter	**Salt Water Distribution Mains**	**(unit)**
≥ DN1000	≤ 3.0	m/s
DN900 - DN800	≤ 2.5	m/s
DN700 - DN525	≤ 2	m/s
DN450 - DN300	≤ 1.5	m/s
< DN300	≤ 1.5	m/s

[1] Refer to ***WSD Departmental Instruction 1309***

Table B - Existing Water Demands

Non-Residential Area

	Category	GFA (ha)	Unit Demand Fresh Water (m^3/ha/day)	Unit Demand Salt Water (m^3/ha/day)	Daily Demand Fresh Water (m^3/day)	Daily Demand Salt Water (m^3/day)
Industrial (Tsuen Wan) (I)	I	0.094	1600.000	210.000	150.594	19.765

Summary

	Daily Demand Fresh Water (m^3/day)	Daily Demand Salt Water (m^3/day)
Total	**150.594**	**19.765**

Table C1 - Water Demands of Water Cooling Tower System

		Unit	Remark
Designed Cooling load (Nominal)	14	MW	
Working hour	24	hour/day	
Peak and Design Factor	1.45		
Water evaporating rate under nominal load (with Peak and Design Factor)	8.9942	kg/s	[1]
	777.10	m^3/day	
Ratio of bleed-off water	20%		[2]
Amount of bleed-off water	155.42	m^3/day	
Total water requirement	**932.52**	m^3/day	

[1] Heat of vaporization for water is 2257 kJ/Kg

[2] A ratio 5:1 for evaporating: discharging has been adopted.

Table C2 - Proposed Water Demands

Staff

	Category	Population	Unit Demand Fresh Water (m^3/head/day)	Unit Demand Salt Water (m^3/head/day)	Daily Demand Fresh Water (m^3/day)	Daily Demand Salt Water (m^3/day)
Staff	R	25	0.350	0.110	8.750	2.750

Water Cooling Tower System

	Category	GFA (ha)	Unit Demand Fresh Water (m^3/ha/day)	Unit Demand Salt Water (m^3/ha/day)	Daily Demand Fresh Water (m^3/day)	Daily Demand Salt Water (m^3/day)
Water Cooling Tower System	N/A	N/A	N/A	N/A	932.523	0.0

Public Open Space

	Category	Area (ha) [1]	Unit Demand Fresh Water (m^3/ha/day)	Unit Demand Salt Water (m^3/ha/day)	Daily Demand Fresh Water (m^3/day)	Daily Demand Salt Water (m^3/day)
Planter (IRR)	IRR	0.029	700.000	0.000	20.248	0.0

Summary [3]

	Daily Demand Fresh Water (m^3/day)	Daily Demand Salt Water (m^3/day)
Total	**961.521**	**2.750**

Note:
[1] 30% of the Site area has been adopted for conservative assessment.

Table D - Summary of Water Demands

Fresh Water Demand

	Daily Demand - Fresh Water (m^3/d)		
	Existing	**Proposed**	**Net Increase**
Total	**150.594**	**961.521**	**810.927**

Salt Water Demand

	Daily Demand - Salt Water (m^3/d)		
	Existing	**Proposed**	**Net Increase**
Total	**19.765**	**2.750**	**-17.015**

Fresh Water Reservoir Capacity

Reservoir	Capacity (x 1,000 m^3)	Supply Capacity @ Capacity Factor = 0.8 (MLD) [1]	Existing Daily Consumption (MLD) [2]	Spare Capacity (MLD)	Remarks
Lai Chi Kok FWSR	93.702	117.13	54	**63.1**	The spare capacity of 63.1 MLD >> net increase of 0.8 MLD from the

Salt Water Pumping Capacity

Pumping Station	Design Pumping Capacity (MLD)	Existing Daily Consumption (MLD) [2]	Spare Capacity (MLD)	Remarks
Tsuen Wan SWPS	93.0	93.0	**0.0**	The salt water demend of the Proposed Development will be reduced

[1] For interconnected supply zone with critical consumers, the capacity of the Reservior should be (75% + 5%) = 80% of the mean daily demend.
[2] Average daily Consumptions provided by WSD in May 2025.

Attachment 4
Air Quality Impact Assessment

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Air Quality Impact Assessment (V2.0)

Apr 2025

Approved By _____

(Project Manager: K.S. Lee)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties.

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18 On Lai Street
Shatin, NT, Hong Kong
Tel: (852) 2151 2083 Fax: (852) 3107 1388
Email: info@cinotech.com.hk

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1 INTRODUCTION

1.1 Background

1.1.1 OXO YW Limited ("the Project Proponent") has proposed to develop a data centre located at No. 7-11 Wing Kin Road, Kwai Chung.

1.1.2 Cinotech Consultants Limited was commissioned by OXO YW Limited to carry out an Air Quality Impact Assessment (AQIA) to assess and envisage any potential air quality impact on the implementation of the Project and to recommend air quality mitigation measures when necessary.

1.1.3 This AQIA is prepared to support a planning permission from the Town Planning Board (TPB) under Section 16 of the Town Planning Ordinance (CAP. 131) for a data centre with minor relaxation of plot ratio restriction from 9.5 to 11.4, and height restriction from 105 mPD to 109.55 mPD.

2 THE PROPOSED DEVELOPMENT AND THE ENVIRONMENT

2.1 The Site

2.1.1 The Application Site (the "Site") is located in an industrial area in Kwai Chung, bordered by Wing Chong Street to the west, Wing Kin Road to the east, Global Trade Centre to the north, and Hou Feng Industrial Building to the south (see **Figure 2-1**). The Site and its surroundings fall within the industrial zone, as per the Approved Kwai Chung Outline Zoning Plan (OZP) No. S/KC/32 (see **Figure 2-2**).

2.1.2 The Site covers approximately 964 m² (about 929 m² excluding the additional area) and is currently occupied by a 2-storey industrial building. Planning applications have been submitted and approved with conditions in 2020 (Application No.: A/KC/457) and 2023 (Application No.: A/KC/496) for Offensive Trades use (Lard Boiling Factory) and Industrial use (Warehouse), respectively.

2.2 The Proposed Development

2.2.1 The Applicant proposes to redevelop the Application Site into a 17-storey data centre with a height of 109.55 mPD and a plot ratio of 11.4. The tentative layout of the proposed development is shown in **Appendix 2-1**, with a planned completion date of 2029.

2.2.2 The proposed development is intended solely for data centre use and is not expected to generate air pollutants. In the current design, all equipment, including data servers and chillers, will be housed in fully enclosed spaces, except for the water-cooling towers, which will be located on the rooftop.

2.2.3 Although the data centre is generally expected to be unmanned, staff will occasionally need to enter the data halls for maintenance. Therefore, the data halls in the proposed development are considered Air Sensitive Receivers (ASRs) during the operational phase. The developer plans to provide fresh air intakes for the entire development.

2.3 Existing Environment in the Vicinity

Existing Developments

Industrial Chimneys

2.3.1 The existing developments in the vicinity are primarily industrial. An on-site survey and desktop study were conducted in April 2022 and updated in December 2024 to identify the industrial chimneys in the area. Multiple industrial chimneys have been identified within 200 m of the site boundary. The chimneys with potential impacts are listed in in **Table 2-1**, illustrated in **Figure 2-3**, and detailed in **Appendix 2-2**.

2.3.2 It is noted that a chimney-like structure was present on the roof of the Mei Kei Industrial Building according to a 3D map from Google. However, based on the latest information, there is currently no chimney on the roof of the Mei Kei Industrial Building.

2.3.3 Additionally, chimneys are identified at the Citic Telecom Tower. However, no potential impact is anticipated, as Citic Telecom Tower is used for data centre and office purposes, with no significant emissions expected. The chimneys serve backup generators to provide

N+1 resilience[1]. Furthermore, the height of Citic Telecom Tower is approximately 140 mPD, located about 200 m to the northeast of the Site. Given that the emission height is more than 20 m above the roof of the Site, with over 100 m of horizontal separation, no adverse impact is anticipated even when the backup generators are operational.

Table 2-1 Identified Industrial Chimneys in the Vicinity

ID	Building	Height [1]	Horizontal Distance from Site Boundary
CH01a & CH01b	Wing Loi Industrial Building	85 mPD	64 m
CH01c & CH01d		81 mPD	85 m
CH02	Kwai Chung Crematorium	52 mPD	196 m
CH03a & CH03b	Wing Kin Industrial Building	99 mPD	23 m
CH03c		103 mPD	40 m

Note:
[i] Estimated Valves

Air Sensitive Receivers (ASRs)

2.3.4 The nearest non-industrial development with air-sensitive uses is the office of the Wing Hau Street Driving Test Centre, located approximately 110 m northwest of the Site.

2.3.5 Most developments with air-sensitive uses are situated in the northeast of the Site, including PCCW, CNEC Lee I Yao Memorial Secondary School, and Kwai Shing West Estate Block 8, located about 180 m, 195 m, and 290 m from the Site, respectively.

2.3.6 The existing developments in the vicinity generally conform to the Outline Zoning Plan (OZP), indicating that no changes in land use are anticipated in the near future.

Road Traffic

2.3.7 The Site is bordered by Wing Kin Road and Wing Chong Street, which are minor roads (local distributors). According to the Annual Traffic Census 2023 (ATC 2023) by the Transport Department, the nearest major road is Tsuen Wan Road (Station 5604), an expressway located approximately 90 m to the northeast of the Site, with an Average Annual Daily Traffic (AADT) of 122,780.

2.4 Key Sources of Potential Air Quality Impact

2.4.1 Although there is heavy traffic on roads near the Site, the major vehicular source, Tsuen Wan Road, is located away from the Site. Therefore, no significant air quality impacts from road traffic are anticipated. The primary concern for the air quality of the proposed development stems from the nearby industrial chimneys.

[1] CITIC Telecom CPC – https://www.citictel-cpc.com/Content/Uploads/IDC1404EN-843d1b2d-fa48-414a-8182-a255a2e90d70.pdf

3 LEGISLATION, STANDARDS & GUIDELINES

3.1.1 The air quality impact assessment criteria were made reference to the HKPSG and the Air Pollution Control Ordinance (Cap.311) (APCO).

3.2 Minimum Buffer Distances

3.2.1 HKPSG recommends minimum buffer distances from the various road emission sources and industrial chimney for planning purpose, which are summarized **Table 3-1**.

Table 3-1 Guidelines on Usage of Open Space Site

Pollution Source	Parameter	Buffer Distance [i]	Permitted Uses
Road and Highways	*Type of Road*		
	Trunk Road and Primary Distributor	>20m	Active and passive recreational uses
		3-20m	Passive recreational uses
		<3m	Amenity areas
	District Distributor	>10m	Active and passive recreational uses
		<10m	Passive recreational uses
	Local Distributor	>5m	Active and passive recreational uses
		<5m	Passive recreational uses
Industrial Area	*Difference in Height between Industrial Chimney Exit and the Site*		
	<20m	>200m	Active and passive recreational uses
		5-200m	Passive recreational uses
	20-30m	>100m	Active and passive recreational uses
		5-100m	Passive recreational uses
	30-40m	>50m	Active and passive recreational uses
		5-50m	Passive recreational uses
	>40m	>10m	Active and passive recreational uses

Note:
(i) The buffer distance is the horizontal, shortest distance from the boundary of the industrial lot, the position of existing chimneys or the edge of road kerb, to the boundary of open space sites.

3.3 Air Quality Objectives (AQO)

3.3.1 The Air Pollution Control Ordinance (APCO) provides the statutory authority for controlling air pollutants from a variety of sources. The Hong Kong Air Quality Objectives (AQO) stipulate the maximum allowable concentrations over specific periods for the criteria pollutants (**Table 3-2**).

Table 3-2 Hong Kong Air Quality Objectives (2025)

Pollutant	Averaging time	Concentration limit [1] ($\mu g/m^3$)	Number of exceedances allowed
Sulphur dioxide (SO_2)	10-minute	500	3
	24-hour	40 [4]	3
Respirable suspended particulates (RSP) [ii]	24-hour	75 [4]	9
	Annual	30 [4]	Not applicable
Fine suspended particulates (FSP) [iii]	24-hour	37.5 [4]	18 [4]
	Annual	15 [4]	Not applicable
Nitrogen dioxide (NO_2)	1-hour	200	18
	24-hours [4]	120 [4]	9 [4]
	Annual	40	Not applicable
Ozone (O_3)	8-hour	160	9
	Peak season [4]	100 [4]	Not applicable [4]
Carbon monoxide (CO)	1-hour	30,000	0
	8-hour	10,000	0
	24-hours [4]	4,000 [4]	0 [4]
Lead (Pb)	Annual	0.5	Not applicable

Note:
1. All measurements of the concentration of gaseous air pollutants, i.e., sulphur dioxide, nitrogen dioxide, ozone and carbon monoxide, are to be adjusted to a reference temperature of 293Kelvin and a reference pressure of 101.325 kilopascal.
2. Respirable suspended particulates mean suspended particles in air with a nominal aerodynamic diameter of 10 μm or less.
3. Fine suspended particulates mean suspended particles in air with a nominal aerodynamic diameter of 2.5 μm or less.
4. Amended/New criteria in the new AQO (AQO-2025).

3.4 Air Pollution Control (Construction Dust) Regulation

3.4.1 The regulation defines notifiable and regulatory works activities that are subject to construction dust control.

3.5 Air Pollution Control (Smoke) Regulations

3.5.1 The regulations stipulate that dark smoke emission from any chimney or relevant plant must not exceed 6 minutes in any period of 4 hours; or 3 minutes continuously at any one time.

3.6 The Air Pollution Control (Fuel Restriction) Regulations

3.6.1 The regulation provides a statutory minimum requirement to restrict commercial and industrial processes to use ULSD (Ultra Low Sulphur Diesel) with a sulphur content of only 0.001%.

3.7 Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation

3.7.1 According to the regulation, Non-road Mobile Machinery (NRMMs) must adhere to the prescribed emission standards. Only NRMMs that have been approved or exempted and bear the appropriate label are permitted for use in specified activities and locations. These include construction sites, container terminals and backup facilities, restricted areas of the airport, designated waste disposal facilities, and specified processes.

3.8 Recommended Pollution Control Clauses for Construction Contracts

3.8.1 This guideline includes a list of relevant regulations/guidelines for contractors and general engineering practices aimed at minimizing inconvenience and environmental nuisance to nearby residents and other sensitive receivers.

3.9 ProPECC Practice Note PN 2/96 - Control of Air Pollution in Car Parks

3.9.1 The practice note provides guidance on the control of air pollution in car parks including air quality guidelines required for the protection of public health; and factors that should be considered in the design and operation of car parks in order to achieve the required air quality.

4 BACKGROUND AIR QUALITY AND KEY CRITERIA POLLUTANTS

4.1 Background Air Quality

4.1.1 EPD has been closely monitoring air quality in Hong Kong through its air quality monitoring stations (AQMS). The Kwai Chung Monitoring Station is the closest AQMS to the site, while the nearest roadside station is located in Mong Kok.

4.1.2 It is important to note that measurement results at the roadside station are generally higher than those at regular sensitive receivers, such as residential flats, due to proximity to road traffic. Therefore, measurements at the roadside station should be considered a worst-case scenario, while those at the Kwai Chung Monitoring Station should be regarded as representative.

4.1.3 The monitoring results for the Mong Kok Roadside Station and Kwai Chung Monitoring Station from 2019 to 2023 are summarized in **Table 4-1 & Table 4-2**, respectively. For both stations, the measured concentrations of NO_2 demonstrate a decreasing trend from 2019 to 2023. In contrast, the measured concentrations of RSP and FSPs dropped in 2020 and have remained at a similar level since then.

4.1.4 The parameters of particular concern during the past few years have been the NO_2 concentrations. The 1-hour averaged and annual averaged NO_2 have consistently exceeded the AQO's criteria from 2019 to 2023 and the 24-hour averaged NO_2 exceeded the AQO's criteria in 2019 & 2020 for the Mong Kok Roadside Station. The NO_2 concentrations at Kwai Chung Monitoring Station is much lower than that of Mong Kok Roadside Station, however, the annual average still consistently exceeded the AQO's criteria from 2019 to 2023.

4.1.5 With the updated AQO in 2025, the annual averaged FSP concentrations at the Mong Kok Roadside Station have also consistently exceeded the AQO's criteria from 2019 to 2023. Meanwhile, the 24-hour averaged FSP and the annual averaged RSP concentrations exceeded the AQO's criteria in 2019. The RSP and FSP concentrations at the Kwai Chung Monitoring Station are significantly lower than those at Mong Kok. However, the annual average FSP concentration exceeded the AQO's criteria in 2019, 2021 & 2023.

Table 4-1 Average Concentrations of Pollutants in the Recent Five Years (Year 2019 - 2023) at Mong Kok Air Quality Monitoring Station

Pollutant	Averaging Time	AQO [i]	Pollutant Concentration (μg/m^3) [ii]				
			2019	2020	2021	2022	2023
Respirable Suspended Particulates (RSP)	10th Highest 24-hour	75 (9)	74	63	69	56	58
	Annual	30	35	29	30	26	29
Fine Suspended Particulates (FSP)	19th Highest 24-hour	37.5 (18)	45	37	37	35	32
	Annual	15	24	18	18	16	18
Nitrogen Dioxide (NO_2)	19th Highest 1-hour	200 (18)	248	214	201	224	212
	10th Highest 24-hour	120 (9)	132	129	120	119	120
	Annual	40	78	74	70	64	68
Sulphur Dioxide (SO_2)	4th Highest 10-Min	500 (3)	39	45	30	28	39
	4th Highest 24-hour	40 (3)	10	10	10	7	9
Ozone (O_3)	10th Highest 8-hour	160 (9)	125	96	97	101	104
	Peak season	100	62	61	60	63	61
Carbon Monoxide (CO)	1st Highest 1-hour	30000 (0)	2280	1810	2130	1670	1340
	1st Highest 8-hour	10000 (0)	2103	1580	1719	1493	1138
	1st Highest 24-hour	4000 (0)	1610	1323	1479	1414	1014

Note:
[i] The numbers in brackets () refer to number of exceedance allowed per year.
[ii] The pollution concentrations are obtained from the Smart Air Modelling Platform.
[iii] Exceedances has been highlighted in orange.

Table 4-2 Average Concentrations of Pollutants in the Recent Five Years (Year 2019 - 2023) at Kwai Chung Air Quality Monitoring Stations

Pollutant	Averaging Time	AQO [i]	Pollutant Concentration (μg/m^3) [ii]				
			2019	2020	2021	2022	2023
Respirable Suspended Particulates (RSP)	10th Highest 24-hour	75 (9)	59	46	56	53	54
	Annual	30	29	23	26	23	25
Fine Suspended Particulates (FSP)	19th Highest 24-hour	37.5 (18)	34	27	32	34	30
	Annual	15	18	14	16	15	16
Nitrogen Dioxide (NO_2)	19th Highest 1-hour	200 (18)	184	184	180	168	182
	10th Highest 24-hour	120 (9)	96	89	96	84	97
	Annual	40	54	48	52	44	50
Sulphur Dioxide (SO_2)	4th Highest 10-Min	500 (3)	53	43	45	59	48
	4th Highest 24-hour	40 (3)	18	12	14	17	13
Ozone (O_3)	10th Highest 8-hour	160 (9)	143	124	124	139	128
	Peak season	100	84	77	74	79	75
Carbon Monoxide (CO)	1st Highest 1-hour	30000 (0)	-	-	-	-	-
	1st Highest 8-hour	10000 (0)	-	-	-	-	-
	1st Highest 24-hour	4000 (0)	-	-	-	-	-

Note:
[i] The numbers in brackets () refer to number of exceedance allowed per year.
[ii] The pollution concentrations are obtained from the Smart Air Modelling Platform.
[iii] Exceedances has been highlighted in orange.

4.2 PATH Background

4.2.1 PATH is a regional-scale air quality model developed by the EPD to predict future air quality of Hong Kong. The PATH v3.0 grids corresponding to the Site are [34,37] and [35,37], as shown in **Figure 4-1**. **Table 4-3** presents the predicted background air quality for the Site and its adjacent areas (Grids [34,37], [34,38], [35,37] and [35,38]) for the year 2029.

4.2.2 Generally, the PATH background for the Site and adjacent areas in 2029 meet the relevant Air Quality Objectives (AQOs) with a significant margin, except for Ozone concentrations.

Table 4-3 Background Ground Level Air Quality of PATH on Year 2029

Pollutant	Averaging Time	AQOs [µg/m^3] [i]	PATH Model Concentration [µg/m^3] on Year 2029			
			Grid [34,37] L1 (0-17m)	Grid [34,38] L1 (0-17m)	Grid [35,37] L1 (0-17m)	Grid [35,38] L1 (0-17m)
Respirable Suspended Particulates (RSP)	10th Highest 24-hour	75 (9)	54.66	55.52	55.08	55.17
	Annual	30	20.94	21.25	21.08	21.31
Fine Suspended Particulates (FSP)	19th Highest 24-hour	37.5 (18)	31.77	32.97	32.79	33.02
	Annual	15	13.27	13.53	13.37	13.57
Nitrogen Dioxide (NO_2)	19th Highest 1-hour	200 (18)	112.23	101.23	104.46	99.87
	10th Highest 24-hour	120 (9)	50.83	44.62	47.93	43.79
	Annual	40	29.73	24.56	23.89	22.79
Sulphur Dioxide (SO_2)	4th Highest 10-Min	500 (3)	21.16	23.28	23.55	23.67
	4th Highest 24-hour	40 (3)	6.77	7.22	7.29	7.31
Ozone (O_3)	10th Highest 8-hour	160 (9)	173.04	176.03	172.17	172.9
	Peak season	100	115.21	117.55	116.09	117.22
Carbon Monoxide (CO)	1st Highest 1-hour	30000 (0)	594.46	592.86	591.21	590.66
	1st Highest 8-hour	10000 (0)	571.48	571.02	564.19	565.06
	1st Highest 24-hour	4000 (0)	538.03	534.32	535.73	530.2

Note:
[i] The numbers in brackets () refer to number of exceedances allowed per year.
[ii] The pollution concentrations are obtained from the Smart Air Modelling Platform.
[iii] Exceedance has been highlighted in orange.

4.3 Identification of Key Criteria Pollutants – Construction Phase

Gaseous Pollutants

4.3.1 Operation of Powered Mechanical Equipment (PME) and/or Non-road Mobile Machinery (NRMMs) during construction work would emit dark smoke and gaseous air pollutants such as nitrogen dioxide (NO_2) via fuel burning.

4.3.2 Emission of dark smoke is regulated by Air Pollution Control (Smoke) Regulations. By providing routine maintenance and using of ULSD, the potential impact can be significantly suppressed.

4.3.3 According to Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, only approved or exempted Non-Road Mobile Machinery (NRMM) with a proper label are allowed to be used in specified activities and locations including construction sites. Supportive information and documents (e.g. third-party emission certificates, model and serial numbers of machines and engines, etc.) for each NRMM would be provided to EPD to prove that the concerned NRMM is in line with the prescribed emission standards.

4.3.4 As only limited number of PME and/or NRMMs are expected to be used on-site due to the small site area (<1000 m^2), and the PME and/or NRMMs are required to fulfil the relevant emission standards. As a result, no significant impact is anticipated.

Particulates (RSP & FSP)

4.3.5 The air pollutants of concern during the construction phase are construction dust, which includes Respirable Suspended Particulates (RSP) and Fine Suspended Particulates (FSP) generated from the construction activities of the proposed development.

4.3.6 In accordance with the Air Pollution Control (Construction Dust) Regulation, contractors and site agents are obligated to inform the EPD and implement dust reduction measures to minimize dust emissions before commencing construction activities such as demolition, site formation, foundation construction, and superstructure construction.

4.4 Identification of Key Criteria Pollutants – Operation Phase

Sulphur Dioxide (SO_2)

4.4.1 In Hong Kong, Sulphur Dioxide (SO_2) is primarily from the combustion of Sulphur-containing fossil fuels in power stations and marine vessels.

4.4.2 The Air Pollution Control (Fuel Restriction) Regulations restrict commercial and industrial processes to use ULSD with a sulphur content of only 0.001%. In December 2007, the Government offered a concessionary duty rate for Euro V diesel for motor vehicles which has a sulphur content of 0.001%. Since then, all petrol filling stations in Hong Kong provide only Euro V diesel, which has a sulphur content of 0.001%. Reference to the *2022 Hong Kong Emission Inventory Report*[2], SO_2 emission from the road traffic contribute less than 1% of the total SO_2 emissions, thus SO_2 from road traffic emissions is not considered as key air pollutant. On the other hand, although the SO_2 emission from the industrial sources contribute little to the total SO_2 emissions, due to the proximity, SO_2 emission from the industrial chimneys is considered as key air pollutant.

Particulates (RSP & FSP)

4.4.3 The emission source during the operational phase of the Project would be the vehicular emission on the roads and industrial emission from industrial chimneys.

Nitrogen Dioxide (NO_2)

4.4.4 NO_2 is the major air pollutant in concern during operation phase of the Project. NO_2 could be emitted directly via combustion, or generated from the reaction between nitrogen oxides (NO_x) and ozone (O_3).

4.4.5 The major emission source of NO_x and NO_2 during the operational phase of the Scheme would be the vehicular emission on the roads and industrial emission from industrial chimneys.

[2] 2022 Hong Kong Emission Inventory Report
https://www.epd.gov.hk/epd/sites/default/files/epd/data/2022_Emission_Inventory_Report_Eng.pdf

Ozone

4.4.6 Ozone (O_3) is formed from dioxygen by the action of ultraviolet light and also atmospheric electrical discharges. It is not a primary pollutant emitted from vehicular emission & industrial emission thus is not considered as key criteria pollutants for the Project.

Carbon Monoxide

4.4.7 Road transportation is the dominant source of CO emissions. However, considering the low CO concentration measured in the roadside air quality monitoring station (**Table 4-1**) as compared to the respective AQO criteria, the emission of CO from road transportation is unlikely to cause a significant air quality impact to the proposed development.

Lead

4.4.8 Leaded petrol has been banned in Hong Kong since 1999. It is not considered concerned pollutants for vehicular emission.

Summary

4.4.9 During the operation phase, the primary sources of pollutants will be traffic and industrial emissions, specifically SO_2, NO_2, RSP and FSP. These pollutants have been identified as the key criteria pollutants for the project's operation.

5 CONSTRUCTION PHASE AIR QUALITY IMPACT ASSESSMENT

5.1 Dust Source of the Project

5.1.1 Major dust-emitting construction activities will include the demolition of existing structures, excavation for basement construction, foundation works, and other construction activities (e.g., superstructure construction). A summary of the construction works is provided in **Table 5-1**.

5.1.2 Due to the small site area (< 1,000 m²), the scale of construction activities for the Project will be limited. The Site currently houses a 2-storey industrial building, and the demolition works are considered small since only a single low-rise development is involved. It is important to note that excavation for the basement is required under the current design.

Table 5-1 Summary of the Construction Works

Site Area (m^2)	Structures to be demolished	Excavating for Basement	Construction of Superstructure	Number of Concurrent PME [1]
< 1000	A 2-storey industrial building	Yes	Yes	8

Note:
[1] Excluding small plants such as water pump and fan. Estimated numbers based on projects in similar scales.

5.2 Concurrent Projects

5.2.1 No planned and/or committed developments in the vicinity of the Site has been identified.

5.3 Air Sensitive Receivers in the Vicinity

5.3.1 The representative ASRs for the construction phase of the proposed development are illustrated in **Figure 5-1** and listed in **Table 5-2**. It is important to note that the Site is surrounded by existing industrial developments, and therefore, all ASRs are located away from the Site.

Table 5-2 Representative Air Sensitive Receivers (Construction Phase)

ID	Building/Location	Type	Building Height (mPD) [1]	Horizontal Distance from Site Boundary (m) [1]
ASR01	Wing Hau Street Driving Test Centre	Office	25	110
ASR02	PCCW	Utility and Offices	80	180
ASR03	CNEC Lee I Yao Memorial Secondary School	Education	50	195
ASR04	Kwai Shing West Estate Block 8	Residential	125	290

Note:
[1] Estimated values.
[2] The windows do not face the Site.

5.4 Identification of the Major Pollutant Sources and of Potential Impacts

Emission from PME & Non-road Mobile Machinery

5.4.1 As stated in **Section 4.3.1**, operation of Powered Mechanical Equipment (PME) during construction work would emit gaseous air pollutants such as nitrogen dioxide (NO_2) via fuel burning. A number of Powered Mobile Equipment (PME), such as excavators, can be utilized for the construction works of the Site. However, the number of PME expected to be used on-site will be limited. As a result, no significant impact is anticipated from the operation of PME.

5.4.2 According to the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, only approved or exempted Non-Road Mobile Machinery (NRMM) with proper labelling are allowed to be utilized in the construction site. Supportive information and documents, such as third-party emission certificates, model and serial numbers of machines and engines, will be provided to the EPD to demonstrate that the concerned NRMM complies with the prescribed emission standards. As a result, no significant impact is anticipated from the operation of NRMM.

Construction Dust

5.4.3 Fugitive dust would be generated and the concerned air pollutants during the construction phase are the Respirable Suspended Particulates (RSP) and Fine Suspended Particulates (FSP) arising from the construction work of the Project. One of the major dust sources during the construction phase is the demolition of existing structures. Despite the small scale of demolition works, mitigation measures shall be necessary to eliminate the potential impact arising from the demolition works.

5.4.4 Movement of dump trucks is also considered a potential dust source if not mitigated properly. A rough estimation of 5 trips per day shall be required during the demolition period.

5.5 Mitigation Measures

5.5.1 Dust control measures under the Air Pollution Control (Construction Dust) Regulation (Cap. 311R) and good site practice shall be implemented to mitigate dust impact arising from demolition work by preventing dust generation and/or by screening, suppressing and removing dust generated:

- Enclose the whole wall of the building to a height of at least 1m higher than the highest level of the structure to be demolished with impervious dust screens or sheeting on façade abutting or fronting upon a street
- Existing structures are proposed to be demolished by non-percussive equipment such as hydraulic crusher to reduce dust emission; no blasting will be involved.
- Water or a dust suppression chemical shall be sprayed immediately prior to, during and immediately after demolition/excavation works
- Cover stockpile or dusty materials with tarpaulin to prevent wind erosion
- Any dusty materials remaining after a stockpile is removed shall be wetted with water and cleared from the surface of roads or streets

- Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the construction site
- Where a vehicle leaving a construction site is carrying a load of dusty materials, the load shall be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle
- Store cement bags in shelter with 3 sides and the top covered by impervious materials if the stack exceeds 20 bags
- Maintain a reasonable height when dropping excavated materials to limit dust generation
- Limit vehicle speed within Site to 10 km/h and confine vehicle movement in haul road
- Minimize exposed earth after completion of work in a certain area by hydroseeding, vegetating or soil compacting
- Cover materials on trucks before leaving the Site to prevent dropping or being blown away by wind
- Regular maintenance of plant equipment to prevent black smoke emission
- Throttle down or switch off unused machines or machine in intermittent use
- Plan the Site layout so that machineries, dust causing activities and stockpilings are away from receptors as far as possible.
- Site hoarding higher than 2.4m should be implemented where there are receptors at close proximity to the construction site and dusty activities.
- Haul road shall be away from the project boundary as much as possible

5.5.2 No adverse dust impact on the surrounding air sensitive receivers (ASRs) is expected with proper implementation of mitigation measures.

5.5.3 As the project is still in planning stage, the necessary of EM&A program shall be determined in detailed design stage.

6 OPERATION PHASE AIR QUALITY IMPACT ASSESSMENT

6.1 Air Sensitive Receivers

6.1.1 During the operational phase, no emissions are anticipated from the proposed development. However, the data halls of the Project are considered ASRs that require assessment. The developer intends to provide fresh air intakes for the entire development, and these intakes for the data halls will be located in areas with no adverse air quality impacts.

6.2 Buffer Distance Recommended by HKPSG

6.2.1 The suggested buffer distances from the Hong Kong Planning Standards and Guidelines (HKPSG) outlined in **Table 3-1** shall be adhered to in order to avoid potential air quality impacts.

6.2.2 The adjoining Wing Kin Road and Wing Chong Street are classified as Local Distributors according to Transport Department (See **Appendix 6-1**), requiring a buffer distance of 5 m, as shown in **Figure 6-1**. Since the buffer zones for roads are independent of elevation, the fresh air intake for the data hall should be located outside these buffer regions, irrespective of elevation.

6.2.3 For the industrial chimneys in the vicinity, a buffer distance of 10 to 200 meters is required, depending on the elevation difference between the emission point and the receptor. A list of the chimneys in the vicinity is provided in **Table 6-1**.

Table 6-1 List of Chimneys in the Vicinity

Chimney ID	Description	Height of chimney (mPD)	Distance from site boundary (m)
CH01a **CH01b**	Wing Loi Industrial Building	85	64
CH01c **CH01d**		81	85
CH02	Kwai Chung Crematorium	52	196
CH03a **CH03b**	Wing Kin Industrial Building	99	23
CH03c		103	40

Note: Please refer to **Appendix 2-2** for details.

6.2.4 The required buffer regions for the identified chimneys at different elevations are illustrated in **Figures 6-2a to 6-2e**. Please note that the buffer regions of the more distant chimneys with higher emission heights have been omitted for clarity in presentation.

- At or below 32 mPD (**Figure 6-2b**)
  - The Site is not within the buffer region of any chimney; thus, the only constraint for fresh air intakes is from the nearby roads.
- Between 32 mPD and 51 mPD (**Figure 6-2c**)
  - A small portion of the Site at the southwest corner falls within the buffer region of the chimney at Kwai Chung Crematorium (CH02).
- Between 51 mPD and 55 mPD (**Figure 6-2d**)
  - The southern portion of the Site is within the buffer region of the chimney at Wing Loi Industrial Building (CH01c).

- Between 55 mPD and 59 mPD (**Figure 6-2e**)
    - Most of the Site is within the buffer region of the chimney at Wing Loi Industrial Building (CH01b).
- At or above 59 mPD (**Figure 6-2a**)
    - The Site is entirely within the buffer regions of the chimneys at Wing Loi Industrial Building (CH01b) and Wing Kin Industrial Building (CH03a).

6.3 Suitable Locations for Fresh Air Intakes for Areas with Sensitive Uses

6.3.1 The floor and ceiling levels of the Proposed Development under the current design are summarised in **Table 6-2**.

Table 6-2 Floor and Ceiling Levels of the Proposed Development

Floor	Height (m)	Floor Level (mPD)	Ceiling Level (mPD)	Corresponding Drawing
G/F	11	9	20	Fig 6-3a
1/F	6	20	26	Fig 6-3b
2/F	6	26	32	Fig 6-3c
3/F	6	32	38	Fig 6-3d
4/F	5.5	38	43.5	Fig 6-3e
5/F	5.5	43.5	49	Fig 6-3e
6/F	5.5	49	54.5	Fig 6-3f
7/F	5.5	54.5	60	Fig 6-3g
8/F and above	5.5	-	-	-

Note:
[1] The design of the proposed development is subject to change.

6.3.2 The proposed façades for fresh air intakes are illustrated in **Figures 6-3a to 6-3g**. Please note that the buffer regions of the more distant chimneys with higher emission heights have been omitted for clarity in presentation. It is important to note that the proposed fresh air locations are designated only for areas with air-sensitive uses (e.g., data halls and other normally occupied areas). For non-normally occupied areas, such as plant rooms, there are no restrictions on ventilation concerning air quality.

- G/F to 2/F (9 to 32 mPD) (**Figures 6-3a to 6-3c**)
    - The entire eastern façade is suitable for fresh air intake.
    - The western façade is within the buffer region of Wing Chong Street.
- 3/F to 6/F (32 to 54.5 mPD) (**Figures 6-3d to 6-3f**)
    - The entire eastern façade is suitable for fresh air intake.
    - A small portion of the western façade is outside the buffer region of Wing Chong Street and suitable for fresh air intake.
- 7/F (54.5 to 60 mPD) (**Figure 6-3g**)
    - At or above 59 mPD, the entire Site is within the buffer regions of the chimneys at Wing Loi Industrial Building (CH01b) and Wing Kin Industrial Building (CH03a).
    - Below 59mPD, only the northern half of the eastern façade is suitable for fresh air intake.
    - No suitable locations for fresh air intake at or above 59mPD.
- 8/F & above (> 60 mPD)
    - No suitable locations for fresh air intake.

6.3.3 With the fresh air intakes for areas with air-sensitive uses positioned at the proposed locations, no air quality impacts during the operation of the Project are anticipated.

6.4 Provision of Emergency Generators

6.4.1 In the current design, backup generators powered by diesel fuel will be provided to address potential electricity outages or emergencies. These backup generators will not operate during normal conditions. Aside from the backup generators, no diesel or other fossil fuels will be utilized in the project.

6.5 Provision of Basement Carparks

6.5.1 It should be noted that there are basement carparks in the Proposed Development. However, the details of the carparks including the locations of the exhaust outlet are not available.

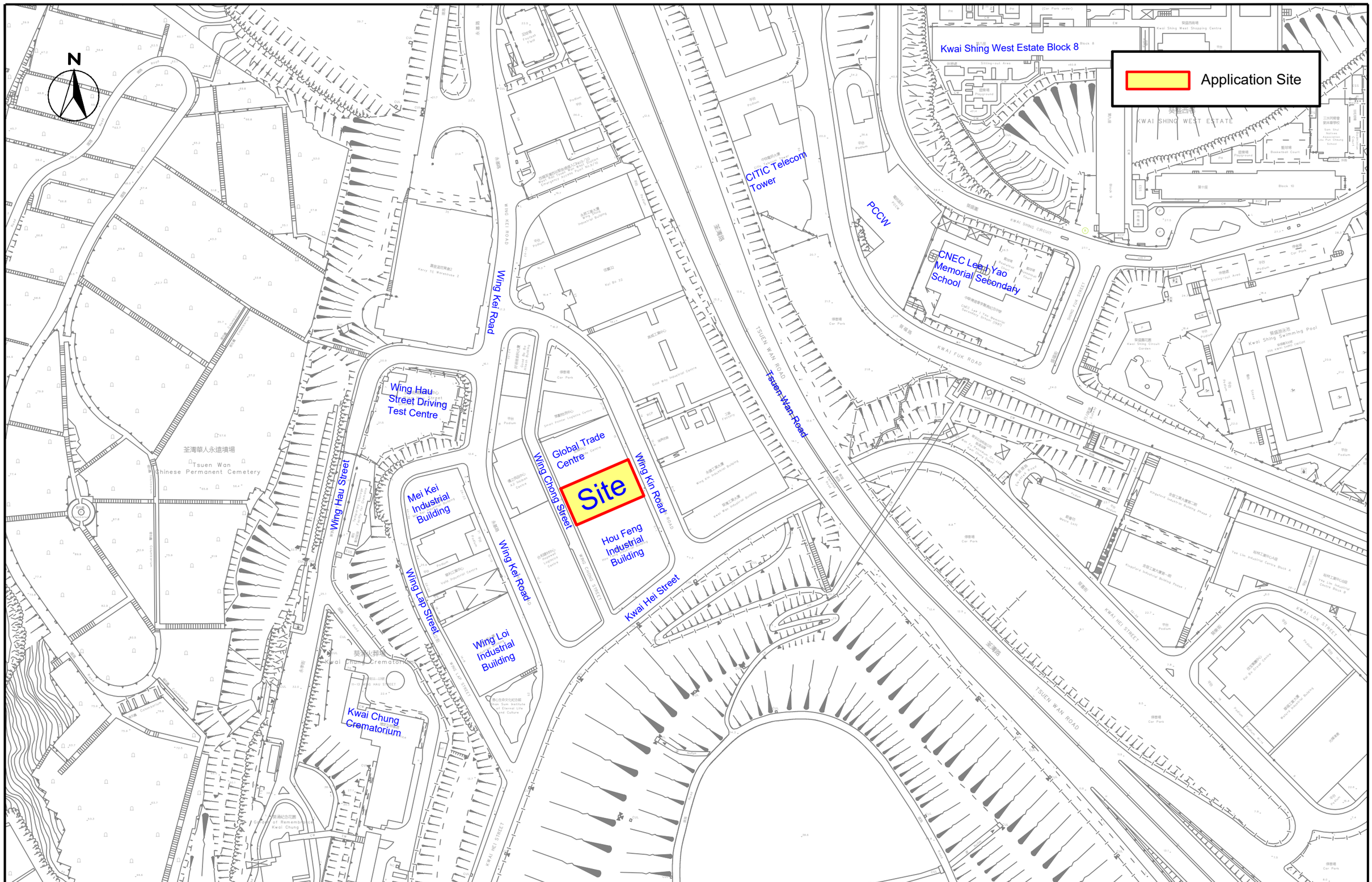
6.5.2 The project team is reminded to fulfill the requirements, including design, maintenance and operation of the ventilation systems, as stipulated in ProPECC PN 2/96 - Control of Air Pollution in Car Parks. In addition, the exhaust outlet for the basement carpark shall be located as far away as possible from nearby ASRs and/or fresh air intake to avoid causing any potential air pollutant nuisance.

7 CONCLUSION

7.1.1 The air quality impact from the construction of the proposed development on the surrounding area, as well as the impact from the surrounding area on the proposed development, has been assessed. With the implementation of dust suppression measures as outlined in the Air Pollution Control (Construction Dust) Regulation and adherence to good site practices, no adverse air quality impacts associated with the construction works are expected.

7.1.2 The proposed development is not considered an air pollution source during its operation. A qualitative assessment indicates that vehicular and industrial emissions are not expected to constrain the proposed development, provided that the locations of the fresh air intakes and exhaust outlet for the basement carpark are carefully designed.

FIGURES

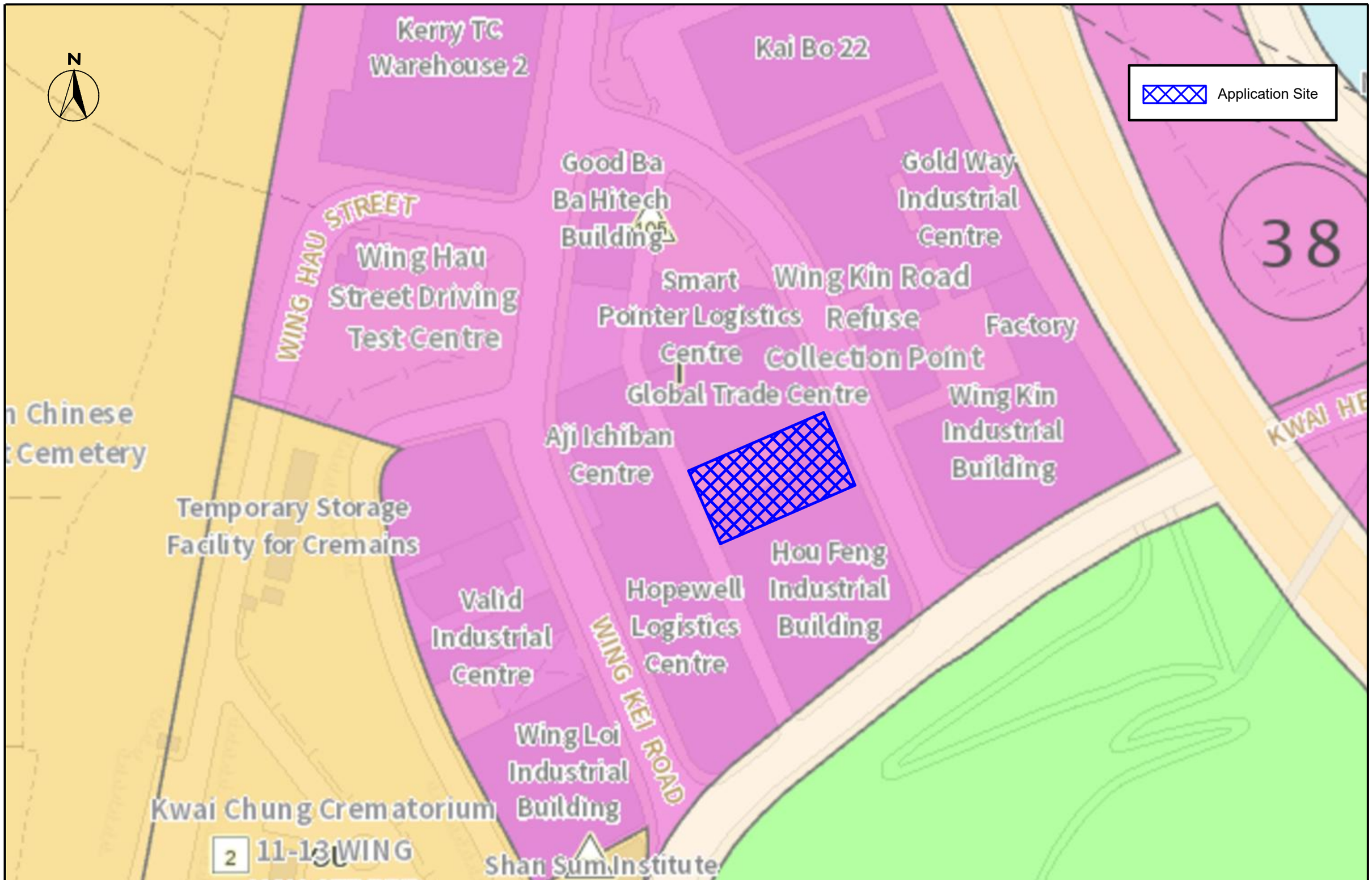


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Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Site Location Plan

SCALE	1:2000 @ A3	DATE	JAN 2025
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	2-1
		REV	-

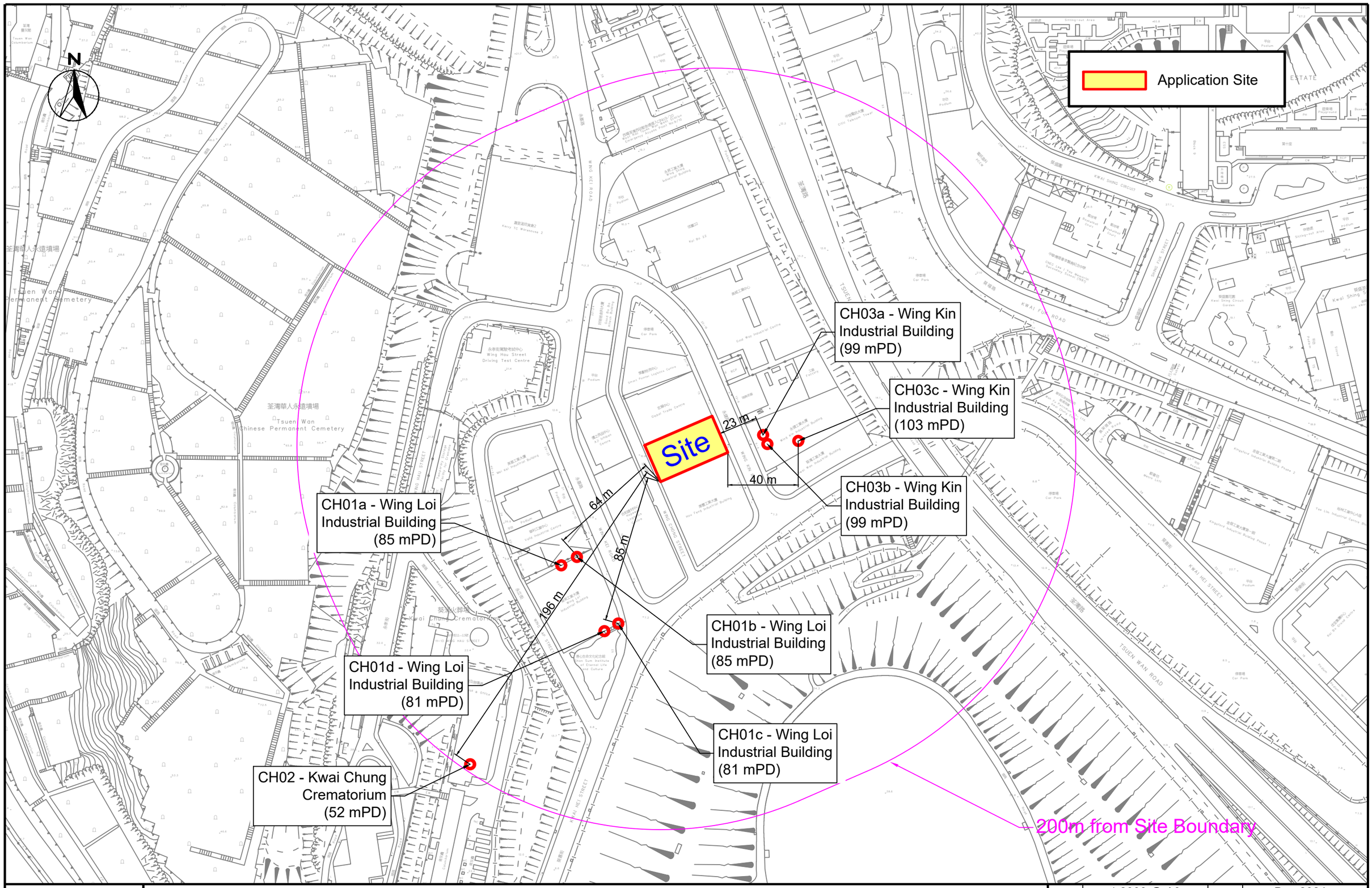


CINOTECH
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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Outline Zoning Plan

SCALE	1:1000 @ A3	DATE	DEC 2024
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	2-2
		REV	-

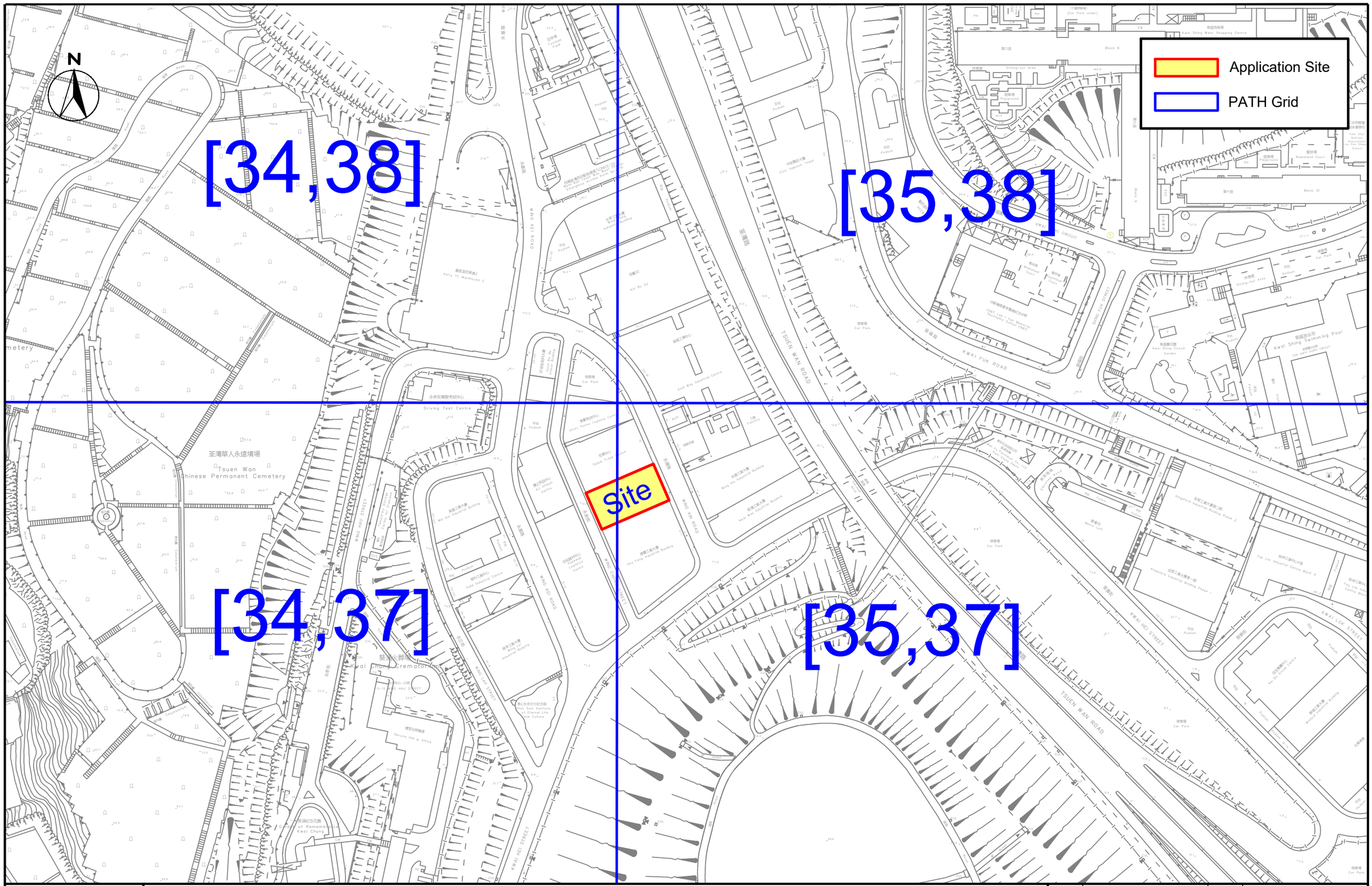


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Location of the Identified Chimneys

SCALE	1:2000 @ A3	DATE	Dec 2024
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	2-3
		REV	-

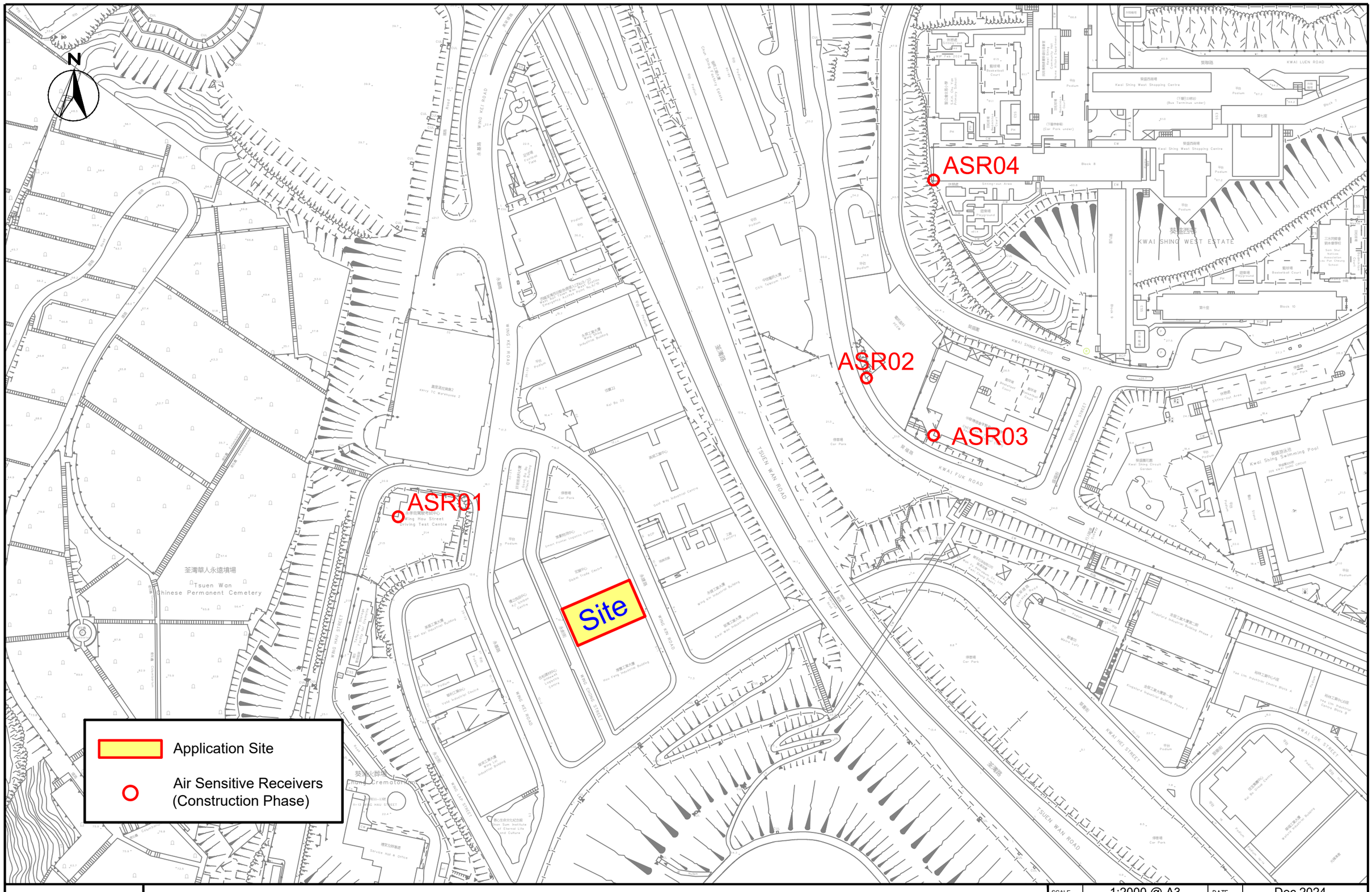


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

PATH Grids

SCALE	1:2000 @ A3	DATE	Dec 2024
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	4-1
		REV	-



CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Representative Air Sensitive Receivers (Construction Phase)

SCALE	1:2000 @ A3	DATE	Dec 2024
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	5-1
		REV	-

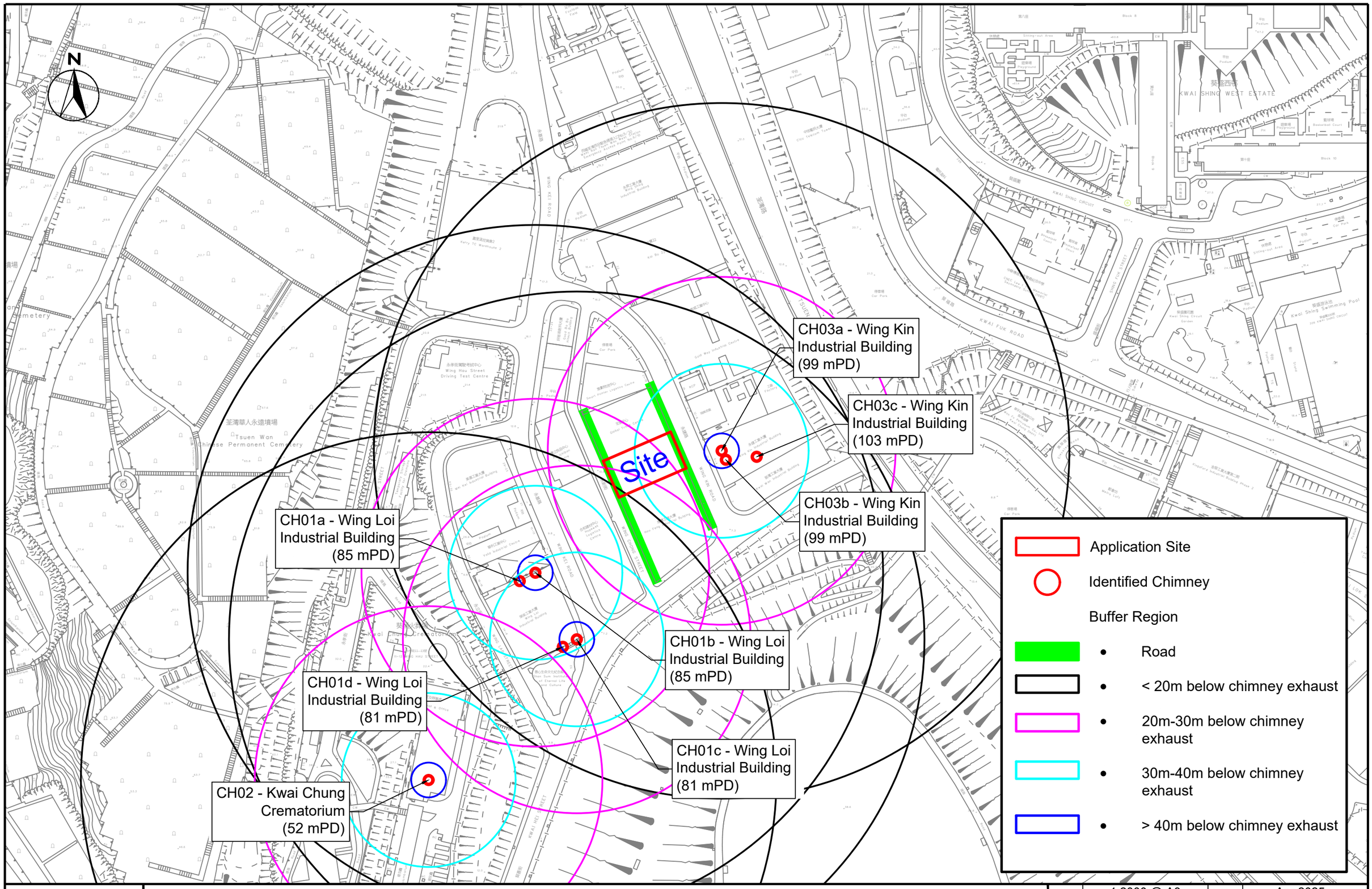


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Buffer Regions of Nearby Roads

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CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-1
		REV	-

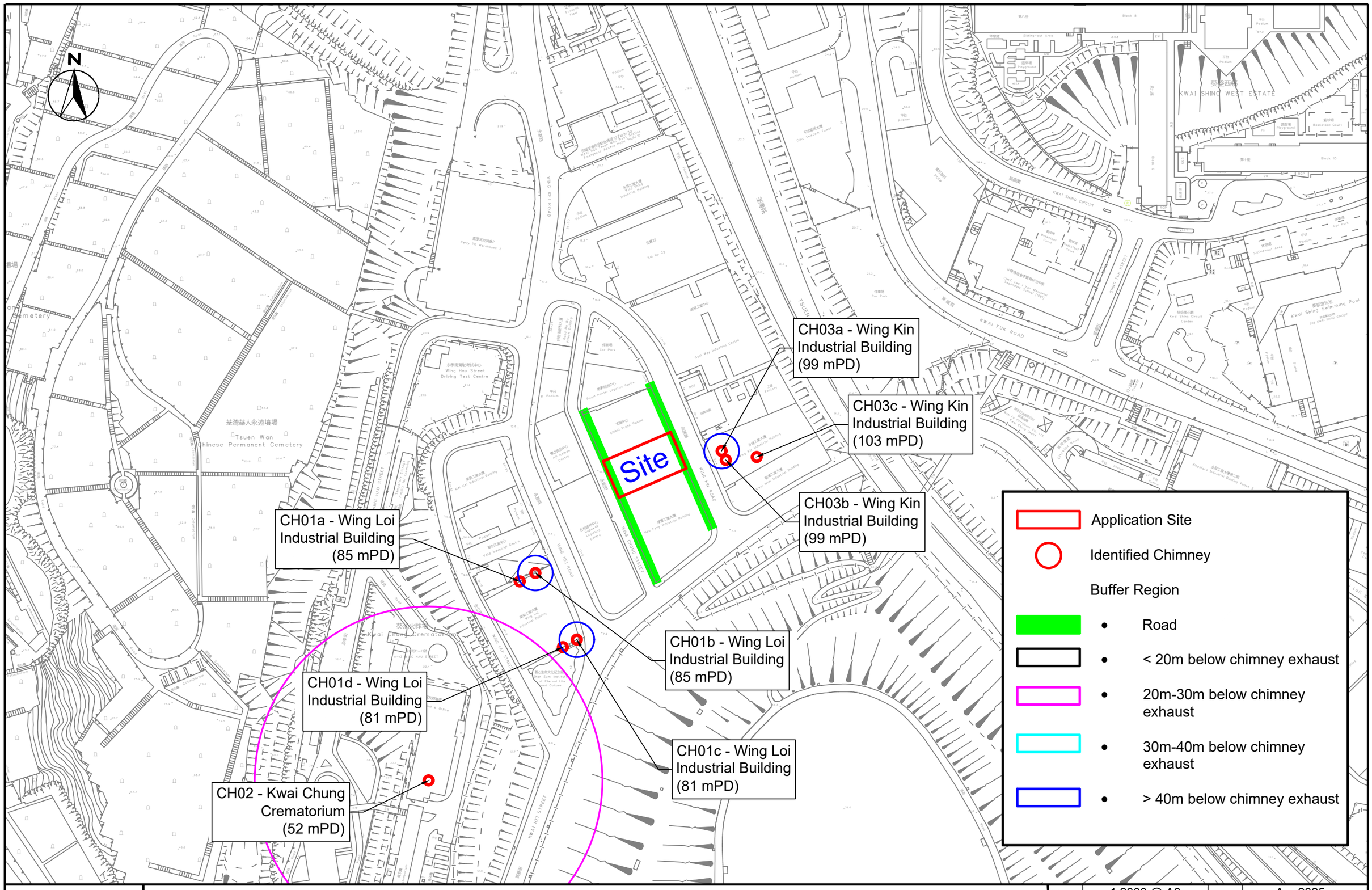


CINOTECH
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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Regions (Overall)

SCALE	1:2000 @ A3	DATE	Apr 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-2a
		REV	-

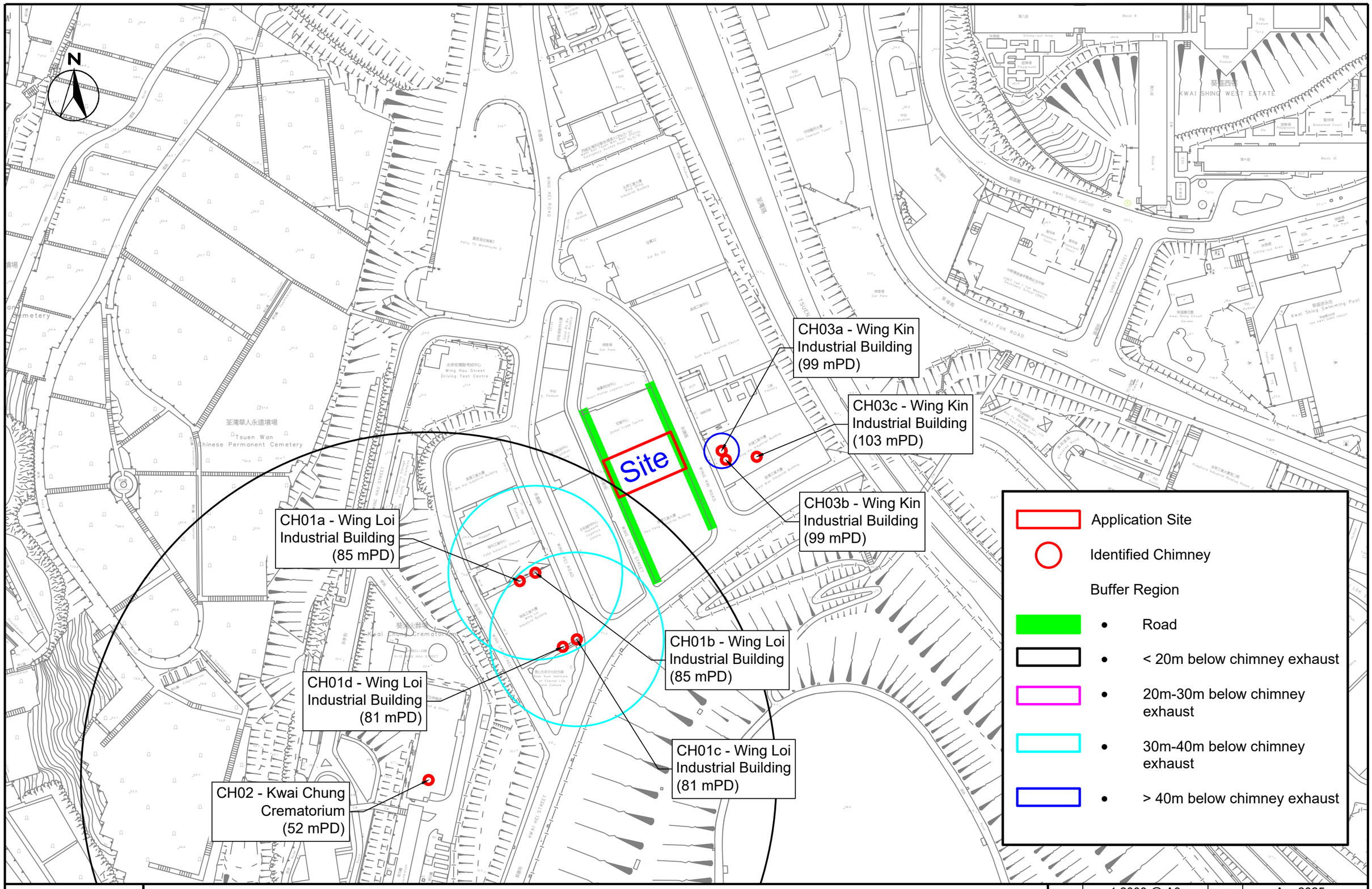


CINOTECH
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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Regions (Below 32mPD)

SCALE	1:2000 @ A3	DATE	Apr 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-2b
		REV	-

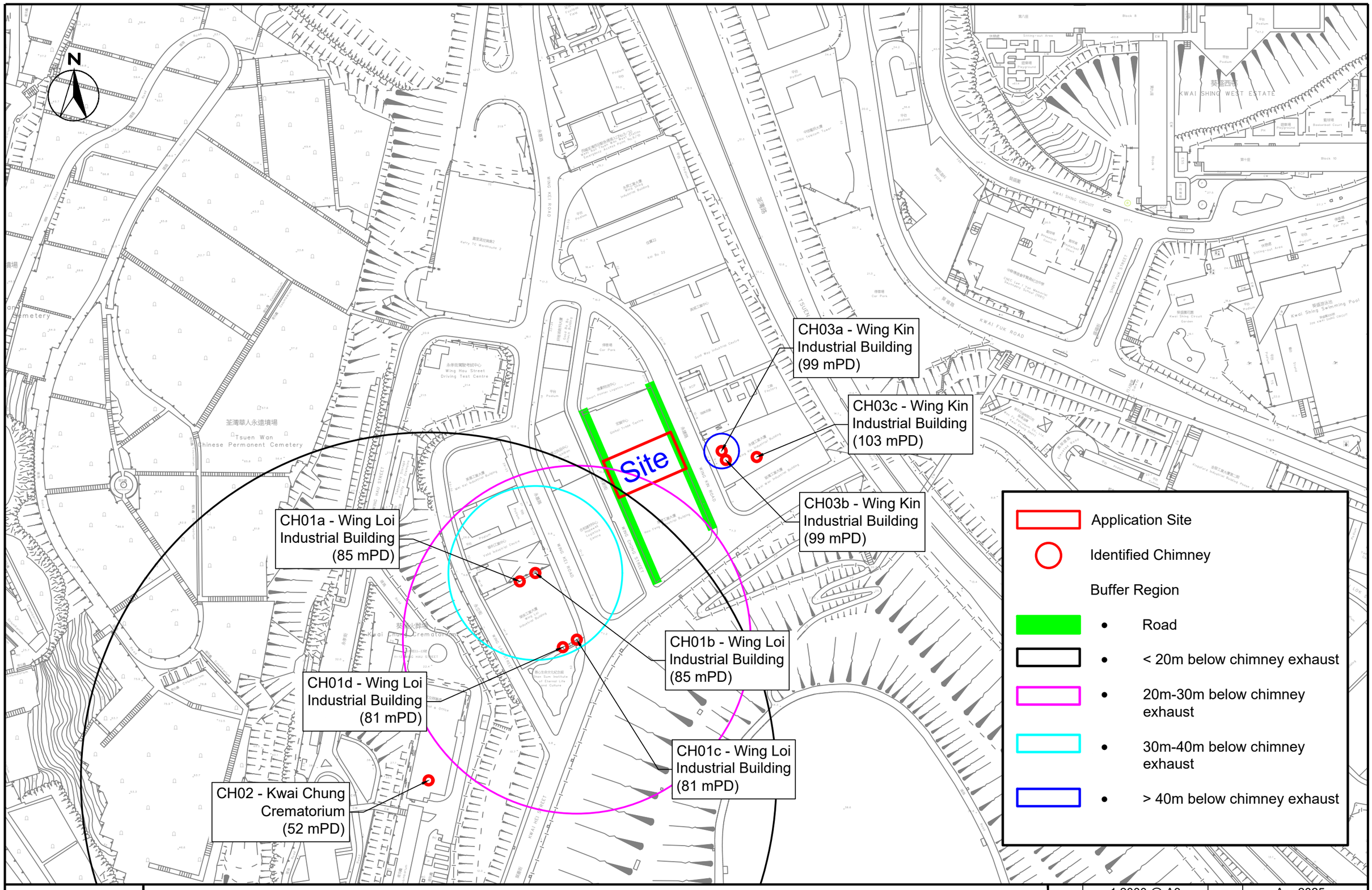


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Regions (32-51mPD)

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JOB No.	IA23170	DRAWING No.	6-2c
		REV	-

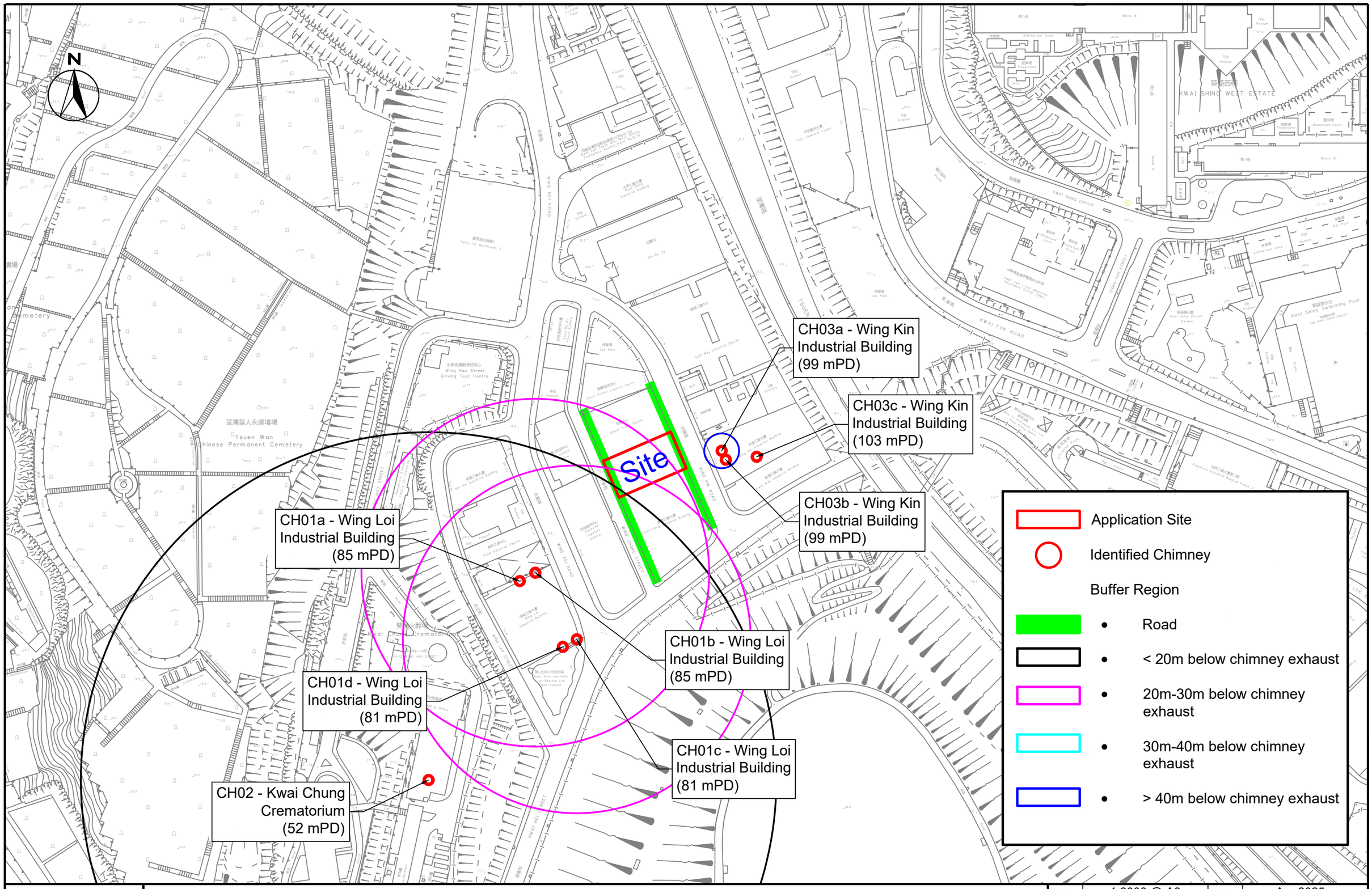


CINOTECH
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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Region (51-55mPD)

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JOB No.	IA23170	DRAWING No.	6-2d
		REV	-

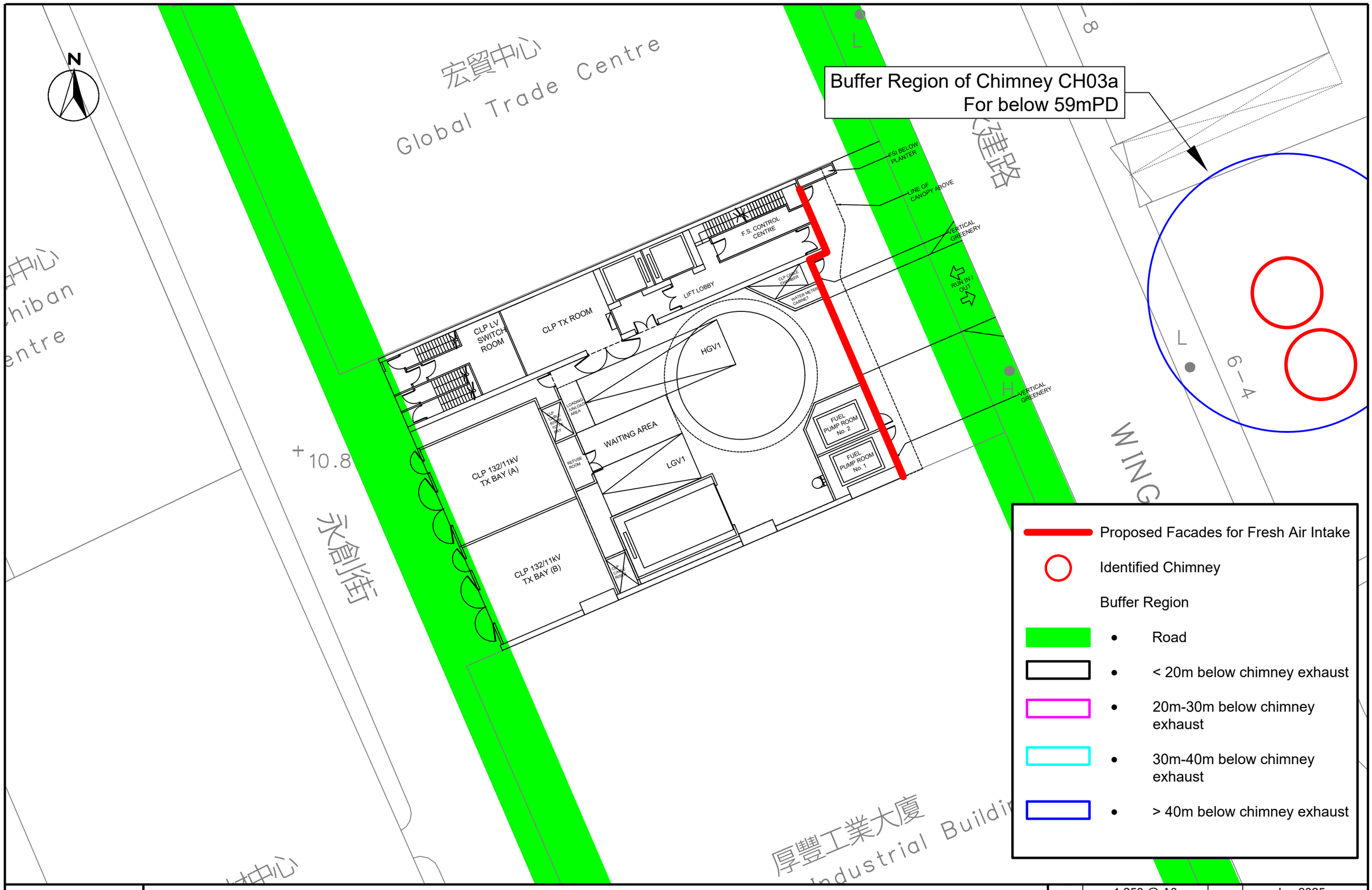


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Region (55-59mPD)

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		REV	-

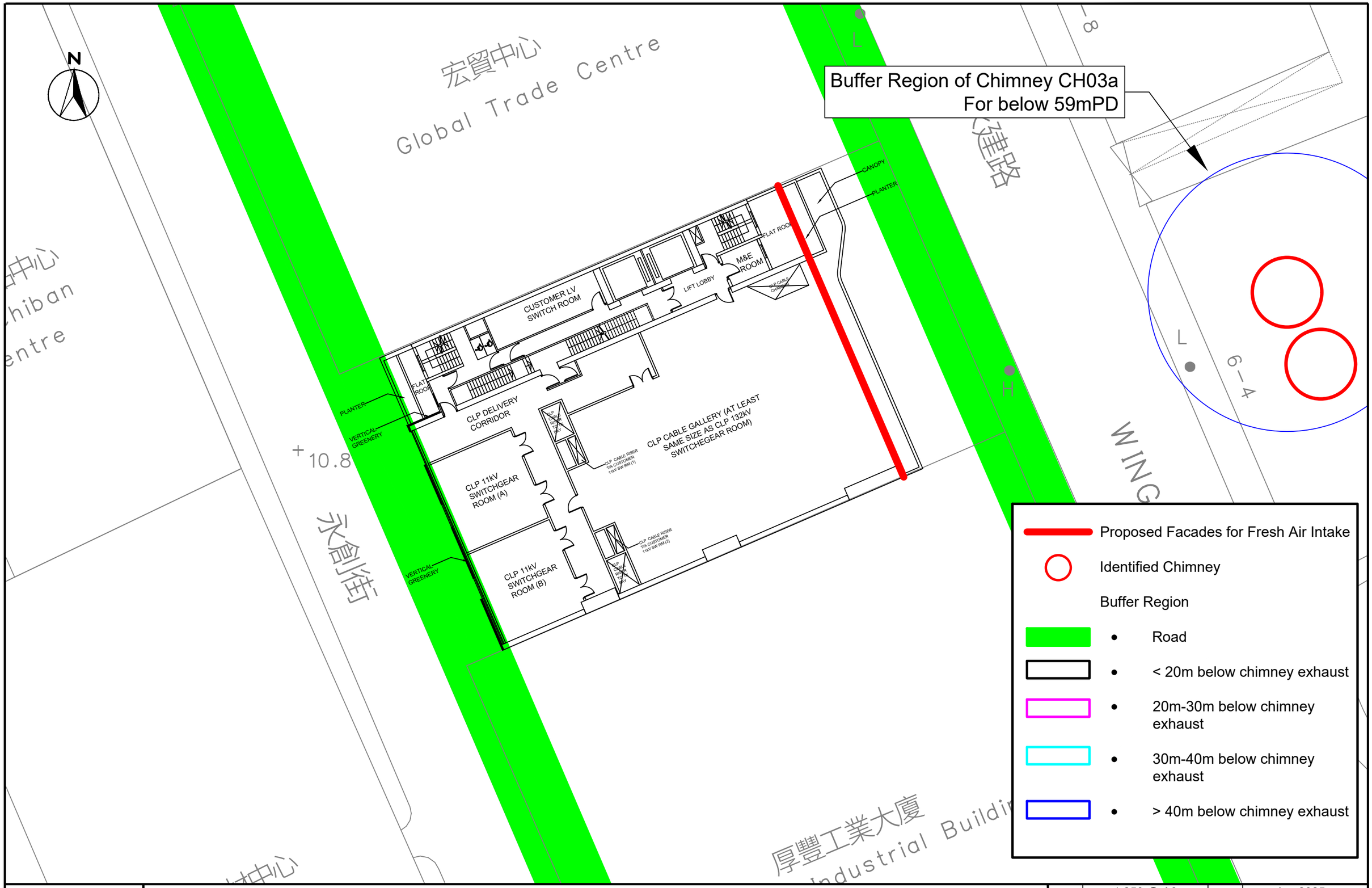


CINOTECH
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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (G/F - 9mPD to 20mPD)

SCALE	1:250 @ A3	DATE	Jun 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3a
		REV	-

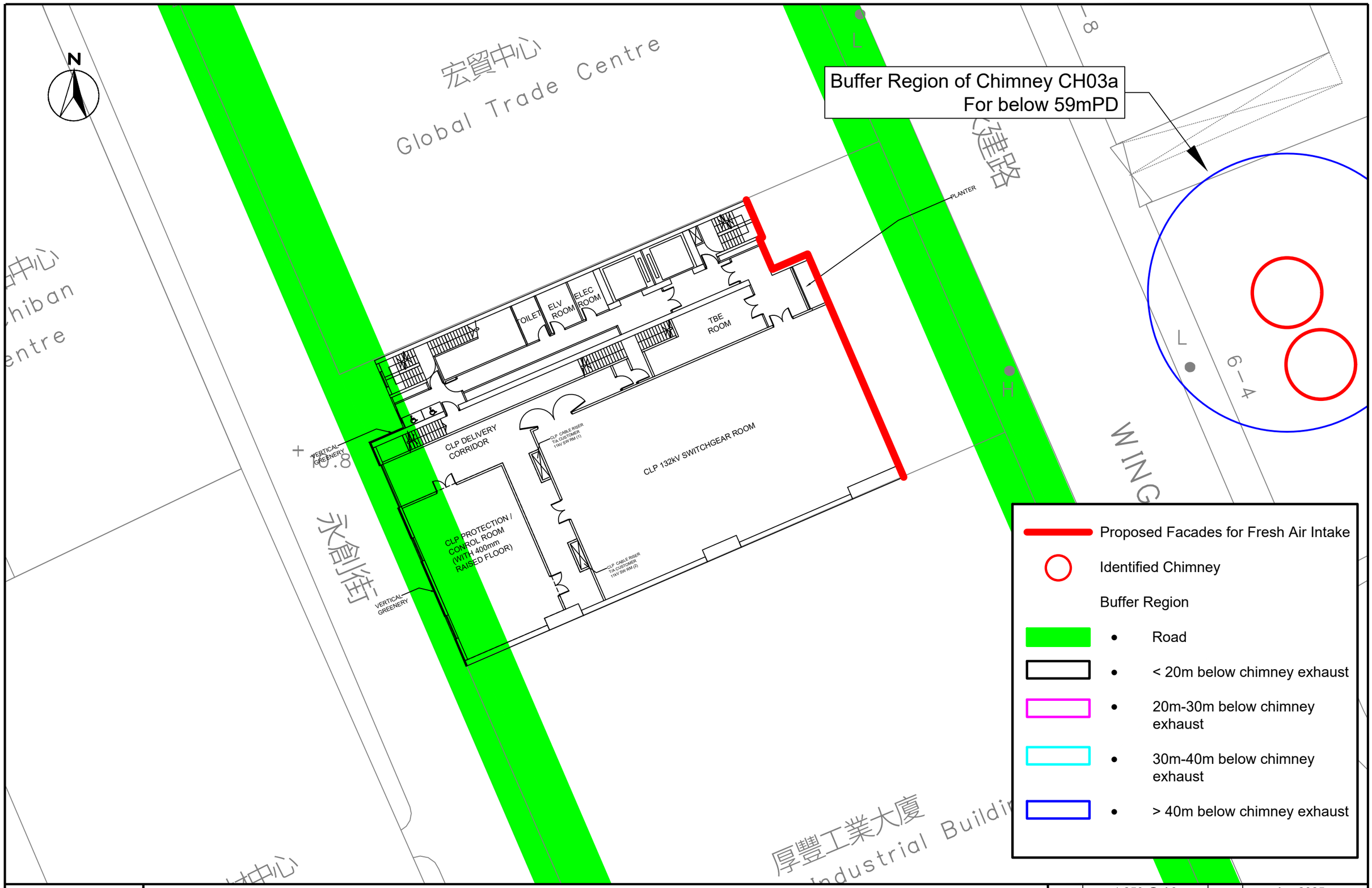


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (1/F - 20mPD to 26mPD)

SCALE	1:250 @ A3	DATE	Jun 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3b
		REV	-



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Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (2/F - 26mPD to 32mPD)

SCALE	1:250 @ A3	DATE	Apr 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3c
		REV	-

Buffer Region of Chimney CH03a
For below 59mPD

Buffer Region of Chimney CH02
For above 32mPD

N

宏貿中心
Global Trade Centre

永康街

WING KIN ROAD

FLAT ROOF
M&E ROOM
OILET
ELV ROOM
ELEC ROOM
PLANTER
VERTICAL GREENERY
CLP BATTERY & CHARGER ROOM (B)
CLP BATTERY & CHARGER ROOM (A)
CUSTOMER 11kV SWITCHROOM (1)
CUSTOMER 11kV SWITCHROOM (2)
CLP CABLE RISER F/B TO CUSTOMER 11kV SW RM (1)
CLP CABLE RISER F/B TO CUSTOMER 11kV SW RM (2)
UPPER PART OF CLP 132kV SWITCHGEAR ROOM ON 2/F
CLP TELECOM ROOM (WITH 400mm RAISED FLOOR)

Proposed Facades for Fresh Air Intake

Identified Chimney

Buffer Region

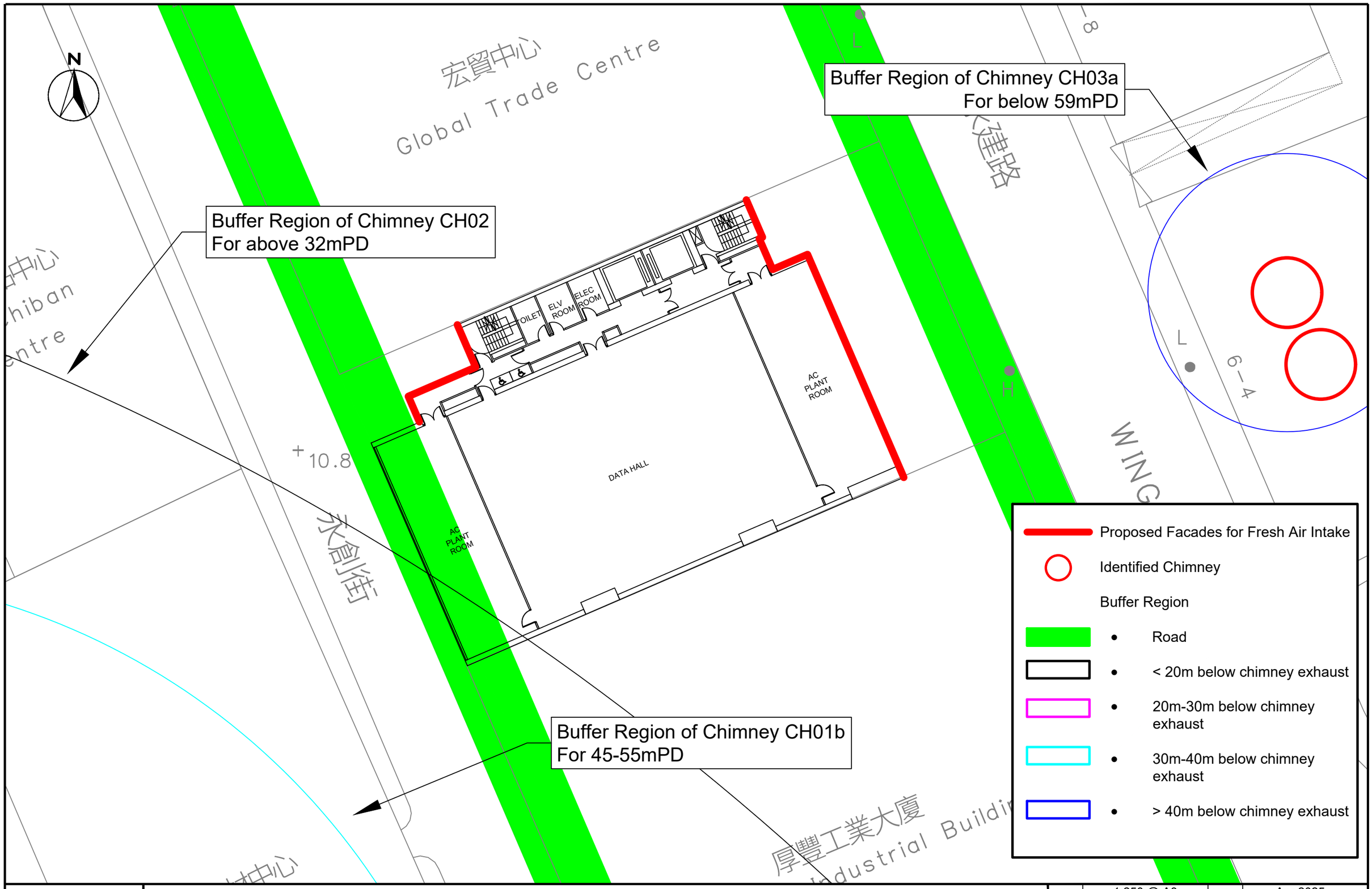
- Road
- < 20m below chimney exhaust
- 20m-30m below chimney exhaust
- 30m-40m below chimney exhaust
- > 40m below chimney exhaust

CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (3/F - 32mPD to 38mPD)

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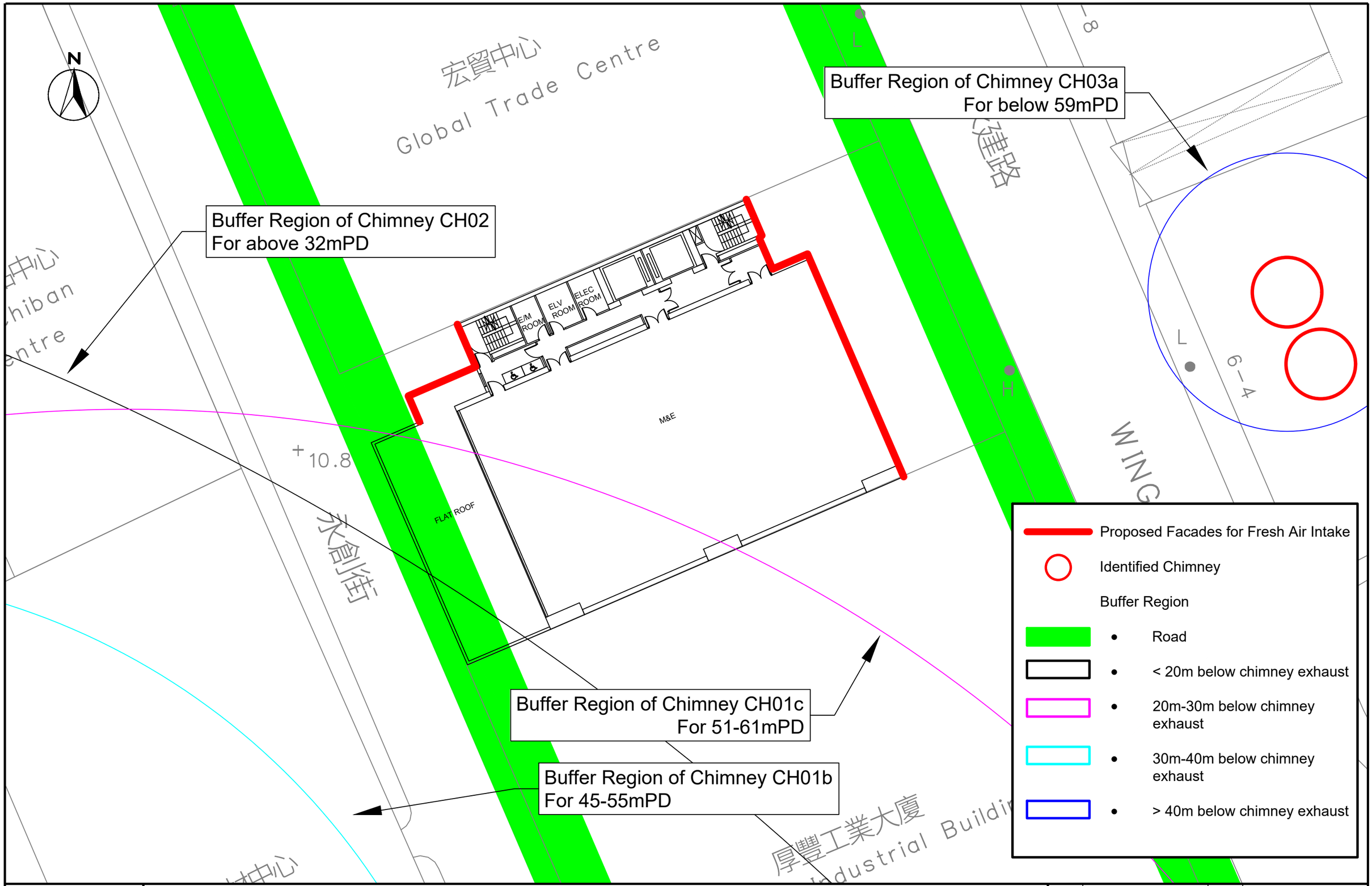


CINOTECH
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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (4-5/F - 38mPD to 49mPD)

SCALE	1:250 @ A3	DATE	Apr 2025
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JOB No.	IA23170	DRAWING No.	6-3e
		REV	-

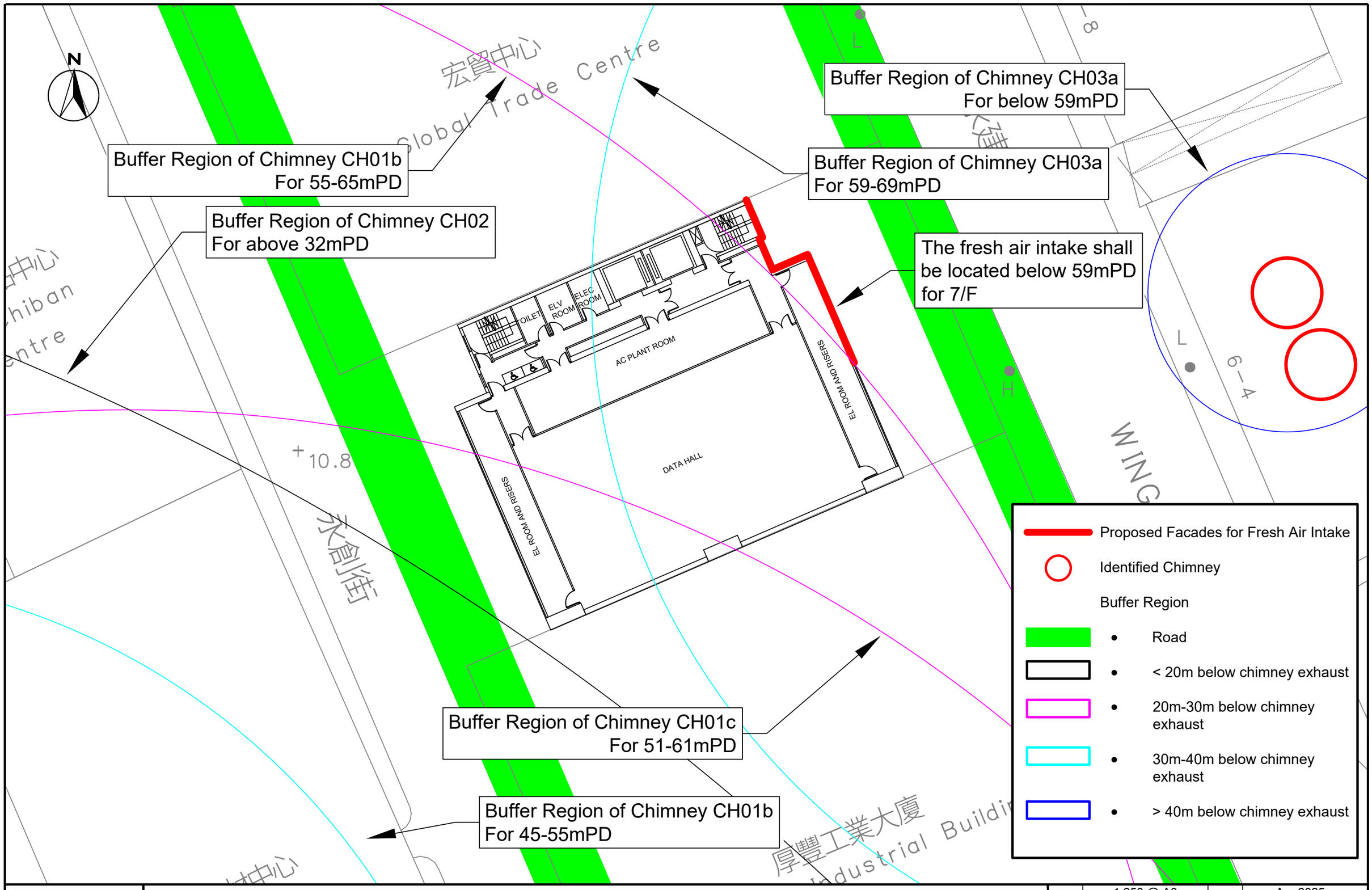


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (6/F - 49mPD to 54.5mPD)

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CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3f
		REV	-



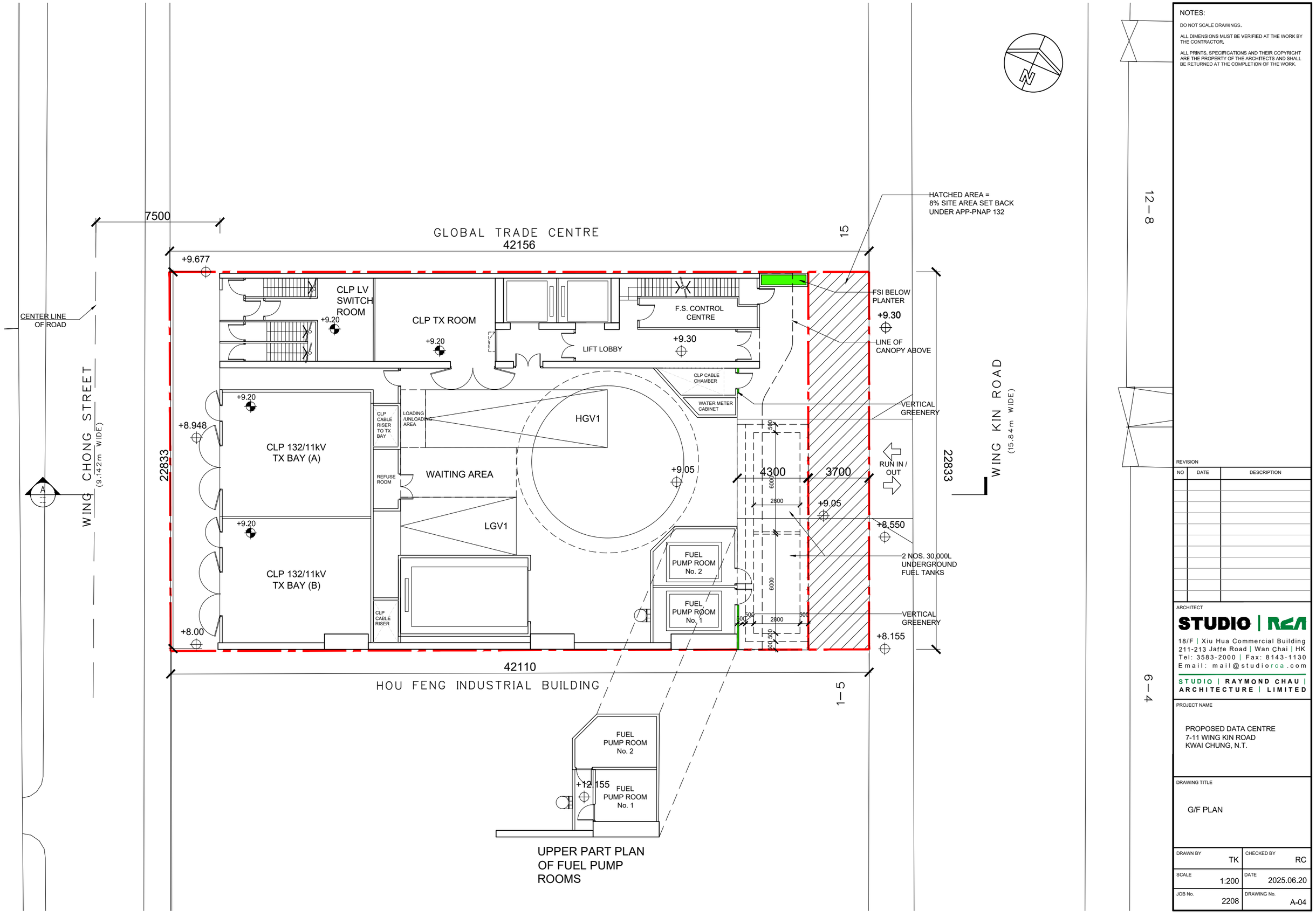
CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (7/F - 54.5mPD to 60mPD)

SCALE	1:250 @ A3	DATE	Apr 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3g
		REV	-

APPENDIX 2-1
TENTATIVE LAYOUT OF THE PROPOSED DEVELOPMENT



NOTES:

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211-213 Jaffe Road | Wan Chai | HK
Tel: 3583-2000 | Fax: 8143-1130
Email: mail@studiorca.com

STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

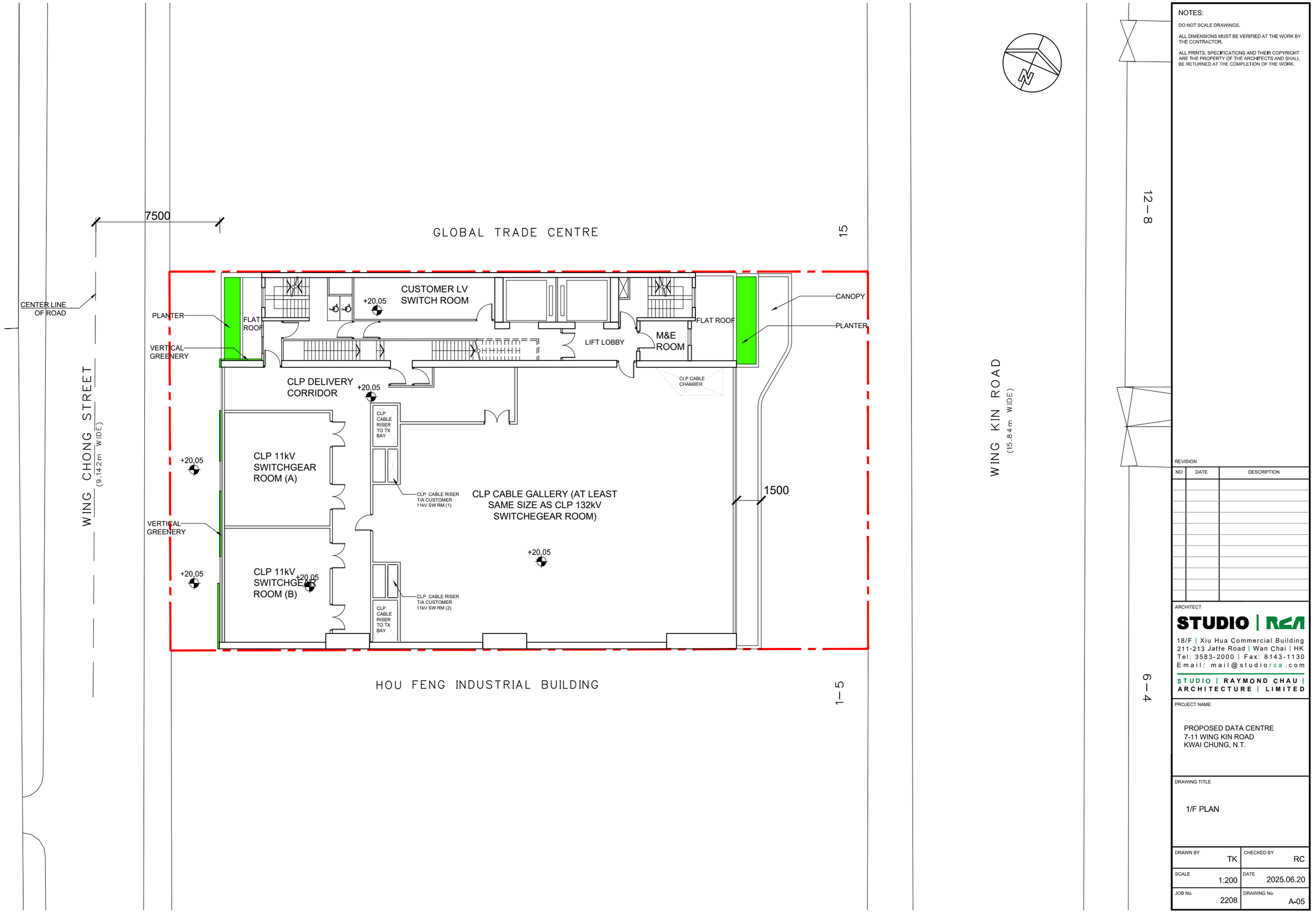
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

G/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.20
JOB No.	DRAWING No.
2208	A-04



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Email: mail@studiorca.com

STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

1/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.20
JOB No.	DRAWING No.
2208	A-05

GLOBAL TRADE CENTRE

15

WING CHONG STREET
(9.14.2m WIDE)

TOILET

ELV ROOM

ELEC ROOM

VERTICAL GREENERY

PLANTER

TBE ROOM

CLP DELIVERY CORRIDOR

+26.05

CLP CABLE RISER T/A CUSTOMER 11kV SW RM (1)

CLP PROTECTION / CONROL ROOM (WITH 400mm RAISED FLOOR)

+26.05

CLP 132kV SWITCHGEAR ROOM

+23.10

VERTICAL GREENERY

CLP CABLE RISER T/A CUSTOMER 11kV SW RM (2)

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

9 — 4

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Email: mail@studiorca.com

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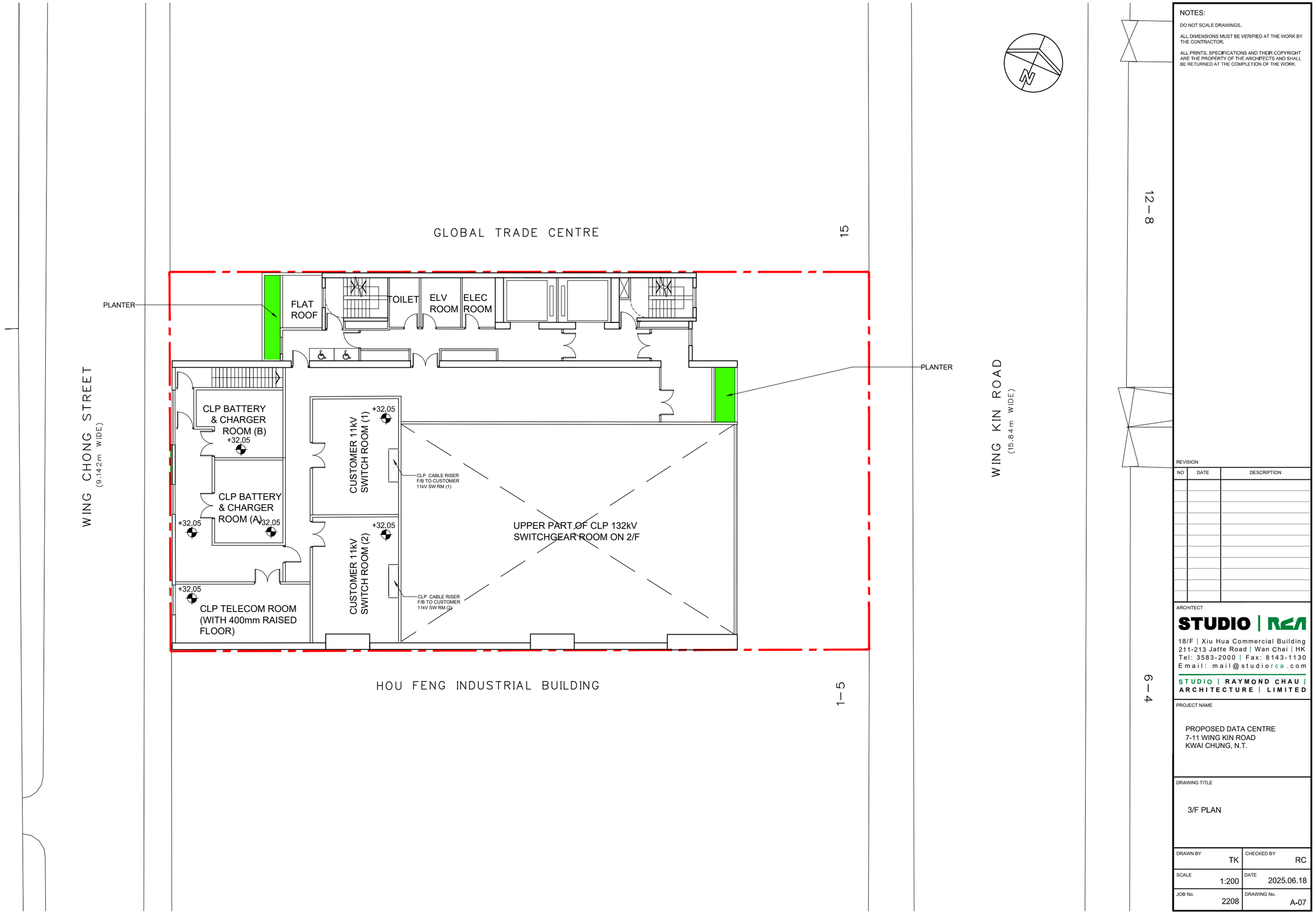
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

2/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.18
JOB No.	DRAWING No.
2208	A-06



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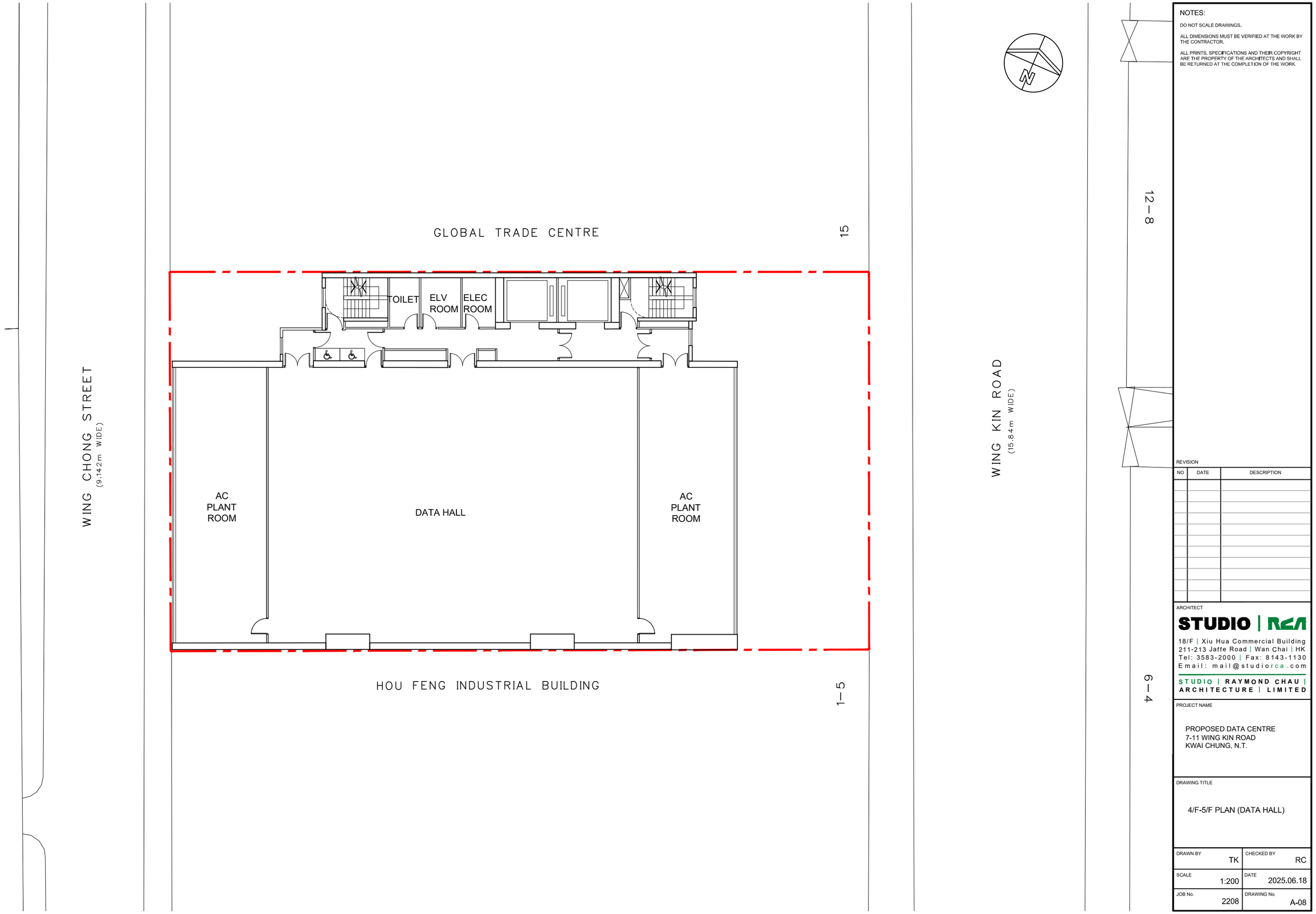
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

3/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.18
JOB No.	DRAWING No.
2208	A-07



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Tel: 3583-2000 | Fax: 8143-1130
Email: mail@studiorca.com

STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

4/F-5/F PLAN (DATA HALL)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-08

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

E/M ROOM | ELV ROOM | ELEC ROOM

FLAT ROOF

M&E

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

NOTES:

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STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

6/F PLAN (M&E)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-09

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

TOILET
ELV ROOM
ELEC ROOM
AC PLANT ROOM
EL ROOM AND RISERS
DATA HALL
EL ROOM AND RISERS

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

7/F-9/F, 11/F-13/F &
15/F-16/F PLANS (TYPICAL
DATA HALL FLOOR PLANS)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-10

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

E/M ROOM | ELV ROOM | ELEC ROOM

M&E

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

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STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

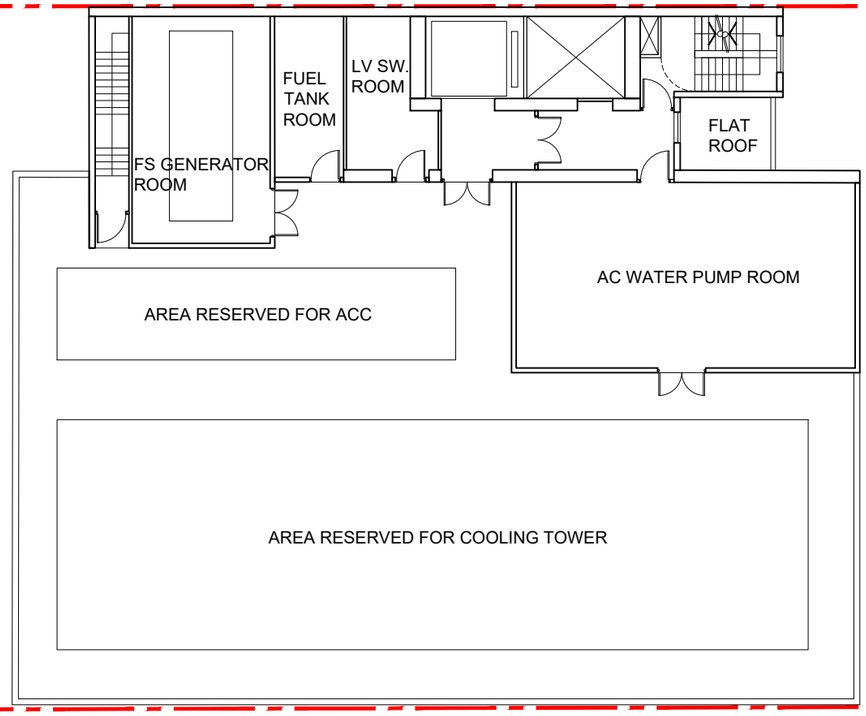
10/F & 14/F PLANS
(TYPICAL M&E FLOOR PLANS)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-11

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15



HOU FENG INDUSTRIAL BUILDING

1 – 5

WING KIN ROAD
(15.84m WIDE)

12 – 8

9 – 4

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STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

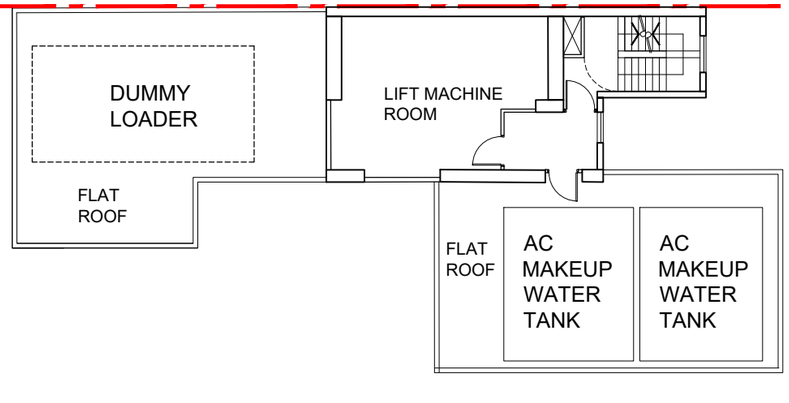
R/F PLAN

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TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-12

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15



HOU FENG INDUSTRIAL BUILDING

1—5

WING KIN ROAD
(15.84m WIDE)

12—8

6—4

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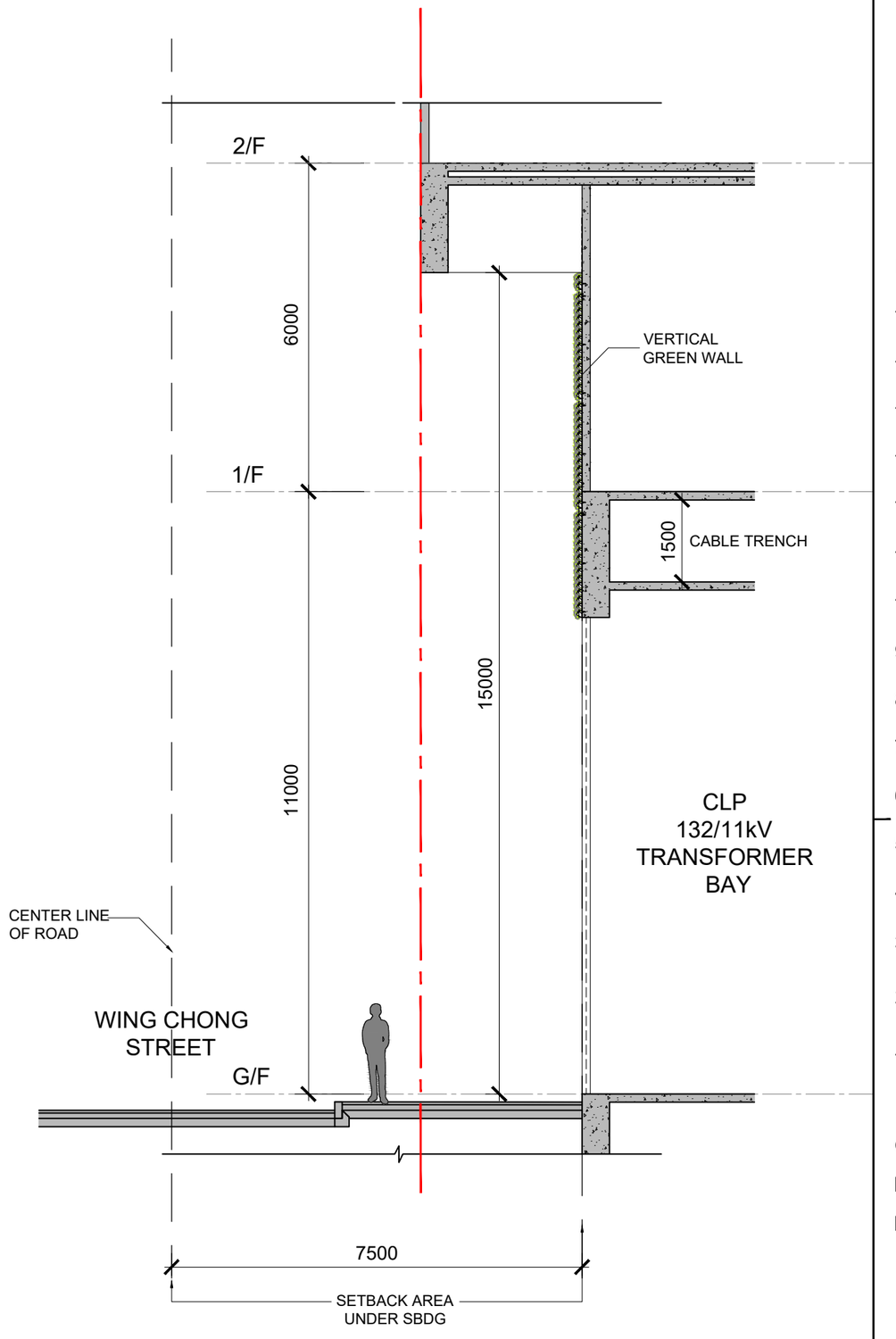
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

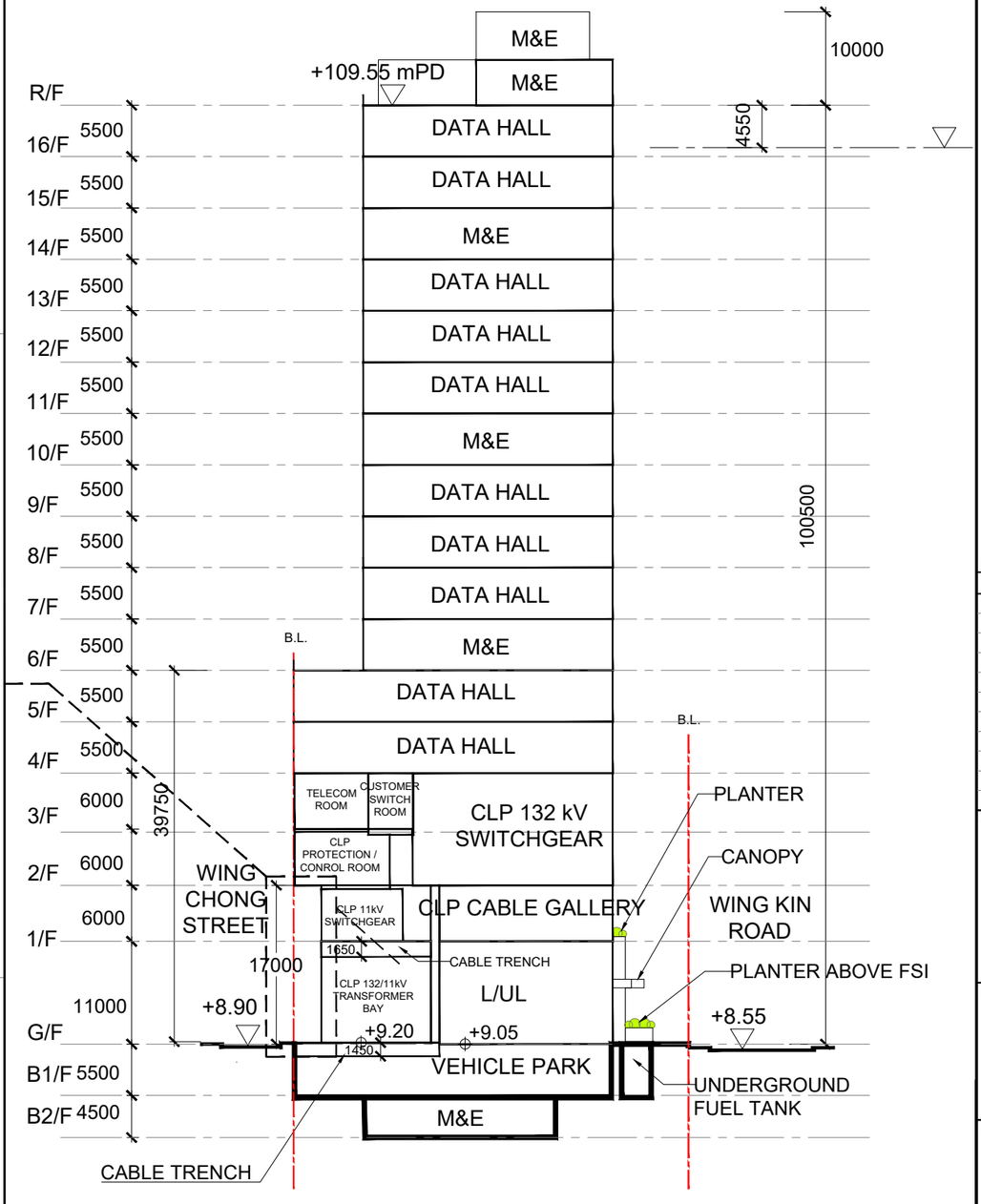
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UR/F PLAN

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SCALE	DATE
1:200	2025.06.18
JOB No.	DRAWING No.
2208	A-13



SECTION OF VERTICAL GREEN WALL
SCALE: 1:100



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STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

PROJECT NAME

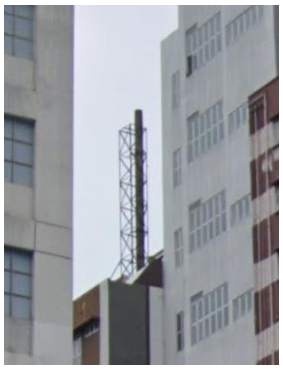
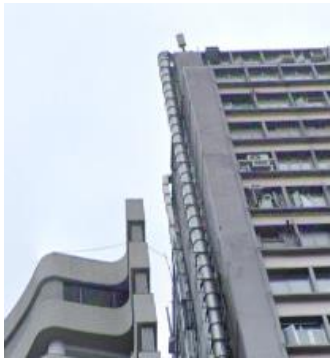
PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

SECTION A-A

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:750	2025.06.18
JOB No.	DRAWING No.
2208	A-14

APPENDIX 2-2
IDENTIFIED CHIMNEY IN THE VICINITY

ID	Description	Photos
CH01a & CH01b	**Wing Loi Industrial Building** Height of chimney: ~85 mPD (77+~8) Distance from site boundary ~64 m	 viewed from north  viewed from northeast
CH01c & CH01d	**Wing Loi Industrial Building** (a) Height of chimney: ~81 mPD (77+~4) Distance from site boundary ~85 m	 viewed from east  viewed from east
CH02	**Kwai Chung Crematorium** Height of chimney: ~52 mPD Distance from site boundary ~196 m	 viewed from south  viewed from east

ID	Description	Photos
CH03a & CH03b	**Wing Kin Industrial Building** (a) Height of chimney: ~99 mPD (96+~3) Distance from site boundary ~23 m	 viewed from southwest
CH03c	**Wing Kin Industrial Building** Height of chimney: ~103 mPD (95+~8) Distance from site boundary ~40 m	 viewed from southwest

ID	Description	Photos
--	**Mei Kei Industrial Building** A Chimney likely structure is identified in google 3D map only. No industrial Chimney identified.	 **Captured from 3D view of google map (last checked on 23rd Dec 2024)**  **View from North**  **Captured from Areial Photo E194703C (dated 1st Mar 2023)**

APPENDIX 6-1
CORRESPONDENCE WITH TRANSPORT DEPARTMENT REGARDING ROAD CLASSIFICATION

s.16 Planning application No. A/KC/510 - Comments from Government departments (batch 1 and batch 2)

From: **Ying Yin LEE<yingyinlee@td.gov.hk>** Mon, Apr 14, 2025, 10:57 AM
To: CKM Asia<mail@ckmasia.com.hk>

Dear Tommy,

The road types are correct please.

Regards,
Brian YY LEE
E/SD, TSSD
Office: 2399 2741

From: "CKM Asia" <mail@ckmasia.com.hk>
To: "Ying Yin LEE" <yingyinlee@td.gov.hk>
Date: 11/04/2025 05:43 PM
Subject: s.16 Planning application No. A/KC/510 - Comments from Government departments (batch 1 and batch 2)

Dear Brian,

As discussed today, Environmental Protection Department in their comment for the captioned project (see item 43 in attached **item 1**), requested for road type for 2 roads. It is much appreciated if you could confirm if you agree to the road type, which we have assumed for the 2 roads as follows:

1) Wing Kin Road – Local Distributor
2) Wing Chong Street – Local Distributor

Should you have any queries, please do not hesitate to contact the undersigned.

Thank you for your attention.

Regards.
Tommy Law

CKM Asia Limited
Traffic and Transportation Planning Consultant
21st Floor, Methodist House
36 Hennessy Road
Wan Chai, Hong Kong
Tel: (852) 2520 5990
Fax: (852) 2528 6343
Email: mail@ckmasia.com.hk
Website: www.ckmasia.com.hk

[attachment "item 1 - A_KC_510 - (Batch 1 Comments).pdf" deleted by Ying Yin LEE/TD/HKSARG]

Attachment 8

Noise Impact Assessment

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Noise Impact Assessment Report

(V2.0)

June 2025

Approved By 

(Project Manager: K.S. Lee)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties.

CINOTECH CONSULTANTS LIMITED
Room 1710, Technology Park
18 On Lai Street
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Email: info@cinotech.com.hk

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1 INTRODUCTION

1.1 Background

1.1.1 OXO YW Limited ("the Project Proponent") has proposed to develop a data centre located at No. 7-11 Wing Kin Road, Kwai Chung.

1.1.2 Cinotech Consultants Limited was commissioned by OXO YW Limited to carry out a Noise Impact Assessment (NIA) to assess and envisage the potential noise impact generated from the proposed development and its surrounding. Effective mitigation measures and recommendations are proposed to mitigate the excessive noise level to achieve an acceptable compliance level under the proposed design.

1.1.3 This NIA is prepared to support the planning permission from the Town Planning Board (TPB) under Section 16 of the Town Planning Ordinance (CAP. 131) for a data centre with minor relaxation of plot ratio restriction from 9.5 to 11.4, and height restriction from 105mPD to 109.55mPD.

2 DESCRIPTION OF THE ENVIRONMENT

2.1 The Site

2.1.1 The Application Site (the "Site") is located in an industrial area in Kwai Chung, bordered by Wing Chong Road to the west, Wing Kin Road to the east, Global Trade Centre to the north, and Hou Feng Industrial Building to the south (see **Figure 2-1**). The Site and its surroundings fall within the industrial zone, as per the Approved Kwai Chung Outline Zoning Plan No. S/KC/32 (see **Figure 2-2**).

2.1.2 The Site covers approximately 964 m² (about 929 m² excluding the additional area) and is currently occupied by a 2-storey industrial building. Planning applications have been submitted and approved with conditions in 2020 (Application No.: A/KC/457) and 2023 (Application No.: A/KC/496) for Offensive Trades use (Lard Boiling Factory) and Industrial use (Warehouse), respectively.

2.2 The Proposed Development

2.2.1 The Applicant proposes to redevelop the Application Site into a 17-storey data centre with a height of 109.55 mPD and plot ratio of 11.4. The tentative layout of the proposed development is shown in **Appendix 2-1**, with a planned completion date of 2029.

2.2.2 The proposed development is intended solely for data centre use. It will feature a central mechanical ventilation system and will not rely on openable windows for ventilation. Therefore, potential noise impacts from road traffic and nearby fixed equipment are not anticipated.

2.2.3 In the current design, noisy equipment such as data servers and water pumps will be housed in fully enclosed spaces. While the majority of the HVAC equipment will be located indoors, water-cooling towers and some outdoor air conditioning units will be situated on the rooftop.

2.3 Overview of Existing Environment in the Surroundings

Surrounding Environment

2.3.1 The Site is located in the industrial area of Kwai Chung, surrounded by various industrial buildings. In addition to these, a secondary school and residential development are situated ~194m & ~289m, respectively, at northeast of the Site. A 1-storey building is located ~110m at northwest of the Site.

Surrounding Environment – Road Traffic

2.3.2 The Site is bordered by Wing Kin Road on the east and Wing Chong Street on the west, which both roads are classified as local distributors. According to the Annual Traffic Census 2023 (ATC 2023) published by the Transport Department, the nearest major road is Tsuen Wan Road (Station 5604), an expressway located approximately 90 m to the northeast of the Site, with an Average Annual Daily Traffic (AADT) of 122,780. Therefore, the traffic in the vicinity of the Site is considered heavy.

3 LEGISLATION, STANDARDS & GUIDELINES

3.1 Construction Noise

3.1.1 Construction noise is governed by the Noise Control Ordinance (NCO) (Cap. 400) which prohibits the use of PME during the restricted hours (7 p.m. to 7 a.m. on Monday to Saturday and any time on a general holiday, including Sunday) without a valid Construction Noise Permit (CNP) issued by the Authority. The criteria and procedures for issuing the permit are specified in the "Technical Memorandum on Noise from Construction Works Other than Percussive Piling" - (TM1).

3.1.2 For construction works other than percussive piling, although TM1 does not provide control over daytime construction activities, the noise limits are set out in the "Practice Note for Professional Persons Environmental Consultative Committee" (ProPECC) "Minimizing Noise from Construction Activities" (PN1/24).

3.2 Road Traffic Noise

3.2.1 HKPSG provides guidance on acceptable road traffic noise levels at the openable windows of various types of noise sensitive buildings. The relevant criteria are shown in **Table 3-1**.

Table 3-1 HKPSG Road Traffic Noise Planning Criteria

Uses	**Road Traffic Noise L_{10}, (1hr) dB(A)**
Domestic Premises	**70**
Hotel and Hostels	70
Offices	70
Educational institutions	65
Hospital & Clinics	55
Places of public worship and courts of law	65

Note: The above criteria apply to noise sensitive uses which rely on opened window for ventilation.

3.2.2 The following Practise Notes provide guideline to facilitate the project planning and design against road traffic noise impact.

- "ProPECC PN3/23 Application of Sound Insulation in Residential Buildings to Reduce Noise Transmission Between Units" provides technical information on the design and application of sound insulation on partition walls and floors between residential units for better privacy protection and indoor sound environment.
- "ProPECC PN4/23 Practice Note for the Planning of Residential Developments against Road Traffic Noise" recommends mitigation measures against road traffic noise in planning stage and promulgates self-assessment procedures to facilitate the planning approval.
- "ProPECC PN5/23 Application of Innovative Noise Mitigation Designs in Planning Private Residential Developments against Road Traffic Noise Impact" provides guidance on technical information for innovative mitigation measures (Acoustic Window and Enhanced Acoustic Balcony) against road traffic noise.

3.3 Fixed Noise

3.3.1 Fixed noise sources, such as the building services system, ventilation system, and the operation of the Project is controlled under the NCO and "Technical Memorandum for the Assessment of Noise from Places Other Than Domestic Premises, Public Places or Construction Sites" (IND-TM). According to the IND-TM, the Acceptable Noise Level (ANL) for a Noise Sensitive Receiver (NSR) is determined by the Area Sensitive Ratings (ASR); which classify a NSR based on the type of the area within, and the degree of the effect on the NSR of particular Influencing Factors (IFs). The different types of area containing the NSR are categorized into the rural area, low density residential area, urban area and other areas, with reference to Table 1 of the IND-TM. While the IFs, defined as industrial areas or area containing a number of factories or major road with an annual average daily traffic flow (AADT) in excess of 30,000, should be assessed for their influence on the NSR according to the degree of influence ("not affected", "indirectly affected" and "directly affected").

3.3.2 The HKPSG states that all planned fixed noise sources should be located and designed so that when assessed in accordance with the IND-TM, the level of the intruding noise at the façade of the nearest sensitive use should be at least 5 dB(A) below the appropriate ANL shown in Table 2 of the IND-TM or the background noise level, whichever is lower. When the prevailing background noise levels would be adopted as the assessment criteria, the prevailing background noise levels, L_{90}(1-hour), at the relevant NSRs shall be measured during the typical operation hours of the fixed plant within daytime, evening and night times. The Acceptable Noise Levels (ANLs) for different Area Sensitivity Ratings (ASRs) are given in **Table 3-2**.

Table 3-2 Acceptable Noise Levels for Fixed Noise Impact (ANLs), dB(A), L_{eq}, (30mins)

Time Period	ASR A	ASR B	ASR C
Day (0700 to 1900 hours)	60	65	70
Evening (1900 to 2300 hours)			
Night (2300 to 0700 hours)	50	55	60

3.3.3 The Site is located in the urban area of Kwai Chung, surrounded by various industrial buildings. Tsuen Wan Road, with an AADT exceeding 30,000, is located to the northeast of the Site. The proposed development and its surroundings are directly affected by the industrial area and major road, and are therefore classified as 'ASR C'.

3.3.4 Given the industrial activity and heavy traffic in the vicinity, the prevailing background noise level is expected to be higher than ANL-5dB during both daytime and nighttime. The criteria for the planned fixed noise sources of the proposed development are 65 dB(A) for daytime and evening, and 55 dB(A) for nighttime. Additionally, since the proposed development does not rely on openable windows for ventilation, the criteria for existing fixed noise sources affecting the proposed development are not applicable.

4 CONSTRUCTION NOISE IMPACT ASSESSMENT

4.1 Potential Noise Impact and Proposed Mitigations

4.1.1 The use of powered mechanical equipment (PME) will generate construction noise impact to the nearby NSRs. The major noise emitting activities will be the demolition of existing structures and foundation works of future development.

4.1.2 As the Site is situated in a well-developed urban area, the number of PME that it can accommodate is limited, however, the noise from construction activities may still be an impact if the construction works are not planned and arranged properly.

4.1.3 ProPECC PN1/24 "Minimizing Noise from Construction Activities" provides construction noise requirements and recommendations on practices such as quieter construction methods and equipment to minimize construction noise.

4.1.4 To minimize noise generation, subject to detailed site works arrangement, the contractor shall consider the following mitigation measures, if necessary and applicable:

- Use non-percussive equipment such as hydraulic crusher, sawing, coring machines for demolishing existing building and structure
- Use non-percussive piling diving method such as hydraulic press-in method, vibration or jacking method for foundation work
- Use Quality Powered Mechanical Equipment (QPME) recognized by the Environmental Protection Department (EPD). The QPME shall be registered with EPD, and valid label issued by EPD shall be affixed on the QPME all times.
- Use Quieter Construction Methods[1] as far as practicable
- Schedule work to minimize concurrent activity and duration of impact
- Regular maintenance of equipment to prevent noise emission due to impairment
- Adopt good site practice, such as throttle down or switch off equipment unused or intermittently used between works
- Position mobile noisy equipment in locations away from nearby NSRs and point the noise sources to directions away from NSRs
- Make good use of other structures for noise screening
- Use of mobile noise barriers/enclosures along the path of noise propagation

4.1.5 Construction activities under the current design involves concrete removal works, demolition works, site formation/excavation works and superstructure works. Subject to detailed site works arrangement, the contractor shall consider the following mitigation measures, if necessary and applicable:

<u>Concrete Removal Works / Demolition Works:</u>

- Use of high-pressure water jetting instead of traditional jackhammers and drill hammers;
- Use of quieter type wire saws or diamond wire saws for cutting large areas and heavily reinforced concrete;

[1] Quieter Construction Methods: https://www.epd.gov.hk/epd/misc/construction_noise/contents/index.php/en/home2/quieter-construction-methods.html.

- Use of quieter type blade saws utilizing diamond blades with higher speeds and smoother blades reduces excitation of vibration;
- Use of hydraulic crushers for concrete breaking instead of traditional excavator-mounted breakers;
- Use of handheld concrete crushers instead of traditional jackhammers;
- Use of hydraulic splitters instead of traditional jackhammers and breakers.

Site Formation / Excavation Works:

- Use of silent piling by press-in method instead of traditional massive augering and piling machines or drop hammer for sheet piling / channel planking installation work;
- Use of a sheet piling noise reducer such as a suitable shock absorber to reduce collisions between sheet pile / channel planking and holding parts;
- Use of pile driving impact cushions to reduce noise generated by piling impact;
- Pre-augering/pre-trench/boring pile holes to remove underground obstruction for avoiding hard driving / soften the ground;
- Use of crack inducers instead of traditional percussive breakers.

Superstructure Works:

- Use of prefabricated structure / sections to replace in-situ construction to reduce the amount of mechanical equipment used on site;
- Use of self-compacting concrete (without the aid of a vibrator e.g. poker for compaction) for in-situ concreting;
- Use of crack inducers instead of traditional percussive breakers.

4.1.6 With proper noise mitigation measures implemented during the construction phase, no adverse noise impact arising from the construction activities is expected.

5 OPERATION NOISE IMPACT ASSESSMENT

5.1 Traffic Noise and Existing Fixed Noise Sources

5.1.1 Since the proposed development does not rely on openable windows for ventilation, potential impacts from traffic noise and existing fixed noise sources are not anticipated. Consequently, the criteria for these noise sources affecting the proposed development are not applicable.

5.2 Planned Fixed Noise Sources

Representative Noise Sensitive Receivers during Operation Phase

5.2.1 Representative NSRs within 300m assessment boundary have been selected for the assessment as listed in **Table 5-1** and illustrated in **Figure 5-1**.

Table 5-1 Representative Noise Sensitive Receivers for Planned Fixed Noise Sources of the Proposed Development

NSR ID	Description	Use	Noise Criteria, dB(A)		Building Height (mPD) [1]	Nearest Horizontal Distance to Site Boundary (m)
			Daytime & Evening	Night Time		
NSR01	Wing Hau Street Driving Test Centre	Office	65	55	25	109
NSR02	Kwai Shing West Estate Block 8	Domestic Premise	65	55	125	289
NSR03	CNEC Lee I Yao Memorial Secondary School	Educational Institution	65	55	50	194

Note:
[1] Estimated values.

Planned Fixed Noise Sources and Design Consideration

5.2.2 Potential noise impacts may arise from the equipment of the proposed development during the operation phase.

5.2.3 The equipment with potential noise impacts is identified including chiller plants and water-cooling towers. According to the current design, most HVAC equipment will be located indoors, while water-cooling towers and some outdoor air conditioning units will be situated on the rooftop.

5.2.4 Exposed equipment may directly impact nearby NSRs, while noise from indoor HVAC equipment will transmit through ventilation pipes and emit at duct exhausts.

5.2.5 The noisy equipment is located at the southern portion of the roof (109.55mPD; refer to roof layout in **Appendix 2-1**). The nearest NSR with a direct line of sight to the noise source is 289m to the northeast of the site, adverse noise impact is not anticipated.

5.2.6 To mitigate noise from indoor HVAC equipment, ventilation pipes will be equipped with silencers to reduce in-duct noise levels. Acoustic louvres will also be used, when necessary, to ensure compliance with the maximum allowable sound power level.

5.2.7 Other equipment, such as data servers, water pumps, and lift motors, will be housed in enclosed rooms, so no adverse noise impacts to the surroundings are anticipated.

5.2.8 To ensure that the noise sources of the proposed development comply with the relevant noise criteria stipulated in the HKPSG, the noisy equipment will be designed to adhere to the maximum allowable sound power level (SWL). The maximum allowable SWL has been further calculated as described in the following sections.

Assessment Methodology

5.2.9 The predicted fixed noise level at the NSR could be quantified by the following standard formula:

SPL = SWL - DC - BC + FC + TC

where,

- SPL: Sound Pressure Levels at receiver, in dB(A)
- SWL: Sound Power Levels of Fixed Noise Sources, in dB(A)
- DC: Distance Correction, DC = 20 × log10 (D) + 8, D is the slant distance between the NSR and noise source in meters. However, for simplicity and conservatism, horizontal distance has been adopted instead of slant distance
- FC: Façade Correction of 3dB(A)
- BC: Barrier Correction of 10dB(A) when direct line-of-sight is completely blocked by building
- TC: Tonality Correction of 3dB(A) is assumed

Maximum Allowable SWL at Site Boundary

5.2.10 The maximum allowable SWL at the site boundary has been calculated based on the horizontal distance between the nearest representative NSR (NSR01) and the site boundary. A 3 dB correction has been applied to account for tonal characteristics for assessment purposes. If the noise exhibits tonal, intermittent, or impulsive characteristics during operation, the maximum allowable SWLs of the fixed equipment should be adjusted according to the recommendations in Section 3.3 of the IND-TM. The maximum allowable SWL at the site boundary are summarized in **Table 5-2** and detailed in **Appendix 5-1**.

5.2.11 Although the layout is still in the early stages and detailed designs, such as the number of units and their noise levels, are not yet available, no adverse fixed noise impacts to the NSRs are anticipated if the choice of equipment, installation locations, and mitigation measures are properly designed.

Table 5-2 Maximum Allowable Sound Power Level for the Building Service Equipment of the Proposed Development

Time Period	Maximum Allowable SPL at the NSR (NSR01), dB(A)	Horizontal Distance from the Project Site Boundary to the worst NSR, m	Correction, dB(A) [1]			Allowable Sound Power Level at Source, dB(A) [2]
			Distance	Facade	Tonality	
Day and Evening Time (07:00-23:00)	65	109	-49	3	3	107
Night Time (23:00 – 07:00)	55	109	-49	3	3	97

[1] For assessment purpose, a 3 dB of tonality has been adopted.
[2] The Maximum Allowable Sound Power Level at Source should be corrected by the tonality, intermittency, & impulsiveness correction of the selected equipment, according to Section 3.3 of the IND-TM.

6 CONCLUSION

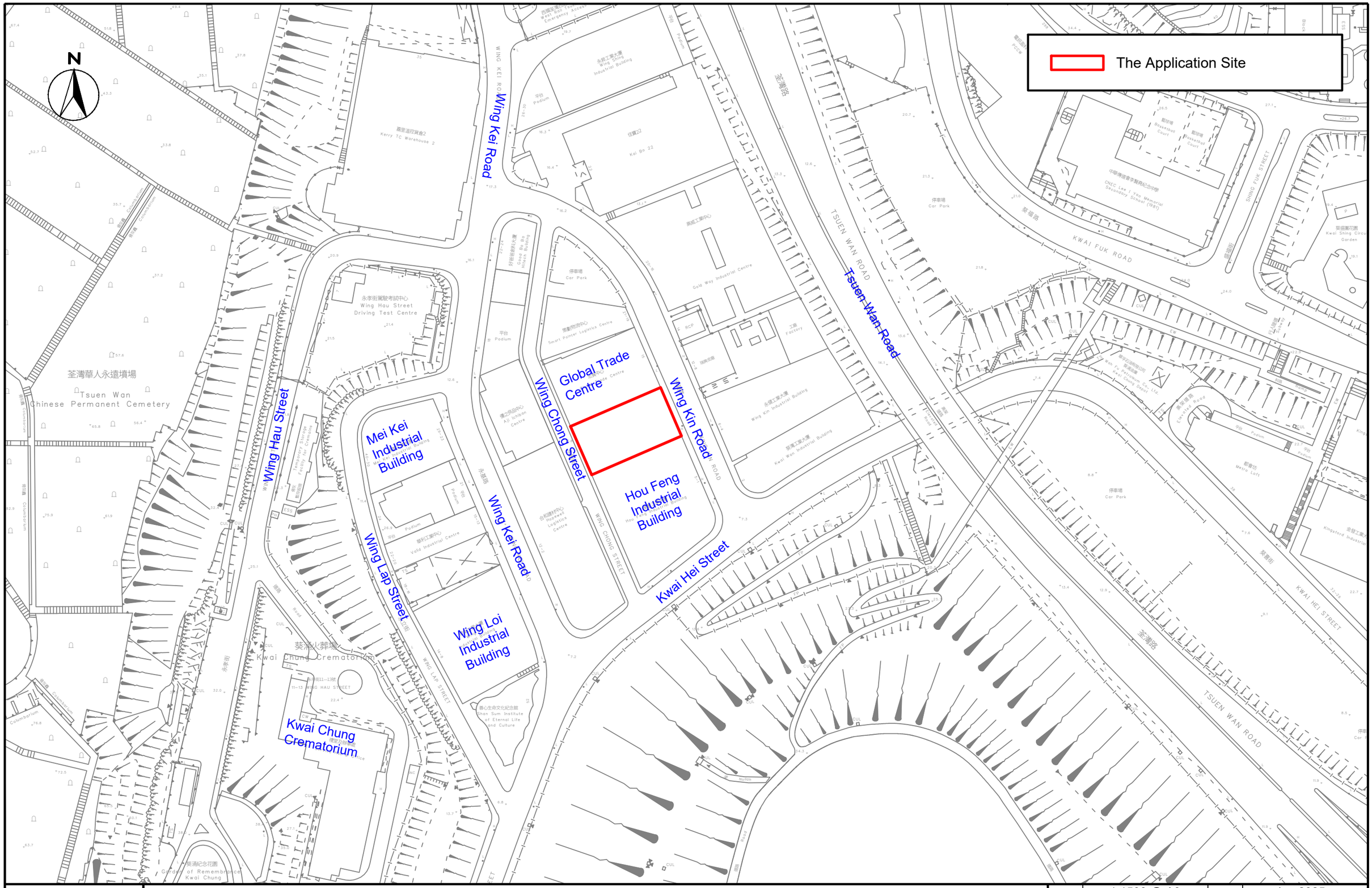
6.1.1 The potential noise impacts from the construction and operation of the proposed development have been assessed.

6.1.2 The overall noise impact during the construction phase is considered insignificant. Depending on the detailed site work arrangements, mitigation measures will be implemented as necessary and applicable, in accordance with ProPECC PN 1/24, to minimize construction noise impacts on nearby NSRs.

6.1.3 The provision of openable windows for ventilation is not anticipated. Therefore, potential noise impacts from road traffic and existing fixed noise sources on the proposed development are not expected.

6.1.4 The planned fixed noise sources of the proposed development should not cause any adverse noise impacts if the maximum allowable SWLs are properly implemented. Thus, no planned fixed noise impacts are anticipated.

FIGURES

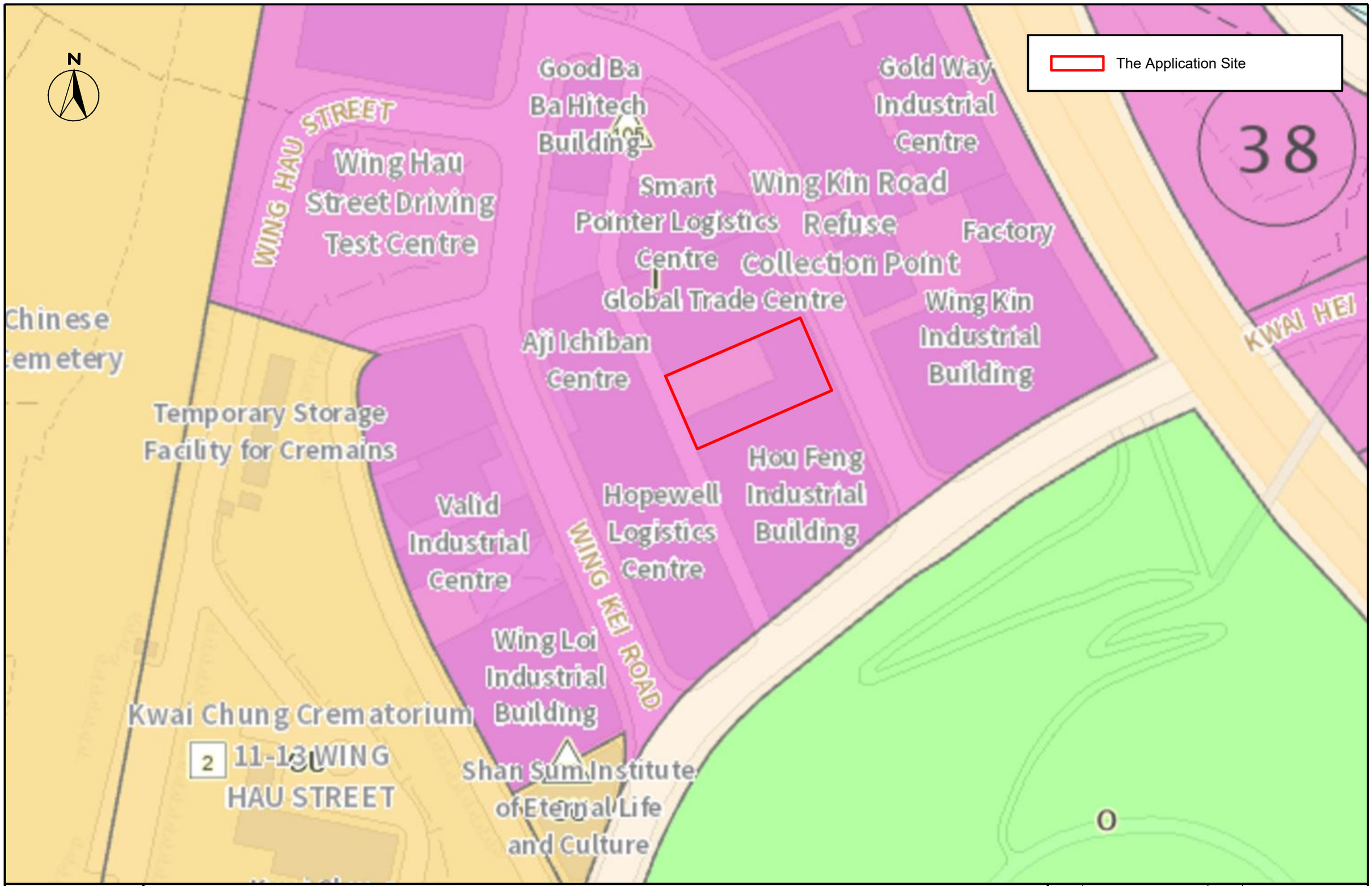


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7 - 11 Wing Kin Road, Kwai Chung (K.C.T.L.)

Site Location Plan

SCALE	1:1500 @ A3	DATE	Jan 2025
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	2-1
		REV	-



CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7 - 11 Wing Kin Road, Kwai Chung (K.C.T.L.)

Outline Zoning Plan

SCALE	1:1000 @ A3	DATE	Jan 2025
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No. 2-2	REV -

N

NSR01

NSR02

NSR03

300m Assessment Boundary

The Application Site

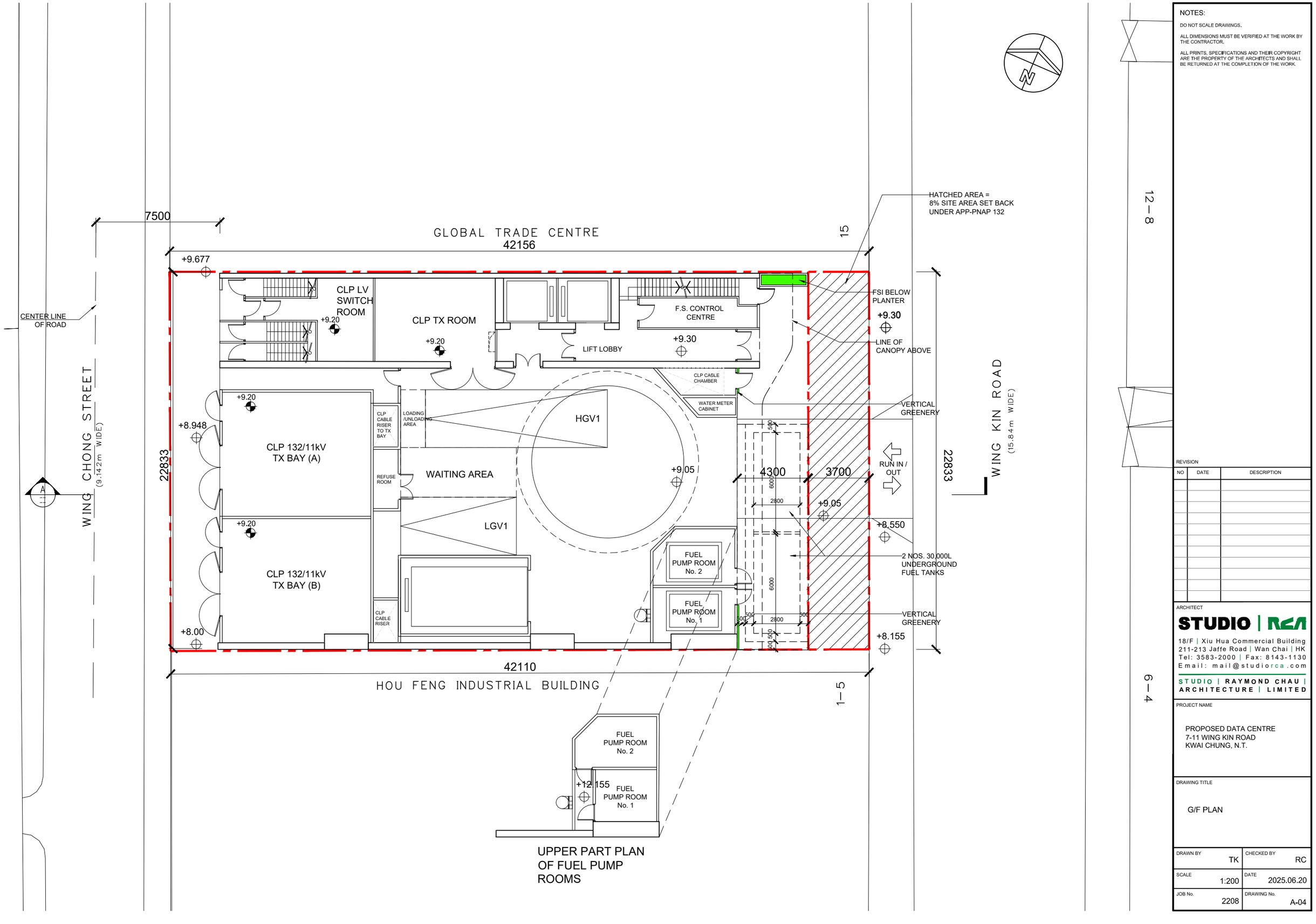
CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7 - 11 Wing Kin Road, Kwai Chung (K.C.T.L.)

Representative Noise Sensitive Receivers (Fixed Noise Impact)

SCALE	1:2500 @ A3	DATE	Jan 2025
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	5-1
		REV	-

APPENDIX 2-1
LAYOUT OF THE PROPOSED DEVELOPMENT



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STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

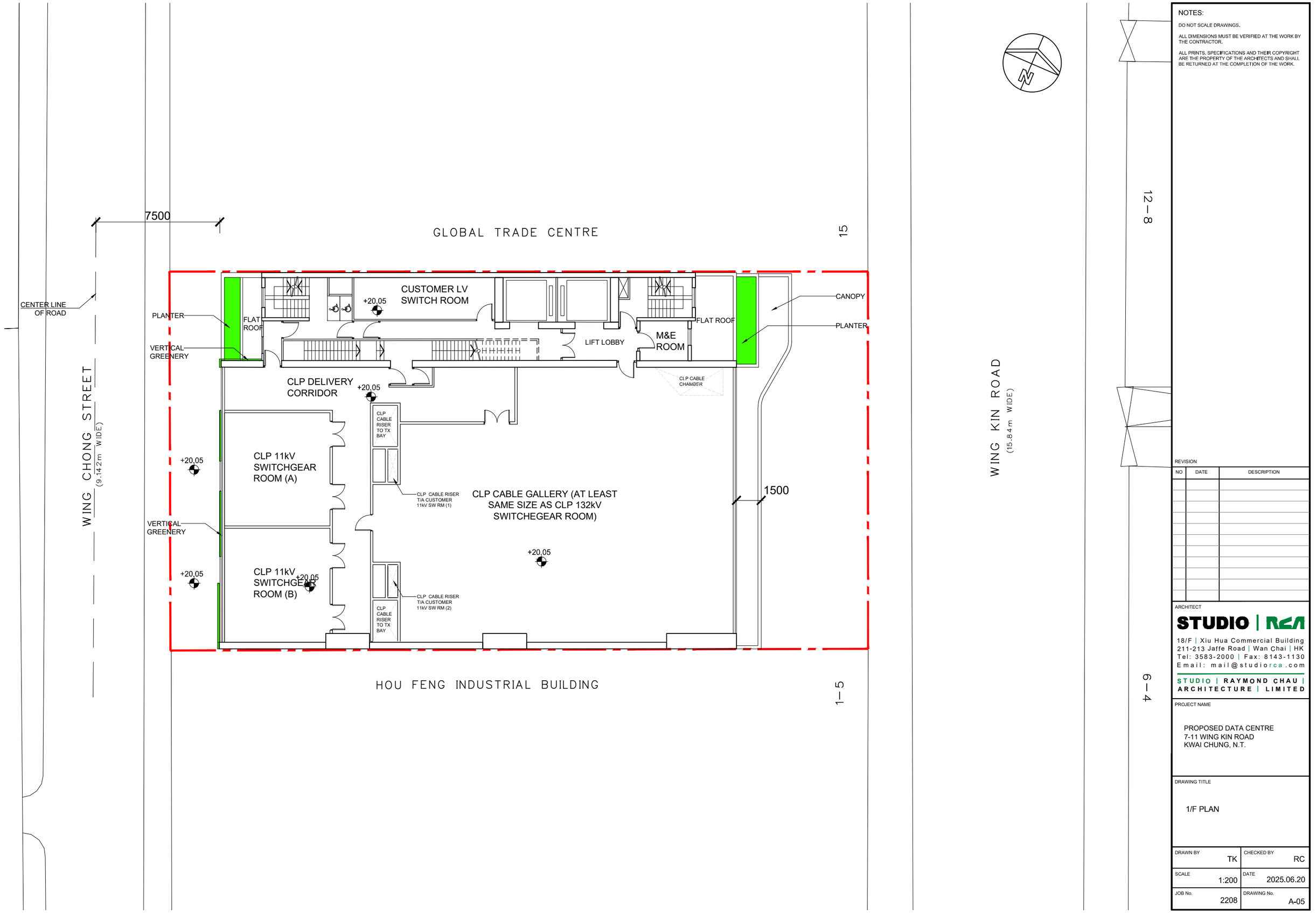
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

G/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.20
JOB No.	DRAWING No.
2208	A-04



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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

1/F PLAN

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SCALE	DATE
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JOB No.	DRAWING No.
2208	A-05

GLOBAL TRADE CENTRE

15

WING CHONG STREET
(9.14.2m WIDE)

TOILET

ELV ROOM

ELEC ROOM

VERTICAL GREENERY

PLANTER

TBE ROOM

CLP DELIVERY CORRIDOR

+26.05

CLP CABLE RISER T/A CUSTOMER 11kV SW RM (1)

CLP PROTECTION / CONROL ROOM (WITH 400mm RAISED FLOOR)

+26.05

CLP 132kV SWITCHGEAR ROOM

+23.10

VERTICAL GREENERY

CLP CABLE RISER T/A CUSTOMER 11kV SW RM (2)

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

9 — 4

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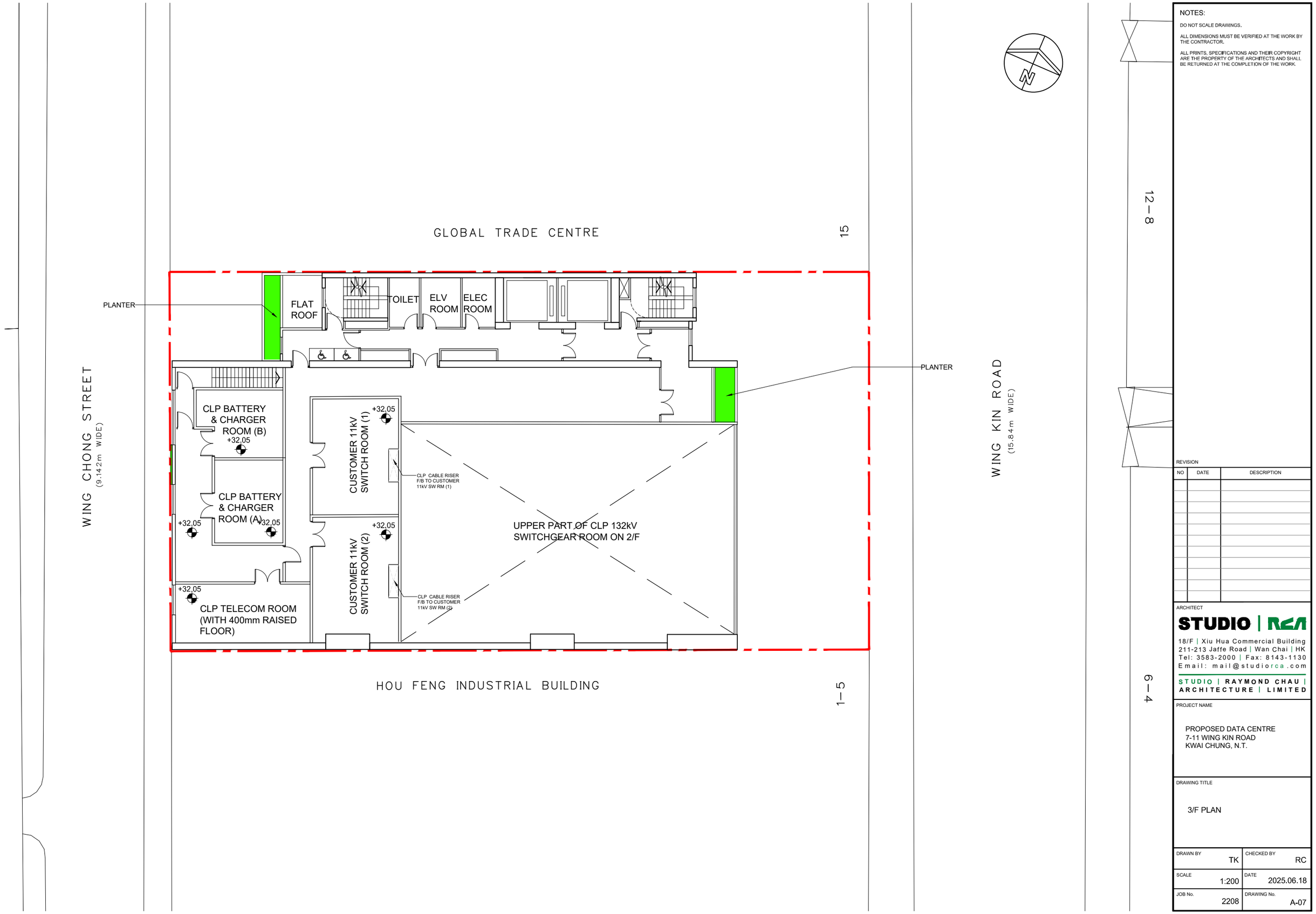
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

2/F PLAN

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2208	A-06



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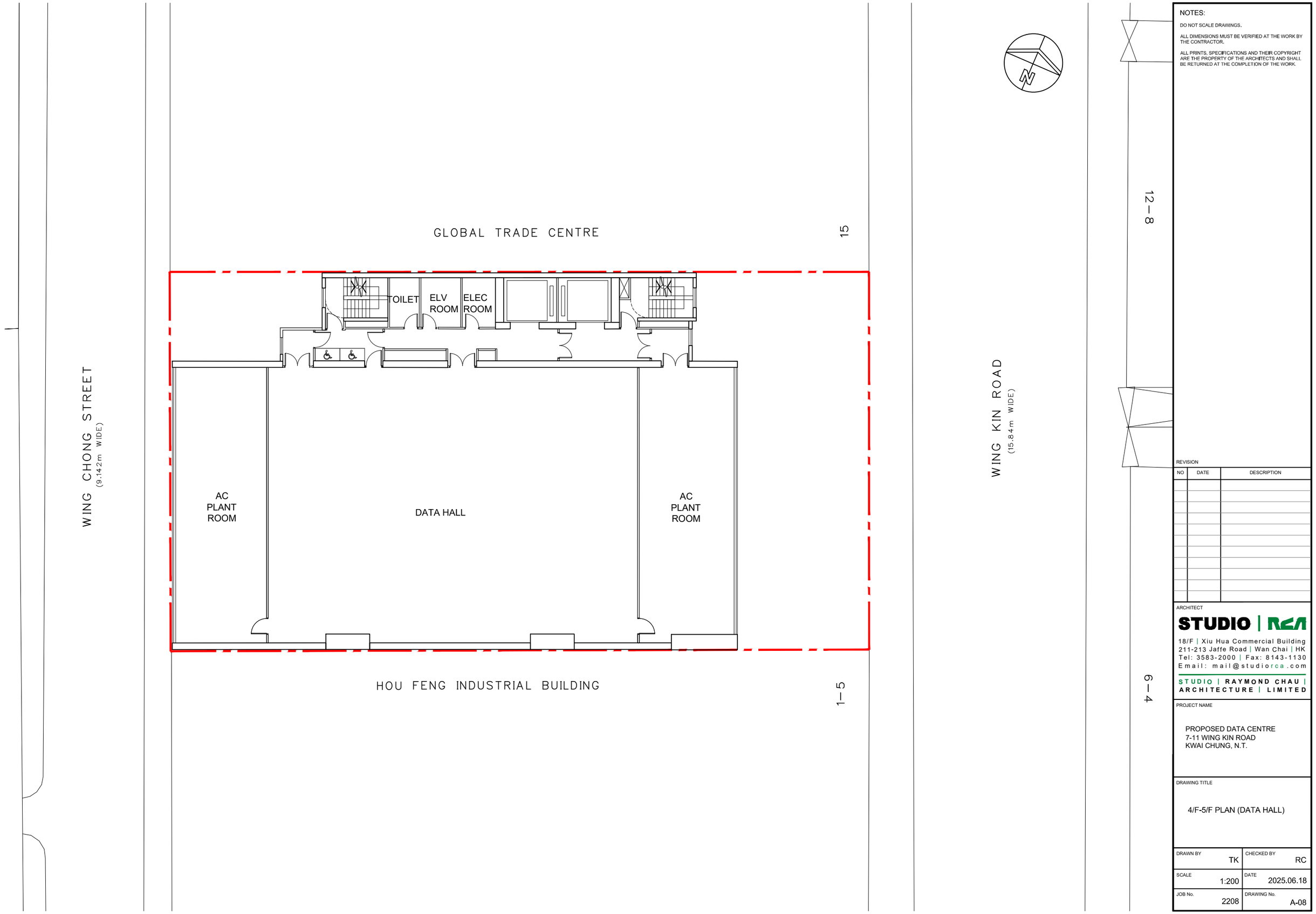
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

3/F PLAN

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2208	A-07



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PROJECT NAME

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KWAI CHUNG, N.T.

DRAWING TITLE

4/F-5/F PLAN (DATA HALL)

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TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-08

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

E/M ROOM | ELV ROOM | ELEC ROOM

FLAT ROOF

M&E

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

NOTES:

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PROJECT NAME

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7-11 WING KIN ROAD
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DRAWING TITLE

6/F PLAN (M&E)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-09

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

TOILET
ELV ROOM
ELEC ROOM
AC PLANT ROOM
EL ROOM AND RISERS
DATA HALL
EL ROOM AND RISERS

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

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KWAI CHUNG, N.T.

DRAWING TITLE

7/F-9/F, 11/F-13/F &
15/F-16/F PLANS (TYPICAL
DATA HALL FLOOR PLANS)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-10

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

E/M ROOM | ELV ROOM | ELEC ROOM

M&E

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

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DRAWING TITLE

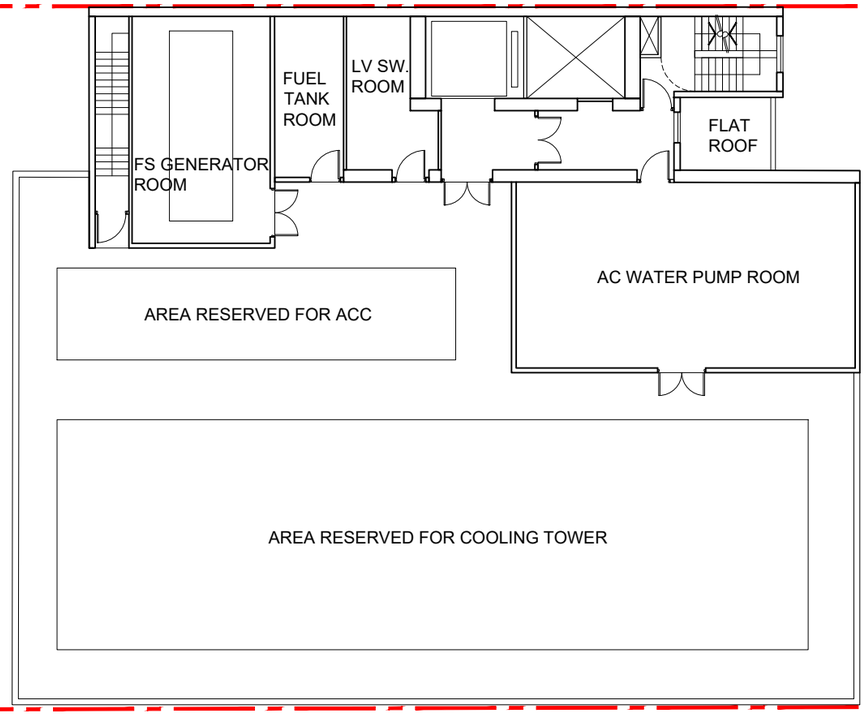
10/F & 14/F PLANS
(TYPICAL M&E FLOOR PLANS)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-11

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15



HOU FENG INDUSTRIAL BUILDING

1 – 5

WING KIN ROAD
(15.84m WIDE)

12 – 8

9 – 4

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Email: mail@studiorca.com

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PROJECT NAME

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DRAWING TITLE

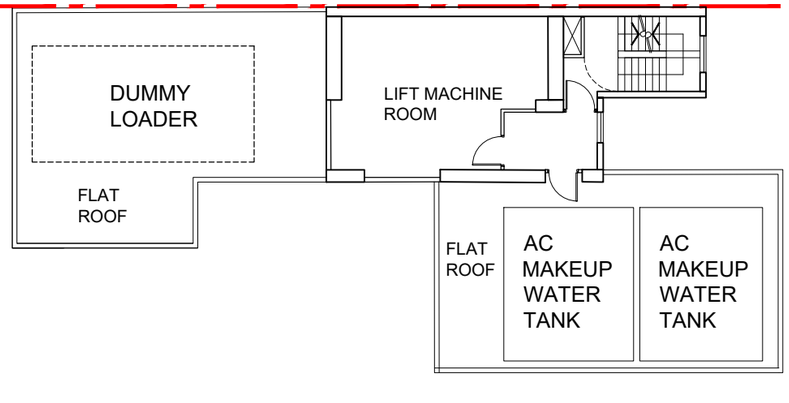
R/F PLAN

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SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-12

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15



HOU FENG INDUSTRIAL BUILDING

1—5

WING KIN ROAD
(15.84m WIDE)

12—8

6—4

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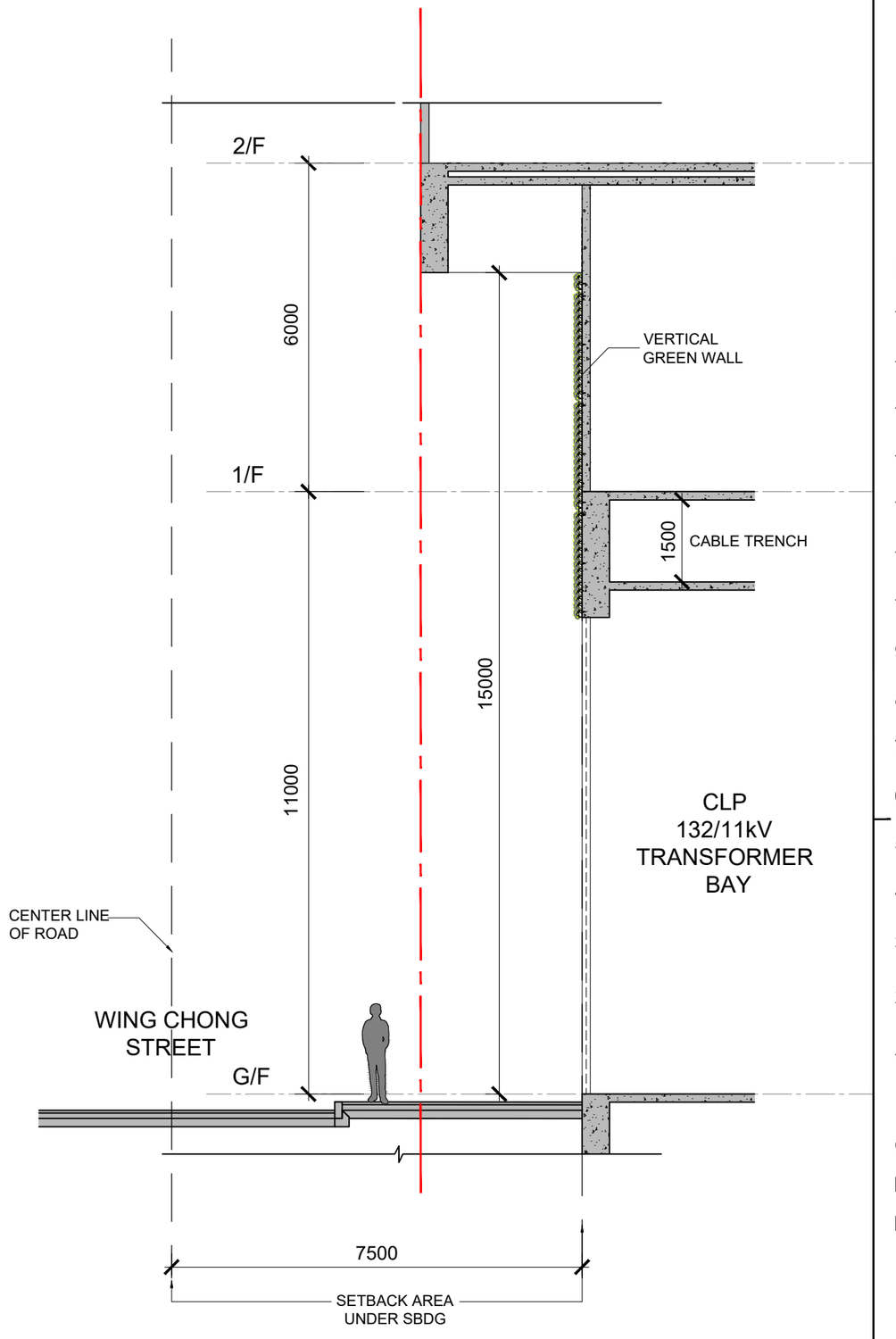
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

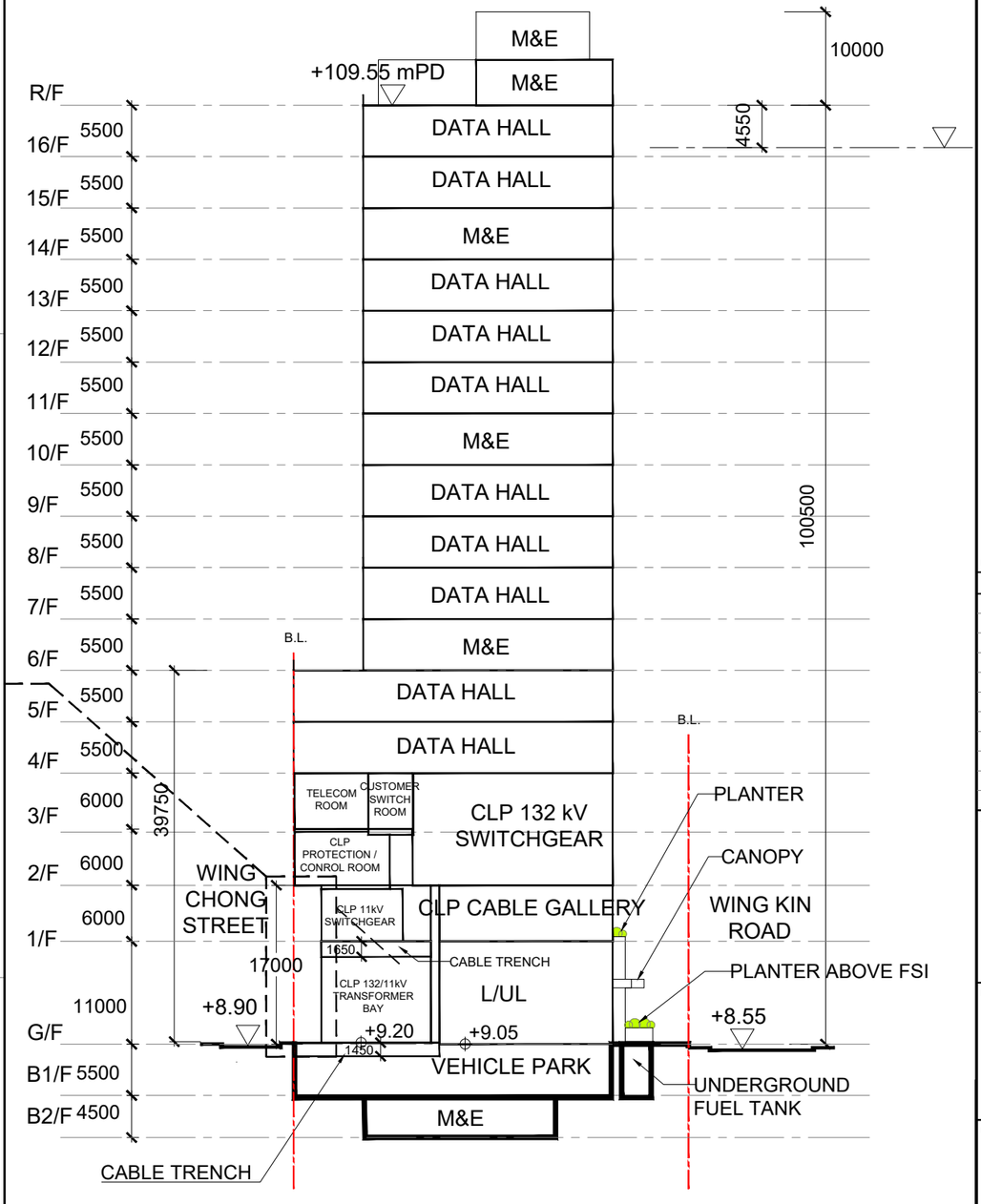
DRAWING TITLE

UR/F PLAN

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JOB No.	DRAWING No.
2208	A-13



SECTION OF VERTICAL GREEN WALL
SCALE: 1:100



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Email: mail@studiorca.com
STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

PROJECT NAME

PROPOSED DATA CENTRE
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KWAI CHUNG, N.T.

DRAWING TITLE

SECTION A-A

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2208	A-14

APPENDIX 5-1
MAXIMUM ALLOWABLE SWL AT SOURCE FOR PLANNED FIXED NOISE

Maximum Allowable SWL at Source for Planned Fixed Noise

Noise Sensitive Receiver (ID)	Description	Nearest Distance to the Representative NSR, metres	Distance Correction, dB(A)	Barrier Correction, dB(A)	Façade Correction, dB(A)	Tonality Correction, dB(A)	Maximum Allowable SPL at NSR, dB(A)	Maximum Allowable SWL at Site Boundary, dB(A) [1]	Adopted Maximum Allowable SWL at Site Boundary, dB(A)
Day and Evening Time (07:00-23:00)									
NSR01	Wing Hau Street Driving Test Centre	109	-49	0	3	3	65	107	107
NSR02	Kwai Shing West Estate Block 8	289	-57	0	3	3	65	116	
NSR03	CNEC Lee I Yao Memorial Secondary School	194	-54	0	3	3	65	112	
Night Time (23:00 – 07:00)									
NSR01	Wing Hau Street Driving Test Centre	109	-49	0	3	3	55	97	97
NSR02	Kwai Shing West Estate Block 8	289	-57	0	3	3	55	106	
NSR03	CNEC Lee I Yao Memorial Secondary School	194	-54	0	3	3	55	102	

Note:

[1] Maximum Allowable SWL at Source is rounded down for conservative approach.

Appendix Ic of
MPC Paper No. A/KC/510B

KJL Ltd.

File Ref.: TPB/A/KC/510

BY EMAIL & BY POST (tpbpd@pland.gov.hk)

21st August 2025

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

Attn: The Secretary of the Town Planning Board

Dear Sir/Madam,

7-11 Wing Kin Road, Kwai Chung, New Territories
Section 16 Planning Application No. A/KC/510

We refer to the captioned section 16 application received by the Town Planning Board (the Board) on 18.3.2025 and 21.3.2025.

As per Town Planning Board Guidcline No. 32B, the applicant submits our responses with supporting information to clarify the queries and address comments by various Government Departments, which we received through the Planning Department. Therefore, we submit four hard copies and one soft copy of the R to C table and supporting information for the Board's consideration.

This further information is considered not to be proposing a material change in the nature of the application. Therefore, it could be exempted from the publication and recounting requirements per the TPB PG-No.32B. However, should this further information be accepted but not exempted from the publication and recounting requirements, we would still like to proceed with the application with further information.

Should you have any queries, please contact Ms. Mina Leung at [redacted] or the undersigned at [redacted]. Thank you.

Yours sincerely,

Kenneth J. Li
Director

Encl.

RECEIVED
21 AUG 2025
Town Planning Board

c.c. Tsuen Wan and West Kowloon District Planning Office, Planning Department – Attn: Messrs. W.C. Lui and Cecil Chow [By Email at wclui@pland.gov.hk and cccchow@pland.gov.hk

Address: Room 1502, 15/F, Parkes Commercial Centre, 2-8 Parkes Street, Kowloon, Hong Kong

Application under Section 16 of the Town Planning Ordinance
Proposed Minor Relaxation of Plot Ratio and Building Height Restrictions
for Permitted Information Technology and Telecommunications Industries (Data Processing Centre)
at 7-11 Wing Kin Road, Kwai Chung, New Territories
in DD 446, Kwai Chung Town Lot 145 and adjoining Government Land
at Wing Chong Street (Application No. A/KC/510)

Departmental Comments (Further Information (F.1.)(1)	Response to Comments
Comments from Highways Department (22.7.2025) 1. Figure 3.1D and 3.1Q – please specify the dimension of canopy at Wing Kin Road indicated as hatched area in Figure 3.1D. The Applicant should confirm whether the proposed canopy encroached upon the hatched area in Figure 3.1D and area indicated in Figure 3.1Q. The Applicant should observe the requirements of the canopy under CAP 123F Building (Planning) Regulations and submit details of the canopy to Buildings for vetting.	The dimensions of the canopy facing Wing Kin Road have been added to the Ground Floor Plan, 1st Floor Plan, and the **Isometric Drawings**. Please also note that the canopy does not encroach into the hatched area shown in **Figure 3.1D** and the area indicated in **Figure 3.1Q (Attachment 1)**. Furthermore, the requirements of the canopy under CAP 123F are duly noted and will be submitted at the GBP stage to BD.
2. Should there be any HyD's inventory such as existing pavement, exclusive road drain etc. affected due to the proposed development, the relevant details shall be submitted for HyD's comment and the roadworks carried out by the Applicant shall be in accordance with HyD's standards during the detailed design stage.	Noted.
Comments by Drainage Services Department (22.7.2025) 3. It is noted that no Drainage Impact Assessment has been submitted in this application. The Applicant should clarify whether there is any drainage impact resulting from the captioned development.	The proposed development is not expected to increase the peak stormwater flow or alter the existing public stormwater system's discharge routes. Additionally, the application site is situated near the 2740 mm x 2740 mm stormwater box culvert along Kwai Hei Street and is not located in any known flooding blackspots. Therefore, no

	drainage impact is anticipated to arise from the proposed development. If necessary, a drainage impact assessment could be conducted during the detailed design stage.
Comments by Landscape Unit, Urban Design & Landscape Section, Planning Department (22.7,2025) 4. The proposed extent vertical greening cannot be demonstrated clearly in Figures 3.1Q and 3.1R. The applicant should clearly show the extent in these Figures (e.g. to provide a legend table to differentiate various features (i.e vertical greenery (VG), creeping planters, louvers, planters etc. and specify the width and height of the proposed vertical greenery) or in other relevant figures, such as elevation, as appropriate.	The proposed extent of the vertical greening is provided in the figures accordingly. Please refer to the enclosed **Figure 3.1.Q** and **Figure 3.1R (Attachment 1: Planning Statement with figures)**.
5. The applicant should confirm whether irrigation and maintenance will be provided by VG. With reference to Figure 3.1N and Figure 3.1R, part of the proposed vertical greening facing Wing Chong Street is shaded by the building of its projecting features. The applicant is advised to review the extension of the proposed vertical greening and the selection of plant species to ensure an effective vertical greening effect in the long term.	We will provide irrigation and maintenance to the VG. We also propose planting species that are suitable for shaded areas, including: (a) Philodendron hederaceum, which is suitable for vertical spaces and adaptable to low-light conditions, and (b) Snake Plant (Sansevieria) as it is tolerant of low light and requires minimal care.
Comments from Transport Department (25.7.2025) 6. Responses to comments (R-t-C) Item No. 7 – Please indicate the units for the traffic flow data on the figures.	Please refer to the updated **Figures R2-1** to **R2-4 (Attachment 2)**.

Comments from Water Supplies Department (25.7.2025) *Water Supply Impact Assessment* 7. Paragraph 3.2.1 and Table 3-1: For industrial use, **Site Area** instead of GFA should be used in the water demand estimation;	**Sections 3.2.1, 4.2.1, Table 3-1, and Table 4-1, as well as Appendix IV,** have been revised.
8. Paragraph 3.2.2 and Table 3-2: Please provide references and more information on the "Peak and Design Factor" of 1.45 applied in the fresh water demand estimation;	The previous calculation was simplified from the detailed calculations for the upcoming EMSD Fresh Water-Cooling Towers Scheme (Form EMSD EE CT1A) submission. The factor of 1.45 includes several parameters and cannot be described by a single reference. To avoid confusion and misunderstanding, the presentation in the main text (**Section 3.2.3 and Table 3-2**) and **Appendix IV** have been revised. The calculations from the Project's building services consultant have been attached in **Appendix V**.
9. Table 3-3: For irrigation, the unit demand should be **7 L/m2/day** i.e. 70 m3/ha/day instead of **700 m3/ha/day**, please update your demand assessment; and	**Table 3.3** has been revised.
10. Paragraph 3.4.4: The proposed DN200 FWM is considered unnecessary. Please source FW supply to the captioned development from the existing DN300 FWM along Wing Kin Road via a DN150 connection main.	**Paragraph 3.4.4** to **Paragraph 3.4.5** and **Figure 3.2** have been revised accordingly. Please refer to **Attachment 3** for the revised WSIA report.
Comments by Tsuen Wan & West Kowloon District Planning Office, Planning Department (25.7.2025) 11. Noted that a canopy is proposed up to 4.3m setback area. Please replace 4.3m wide 'non-building area' to 'voluntary setback' in paragraph 3.1.2 in Planning Statement.	**Paragraph 3.1.2** has been revised.

12. Please find comments marked in attached Figure No. 3.1Q and 3.1R and revised relevant figures e.g. Figure No. 3.1I.	We have updated **Figures 3.1Q, 3.1R, and 3.1I** accordingly.
<u>Comments by Urban Design Unit, Urban Design & Landscape Unit, Planning Department (25.7.2025)</u> *Revised Planning Statement (PS)* 13. Paragraph 3.1.8 - According to Drawing No. A-05, planters are also proposed facing Wing Chong Street.	**Paragraph 3.1.18** has been amended.
14. Paragraph 3.1.10 - With reference to Drawing No. A-05, a full-length canopy of at least 1.5m wide is proposed along the building frontage facing Wing Kin Road. However, as commented previously, the **<u>width</u>** of the said canopy is still not mentioned in para. 3.1.10 nor annotated on Drawing Nos. A-14 and AR-10.	**Paragraph 3.1.10** and drawings Nos. **A-14** and **AR-10** have been updated.
15. Paragraphs 1.2.1, 3.1.1, 4.3.2 and Application Form - As commented previously, with reference to Executive Summary, Tables 3.1 and 3.3 and Drawing No. A-14, it appears that the no. of storey should be **<u>19</u>** instead of 18.	The figures in these paragraphs have been revised.
16. Table 3.3 – Noting that an about 7.5m setback from the centreline of Wing Chong Street will be provided, please also supplement the width of building setback **<u>from</u>** **<u>G/F to 1/F</u>** fronting Wing Chong Street **<u>measured from the site boundary</u>**, and annotate the said building setback on relevant plans/drawings (e.g. Drawing Nos. A-04, A-05, A-14 and AR-11, etc.) for ease of reference.	**Table 3.3,** as well as drawing Nos. **A-04**, **A-05**, **A-14** and **AR-11** have been revised.
17. Paragraph 3.7.1 - Please update the conclusion of Visual Impact Assessment (VIA) taking into account our comments on VIA below.	**Paragraph 3.7.1** has been amended.
18. Paragraph 3.7.2 - Please consider revising the 1st line to read as "<u>As compared with the existing condition</u>, the massing and disposition…".	**Paragraph 3.7.2** has been amended.

19. Paragraph 4.7.1 - With reference to Drawing Nos. A-04, AR-10 and AR-11 and paragraphs 3.1.8 and 3.1.9, vertical greening is also proposed at the building façades facing Wing Kin Road and planters will also be provided at G/F to 3/F fronting Wing Chong Street.	**Paragraph 4.7.1** has been revised.
20. Drawing No. A-04 – With reference to Figure 3 of the VIA, annotation of the proposed vertical greening at the building façade of G/F fronting Wing Chong Street is missing.	Noted and **Drawing No. A-04** has been revised.
21. Drawing No. A-07 – Annotation of the proposed vertical greening at the building façade of 3/F fronting Wing Chong Street is missing.	Please note that there is no VG proposed above the 1/F level of the building façade facing Wing Chong Street. Please also refer to **Drawing No. AR11** (**Isometric Drawing B**).
22. Drawing No. AR-10 and AR-11 - Please annotate the proposed vertical greening fronting Wing Kin Road and Wing Chong Street.	Noted. The drawings have been revised.
Revised VIA 23. Paragraph 2(e) - Please supplement the Baseline Scheme (i.e. the existing condition (with planned/committed development)).	Text in the paragraph amended. Please refer **Attachment 4** for the revised VIA.
24. Paragraph 3.3 - Please supplement the building heights (ranging from 22mPD to 132.365mPD) of the cluster of industrial buildings to the east of the Site	**Paragraph 3.3** has been amended.
25. Paragraph 4.1 - The widths of the setbacks **from the site boundary** abutting Wing Chong Street (i) from G/F to 1/F and (ii) from 6/F and above are not mentioned.	The proposed setbacks are added to **Paragraph 4.1**.

VP1 26. Paragraph 6.1.2 - Please consider revising the last sentence to read as "The planters and vertical greening as visual amenity would soften the building edge.".	**Paragraph 6.1.2** has been revised.
VP4 27. Paragraph 6.4.1 – Please consider to delete "the deceased and" in the 5th line.	Text has been deleted from the paragraph.
28. Paragraph 6.4.2 – (a) As commented previously, please supplement the proposed development would reduce visual permeability and depth of view. (b) Please consider revising the 5th line to read as "…with the surrounding development with **moderate** visual changes on public viewers".	**Paragraph 6.4.2** has been amended.
VP5 29. Paragraph 6.5.1 – Please supplement a portion of open sky view is visible from this VP.	**Paragraph 6.5.1** has been revised.
30. Figure 6 – Please remove "and Kwai Hei Street" from the drawing title.	**Figure 6** has been revised with "and Kwai Hei Street" removed from the title.
VP6 31. Paragraph 6.6.2 and Figure 7, there are discrepancies in BH of Kingsford Industrial Building between paragraph 6.6.2 (99.8mPD) and Figure 7 (99.5mPD), please amend to tally the text and figure.	The BH of Kingsford Industrial Building has been revised to 99.5mPD in the text.

VP8 32. Paragraph 6.8.1 – Please replace "The cricket ground is only opened for cricket players hence" by "This VP represents recreational users including cricket players and" and delete the third sentence to avoid duplication. Please also review whether the rating of visual sensitivity should be "medium" rather than "low".	**Paragraph 6.8.1** has been revised.
33. Paragraph 7.1 – a. According to the visual assessment in Section 6, no VP has been rated as having a "Negligible to Slightly Adverse" visual impact; and three VPs, rather than two VPs, are anticipated to have a "Slight Adverse" visual impact arising from the proposed development. b. The overall visual impact should be ranging from "Partly Enhanced/Partly Adverse" to "Moderately Adverse".	We wish to clarify that VP3 has been rated as causing negligible to slightly adverse visual impact by the proposed development, and VP7 and VP8 have been rated as "slightly adverse". The text has been amended.
34. Figures 1 to 10 – Please update the title of the figures to tally with the proposed use of the subject application.	The title of the figures has been updated.
35. The Consultant is reminded to fully address our comments in the next submission and **highlight changes** as compared with the current submission for our vetting.	Noted.
Comments from Environmental Protection Department (25.7.2025) *General* 36. R-t-C Item Nos. 39 and 40 - It is noted that the Applicant has committed to conduct the Landfill Gas Hazard Assessment (LGHA) and Land Contamination Assessment (LCA) during the detailed design stage.	Noted.

37. The Applicant is reminded to make reference to the relevant regulations, circulars and guidelines on waste management and contaminated land management, and the Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97).	Noted.
Air Quality 38. R-t-C Item 42B - It is noted that power generator(s) will be equipped for emergency uses only. Please clarify in section 6.4 whether chimney(s) will be installed for such power generator(s).	Industrial chimneys will be installed for the backup generators, and subject to detailed design. **Section 6.4.2** has been updated accordingly.
39. Tables 6-1 and 6-2 – Please update tables 6-1 and 6-2 for different elevations assessed, providing with columns (i) "Difference in Height between Industrial Chimney Exit and the Site (i.e. the nearest ASR)", (ii) "Buffer Distance Required in HKPSG", (iii) "Actual Horizontal Distance between Industrial Chimney Exit and the Site", (iv)" Complied with HKPSG Requirement" (express in yes/no) and (v) "Reference of Corresponding Drawing".	The revised **Table 6-1** and a new **Table-6-2** have been added to the report.
40. Section 6.2.4 – Please ensure the naming of different elevations assessed is consistent to all drawings, tables and section 6.3.2.	The revised **Section 6.4.2** and a new **Figure 6-2f** have been added to the report.
41. Section 6.3.3 – section 6.3.2 has identified the area suitable for fresh air intake, please illustrate and describe in section 6.3.3 about the proposed design of fresh air intakes at different floors and confirm whether there will be no fresh air intake at 8/F or above.	**Section 6.3.3** has been revised. Please refer to **Attachment 5** for the revised AQIA.

Attachment 1
Planning Statement with figures

Section 16 Planning Application

for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Data Centre) Use at 7-11 Wing Kin Road and adjoining Government Land at Wing Chong Street, Kwai Chung, New Territories

PLANNING STATEMENT

Prepared by

KJL Limited

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Studio Raymond Chau Architecture Limited

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for

OXO YW Limited

August 2025

EXECUTIVE SUMMARY

BACKGROUND

This application is submitted on behalf of OXO YW Limited, the registered owner of 7-11 Wing Kin Road, Kwai Chung, to seek the Town Planning Board's permission for the proposed minor relaxation of plot ratio restriction from 9.5 to 11.4 and building height restriction from 105mPD to 109.55mPD for permitted information technology and telecommunications industries (data centre) use at 7-11 Wing Kin Road and adjoining government land at Wing Chong Street, Kwai Chung, New Territories (i.e. the application site).

The application site falls within an area zoned "Industrial" ("I") on the Kwai Chung Outline Zoning Plan ("OZP") no. S/KC/32. According to the Notes for the "I" zone, the proposed information technology and telecommunication industries (data centre) at the application site is under Column 1 use in this "I" zone, which is always permitted. However, the proposed new data centre's proposed plot ratio of 11.4 exceeds the plot ratio restriction under the OZP of 9.5. In addition, the proposed building height of the proposed scheme at 109.55mPD exceeds the height restriction under the OZP of 105mPD. Therefore, planning permission from the Town Planning Board ("the Board") is required.

The application aligns with the SAR Government's intention under the IB Revitalisation Scheme that "IBs located in 'I' zone could be redeveloped into new premises for conventional 'industrial/godown uses' and/or 'modern industrial uses". Further, the proposed relaxation of the maximum non-domestic permissible PR by up to 20% could, in effect, allow owners to recover any GFA loss in meeting present-day building standards, thereby incentivising industrial building redevelopment.

DESCRIPTION OF PROPOSED DEVELOPMENT

The proposed development involves redeveloping an existing industrial building into a new 19-storey building for a permitted data centre. The major development parameters for the proposed development are shown in the table as follows:

Site Area	About 964.2m^2 (including additional land of 35.169m^2 granted by the District Land Conference on 6.10.2021)
Plot Ratio	No more than 11.4
Total Gross Floor Area	About 10,991.88m^2 (non-domestic)
Site Coverage	Not more than 82% (Site coverage permitted under PNAP-132)
No. of Storeys	19 storeys (including 2 levels of basement)
Building Height	109.55mPD (at main roof level)
Proposed Use	Information Technology and Telecommunication Industries (Data Centre)

Parking Spaces	• Private cars: 11 nos. (including one no. accessible) • Motorcycle: 2 nos.
Goods Vehicle Loading / Unloading Bays	• Light Goods Vehicle: 3 nos. • Heavy Goods Vehicle: 1 nos.
Greenery	About 195m^2 • G/F: 2m^2 • 1/F: 11m^2 • 2/F: 4m^2 • 3/F: 9m^2 • Vertical: 169m^2

PLANNING JUSTIFICATIONS

The proposed development at the application site is appropriate in planning terms because of the following planning justifications:

- The proposed minor relaxation of plot ratio restriction by 20% aligns with the 2018 Policy Address to incentivise the redevelopment of industrial buildings constructed before 1987.
- The proposed data centre aligns with the planning intention of the "I" zone.
- The proposed development is compatible with the surrounding land use.
- The proposed scheme fully utilises the development potential of the application site with modern-day building standards.
- The proposed minor relaxation of plot ratio and building height will not adversely affect the surrounding areas visually.
- The proposed building setbacks at Wing Chong Street and Wing Kin Road will provide a better streetscape, walking environment and visual permeability.
- The proposed greening, including vertical greening, will enhance the streetscape and improve visual amenity.
- The proposed scheme will be seen as a catalyst and precedent in the gradual transformation of this industrial area.
- The proposed development is considered feasible from a traffic point of view.
- The proposed development would have no adverse environmental impact on air, noise, water supply or the sewerage system.

CONCLUSION

Given the abovementioned justifications, the Applicant respectfully requests that the Town Planning Board approve the application.

行政摘要

引言

是次第 16 條規劃許可申請人安秀耀榮有限公司，為葵涌永建路 7-11 號的註冊擁有人。 此規劃報告旨在支持是次根據《城市規劃條例》第 16 條提出的規劃許可申請，擬議申請在葵涌永建路 7-11 號以及位於永創街的毗鄰政府土地（即申請地點）略為放寬地積比率和建築高度限制，以作准許的資訊科技及電訊業用途。

根據葵涌分區計劃大綱圖（圖則編號為 S/KC/32），該申請地點屬於「工業」地帶。根據「工業」地帶的註釋，擬議發展的「資 訊 科 技 及 電 訊 業 (數據中心)」用途為經常允許的第 1 欄用途。申請人擬議將地積比率限制略為放寬至 11.4 以及建築高度略為放寬至 109.55mPD 超過了葵涌分區計劃大綱草圖中的地積比率和建築高度限制，因此，現按《城市規劃條例》第 16 條向城市規劃委員會提出申請。

是次申請符合特區政府在活化工廈計劃下的意向，即位於「工業」地帶的工廈可重新發展為新處所，作傳統的「工業/倉庫用途」及/或「現代工業用途」。此外，放寬最高核准非住用地積比率，上限為 20%，實際上可以讓業主重獲符合當今建築標準的建築面積損失，從而激勵工廈的重建。

擬議項目發展重點

擬議發展計劃涉及將現有工業樓宇重建為 19 層工業樓宇，以用於「貨倉(危險品倉庫除外)」用途。擬議發展方案的主要發展參數如下表所示:

地盤面積	約 964.2 平方米 (包括附加土地約 35.169 平方米)
地積比率	不多於 11.4
總樓面面積	約 10,991.88 平方米 (非住用)
上蓋面積	不多於 82% (PNAP-132 允許的覆蓋率)
層數	19 層 (包括兩層地庫)
建築物高度	109.55mPD
擬議用途	資 訊 科 技 及 電 訊 業 (數據中心)
停車位數目	• 私家車車位: 11 (包括 1 個殘疾人士泊車位) • 電單車車位: 2

上落客貨車位數目	• 輕型貨車上落客貨車位：3 • 重型貨車上落客貨車位：1
綠化	約 195平方米 • G/F: 2 平方米 • 1/F: 11 平方米 • 2/F: 4 平方米 • 3/F: 9 平方米 • 垂直綠化: 169 平方米

發展理據

擬議發展計劃在規劃層面上理應視為恰當，以下是是項申請的規劃理據：

- 擬議略為放寬 20%地積比率限制符合政府《2018 年施政報告》的意向，以鼓勵重建1987年以前建造的工業樓宇。
- 擬議發展的「數據中心」用途完全符合「工業」地帶的規劃意向。
- 擬議發展與周圍的土地使用是兼容的。
- 更好地利用申請地點土地的開發潛力並符合最新的建築條例的建築設計。
- 擬議略為放寬地積比率和建築物高度並不會在視覺上影響周邊地區。
- 擬議將永創街和永建路的樓宇後移，提供更好的街景和步行環境。
- 擬議的綠化包括垂直綠化在內將增強街景和改善視覺舒適度。
- 擬議計劃將被視為該工業區逐步轉型的催化劑和先例。
- 擬議發展從交通角度考慮是可行的。
- 擬議發展不會對空氣,噪音, 供水和污水收集系統產生負面影響。

總結

綜觀上述理由，申請人謹請城規會批准是次申請。

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1. Introduction

1.1. Background

1.1.1 This application is submitted on behalf of OXO YW Limited, the registered owner of 7-11 Wing Kin Road, Kwai Chung, to seek the Town Planning Board's permission for the proposed minor relaxation of plot ratio restriction from 9.5 to 11.4 and building height restriction from 105mPD to 109.55mPD for permitted data centre use at 7-11 Wing Kin Road, Kwai Chung, New Territories (i.e., the application site).

1.1.2 The application site falls within an area zoned "Industrial" ("I") on the Kwai Chung Outline Zoning Plan ("OZP") no. S/KC/32 (**Figure 1.1** refers). According to the Notes for the "I" zone, the proposed use at the application site for the data centre is Column 1 use in this "I" zone, which is always permitted. However, the proposed plot ratio of 11.4 exceeds the plot ratio restriction under the OZP of 9.5, and the proposed building height of 109.55mPD exceeds the height restriction by 4.55m (about 4.3%) under the OZP of 105mPD. Therefore, planning permission from the Town Planning Board ("the Board") is required.

1.1.3 The gross area of the application site is about 964.2m^2.

1.2 Purpose of this application

1.2.1 The Applicant wishes to state the purposes of this planning application as follows:

- To apply for a proposed minor relaxation of plot ratio and building height for permitted data centre use at the application site.
- To redevelop the existing 2-storey industrial building into a new 19-storey industrial building for permitted 'data centre' use.
- To align with the SAR Government's intention under the IB Revitalisation Scheme that "IBs located in 'I' zone could be redeveloped into new premises for conventional 'industrial/godown uses' and/or 'modern industrial uses. In particular after the Government has extended the application deadline to October 2024.
- To better utilise the application site's potential with modern-day and better safety standards by redeveloping the existing industrial building in Kwai Chung Town Lot 145 that was constructed before 1987 ("pre-1987 IB").
- To allow the Applicant (landowner) to recover the GFA loss in meeting present-day building standards through the proposed relaxation of the maximum non-domestic permissible PR by up to 20%, incentivising industrial building redevelopment.

2. Development Context

2.1. Site context

2.1.1. The application site is at No. 7-11 Wing Kin Road and adjoining government land at Wing Chong Street. The existing industrial building was constructed before 1987 ("pre-1987 IB").

2.1.2. The application site abuts Wing Kin Road and Wing Chong Street to the east and west, respectively. The application site can be accessed from Wing Kin Road and Wing Chong Street. (**Figures 2.1** refers)

2.2. Surrounding land use

2.2.1. The application site is surrounded by industrial and industrial/office buildings at Wing Kin Road, Wing Chong Street and Wing Kei Road, which are in active use. It is located southwest of the Kwai Chung industrial area and is accessible by public transport, such as the green minibuses along Wing Kei Road.

2.2.2. The Tsuen Wan Chinese Permanent Cemetery is west of the application site and across Wing Hau Road. Kwai Chung Park is located south of the application site across Kwai Hei Street.

2.3. Statutory planning requirements

2.3.1. The application site falls within an area zoned "Industrial" ("I") on the Kwai Chung Outline Zoning Plan (OZP) no. S/KC/32.

2.3.2. According to the Notes for the "I" zone, the proposed 'information technology and telecommunications industries (data centre)' at the application site is under Column 1 uses in this "I" zone, which is always permitted. However, firstly, the proposed plot ratio of 11.4 exceeds the plot ratio restriction under the OZP of 9.5. Secondly, the proposed building height of 109.5mPD exceeds the height restriction under the OZP of 105mPD. Therefore, planning permission from the Board is required.

2.3.3. The Notes of the OZP stated that the "I" zone is primarily for general industrial uses to ensure an adequate supply of industrial floor space to meet demand from production-oriented industries. Information technology and telecommunications industries, offices related to industrial use, and selected uses akin to industrial production that would not compromise building and fire safety are always permitted in this zone. The proposed 'information technology and telecommunications (data centre)' is under Column 1, which is always allowed. Thus, the proposed use aligns with the planning intention of the "I" zone.

2.3.4. The Board may consider a minor relaxation of plot ratio/building height on application under section 16 of the Ordinance based on the individual merits of the development or redevelopment proposal.

2.4 Planning history

2.4.1 There were previously approved planning applications (application no. A/KC/457 and A/KC/496) on the subject site. A/KC/457 was approved by the Board on 17.3.2020 with

conditions for proposed offensive trade (lard boiling factory) with conditions. A/KC/496 was approved by the Board on 14.7.2023 for proposed warehouse use (excluding Dangerous Goods Godown) with conditions. The Applicant has complied with conditions (a) and (c).

2.4.2 The Board has also approved similar industrial building redevelopment applications for minor relaxation of plot ratio and/or height relaxation for data centres in the Kwai Chung District. The similar approved data centre cases are summarised in Table 2.1 below.

Table 2.1: Similar approved data centre cases

Planning Application No.	Address	Proposed Uses	TPB Approval Date
A/KC/491	13-17 Wah Sing Street, Kwai Chung	Data Centre (relaxation of PR from 9.5 to 11.4)	26/8/2022
A/KC/488	11-19 Wing Yip Street, Kwai Chung	Data Centre (relaxation of PR from 9.5 to 10.19)	15/7/2022
A/KC/480	45-51 Tai Lin Pai Road, Kwai Chung	Data Centre (relaxation of PR from 9.5 to 11.4 and height from 120mPD to 129mPD)	24/12/2021
A/KC/473	2-10 Tai Yuen Street, Kwai Chung	Data Centre (relaxation of PR from 9.75 to 11.7)	11/6/2021
A/KC/466	2-16 Lam Tin Street, Kwai Chung	Data Centre (relaxation of PR from 9.5 to 11.4 and height from 130mPD to 146.5mPD)	29/5/2020

2.5 Land administrative matters

2.5.1 The application site is located in Kwai Chung Town Lot 145 and no. 7-11 Wing Kin Road, Kwai Chung, under proposed New Grant No. 4708 ('the New Grant') of 8.1.1970. The lease modification application is in progress, and the Lands Department issued the draft basic terms of the offer for the conditions of exchange served to the registered landowners on 24.11.2024. The Applicant has replied to the Lands Department to accept the draft basic terms of the offer on 4.12.2024. Once the new land grant is executed, the new grant site will be known as Kwai Chung Town Lot 534.

2.5.2 Under the existing Government lease, there is no restriction on building height or GFA for redevelopment. The building was completed in 1972 with a GFA of about 941m^2. The previous industrial activity was suspended several years ago, in 2018. The dangerous goods store license for the existing building, once held under its occupation permit, has expired and has not been renewed.

3. Description of Proposed Development

3.1. Proposed development

3.1.1. The proposed development involves redeveloping an existing industrial building into an 19-storey data centre. The industrial building was constructed before 1987 ("pre-1987 IB").

3.1.2. The proposed design scheme for the new data centre incorporates various landscape treatments, including planting areas and vertical greening features, which have been offered to enhance the area's streetscape and improve the proposed development's visual amenity. A 4.3m wide voluntary setback facing Wing Kin Road is reserved as a maintenance area for the underground fuel tanks at basement 1 level. This non-building area will further enhance local air ventilation and street environment.

3.1.3. The floor layout and section plans are provided in **Figures 3.1A** to **3.1N.**

3.1.4. Although the site area is less than 1,000m^2 and no site coverage of greenery is required under the Sustainable Building Design Guidelines (SBDG), the proposed scheme provides a total of 195m^2 greenery (including 169m^2 vertical greenery). In addition, various landscape treatments, including planting areas and vertical green wall, are proposed to enhance the area's streetscape and improve the visual amenity of the proposed development. The planter details and typical details of the vertical green wall are illustrated in Figures 3.1O and 3.1P.

Building Setback at Wing Kin Road and Wing Chong Street

3.1.5 According to the draft basic terms of offer issued by the Lands Department in November 2024, a setback of 3.7m from the existing lot boundary abutting Wing Kin Road is required. Given that the current width of Wing Kin Road is about 15.84m wide and is a one-way street without traffic congestion, the proposed 3.7m building setback is considered sufficient.

3.1.6. Under the Buildings Ordinance, the voluntary ground floor setback would not be granted any bonus plot ratio by the Buildings Department. However, such an arrangement could provide a better streetscape and good quality street-level urban space along Wing Kin Road.

3.1.7. As mentioned above, in addition to the building setback from the application boundary abutting Wing Kin Road, a further building setback of about 6.53m (subject to detailed design) from 6/F and above facing Wing Chong Street has been incorporated into the proposed scheme to provide a wider separation from buildings on the opposite side of Wing Chong Street to enhance air ventilation and visual permeability (see **Figure 3.1Q** and **Figure 3.1R**).

Greening Proposals

3.1.8. The proposed design scheme incorporates various greenery proposals, including planters facing Wing Kin Road and Wing Chong Street, and vertical greening at the facades facing Wing Kin Road and Wing Chong Street, respectively, to provide a pleasant external building design. A total of 169m^2 of vertical greening is proposed in the primary zone as per PNAP APP-152.

3.1.9. For the proposed vertical greening, especially those at the Wing Chong Street façade, the applicant would consider, without prejudice, those planting species that are suitable for shaded areas, such as: (a) Philodendron hederaceum, which is suitable for vertical spaces and adaptable to low-light conditions, and (b) Snake Plant (Sansevieria) as it is tolerant of low light and requires minimal care.

Reduction of Building Height at the Main Roof Level

3.1.10. The proposed building height has been reduced by about 5% from 115.2mPD to 109.55mPD compared to the previously approved scheme (A/KC/496). To facilitate the future operation of the data centre, a 132kV switchgear, cable gallery, protection/control room, two 132/11kV transformer bays are provided on G/F to 3/F according to CLP's requirements. The vertical greening and greenery provision at certain levels on the façade of the new building fronting Wing Kin Road and Wing Chong Street could reduce any potential visual impact on the surrounding area.

All-Weather Protection Canopy

3.1.11. A canopy is proposed at the building entrance facing Wing Kin Road for weather protection. In order to provide a better weather protection for pedestrians, a canopy with a depth of 1.5m is proposed along the building frontage facing Wing Kin Road subject to departmental comments in the detailed design stage.

3.1.12. Despite the site constraints, the proposed development has contributed to the gradual gentrification of this old industrial building into a modern-day industrial building with good-quality design and safety standards.

3.1.13. In summary, the proposed scheme incorporates setbacks, canopy fronting Wing Kin Road, greenery proposals and a reduction in the building height at the main roof level. These measures may improve the streetscape by softening the building edge, promoting visual interest, and promoting pedestrian comfort.

3.1.14. Pertinent design features and illustrations/photomontages for the proposed development are shown in **Figures 3.1O to 3.1P**.

3.1.15. The major development parameters of the proposed development are summarised in **Table 3.1** and **Table 3.2** below.

Table 3.1: Major development parameters for the proposed development

Site Area	About 964.2m^2 (including additional land of 35.169m^2 granted by the District Land Conference on 6.10.2021)
Plot Ratio	No more than 11.4
Total Gross Floor Area	About 10,991.88m^2 (non-domestic)

Site Coverage	Not more than 82%
No. of Storeys	19 storeys (including and 2 levels of basement)
Building Height	109.55mPD (at main roof level)
Proposed Use	Information Technology and Telecommunication Industries (Data Centre)
Parking Spaces	• Private cars: 11 nos. (including one no. accessible) • Motorcycle: 2 nos.
Goods Vehicle Loading / Unloading Bays	• Light Goods Vehicle: 3 nos. • Heavy Goods Vehicle: 1 nos.
Greenery	About 195m^2 • G/F: 2m^2 • 1/F: 11m^2 • 2/F: 4m^2 • 3/F: 9m^2 • Vertical: 169m^2

Table 3.2: The main uses of the floor of the proposed development

Floor	Main Uses
B/F2 B/F1	Sprinkler Water Tank / M&E facilities Parking for private cars, motorcycles, light goods vehicles, car lifts, the main lift lobby, fuel tanks, and M&E facilities.
G/F	Parking for heavy and light goods vehicles, car lift, main lift lobby and M&E facilities
1/F-3/F	CLP cable facilities and M&E facilities
6/F, 10/F, 14/F	M&E facilities
4-5/F, 7-9/F, 11/F-13/F, 15/F-16/F	Data Centre
Roof Floor	M&E facilities
Upper Roof Floor	AC water tank and lift machine room

3.1.15 The changes made to the previously approved scheme (A/KC/496) mainly involve changing industrial use to data centre use. Some design changes are proposed, such as reducing the building height and leaving most of the basement 2 level unexcavated. Details of changes between the previously approved scheme and the current scheme

are summarised in Table 3.3 below.

Table 3.3: Comparison between the approved scheme (A/KC/496) and the current scheme

Parameters	Approved Application (A/KC/496)	Current Scheme	Remarks
Site Area	About 964.2m^2	About 964.2m^2	No Change
Proposed Use	Warehouse (excluding DG Godowns)	Information Technology and telecommunication industries (Data Centre)	No Change
Plot ratio	11.4	11.4	No Change
Total GFA	10,991.88m^2	10,991.88m^2	No Change
Maximum Building Height (at main roof level)	115.2mPD	109.55mPD	- 5.65m (reduced by about 5%)
No of Storeys	22 (including three basement levels + one refuge floor)	19 (including two basement levels)	- 3 storeys (reduced by 14%)
Site Coverage (SC)	not more than 80%	not more than 82%	Increase by 2% (per PNAP-132)
Building setback at Wing Kin Road	About 4.1m from the site boundary	About 3.7m from the site boundary	Changes as per the draft basic terms of Conditions of Exchange
Building setback at Wing Chong Street per SBDG	About 7.5m from the centre of Wing Chong Street	About 7.5m from the centre of Wing Chong Street	No Change
Building setback from G/F to 1/F at Wing Chong Street from the site boundary	About 2.948m	About 2.948m	No Change
Floor Height (about)	• G/F: 6m • 1/F: 6.2m • 2/F- 18/F: 5.5m to 5.6m	• G/F: 11m • 1/F-3/F: 6m • 4/F - 18/F: 5.5m	Design changes to cater for data centre use
Greenery provisions	About 20% (195m^2)	About 20% (195m^2)	No Change
Car parking and loading & unloading spaces	Private car = 11 (including 1 accessible parking space) Motorcycle = 4 L&UL for LGV = 12 L&UL for HGV = 4	Private car = 11 (including 1 accessible parking space) Motorcycle = 2 L&UL for LGV = 3 L&UL for HGV = 1	Change of parking and L&UL spaces provision due to the change of use to data centre use.
Anticipated completion year	2028	2029	

3.2. Traffic consideration

3.2.1. The proposed data centre is expected to be completed by 2029, and the design year adopted in the Traffic Impact Assessment (TIA) for the capacity analysis is 2032, i.e., approximately three years after its completion.

3.2.2. The 2032 traffic flows used for the junction analysis are produced regarding the following:

(1) 2031 traffic flows derived with reference to the Base District Traffic Model ("BDTM");

(2) The estimated traffic growth from 2031 to 2032 is based on the higher of the (a) 2019–based Territorial Population and Employment Data Matrix ("TPEDM") data produced by the Planning Department ("PlanD") for Kwai Chung District, (b) Hong Kong Population Projections 2022 – 2046 published by Census and Statistics Department ("C&SD"), or (c) historic Annual Average Daily Traffic Growth ("AADT") produced by Transport Department ("TD");

(3) The traffic generated by the proposed data centre.

3.2.3. The traffic consultant conducted manual classified counts at the critical junctions near the proposed data centre to establish the peak-hour traffic flows. The key junctions operate with capacities during the AM and PM peak hours.

3.2.4. The internal transport facilities are provided per the requirement of the draft Provisional Basic Terms Offer ("draft PBTO"). A light goods vehicle lift is provided to access B1/F and B2/F from G/F. All vehicles can quickly enter and leave the proposed data centre and their respective space/bay.

3.2.5. The proposed data centre is expected to be completed by 2029, and the junction capacity analysis is undertaken for 2032. For the design year 2032, the junctions analysed are expected to operate with capacities during the peak hours for the case without and with the proposed data centre (refer to Section 4 of the Traffic Impact Assessment in Appendix I).

3.2.6. The TIA concludes, therefore, that the proposed data centre will have no adverse traffic impact on the surrounding road network, which is acceptable from the traffic engineering point of view.

3.2.7. Please refer to the Traffic Impact Assessment in **Appendix I** for details.

3.3. Air Quality consideration

3.3.1. An air quality Impact Assessment (AQIA) has been prepared to address the air quality impact of the proposed development's construction on the surrounding area and the impact of the surrounding area on the proposed development.

3.3.2. With the implementation of dust suppression measures as outlined in the Air Pollution Control (Construction Dust) Regulation and adherence to good site practices, no adverse air quality impacts associated with the construction works are expected.

3.3.3. The proposed development is not considered an air pollution source during its operation. A qualitative assessment indicates that vehicular and industrial emissions are not expected to constrain the proposed development, provided that the locations of the fresh air intakes are carefully designed.

3.3.4. Therefore, no air quality impact arising from the proposed development is expected. Please refer to the Air Quality Impact Assessment in **Appendix II.**

3.4 Noise consideration

3.4.1 A Noise Impact Assessment (NIA) has been prepared to address the potential noise impacts from the construction and operation of the proposed development.

3.4.2 The overall noise impact during the construction phase is considered insignificant. Depending on the detailed site work arrangements, mitigation measures will be implemented as necessary and applicable, per ProPECC PN 1/24, to minimise construction noise impacts on nearby NSRs.

3.4.3 The provision of openable windows for ventilation is not anticipated. Therefore, potential impacts of road traffic and existing fixed noise sources on the proposed development are not expected.

3.4.4 The planned fixed noise sources of the proposed development should not cause any adverse noise impacts if the maximum allowable sound power levels (SWLs) are properly implemented. Thus, no planned fixed noise impacts are anticipated.

3.4.5 Therefore, no noise impact arising from the proposed development is expected. Please refer to the Noise Impact Assessment in Appendix III.

3.5 Sewerage consideration

3.5.1 A Sewage Impact Assessment (SIA) has been prepared to address all the potential adverse sewerage impacts from the proposed development and recommend mitigation measures, improvement works, and other measures and works if required.

3.5.2 The estimated daily sewage discharge from the Project is 157 m^3/day. Sewage from the Project will be collected by the new terminal sewage manhole FTMH01 and discharged to the existing sewer manhole FMH4022807 via a proposed 225mm PE sewer with a slope of 1:100. The actual layout and invert levels of the proposed sewer are subject to detailed design.

3.5.3 The sewage network is considered to have sufficient capacities to cater for the expected sewage flows from the proposed development and the surrounding catchments. Therefore, no adverse sewerage impact on the public sewage system is expected from the proposed development. Please refer to the Sewerage Impact Assessment in Appendix IV.

3.6 Water Supply Consideration

3.6.1. Water Supply Impact Assessment (WSIA) has been prepared to address all the potential adverse water supply impacts from the proposed development and recommend mitigation measures, improvement works, and other measures and works, if required.

3.6.2. The estimated fresh water demand from the project is 944.998 m^3/day, an increase from the existing demand of 153.986 m^3/day. The existing freshwater main cannot meet the application site's freshwater demand. Therefore, a new 150 mm fresh water main connected to the existing 300 mm fresh water main along Wing Kin Road is proposed and to be implemented by the Applicant. The specific alignment and connection points of the proposed new water pipes will be determined during the detailed design phase of the development.

3.6.3. The estimated salt water demand from the project is 2.75 m^3/day, down from the existing demand of 20.211 m^3/day. The existing saltwater main can meet the saltwater demand of the application site, so no modifications to the saltwater mains are required.

3.6.4. Therefore, no adverse water supply impact on the public water supply system is expected from the proposed development. Please refer to the Water Supply Impact Assessment in **Appendix V**.

3.7 Visual Impact Consideration

3.7.1 A total of 9 VPs are selected for visual impact assessment. Based on the comparison between the existing condition and the proposed scenario, one will cause a moderately adverse visual impact by the proposed development, two will cause slightly adverse visual impact, two cause partly enhanced/partly adverse, one has negligible to slightly adverse, and three have a negligible visual impact. The overall visual impact is therefore envisaged to be ranging from partly enhanced/partly adverse to moderately adverse. Nevertheless, there is only one VP that will cause a moderately adverse visual impact by the proposed development. Thus, the proposed development would unlikely induce significant adverse effects on the visual character of the surrounding townscape.

3.7.2 As compared with the existing condition, the massing and disposition of the proposed development will not create a significant visual blockage or cause significant visible changes for public viewers. In addition, the proposed building height has been reduced by about 5% from 115.2 to 109.55 mPD compared to the previously approved scheme (A/KC/496). The proposed development's scale and height are visually compatible with the surrounding industrial developments. Vertical greening and planters are proposed at the lower levels of the building façade to minimise the likely visual impact and soften the proposed building structure. The area's street environment and visual amenities will be enhanced by replacing the old industrial building with a modern-day development and greening provision. Please refer to the Visual Impact Assessment in **Appendix VI** for details.

4 Justifications for the Proposed Development

4.1 The proposed minor relaxation of plot ratio restriction by 20% aligns with the 2018 Policy Address to incentivise the redevelopment of industrial buildings constructed before 1987

4.1.1 The Chief Executive's 2018 Policy Address announced a new scheme for revitalising industrial buildings to encourage owners to redevelop industrial buildings constructed before 1987. The planning policy aims to increase the maximum permissible domestic plot ratio within specific "Residential" ("R") zones to allow relaxation of the maximum allowable non-domestic plot ratio by up to 20% for redevelopment projects of these pre-1987 industrial buildings located outside "R" zones in Main Urban Areas and New Towns. Individual applications must be made to the TPB within three years from 10.10.2018, and the modified lease should be executed within three years after the planning permission is granted.

4.1.2 The existing industrial building is an eligible industrial building constructed before 1987, and the Occupation Permit ("OP") was issued on 15.6.1972. Therefore, the proposed minor relaxation of plot ratio restriction by 20% aligns with the 2018 Policy Address to incentivise the redevelopment of industrial buildings constructed before 1987.

4.1.3 As mentioned above, the application also aligns with the SAR Government's intention that "IBs located in 'I' zone could be redeveloped into new premises for conventional 'industrial/godown uses' and/or 'modern industrial uses". Further, the proposed relaxation of the maximum non-domestic permissible PR by up to 20% could allow owners to recover any GFA loss in meeting present-day building standards, thereby incentivising industrial building redevelopment."

4.2 The proposed Data Centre aligns with the planning intention of the "I" zone

4.2.1 The proposed use fits the purpose and planning intention of the 'I" zone. Information technology and telecommunications industries, offices related to industrial use, and selected uses akin to industrial production that would not compromise building and fire safety are always permitted in this zone.

4.2.2 The proposed information technology and telecommunication industries (data centre) use is under Column 1, which is always permitted. The proposed use aligns with the "I "zone's planning intention.

4.3 The proposed development is compatible with the surrounding land use

4.3.1 The application site is located within a predominantly industrial area, surrounded mainly by the "I" zone, with industrial/office buildings in the immediate vicinity.

4.3.2 The proposed redevelopment of an existing industrial building into a 19-storey data centre is compatible with the surrounding land use. Therefore, the proposed use would not cause any environmental impacts on the surrounding areas.

4.4 The proposed scheme fully utilises the development potential of the application site with modern-day building standards

4.4.1 The application site contains an industrial building completed in 1972 with a GFA of about 941m^2. The existing building has been left mainly vacant since its previous industrial use was suspended in 2018.

4.4.2 This application's positive impact is replacing an old industrial building with a new data centre with modern-day standards and supporting facilities to meet the changing market needs.

4.5 The proposed minor relaxation of plot ratio and building height will not adversely affect the surrounding areas visually.

4.5.1 The proposed development is compatible with the surrounding neighbourhood. The application site is mainly surrounded by buildings in the "I" zone, with a maximum plot ratio of 9.5 and a maximum height of 105mPD under the OZP.

4.5.2 Based on the Visual Impact Assessment in Appendix V, the proposed development's scale and height are considered visually compatible with the surrounding industrial developments. Planters and Vertical greening at the lower levels of the proposed development will soften the proposed building structure. Replacing the old industrial building with a modern-day development with a greening provision will enhance the area's street environment and visual amenities.

4.6 The proposed building setback at Wing Chong Street and Wing Kin Road will provide a better streetscape, walking environment and visual permeability.

4.6.1 The proposed building setback at Wing Kin Road and Wing Chong Street, both one-way streets, will provide a wider separation from buildings to enhance the walking environment and visual permeability. Air ventilation along these streets could also be enhanced.

4.7 The proposed greening, including vertical greening, will enhance the streetscape and improve visual amenity

4.7.1 Greening space provision has been maximised by providing planters at ground level and 1/F to 3/F fronting Wing Kin Road and Wing Chong Street. The vertical greening at sections of building facades fronting Wing Chong Street and Wing Kin Road will improve the street environment and visual amenity.

4.8 The proposed development will be seen as a catalyst and precedent in the gradual transformation of this industrial area

4.8.1 The area was characterised by the concentration of offensive trade businesses and polluting industries, including but not limited to the application site in the 1960s'. The proposed minor relaxation of the plot ratio restriction and change of uses in this application will form a catalyst and a precedent in gradually transforming the area, once predominated by offensive trades and polluting industries, to non-polluting industrial uses.

4.9 The proposed development is considered feasible from a traffic point of view

4.9.1 Based on the calculations and findings in the Traffic Impact Assessment (TIA) in **Appendix I**, it is concluded that the proposed development is acceptable from a traffic engineering viewpoint.

4.10 The proposed development would have no adverse impact on air, noise, water supply and the sewerage system

4.10.1 Based on the Air Quality Impact Assessment, Noise Impact Assessment, Water Supply Impact Assessment and Sewerage Impact Assessment in Appendix II, III and IV, respectively, it is concluded that the proposed development will not cause any adverse impact in terms of air, noise, water supply and sewerage to the neighbourhood.

5 Conclusion

5.1 The application is submitted on behalf of the Applicant, OXO YW Limited, to seek the Town Planning Board's permission for the proposed minor relaxation of plot ratio restriction from 9.5 to 11.4 and height relaxation from 105mPD to 109.55mPD for permitted information technology and telecommunications industries (data centre) use at the application site.

5.2 The proposed minor relaxation of plot ratio restriction by 20% aligns with the 2018 Policy Address to incentivise the redevelopment of industrial buildings constructed before 1987. The proposed relaxation of the building height conforms with the surrounding industrial buildings of similar height in the area. The technical impact assessments concluded that the proposed development would not cause any adverse visual impact, traffic impact, air, noise, or sewerage impact on the neighbourhood. The proposed planters and vertical greening on the façade will soften the building edges and enhance the streetscape.

5.3 For the above reasons, the Board is earnestly requested to consider and grant approval to this application.

Figures



NOTES:

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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

BLOCK PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:500	2025.07.30
JOB No.	DRAWING No.
2208	A-01

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

M&E

LIFT PIT

LIFT PIT

F.S. & SPRINKLER
PUMP ROOM

SPRINKLER
WATER TANK

F.S. WATER
TANK

UNEXCAVATED AREA

HOU FENG INDUSTRIAL BUILDING

1—5

WING KIN ROAD
(15.84m WIDE)

12—8

6—4

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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

B2/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.07.30
JOB No.	DRAWING No.
2208	A-02

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

M&E

M&E

M&E

LIFT LOBBY

CP6 CP7 CP8 CP9 CP10 CP11

LGV2

LGV3

LOADING/ UNLOADING AREA

UNEXCAVATED AREA

+8.550

+8.155

2 NOS. 30,000L UNDERGROUND FUEL TANKS

CP2 CP3 CP4 CP5

M1 M2

CP1

HOU FENG INDUSTRIAL BUILDING

1—5

WING KIN ROAD
(15.84m WIDE)

12—8

6—4

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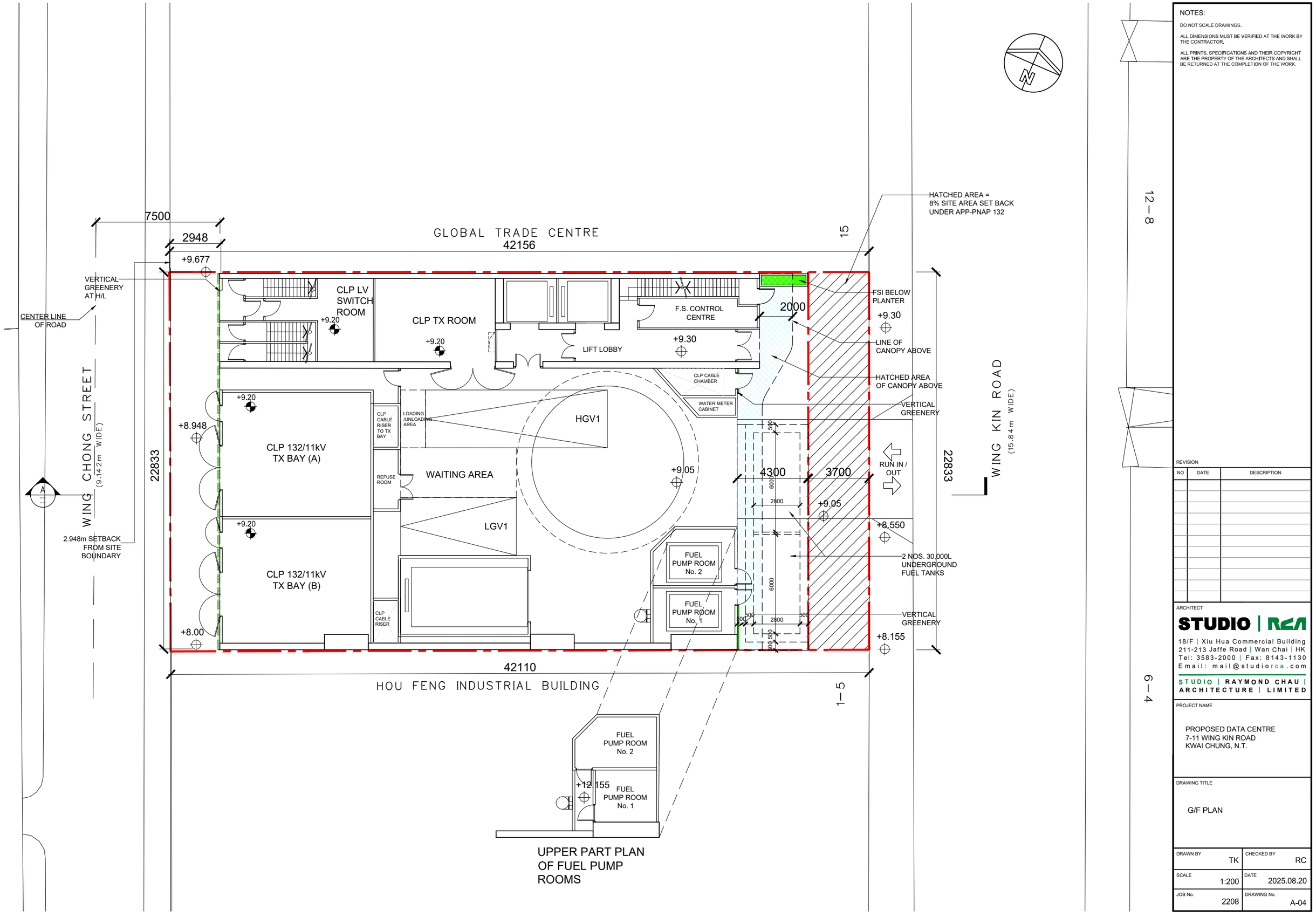
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

B1/F PLAN

DRAWN BY	CHECKED BY
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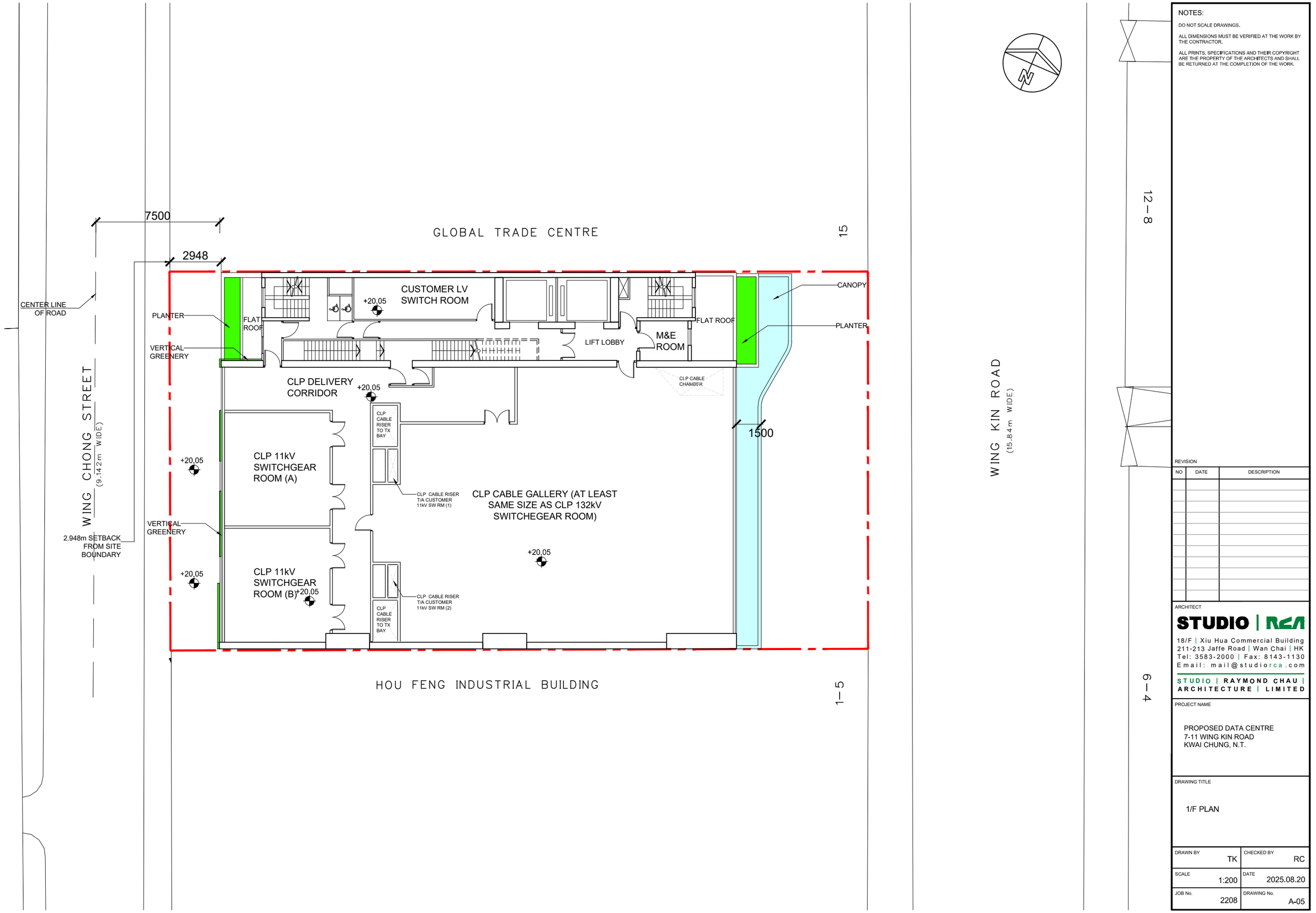
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PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

G/F PLAN

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SCALE	DATE
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JOB No.	DRAWING No.
2208	A-04



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KWAI CHUNG, N.T.

DRAWING TITLE

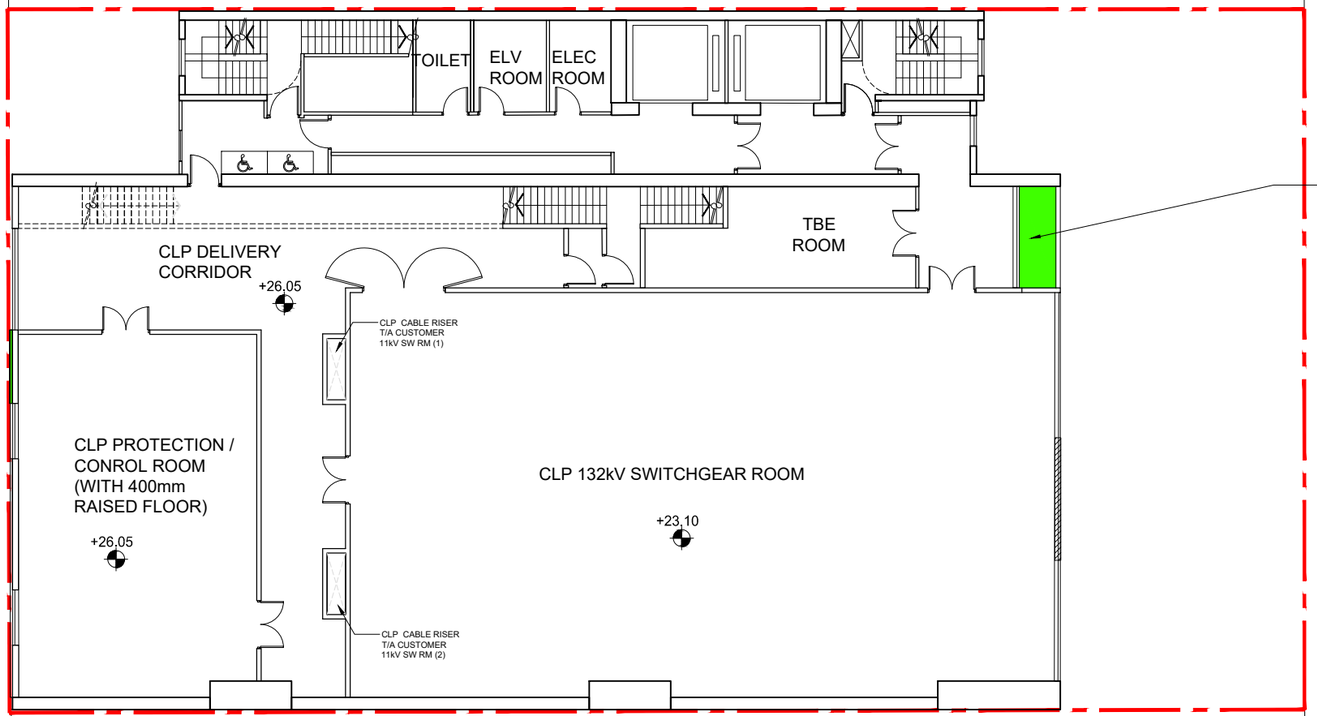
1/F PLAN

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TK	RC
SCALE	DATE
1:200	2025.08.20
JOB No.	DRAWING No.
2208	A-05

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15



PLANTER

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

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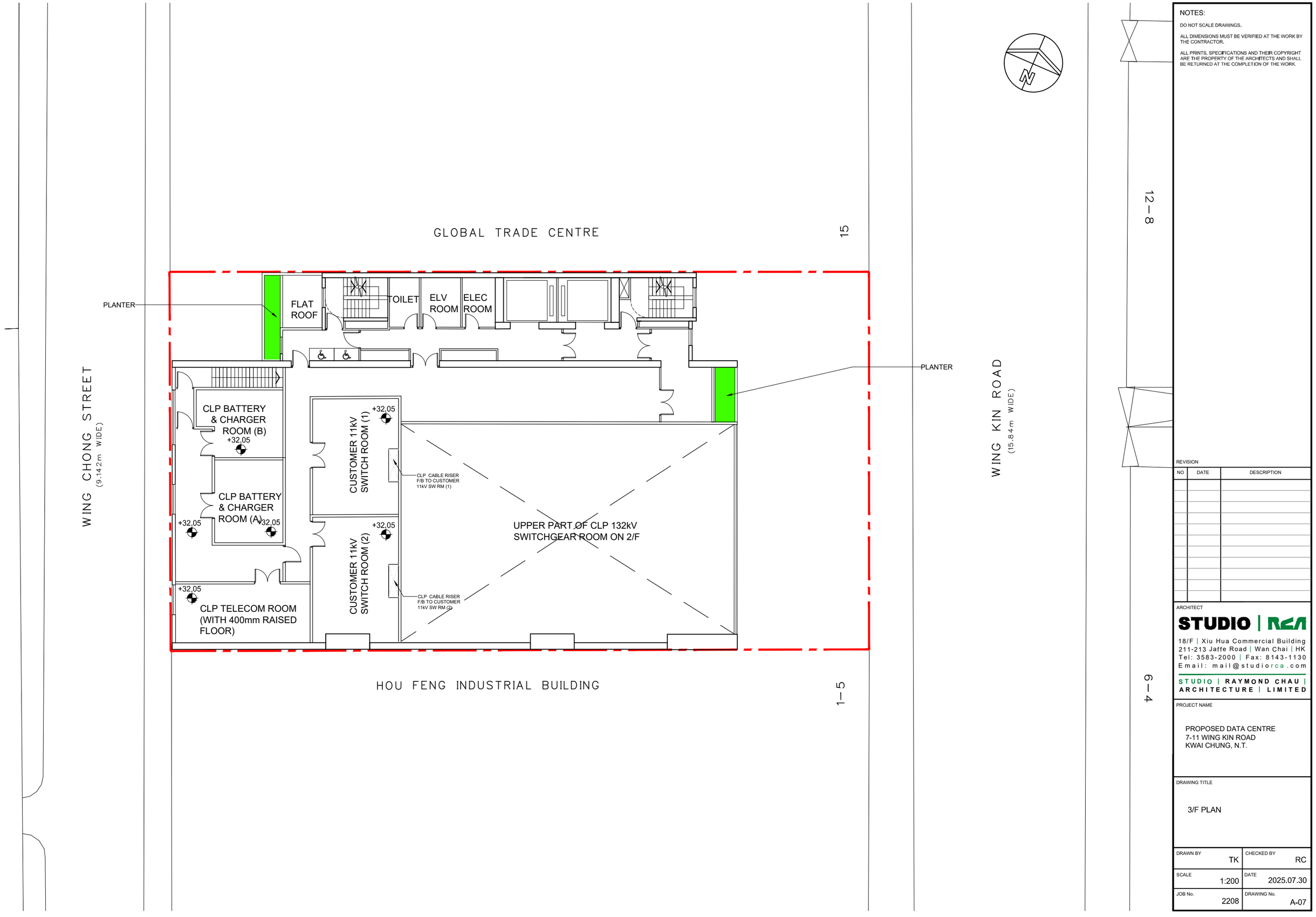
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

2/F PLAN

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DRAWING TITLE

3/F PLAN

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2208	A-07

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

TOILET
ELV ROOM
ELEC ROOM

AC PLANT ROOM

DATA HALL

AC PLANT ROOM

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

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KWAI CHUNG, N.T.

DRAWING TITLE

4/F-5/F PLAN (DATA HALL)

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JOB No.: 2208	DRAWING No.: A-08

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

E/M ROOM | ELV ROOM | ELEC ROOM

FLAT ROOF

6530

M&E

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

NOTES:

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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

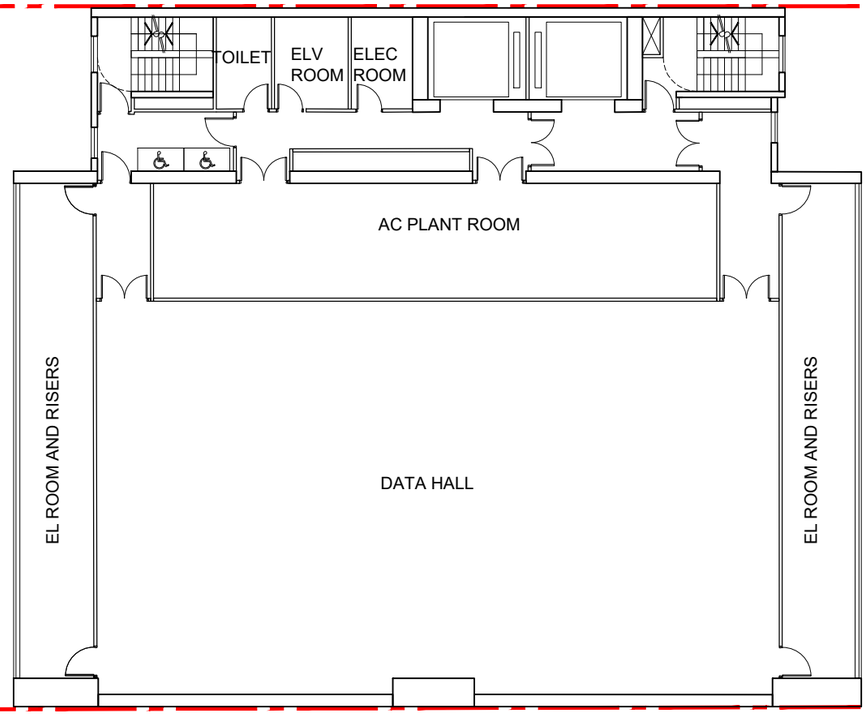
6/F PLAN (M&E)

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TK	RC
SCALE: 1:200	DATE: 2025.07.30
JOB No.: 2208	DRAWING No.: A-09

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15



HOU FENG INDUSTRIAL BUILDING

1 – 5

WING KIN ROAD
(15.84m WIDE)

12 – 8

6 – 4

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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

7/F-9/F, 11/F-13/F &
15/F-16/F PLANS (TYPICAL
DATA HALL FLOOR PLANS)

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TK	RC
SCALE: 1:200	DATE: 2025.07.30
JOB No.: 2208	DRAWING No.: A-10

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

E/M ROOM | ELV ROOM | ELEC ROOM

M&E

HOU FENG INDUSTRIAL BUILDING

1 – 5

WING KIN ROAD
(15.84m WIDE)

12 – 8

6 – 4

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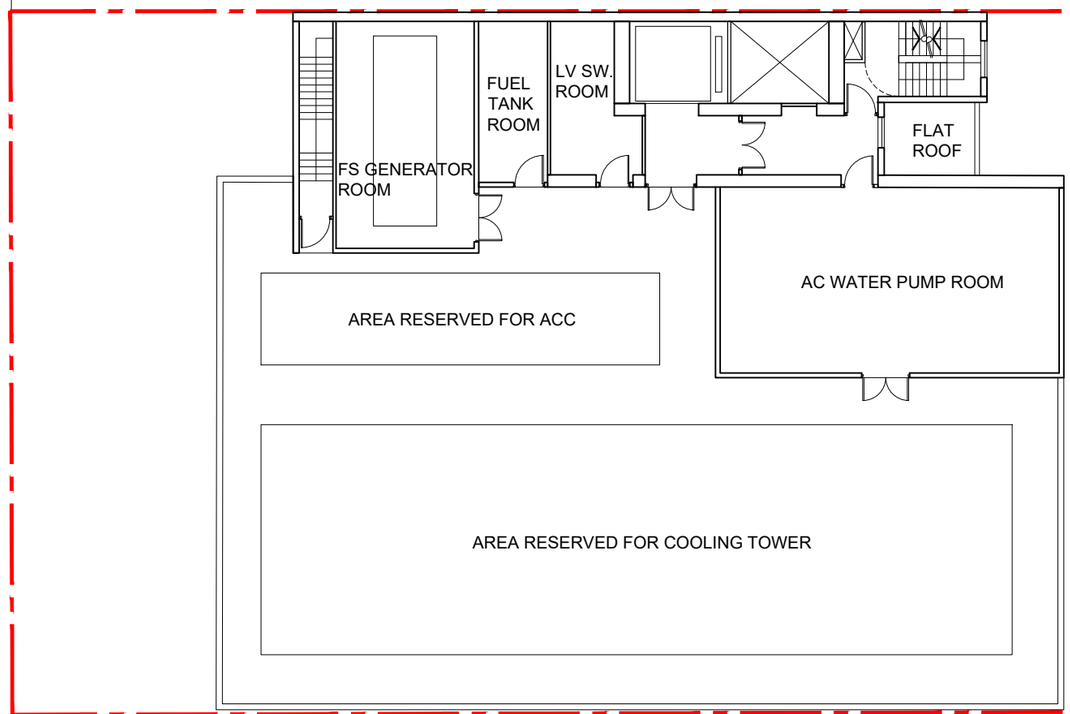
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

10/F & 14/F PLANS
(TYPICAL M&E FLOOR PLANS)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.07.30
JOB No.: 2208	DRAWING No.: A-11



WING CHONG STREET
(9.142m WIDE)

WING KIN ROAD
(15.84m WIDE)

12 – 8

9 – 4

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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

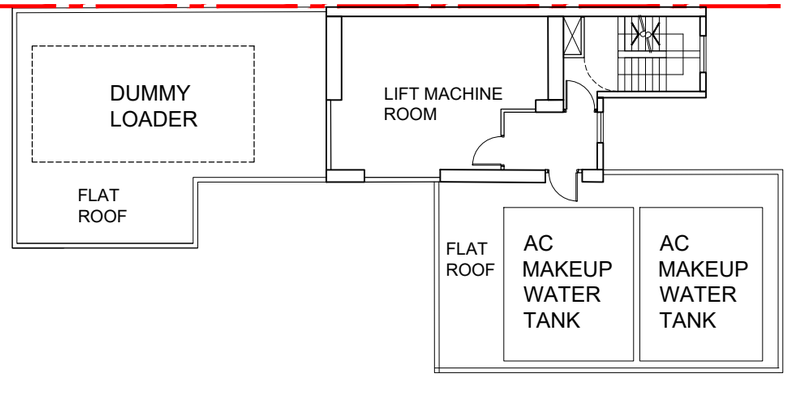
R/F PLAN

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TK	RC
SCALE: 1:200	DATE: 2025.07.30
JOB No.: 2208	DRAWING No.: A-12

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15



HOU FENG INDUSTRIAL BUILDING

1—5

WING KIN ROAD
(15.84m WIDE)

12—8

6—4

NOTES:

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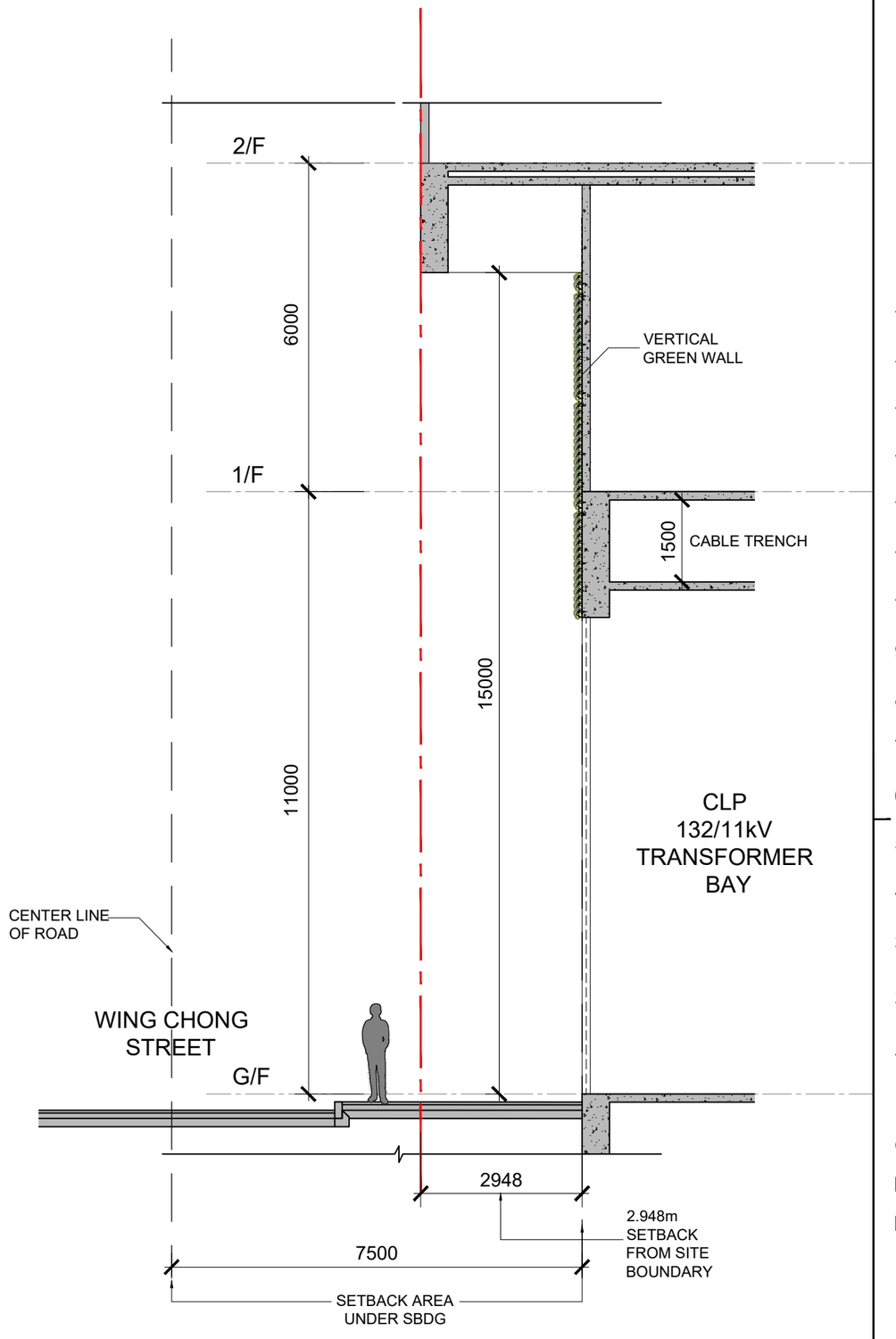
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

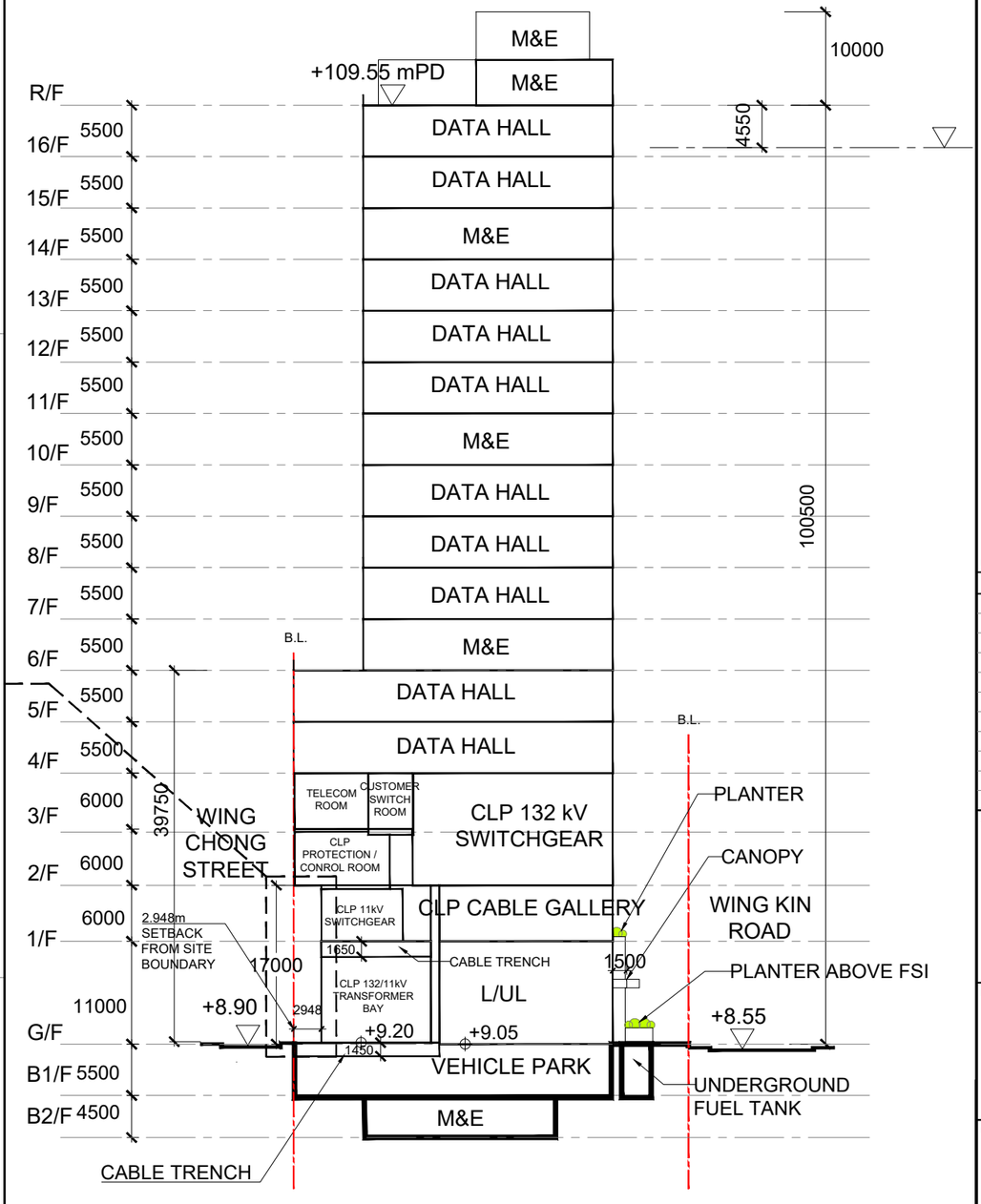
UR/F PLAN

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TK	RC
SCALE	DATE
1:200	2025.07.30
JOB No.	DRAWING No.
2208	A-13



SECTION OF VERTICAL GREEN WALL

SCALE: 1:100



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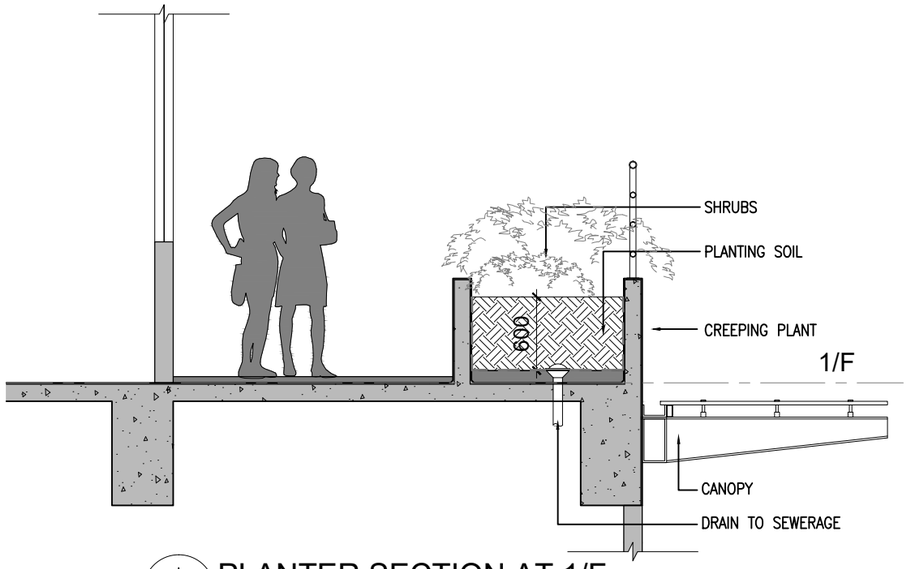
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

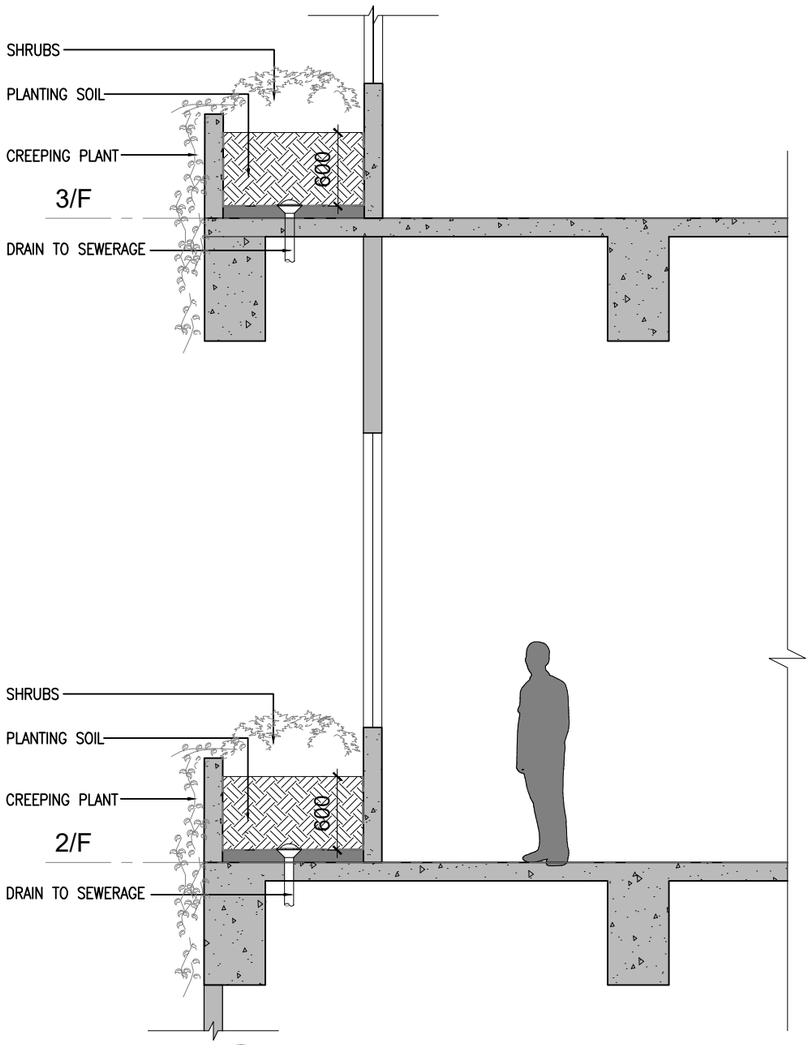
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SECTION A-A

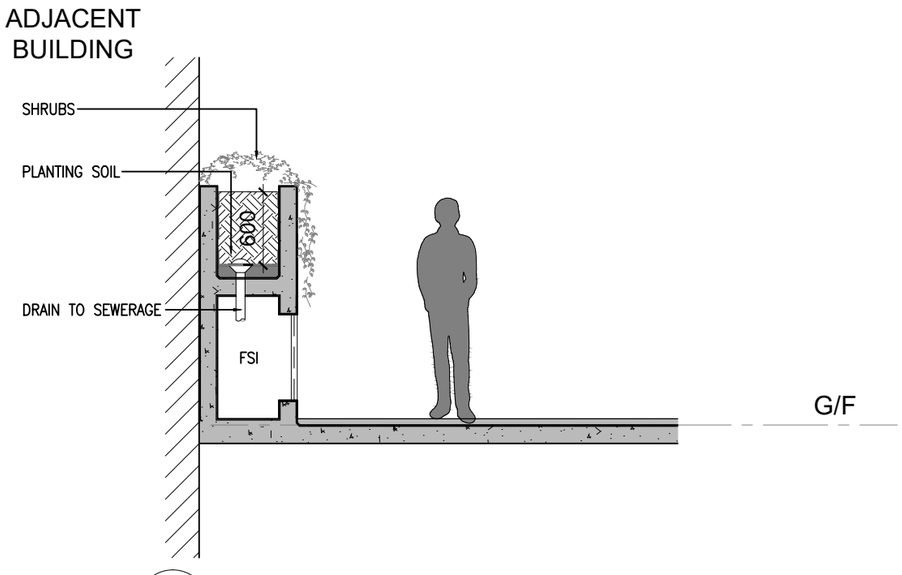
DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:750	2025.08.18
JOB No.	DRAWING No.
2208	A-14



A PLANTER SECTION AT 1/F
SCALE 1:50



B PLANTER SECTION AT 2/F & 3/F
SCALE 1:50



C PLANTER SECTION AT G/F
SCALE 1:50

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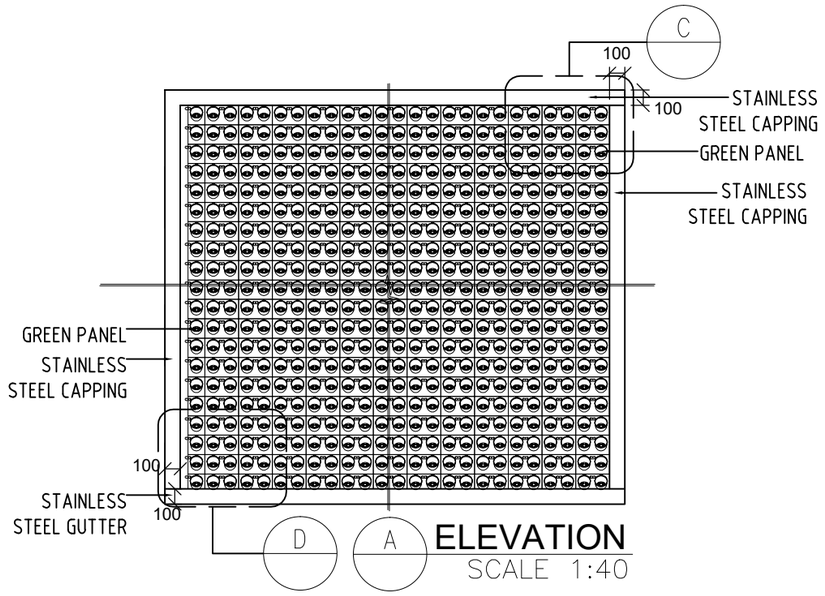
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PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

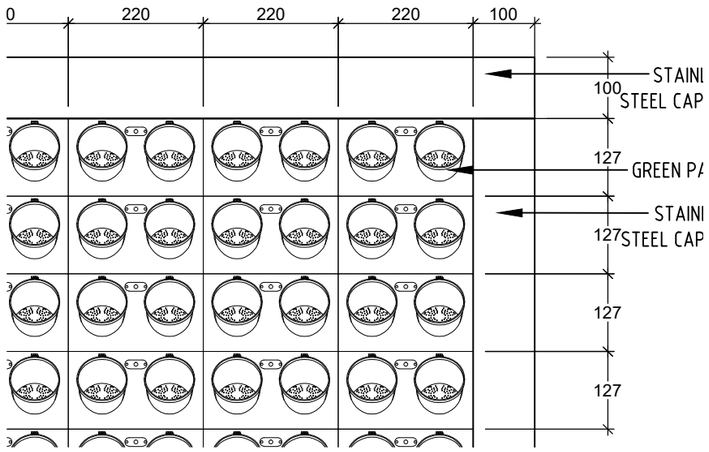
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LANDSCAPE SECTIONS

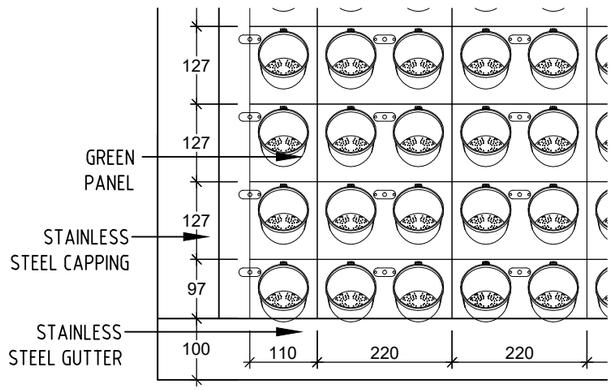
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JOB No.	DRAWING No.
2208	A-15



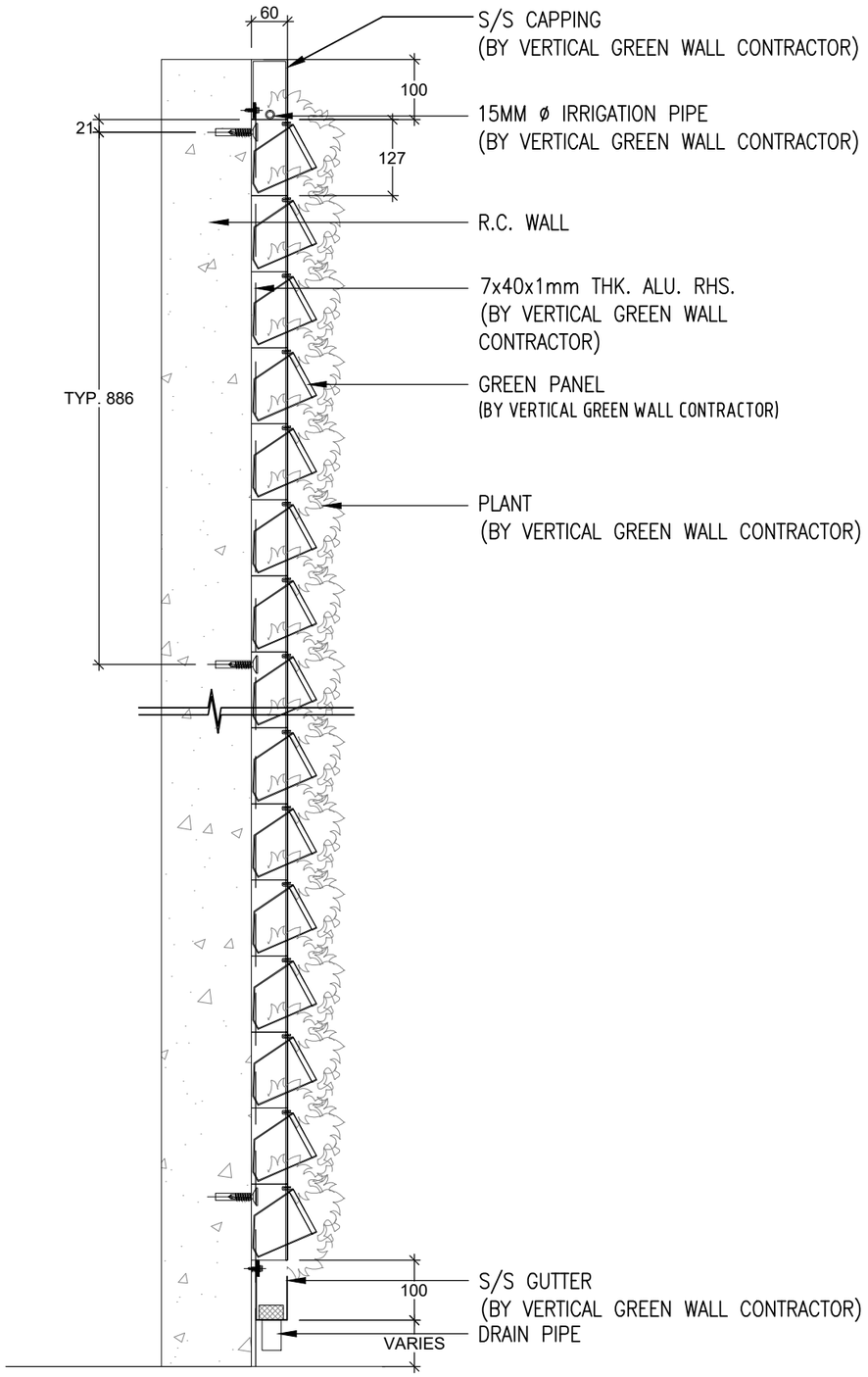
ELEVATION
SCALE 1:40



C BLOW UP DETAILS
SCALE 1:10



D BLOW UP DETAILS
SCALE 1:10



B SECTION
SCALE 1:10

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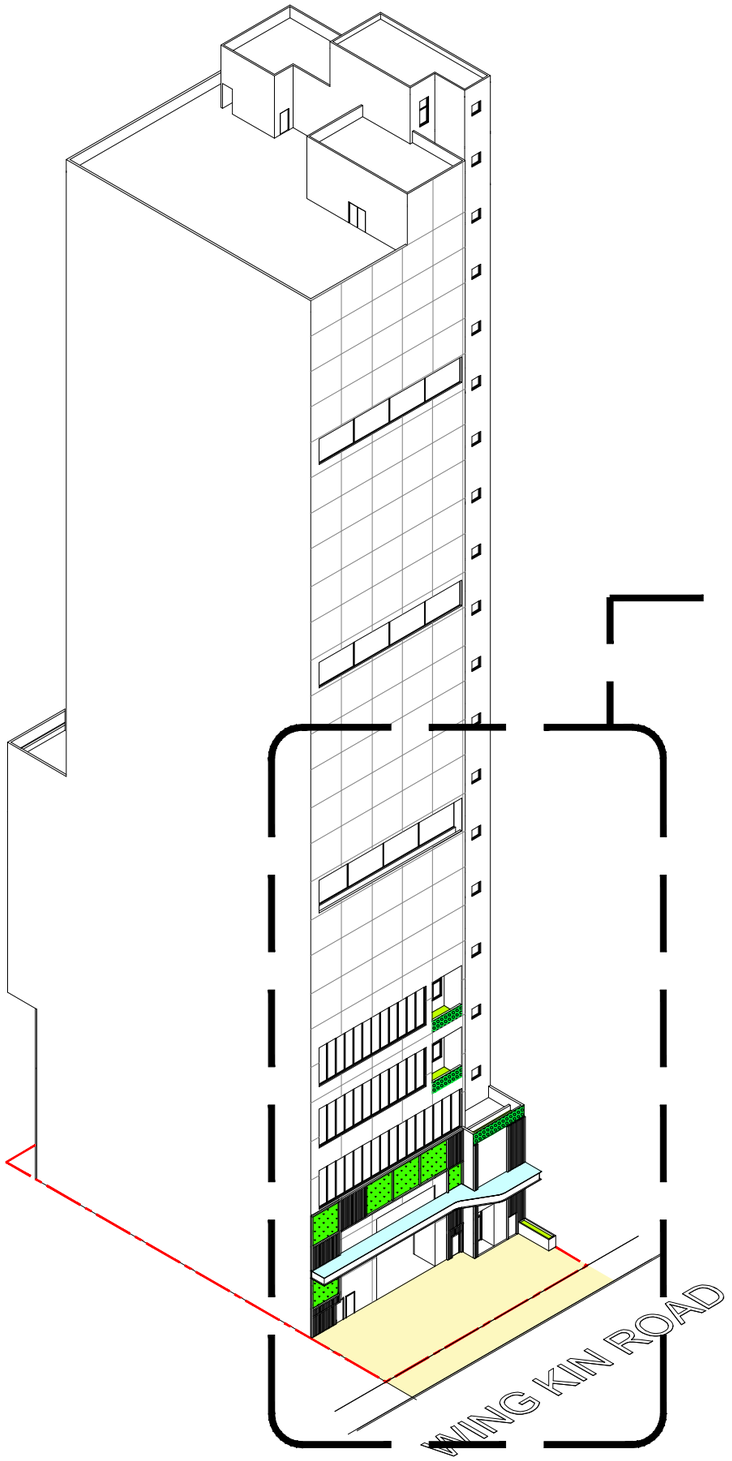
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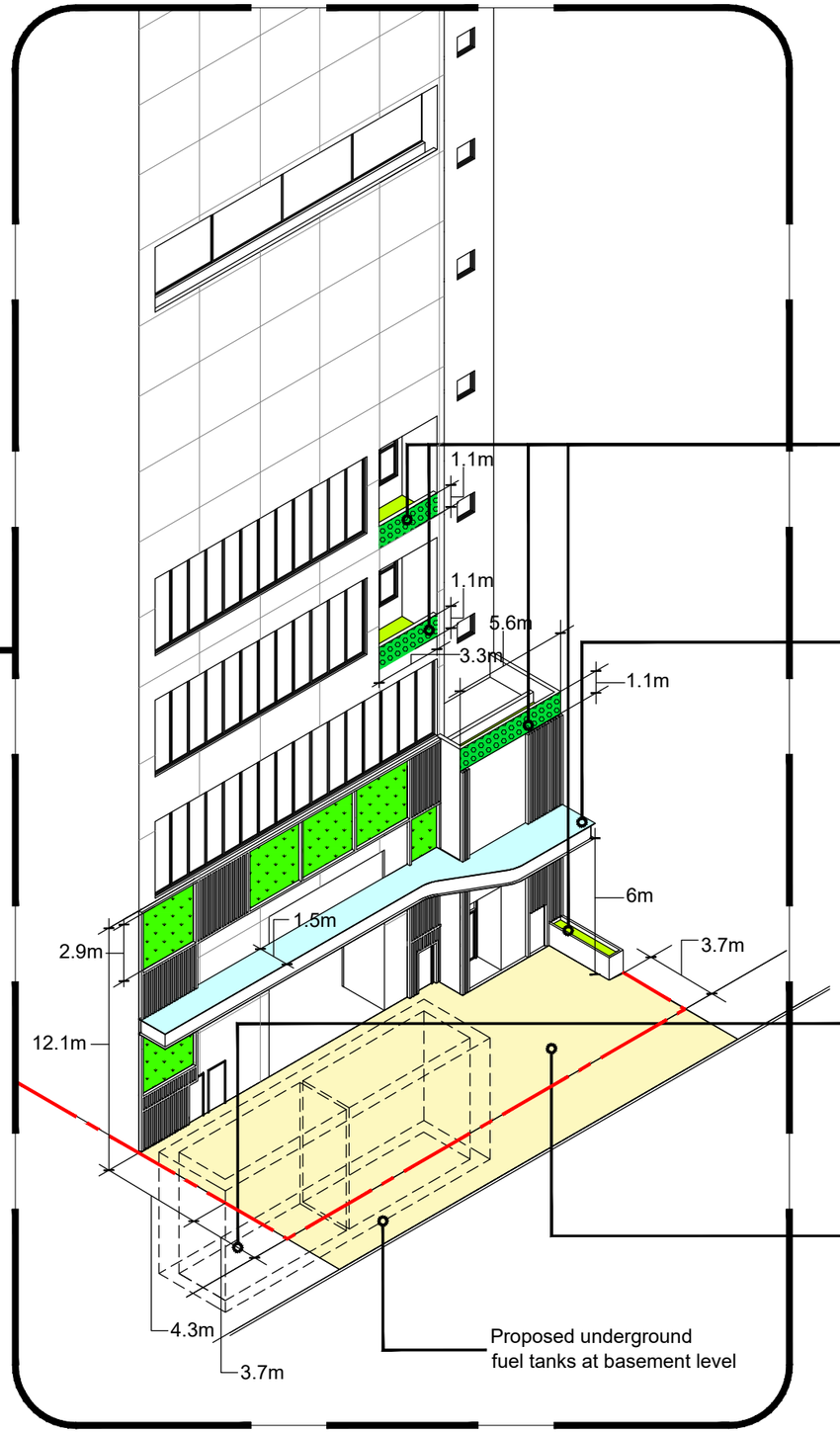
PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

TYPICAL DETAILS OF
VERTICAL GREEN WALL

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TK	RC
SCALE	DATE
AS SHOWN	2025.07.30
JOB No.	DRAWING No.
2208	A-16





Planters with Creeping Plants at G/F to 3/F
As greening elements to enhance the visual and street environment

Canopy for Weather Protection
As a weather protection and shading element at building entrance

Building Setback
3.7m full-height setback from site boundary

Re-paved Footpath
Proposed upgrading of pavement with concrete paving block per HYD's standard (subject to HYD approval) and to improve streetscape
(approx. paving area within the site boundary = 170m²
approx. paving area outside the site boundary = 60m²
approx. total paving area = 230m²)

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LEGEND:

- PLANTER (SNAKE PLANT)
- CREEPING PLANTS (PHILODENDRON HEDERACEUM)
- VERTICAL GREENING (PHILODENDRON HEDERACEUM)

REVISION

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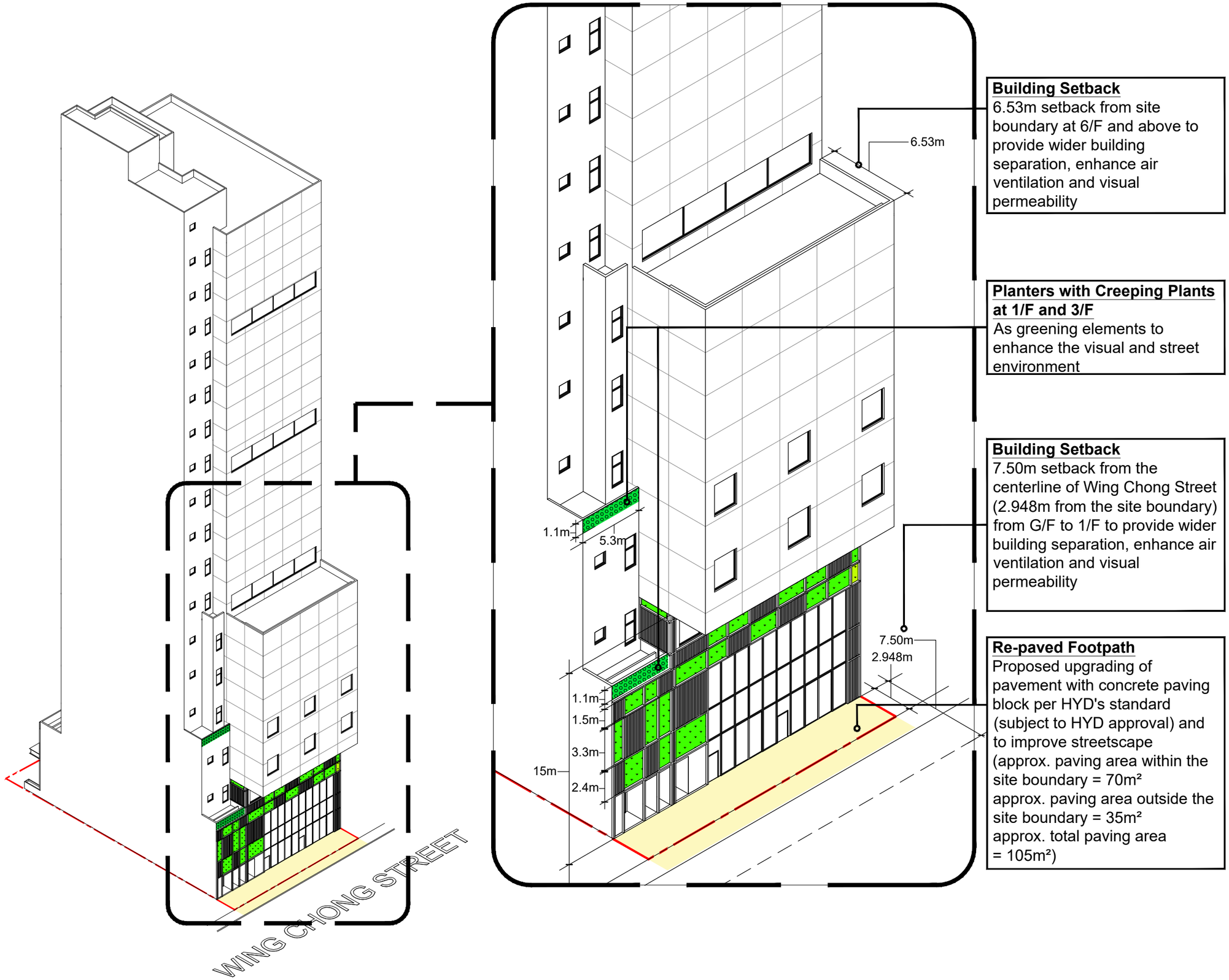
PROJECT NAME

REDEVELOPMENT OF
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

ISOMETRIC DRAWING A

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MH	RC
SCALE	DATE
N/A	2025.08.20
JOB No.	DRAWING No.
2208	AR-10



Building Setback
6.53m setback from site boundary at 6/F and above to provide wider building separation, enhance air ventilation and visual permeability

Planters with Creeping Plants at 1/F and 3/F
As greening elements to enhance the visual and street environment

Building Setback
7.50m setback from the centerline of Wing Chong Street (2.948m from the site boundary) from G/F to 1/F to provide wider building separation, enhance air ventilation and visual permeability

Re-paved Footpath
Proposed upgrading of pavement with concrete paving block per HYD's standard (subject to HYD approval) and to improve streetscape (approx. paving area within the site boundary = 70m²
approx. paving area outside the site boundary = 35m²
approx. total paving area = 105m²)

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LEGEND:

- PLANTER (SNAKE PLANT)
- CREEPING PLANTS (PHILODENDRON HEDERACEUM)
- VERTICAL GREENING (PHILODENDRON HEDERACEUM)

REVISION

NO	DATE	DESCRIPTION

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PROJECT NAME

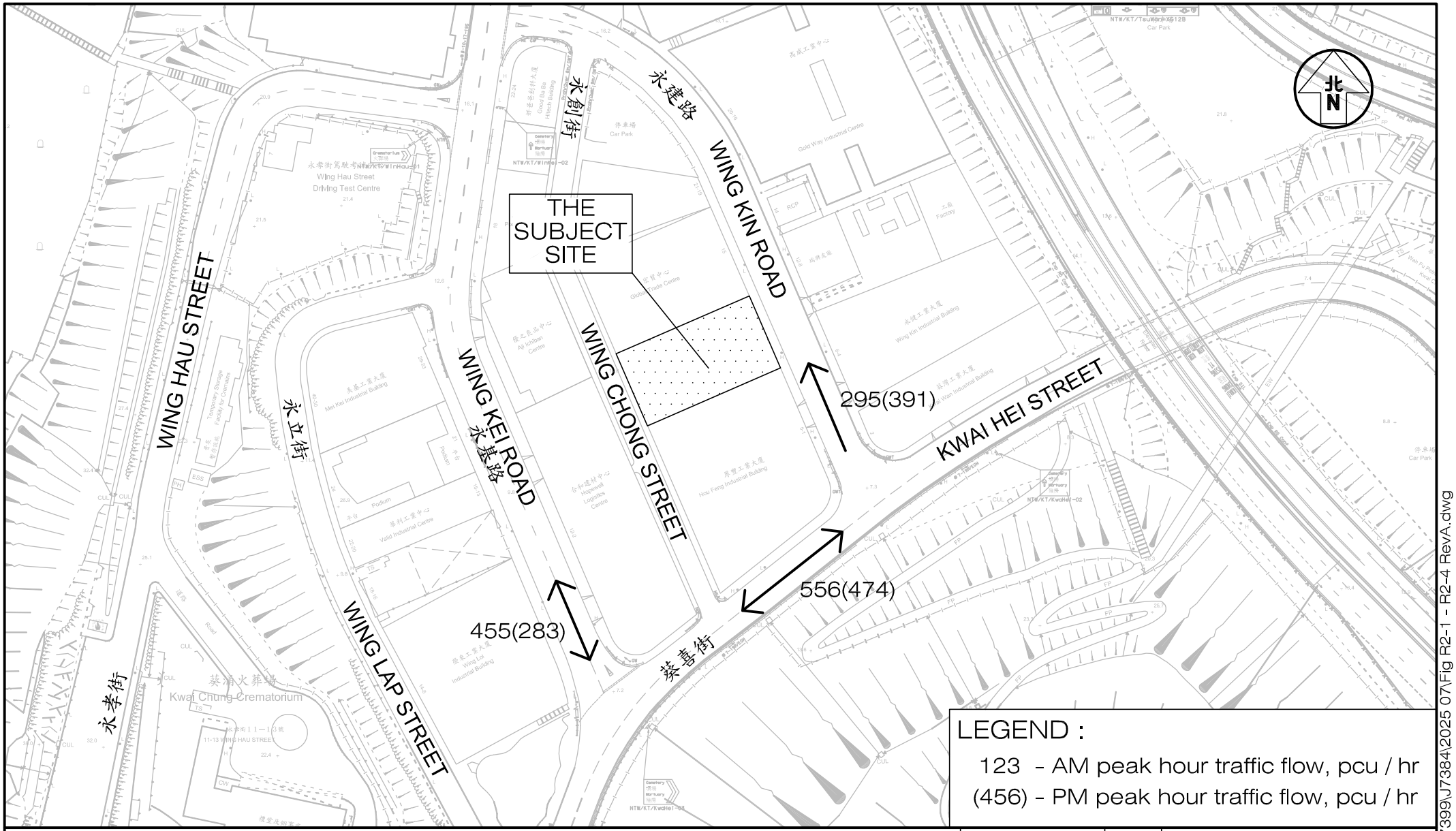
REDEVELOPMENT OF
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

ISOMETRIC DRAWING B

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MH	RC
SCALE	DATE
N/A	2025.08.20
JOB No.	DRAWING No.
2208	AR-11

Attachment 2
Figures R2-1 to R2-4, 2.10, 4.1-4.3



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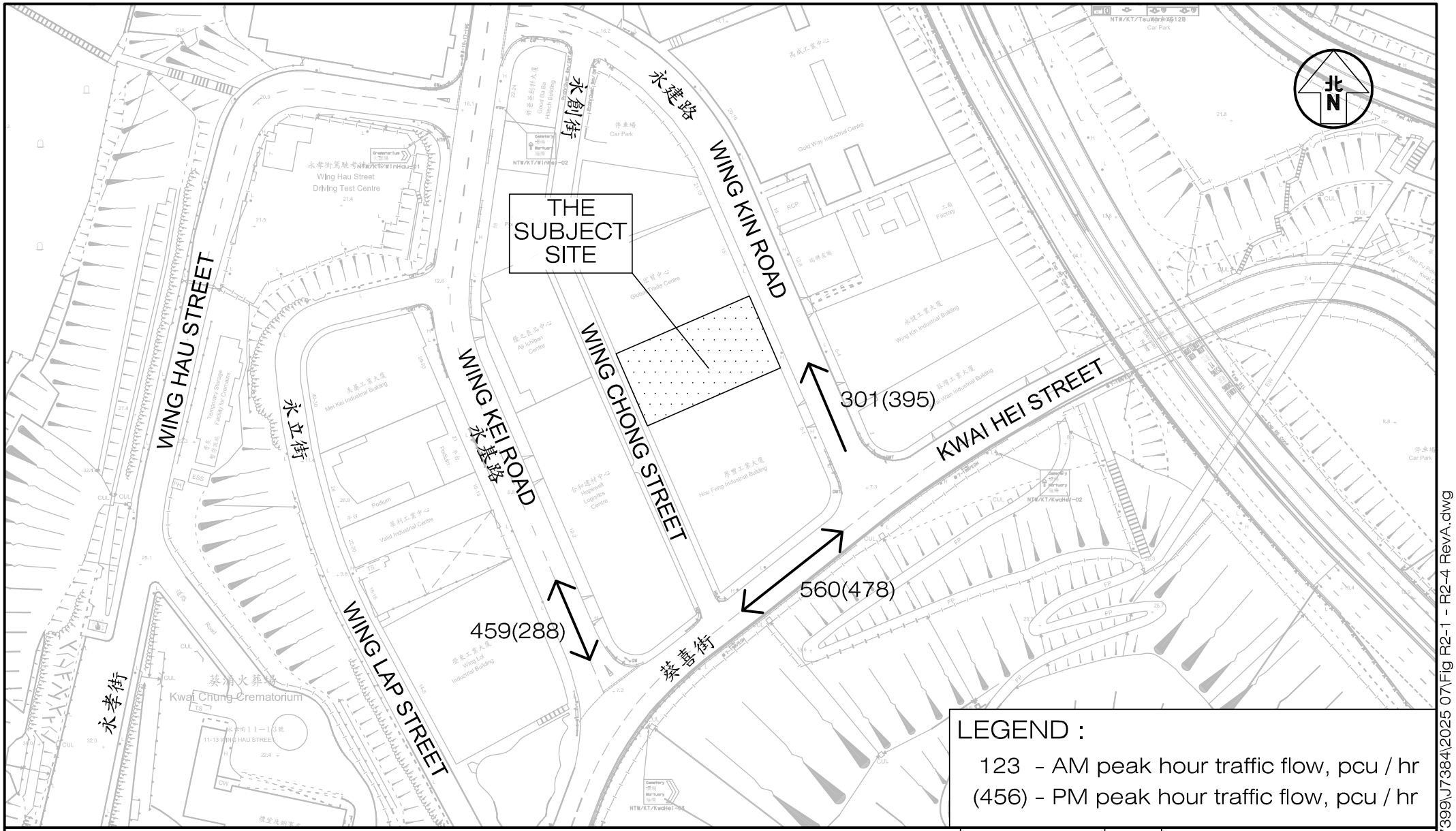
123 - AM peak hour traffic flow, pcu / hr

(456) - PM peak hour traffic flow, pcu / hr

Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. R2–1 / Revision B
Figure Title	2032 TRAFFIC FLOWS (PCU/HR) WITHOUT THE PROPOSED DATA CENTRE		Designed by L C H / Drawn by N C M / Checked by K C
			Scale in A4 1 : 1500 / Date 11 AUG 2025

CKM Asia Limited
Traffic and Transportation Planning Consultants
21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong
Tel : (852) 2520 5990 Fax : (852) 2528 6343
Email : mail@ckmasia.com.hk

T:\JOB\J7350-J7399\J7384\2025 07\Fig R2-1 - R2-4 RevA.dwg



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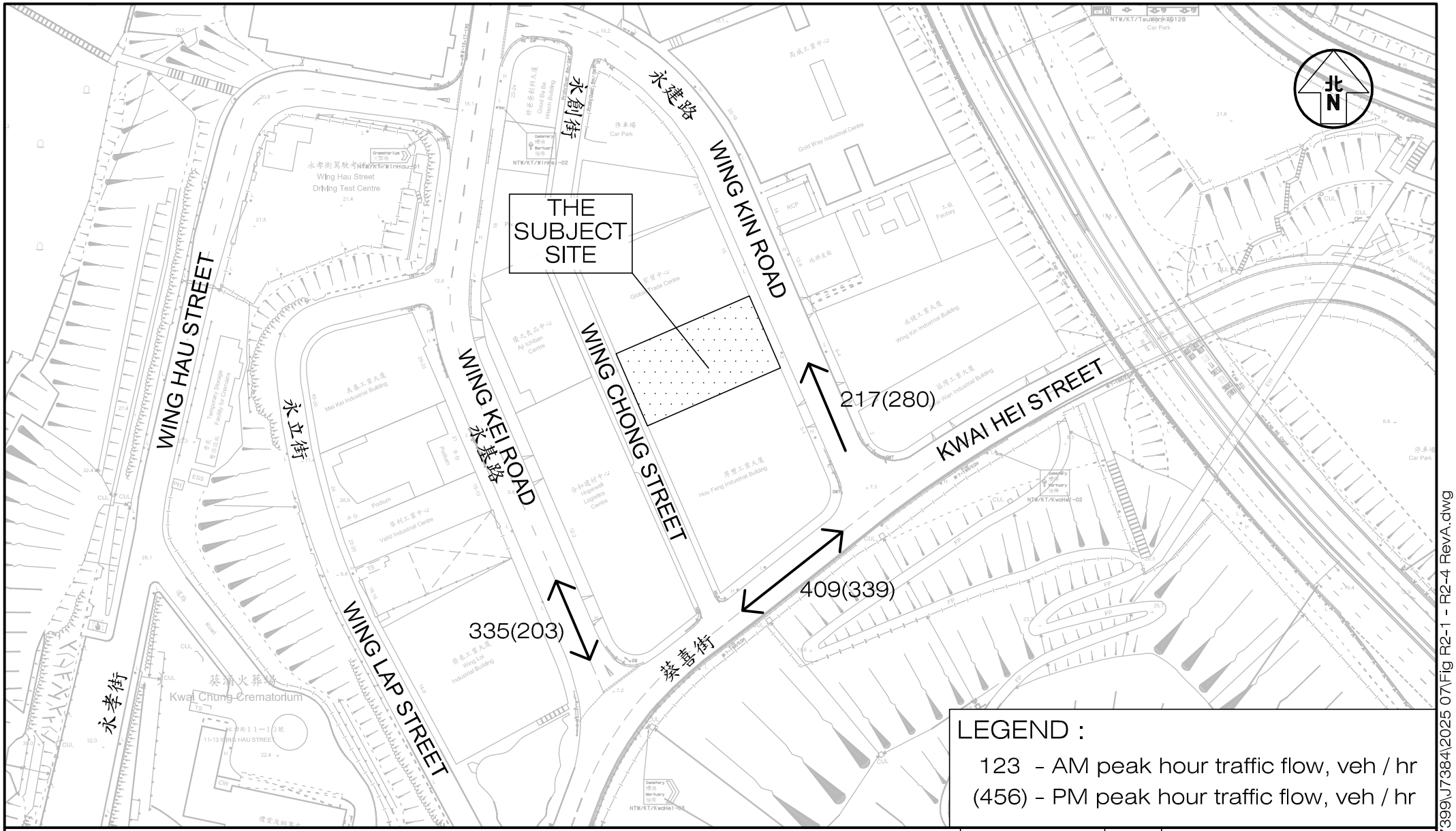
123 - AM peak hour traffic flow, pcu / hr

(456) - PM peak hour traffic flow, pcu / hr

Project Title	PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. R2–2 / Revision B
Figure Title	2032 TRAFFIC FLOWS (PCU/HR) WITH THE PROPOSED DATA CENTRE		Designed by L C H / Drawn by N C M / Checked by K C
			Scale in A4 1 : 1500 / Date 11 AUG 2025

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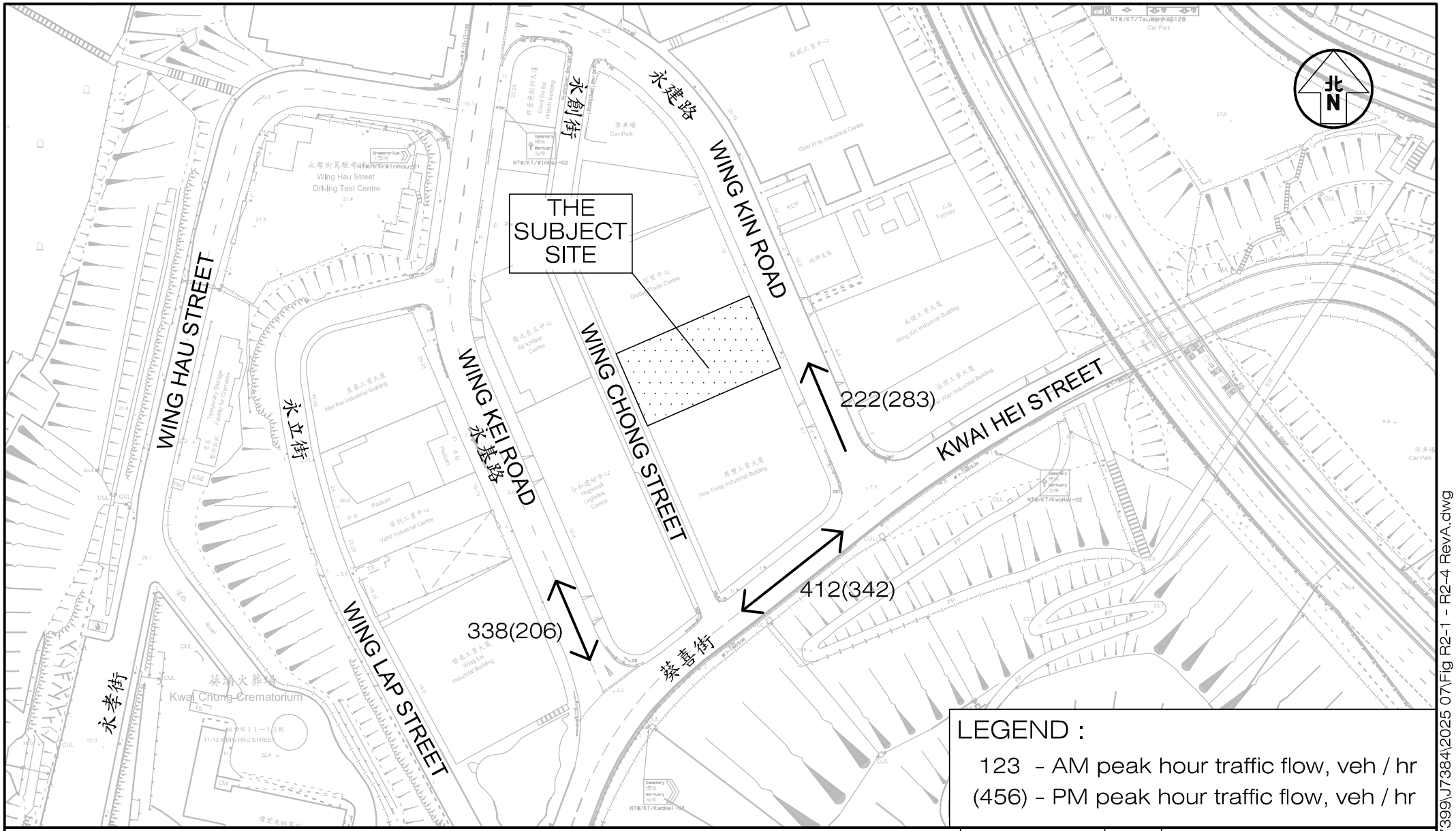
123 - AM peak hour traffic flow, veh / hr

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Project Title: PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	J7384	Figure No. R2–3	Revision B
Figure Title: 2032 TRAFFIC FLOWS (VEH/HR) WITHOUT THE PROPOSED DATA CENTRE		Designed by L C H / Drawn by N C M / Checked by K C	
		Scale in A4: 1 : 1500	Date: 11 AUG 2025

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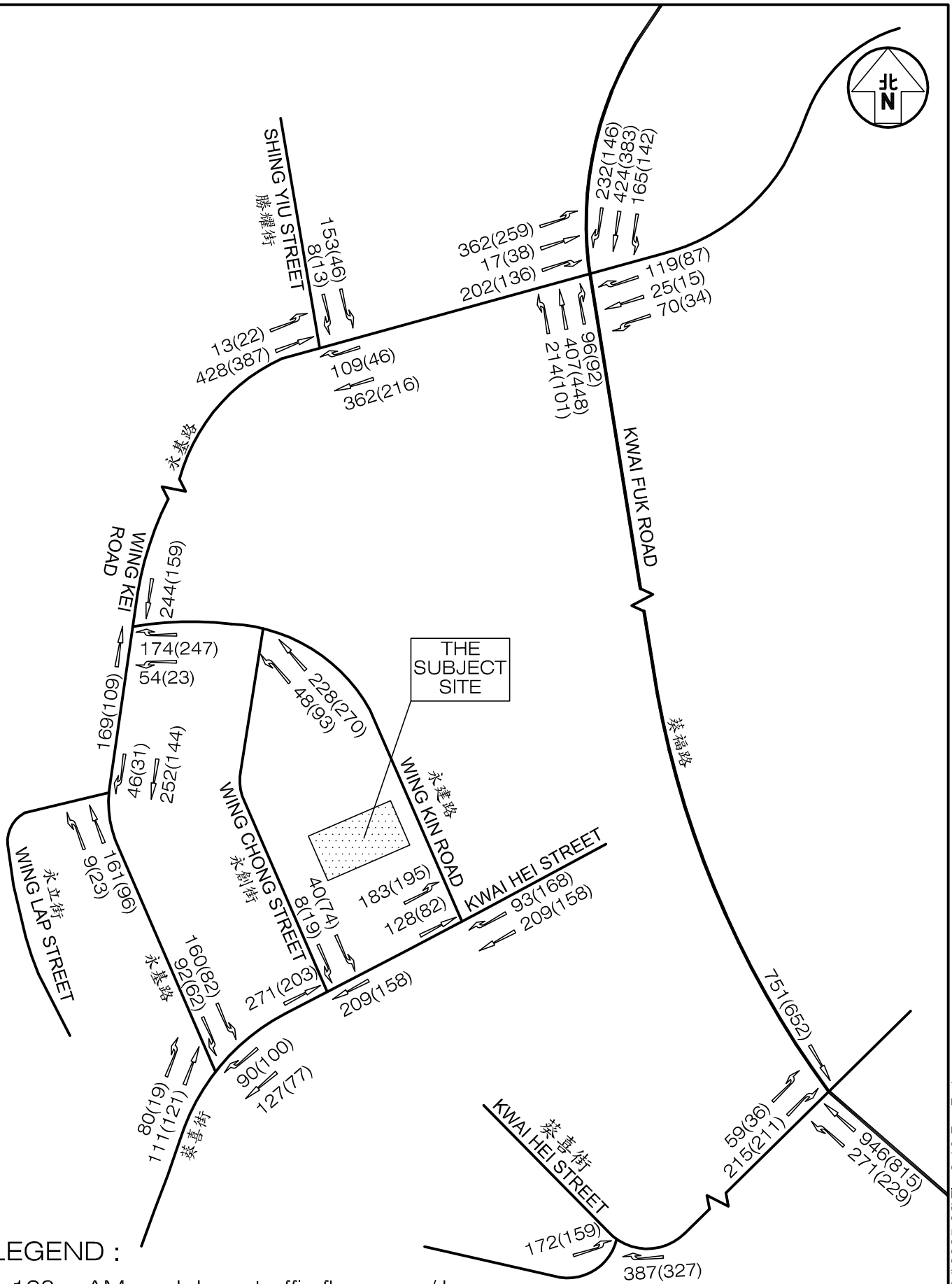
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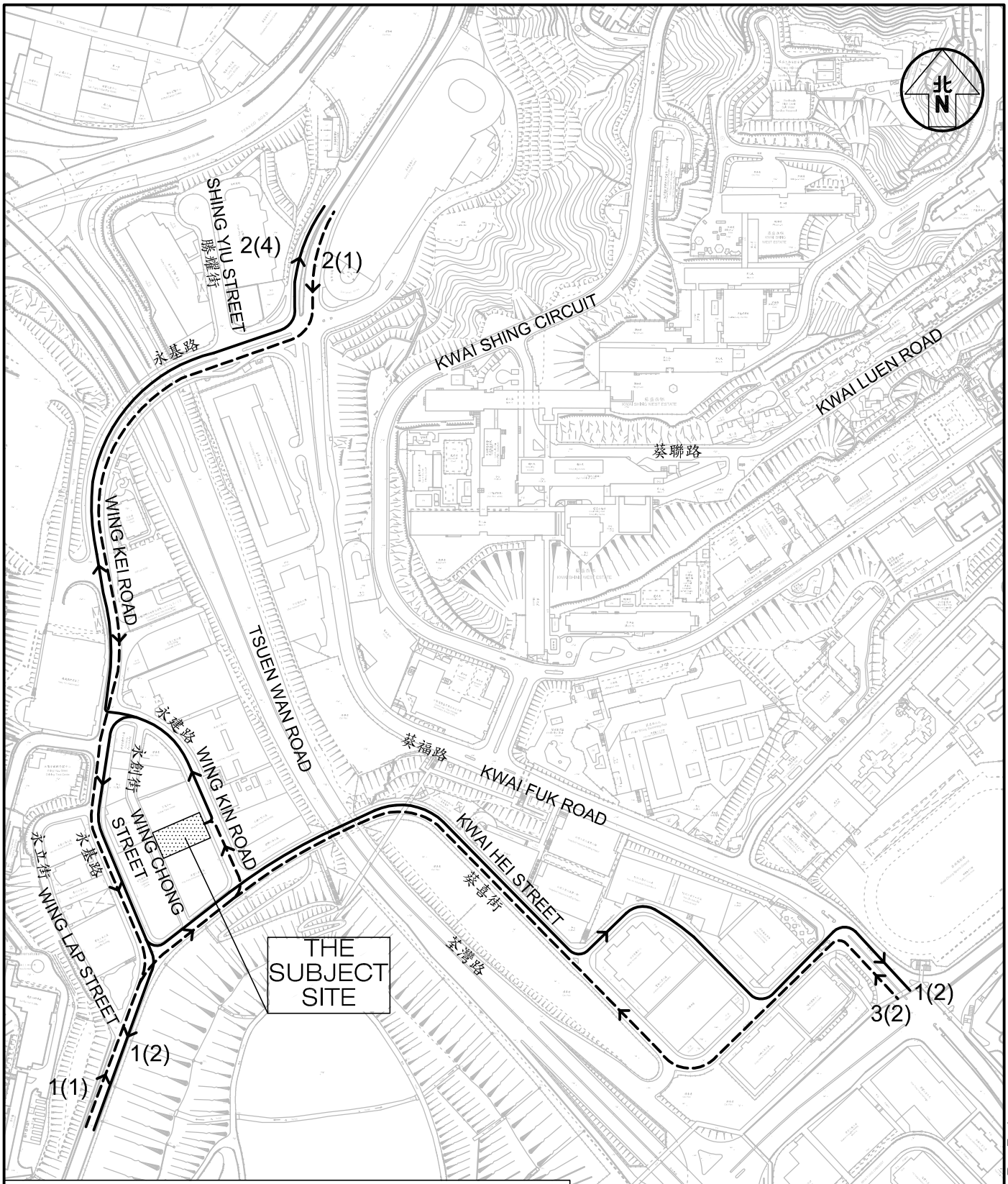
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Project Title: PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	Job No. J7384	Figure No. 2.10			Scale in A4 N.T.S.
	Designed by C Y Y	Drawn by N C M	Checked by K C	Revision C	Date 11 AUG 2025
Figure Title: EXISTING PEAK HOUR TRAFFIC FLOWS	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk				

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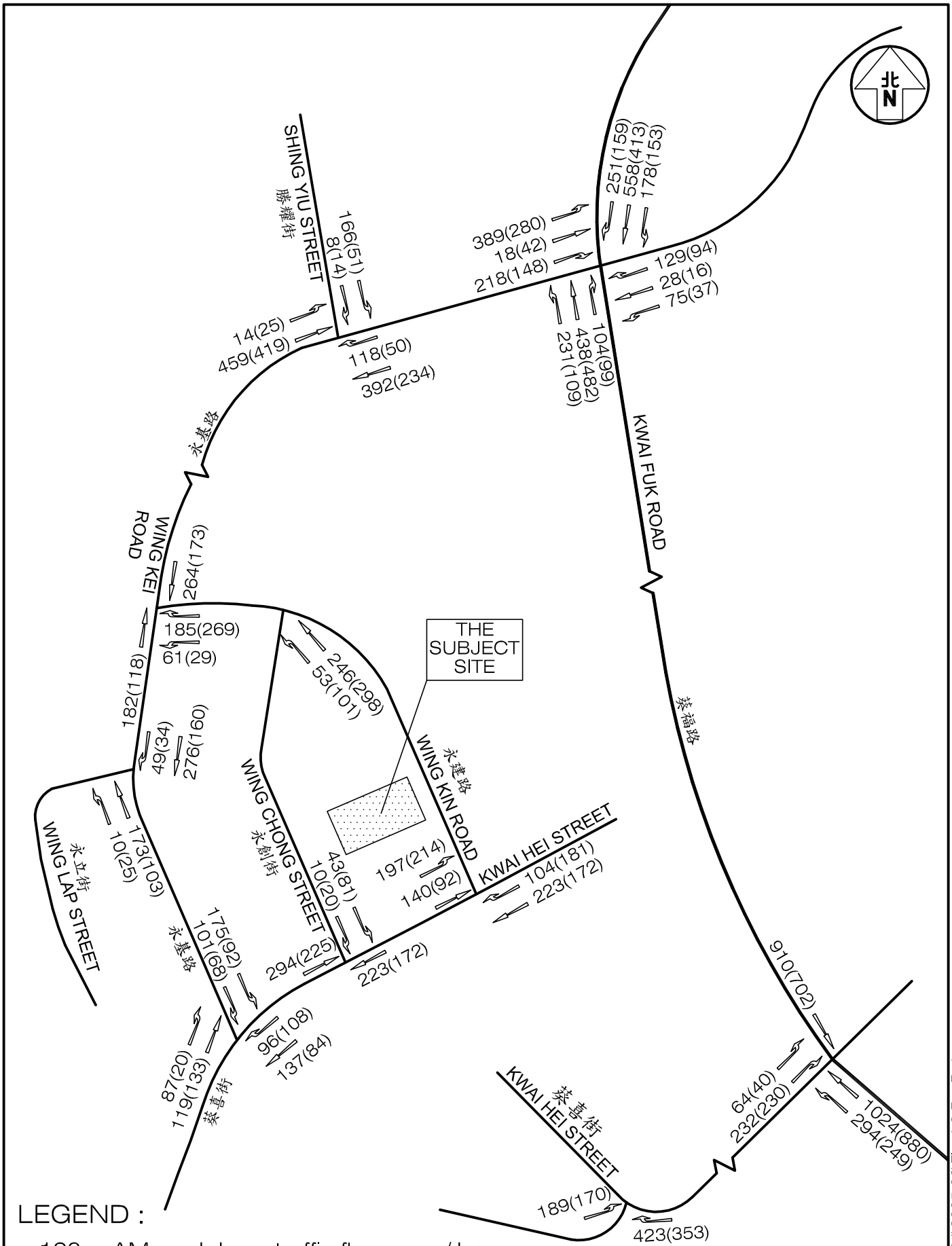
Egress Route

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Project Title: PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	Job No. J7384	Figure No. 4.1			Scale in A4 N.T.S.
	Designed by C Y Y	Drawn by N C M	Checked by K C	Revision C	Date 11 AUG 2025
Figure Title: INGRESS / EGRESS ROUTE FOR TRAFFIC GENERATED BY THE PROPOSED DATA CENTRE	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk				

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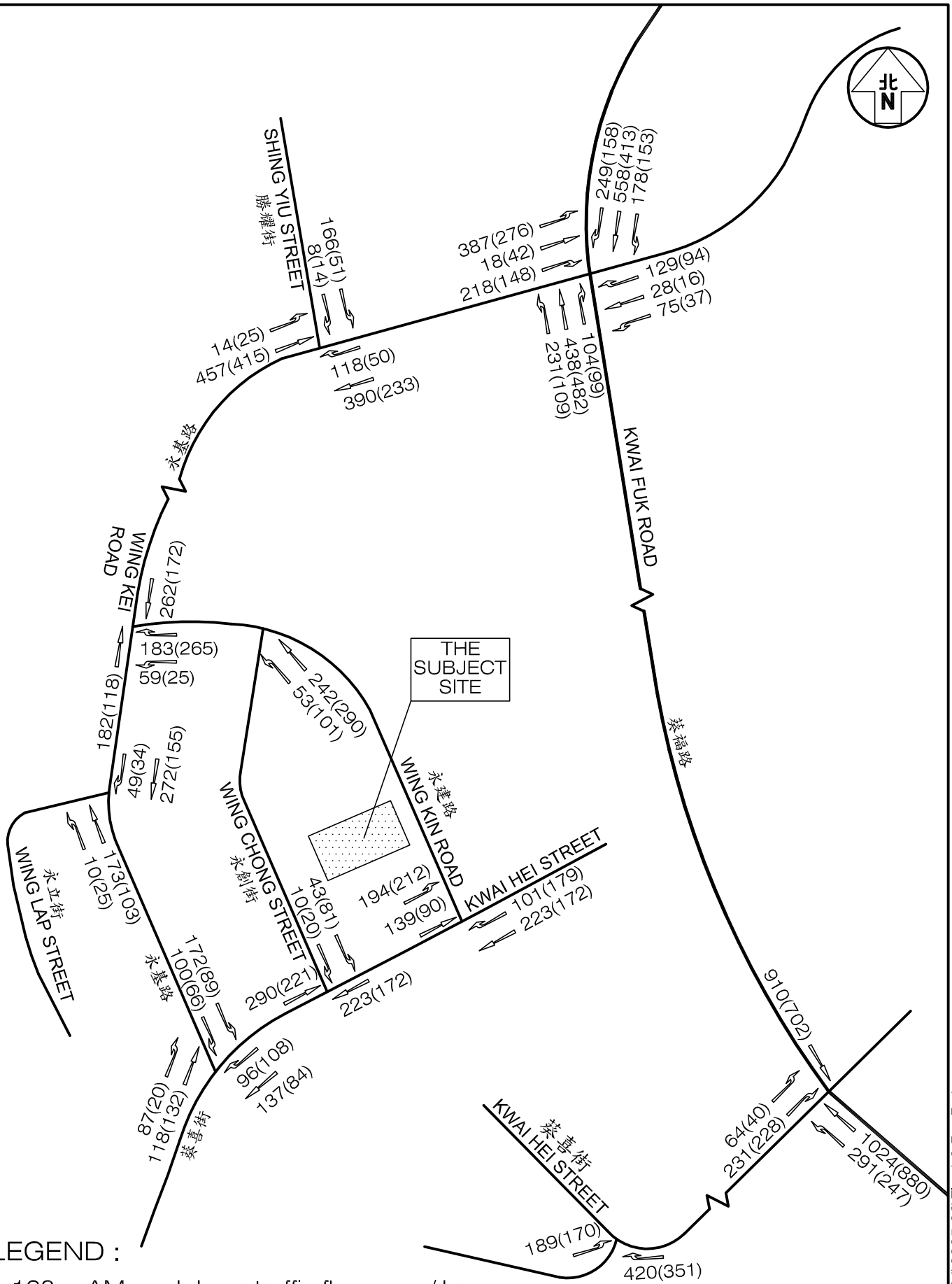
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Project Title: PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	Job No. J7384	Figure No. 4.3			Scale in A4 N.T.S.
	Designed by C Y Y	Drawn by N C M	Checked by K C	Revision C	Date 11 AUG 2025
Figure Title: YEAR 2032 PEAK HOUR TRAFFIC FLOWS WITH THE PROPOSED DATA CENTRE	CKM Asia Limited Traffic and Transportation Planning Consultants 21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong Tel : (852) 2520 5990 Fax : (852) 2528 6343 Email : mail@ckmasia.com.hk				

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Project Title: PROPOSED INFORMATION TECHNOLOGY AND TELECOMMUNICATION INDUSTRIES (DATA CENTRE) DEVELOPMENT AT 7 – 11 WING KIN ROAD, KWAI CHUNG, NEW TERRITORIES	Job No. J7384	Figure No. 4.2			Scale in A4 N.T.S.
	Designed by C Y Y	Drawn by N C M	Checked by K C	Revision C	Date 11 AUG 2025
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Attachment 3
Water Supply Impact Assessment

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Water Supply Impact Assessment

(V2.0)

July 2025

Approved By _____

(Project Manager: K.S. Lee)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties.

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1 INTRODUCTION

1.1 Background

1.1.1 OXO YW Limited ("the Project Proponent") has proposed to develop a data centre located at No. 7-11 Wing Kin Road, Kwai Chung.

1.1.2 Cinotech Consultants Limited was commissioned by OXO YW Limited to carry out a Water Supply Impact Assessment (WSIA) to assess and envisage any potential water supply impact on the implementation of the Project and to recommend improvement / modification works on the existing water supply system.

2 DESCRIPTION OF THE ENVIRONMENT

2.1 Existing Environment

2.1.1 The Application Site (the "Site") is located in an industrial area in Kwai Chung, bordered by Wing Chong Street to the west, Wing Kin Road to the east, Global Trade Centre to the north, and Hou Feng Industrial Building to the south (see **Figure 2-1**). The Site and its surroundings fall within the industrial zone, as per the *Approved Kwai Chung Outline Zoning Plan No. S/KC/32* (see **Figure 2-2**).

2.1.2 The Site covers approximately 964 m² (about 929 m² excluding the additional area) and is currently occupied by a 2-storey industrial building. Planning applications have been submitted and approved with conditions in 2020 (Application No.: A/KC/457) and 2023 (Application No.: A/KC/496) for Offensive Trades use (Lard Boiling Factory) and Industrial use (Warehouse), respectively.

2.2 The Proposed Development

2.2.1 The Project Proponent proposes to redevelop the Application Site into a 17-storey data centre with a height of 109.55 mPD and a plot ratio of 11.4. The tentative section plan of the proposed development is shown in **Appendix I**, with a planned completion date of 2029.

2.2.2 It should be noted that the proposed development is intended for Data Processing Centre use, and its water consumption behavior will differ significantly from typical industrial and commercial uses.

2.2.3 The major water consumption sources for the proposed development include:

- Water usage by staff
    - The proposed development is expected to be unmanned and automated, with a limited number of staff. As advised by the project applicant, up to 25 staff members will be employed.
- Water consumption for the water cooling tower system

  - A water cooling tower system will be implemented to meet the significant cooling demand, which will predominantly influence the fresh water requirements.
- Irrigation of planters

2.2.4 On the other hand, no other water consumption activities within the proposed development are anticipated.

2.2.5 During operation, the bleed-off water from the water cooling tower system will be reused as much as practicable, with the expectation that all salt water demand for the proposed development will be met.

Development Parameters

2.2.6 This assessment is prepared based on the following development parameters (**Table 2-1**) of the notional design, which are subject to changes at detailed design stage:

Table 2-1 Development Parameters

	Existing	**Proposed Development**
Zoning	Industrial	
Site Area	About 964.2 m^2	
Use	Industrial	Data Processing Centre
Domestic GFA	0 m^2	0 m^2
Non-Domestic GFA (Industrial)	941.21 m^2	About 10,991.88 m^2
Building Height	60 mPD	109.55 mPD

Remarks: Development Parameters of the proposed development subject to detailed design.

3 WATER SUPPLY IMPACT ASSESSMENT – FRESH WATER

3.1 Existing Fresh Water Supply

3.1.1 The Application Site is currently served by the Lai Chi Kok Fresh Water Supply Reservoir (FWSR) (Capacity: 93,702 m³).

3.1.2 The Application Site is currently served by the 25 mm and 50 mm branches from the 300 mm fresh water main along Wing Kin Road, which originates from the 400 mm fresh water main along Kwai Hei Street.

3.1.3 The simplified fresh water mains records are illustrated in **Figures 3-1 and 3-2**. The Water Supplies Department (WSD) Fresh Water Mains Record Plan is provided in **Appendix II**.

3.2 Fresh Water Demand

3.2.1 The calculations of fresh water demand are generally following Departmental Instruction (DI) No. 1309 "Design Criteria,", which adopted a per person or per Site Area water consumption rate. The fresh water demand of the existing development is calculated in **Table 3-1** and detailed in **Table B of Appendix IV**.

Table 3-1 Fresh Water Demand of the Existing Development

	Category	Site Area (ha)	Unit Demand Fresh Water (m^3/ha/day)	Daily Demand Fresh Water (m^3/day)
Industrial (Tsuen Wan)	I	0.096	1600	153.986

3.2.2 As stated in **Section 2.2**, the water consumption behavior of the proposed development will differ significantly from typical industrial and commercial uses. Therefore, the water usage for staff, the water cooling tower system, and irrigation will be calculated separately, rather than using a GFA-based broad-brush estimation. Since the staff will not serve any customers, the water consumption figures for residents have been adopted.

3.2.3 The calculation for the fresh water demand of the proposed water cooling tower system, provided by the Project's building services engineer, aligns with the upcoming EMSD Fresh Water Cooling Towers Scheme (Form EMSD EE CT1A) submission. The estimated fresh water demand for the proposed system is summarized in **Table 3-2** and detailed in **Table C1 of Appendix IV.** The calculations from the Project's building services engineer are enclosed in **Appendix V**. Please note that the water cooling tower system and its calculations may undergo minor changes during the detailed design stage.

3.2.4 The fresh water demand of the proposed development is provided in **Table 3-3**, and detailed in **Tables C1 & C2 of Appendix IV**.

Table 3-2 Fresh Water Demand of the Proposed Water Cooling Tower System

		Unit
[A] Cooling tower water flow rate	971.0	L/s
[B] Evaporation loss	0.928%	
[C] Drift loss	0.005%	
[D] Cycle of concentration	6	
[E] Bleed-off rate	0.181%	
[F] Required make-up water flow rate	10.81	L/s
	934.22	m^3/day
[G] Required bleed off water flow rate	1.754	L/s
	151.51	m^3/day

Noted:
[1] Detailed calculation provided in **Table C1 of Appendix IV**.

Table 3-3 Fresh Water Demand of the Proposed Development

	Category	Population or/ GFA (ha)	Unit Demand Fresh Water (m^3/head/day) or (L/ m^2/day)	Daily Demand Fresh Water (m^3/day)
Staff	R	25 (Population)	0.35	8.750
Water Cooling Tower system	N/A	N/A	N/A	934.223
Planter	IRR	0.029 (GFA) [1]	7	2.025

Note:
[1] 30% of the Site area has been adopted for conservative assessment.

3.2.5 The fresh water demand for the site is expected to increase significantly from 153.986 m^3/day to 944.998 m^3/day, representing an increase of 791.012 m^3/day (or 0.791 MLD). The calculations for fresh water demand in both existing and proposed scenarios are summarized in **Table 3-4**.

Table 3-4 Summary of Fresh Water Demand

Daily Demand - Fresh Water (m^3/day)		
Existing	***Proposed***	***Net Increase***
153.986	944.998	791.012

3.3 Fresh Water Supply Impact - Fresh water service reservoir

3.3.1 As shown in **Table D of Appendix IV**, there is substantially greater spare capacity (63.1 MLD) in Lai Chi Kok FWSR. The expected increase in demand (0.811 MLD) can therefore be accommodated by the existing Fresh Water Service Reservoirs. No adverse impact to the fresh water service reservoirs is anticipated.

3.4 Fresh Water Supply Impact – Fresh Water Mains

3.4.1 The Application Site is currently served by the 25 mm and 50 mm branches from the 300 mm fresh water main along Wing Kin Road, which originates from the 400 mm fresh water main along Kwai Hei Street as shown in **Figures 3-1 & 3-2**.

3.4.2 According to Departmental Instruction (DI) No. 1309 "Design Criteria" (DI 1309), the peak flow rate in the distribution mains for fresh water should be three times the daily demand. However, the water consumption of the water cooling tower system is expected to be steady, and the consumption in **Table 3-2** is based on the worst-case scenario (maximum cooling load under hot weather). Thus, the peak factor of three is not applicable to the water consumption of the water cooling tower system. Consequently, the estimated peak daily fresh water demand for the proposed development is calculated as (8.750+2.025) × 3 + 934.223 = 966.547 m^3/day. Following the maximum sustained flow velocity suggested in DI 1309 (**Table A2 of Appendix IV**), the capacities of the 150 mm and 300 mm fresh water mains are determined to be 2,290 m^3/day and 9,161 m^3/day, respectively.

3.4.3 Taking into account the fresh water consumption of the proposed development, it has been determined that the existing 50 mm and 25 mm branches cannot meet the fresh water demand of the Site.

3.4.4 Therefore, a new 150 mm fresh water main connected to the existing 300 mm fresh water main along Wing Kin Road is proposed, as shown in **Figure 3-2**. Additionally, the existing 50 mm and 25 mm branches will be removed. The specific alignment and connection points of the proposed new water pipes will be determined during the detailed design phase of the development.

4 WATER SUPPLY IMPACT ASSESSMENT – SALT WATER

4.1 Existing Salt Water Supply

4.1.1 The Application Site is currently served by Tsuen Wan Salt Water Pumping Station (SWPS) (Design Pumping Capacity: 93 MLD).

4.1.2 The Application Site is currently served by a 25 mm branch from the 150 mm salt water main along Wing Kin Road.

4.1.3 The simplified salt water mains records are illustrated in **Figure 4-1**. The Water Supplies Department (WSD) Salt Water Mains Record Plan is provided in **Appendix III**, and detailed in **Table B of Appendix IV**.

4.2 Saltwater Supply Demand

4.2.1 The calculations of salt water demand are generally following Departmental Instruction (DI) No. 1309 "Design Criteria,", which adopted a per person or per Site Aera water consumption rate. The fresh water demand of the existing development is calculated in **Table 3-4**.

Table 4-1 Salt Water Demand of the Existing Development

	Category	Site Area (ha)	Unit Demand Salt Water (m^3/ha/day)	Daily Demand Salt Water (m^3/day)
Industrial (Tsuen Wan)	I	0.096	210	20.211

4.2.2 Similar to the calculation of fresh water demand for the proposed development, the salt water consumption figures for residents have been adopted for staff. It should be noted that there is no salt water demand from the water cooling tower system or irrigation. The salt water demand of the proposed development is provided in **Table 4-2**, and detailed in **Table C2 of Appendix IV**.

Table 4-2 Salt Water Demand of the Proposed Development

	Category	Population	Unit Demand Salt Water (m^3/head/day)	Daily Demand Salt Water (m^3/day)
Staff	R	25	0.110	2.750

4.2.3 The salt water demand for the site is expected to reduce from 20.211 m^3/day to 2.750 m^3/day, representing a decrease of 17.461 m^3/day (or 0.017 MLD). The calculations for salt water demand in both existing and proposed scenarios are summarized in **Table 4-3**.

Table 4-3 Summary of Salt Water Demand

Daily Demand - Salt Water (m^3/day)		
Existing	***Proposed***	***Net Increase***
20.211	2.750	-17.461

4.3 Saltwater Supply Impact – Salt Water Pumping Station

4.3.1 It should be noted that the existing daily consumption of the Tsuen Wan SWPS is close to its capacity. However, as shown in **Table 4-3**, the salt water demand is expected to decrease in the proposed development compared to the existing situation. Additionally, since the bleed-off water from the water cooling tower system will be reused as flushing water, no salt water demand is anticipated once the water reuse system of the cooling tower is properly implemented. No adverse impact to the salt water pumping station is anticipated.

4.4 Saltwater Supply Impact – Salt Water Mains

4.4.1 The Application Site is currently served by a 25 mm branch from the 150 mm salt water main along Wing Kin Road, as shown in **Figure 4-1**.

4.4.2 According to Departmental Instruction (DI) No. 1309 "Design Criteria," the peak flow rate in the distribution mains for salt water should be two times the daily demand. Based on this criterion, the estimated peak daily salt water demand for the proposed development is approximately 5.5 m^3/day. By following the maximum sustained flow velocity as suggested in Departmental Instruction (DI) No. 1309 "Design Criteria" (**Table A2 of Appendix IV**), the capacities of the 25 mm and 150 mm salt water mains are determined to be 64 m^3/day and 2,290 m^3/day, respectively.

4.4.3 Taking into consideration the reduced salt water consumption of the proposed development, it has been determined that the existing 25 mm salt water main can meet the salt water demand of the Site, even when the water reuse system of the cooling tower is out of order. Therefore, no modifications to the salt water mains are required.

5 CONSTRUCTION AND MAINTENANCE

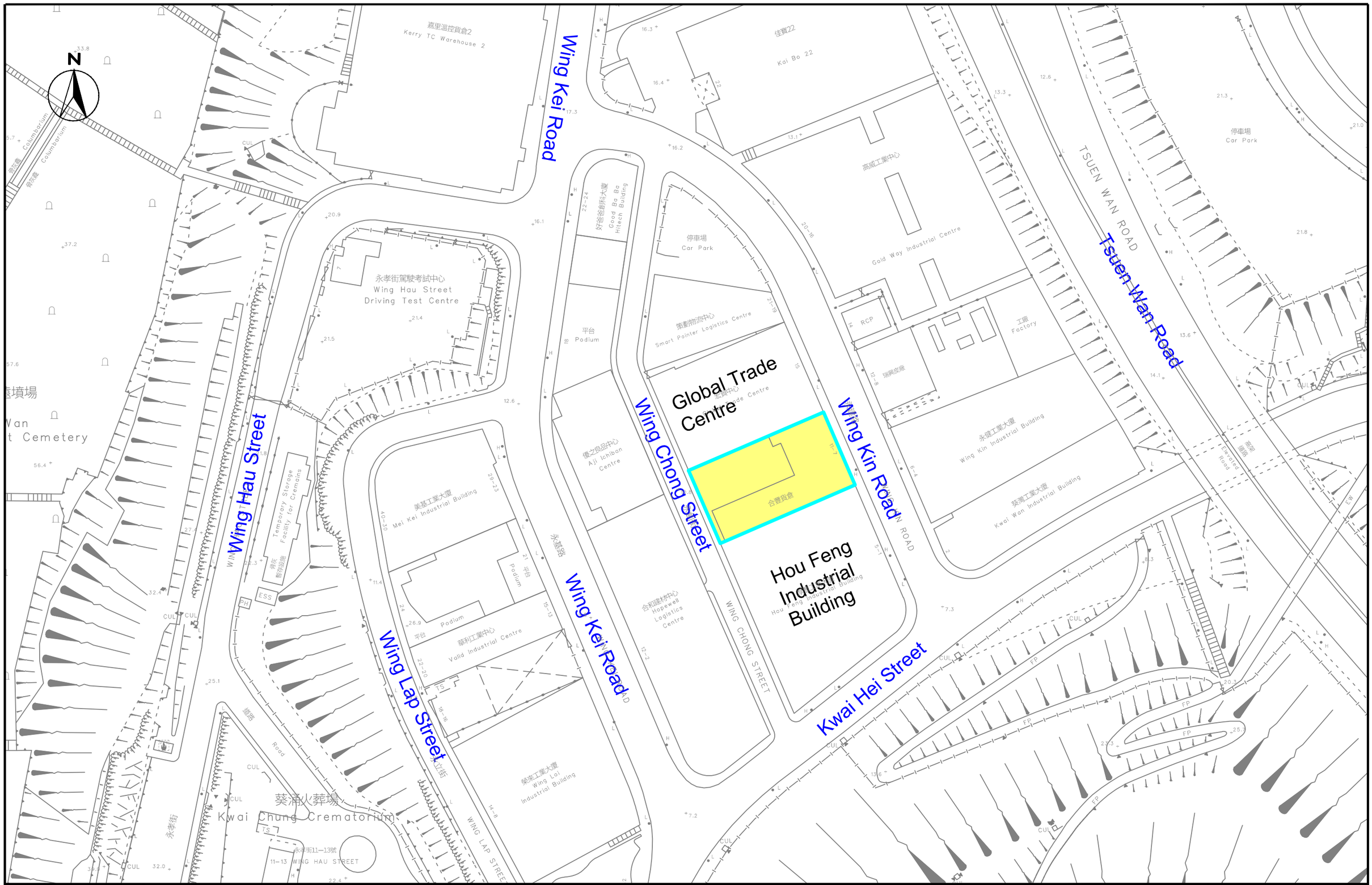
5.1.1 The detailed connection arrangements, responsibilities for the investigation, design, construction, repair and maintenance of the proposed modification to the fresh water mains system will be discussed among the Project Proponent and relevant Government departments in detailed design stage.

6 CONCLUSION

6.1.1 The potential water supply impact under the worst-case scenario of the proposed development has been reviewed. The assessment conducted concludes that no upgrading works on the water supply infrastructure will be required.

6.1.2 For the local water supply network, although the proposed development will result in additional fresh water demand, the increases can be accommodated by the existing main supply facilities and the proposed new pipes. Therefore, no adverse water supply impact is anticipated from the proposed development.

FIGURES

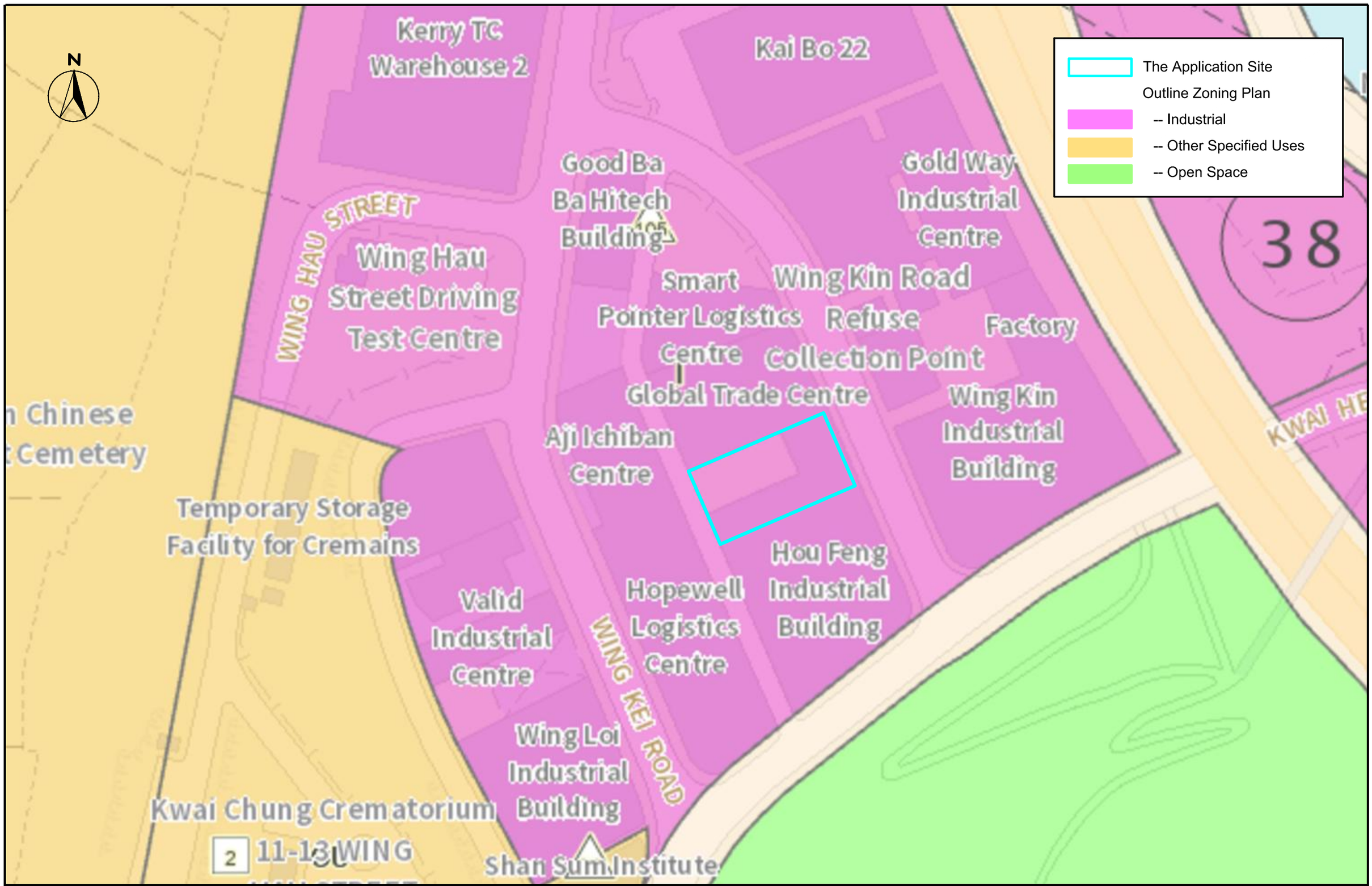


Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Location of the Project Site

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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Zoning in the Vicinity of the Project Site

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The Application Site

Existing Fresh Water Main

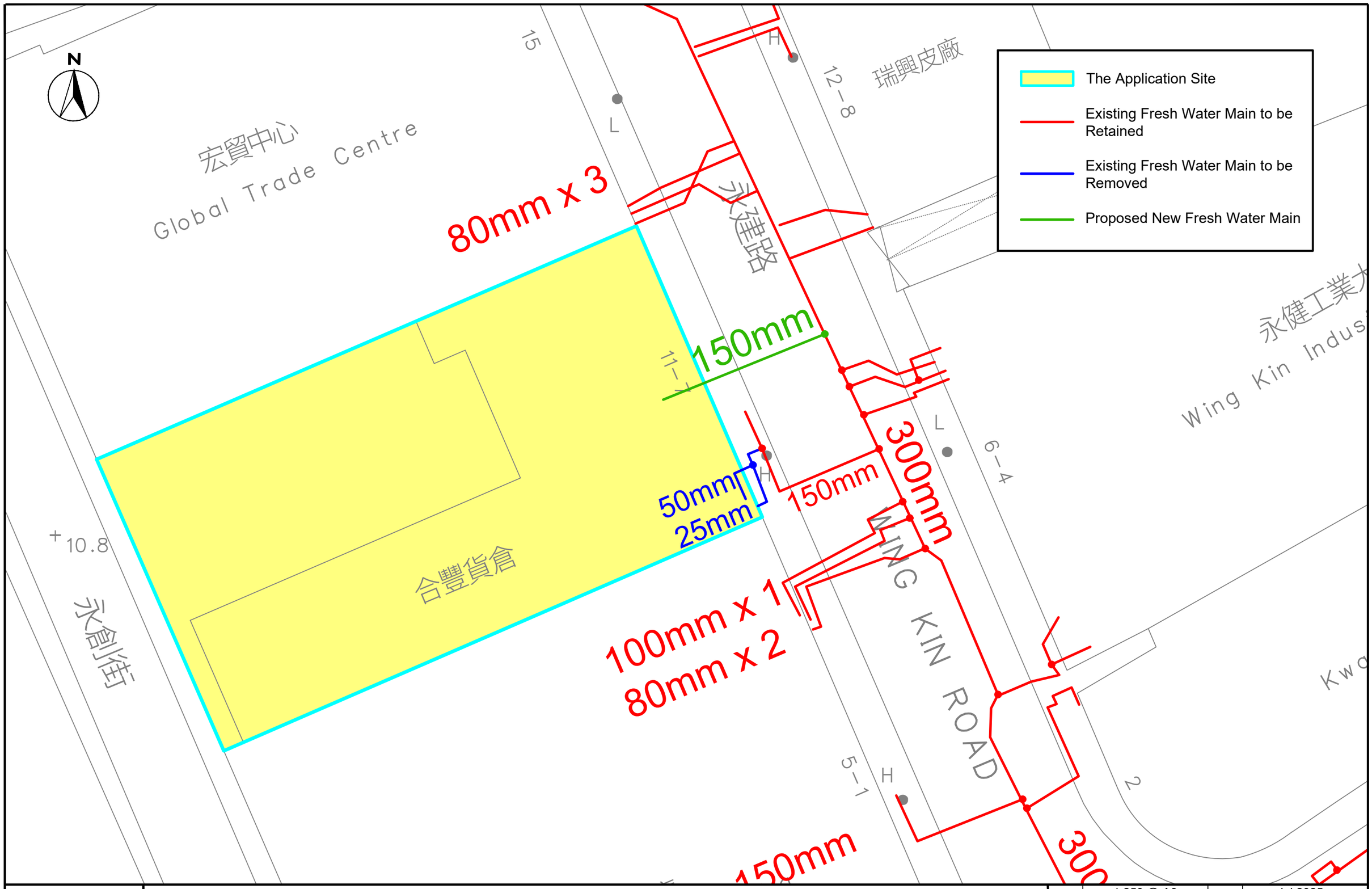
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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Fresh Water Mains in the Vicinity

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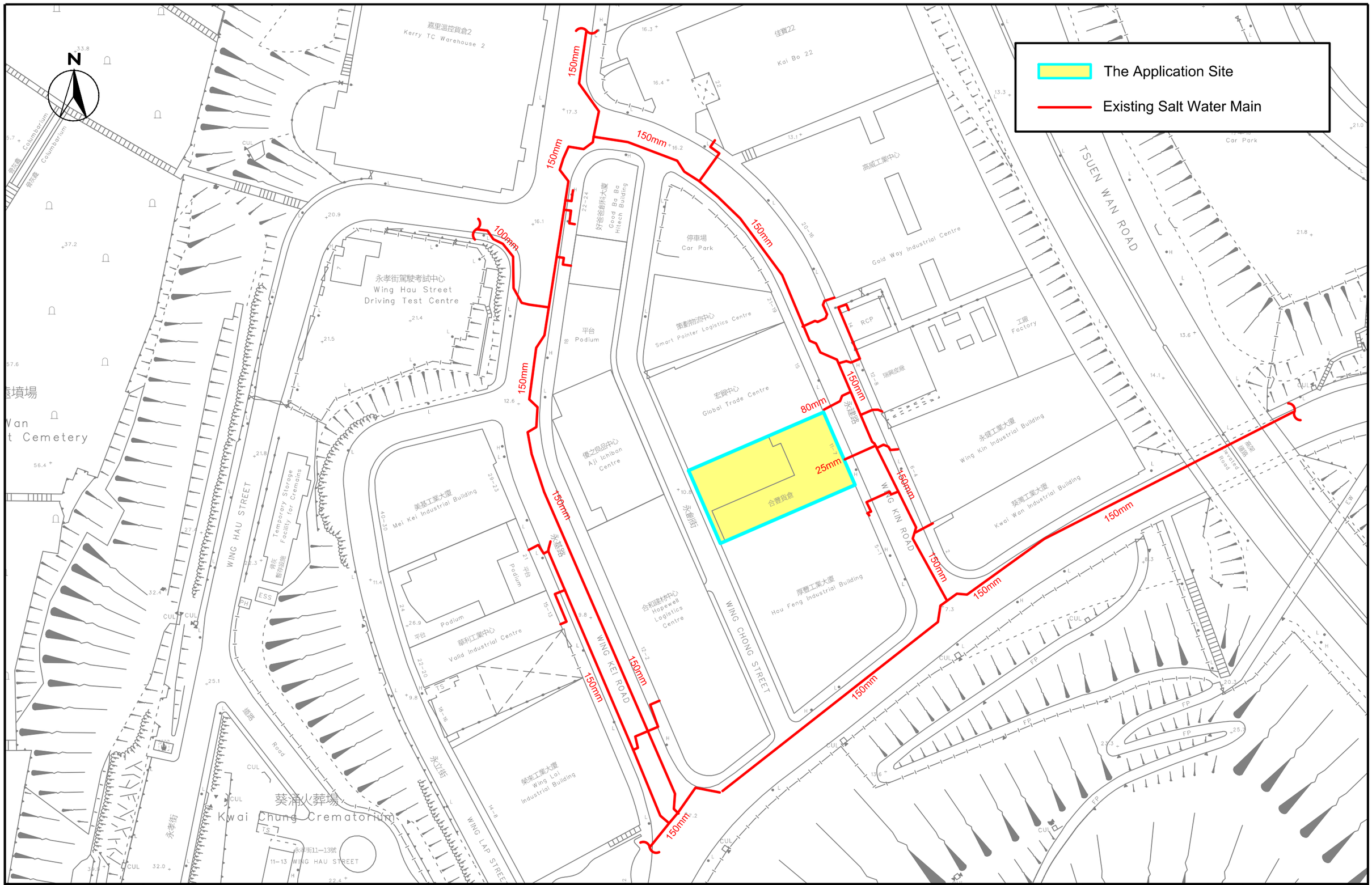


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Modification of Fresh Water Mains

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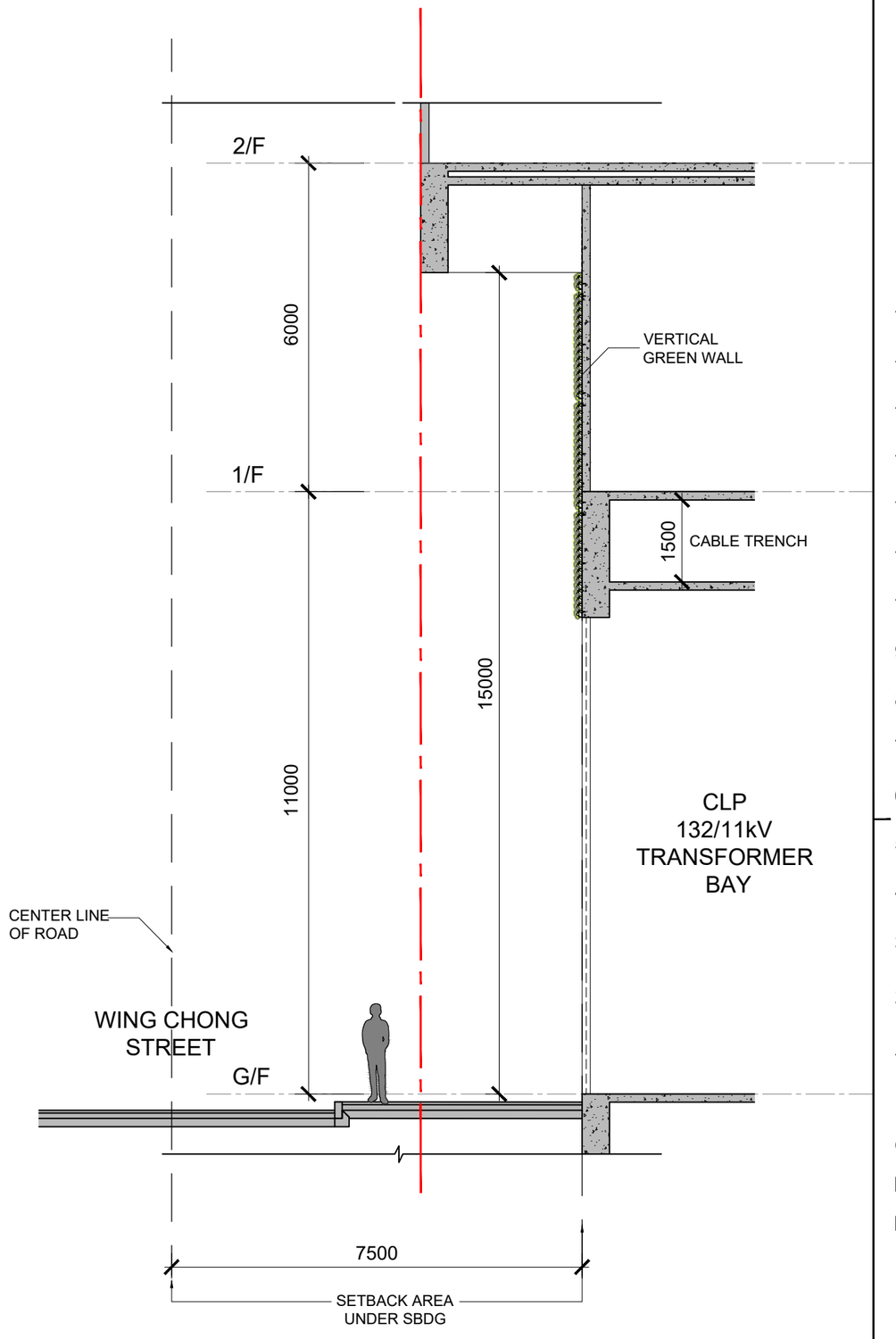
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Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

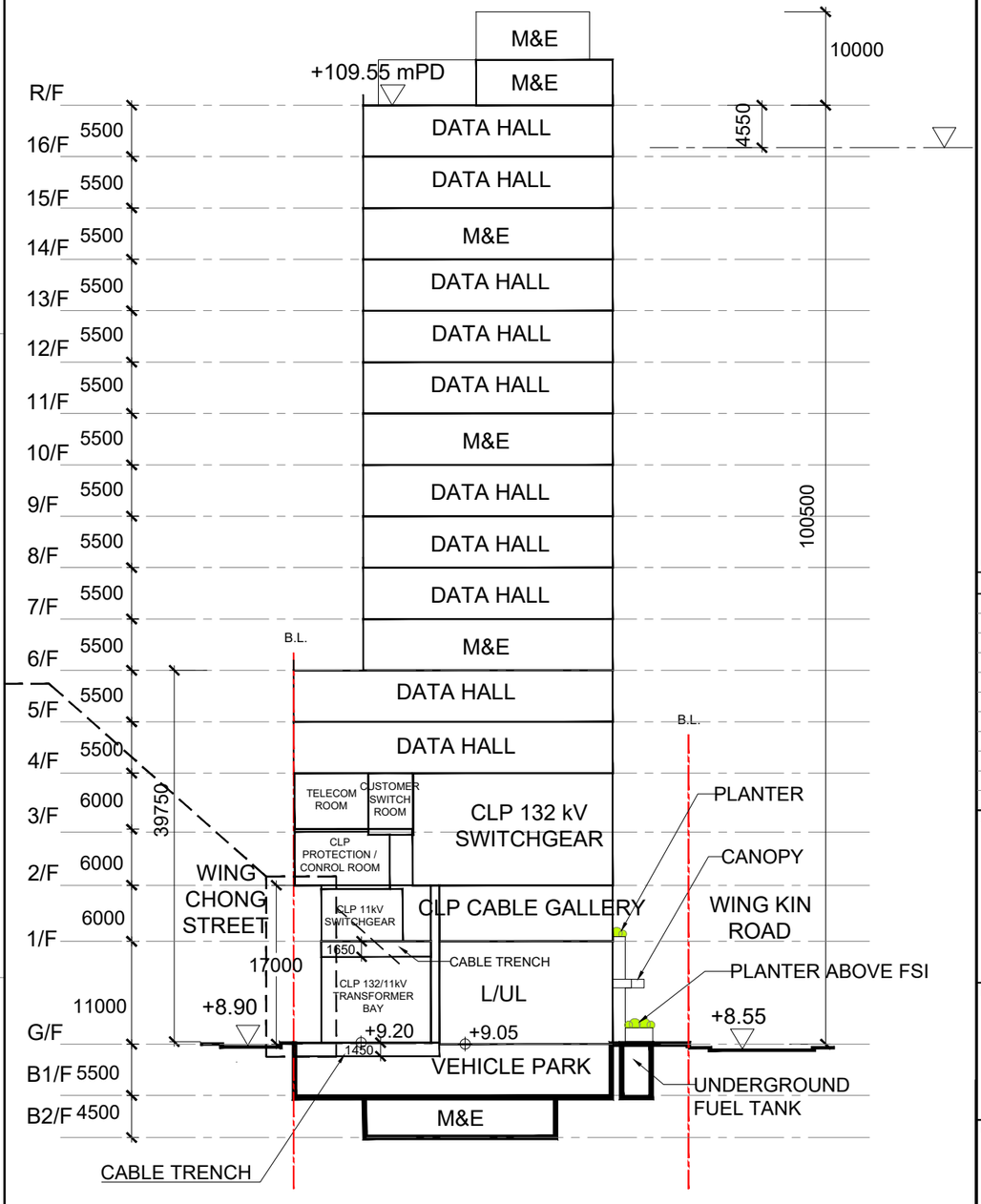
Salt Water Mains in the Vicinity

SCALE	1:1000 @ A3	DATE	May 2025
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		REV	-

APPENDIX I
TENTATIVE SECTION PLAN



SECTION OF VERTICAL GREEN WALL
SCALE: 1:100



NOTES:

DO NOT SCALE DRAWINGS.

ALL DIMENSIONS MUST BE VERIFIED AT THE WORK BY THE CONTRACTOR.

ALL PRINTS, SPECIFICATIONS AND THEIR COPYRIGHT ARE THE PROPERTY OF THE ARCHITECTS AND SHALL BE RETURNED AT THE COMPLETION OF THE WORK.

REVISION

NO	DATE	DESCRIPTION

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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

SECTION A-A

DRAWN BY	CHECKED BY
TK	RC
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1:750	2025.06.18
JOB No.	DRAWING No.
2208	A-14

APPENDIX II
FRESH WATER MAINS RECORD PLAN


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824300N
824250N
824200N
824150N
824100N
Football Field
Podium
Kerry TC Warehouse 2
Kai Bo 22
Car Park
Wing Hau Street Driving Test Centre
Cemetery
Temporary Storage Facility for Cremains
Kwai Chung Crematorium
Garden of Remembrance Kwai Chung
Service Hall & Office
Shan Sum Institute of Eternal Life and Culture
Wing Shing Industrial Building
Wing Kin Industrial Building
Kwai Wan Industrial Building
Hou Feng Industrial Building
Wing Loi Industrial Building
Mei Kei Industrial Building
Aji Ichiban Centre
Valid Industrial Centre
Hopewell Logistics Centre
Smart Pointer Logistics
Global Trade Centre
Gold Way Industrial Centre
Factory
Citic Telecom Tower
Car Park
West Rail Tsuen Wan West Station Emergency Access Point No.9/10
WING HAU STREET
WING KEI ROAD
WING CHONG STREET
KWAI HEI STREET
TSUEN WAN ROAD
KWAI FUK RO
Columbarium
Nullah
Road
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APPENDIX III
SALT WATER MAINS RECORD PLAN



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
2. ALL LEVELS ARE IN METRES ABOVE PRINCIPAL DATUM.
3. INFORMATION ON ALIGNMENT OF MAINS IS OF INDICATIVE VALUE ONLY. WHERE POSITIONAL ACCURACY MAY BE OF IMPORTANCE, DETAILS SHOULD BE SITE CHECKED.
4. FOR MAINS RECORDS SIGN CONVENTIONS AND DESIGNATIONS SEE SKETCH NO. 3988.
5. NO PROPOSED WATER MAINS IN THE VICINITY OF THE SITE.
6. NO EXISTING WSD CABLE IN THE VICNITY OF THE SITE.
7. NO PROPOSED WSD CABLE IN THE VICNITY OF THE SITE.
8. THE SITE IS NOT WITHIN WSD GATHERING GROUNDS.
9. NO WSD LAND ALLOCATION / WWR WITHIN THE SITE AREA.
10. NO WSD SLOPES ARE AFFECTED IN THE VICINITY OF THE SITE.
11. ASBESTOS CEMENT / UNKNOWN MATERIALS MAINS WAS FOUND IN THE VICINITY OF THE SITE.
12. NO CATHODIC PROTECTION MAINS ON THE VICINITY OF THE SITE.

SUBJECT SITE

PART COPY OF SALT WATER MAINS RECORD PLAN(S)

W67881/7-SW-21A & 21C

FILE REF: A/KC/510

REF. CODE: 18W25M	SHEET 1 OF 1	SCALE 1:800

水 務 署
Water Supplies Department

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APPENDIX IV
DETAILED WATER DEMAND CALCULATION

Table A1 - Unit Daily Demand

Zone Type		Unit Demand Fresh Water [1]	Unit Demand Salt Water [2]	(unit)
Staff	R	0.35	0.11	m^3/head/day
Industrial (Tsuen Wan)	I	1600	210	m^3/ha/day
Planter (Irrigation)	IRR	7	0	L/m^2/day

[1] Unit Demand Fresh Water*:*

- Residential - 0.35 m^3/head/day, including service trade allowance, has been adopted for Staff.
- Industrial (Tsuen Wan) - 1600 m^3/ha/day.
- Irrigation Area - 7 litre / sq. meters of irrigation area / day.

[2] Unit Demand Salt Water*:*

- Residential - 0.11 m^3/head/day, including service trade allowance, has been adopted for Staff.
- Industrial (Tsuen Wan) - 210 m^3/ha/day.

Table A2 - Flow Velocity Limit

Pipe Diameter	Fresh Water Distribution Mains	(unit)
> DN700	≤ 3	m/s
DN700 - DN525	≤ 2.5	m/s
DN450 - DN375	≤ 2	m/s
DN300 - DN200	≤ 1.5	m/s
< DN200	≤ 1.5	m/s
Pipe Diameter	**Salt Water Distribution Mains**	**(unit)**
≥ DN1000	≤ 3.0	m/s
DN900 - DN800	≤ 2.5	m/s
DN700 - DN525	≤ 2	m/s
DN450 - DN300	≤ 1.5	m/s
< DN300	≤ 1.5	m/s

[1] Refer to ***WSD Departmental Instruction 1309***

Table B - Existing Water Demands

Non-Residential Area

	Category	Site Area (ha)	Unit Demand Fresh Water (m^3/ha/day)	Unit Demand Salt Water (m^3/ha/day)	Daily Demand Fresh Water (m^3/day)	Daily Demand Salt Water (m^3/day)
Industrial (Tsuen Wan) (I)	I	0.096	1600.000	210.000	153.986	20.211

Summary

	Daily Demand Fresh Water (m^3/day)	Daily Demand Salt Water (m^3/day)
Total	**153.986**	**20.211**

Table C1 - Water Demands of Water Cooling Tower System

		Unit	Remark
System Information			
Total chiller capacity	16940	kW	
Chiller COP	5.0		
Cooling tower heat Rejection	20328	kW	Note [1]
[T_{in}] Entering condensing water (T_{in})	32	°C	
[T_{out}] Leaving condensing water temp. (T_{out})	37	°C	
Working hour	24	hour/day	
Water Consumption Calculation			
[A] Cooling tower water flow rate	971.0	L/s	Notes [2] & [6]
[B] Evaporation loss	0.928%		Notes [3] & [7]
[C] Drift loss	0.005%		Note [4]
[D] Cycle of concentration	6		
[E] Bleed-off rate	0.181%		= [B - (D-1) x C] / ((D-1) Note [5]
[F] Required make-up water flow rate	**10.81**	L/s	= (B+C+E) x A
	934.22	m^3/day	
[G] Required bleed off water flow rate	1.754	L/s	= E x A
	151.51	m^3/day	

Notes:

[1] Chiller capacity + chiller power consumption

[2] Cooling Tower Flow Rate = Cooling Tower Heat Rejection / [Specific Heat Capacity of Water x (T_{out} - T_{in})]

[3] Evaporation loss = Specific Heat Capacity of Water * (Tout - Tin) / Vaporization Heat of Water

[4] According to section 3.6.5 of the COP (part 1) by EMSD

[5] According to the equation in section 3.4.3.1 of the COP (part 3) of EMSD

[6] Specific Heat Capacity of Water = 4.187 J/g°C

[7] Vaporization Heat of Water = 2256 KJ/kg

Table C2 - Proposed Water Demands

Staff

	Category	Population	Unit Demand Fresh Water (m^3/head/day)	Unit Demand Salt Water (m^3/head/day)	Daily Demand Fresh Water (m^3/day)	Daily Demand Salt Water (m^3/day)
Staff	R	25	0.350	0.110	8.750	2.750

Water Cooling Tower System

	Category	GFA (ha)	Unit Demand Fresh Water (m^3/ha/day)	Unit Demand Salt Water (m^3/ha/day)	Daily Demand Fresh Water (m^3/day)	Daily Demand Salt Water (m^3/day)
Water Cooling Tower System	N/A	N/A	N/A	N/A	934.223	0.0

Public Open Space

	Category	Area (m^2) [1]	Unit Demand Fresh Water (L/m^2/day)	Unit Demand Salt Water (m^3/ha/day)	Daily Demand Fresh Water (m^3/day)	Daily Demand Salt Water (m^3/day)
Planter (IRR)	IRR	289.260	7.000	0.000	2.025	0.0

Summary [3]

	Daily Demand Fresh Water (m^3/day)	Daily Demand Salt Water (m^3/day)
Total	**944.998**	**2.750**

Note:
[1] 30% of the Site area has been adopted for conservative assessment.

Table D - Summary of Water Demands

Fresh Water Demand

	Daily Demand - Fresh Water (m^3/d)		
	Existing	Proposed	Net Increase
Total	**153.986**	**944.998**	**791.012**

Salt Water Demand

	Daily Demand - Salt Water (m^3/d)		
	Existing	Proposed	Net Increase
Total	**20.211**	**2.750**	**-17.461**

Fresh Water Reservoir Capacity

Reservoir	Capacity (x 1,000 m^3)	Supply Capacity @ Capacity Factor = 0.8 (MLD) [1]	Existing Daily Consumption (MLD) [2]	Spare Capacity (MLD)	Remarks
Lai Chi Kok FWSR	93.702	117.13	54	**63.1**	The spare capacity of 63.1 MLD >> net increase of 0.8 MLD from the

Salt Water Pumping Capacity

Pumping Station	Design Pumping Capacity (MLD)	Existing Daily Consumption (MLD) [2]	Spare Capacity (MLD)	Remarks
Tsuen Wan SWPS	93.0	93.0	**0.0**	The salt water demend of the Proposed Development will be reduced

[1] For interconnected supply zone with critical consumers, the capacity of the Reservior should be (75% + 5%) = 80% of the mean daily demend.
[2] Average daily Consumptions provided by WSD in May 2025.

APPENDIX V
WATER DEMAND CALCULATION FOR WATER COOLING TOWER SYSTEM FROM PROJECTS BUILDING SERVICES ENGINEER

Project No.: 25-0005252
Project Name: Proposed Data Centre at No. 7-11 Wing Kin Road,Kwai Chung (K.C.T.L. 145)
Rev.: 1
Date: 07/28/2025

Cooling Tower Make Up and Bleed Off Water Flow Rate Calculation Sheet

Total chiller capacity		**16940.0**	kW		**Chiller COP**	**5.0**	
Cooling tower heat		**20328.0**	**kW**	(Chiller capacity + chiller power consumption)			
Entering condensing water	(T_{in})	**32**	**°C**	**Leaving condensing water temp.**	(T_{out})	**37.0**	**°C**

A **Cooling tower water flow rate** **971.0 L/s**

B **Evaporation loss** **= [Water Specific Heat Capacity * (T_{out} - T_{in}) / Water Vaporization Heat]*100**
= 0.928 %

C **Drift**
= 0.005 %
Note: according to section 3.6.5 of the COP (part 1) by EMSD

D **Cycle of concentration =** **6.0**
Note: Cycle of concentration shall be maintained at 6 for fresh water type cooling tower and

E **Bleed-off rate = {Evaporation loss-[(Cycle of concentration-1)xDrift loss]} / (Cycle of concentration-1)**
= 0.181 %
Note: according to the equation in section 3.4.3.1 of the COP (part 3) of EMSD

F **Required make-up water flow rate = (B+C+E)*A**
= 10.81 litre/sec
= 934.22 m^3/day

G **Required bleed off water flow rate = E*A**
= 1.75 litre/sec
= 151.51 m^3/day

H **Make-up water tank storage for** **24** **hours operation**

I **Required effective volume for make-up water tank = F**
= 934.22 m^3

Attachment 4
Visual Impact Assessment

Section 16 Planning Application

for Proposed Minor Relaxation of Plot Ratio and Building Height for Information Technology and Telecommunication Industries (Data Centre) Use at 7-11 Wing Kin Road, Kwai Chung, New Territories

VISUAL IMPACT ASSESSMENT

Prepared by

KJL Limited

August 2025

Content

1. Background
2. Assessment Methodology
3. Assessment Area
4. Proposed Development
5. Viewing Points
6. Visual Assessment
7. Evaluation of Overall Visual Impact

Figures

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Figure 2: Photomontage of VP1 – Wing Kin Road
Figure 3: Photomontage of VP2 – Wing Chong Street
Figure 4: Photomontage of VP3 – Tsuen Wan Chinese Permanent Cemetery
Figure 5: Photomontage of VP4 – Kwai Chung Crematorium
Figure 6: Photomontage of VP5 – Footbridge linking Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road
Figure 7: Photomontage of VP6 – Kwai Chung Sports Ground
Figure 8: Photomontage of VP7 – Former Wing Kei Road Trucks Car Park
Figure 9: Photomontage of VP8 – Temporary Cricket Gound in Kwai Chung Park
Figure 10: Photomontage of VP9 – Tsing Yi Waterfront Promenade

1. Background

1.1 This application is submitted on behalf of OXO YW Limited, the registered owner of 7-11 Wing Kin Road, Kwai Chung, to seek the Town Planning Board's permission for the proposed minor relaxation of plot ratio restriction from 9.5 to 11.4 and building height restriction from 105mPD to 109.55mPD for permitted information technology and telecommunication industries (data centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145) and adjoining Government Land at Wing Chong Street (i.e., the application site).

2. Assessment Methodology

2.1 The assessment of visual impacts is prepared with reference to the Town Planning Board Guidelines No. 41, which includes the following procedures:

a. Identify the visual context and character in the vicinity of the application site;

b. Identify and select viewpoints (VPs) to assess the visual impact. The VPs should be easily accessible and popular with the public and/or visitors. Important viewpoints, such as popular areas used by the public for outdoor activities, recreation, special landmarks, valued landscape features etc., should be assessed where possible.

c. Illustrate the visual impact of the proposed development by using computer-generated photomontages.

d. Appraise the visual changes in respect of the aspects, including visual composition, visual obstruction, effect on public viewers and visual resources.

e. Evaluate the overall visual impact of the existing condition with the planned/committed developments ie. the existing condition and with the proposed development. Any design features or mitigation measures that help alleviate the visual impact will be proposed.

3. Assessment Area

3.1 The application site is located southwest of the Kwai Chung industrial area.

3.2 The visual envelope of the proposed development defines the assessment area for the visual impact assessment. The visual envelope generally covers an area of about 303m in radius from the proposed development (i.e. about three times the proposed building height). Major sensitive viewers in direct sight of the Proposed Development are identified for visual impact assessment (**Figure 1**). Kwai Chung Sports Ground and Tsing Yi Waterfront Promenade though located outside the 350m radius assessment area are included in this visual impact assessment due to their popular use by the public for outdoor activities.

3.3 To the west of the application site located the Tsuen Wan Chinese Permanent Cemetery, and southwest, the Kwai Chung Crematorium. A cluster of industrial buildings, with building height ranging from 22mPD to 132mPD, is situated east of the application site across Tsuen Wan Road, while the Kwai Chung Sports Ground is further southeast and Kwai Chung Park to the south.

4. Proposed Development

4.1 The application site, with an area of about 964.2m^2, is proposed to redevelop an existing industrial building into an information technology and telecommunication industries (data centre). The proposed building is about 109.55mPD with 2 basement levels for parking and M&E facilities. In addition, a 3.7m full-height building setback fronting Wing Kin Road, a 2.859m-2.916m building set back fronting Wing Chong Street from G/F to 1/F and a 6.53m building setback from 6/F and above facing Wing Chong Street are proposed with the provision of planters and vertical greening to enhance visual amenities.

5. Viewing Points

5.1 A total of nine VPs are selected for this visual impact assessment. The nine VPs, same as those selected under the previous approved planning application (A/KC/496), are selected from different directions and distances (**Figure 1**). These VPs represent views from key pedestrian nodes, popular areas used by the public for outdoor activities and public open spaces: -

a. VP1: Wing Kin Road
b. VP2: Wing Chong Street
c. VP3: Tsuen Wan Chinese Permanent Cemetery
d. VP4: Kwai Chung Crematorium
e. VP5: Footbridge connecting Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road
f. VP6: Kwai Chung Sports Ground
g. VP7: Former Wing Kei Road Trucks Car Park
h. VP8: Temporary Cricket Gound in Kwai Chung Park
i. VP9: Tsing Yi Waterfront Promenade

6. Visual Assessment

6.1 VP1: Wing Kin Road (**Figure 2**)

6.1.1 VP1, located around 20m from the application site, is a short-distance view. VP1 consists of a 2-storey industrial building at the application site, situated between two existing industrial buildings, i.e. Global Trade Centre and Hou Feng Industrial Building. Since VP1 is

a short-distance view, only the lower portions of the existing industrial buildings are visible. Therefore, industrial buildings dominate this VP1 without key visual resources. It represents a typical view of workers in the area. As the viewer population is low and the duration of view is short, the sensitivity of this VP is considered low.

6.1.2 As shown in the photomontage (Figure 2), only the lower portion of the proposed development will be visible from this VP. The proposed development will not cause any visual obstruction or create any visual incompatibility with the surroundings. Hence the effects on public viewers are considered negligible. With the replacement of the old industrial building by a modern-day development, the provision of a full length canopy as a shading element, planters and vertical greening on the lower floors, there will be a visual enhancement in the area. The planters and vertical greening as visual amenity would soften the building edge.

6.1.3 Based on the comparison between the existing condition and the proposed scenario, there will be visual enhancement as stated in the aforesaid. However, there will also be an increase in building bulk due to the proposed development. The visual impact from this VP is therefore considered partly enhanced/partly adverse.

6.2 VP2: Wing Chong Street (**Figure 3**)

6.2.1 VP2, located around 20m from the application site, is a short-distance view. VP2 consists of a 1-storey structure at the application site with Hou Feng Industrial Building at the back. A portion of the sky view and tree plantings in Kwai Chung Park are visible at the end of Wing Chong Street, the key visual resource. Similar to VP1, VP2 represents a typical view of workers in the industrial area. However, as the viewer population is low and the duration of view is short, the sensitivity of this VP is considered low.

6.2.2 Similar to VP1, only the lower portion of the proposed development will be visible from the photomontage of VP2 (Figure 3). The proposed development will shield a part of the Hou Feng Industrial Building. There will be no changes to the visual composition and resources, i.e. the sky view and park trees. As shown in the photomontage, the proposed development will replace the old industrial building structure with a modern-day building and vertical greening, considered a visual enhancement in the area.

6.2.3 Based on the comparison between the existing condition and the proposed scenario, there will be visual enhancement as stated in the aforesaid. However, there will also be an increase in building bulk due to the proposed development. With the proposed vertical greening along the building façade, there will be a visual enhancement along Wing Chong Street. Therefore, the visual impact from this VP is considered partly enhanced/partly adverse.

6.3 VP3: Tsuen Wan Chinese Permanent Cemetery (**Figure 4**)

6.3.1 VP3 provides a distant view at around 300m west of the application site. The photo of VP3 is taken from the Tsuen Wan Chinese Permanent Cemetery, which provides a view overlooking the graveyard and existing tree plantings, the industrial buildings in the background, such as Kerry Tc Warehouse 2, Global Trade Centre, Mei Kei Industrial Building. In addition, a small portion of the mountain top near Woodland Villas is visible from this VP with an open sky view as a backdrop. Grave sweepers and graveyard keepers usually visit where VP3 is located. However, considering visitors to the cemetery are generally limited to short stays, mainly during the Ching Ming and Chung Yeung Festivals, the visual sensitivity of this VP is considered low.

6.3.2 As shown in the photomontage (Figure 4), the proposed development will partially block a portion of the Wonderland Villas, a small portion of the mountain top and a very insignificant portion of the open sky view. Nevertheless, the proposed development of 109.55mPD blends well with the existing built environment and is visually compatible with the surrounding industrial developments. The proposed development will be of comparable height to the Kerry Tc Warehouse 2 (108.58mPD), Global Trade Centre (93.4mPD), Mei Kei Industrial Building (91.58mPD), and Ever Gain Plaza (140.4mPD). Though the proposed development will block a very small portion of the open sky view, such a blockage is considered slight with insignificant visual changes. Furthermore, the effects on the public viewers i.e. grave sweepers and graveyard keepers, are considered slight due to their short stay. Based on the comparison between the existing condition and the proposed scenario, the visual impact from this VP is considered negligible to slightly adverse.

6.4 VP4: Kwai Chung Crematorium (**Figure 5**)

6.4.1 VP4 provides a medium-range view at about 170m to the southwest of the application site. The photo is taken in front of the Kwai Chung Crematorium building. Industrial buildings with roadside trees in the foreground dominate the view. A portion of an open sky view and the roadside trees are the key visual resources in this VP. VP4 is normally visited by those who attended funerals. The viewer population is low, and the duration of view is generally short. Therefore, the visual sensitivity of this VP is considered low.

6.4.2 As shown in the photomontage (Figure 5), only the middle portion of the proposed development can be seen from this VP. The proposed development will be largely blocked by Valid Industrial Centre and Wing Loi Industrial Building. Nevertheless, the proposed development will inevitably block a small portion of the sky view, reduce visual permeability and depth of view. The proposed development blends in well with the surrounding development with moderate visual changes on public viewers. Based on the comparison between the existing condition and the proposed scenario, the visual impact from this VP is considered moderately adverse.

6.5 VP5: Footbridge connecting Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road (**Figure 6**)

6.5.1 VP5 is taken at the footbridge connecting Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road. The views along Kwai Fuk Road towards the application site are either blocked by roadside plantings or existing buildings, thus, the view from the footbridge is chosen because it is the closest means for pedestrians coming and leaving the area. VP5 is located about 160m to the east of the application site. A portion of open sky view is visible from this VP. A portion of the Tsuen Wan Road flyover with Kwai Hei Street underneath and roadside plantings can be viewed in the foreground. Industrial Buildings are situated further back behind Tsuen Wan Road. The view from this footbridge is limited, and the duration of the view is short. Therefore, the visual sensitivity of this VP is considered low.

6.5.2 As shown in the photomontage (Figure 6), the proposed development will be entirely blocked by the existing industrial developments and roadside plantings. There will be no visual changes due to the proposed development. Based on the comparison between the existing condition and the proposed scenario, the overall visual impact is rated negligible.

6.6 VP6: Kwai Chung Sports Ground (**Figure 7**)

6.6.1 VP6 is located about 720m to the southeast of the application site. Kwai Chung Sports Ground is one of the major sports grounds in the Kwai Tsing District, providing facilities for track and field and football. Since there is a covered grandstand, the Sports Ground is also popular for school sports days. This VP is dominated by the football ground and running track with an open sky view. Clusters of industrial buildings are located behind the Sports Ground. The running track of the sports ground is opened for the public in the morning. Athletes and the public frequently visit it; hence, the viewer population is considered medium. Since the park users are normally occupied with different sports activities, the view duration is short. Therefore, the visual sensitivity of this VP is considered medium.

6.6.2 As shown in the photomontage (Figure 7), the proposed development is not visible from this VP since it is blocked by Kingsford Industrial Building (99.5mPD). There will be no visual changes due to the proposed development. Based on the comparison between the existing condition and the proposed scenario, the overall visual impact is rated negligible.

6.7 VP7: Former Wing Kei Road Trucks Car Park (**Figure 8**)

6.7.1 VP7 is located about 320m to the north of the application site. The former trucks car park site is currently under works. It is zoned "OU (Columbarium)" and intended to be used as columbarium and garden of remembrance in future. VP7 represents the viewer of the columbarium users in future. This view is predominated by the vacant ground in the foreground and industrial buildings with a sky view at the back. Similar to the Tsuen Wan Chinese Permanent Cemetery, visitors to the columbarium are generally limited to short stays and mainly during the Ching Ming and Chung Yeung Festivals. Therefore, the sensitivity of this VP is considered low.

6.7.2 As shown in the photomontage (Figure 8), only the upper portion of the proposed development is visible from this VP. Apart from blocking a small part of the sky view, there will be slight visual changes caused by the proposed development. The proposed

development is of comparable height as the adjacent industrial buildings such as Kai Bo 22 (105mPD) and Kerry TC Warehouse 2 (108.58mPD). Since the duration of view is short, the effect on visual changes is considered not significant. Based on the comparison between the existing condition and the proposed scenario, the proposed development blends in well with the surroundings. Therefore, the overall visual impact is rated slightly adverse.

6.8 VP8: Temporary Cricket Ground in Kwai Chung Park (**Figure 9**)

6.8.1 VP8 is located at about 300m to the south of the application site. This VP is taken from the temporary cricket ground in Kwai Chung Park. VP8 represents the users of the cricket ground. This view is dominated by the cricket field in the foreground with industrial buildings and open sky view in the back. This VP represents recreational users including cricket players hence the viewer population is considered low. Since the viewer is in transient nature, the sensitivity of this VP is considered medium.

6.8.2 As shown in the photomontage (Figure 9), the proposed development will be blocked by the existing industrial buildings in the area. Only the upper portion of the proposed development is visible from this VP. Apart from blocking a small part of the sky view, there will be insignificant visual changes caused by the proposed development. The proposed development is of comparable height as the adjacent industrial buildings such as Citic Telecom Tower (132.365mPD) and Kerry TC Warehouse 2 (108.58mPD). Based on the comparison between the existing condition and the proposed scenario, the proposed development blends in well with the surrounding buildings. Therefore, the overall visual impact is rated slightly adverse.

6.9 VP9: Tsing Yi waterfront Promenade (**Figure 10**) (1100m)

6.9.1 VP9 is taken from the Tsing Yi waterfront promenade across Rambler Channel. It provides a long-range view at about 1,100m to the west of the application site. The promenade is a popular place for leisure walk, jogging or sightseeing by the public and the residents in the area. The sea and an open sky view dominate the visual context of this VP. High-rise development such as Metro Plaza (173.4mPD) and Wonderland Villas (233.3-339.2mPD) can be viewed behind the Tsuen Wan Chinese Permanent Cemetery and Kwai Chung Park. View duration would be long as people would stop by the waterfront and enjoy the sea view. Therefore, the viewer population is high and visual sensitivity is considered high.

6.9.2 As shown in the photomontage (Figure 8), the proposed development will be completed shielded by the Tsuen Wan Chinese Permanent Cemetery. Based on the comparison between the existing condition and the proposed scenario, there will be no visual changes due to the proposed development. Therefore, the overall visual impact is rated negligible.

7. Evaluation of Overall Visual Impact

7.1 A total of 9 VPs are selected for this visual impact assessment (Table 1). Based on the comparison between the existing condition and the proposed scenario, one will cause a moderately adverse visual impact by the proposed development, two cause a slightly adverse visual impact, two cause partly enhanced/partly adverse, one has negligible to slightly adverse and three have negligible visual impact. The overall visual impact is therefore envisaged to be ranging from partly enhanced/partly adverse to moderately adverse. Nevertheless, there is only one VP that will cause a moderately adverse visual impact by the proposed development. Thus, the proposed development would unlikely induce significant adverse effects on the visual character of the surrounding townscape.

Table 1: Summary of visual impact assessment evaluation

Public Viewing Points	Visual Impact Ratings
VP 1	Partly enhanced/partly adverse
VP 2	Partly enhanced/partly adverse
VP 3	Negligible to slightly adverse
VP 4	Moderately adverse
VP 5	Negligible
VP 6	Negligible
VP 7	Slightly adverse
VP 8	Slightly adverse
VP 9	Negligible

7.2 The massing and disposition of the proposed development will not create a significant visual blockage or cause significant changes for public viewers. The proposed building height has been reduced by about 5% from 115.2mPD to 109.55mPD as compare to the previous approved scheme (A/KC/496). In conclusion, the scale and building height of the proposed development is considered visually compatible with the surrounding industrial developments. Furthermore, vertical greening and planters at lower levels of the building façade are proposed to minimise the likely visual impact and soften the proposed building structure. The area's street environment and visual amenities will be enhanced by replacing the old industrial building with a modern-day development and greening provision.

Figures

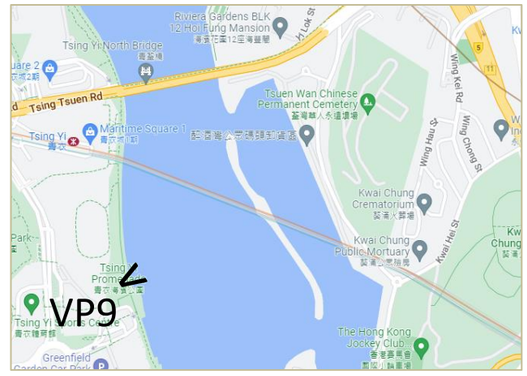


Legend

VP1 Wing Kin Road (**20m**)
VP2 Wing Chong Street (**20m**)
VP3 Tsuen Wan Chinese Permanent Cemetery (**300m**)
VP4 Kwai Chung Crematorium (**170m**)
VP5 Footbridge connecting Kwai Chung Park and Kwai Fuk Rd across Tsuen Wan Rd (**160m**)
VP6 Kwai Chung Sports Ground (**650m**)
VP7 Former Wing Kei Road Trucks Car Park (320m)
VP8 Temporary Cricket Ground in Kwai Chung Park (300m)
VP9 Tsing Yi waterfront Promenade (**1100m**)

Application Site

Visual Envelope



Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

Drawing Title:
Figure 1: Site Location with Viewing Points and Visual Envelope

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Existing Condition



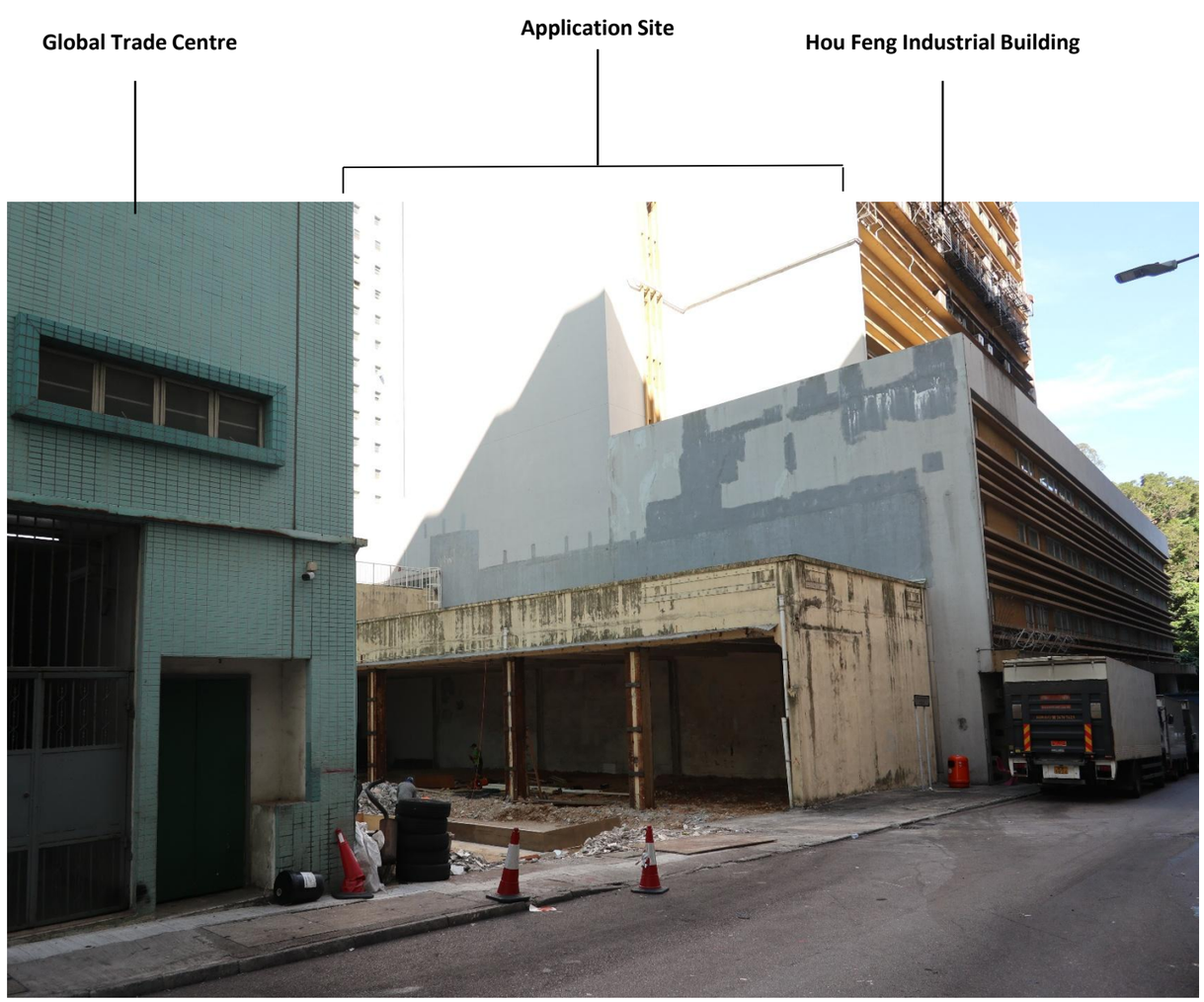
With Proposed Development

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Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

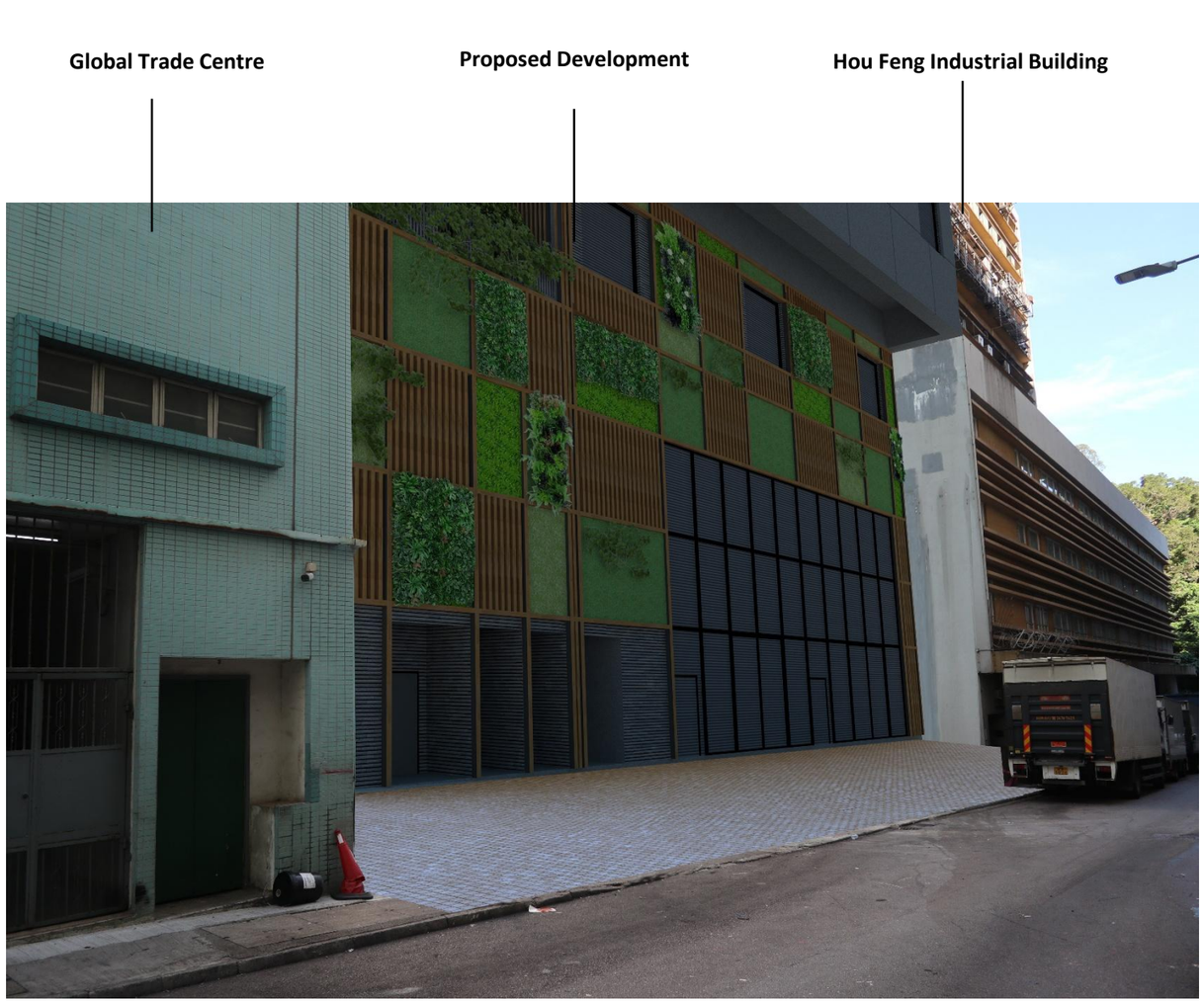
Drawing Title:
Figure 2: Photomontage of VP1 - Wing Kin Road

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Existing Condition



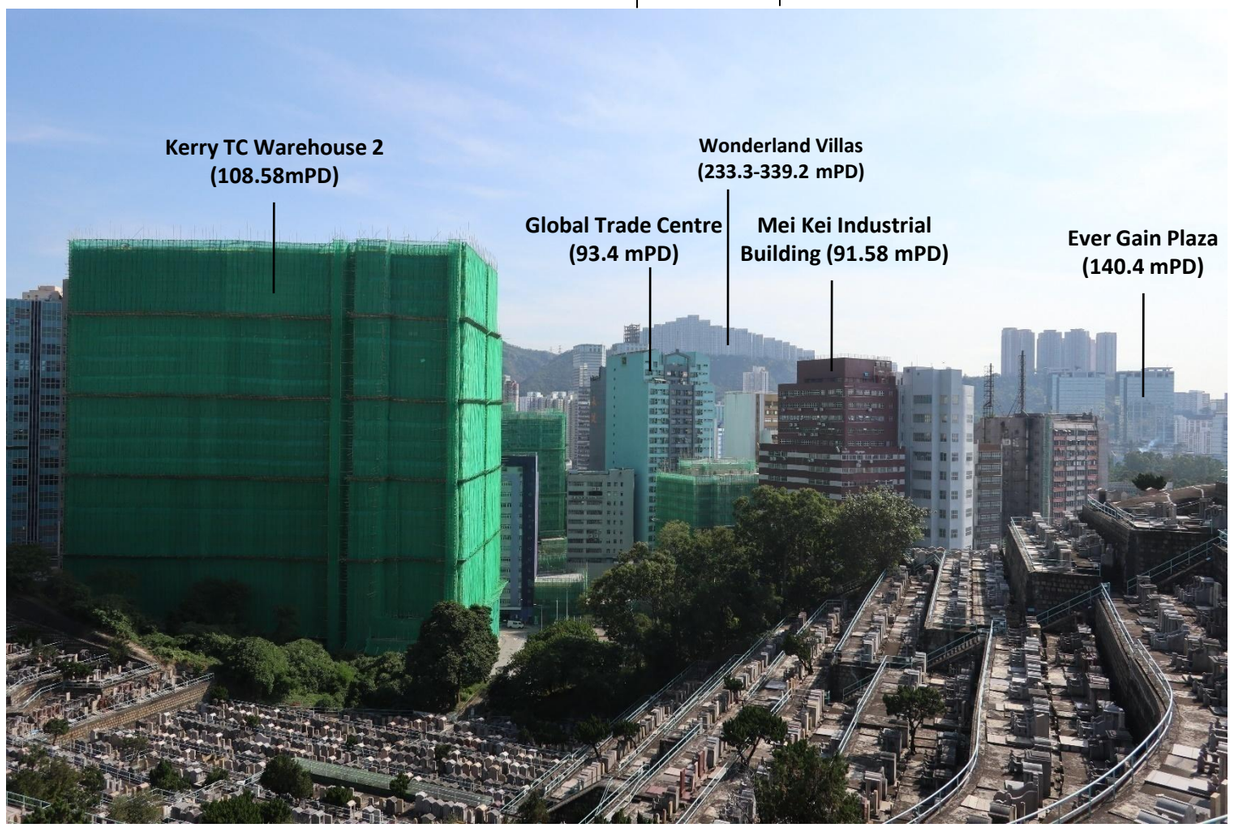
With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

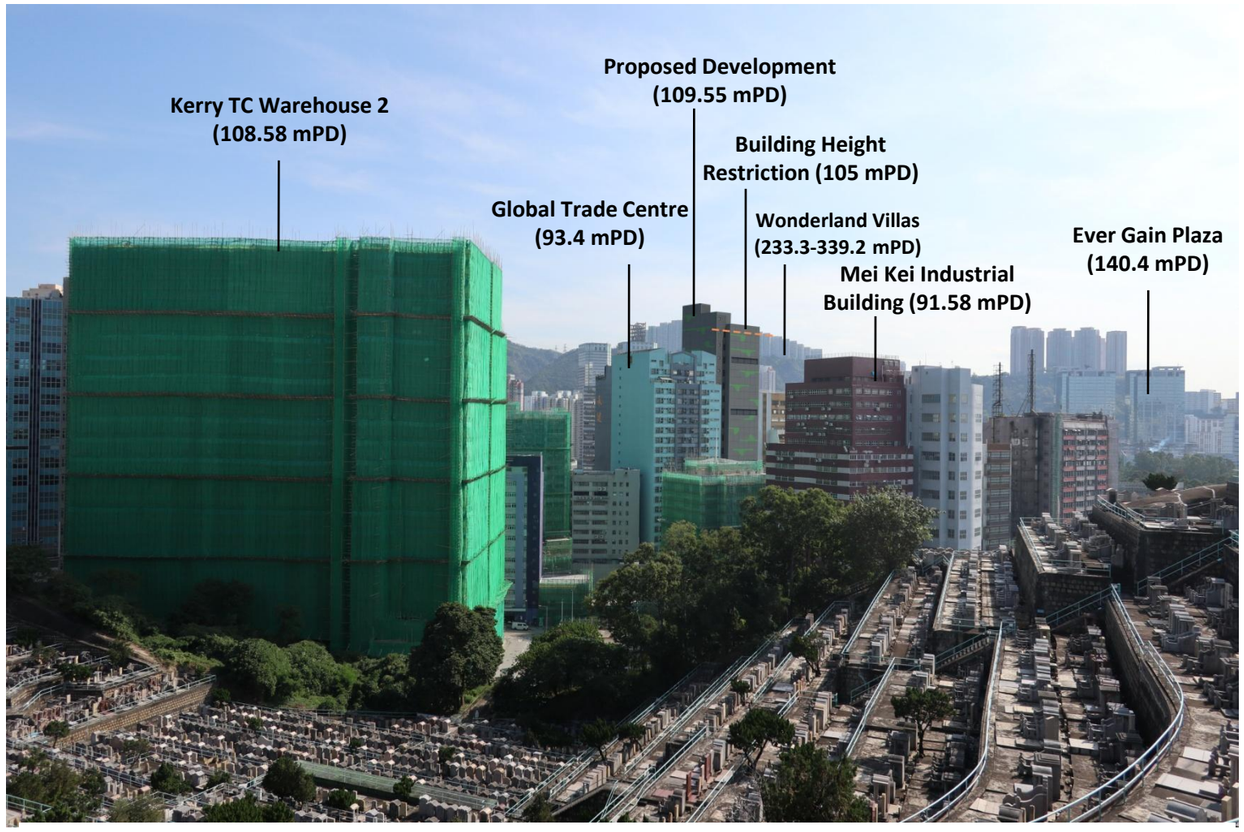
Drawing Title:
Figure 3: Photomontage of VP2 - Wing Chong Street

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Existing Condition



With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

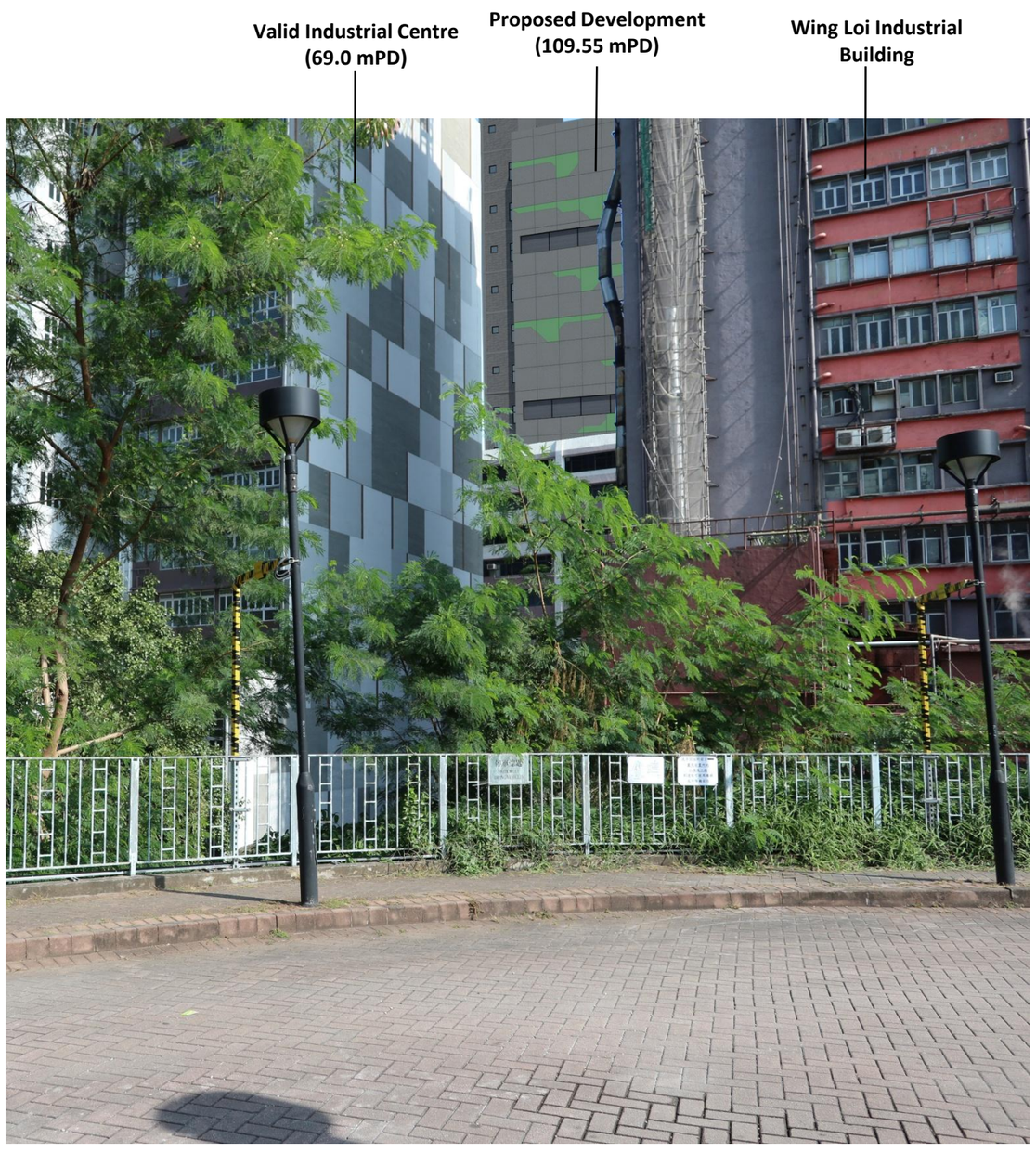
Drawing Title:
Figure 4: Photomontage of VP3 - Tsuen Wan Chinese Permanent Cemetery

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Existing Condition



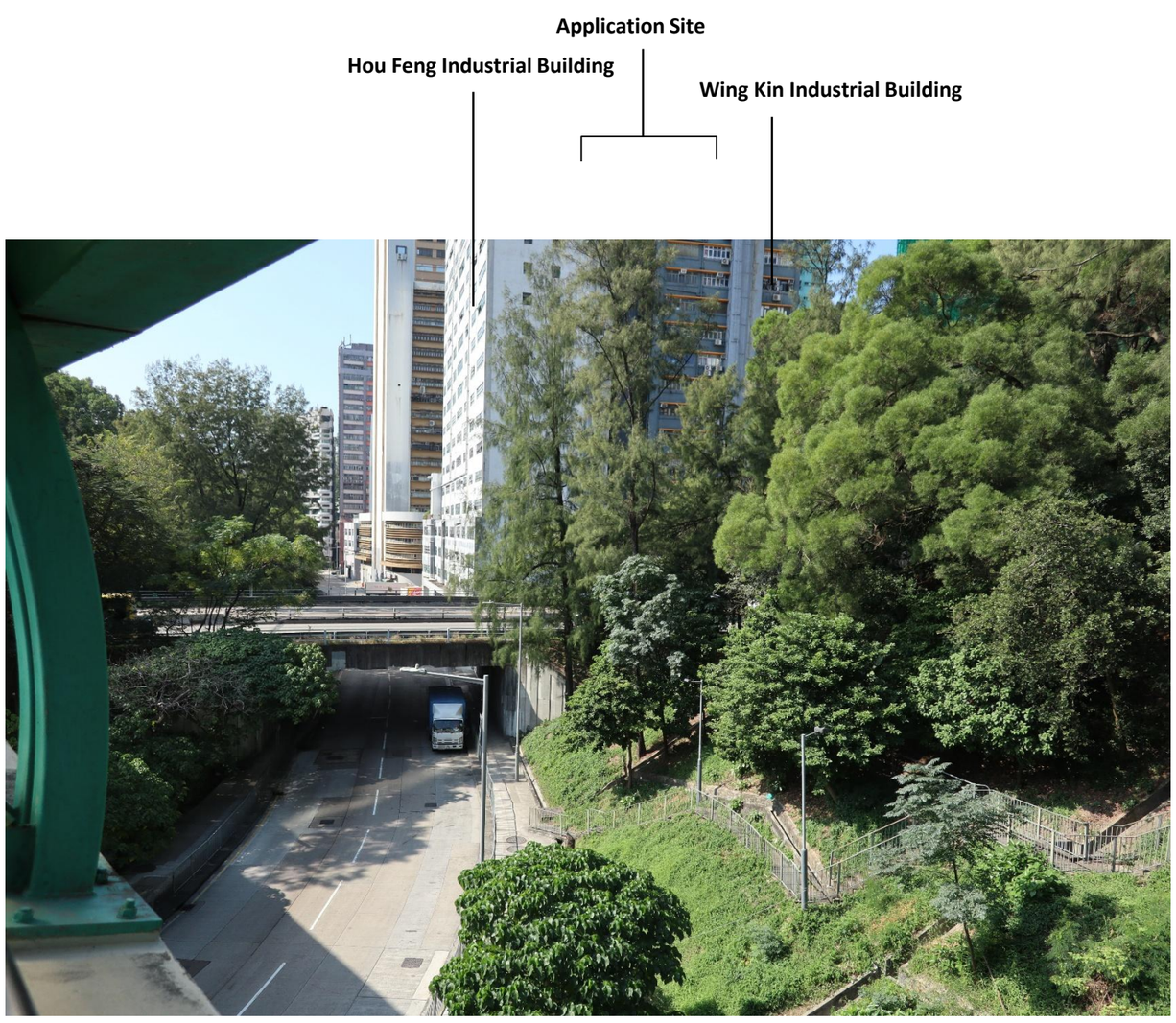
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Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

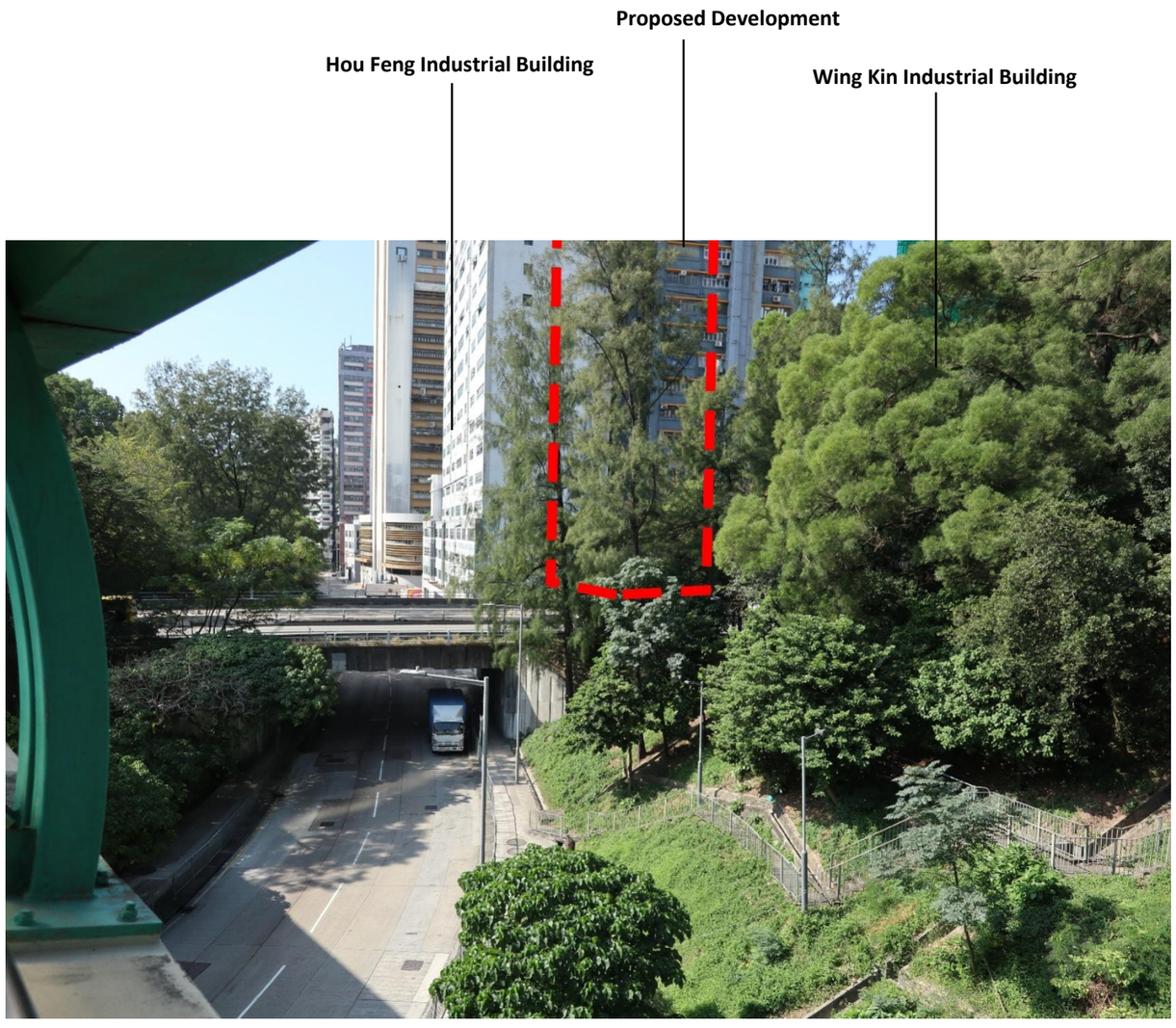
Drawing Title:
Figure 5: Photomontage of VP4 - Kwai Chung Crematorium

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Existing Condition



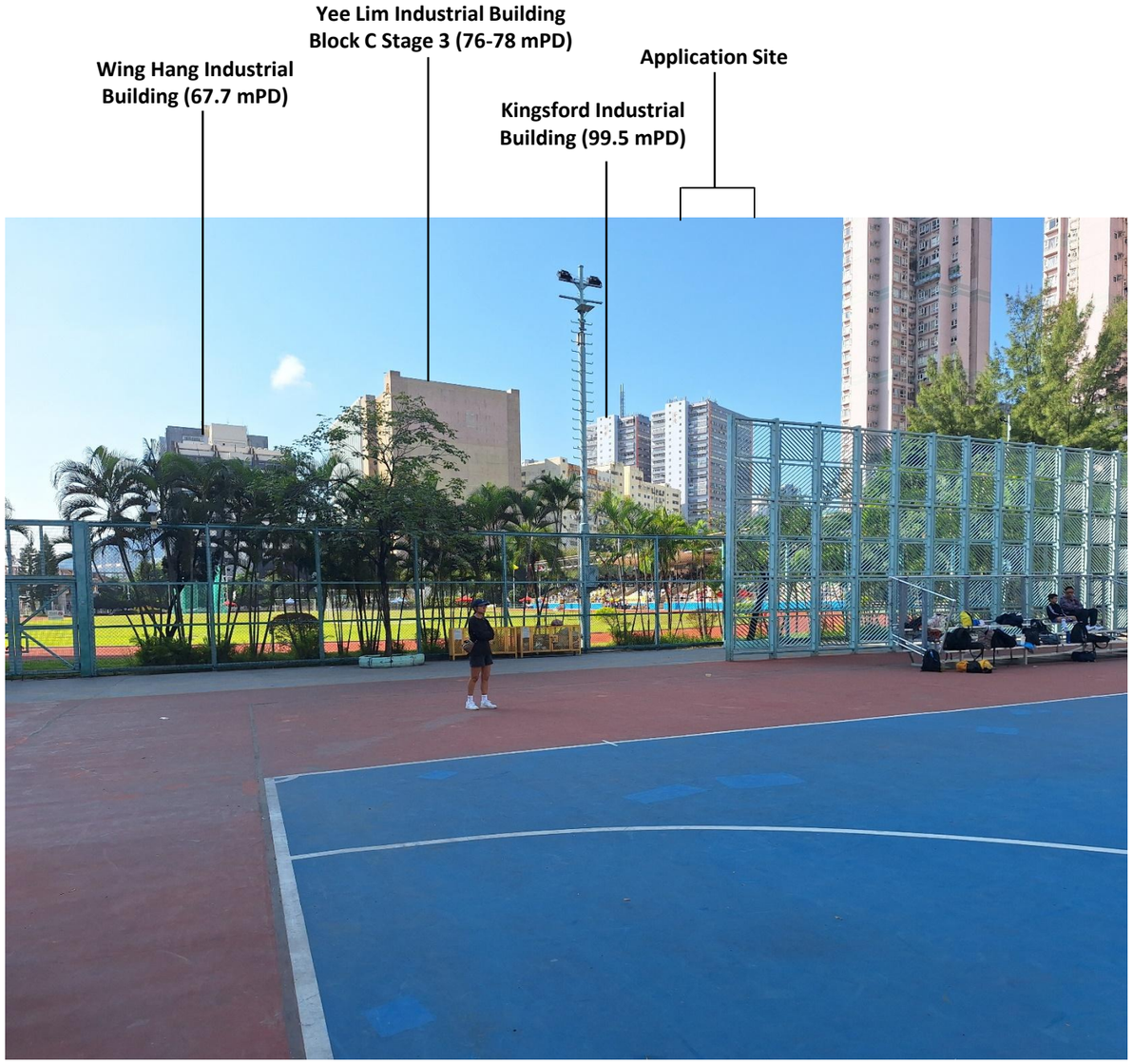
With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

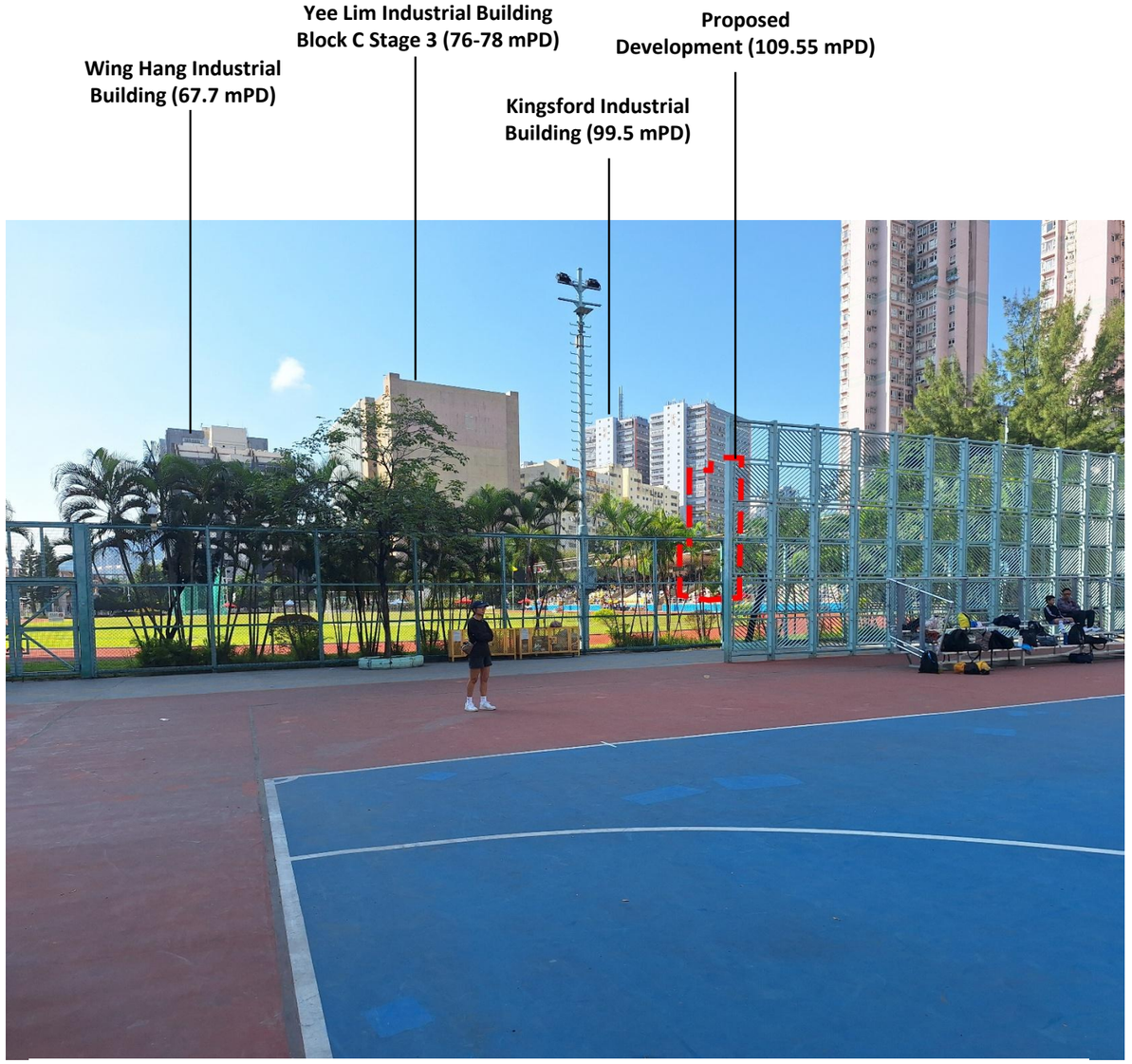
Drawing Title:
Figure 6: Photomontage of VP5 - Footbridge linking Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road

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Existing Condition



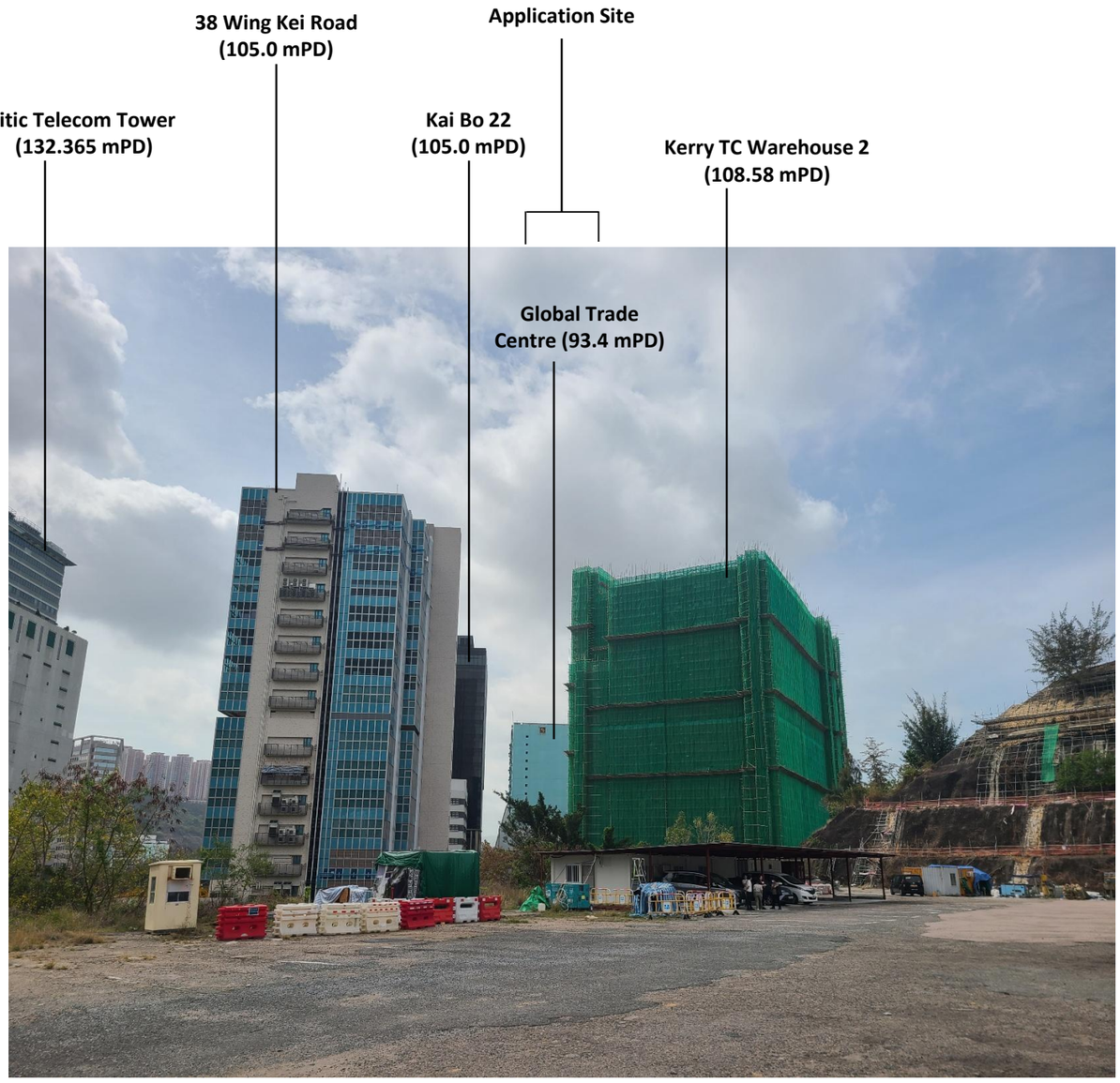
With Proposed Development

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Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

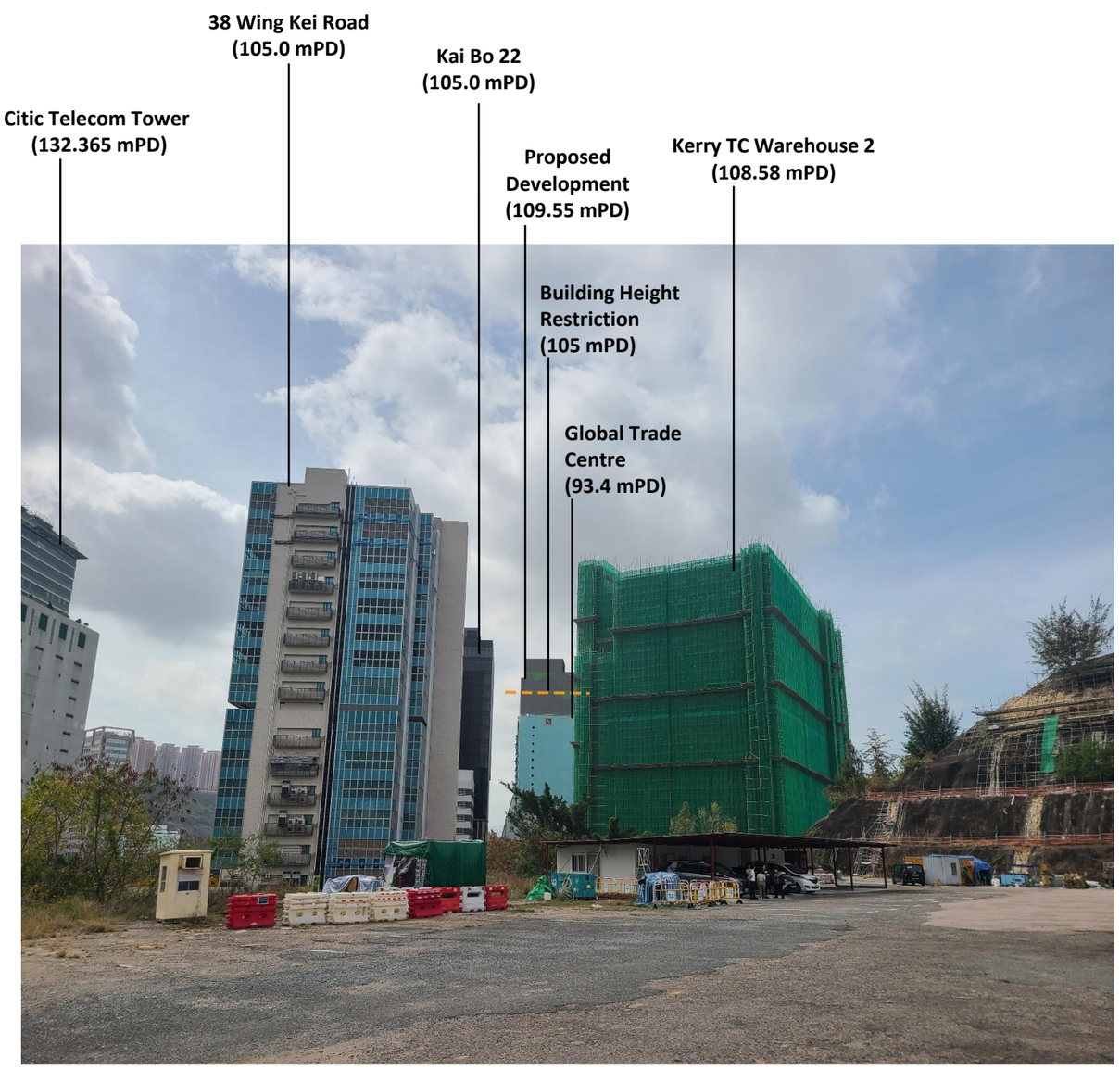
Drawing Title:
Figure 7: Photomontage of VP6 - Kwai Chung Sports Ground

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Existing Condition



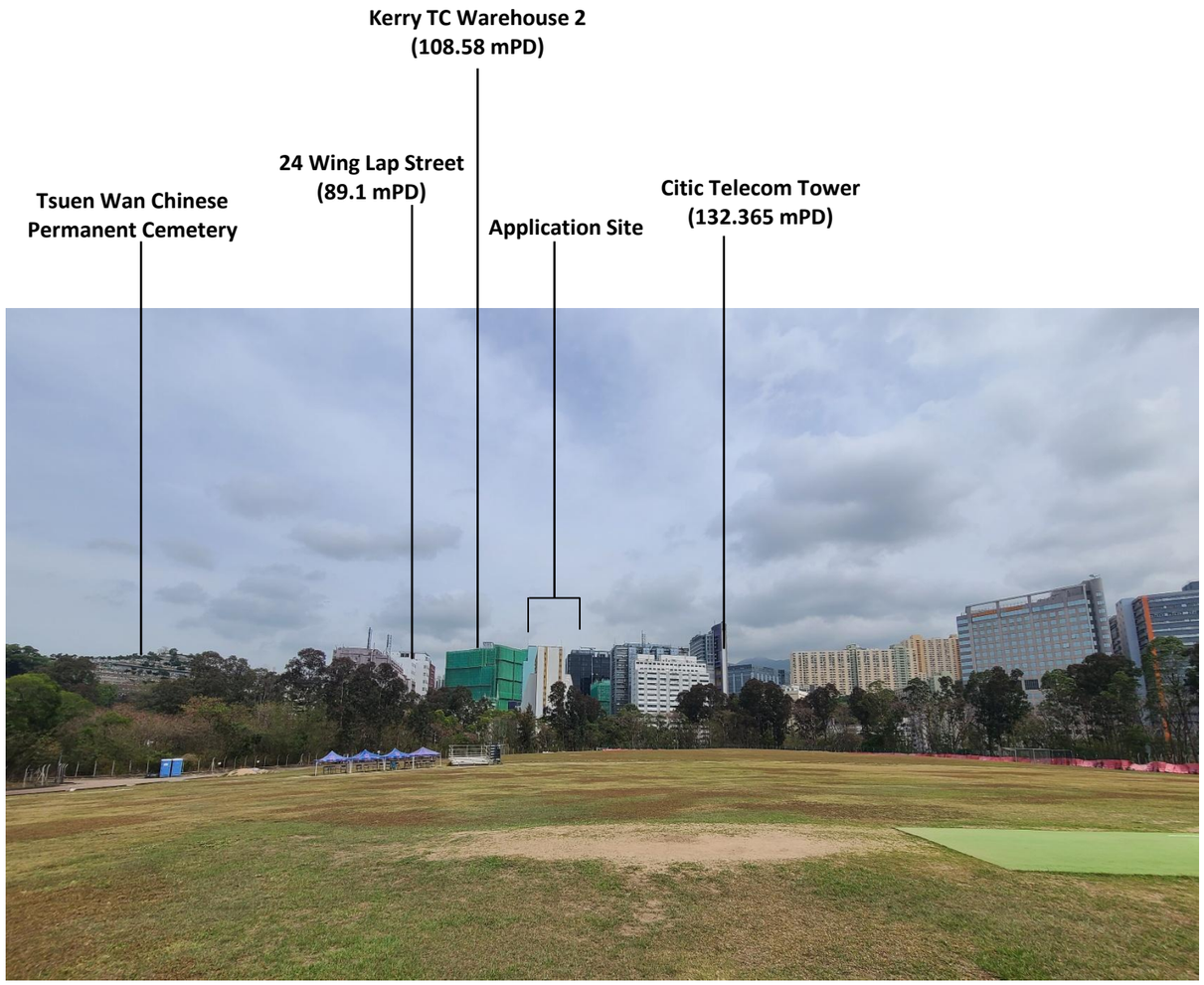
With Proposed Development

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Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

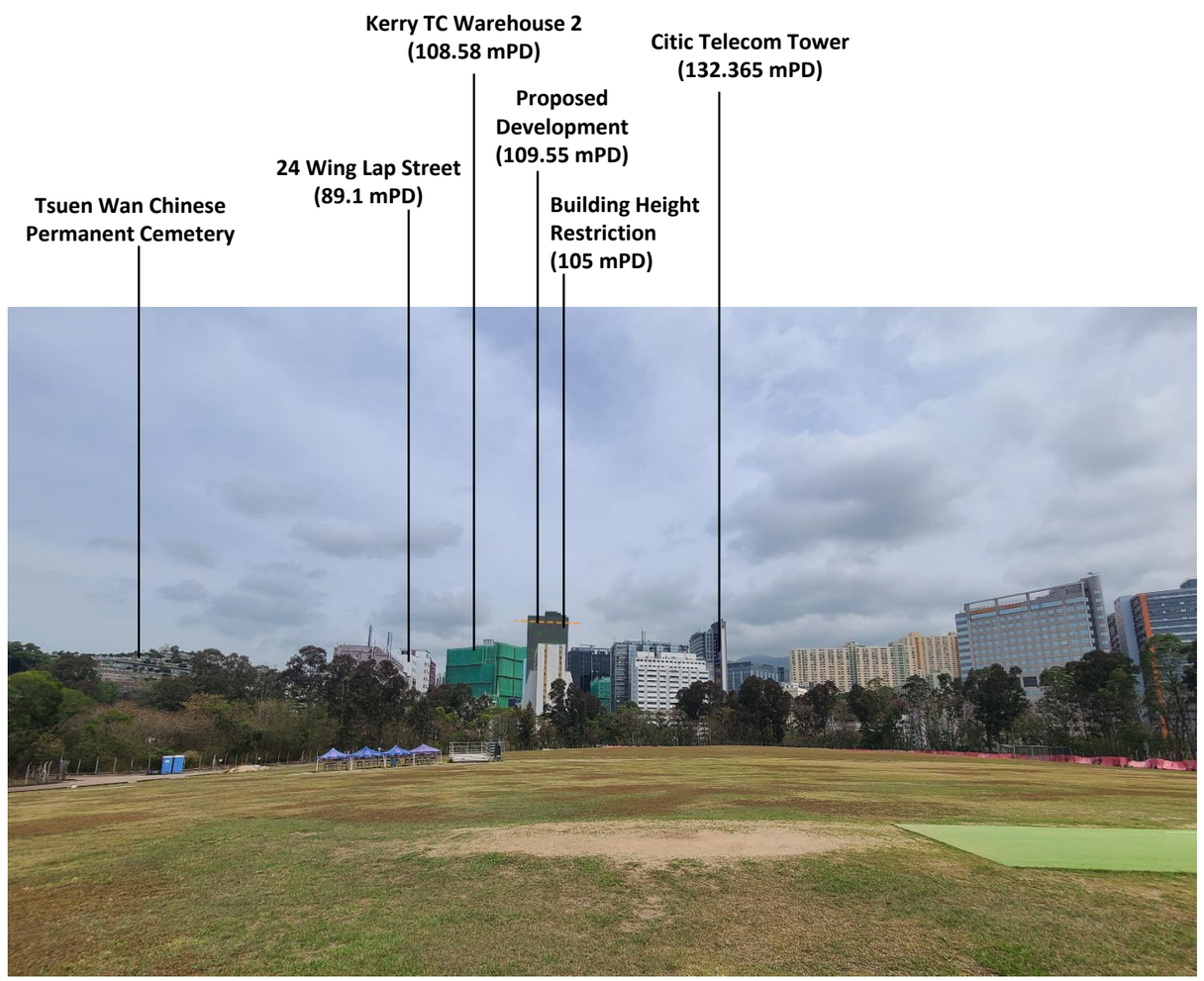
Drawing Title:
Figure 8: Photomontage of VP7 – Former Wing Kei Road Trucks Car Park

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Existing Condition



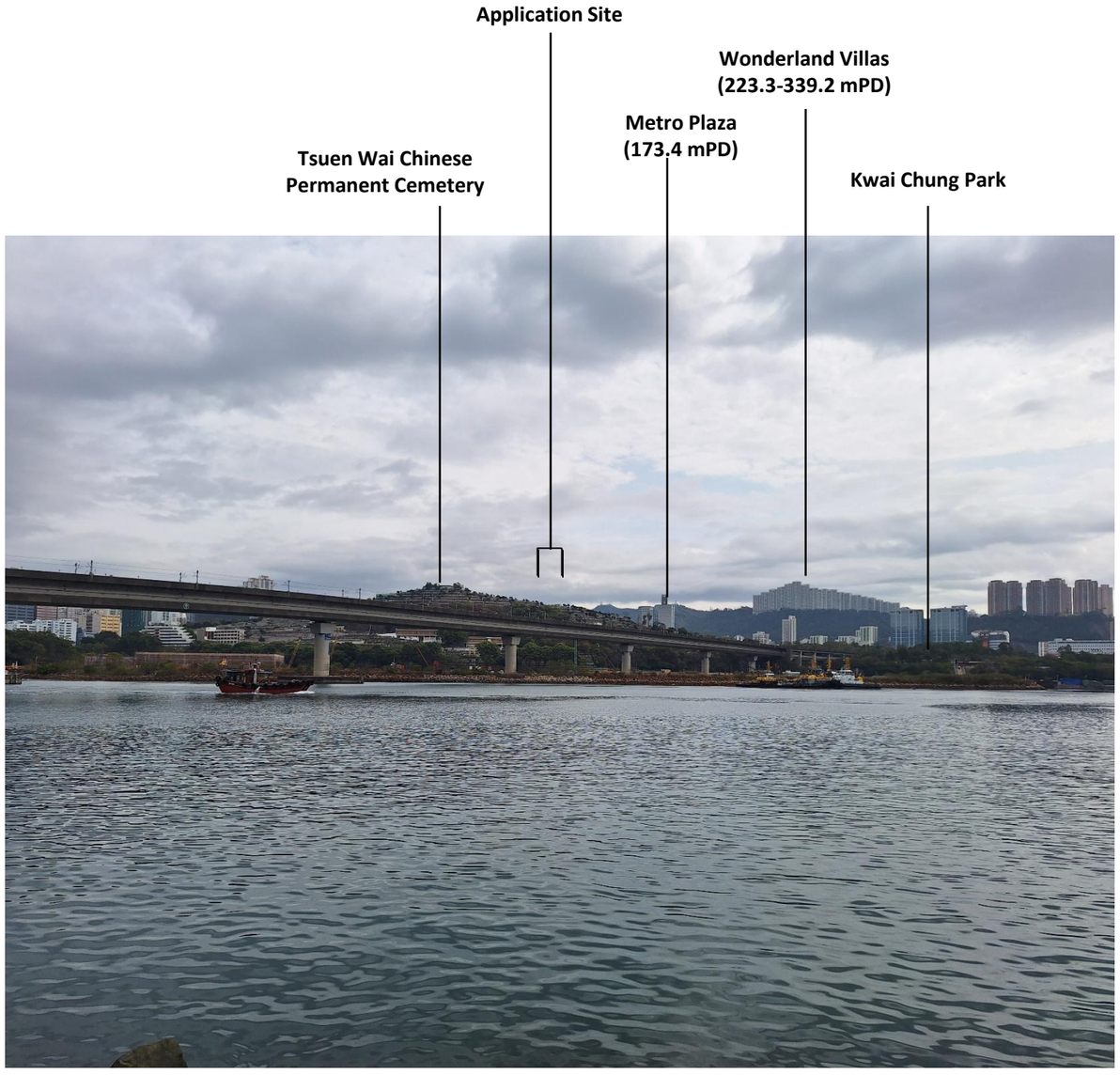
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Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

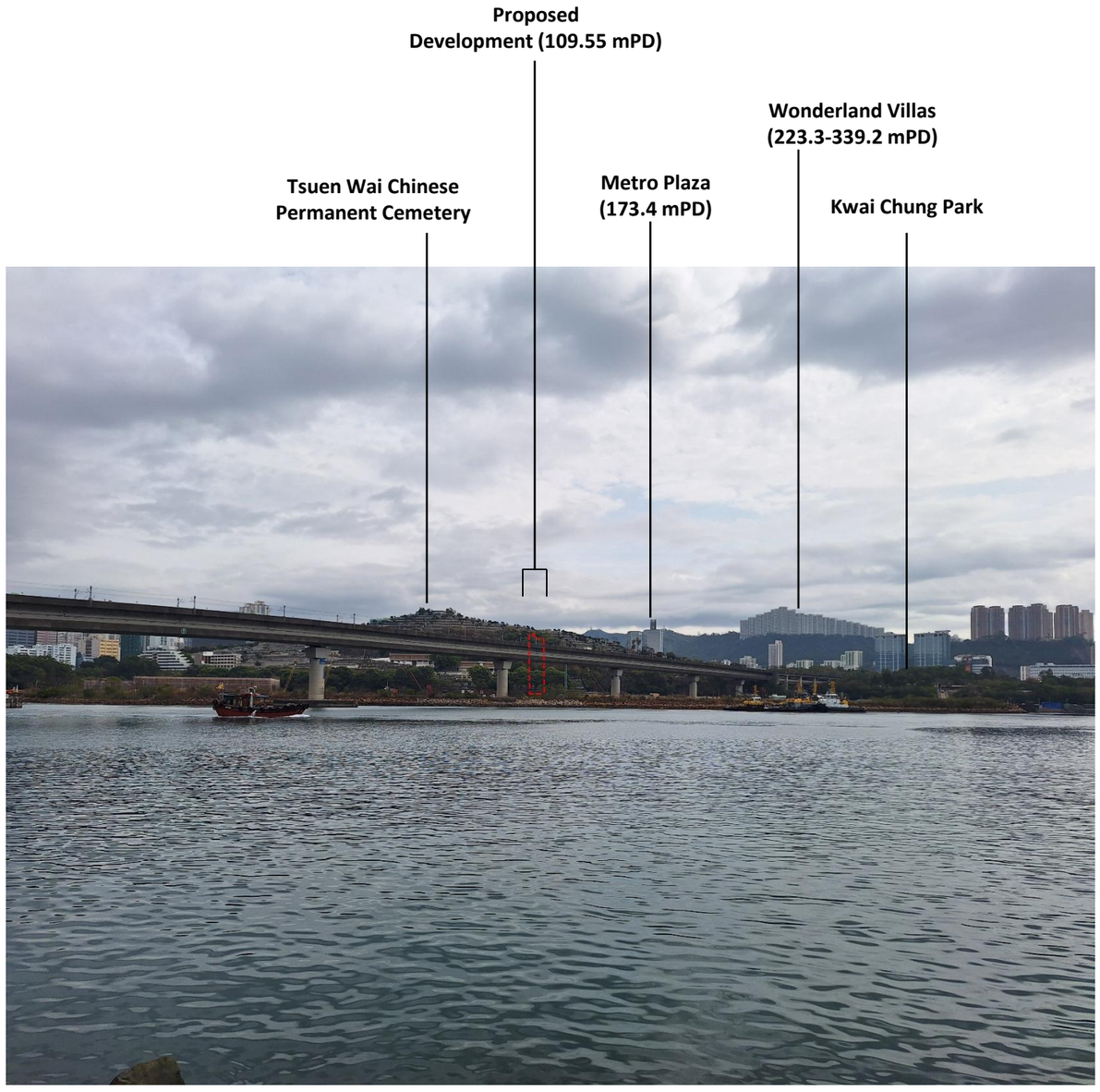
Drawing Title:
Figure 9: Photomontage of VP8 – Temporary Cricket Ground in Kwai Chung Park

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Existing Condition



With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

Drawing Title:
Figure 10: Photomontage of VP9 - Tsing Ying Waterfront Promenade

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Attachment 5
Air Quality Impact Assessment

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Air Quality Impact Assessment (V2.1)

Jul 2025

Approved By _____
(Project Manager: K.S. Lee)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties.

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1 INTRODUCTION

1.1 Background

1.1.1 OXO YW Limited ("the Project Proponent") has proposed to develop a data centre located at No. 7-11 Wing Kin Road, Kwai Chung.

1.1.2 Cinotech Consultants Limited was commissioned by OXO YW Limited to carry out an Air Quality Impact Assessment (AQIA) to assess and envisage any potential air quality impact on the implementation of the Project and to recommend air quality mitigation measures when necessary.

1.1.3 This AQIA is prepared to support a planning permission from the Town Planning Board (TPB) under Section 16 of the Town Planning Ordinance (CAP. 131) for a data centre with minor relaxation of plot ratio restriction from 9.5 to 11.4, and height restriction from 105 mPD to 109.55 mPD.

2 THE PROPOSED DEVELOPMENT AND THE ENVIRONMENT

2.1 The Site

2.1.1 The Application Site (the "Site") is located in an industrial area in Kwai Chung, bordered by Wing Chong Street to the west, Wing Kin Road to the east, Global Trade Centre to the north, and Hou Feng Industrial Building to the south (see **Figure 2-1**). The Site and its surroundings fall within the industrial zone, as per the Approved Kwai Chung Outline Zoning Plan (OZP) No. S/KC/32 (see **Figure 2-2**).

2.1.2 The Site covers approximately 964 m² (about 929 m² excluding the additional area) and is currently occupied by a 2-storey industrial building. Planning applications have been submitted and approved with conditions in 2020 (Application No.: A/KC/457) and 2023 (Application No.: A/KC/496) for Offensive Trades use (Lard Boiling Factory) and Industrial use (Warehouse), respectively.

2.2 The Proposed Development

2.2.1 The Applicant proposes to redevelop the Application Site into a 17-storey data centre with a height of 109.55 mPD and a plot ratio of 11.4. The tentative layout of the proposed development is shown in **Appendix 2-1**, with a planned completion date of 2029.

2.2.2 The proposed development is intended solely for data centre use and is not expected to generate air pollutants. In the current design, all equipment, including data servers and chillers, will be housed in fully enclosed spaces, except for the water-cooling towers, which will be located on the rooftop.

2.2.3 Although the data centre is generally expected to be unmanned, staff will occasionally need to enter the data halls for maintenance. Therefore, the data halls in the proposed development are considered Air Sensitive Receivers (ASRs) during the operational phase. The developer plans to provide fresh air intakes for the entire development.

2.3 Existing Environment in the Vicinity

Existing Developments

Industrial Chimneys

2.3.1 The existing developments in the vicinity are primarily industrial. An on-site survey and desktop study were conducted in April 2022 and updated in December 2024 to identify the industrial chimneys in the area. Multiple industrial chimneys have been identified within 200 m of the site boundary. The chimneys with potential impacts are listed in in **Table 2-1**, illustrated in **Figure 2-3**, and detailed in **Appendix 2-2**.

2.3.2 It is noted that a chimney-like structure was present on the roof of the Mei Kei Industrial Building according to a 3D map from Google. However, based on the latest information, there is currently no chimney on the roof of the Mei Kei Industrial Building.

2.3.3 Additionally, chimneys are identified at the Citic Telecom Tower. However, no potential impact is anticipated, as Citic Telecom Tower is used for data centre and office purposes, with no significant emissions expected. The chimneys serve backup generators to provide

N+1 resilience[1]. Furthermore, the height of Citic Telecom Tower is approximately 140 mPD, located about 200 m to the northeast of the Site. Given that the emission height is more than 20 m above the roof of the Site, with over 100 m of horizontal separation, no adverse impact is anticipated even when the backup generators are operational.

Table 2-1 Identified Industrial Chimneys in the Vicinity

ID	Building	Height [1]	Horizontal Distance from Site Boundary
CH01a & CH01b	Wing Loi Industrial Building	85 mPD	64 m
CH01c & CH01d		81 mPD	85 m
CH02	Kwai Chung Crematorium	52 mPD	196 m
CH03a & CH03b	Wing Kin Industrial Building	99 mPD	23 m
CH03c		103 mPD	40 m

Note:
[i] Estimated Valves

Air Sensitive Receivers (ASRs)

2.3.4 The nearest non-industrial development with air-sensitive uses is the office of the Wing Hau Street Driving Test Centre, located approximately 110 m northwest of the Site.

2.3.5 Most developments with air-sensitive uses are situated in the northeast of the Site, including PCCW, CNEC Lee I Yao Memorial Secondary School, and Kwai Shing West Estate Block 8, located about 180 m, 195 m, and 290 m from the Site, respectively.

2.3.6 The existing developments in the vicinity generally conform to the Outline Zoning Plan (OZP), indicating that no changes in land use are anticipated in the near future.

Road Traffic

2.3.7 The Site is bordered by Wing Kin Road and Wing Chong Street, which are minor roads (local distributors). According to the Annual Traffic Census 2023 (ATC 2023) by the Transport Department, the nearest major road is Tsuen Wan Road (Station 5604), an expressway located approximately 90 m to the northeast of the Site, with an Average Annual Daily Traffic (AADT) of 122,780.

2.4 Key Sources of Potential Air Quality Impact

2.4.1 Although there is heavy traffic on roads near the Site, the major vehicular source, Tsuen Wan Road, is located away from the Site. Therefore, no significant air quality impacts from road traffic are anticipated. The primary concern for the air quality of the proposed development stems from the nearby industrial chimneys.

[1] CITIC Telecom CPC – https://www.citictel-cpc.com/Content/Uploads/IDC1404EN-843d1b2d-fa48-414a-8182-a255a2e90d70.pdf

3 LEGISLATION, STANDARDS & GUIDELINES

3.1.1 The air quality impact assessment criteria were made reference to the HKPSG and the Air Pollution Control Ordinance (Cap.311) (APCO).

3.2 Minimum Buffer Distances

3.2.1 HKPSG recommends minimum buffer distances from the various road emission sources and industrial chimney for planning purpose, which are summarized **Table 3-1**.

Table 3-1 Guidelines on Usage of Open Space Site

Pollution Source	Parameter	Buffer Distance [i]	Permitted Uses
Road and Highways	*Type of Road*		
	Trunk Road and Primary Distributor	>20m	Active and passive recreational uses
		3-20m	Passive recreational uses
		<3m	Amenity areas
	District Distributor	>10m	Active and passive recreational uses
		<10m	Passive recreational uses
	Local Distributor	>5m	Active and passive recreational uses
		<5m	Passive recreational uses
Industrial Area	*Difference in Height between Industrial Chimney Exit and the Site*		
	<20m	>200m	Active and passive recreational uses
		5-200m	Passive recreational uses
	20-30m	>100m	Active and passive recreational uses
		5-100m	Passive recreational uses
	30-40m	>50m	Active and passive recreational uses
		5-50m	Passive recreational uses
	>40m	>10m	Active and passive recreational uses

Note:
(i) The buffer distance is the horizontal, shortest distance from the boundary of the industrial lot, the position of existing chimneys or the edge of road kerb, to the boundary of open space sites.

3.3 Air Quality Objectives (AQO)

3.3.1 The Air Pollution Control Ordinance (APCO) provides the statutory authority for controlling air pollutants from a variety of sources. The Hong Kong Air Quality Objectives (AQO) stipulate the maximum allowable concentrations over specific periods for the criteria pollutants (**Table 3-2**).

Table 3-2 Hong Kong Air Quality Objectives (2025)

Pollutant	Averaging time	Concentration limit [1] ($\mu g/m^3$)	Number of exceedances allowed
Sulphur dioxide (SO_2)	10-minute	500	3
	24-hour	40 [4]	3
Respirable suspended particulates (RSP) [ii]	24-hour	75 [4]	9
	Annual	30 [4]	Not applicable
Fine suspended particulates (FSP) [iii]	24-hour	37.5 [4]	18 [4]
	Annual	15 [4]	Not applicable
Nitrogen dioxide (NO_2)	1-hour	200	18
	24-hours [4]	120 [4]	9 [4]
	Annual	40	Not applicable
Ozone (O_3)	8-hour	160	9
	Peak season [4]	100 [4]	Not applicable [4]
Carbon monoxide (CO)	1-hour	30,000	0
	8-hour	10,000	0
	24-hours [4]	4,000 [4]	0 [4]
Lead (Pb)	Annual	0.5	Not applicable

Note:
1. All measurements of the concentration of gaseous air pollutants, i.e., sulphur dioxide, nitrogen dioxide, ozone and carbon monoxide, are to be adjusted to a reference temperature of 293Kelvin and a reference pressure of 101.325 kilopascal.
2. Respirable suspended particulates mean suspended particles in air with a nominal aerodynamic diameter of 10 μm or less.
3. Fine suspended particulates mean suspended particles in air with a nominal aerodynamic diameter of 2.5 μm or less.
4. Amended/New criteria in the new AQO (AQO-2025).

3.4 Air Pollution Control (Construction Dust) Regulation

3.4.1 The regulation defines notifiable and regulatory works activities that are subject to construction dust control.

3.5 Air Pollution Control (Smoke) Regulations

3.5.1 The regulations stipulate that dark smoke emission from any chimney or relevant plant must not exceed 6 minutes in any period of 4 hours; or 3 minutes continuously at any one time.

3.6 The Air Pollution Control (Fuel Restriction) Regulations

3.6.1 The regulation provides a statutory minimum requirement to restrict commercial and industrial processes to use ULSD (Ultra Low Sulphur Diesel) with a sulphur content of only 0.001%.

3.7 Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation

3.7.1 According to the regulation, Non-road Mobile Machinery (NRMMs) must adhere to the prescribed emission standards. Only NRMMs that have been approved or exempted and bear the appropriate label are permitted for use in specified activities and locations. These include construction sites, container terminals and backup facilities, restricted areas of the airport, designated waste disposal facilities, and specified processes.

3.8 Recommended Pollution Control Clauses for Construction Contracts

3.8.1 This guideline includes a list of relevant regulations/guidelines for contractors and general engineering practices aimed at minimizing inconvenience and environmental nuisance to nearby residents and other sensitive receivers.

3.9 ProPECC Practice Note PN 2/96 - Control of Air Pollution in Car Parks

3.9.1 The practice note provides guidance on the control of air pollution in car parks including air quality guidelines required for the protection of public health; and factors that should be considered in the design and operation of car parks in order to achieve the required air quality.

4 BACKGROUND AIR QUALITY AND KEY CRITERIA POLLUTANTS

4.1 Background Air Quality

4.1.1 EPD has been closely monitoring air quality in Hong Kong through its air quality monitoring stations (AQMS). The Kwai Chung Monitoring Station is the closest AQMS to the site, while the nearest roadside station is located in Mong Kok.

4.1.2 It is important to note that measurement results at the roadside station are generally higher than those at regular sensitive receivers, such as residential flats, due to proximity to road traffic. Therefore, measurements at the roadside station should be considered a worst-case scenario, while those at the Kwai Chung Monitoring Station should be regarded as representative.

4.1.3 The monitoring results for the Mong Kok Roadside Station and Kwai Chung Monitoring Station from 2019 to 2023 are summarized in **Table 4-1 & Table 4-2**, respectively. For both stations, the measured concentrations of NO_2 demonstrate a decreasing trend from 2019 to 2023. In contrast, the measured concentrations of RSP and FSPs dropped in 2020 and have remained at a similar level since then.

4.1.4 The parameters of particular concern during the past few years have been the NO_2 concentrations. The 1-hour averaged and annual averaged NO_2 have consistently exceeded the AQO's criteria from 2019 to 2023 and the 24-hour averaged NO_2 exceeded the AQO's criteria in 2019 & 2020 for the Mong Kok Roadside Station. The NO_2 concentrations at Kwai Chung Monitoring Station is much lower than that of Mong Kok Roadside Station, however, the annual average still consistently exceeded the AQO's criteria from 2019 to 2023.

4.1.5 With the updated AQO in 2025, the annual averaged FSP concentrations at the Mong Kok Roadside Station have also consistently exceeded the AQO's criteria from 2019 to 2023. Meanwhile, the 24-hour averaged FSP and the annual averaged RSP concentrations exceeded the AQO's criteria in 2019. The RSP and FSP concentrations at the Kwai Chung Monitoring Station are significantly lower than those at Mong Kok. However, the annual average FSP concentration exceeded the AQO's criteria in 2019, 2021 & 2023.

Table 4-1 Average Concentrations of Pollutants in the Recent Five Years (Year 2019 - 2023) at Mong Kok Air Quality Monitoring Station

Pollutant	Averaging Time	AQO [i]	Pollutant Concentration (µg/m^3) [ii]				
			2019	2020	2021	2022	2023
Respirable Suspended Particulates (RSP)	10th Highest 24-hour	75 (9)	74	63	69	56	58
	Annual	30	35	29	30	26	29
Fine Suspended Particulates (FSP)	19th Highest 24-hour	37.5 (18)	45	37	37	35	32
	Annual	15	24	18	18	16	18
Nitrogen Dioxide (NO_2)	19th Highest 1-hour	200 (18)	248	214	201	224	212
	10th Highest 24-hour	120 (9)	132	129	120	119	120
	Annual	40	78	74	70	64	68
Sulphur Dioxide (SO_2)	4th Highest 10-Min	500 (3)	39	45	30	28	39
	4th Highest 24-hour	40 (3)	10	10	10	7	9
Ozone (O_3)	10th Highest 8-hour	160 (9)	125	96	97	101	104
	Peak season	100	62	61	60	63	61
Carbon Monoxide (CO)	1st Highest 1-hour	30000 (0)	2280	1810	2130	1670	1340
	1st Highest 8-hour	10000 (0)	2103	1580	1719	1493	1138
	1st Highest 24-hour	4000 (0)	1610	1323	1479	1414	1014

Note:
[i] The numbers in brackets () refer to number of exceedance allowed per year.
[ii] The pollution concentrations are obtained from the Smart Air Modelling Platform.
[iii] Exceedances has been highlighted in orange.

Table 4-2 Average Concentrations of Pollutants in the Recent Five Years (Year 2019 - 2023) at Kwai Chung Air Quality Monitoring Stations

Pollutant	Averaging Time	AQO [i]	Pollutant Concentration (μg/m^3) [ii]				
			2019	2020	2021	2022	2023
Respirable Suspended Particulates (RSP)	10th Highest 24-hour	75 (9)	59	46	56	53	54
	Annual	30	29	23	26	23	25
Fine Suspended Particulates (FSP)	19th Highest 24-hour	37.5 (18)	34	27	32	34	30
	Annual	15	18	14	16	15	16
Nitrogen Dioxide (NO_2)	19th Highest 1-hour	200 (18)	184	184	180	168	182
	10th Highest 24-hour	120 (9)	96	89	96	84	97
	Annual	40	54	48	52	44	50
Sulphur Dioxide (SO_2)	4th Highest 10-Min	500 (3)	53	43	45	59	48
	4th Highest 24-hour	40 (3)	18	12	14	17	13
Ozone (O_3)	10th Highest 8-hour	160 (9)	143	124	124	139	128
	Peak season	100	84	77	74	79	75
Carbon Monoxide (CO)	1st Highest 1-hour	30000 (0)	-	-	-	-	-
	1st Highest 8-hour	10000 (0)	-	-	-	-	-
	1st Highest 24-hour	4000 (0)	-	-	-	-	-

Note:
[i] The numbers in brackets () refer to number of exceedance allowed per year.
[ii] The pollution concentrations are obtained from the Smart Air Modelling Platform.
[iii] Exceedances has been highlighted in orange.

4.2 PATH Background

4.2.1 PATH is a regional-scale air quality model developed by the EPD to predict future air quality of Hong Kong. The PATH v3.0 grids corresponding to the Site are [34,37] and [35,37], as shown in **Figure 4-1**. **Table 4-3** presents the predicted background air quality for the Site and its adjacent areas (Grids [34,37], [34,38], [35,37] and [35,38]) for the year 2029.

4.2.2 Generally, the PATH background for the Site and adjacent areas in 2029 meet the relevant Air Quality Objectives (AQOs) with a significant margin, except for Ozone concentrations.

Table 4-3 Background Ground Level Air Quality of PATH on Year 2029

Pollutant	Averaging Time	AQOs [µg/m^3] [i]	PATH Model Concentration [µg/m^3] on Year 2029			
			Grid [34,37] L1 (0-17m)	Grid [34,38] L1 (0-17m)	Grid [35,37] L1 (0-17m)	Grid [35,38] L1 (0-17m)
Respirable Suspended Particulates (RSP)	10th Highest 24-hour	75 (9)	54.66	55.52	55.08	55.17
	Annual	30	20.94	21.25	21.08	21.31
Fine Suspended Particulates (FSP)	19th Highest 24-hour	37.5 (18)	31.77	32.97	32.79	33.02
	Annual	15	13.27	13.53	13.37	13.57
Nitrogen Dioxide (NO_2)	19th Highest 1-hour	200 (18)	112.23	101.23	104.46	99.87
	10th Highest 24-hour	120 (9)	50.83	44.62	47.93	43.79
	Annual	40	29.73	24.56	23.89	22.79
Sulphur Dioxide (SO_2)	4th Highest 10-Min	500 (3)	21.16	23.28	23.55	23.67
	4th Highest 24-hour	40 (3)	6.77	7.22	7.29	7.31
Ozone (O_3)	10th Highest 8-hour	160 (9)	173.04	176.03	172.17	172.9
	Peak season	100	115.21	117.55	116.09	117.22
Carbon Monoxide (CO)	1st Highest 1-hour	30000 (0)	594.46	592.86	591.21	590.66
	1st Highest 8-hour	10000 (0)	571.48	571.02	564.19	565.06
	1st Highest 24-hour	4000 (0)	538.03	534.32	535.73	530.2

Note:
[i] The numbers in brackets () refer to number of exceedances allowed per year.
[ii] The pollution concentrations are obtained from the Smart Air Modelling Platform.
[iii] Exceedance has been highlighted in orange.

4.3 Identification of Key Criteria Pollutants – Construction Phase

Gaseous Pollutants

4.3.1 Operation of Powered Mechanical Equipment (PME) and/or Non-road Mobile Machinery (NRMMs) during construction work would emit dark smoke and gaseous air pollutants such as nitrogen dioxide (NO_2) via fuel burning.

4.3.2 Emission of dark smoke is regulated by Air Pollution Control (Smoke) Regulations. By providing routine maintenance and using of ULSD, the potential impact can be significantly suppressed.

4.3.3 According to Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, only approved or exempted Non-Road Mobile Machinery (NRMM) with a proper label are allowed to be used in specified activities and locations including construction sites. Supportive information and documents (e.g. third-party emission certificates, model and serial numbers of machines and engines, etc.) for each NRMM would be provided to EPD to prove that the concerned NRMM is in line with the prescribed emission standards.

4.3.4 As only limited number of PME and/or NRMMs are expected to be used on-site due to the small site area (<1000 m^2), and the PME and/or NRMMs are required to fulfil the relevant emission standards. As a result, no significant impact is anticipated.

Particulates (RSP & FSP)

4.3.5 The air pollutants of concern during the construction phase are construction dust, which includes Respirable Suspended Particulates (RSP) and Fine Suspended Particulates (FSP) generated from the construction activities of the proposed development.

4.3.6 In accordance with the Air Pollution Control (Construction Dust) Regulation, contractors and site agents are obligated to inform the EPD and implement dust reduction measures to minimize dust emissions before commencing construction activities such as demolition, site formation, foundation construction, and superstructure construction.

4.4 Identification of Key Criteria Pollutants – Operation Phase

Sulphur Dioxide (SO_2)

4.4.1 In Hong Kong, Sulphur Dioxide (SO_2) is primarily from the combustion of Sulphur-containing fossil fuels in power stations and marine vessels.

4.4.2 The Air Pollution Control (Fuel Restriction) Regulations restrict commercial and industrial processes to use ULSD with a sulphur content of only 0.001%. In December 2007, the Government offered a concessionary duty rate for Euro V diesel for motor vehicles which has a sulphur content of 0.001%. Since then, all petrol filling stations in Hong Kong provide only Euro V diesel, which has a sulphur content of 0.001%. Reference to the *2022 Hong Kong Emission Inventory Report*[2], SO_2 emission from the road traffic contribute less than 1% of the total SO_2 emissions, thus SO_2 from road traffic emissions is not considered as key air pollutant. On the other hand, although the SO_2 emission from the industrial sources contribute little to the total SO_2 emissions, due to the proximity, SO_2 emission from the industrial chimneys is considered as key air pollutant.

Particulates (RSP & FSP)

4.4.3 The emission source during the operational phase of the Project would be the vehicular emission on the roads and industrial emission from industrial chimneys.

Nitrogen Dioxide (NO_2)

4.4.4 NO_2 is the major air pollutant in concern during operation phase of the Project. NO_2 could be emitted directly via combustion, or generated from the reaction between nitrogen oxides (NO_x) and ozone (O_3).

4.4.5 The major emission source of NO_x and NO_2 during the operational phase of the Scheme would be the vehicular emission on the roads and industrial emission from industrial chimneys.

[2] 2022 Hong Kong Emission Inventory Report
https://www.epd.gov.hk/epd/sites/default/files/epd/data/2022_Emission_Inventory_Report_Eng.pdf

Ozone

4.4.6 Ozone (O_3) is formed from dioxygen by the action of ultraviolet light and also atmospheric electrical discharges. It is not a primary pollutant emitted from vehicular emission & industrial emission thus is not considered as key criteria pollutants for the Project.

Carbon Monoxide

4.4.7 Road transportation is the dominant source of CO emissions. However, considering the low CO concentration measured in the roadside air quality monitoring station (**Table 4-1**) as compared to the respective AQO criteria, the emission of CO from road transportation is unlikely to cause a significant air quality impact to the proposed development.

Lead

4.4.8 Leaded petrol has been banned in Hong Kong since 1999. It is not considered concerned pollutants for vehicular emission.

Summary

4.4.9 During the operation phase, the primary sources of pollutants will be traffic and industrial emissions, specifically SO_2, NO_2, RSP and FSP. These pollutants have been identified as the key criteria pollutants for the project's operation.

5 CONSTRUCTION PHASE AIR QUALITY IMPACT ASSESSMENT

5.1 Dust Source of the Project

5.1.1 Major dust-emitting construction activities will include the demolition of existing structures, excavation for basement construction, foundation works, and other construction activities (e.g., superstructure construction). A summary of the construction works is provided in **Table 5-1**.

5.1.2 Due to the small site area (< 1,000 m²), the scale of construction activities for the Project will be limited. The Site currently houses a 2-storey industrial building, and the demolition works are considered small since only a single low-rise development is involved. It is important to note that excavation for the basement is required under the current design.

Table 5-1 Summary of the Construction Works

Site Area (m^2)	Structures to be demolished	Excavating for Basement	Construction of Superstructure	Number of Concurrent PME [1]
< 1000	A 2-storey industrial building	Yes	Yes	8

Note:
[1] Excluding small plants such as water pump and fan. Estimated numbers based on projects in similar scales.

5.2 Concurrent Projects

5.2.1 No planned and/or committed developments in the vicinity of the Site has been identified.

5.3 Air Sensitive Receivers in the Vicinity

5.3.1 The representative ASRs for the construction phase of the proposed development are illustrated in **Figure 5-1** and listed in **Table 5-2**. It is important to note that the Site is surrounded by existing industrial developments, and therefore, all ASRs are located away from the Site.

Table 5-2 Representative Air Sensitive Receivers (Construction Phase)

ID	Building/Location	Type	Building Height (mPD) [1]	Horizontal Distance from Site Boundary (m) [1]
ASR01	Wing Hau Street Driving Test Centre	Office	25	110
ASR02	PCCW	Utility and Offices	80	180
ASR03	CNEC Lee I Yao Memorial Secondary School	Education	50	195
ASR04	Kwai Shing West Estate Block 8	Residential	125	290

Note:
[1] Estimated values.
[2] The windows do not face the Site.

5.4 Identification of the Major Pollutant Sources and of Potential Impacts

Emission from PME & Non-road Mobile Machinery

5.4.1 As stated in **Section 4.3.1**, operation of Powered Mechanical Equipment (PME) during construction work would emit gaseous air pollutants such as nitrogen dioxide (NO_2) via fuel burning. A number of Powered Mobile Equipment (PME), such as excavators, can be utilized for the construction works of the Site. However, the number of PME expected to be used on-site will be limited. As a result, no significant impact is anticipated from the operation of PME.

5.4.2 According to the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, only approved or exempted Non-Road Mobile Machinery (NRMM) with proper labelling are allowed to be utilized in the construction site. Supportive information and documents, such as third-party emission certificates, model and serial numbers of machines and engines, will be provided to the EPD to demonstrate that the concerned NRMM complies with the prescribed emission standards. As a result, no significant impact is anticipated from the operation of NRMM.

Construction Dust

5.4.3 Fugitive dust would be generated and the concerned air pollutants during the construction phase are the Respirable Suspended Particulates (RSP) and Fine Suspended Particulates (FSP) arising from the construction work of the Project. One of the major dust sources during the construction phase is the demolition of existing structures. Despite the small scale of demolition works, mitigation measures shall be necessary to eliminate the potential impact arising from the demolition works.

5.4.4 Movement of dump trucks is also considered a potential dust source if not mitigated properly. A rough estimation of 5 trips per day shall be required during the demolition period.

5.5 Mitigation Measures

5.5.1 Dust control measures under the Air Pollution Control (Construction Dust) Regulation (Cap. 311R) and good site practice shall be implemented to mitigate dust impact arising from demolition work by preventing dust generation and/or by screening, suppressing and removing dust generated:

- Enclose the whole wall of the building to a height of at least 1m higher than the highest level of the structure to be demolished with impervious dust screens or sheeting on façade abutting or fronting upon a street
- Existing structures are proposed to be demolished by non-percussive equipment such as hydraulic crusher to reduce dust emission; no blasting will be involved.
- Water or a dust suppression chemical shall be sprayed immediately prior to, during and immediately after demolition/excavation works
- Cover stockpile or dusty materials with tarpaulin to prevent wind erosion
- Any dusty materials remaining after a stockpile is removed shall be wetted with water and cleared from the surface of roads or streets

- Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the construction site
- Where a vehicle leaving a construction site is carrying a load of dusty materials, the load shall be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle
- Store cement bags in shelter with 3 sides and the top covered by impervious materials if the stack exceeds 20 bags
- Maintain a reasonable height when dropping excavated materials to limit dust generation
- Limit vehicle speed within Site to 10 km/h and confine vehicle movement in haul road
- Minimize exposed earth after completion of work in a certain area by hydroseeding, vegetating or soil compacting
- Cover materials on trucks before leaving the Site to prevent dropping or being blown away by wind
- Regular maintenance of plant equipment to prevent black smoke emission
- Throttle down or switch off unused machines or machine in intermittent use
- Plan the Site layout so that machineries, dust causing activities and stockpilings are away from receptors as far as possible.
- Site hoarding higher than 2.4m should be implemented where there are receptors at close proximity to the construction site and dusty activities.
- Haul road shall be away from the project boundary as much as possible

5.5.2 No adverse dust impact on the surrounding air sensitive receivers (ASRs) is expected with proper implementation of mitigation measures.

5.5.3 As the project is still in planning stage, the necessary of EM&A program shall be determined in detailed design stage.

6 OPERATION PHASE AIR QUALITY IMPACT ASSESSMENT

6.1 Air Sensitive Receivers

6.1.1 During the operational phase, no emissions are anticipated from the proposed development. However, the data halls of the Project are considered ASRs that require assessment. The developer intends to provide fresh air intakes for the entire development, and these intakes for the data halls will be located in areas with no adverse air quality impacts.

6.2 Buffer Distance Recommended by HKPSG

6.2.1 The suggested buffer distances from the Hong Kong Planning Standards and Guidelines (HKPSG) outlined in **Table 3-1** shall be adhered to in order to avoid potential air quality impacts.

6.2.2 The adjoining Wing Kin Road and Wing Chong Street are classified as Local Distributors according to Transport Department (See **Appendix 6-1**), requiring a buffer distance of 5 m, as shown in **Figure 6-1**. Since the buffer zones for roads are independent of elevation, the fresh air intake for the data hall should be located outside these buffer regions, irrespective of elevation.

6.2.3 For the industrial chimneys in the vicinity, a buffer distance of 10 to 200 meters is required, depending on the elevation difference between the emission point and the receptor. A list of the chimneys in the vicinity is provided in **Table 6-1**.

Table 6-1 List of Chimneys in the Vicinity

Chimney ID	Description	Height of chimney (mPD)	Horizontal Distance from site boundary (m)	Horizontal Distance from building footprint (m)
CH01a **CH01b**	Wing Loi Industrial Building	85	64	67
CH01c **CH01d**		81	85	87
CH02	Kwai Chung Crematorium	52	196	198
CH03a **CH03b**	Wing Kin Industrial Building	99	23	31
CH03c		103	40	49

Note: Please refer to **Appendix 2-2** for details.

Table 6-2 Required Buffer Distance for Various Elevations

Assessed Elevation	Chimney ID	Industrial Chimney Exit above the Highest Assessed Elevation (m)	Required buffer distance (m)	The Proposed Development Completely Outside of Buffer Region (Y/N)	Corresponding Drawing
At or Below 32 mPD	CH01a, CH01b	53	10	Y	Figure 6-2b
	CH01c, CH01d	49	10	Y	
	CH02	20	100	Y	
	CH03a, CH03b	67	10	Y	
	CH03c	71	10	Y	
Between 32 mPD and 51 mPD	CH01a, CH01b	34	50	Y	Figure 6-2c
	CH01c, CH01d	30	50	Y	
	CH02	1	200	N	
	CH03a, CH03b	48	10	Y	
	CH03c	52	10	Y	
Between 51 mPD and 55 mPD	CH01a, CH01b	30	50	Y	Figure 6-2d
	CH01c, CH01d	26	100	N	
	CH02	-3	200	N	
	CH03a, CH03b	44	10	Y	
	CH03c	48	10	Y	
Between 55 mPD and 59 mPD	CH01a, CH01b	26	100	N	Figure 6-2e
	CH01c, CH01d	22	100	N	
	CH02	-7	200	N	
	CH03a, CH03b	40	10	Y	
	CH03c	44	10	Y	
Between 59 mPD and 109.55 mPD	CH01a, CH01b	-24.55	200	N	Figure 6-2f
	CH01c, CH01d	-28.55	200	N	
	CH02	-57.55	200	N	
	CH03a, CH03b	-10.55	200	N	
	CH03c	-6.55	200	N	

6.2.4 The required buffer regions for the identified chimneys at different elevations are illustrated in **Figures 6-2a to 6-2f**. Please note that the buffer regions of the more distant chimneys with higher emission heights have been omitted for clarity in presentation.

- Below 32 mPD (**Figure 6-2b**)
  - The Site is not within the buffer region of any chimney; thus, the only constraint for fresh air intakes is from the nearby roads.

- Between 32 mPD and 51 mPD (**Figure 6-2c**)
  - A small portion of the Site at the southwest corner falls within the buffer region of the chimney at Kwai Chung Crematorium (CH02).
- Between 51 mPD and 55 mPD (**Figure 6-2d**)
  - The southern portion of the Site is within the buffer region of the chimney at Wing Loi Industrial Building (CH01c).
- Between 55 mPD and 59 mPD (**Figure 6-2e**)
  - Most of the Site is within the buffer region of the chimney at Wing Loi Industrial Building (CH01b).
- Between 59 mPD and 109.55 mPD (**Figure 6-2f**)
  - The Site is entirely within the buffer regions of the nearby chimneys.

6.3 Suitable Locations for Fresh Air Intakes for Areas with Sensitive Uses

6.3.1 The floor and ceiling levels of the Proposed Development under the current design are summarised in **Table 6-3**.

Table 6-3 Floor and Ceiling Levels of the Proposed Development

Floor	Height (m)	Floor Level (mPD)	Ceiling Level (mPD)	Corresponding Drawing
G/F	11	9	20	Fig 6-3a
1/F	6	20	26	Fig 6-3b
2/F	6	26	32	Fig 6-3c
3/F	6	32	38	Fig 6-3d
4/F	5.5	38	43.5	Fig 6-3e
5/F	5.5	43.5	49	Fig 6-3e
6/F	5.5	49	54.5	Fig 6-3f
7/F	5.5	54.5	60	Fig 6-3g
8/F and above	5.5	-	-	-

Note:
[1] The design of the proposed development is subject to change.

6.3.2 The proposed façades for fresh air intakes are illustrated in **Figures 6-3a to 6-3g**. Please note that the buffer regions of the more distant chimneys with higher emission heights have been omitted for clarity in presentation. It is important to note that the proposed fresh air locations are designated only for areas with air-sensitive uses (e.g., data halls and other normally occupied areas). For non-normally occupied areas, such as plant rooms, there are no restrictions on ventilation concerning air quality.

- G/F to 2/F (9 to 32 mPD) (**Figures 6-3a to 6-3c**)
  - The entire eastern façade is suitable for fresh air intake.
  - The western façade is within the buffer region of Wing Chong Street.
- 3/F to 6/F (32 to 54.5 mPD) (**Figures 6-3d to 6-3f**)
  - The entire eastern façade is suitable for fresh air intake.
  - A small portion of the western façade is outside the buffer region of Wing Chong Street and suitable for fresh air intake.
- 7/F (54.5 to 60 mPD) (**Figure 6-3g**)

  - At or above 59 mPD, the entire Site is within the buffer regions of the chimneys at Wing Loi Industrial Building (CH01b) and Wing Kin Industrial Building (CH03a).
  - Below 59mPD, only the northern half of the eastern façade is suitable for fresh air intake.
  - No suitable locations for fresh air intake at or above 59mPD.
- 8/F & above (> 60 mPD)
  - No suitable locations for fresh air intake.

6.3.3 Generally, the entire eastern façade from G/F to 7/F (up to 59 mPD) and a small portion of the western façade from 3/F to 6/F (32 to 54.5 mPD) are suitable for fresh air intake. However, no fresh air intake shall be provided at 8/F or above.

6.3.4 With the fresh air intakes for areas with air-sensitive uses positioned at the proposed locations, no air quality impacts during the operation of the Project are anticipated.

6.4 Provision of Emergency Generators

6.4.1 In the current design, backup generators powered by diesel fuel will be provided to address potential electricity outages or emergencies. These backup generators will not operate during normal conditions. Aside from the backup generators, no diesel or other fossil fuels will be utilized in the project.

6.4.2 Industrial chimneys for the backup generators will be installed, subject to details design.

6.5 Provision of Basement Carparks

6.5.1 It should be noted that there are basement carparks in the Proposed Development. However, the details of the carparks including the locations of the exhaust outlet are not available.

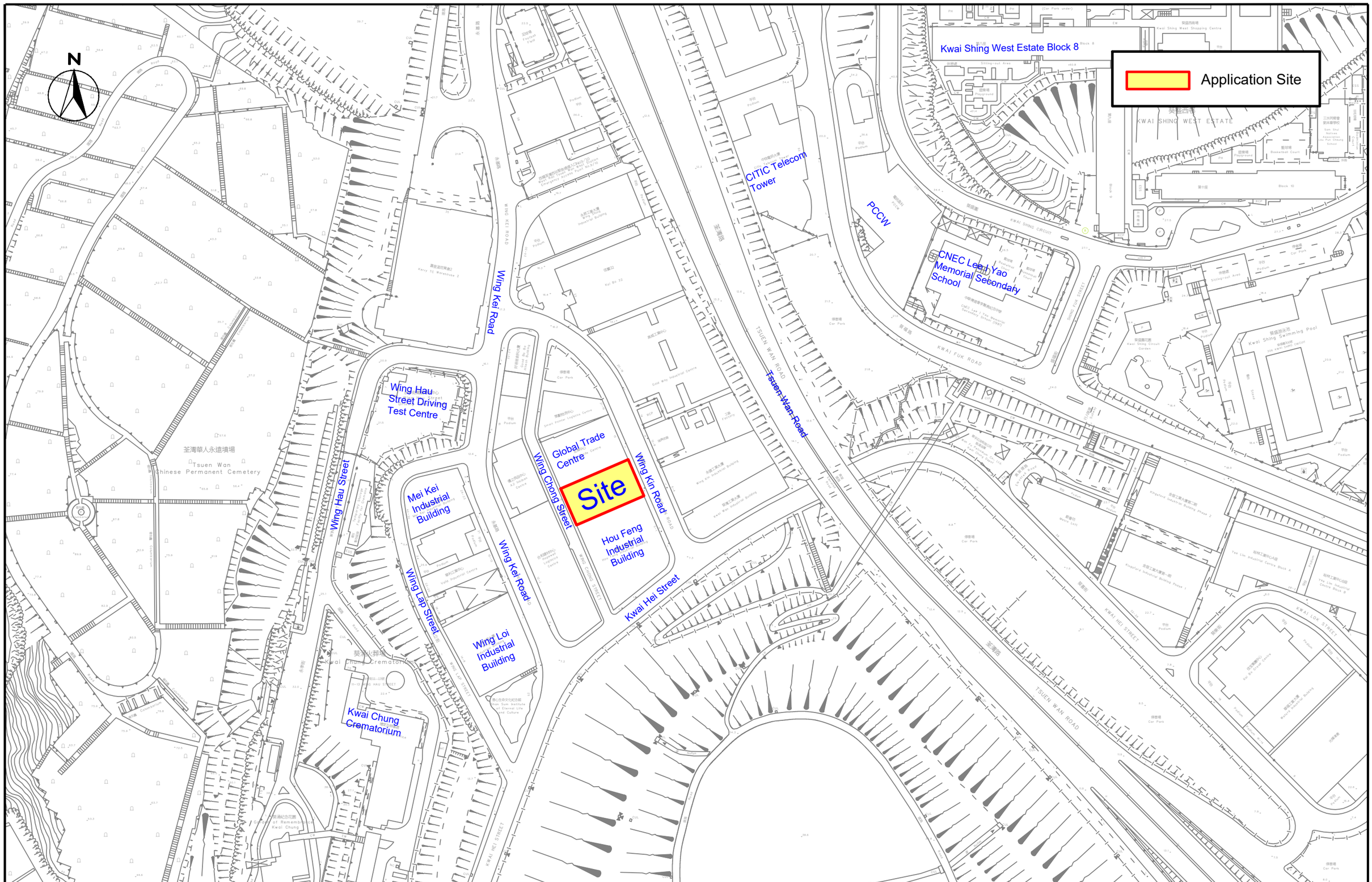
6.5.2 The project team is reminded to fulfill the requirements, including design, maintenance and operation of the ventilation systems, as stipulated in ProPECC PN 2/96 - Control of Air Pollution in Car Parks. In addition, the exhaust outlet for the basement carpark shall be located as far away as possible from nearby ASRs and/or fresh air intake to avoid causing any potential air pollutant nuisance.

7 CONCLUSION

7.1.1 The air quality impact from the construction of the proposed development on the surrounding area, as well as the impact from the surrounding area on the proposed development, has been assessed. With the implementation of dust suppression measures as outlined in the Air Pollution Control (Construction Dust) Regulation and adherence to good site practices, no adverse air quality impacts associated with the construction works are expected.

7.1.2 The proposed development is not considered an air pollution source during its operation. A qualitative assessment indicates that vehicular and industrial emissions are not expected to constrain the proposed development, provided that the locations of the fresh air intakes and exhaust outlet for the basement carpark are carefully designed.

FIGURES

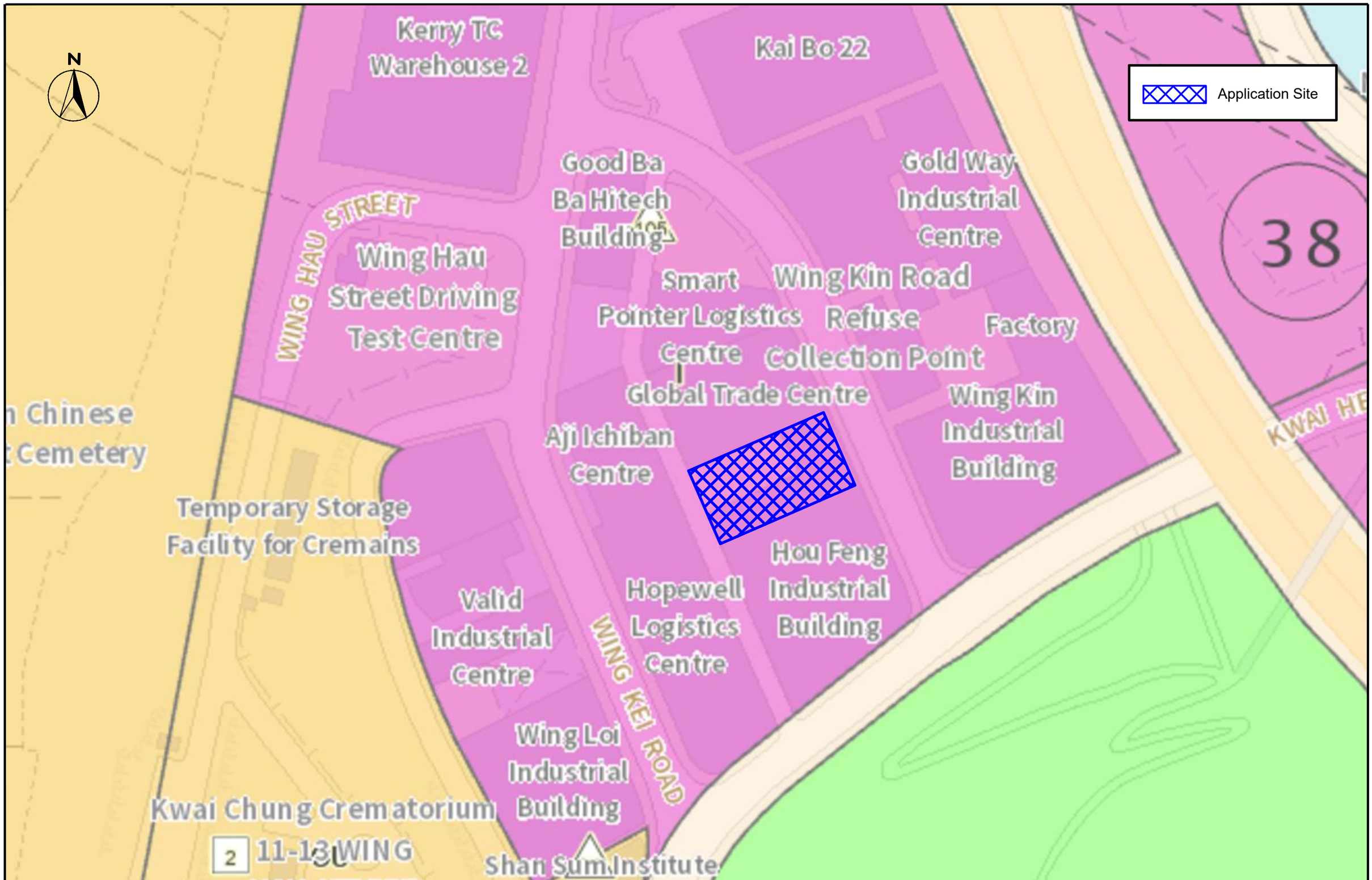


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Site Location Plan

SCALE	1:2000 @ A3	DATE	JAN 2025
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	2-1
		REV	-

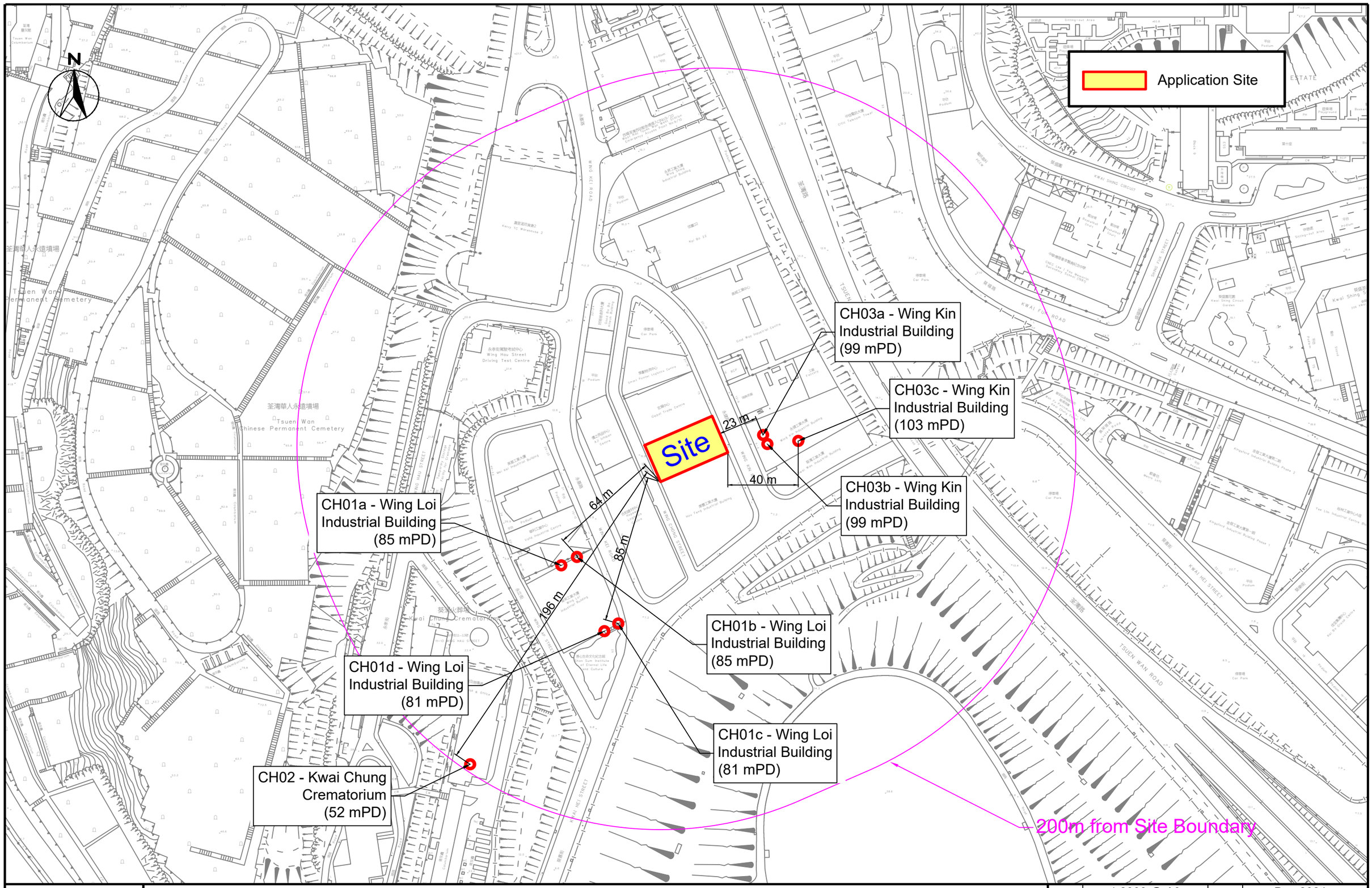


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Outline Zoning Plan

SCALE	1:1000 @ A3	DATE	DEC 2024
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	2-2
		REV	-

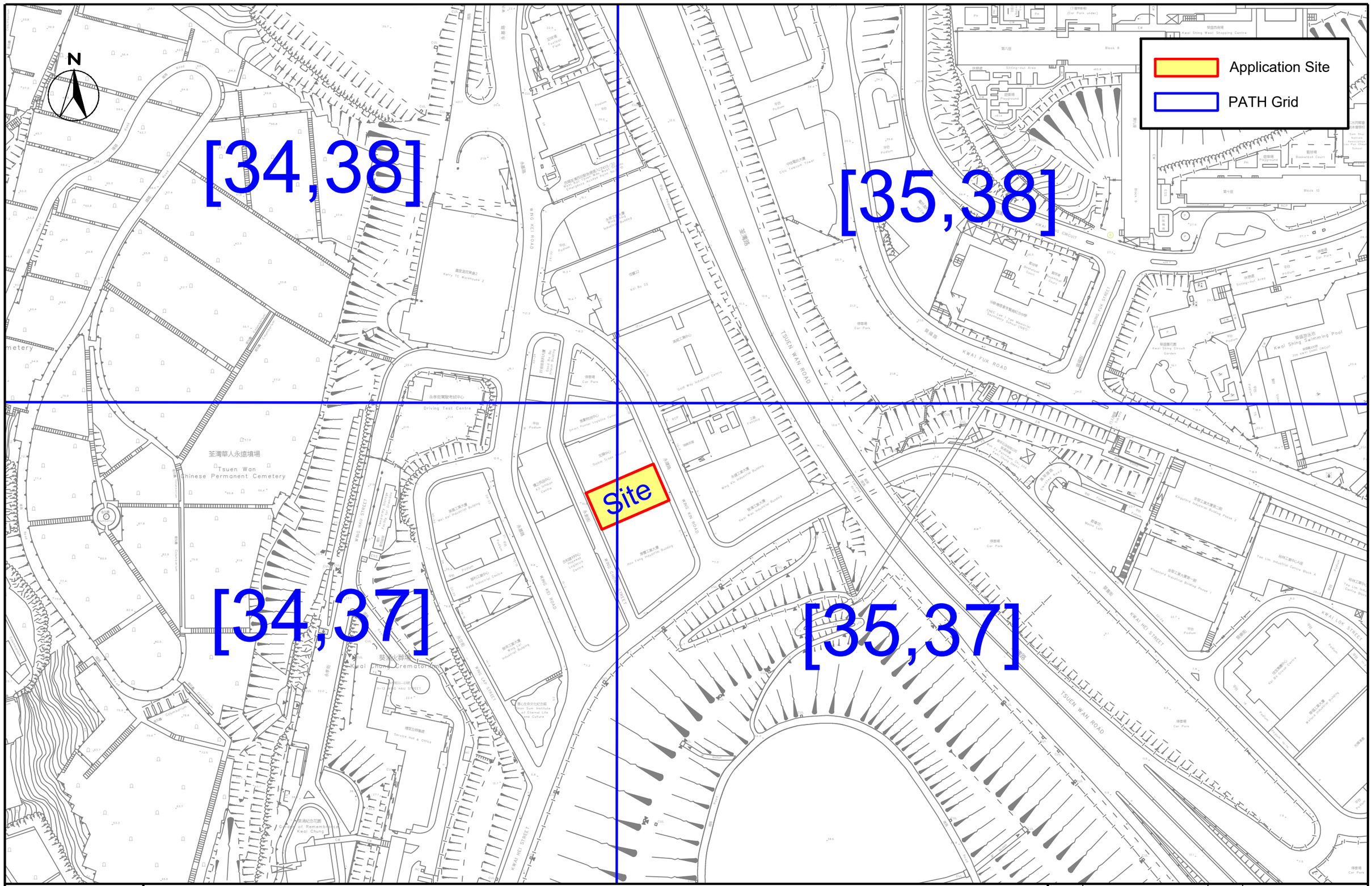


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Location of the Identified Chimneys

SCALE	1:2000 @ A3	DATE	Dec 2024
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	2-3
		REV	-

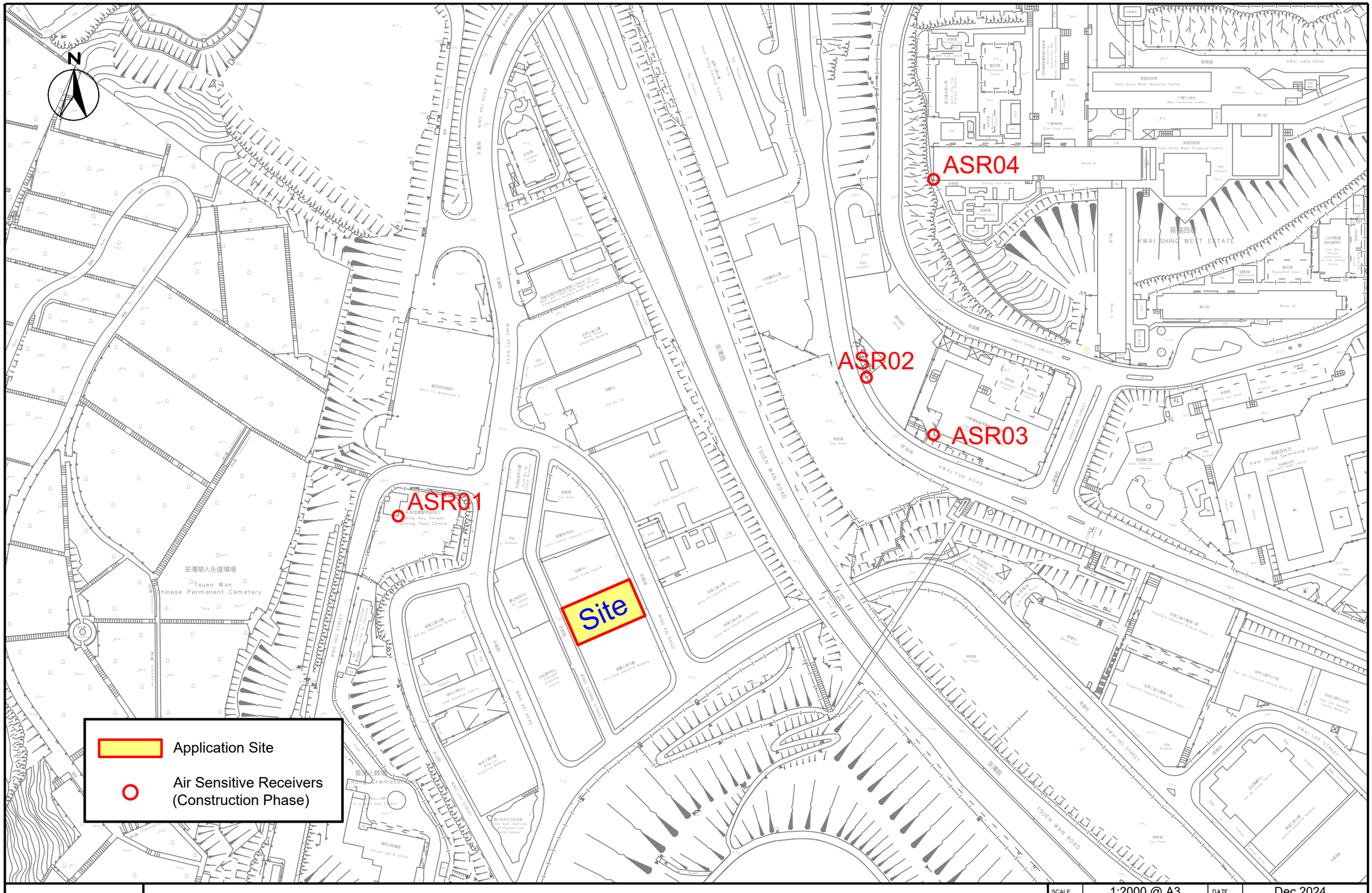


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

PATH Grids

SCALE	1:2000 @ A3	DATE	Dec 2024
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	4-1
		REV	-



CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Representative Air Sensitive Receivers (Construction Phase)

SCALE	1:2000 @ A3	DATE	Dec 2024
CHECK	CC	DRAWN	LL
JOB No.	IA23170	DRAWING No.	5-1
		REV	-

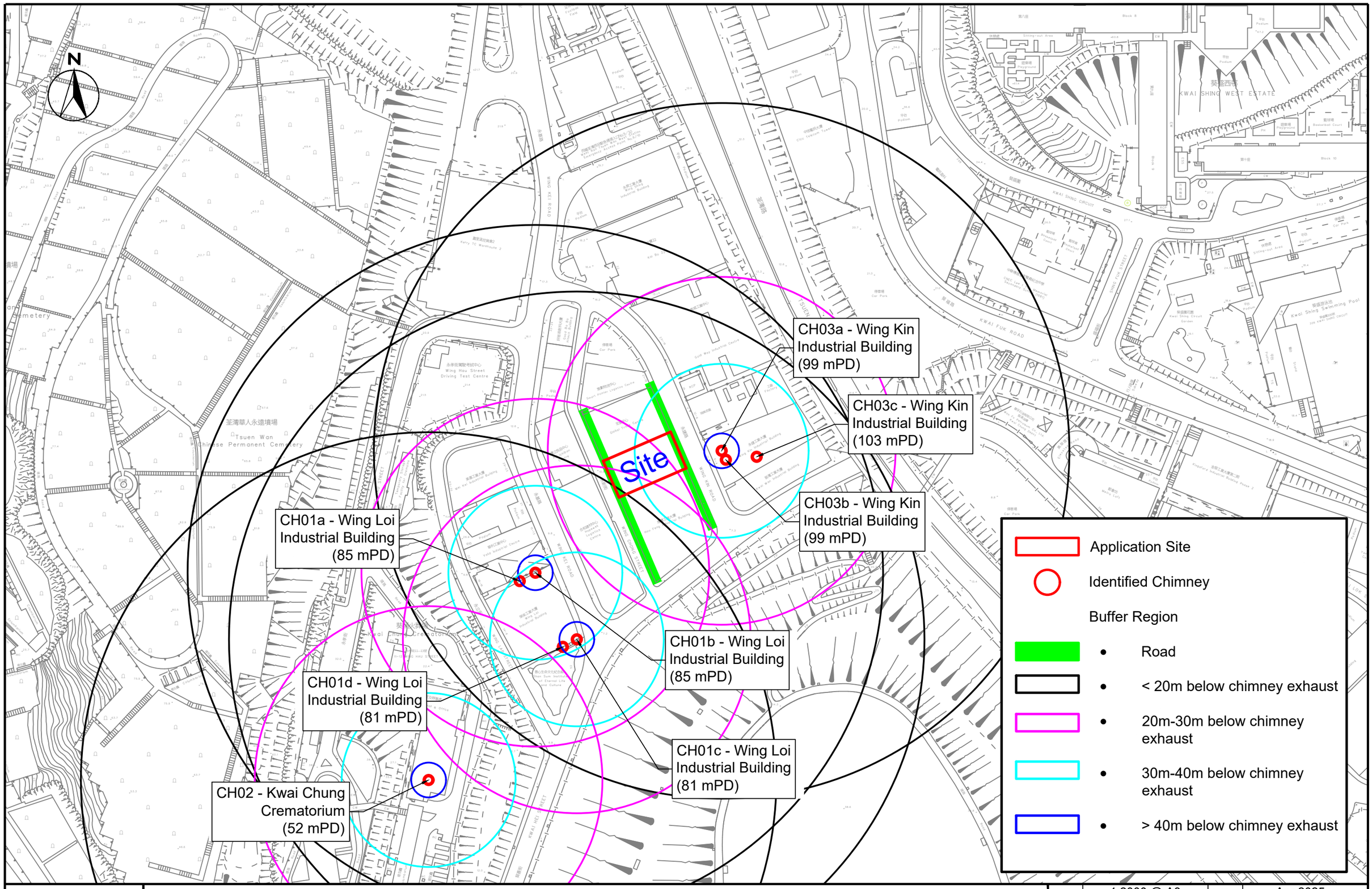


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Buffer Regions of Nearby Roads

SCALE	1:500 @ A3	DATE	Dec 2024
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-1
		REV	-

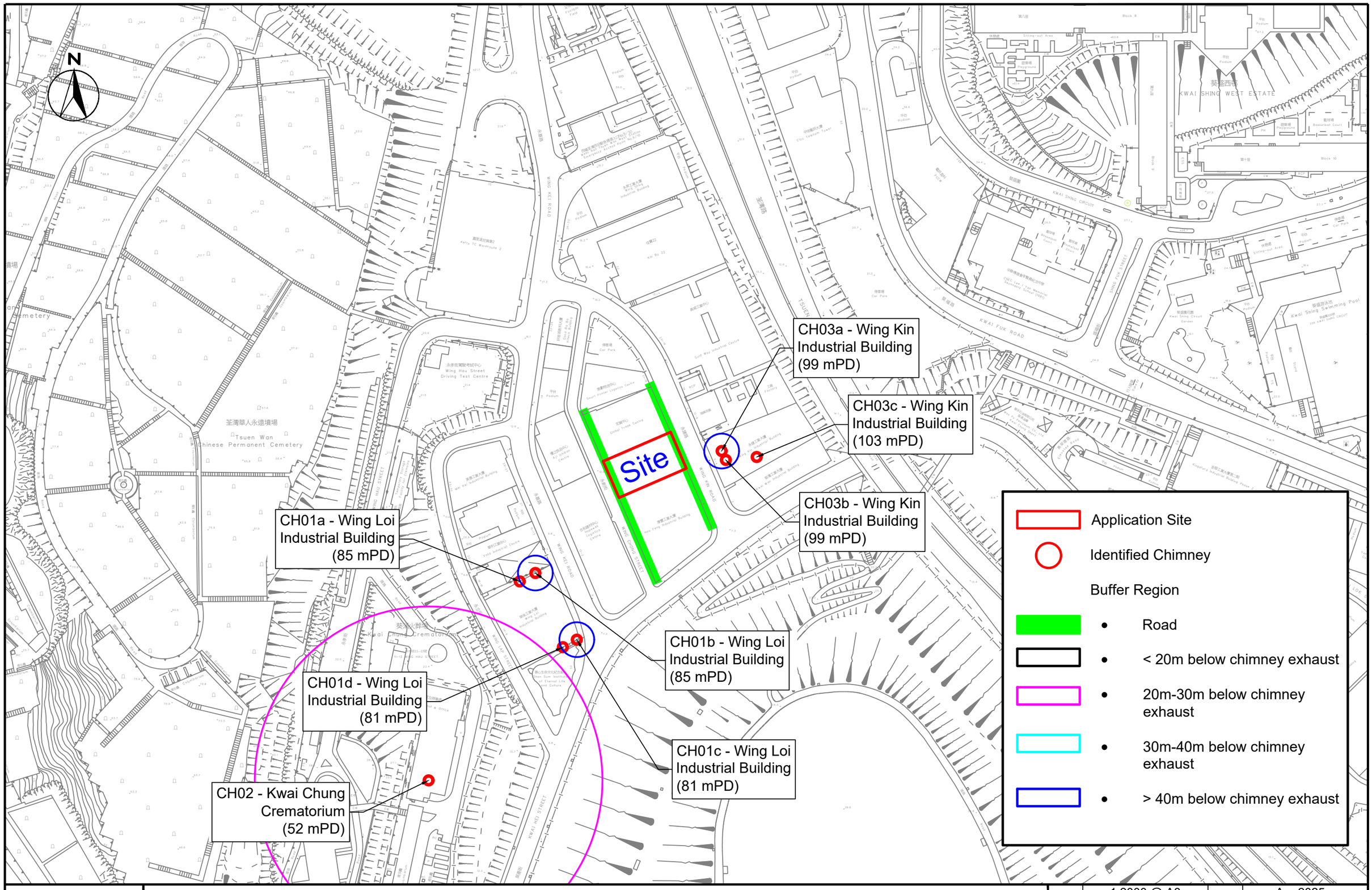


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Regions (Overall)

SCALE	1:2000 @ A3	DATE	Apr 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-2a
		REV	-

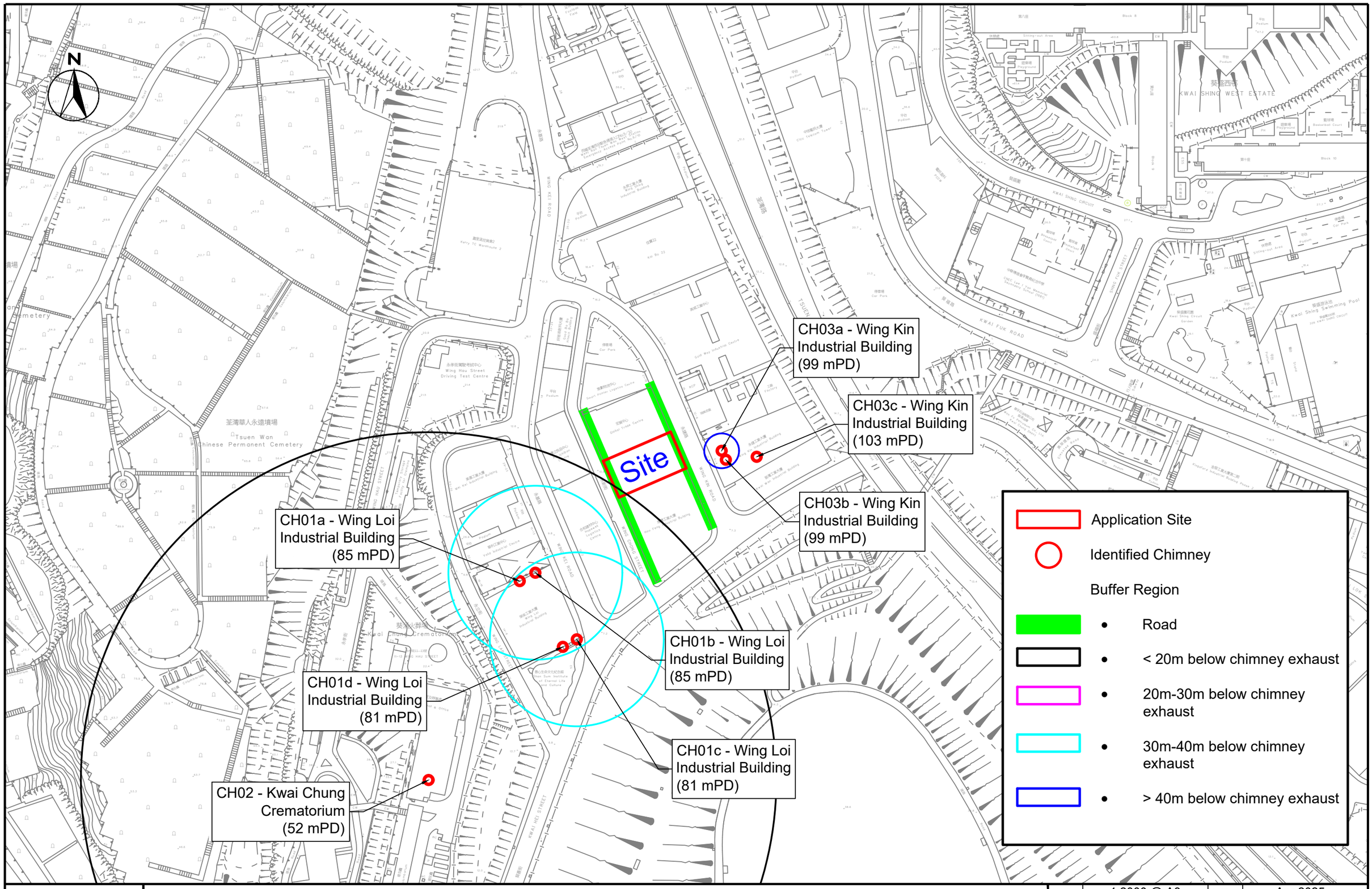


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Regions (Below 32mPD)

SCALE	1:2000 @ A3	DATE	Apr 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-2b
		REV	-

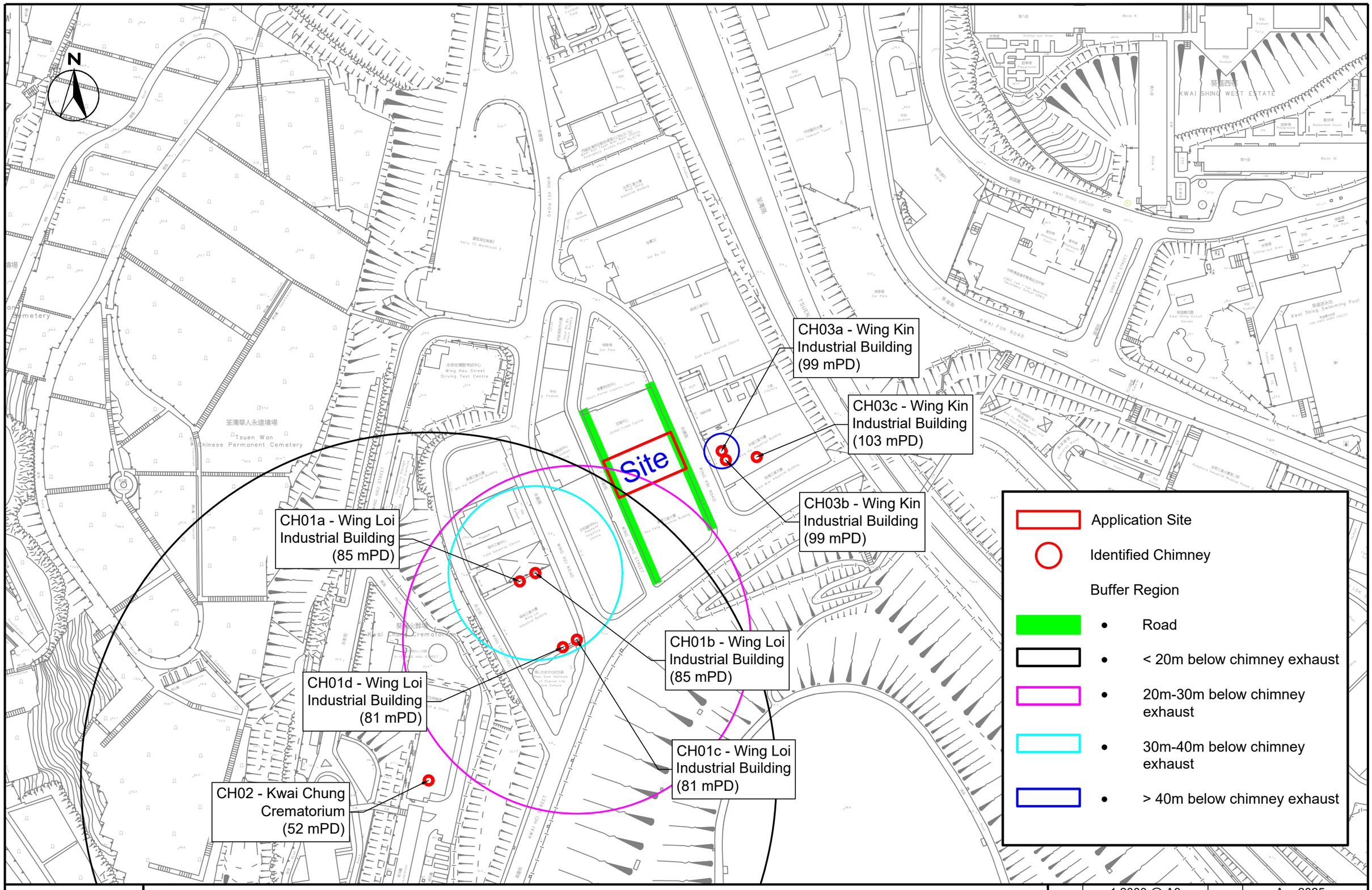


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Regions (32-51mPD)

SCALE	1:2000 @ A3	DATE	Apr 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-2c
		REV	-

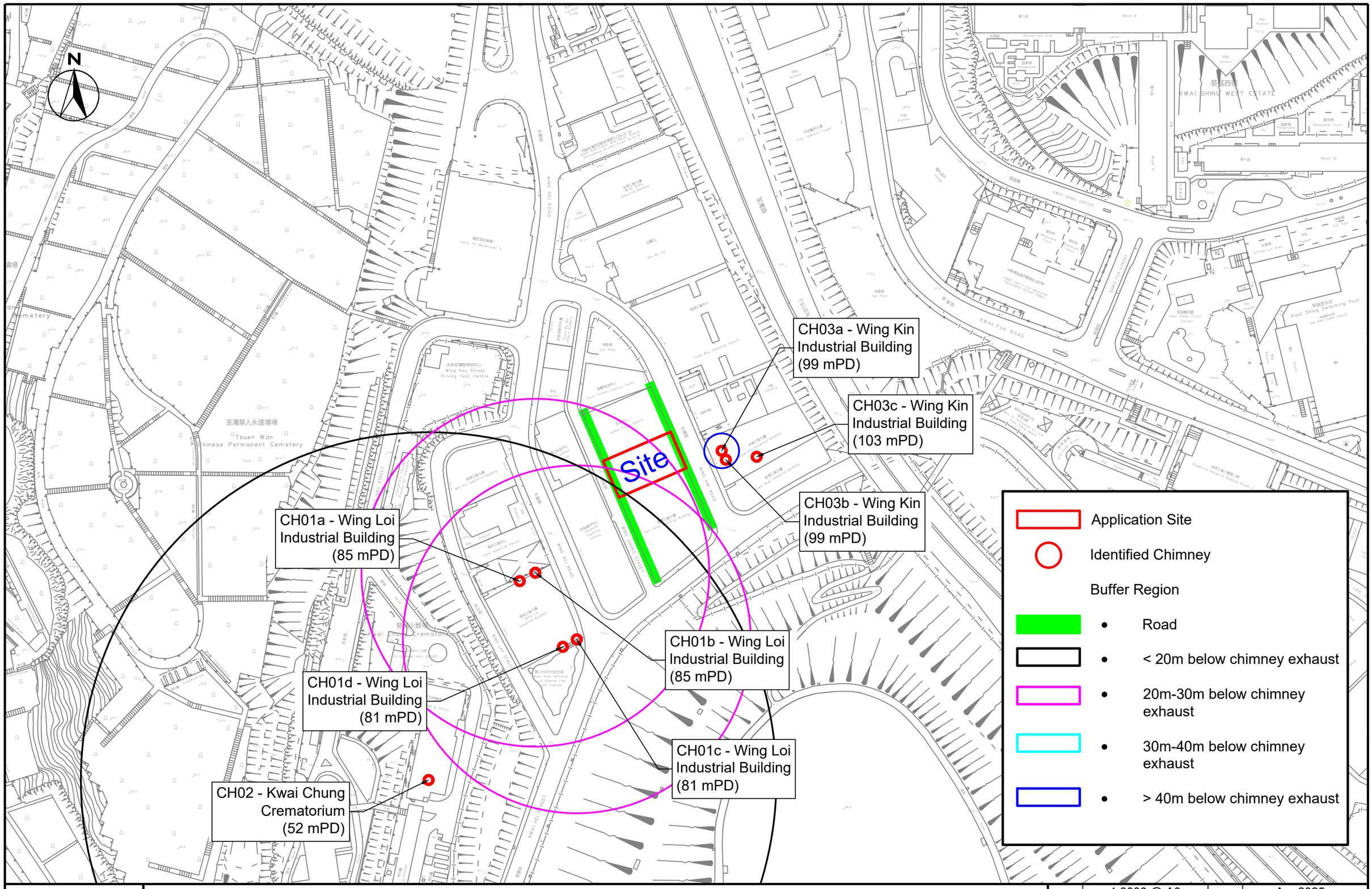


CINOTECH
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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Region (51-55mPD)

SCALE	1:2000 @ A3	DATE	Apr 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-2d
		REV	-

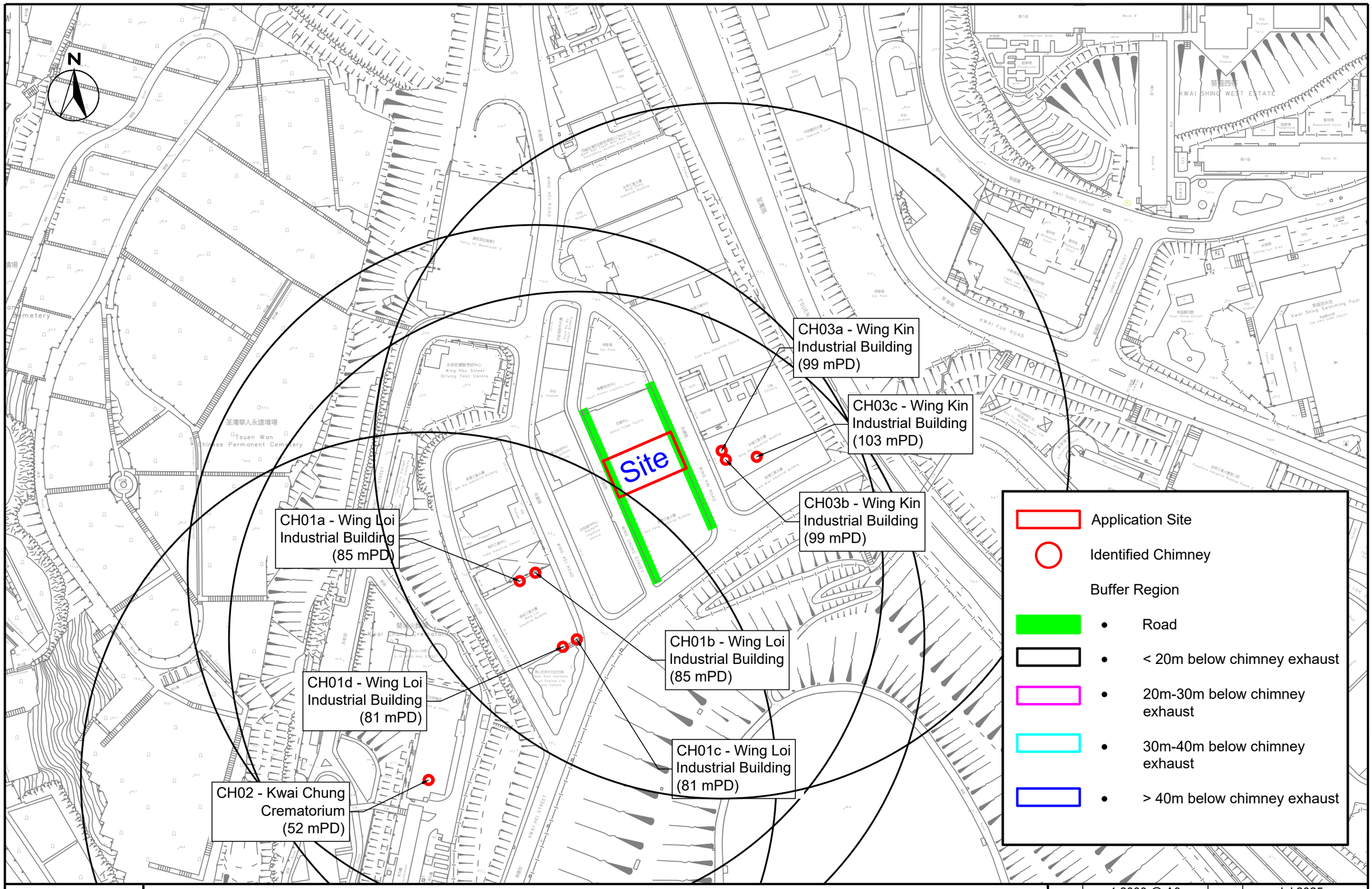


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Region (55-59mPD)

SCALE	1:2000 @ A3	DATE	Apr 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-2e
		REV	-

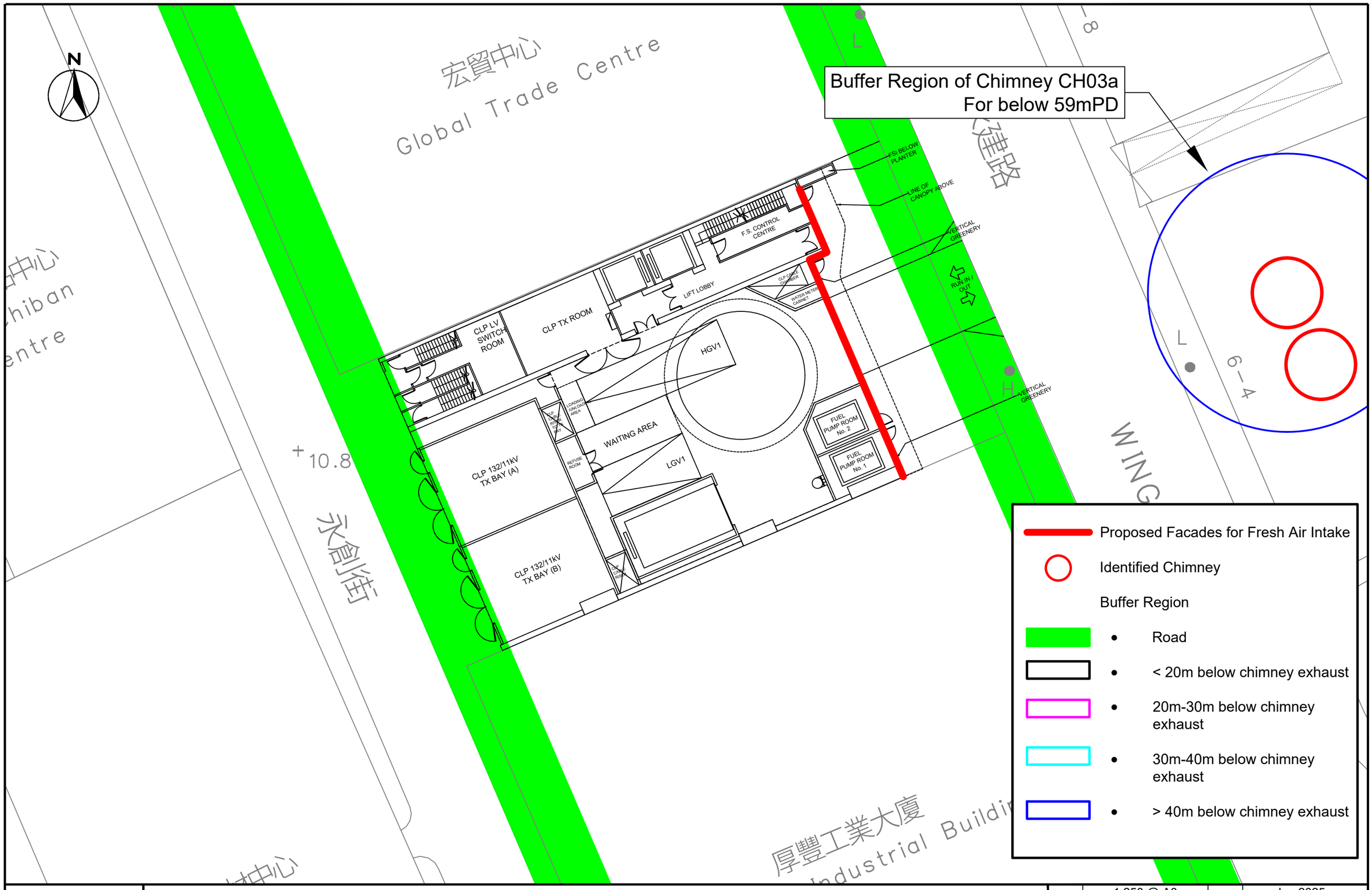


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Region (59-109.55mPD)

SCALE	1:2000 @ A3	DATE	Jul 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-2f
		REV	-

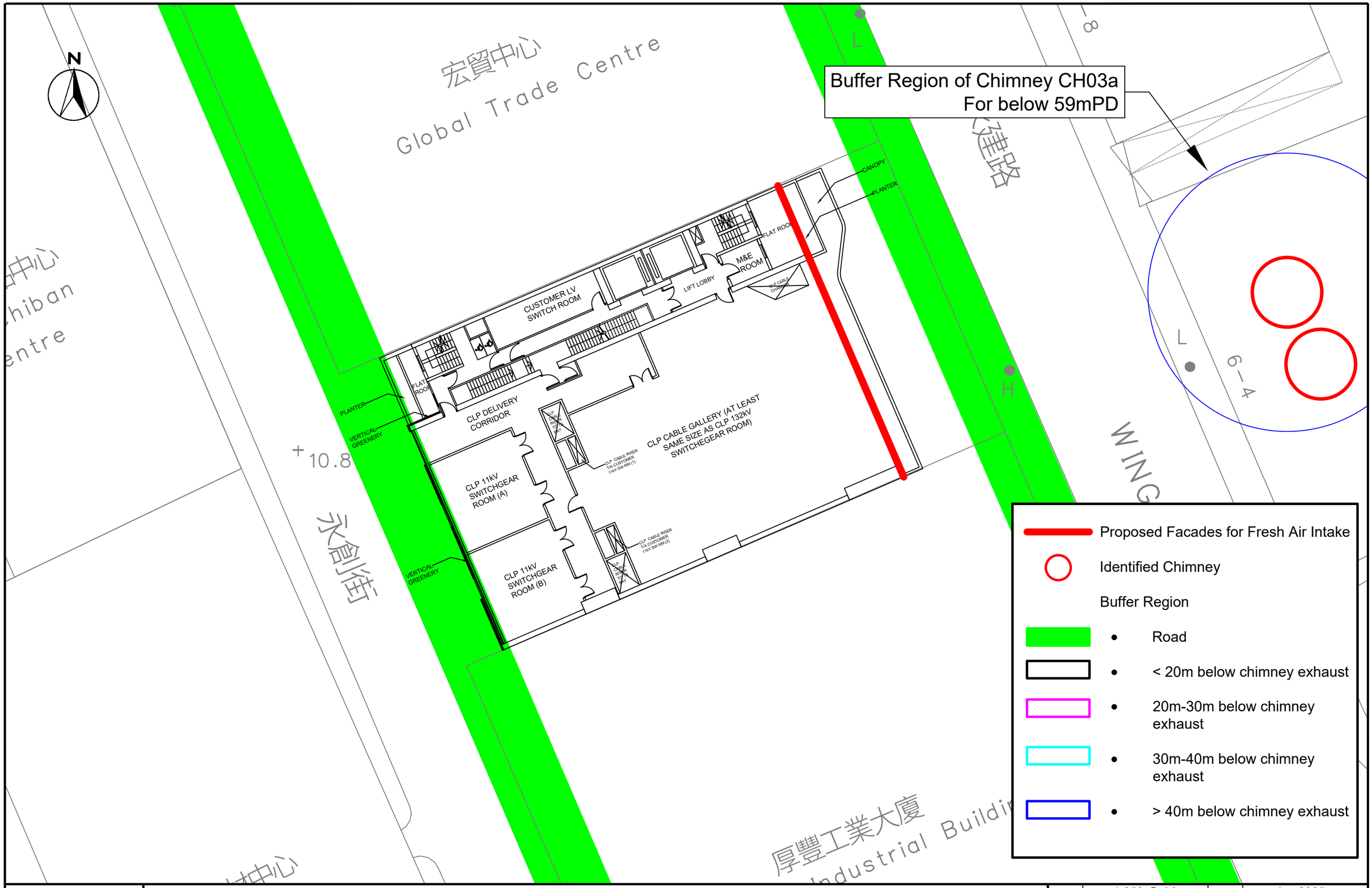


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (G/F - 9mPD to 20mPD)

SCALE	1:250 @ A3	DATE	Jun 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3a
		REV	-

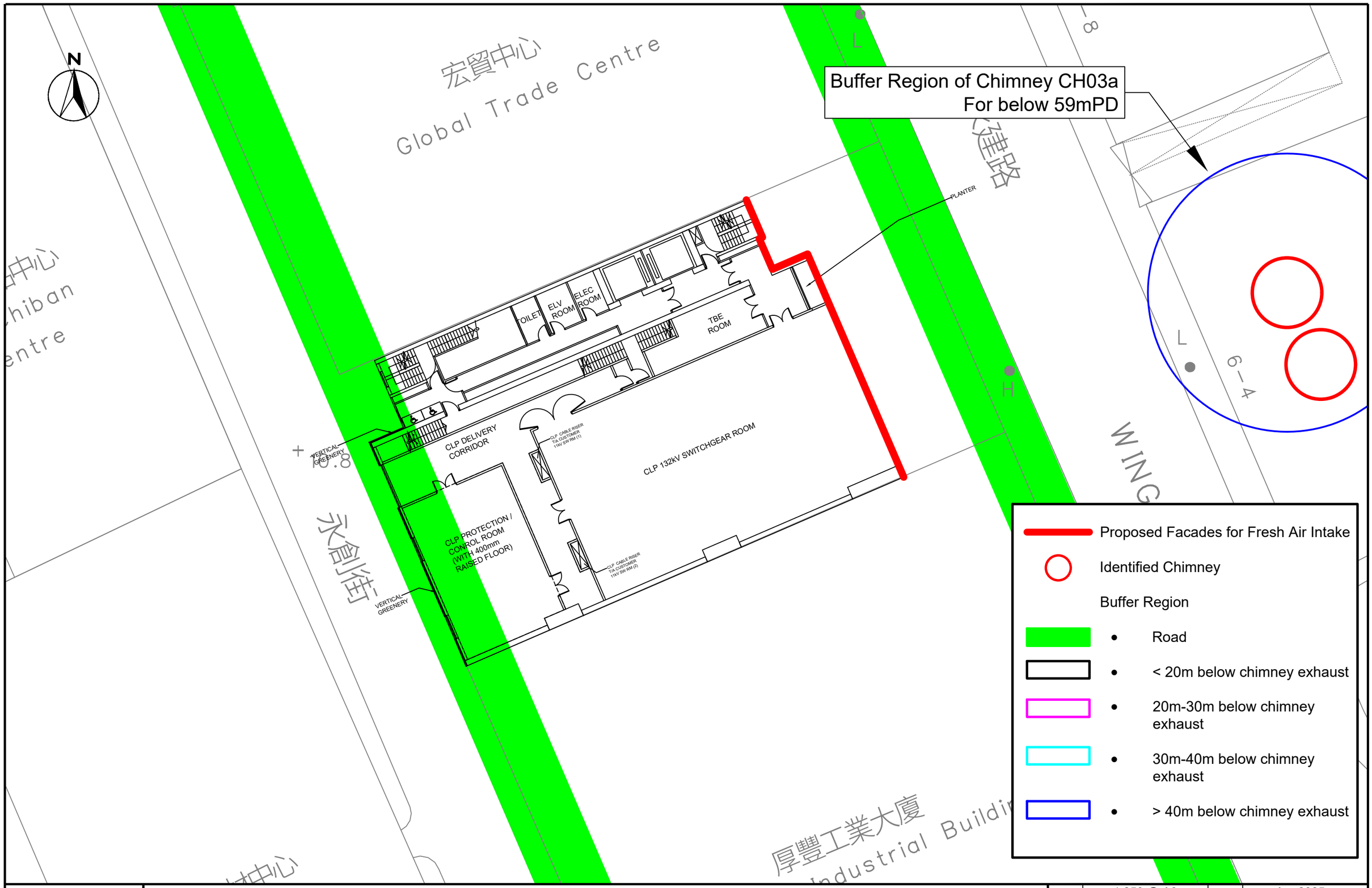


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (1/F - 20mPD to 26mPD)

SCALE	1:250 @ A3	DATE	Jun 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3b
		REV	-



CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (2/F - 26mPD to 32mPD)

SCALE	1:250 @ A3	DATE	Apr 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3c
		REV	-

Buffer Region of Chimney CH03a
For below 59mPD

Buffer Region of Chimney CH02
For above 32mPD

N

宏貿中心
Global Trade Centre

永康街

WING KIN ROAD

FLAT ROOF
M&E ROOM
OILET
ELV ROOM
ELEC ROOM
PLANTER
VERTICAL GREENERY
CLP BATTERY & CHARGER ROOM (B)
CLP BATTERY & CHARGER ROOM (A)
CUSTOMER 11kV SWITCHROOM (1)
CUSTOMER 11kV SWITCHROOM (2)
CLP CABLE RISER F/B TO CUSTOMER 11kV SW RM (1)
CLP CABLE RISER F/B TO CUSTOMER 11kV SW RM (2)
UPPER PART OF CLP 132kV SWITCHGEAR ROOM ON 2/F
CLP TELECOM ROOM (WITH 400mm RAISED FLOOR)

Proposed Facades for Fresh Air Intake

Identified Chimney

Buffer Region

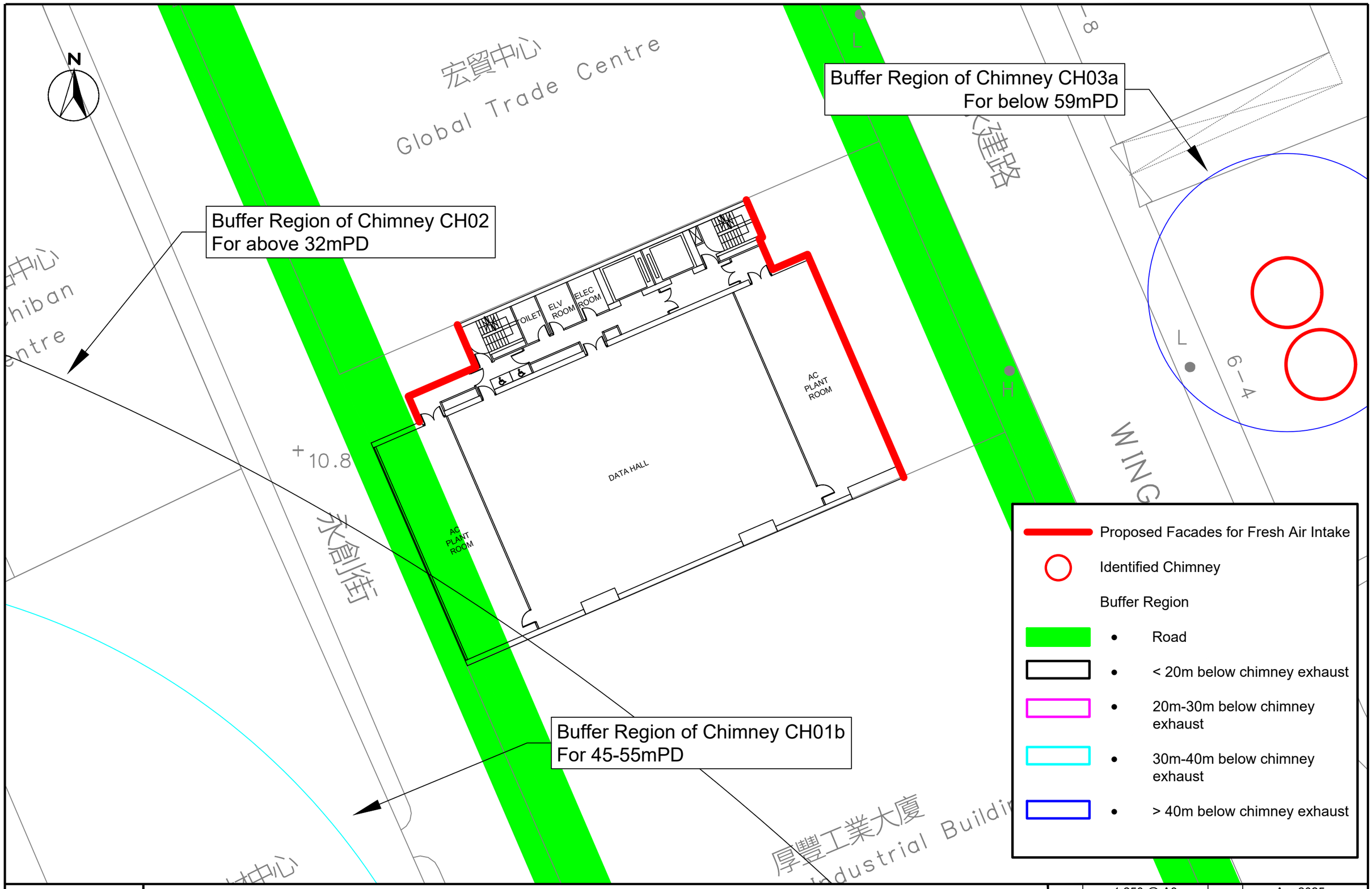
- Road
- < 20m below chimney exhaust
- 20m-30m below chimney exhaust
- 30m-40m below chimney exhaust
- > 40m below chimney exhaust

CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (3/F - 32mPD to 38mPD)

SCALE	1:250 @ A3	DATE	Apr 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3d
		REV	-

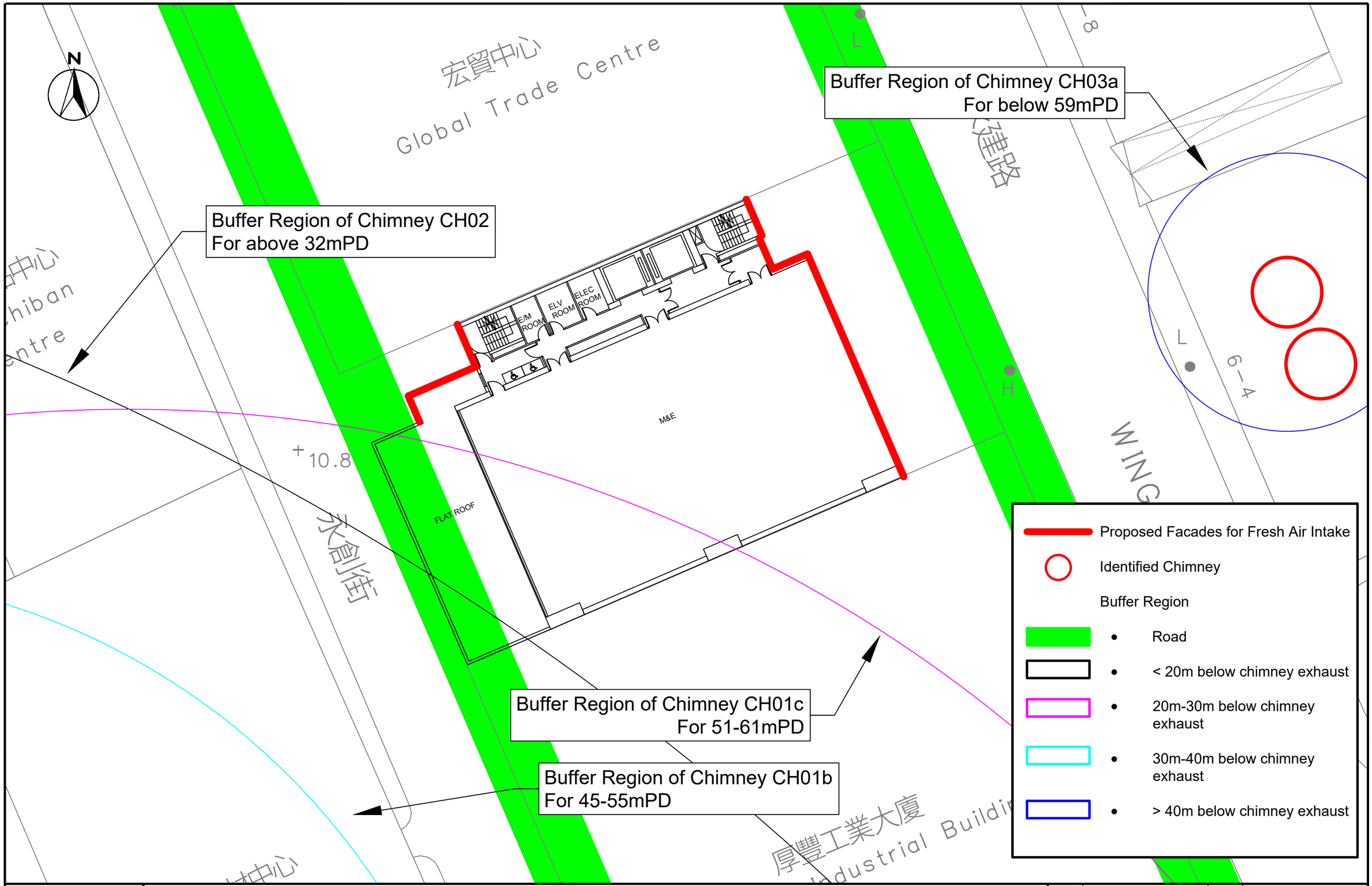


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (4-5/F - 38mPD to 49mPD)

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CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3e
		REV	-

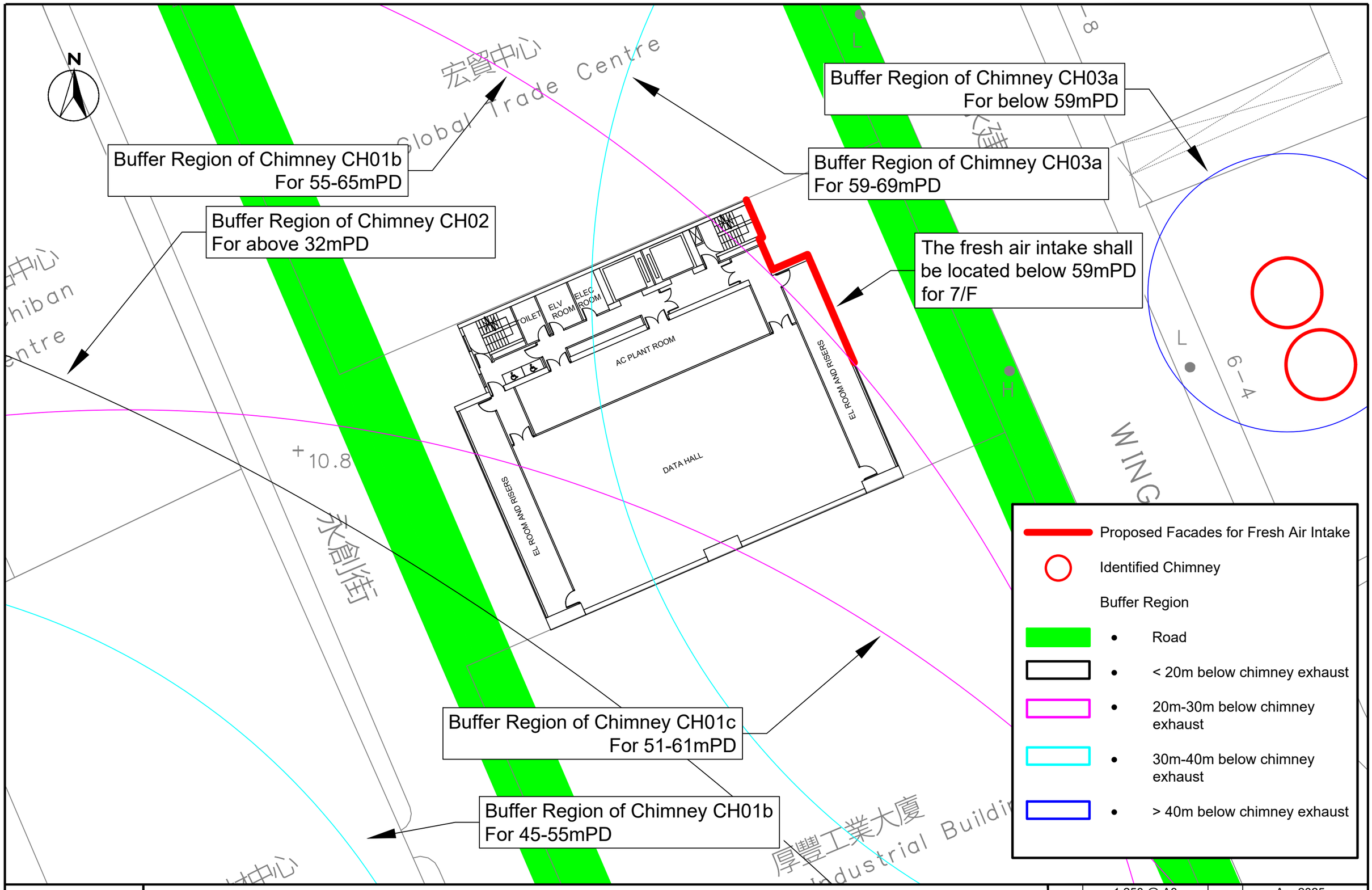


CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (6/F - 49mPD to 54.5mPD)

SCALE	1:250 @ A3	DATE	Apr 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3f
		REV	-



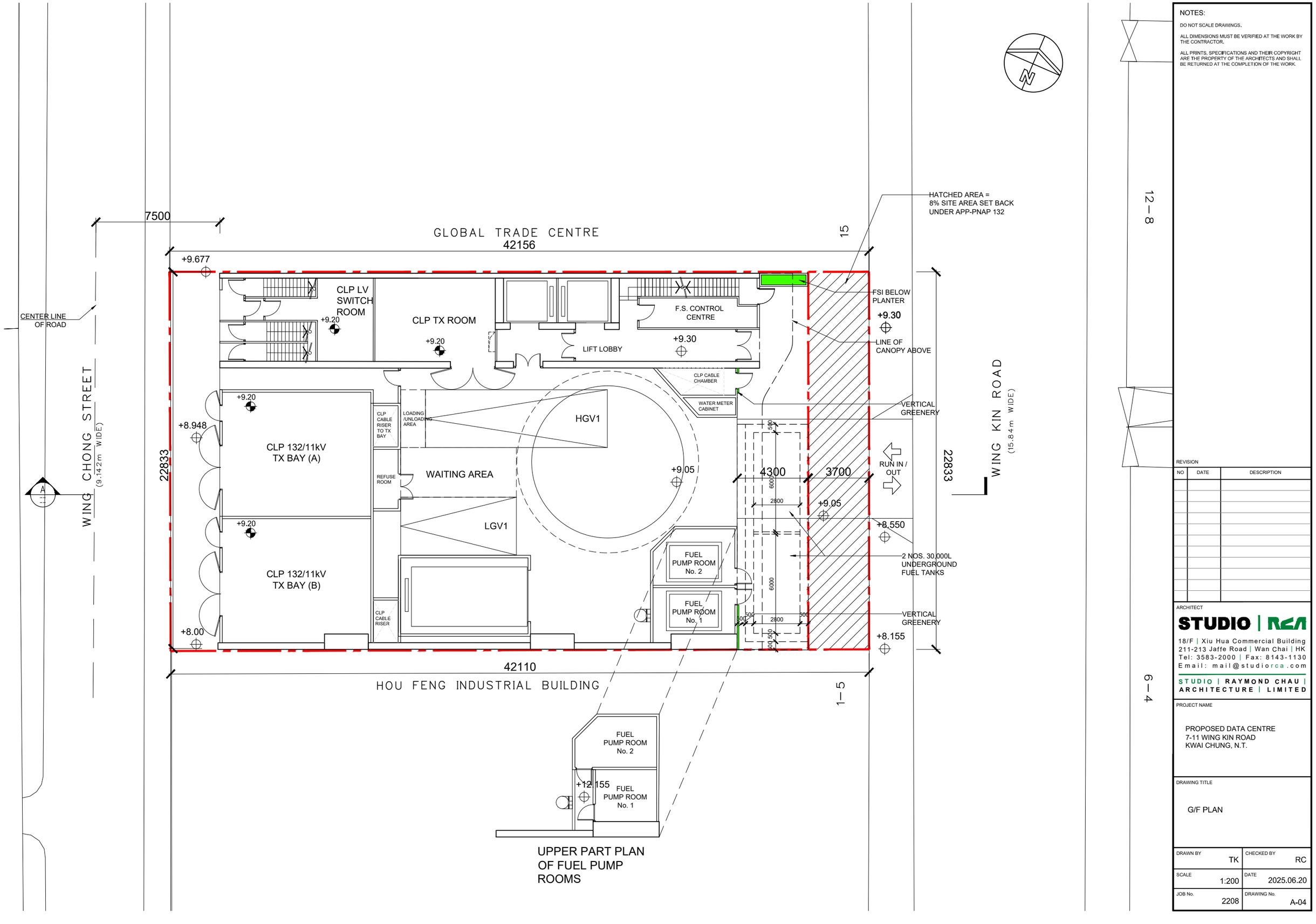
CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (7/F - 54.5mPD to 60mPD)

SCALE	1:250 @ A3	DATE	Apr 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3g
		REV	-

APPENDIX 2-1
TENTATIVE LAYOUT OF THE PROPOSED DEVELOPMENT



NOTES:

DO NOT SCALE DRAWINGS.

ALL DIMENSIONS MUST BE VERIFIED AT THE WORK BY THE CONTRACTOR.

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Tel: 3583-2000 | Fax: 8143-1130
Email: mail@studiorca.com

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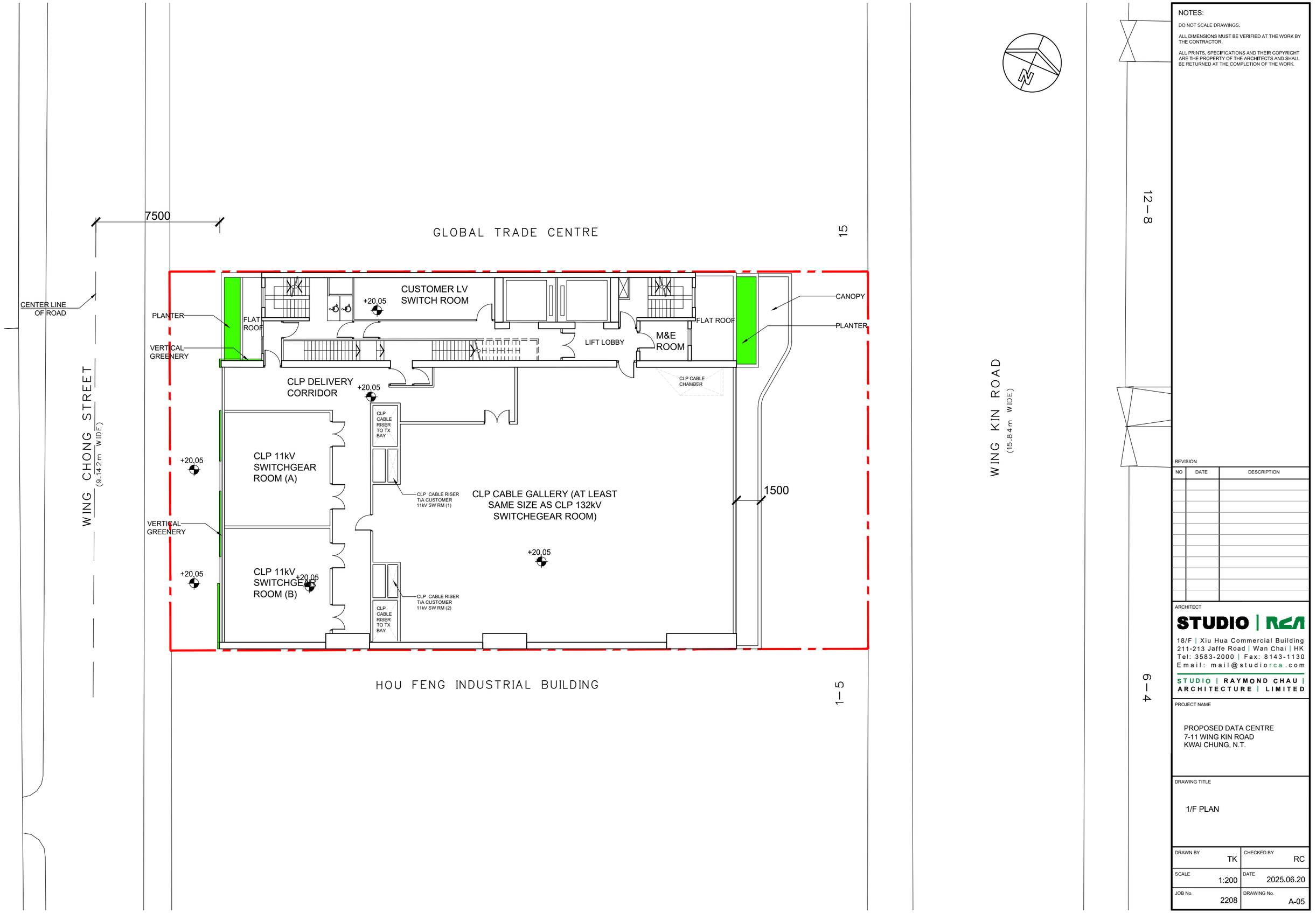
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

G/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.20
JOB No.	DRAWING No.
2208	A-04



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Email: mail@studiorca.com

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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

1/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.20
JOB No.	DRAWING No.
2208	A-05

GLOBAL TRADE CENTRE

15

WING CHONG STREET
(9.14.2m WIDE)

TOILET

ELV ROOM

ELEC ROOM

VERTICAL GREENERY

PLANTER

TBE ROOM

CLP DELIVERY CORRIDOR

+26.05

CLP CABLE RISER T/A CUSTOMER 11kV SW RM (1)

CLP PROTECTION / CONROL ROOM (WITH 400mm RAISED FLOOR)

+26.05

CLP 132kV SWITCHGEAR ROOM

+23.10

VERTICAL GREENERY

CLP CABLE RISER T/A CUSTOMER 11kV SW RM (2)

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

9 — 4

NOTES:

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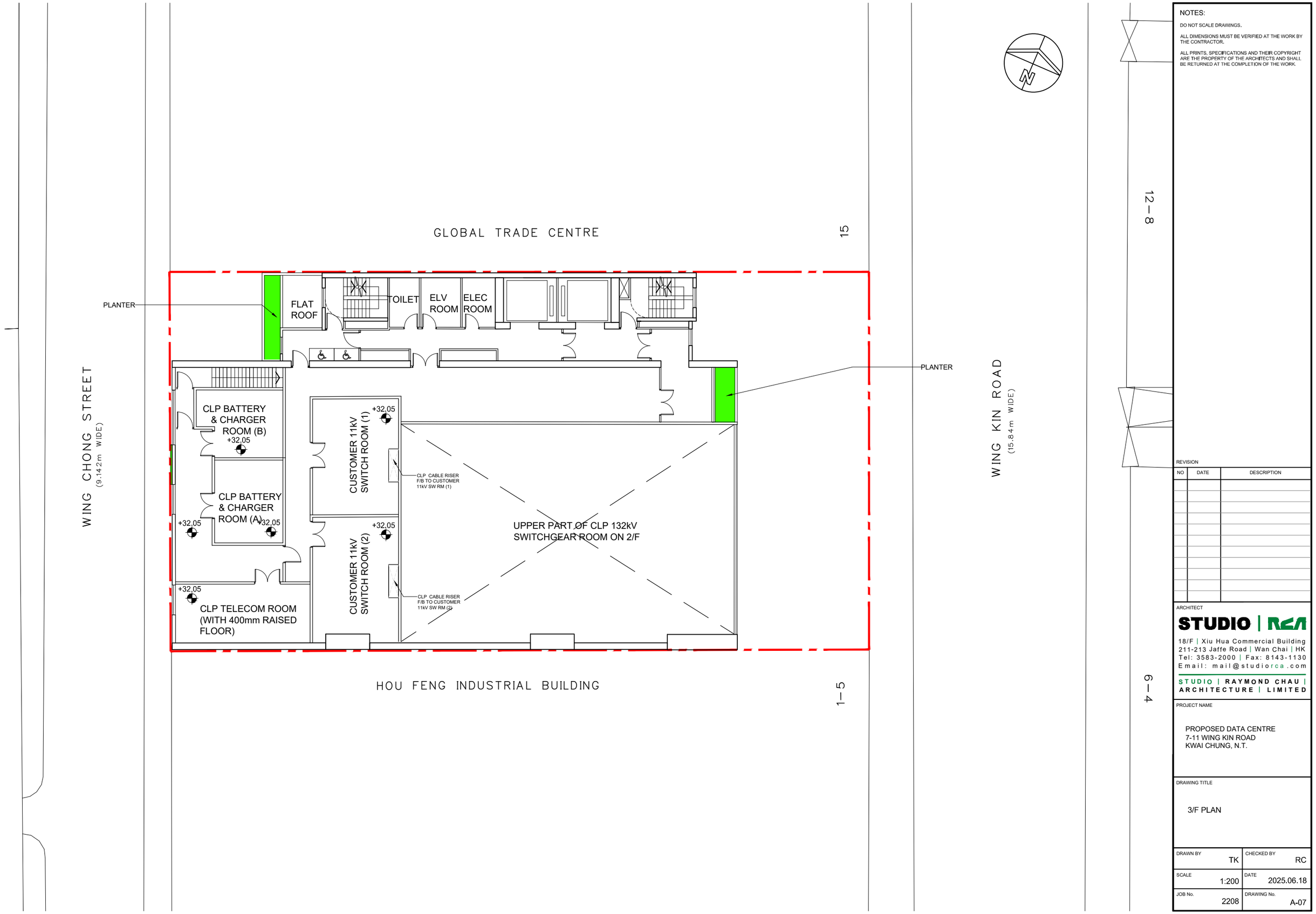
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

2/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.18
JOB No.	DRAWING No.
2208	A-06



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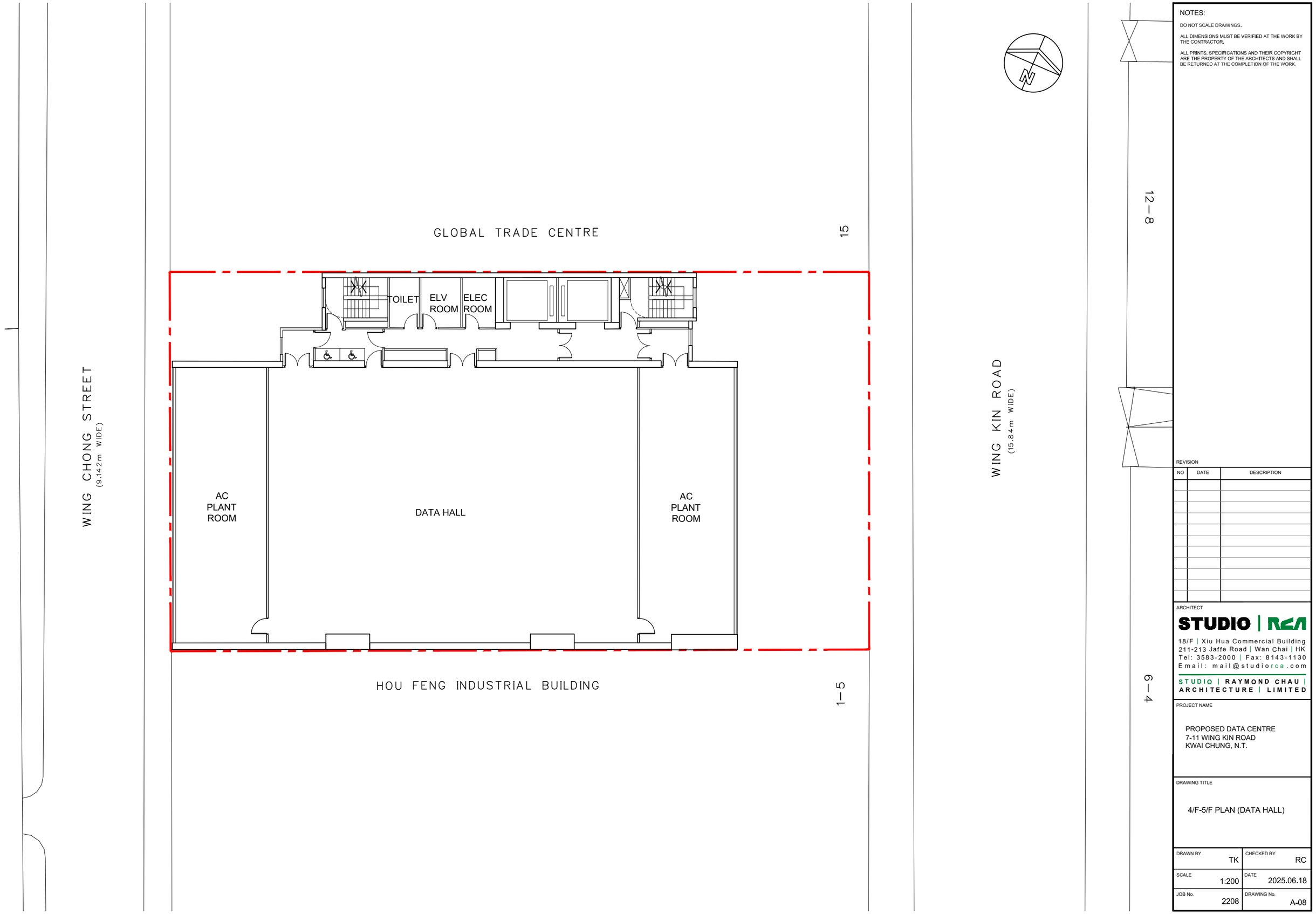
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

3/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.18
JOB No.	DRAWING No.
2208	A-07



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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

4/F-5/F PLAN (DATA HALL)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-08

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

E/M ROOM | ELV ROOM | ELEC ROOM

FLAT ROOF

M&E

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

NOTES:

DO NOT SCALE DRAWINGS.

ALL DIMENSIONS MUST BE VERIFIED AT THE WORK BY THE CONTRACTOR.

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STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

6/F PLAN (M&E)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-09

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

TOILET
ELV ROOM
ELEC ROOM
AC PLANT ROOM
EL ROOM AND RISERS
DATA HALL
EL ROOM AND RISERS

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

NOTES:

DO NOT SCALE DRAWINGS.

ALL DIMENSIONS MUST BE VERIFIED AT THE WORK BY THE CONTRACTOR.

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REVISION

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PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

7/F-9/F, 11/F-13/F &
15/F-16/F PLANS (TYPICAL
DATA HALL FLOOR PLANS)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-10

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15

E/M ROOM | ELV ROOM | ELEC ROOM

M&E

HOU FENG INDUSTRIAL BUILDING

1 — 5

WING KIN ROAD
(15.84m WIDE)

12 — 8

6 — 4

NOTES:

DO NOT SCALE DRAWINGS.

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STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

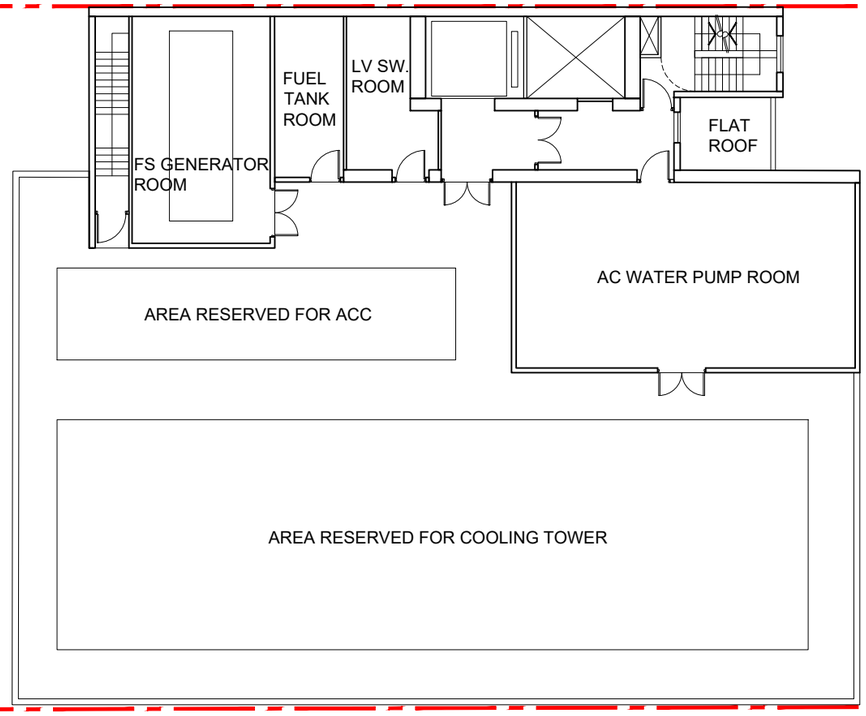
10/F & 14/F PLANS
(TYPICAL M&E FLOOR PLANS)

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-11

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15



HOU FENG INDUSTRIAL BUILDING

1 – 5

WING KIN ROAD
(15.84m WIDE)

12 – 8

9 – 4

NOTES:

DO NOT SCALE DRAWINGS.

ALL DIMENSIONS MUST BE VERIFIED AT THE WORK BY THE CONTRACTOR.

ALL PRINTS, SPECIFICATIONS AND THEIR COPYRIGHT ARE THE PROPERTY OF THE ARCHITECTS AND SHALL BE RETURNED AT THE COMPLETION OF THE WORK.

REVISION

NO	DATE	DESCRIPTION

ARCHITECT

STUDIO | RCA

18/F | Xiu Hua Commercial Building
211-213 Jaffe Road | Wan Chai | HK
Tel: 3583-2000 | Fax: 8143-1130
Email: mail@studiorca.com

STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

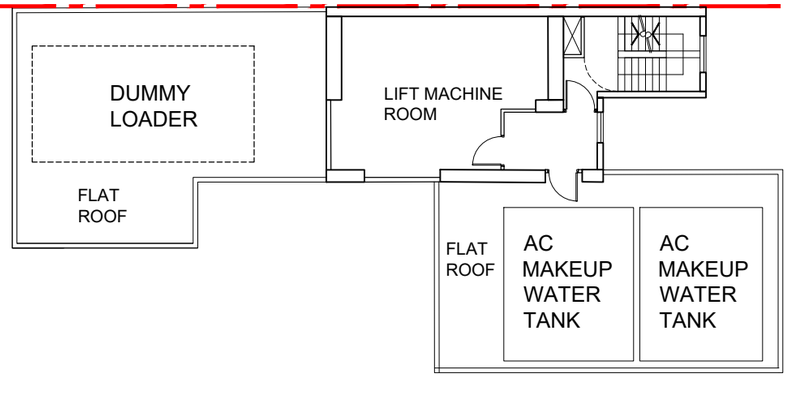
R/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE: 1:200	DATE: 2025.06.18
JOB No.: 2208	DRAWING No.: A-12

WING CHONG STREET
(9.142m WIDE)

GLOBAL TRADE CENTRE

15



HOU FENG INDUSTRIAL BUILDING

1—5

WING KIN ROAD
(15.84m WIDE)

12—8

6—4

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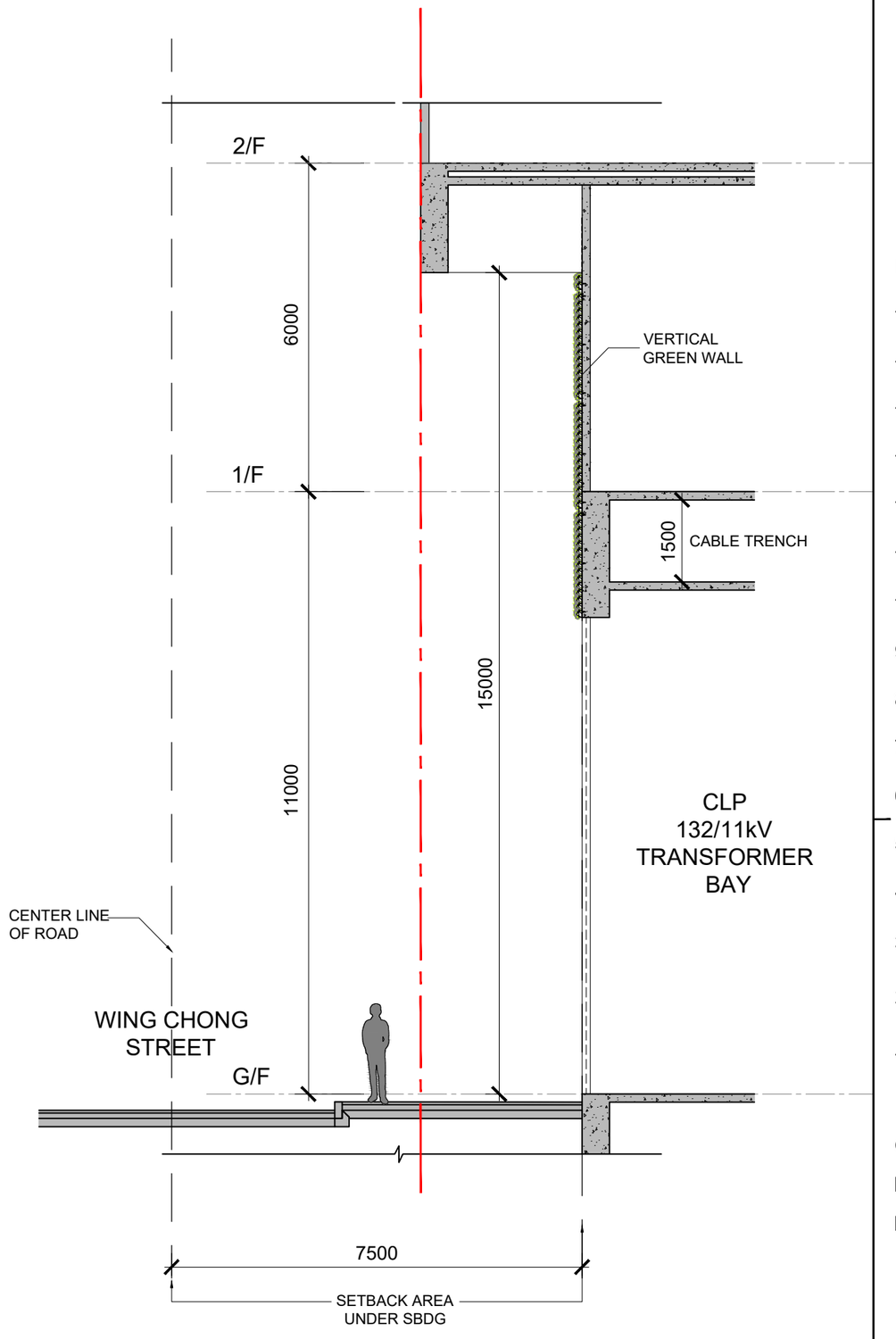
PROJECT NAME

PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

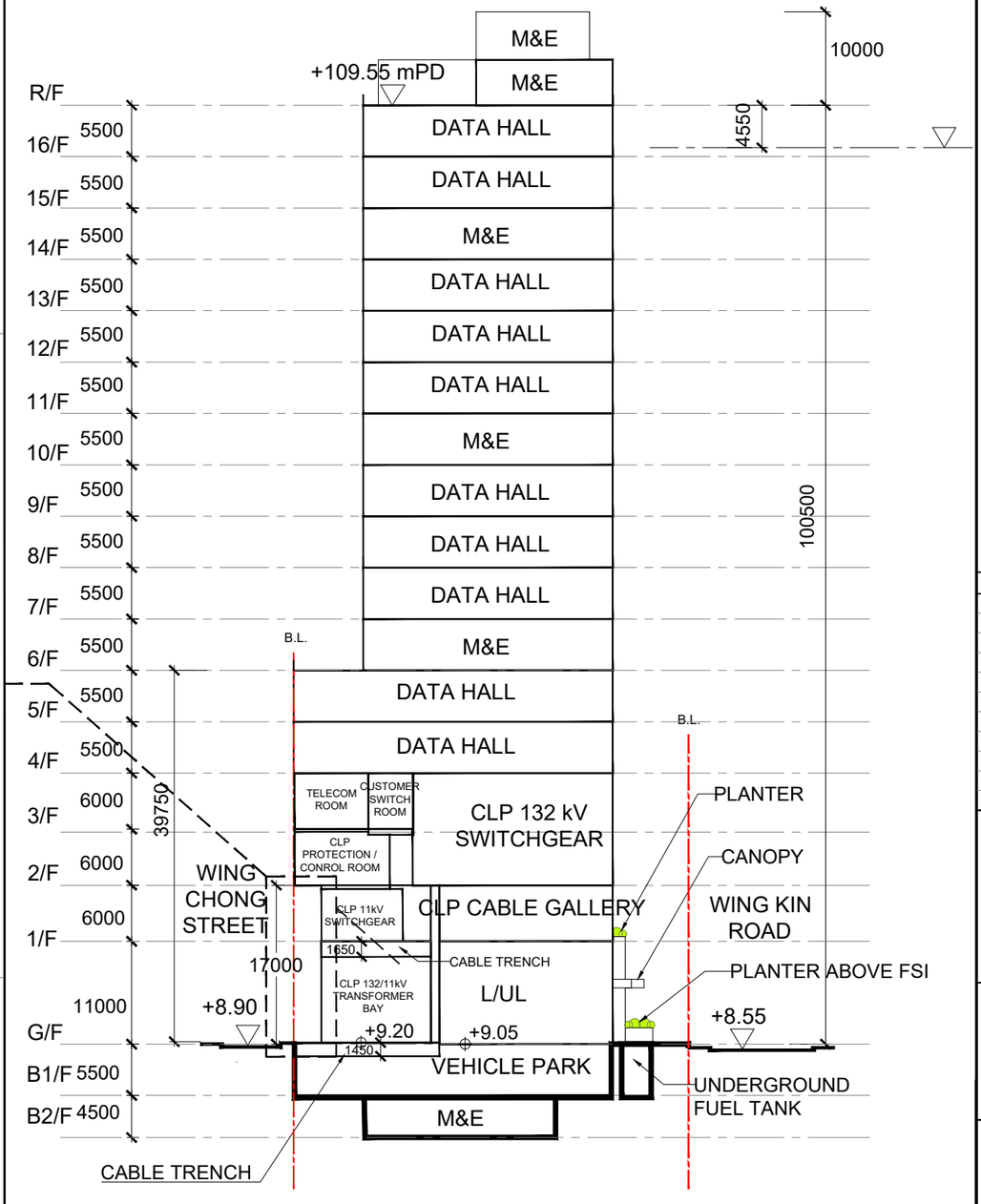
DRAWING TITLE

UR/F PLAN

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:200	2025.06.18
JOB No.	DRAWING No.
2208	A-13



SECTION OF VERTICAL GREEN WALL
SCALE: 1:100



NOTES:

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REVISION

NO	DATE	DESCRIPTION

ARCHITECT
STUDIO | RCA
18/F | Xiu Hua Commercial Building
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Tel: 3583-2000 | Fax: 8143-1130
Email: mail@studiorca.com
STUDIO | RAYMOND CHAU | ARCHITECTURE | LIMITED

PROJECT NAME

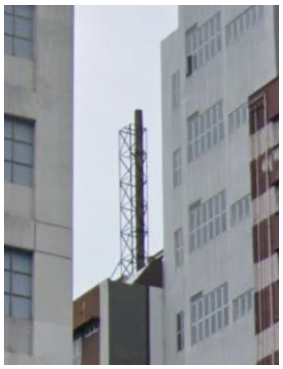
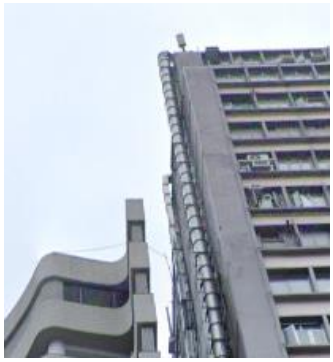
PROPOSED DATA CENTRE
7-11 WING KIN ROAD
KWAI CHUNG, N.T.

DRAWING TITLE

SECTION A-A

DRAWN BY	CHECKED BY
TK	RC
SCALE	DATE
1:750	2025.06.18
JOB No.	DRAWING No.
2208	A-14

APPENDIX 2-2
IDENTIFIED CHIMNEY IN THE VICINITY

ID	Description	Photos
CH01a & CH01b	**Wing Loi Industrial Building** Height of chimney: ~85 mPD (77+~8) Distance from site boundary ~64 m	 viewed from north  viewed from northeast
CH01c & CH01d	**Wing Loi Industrial Building** (a) Height of chimney: ~81 mPD (77+~4) Distance from site boundary ~85 m	 viewed from east  viewed from east
CH02	**Kwai Chung Crematorium** Height of chimney: ~52 mPD Distance from site boundary ~196 m	 viewed from south  viewed from east

ID	Description	Photos
CH03a & CH03b	**Wing Kin Industrial Building** (a) Height of chimney: ~99 mPD (96+~3) Distance from site boundary ~23 m	 viewed from southwest
CH03c	**Wing Kin Industrial Building** Height of chimney: ~103 mPD (95+~8) Distance from site boundary ~40 m	 viewed from southwest

ID	Description	Photos
--	**Mei Kei Industrial Building** A Chimney likely structure is identified in google 3D map only. No industrial Chimney identified.	 **Captured from 3D view of google map (last checked on 23rd Dec 2024)**  **View from North**  **Captured from Areial Photo E194703C (dated 1st Mar 2023)**

APPENDIX 6-1
CORRESPONDENCE WITH TRANSPORT DEPARTMENT REGARDING ROAD CLASSIFICATION

s.16 Planning application No. A/KC/510 - Comments from Government departments (batch 1 and batch 2)

From: **Ying Yin LEE<yingyinlee@td.gov.hk>** Mon, Apr 14, 2025, 10:57 AM
To: CKM Asia<mail@ckmasia.com.hk>

Dear Tommy,

The road types are correct please.

Regards,
Brian YY LEE
E/SD, TSSD
Office: 2399 2741

From: "CKM Asia" <mail@ckmasia.com.hk>
To: "Ying Yin LEE" <yingyinlee@td.gov.hk>
Date: 11/04/2025 05:43 PM
Subject: s.16 Planning application No. A/KC/510 - Comments from Government departments (batch 1 and batch 2)

Dear Brian,

As discussed today, Environmental Protection Department in their comment for the captioned project (see item 43 in attached **item 1**), requested for road type for 2 roads. It is much appreciated if you could confirm if you agree to the road type, which we have assumed for the 2 roads as follows:

1) Wing Kin Road – Local Distributor
2) Wing Chong Street – Local Distributor

Should you have any queries, please do not hesitate to contact the undersigned.

Thank you for your attention.

Regards.
Tommy Law

CKM Asia Limited
Traffic and Transportation Planning Consultant
21st Floor, Methodist House
36 Hennessy Road
Wan Chai, Hong Kong
Tel: (852) 2520 5990
Fax: (852) 2528 6343
Email: mail@ckmasia.com.hk
Website: www.ckmasia.com.hk

[attachment "item 1 - A_KC_510 - (Batch 1 Comments).pdf" deleted by Ying Yin LEE/TD/HKSARG]

KJL Ltd.
development consultancy

File Ref.: TPB/A/KC/510

BY EMAIL & BY POST (tpbpd@pland.gov.hk)

4th September 2025

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

Attn: The Secretary of the Town Planning Board

Dear Sir/Madam,

7-11 Wing Kin Road, Kwai Chung, New Territories
Section 16 Planning Application No. A/KC/510

We refer to the captioned section 16 application received by the Town Planning Board (the Board) on 18.3.2025 and 21.3.2025.

As per Town Planning Board Guideline No. 32B, the applicant submits our responses, along with supporting information, to clarify the minor comments and queries from the Planning Department and the Environmental Protection Department, which we received through the Planning Department on 27.8.2025. We submit four hard copies and one soft copy of the R to C table and supporting information for the Board's consideration.

This further information is considered not to be proposing a material change in the nature of the application. Therefore, it could be exempt from the publication and recounting requirements, as per TPB PG-No. 32B. However, if this further information is accepted but not exempt from the publication and recounting requirements, we would still like to proceed with the application, providing the additional information.

Should you have any queries, please contact Ms. Mina Leung at [redacted] or the undersigned at [redacted] Thank you.

Yours sincerely,

Kenneth J. Li
Director

Encl.

RECEIVED
- 4 SEP 2025
Town Planning Board

c.c. Tsuen Wan and West Kowloon District Planning Office, Planning Department – Attn: Messrs. W.C. Lui and Cecil Chow [By Email at wclui@pland.gov.hk and cccchow@pland.gov.hk

Address: Room 1502, 15/F, Parkes Commercial Centre, 2-8 Parkes Street, Kowloon, Hong Kong

Application under Section 16 of the Town Planning Ordinance
Proposed Minor Relaxation of Plot Ratio and Building Height Restrictions
for Permitted Information Technology and Telecommunications Industries (Data Processing Centre)
at 7-11 Wing Kin Road, Kwai Chung, New Territories
in DD 446, Kwai Chung Town Lot 145 and adjoining Government Land
at Wing Chong Street (Application No. A/KC/510)

Departmental Comments (Further Information (F.1.)(2)	Response to Comments
Comments by Planning Department (27.8.2025)	
Revised Visual Impact Assessment (VIA) 1. Paragraph 4.1 – The 5th line should read as "2.948m building setback fronting Wing Chong Street from G/F to 1/F" to tally with Table 3.3 of the revised Planning Statement (PS).	The text in **Paragraph 4.1** has been revised. Please refer to the enclosed replacement page 3 in **Attachment 1**.
2. Figures 1 to 10 – "Date Centre" in the title of the figures should read as "Data Centre".	The word has been amended in **Figures 1** to **10**. Please refer to the enclosed Figures 1 to 10 in **Attachment 1**.

Comments from Environmental Protection Department (27.8.2025)	
Revised Air Quality Impact Assessment (AQIA) 3. Section 2.2.2: Please verify whether the proposed development operates exclusively on electricity or if any fuel-powered equipment will be deployed. As emergency generator(s) will be installed, please clarify whether routine running tests will be conducted. It is inappropriate to conclude that "The proposed development…is not expected to generate air pollutants" without providing any information on the routine running tests. Information on the testing frequency and duration, etc.., should be supplemented.	The proposed development is intended solely for data centre use and will operate exclusively on electricity supplied by CLP. Backup generators will be provided to address potential electricity outages or emergencies. No diesel or other fossil fuels will be utilised during the normal operation of the proposed development. The proposed development is not considered a source of air pollutants during normal operation. During routine testing, given the short operational duration of the backup generators and the necessary mitigation measures to be confirmed in the APCP, adverse air quality impacts arising from the routine testing are not anticipated. The information regarding the backup generator has been supplemented in **Sections 2.2.2 to 2.2.7** of the revised AQIA report, attached as **Attachment 2**.
4. Section 2.3.1: Please note that an updated site survey is required to verify the current status of air emission sources in the surrounding environment.	An updated site visit was conducted on 28th August, 2025. **Section 2.3.1** and **Appendix 2-2** have been updated accordingly.
5. Sections 2.3.1 – 2.3.3, 6.2.3, Appendix 2.2: Please be reminded that the applicant and their consultants are responsible for verifying the accuracy of the chimney data by their own site surveys. If the information regarding the industrial chimneys is later discovered to be incorrect, the assessment results presented in the planning application will be considered invalid.	Noted.

6. Section 2.3.2: Please clarify the meaning of "the latest information" in Line 2. Please provide supporting information, such as written confirmation from the operator or building management, and/or site surveys, to substantiate the claim that no chimney exists on the roof of Mei Kei Industrial Building.	It is noted that a chimney-like structure was present on the roof of the Mei Kei Industrial Building, as indicated by a 3D map from Google. However, based on the site visit on 28th August 2025, there is currently no chimney on the roof of the Mei Kei Industrial Building. **Appendix 2-2** has been updated accordingly.
7. Section 2.3.3: -The statement that no significant emissions are expected from the data center lacks justification. Please provide information on the operation of the data center, e.g. whether routine running tests on emergency generator(s) will be conducted similar to our comments on Section 2.2.2 above. -The meaning of the last sentence is unclear.	The chimneys of Citic Telecom Tower have been included in the assessment. **Section 2.3.3**, **Table 2-1** and **Appendix 2-2** have been revised accordingly.
8. Section 2.4.1: The first sentence is not justified. Potential air quality impacts depend on both traffic intensity and the distances between air-sensitive uses and air emission sources.	To avoid confusion, **Section 2.4** has been rewritten as follows: According to the Hong Kong Planning Standards and Guidelines (HKPSG), areas designated for active or passive recreational uses should be located 5 to 20 m away from road traffic. Since only minor roads are within 20 meters of the site boundary, potential air quality impacts from nearby road traffic are expected to be limited. Conversely, areas for active or passive recreational uses should be situated 10 to 200 m away from industrial chimneys. Given that multiple industrial chimneys are located within 200 m of the site boundary, the primary concern for the air quality of the proposed development arises from these nearby industrial chimneys.

9. Table 3-2: The format of the footnote marker (e.g. [ii] and [4]) should be consistent. Please revise.	Revised accordingly.
10. Section 4.3.1: Please replace "dark smoke" in Line 2 to "particulates".	**Section 4.3.1** has been revised accordingly.
11. Section 4.3.6: Dust reduction measures should be implemented during the construction phase. Please revise.	**Section 4.3.6** has been revised as follows to avoid confusion. In accordance with the Air Pollution Control (Construction Dust) Regulation, contractors and site agents are obligated to inform the EPD and implement dust reduction measures to minimise dust emissions throughout the construction phase, including demolition, site formation, foundation construction, and superstructure construction.
12. Section 5.1.2: To substantiate that the scale of construction activities of this Project will be limited, please provide information on the size of the site formation or excavation area, the volume of excavated materials to be managed, the maximum number of construction trucks and mechanical equipment to be deployed at the worksite at any given time, and etc.	Due to the small gross site area (964.2m^2), the scale of construction activities for the Project will be limited. The Site currently houses a 2-storey industrial building, and the demolition works are considered minor, as only a single low-rise development is involved. It is important to note that excavation for the basement is required for the entire Site, with an excavation depth of ~10 meters. This is expected to generate ~9,642 m^3 of inert C&D material (calculated as 964.2 m^2 x 10 m). The maximum number of Powered Mechanical Equipment (PME), including trucks, expected to be deployed at the worksite is 8, excluding small plants such as water pumps and fans. **Section 5.1.2** and **Table 5-1** have been revised accordingly.

13. Section 5.3.1: Office areas, if present within industrial buildings, should be classified as air-sensitive uses. Please review and revise this Section and Table 5-2 accordingly.	Industrial development is considered ASRs in the current assessment. **Sections 2.3.5, 5.3.1, Table 5-2,** and **Figure 5-1** have been revised accordingly.
14. Section 5.4.1: Please provide the maximum number of PME to be deployed at the worksite at any given time to demonstrate that it will be limited.	The number of PMEs expected to be used on-site will be limited to a maximum of 8. As a result, no significant impact is anticipated from the operation of PME. **Section 5.4.1** has been revised accordingly.
15. Section 5.4.3: In addition to the demolition of the existing structure, please identify all potential dust emission sources during the construction phase.	Sources of dust during the construction phase include demolition, foundation and superstructure construction activities, as well as the handling and transportation of temporary stockpiles, dusty materials, excavated materials, and concrete production. Additionally, particulates emitted from plant equipment could pose a concern if not properly mitigated. The exposed earth after the completion of work may also serve as a potential dust source. **Sections 5.4.3 - 5.4.5** have been revised accordingly.
16. Section 6.1.1: - Please provide information on the operation of the data center to justify that no air pollutant emissions will be generated from the proposed development. - Please clarify whether routine running tests on emergency generator(s) would be conducted. If yes, air pollutant emissions are expected and their potential air quality impacts should be reviewed as mentioned in our comments on Section 2.2.2 above. -Please confirm whether the proposed development has no openable windows and relies exclusively on fresh air intakes for ventilation.	The proposed development is intended solely for data centre use and will operate exclusively on electricity supplied by CLP. As stated in **Sections 2.2**, 16 backup generators powered by diesel fuel, with a total capacity of 28,000 kW, will be installed. Routine testing of each backup generator will be conducted sequentially for 30 minutes each month, which may pose a potential source of air quality impact. Since the backup generators and exhaust chimneys require a Specified Process license, it is expected that the potential impact will be mitigated to an acceptable level prior to the approval of the Air Pollution Control Plan (APCP) and issuance of the license.

	Therefore, the proposed development is not expected to induce adverse air quality impacts during the operation phase. Based on the current tentative layout, only the management offices and data halls in the proposed development are considered ASRs, as stated in **Section 2.2**. To ensure air quality in these areas during operation, they are designed as confined spaces and will rely exclusively on fresh air intakes for ventilation. The potentially polluted air from outside is not expected to enter the management offices and data halls. Therefore, it is necessary to identify suitable locations for the fresh air intakes. **Sections 6.1.1 – 6.1.5** have been revised accordingly.
17. Section 6.2.2: Please add "more than" before "5 m" in Line 2.	**Section 6.2.2** has been revised accordingly.
18. Table 6-1: Please indicate the reference sources for chimney height and horizontal separation distances.	The height and location of the chimneys were estimated from the building footprint derived from the Digital Topographic Map iB1000, measurements from Open3Dhk, and site observations. Please refer to **Appendix 2-2** for details. **Tables 2-1, 6-1, and Appendix 2-2** have been revised accordingly.
19. Section 6.2.4: The meaning of the last sentence is unclear. Please consider removing this sentence and clearly state that all industrial chimneys within 200 m from the application site boundary have been identified. Same comment applies to the second sentence of Section 6.3.2.	**Sections 6.2.4** and **6.3.2** have been revised accordingly.
20. Section 6.3.2: -Please add "intake" after "air" in Line 3.	It should be noted that only the management offices and data halls in the proposed development are considered as ASRs, as stated in **Sections 2.2** and **6.1.5**. To avoid confusion, management offices and data halls have been

- In the last sentence of Section 6.3.2, please clarify whether openable windows will be provided in the proposed development. If yes, please provide the following information: (i) the definition of "areas with air-sensitive uses" and their locations indicated on the map; (ii) verification of whether "areas with air-sensitive uses" are confined spaces (e.g., without any openable windows and with doors consistently closed) and rely exclusively on fresh air intakes for ventilation; (iii) the definition of "non-normally occupied areas" and confirmation of whether staff will work within these areas, including the maximum frequency and duration of such occupancy; and (iv) confirmation of whether the polluted air entering "non-normally occupied areas" through the windows could affect "areas with air-sensitive uses".	listed in **Section 6.3.2**, instead of the "areas with air-sensitive uses". The definitions of "not normally occupied spaces" or "unoccupied spaces" have been relocated to **Sections 2.2.8** to **2.2.10** & **6.1.5**, and removed from **Section 6.3.2** to avoid confusion. It should be noted that the ASRs of the proposed development, namely the management offices and data halls, are designed as confined spaces and will rely exclusively on fresh air intakes at suitable locations for ventilation, as mentioned in **Section 2.2.10**. The potentially polluted air outside is not expected to enter the management offices and data halls. As the current layout is tentative, the locations of the management offices and data halls are subject to change. Indicating their locations on the layout may not account for potential changes to the ASRs in later designs. Therefore, the following sentence has been added. If any additional ASRs are identified in the proposed development at a later stage, those areas should receive the same treatment as the management offices and data halls. **Section 6.3.2** has been revised accordingly.
21. Section 6.3.4: Please add "adverse" before "air quality" in Line 2.	**Section 6.3.4** has been revised accordingly.
22. Section 6.4.1: Please provide information on the emergency generators, such as the number of gen sets, their installed capacity, the routine test schedule, the estimated annual operating time based on past experience, and etc..	Details on the emergency generators are provided in **Sections 2.2.2** to **2.2.7** and again in **Section 6.1.2**. Therefore, only a summary of the information has been supplemented in **Section 6.4**.

23. Figure 6-1, 6-3a–g: Please add a remark to state that "no air-sensitive uses, including openable windows, fresh air intake of mechanical ventilation and recreational uses in the open area, would be located within the buffer zones".	The remark has been added to **Figures 6-1, 6-2a** to **6-2e, and 6-3a** to **6-3g**.
24. Figure 6-2a: Please review whether an "overall" figure is necessary, as the different buffer distance requirements for industrial chimneys vary based on the height differences between the chimney exit and the ASRs.	The figure has covered the function of the "overall" figure (**Figure 6-2a**) for 59mPD to 109.55mPD (**Figure 6-2f**). Therefore, **Figure 6-2a** has been removed and the previous **Figures 6-2b** to **6-2f have been renamed to Figures 6-2a** to **6-2e**. **Table 6-2** and **Section 6.2.4** have been revised accordingly.
25. Appendix 2.2: - Please indicate the dates on which site surveys were conducted. - Please explain the methodology used to obtain information such as horizontal separation distances and chimney heights.	The dates on which site surveys were conducted have been supplemented in **Appendix 2-2**. The methodology used to obtain information, such as horizontal separation distances and chimney heights, is supplemented in **Appendix 2-2**.
Revised Planning Statement (PS) 26. Section 3.3: Please update according to the comments provided for the AQIA above.	Please refer to the revised pages 8 and 9 of the Planning Statement (PS) in **Attachment 3**.
27. Section 4.4.1: Please repeat the current status of the existing industrial building in Section 2.1.2 of AQIA.	We have revised descriptions of its status in **Section 4.4.1**. Please refer to revised page 13 in **Attachment 3**.

Enclosures

1. **Attachment 1** – Replacement Page 3 and Figures 1 to 10 of the VIA Report
2. **Attachment 2** – Replacement Pages, Figures and Appendix 2.2 of the AQIA Report
3. **Attachment 3** – Replacement Pages 8, 9 and 13 of the Planning Statement

Attachment 1
Replacement Page 3 and Figures 1 to 10 of the VIA Report

3.3 To the west of the application site located the Tsuen Wan Chinese Permanent Cemetery, and southwest, the Kwai Chung Crematorium. A cluster of industrial buildings, with building height ranging from 22mPD to 132mPD, is situated east of the application site across Tsuen Wan Road, while the Kwai Chung Sports Ground is further southeast and Kwai Chung Park to the south.

4. Proposed Development

4.1 The application site, with an area of about 964.2m^2, is proposed to redevelop an existing industrial building into an information technology and telecommunication industries (data centre). The proposed building is about 109.55mPD with 2 basement levels for parking and M&E facilities. In addition, a 3.7m full-height building setback fronting Wing Kin Road, a 2.948m building set back fronting Wing Chong Street from G/F to 1/F and a 6.53m building setback from 6/F and above facing Wing Chong Street are proposed with the provision of planters and vertical greening to enhance visual amenities.

5. Viewing Points

5.1 A total of nine VPs are selected for this visual impact assessment. The nine VPs, same as those selected under the previous approved planning application (A/KC/496), are selected from different directions and distances (**Figure 1**). These VPs represent views from key pedestrian nodes, popular areas used by the public for outdoor activities and public open spaces: -

a. VP1: Wing Kin Road
b. VP2: Wing Chong Street
c. VP3: Tsuen Wan Chinese Permanent Cemetery
d. VP4: Kwai Chung Crematorium
e. VP5: Footbridge connecting Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road
f. VP6: Kwai Chung Sports Ground
g. VP7: Former Wing Kei Road Trucks Car Park
h. VP8: Temporary Cricket Gound in Kwai Chung Park
i. VP9: Tsing Yi Waterfront Promenade

6. Visual Assessment

6.1 VP1: Wing Kin Road (**Figure 2**)

6.1.1 VP1, located around 20m from the application site, is a short-distance view. VP1 consists of a 2-storey industrial building at the application site, situated between two existing industrial buildings, i.e. Global Trade Centre and Hou Feng Industrial Building. Since VP1 is

Figures

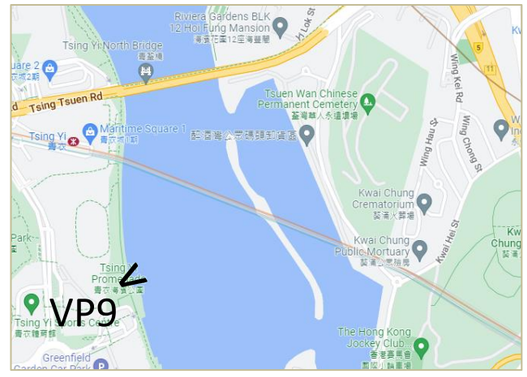


Legend

VP1 Wing Kin Road (**20m**)
VP2 Wing Chong Street (**20m**)
VP3 Tsuen Wan Chinese Permanent Cemetery (**300m**)
VP4 Kwai Chung Crematorium (**170m**)
VP5 Footbridge connecting Kwai Chung Park and Kwai Fuk Rd across Tsuen Wan Rd (**160m**)
VP6 Kwai Chung Sports Ground (**650m**)
VP7 Former Wing Kei Road Trucks Car Park (320m)
VP8 Temporary Cricket Ground in Kwai Chung Park (300m)
VP9 Tsing Yi waterfront Promenade (**1100m**)

Application Site

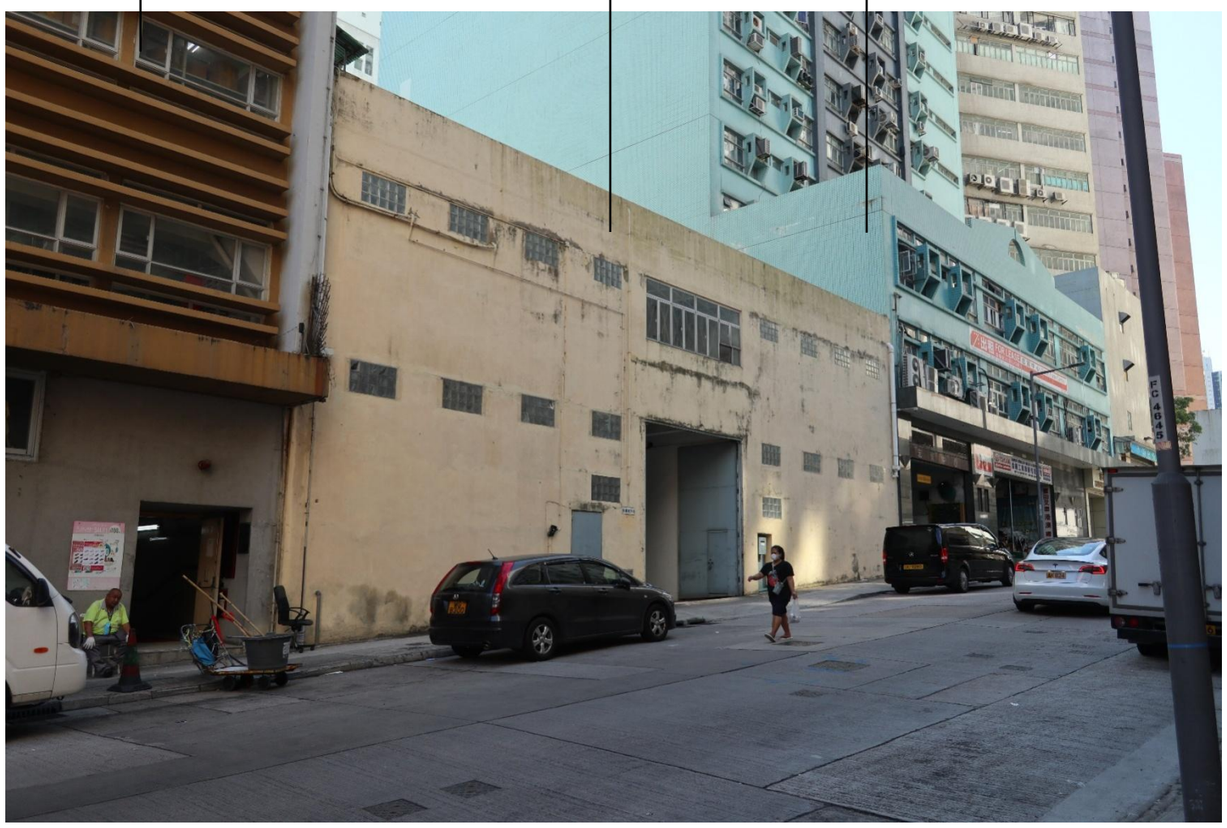
Visual Envelope



Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Data Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

Drawing Title:
Figure 1: Site Location with Viewing Points and Visual Envelope

KJL Ltd.



Existing Condition



With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Data Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

Drawing Title:
Figure 2: Photomontage of VP1 - Wing Kin Road

STUDIO | RCA

KJL Ltd.



Existing Condition



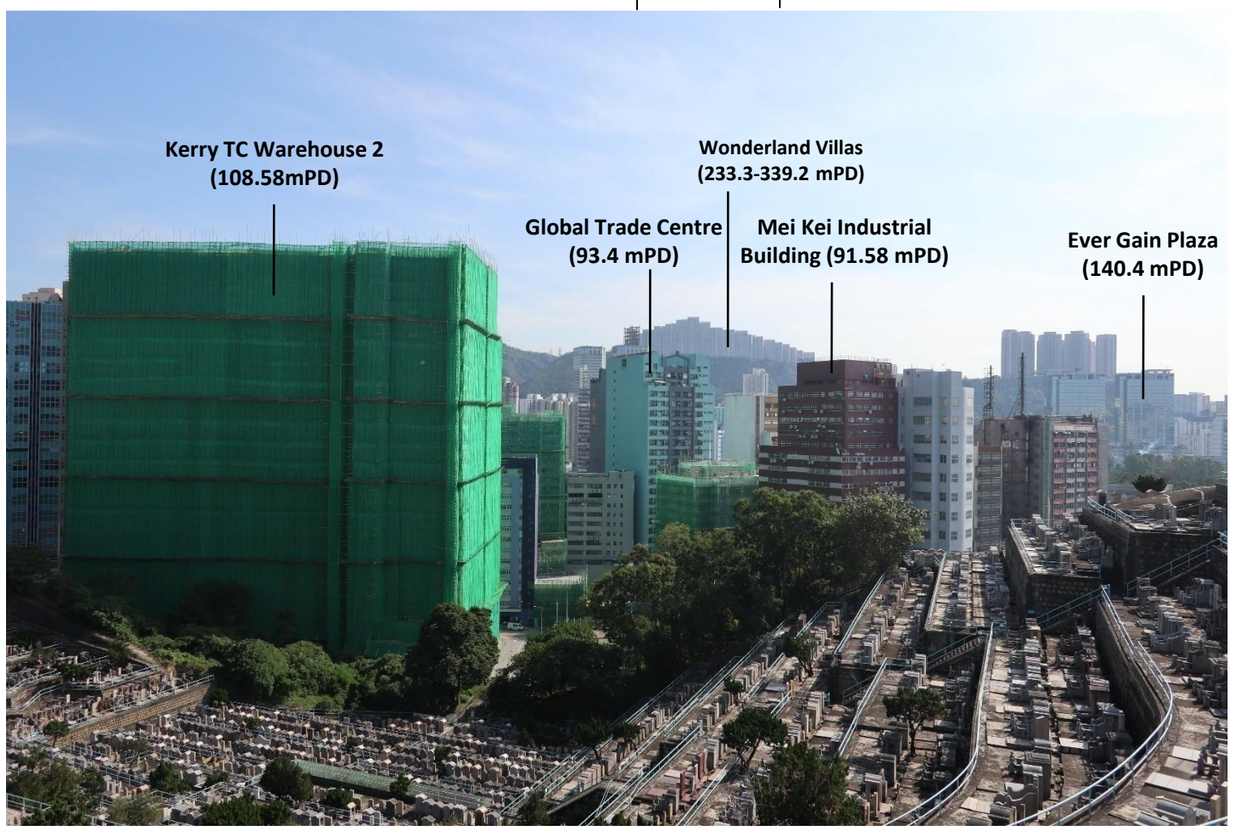
With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Data Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

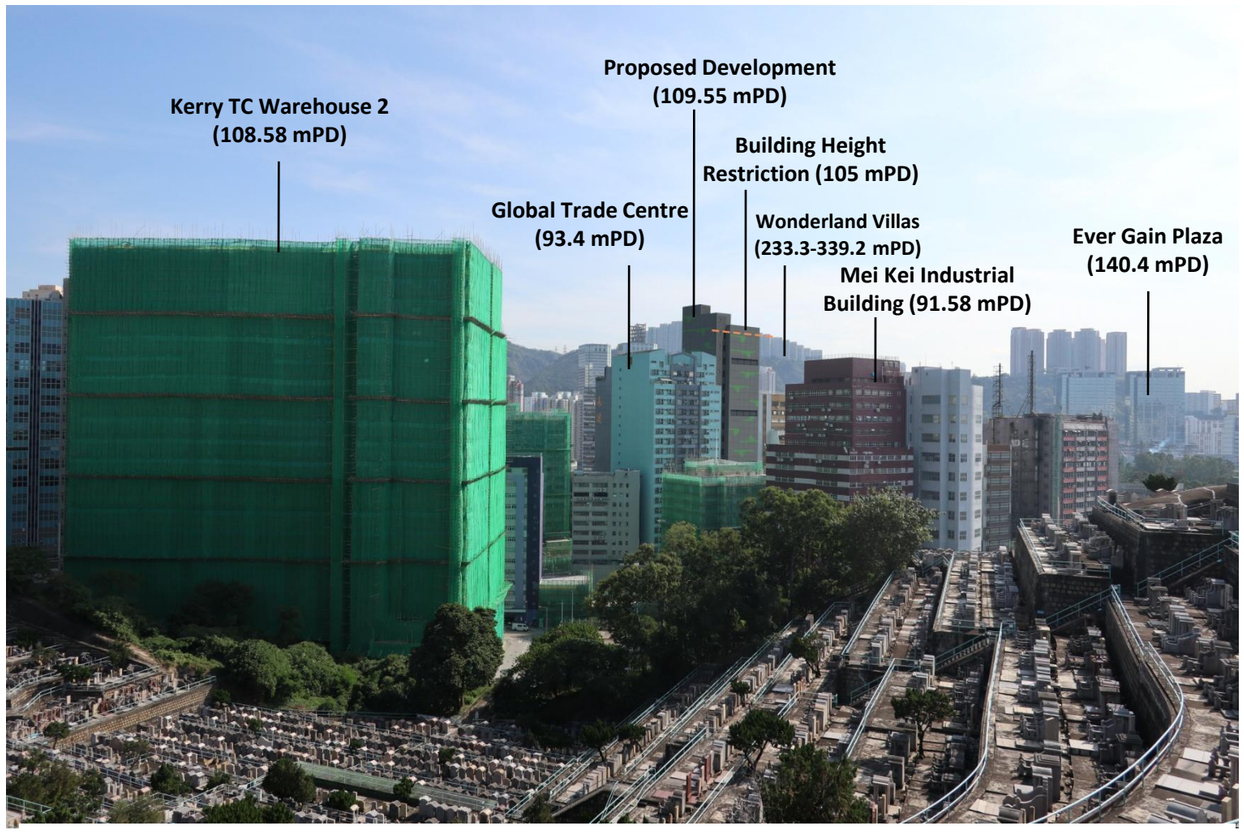
Drawing Title:
Figure 3: Photomontage of VP2 - Wing Chong Street

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Existing Condition



With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Data Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

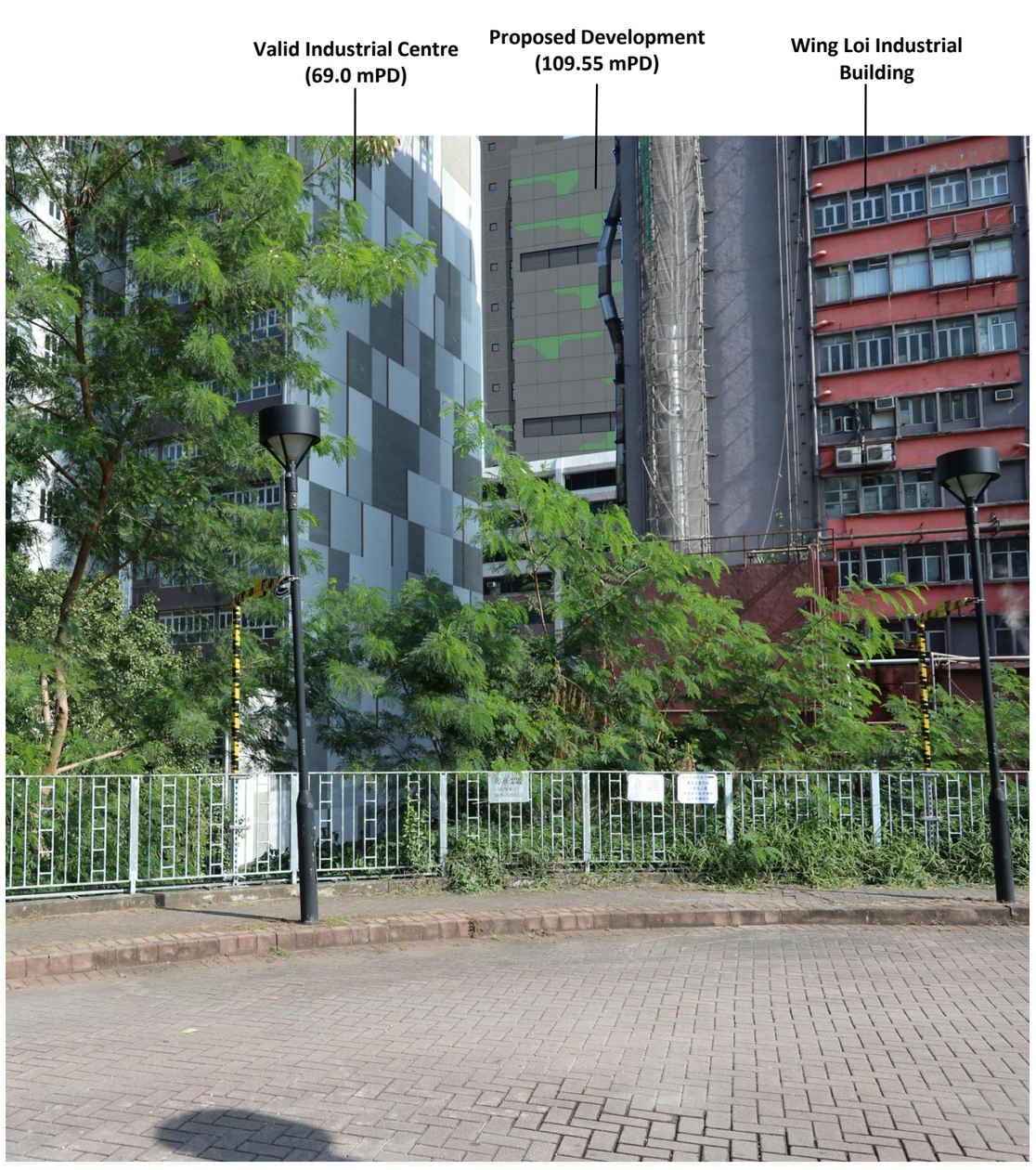
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Figure 4: Photomontage of VP3 - Tsuen Wan Chinese Permanent Cemetery

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Existing Condition



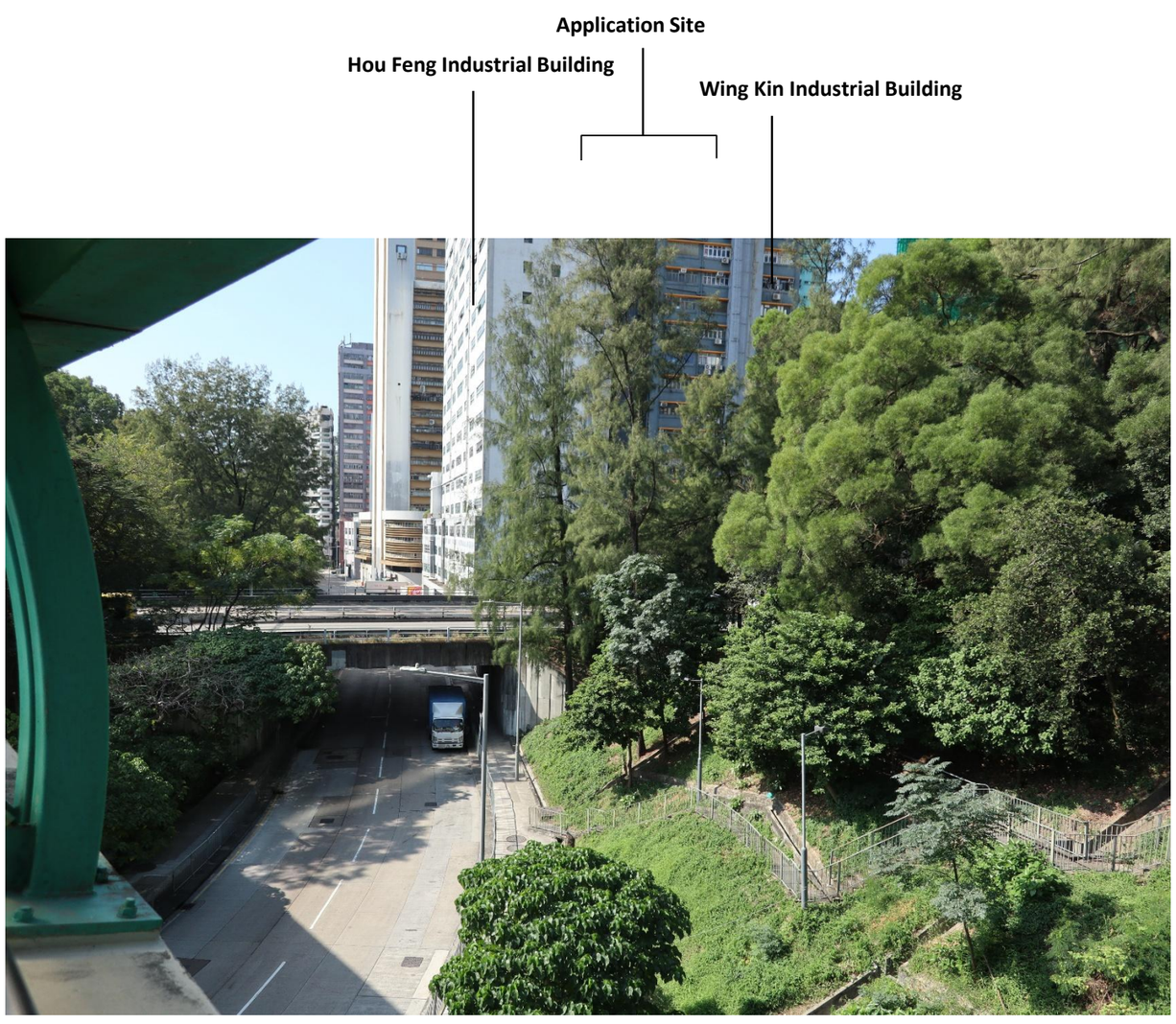
With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Data Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

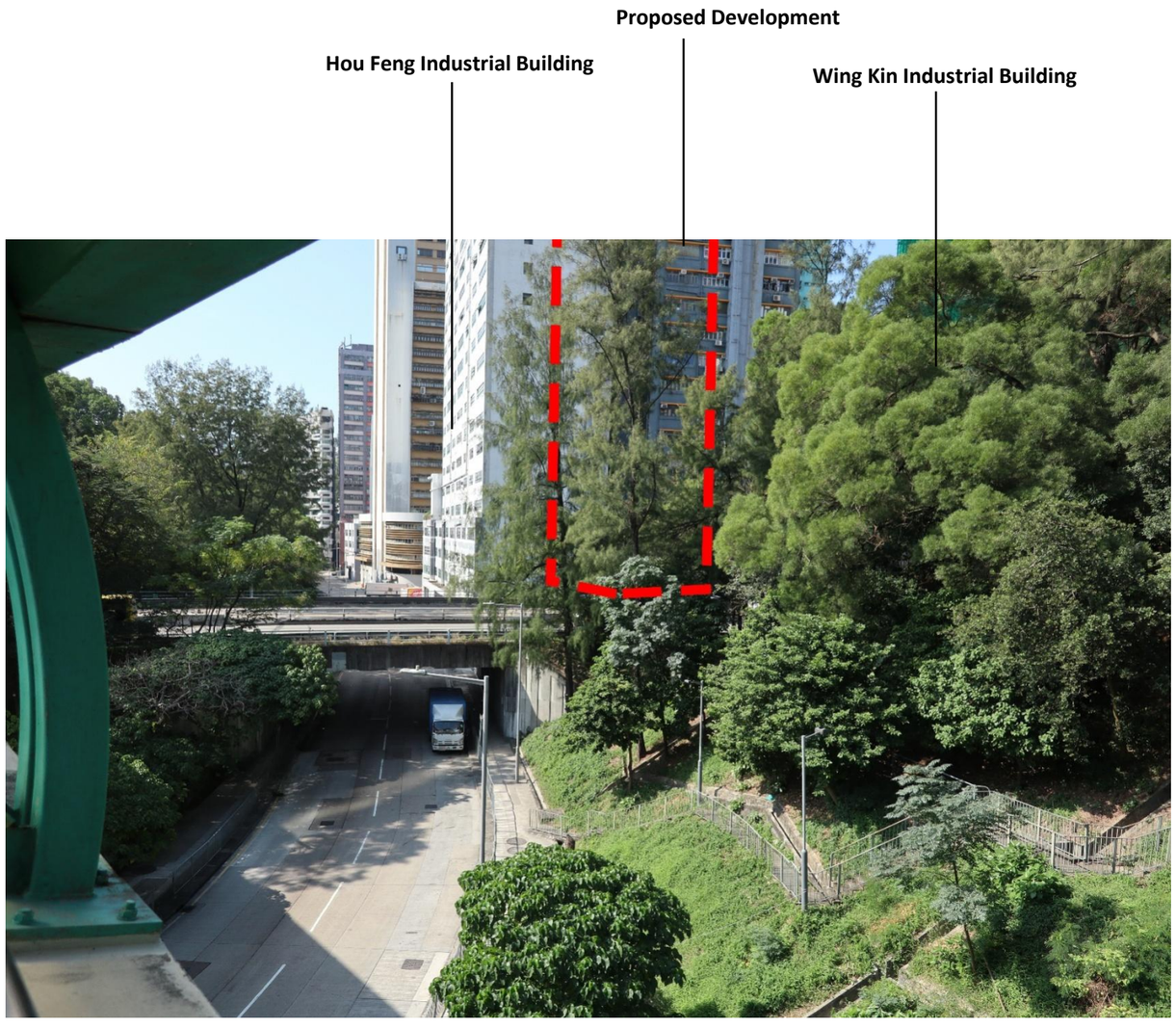
Drawing Title:
Figure 5: Photomontage of VP4 - Kwai Chung Crematorium

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Existing Condition



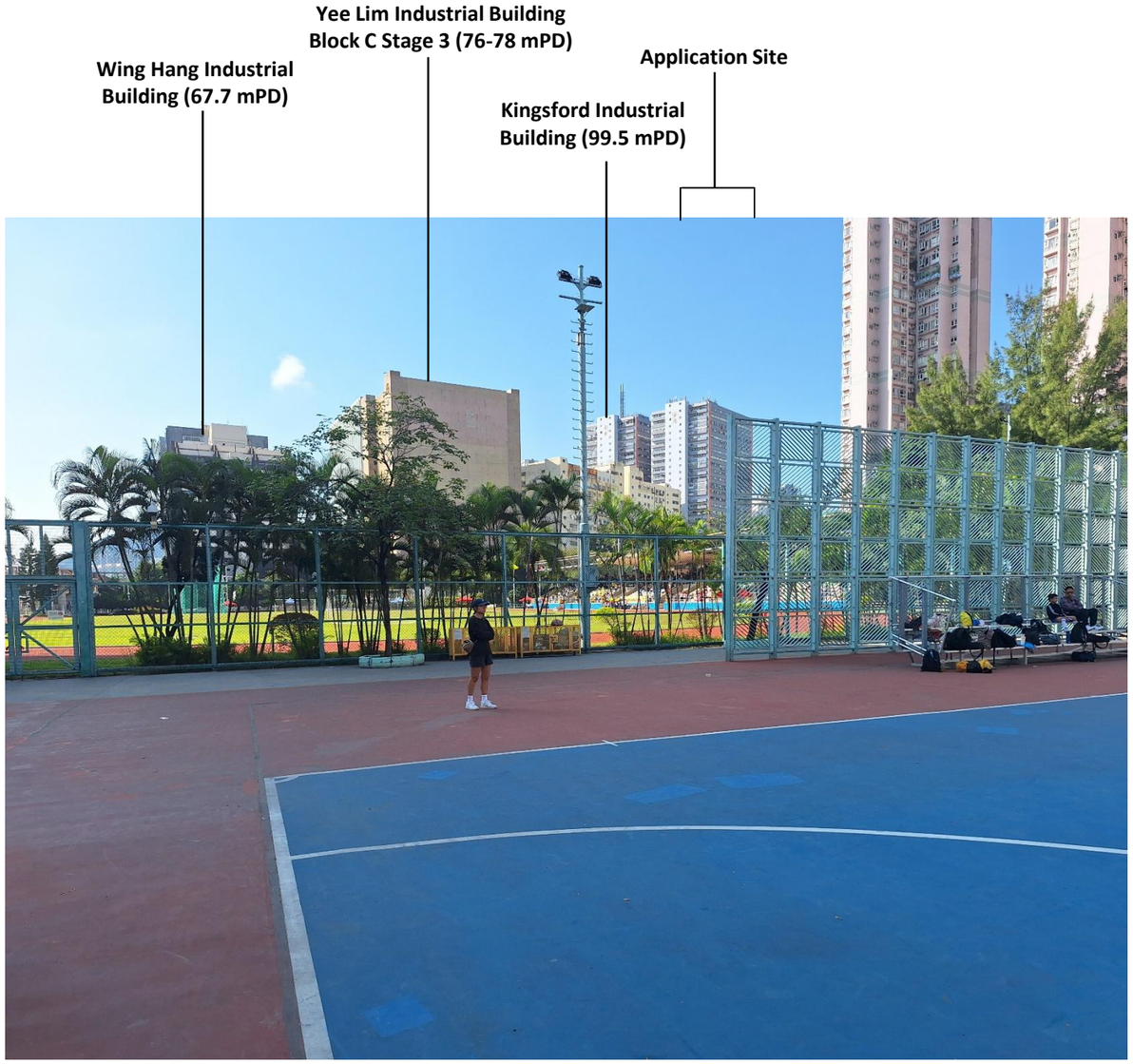
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Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Data Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

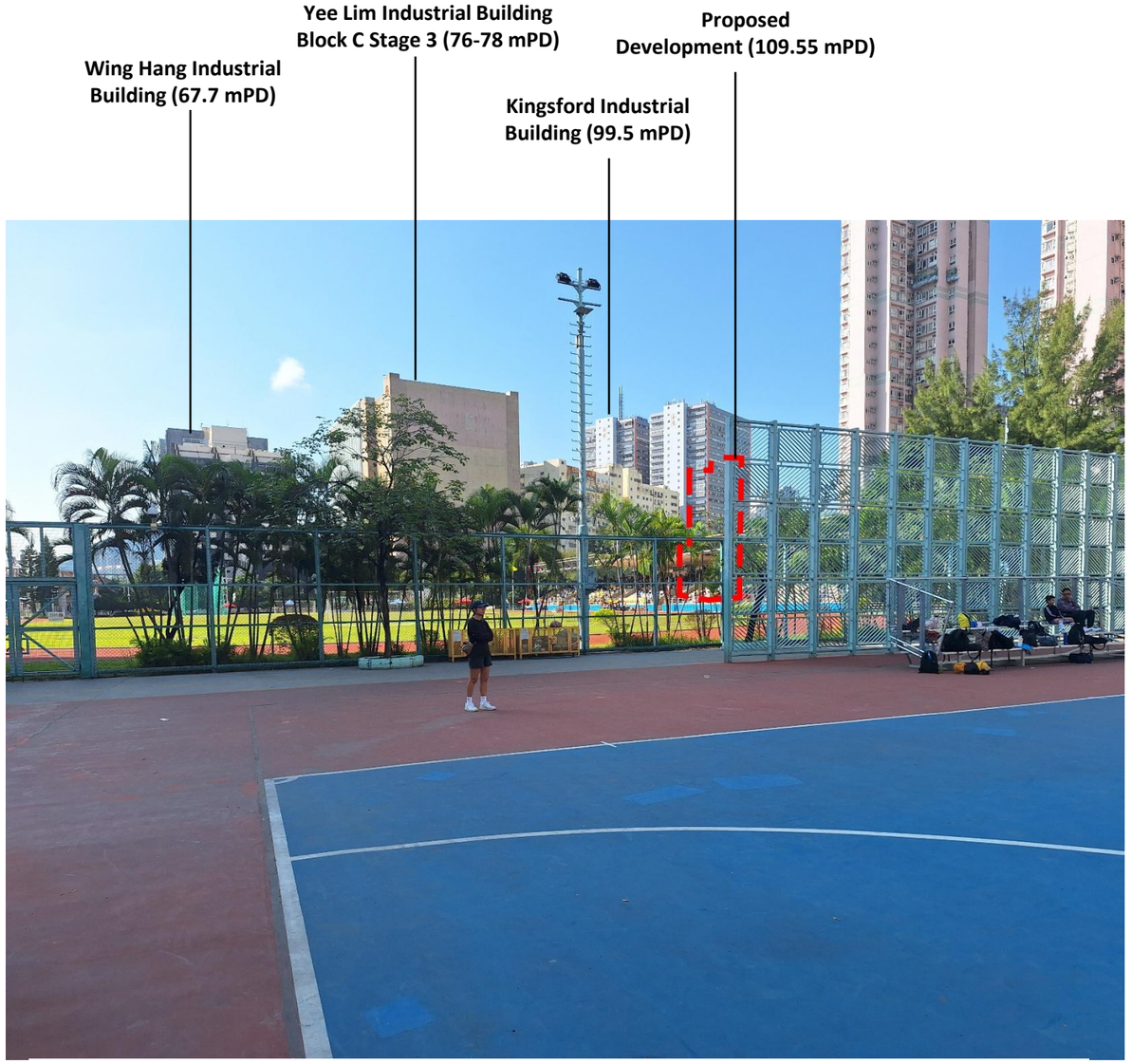
Drawing Title:
Figure 6: Photomontage of VP5 - Footbridge linking Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road

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Existing Condition



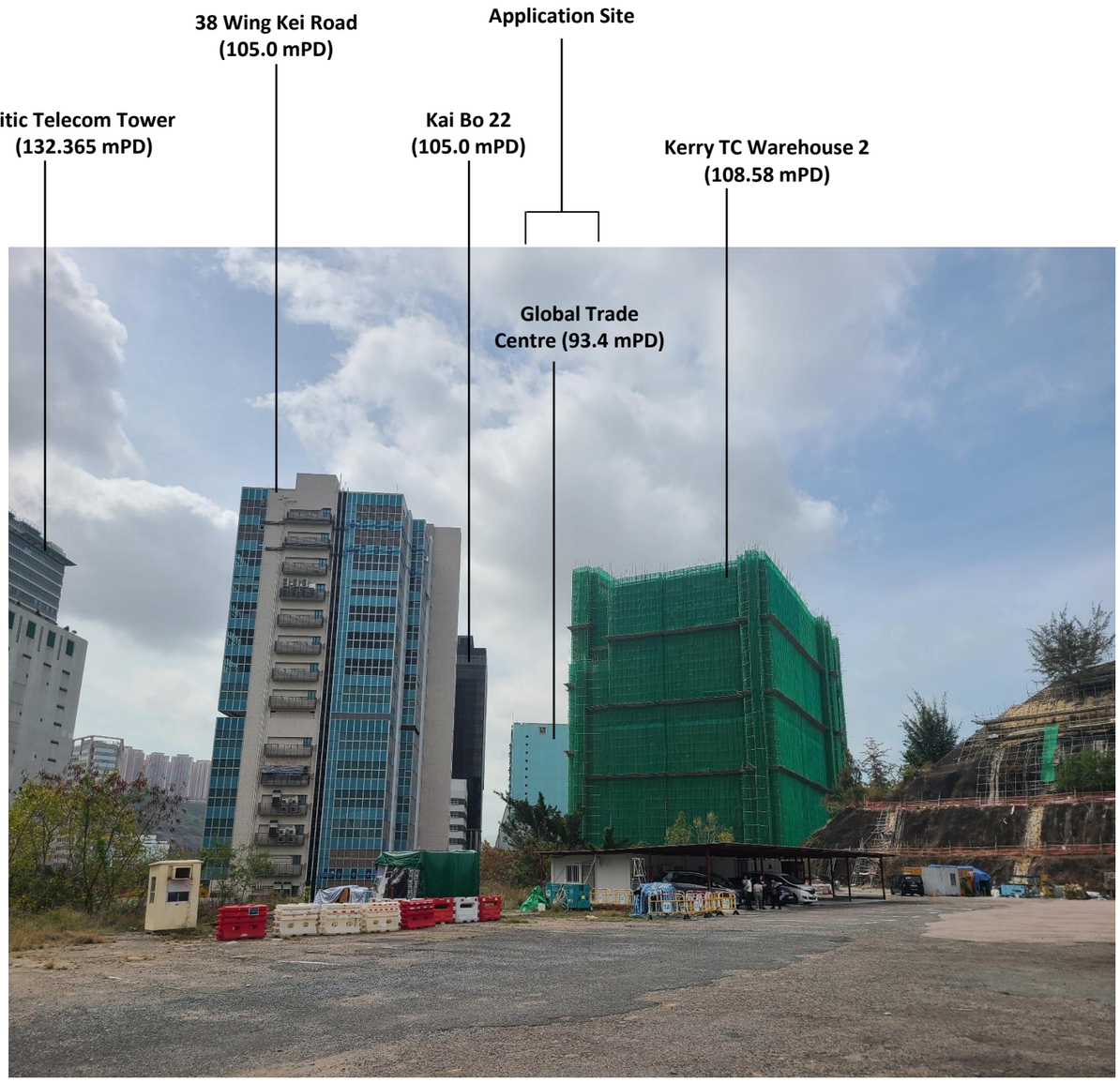
With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Data Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

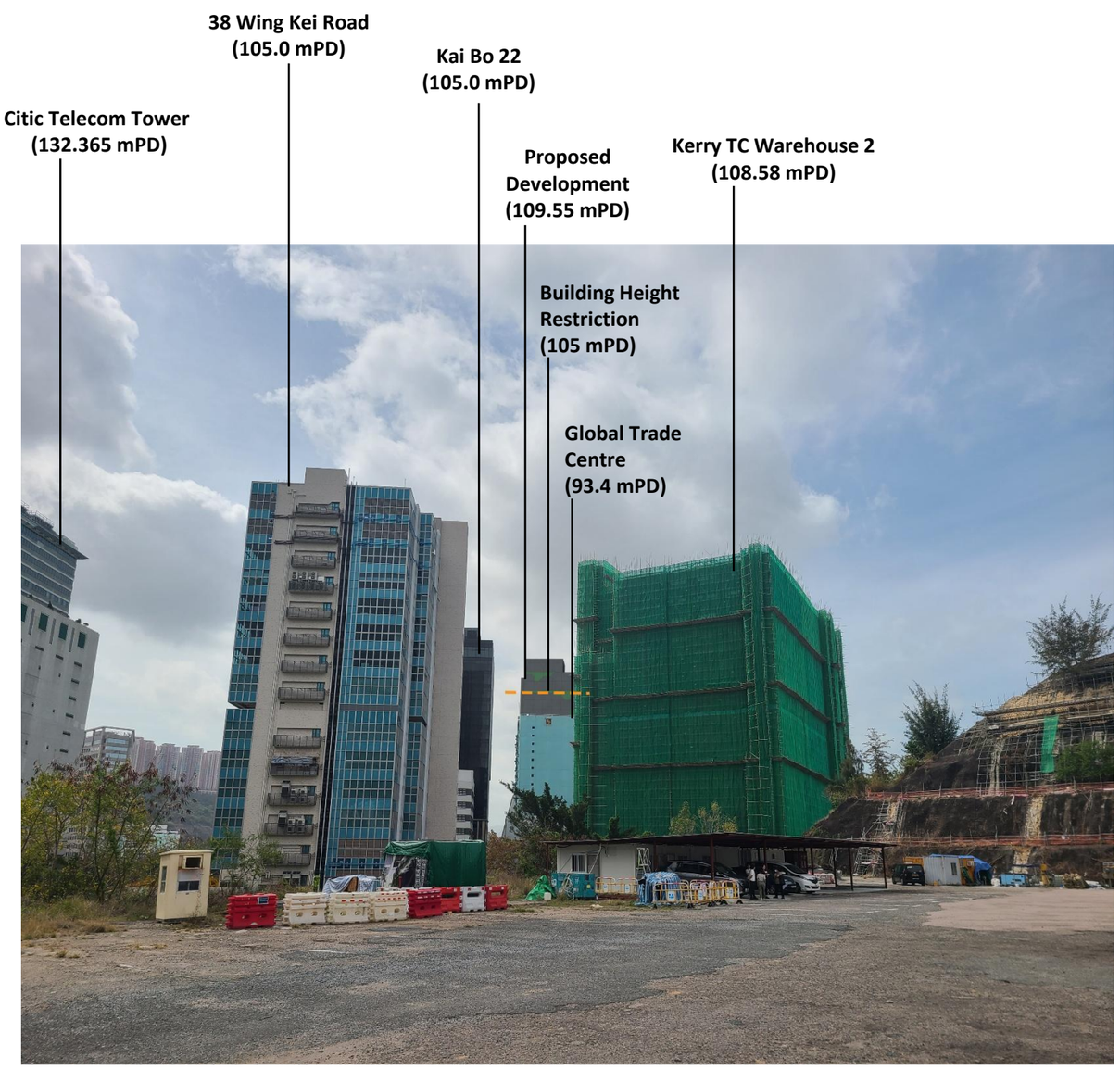
Drawing Title:
Figure 7: Photomontage of VP6 - Kwai Chung Sports Ground

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Existing Condition



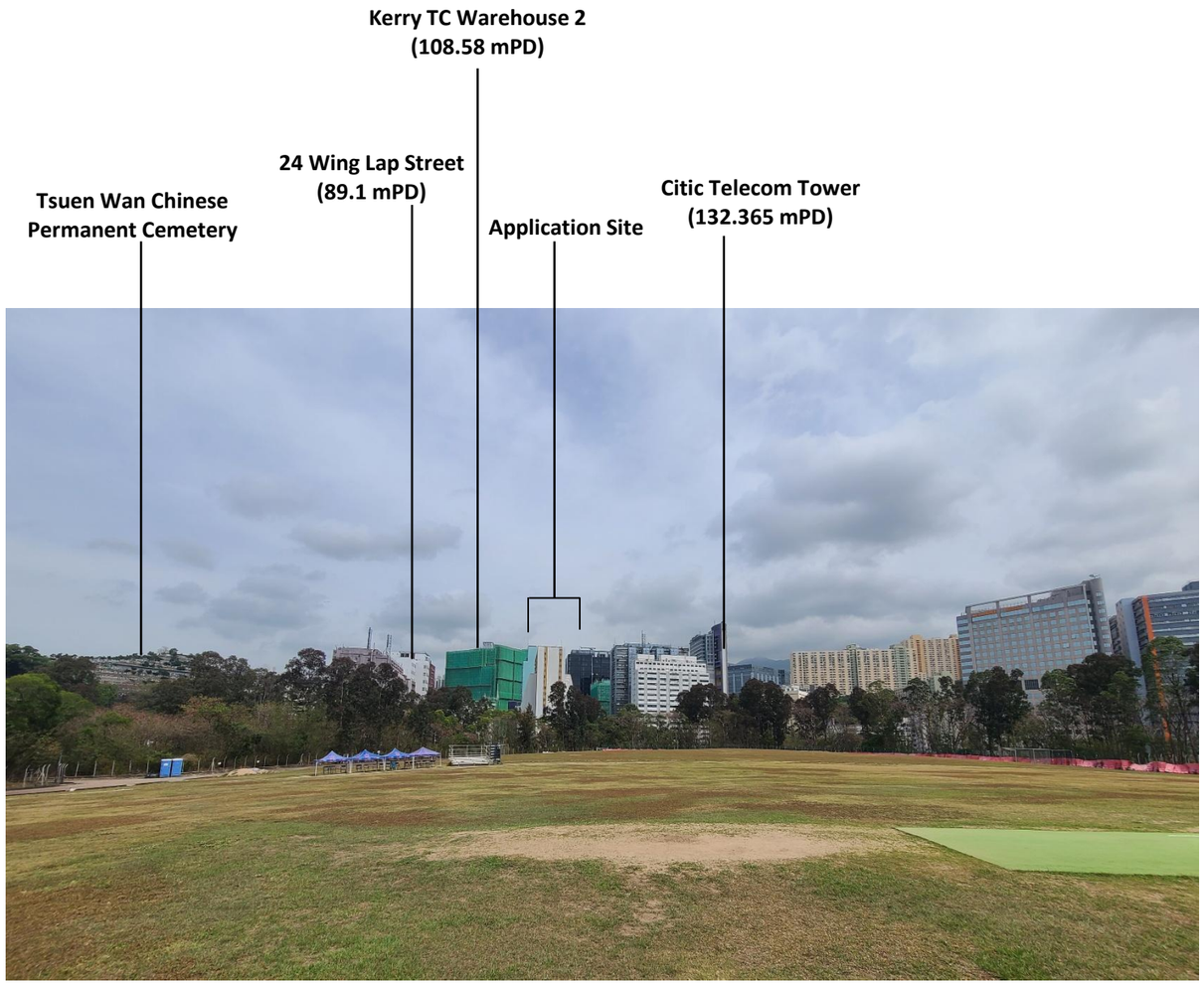
With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Data Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

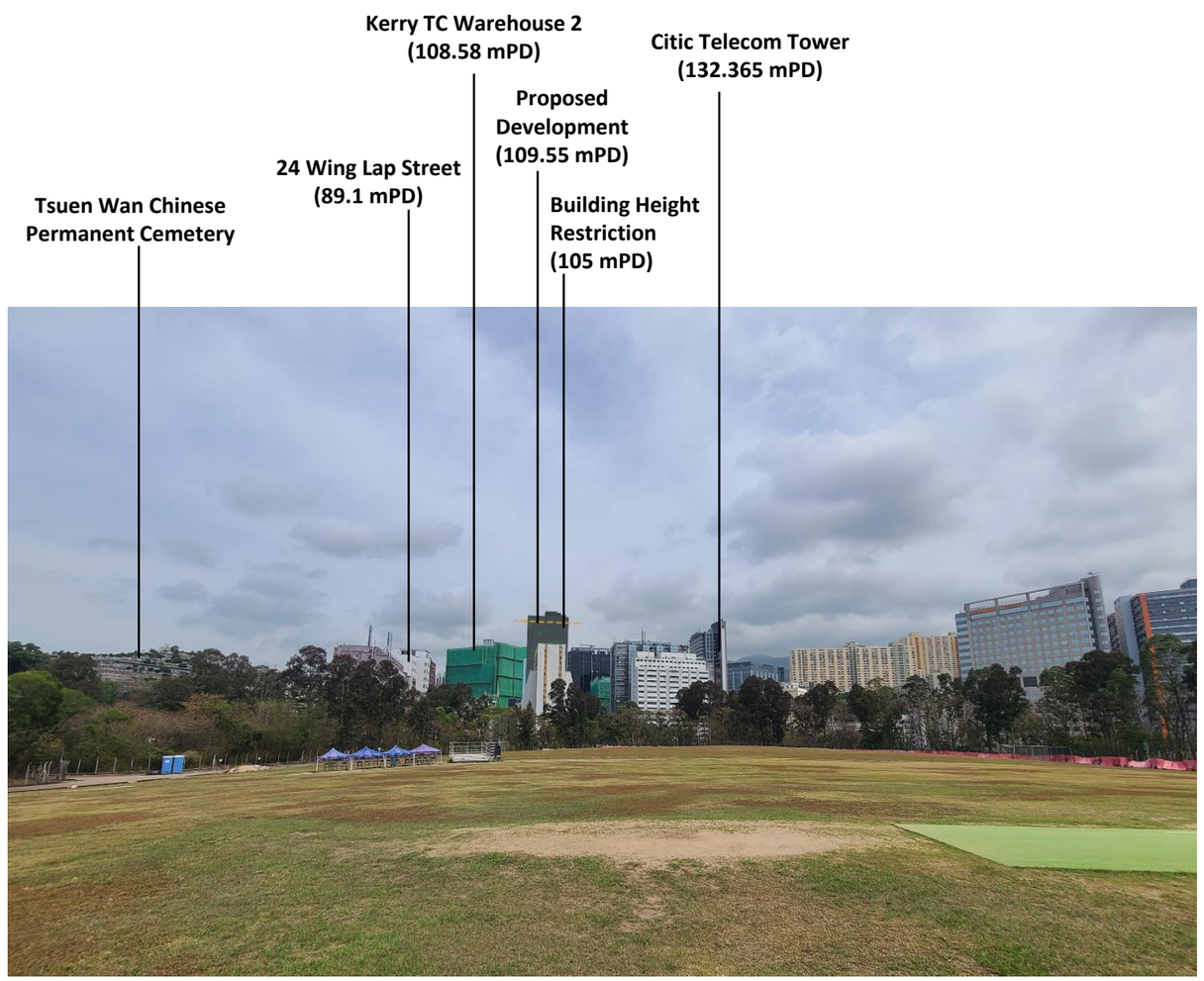
Drawing Title:
Figure 8: Photomontage of VP7 – Former Wing Kei Road Trucks Car Park

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Existing Condition



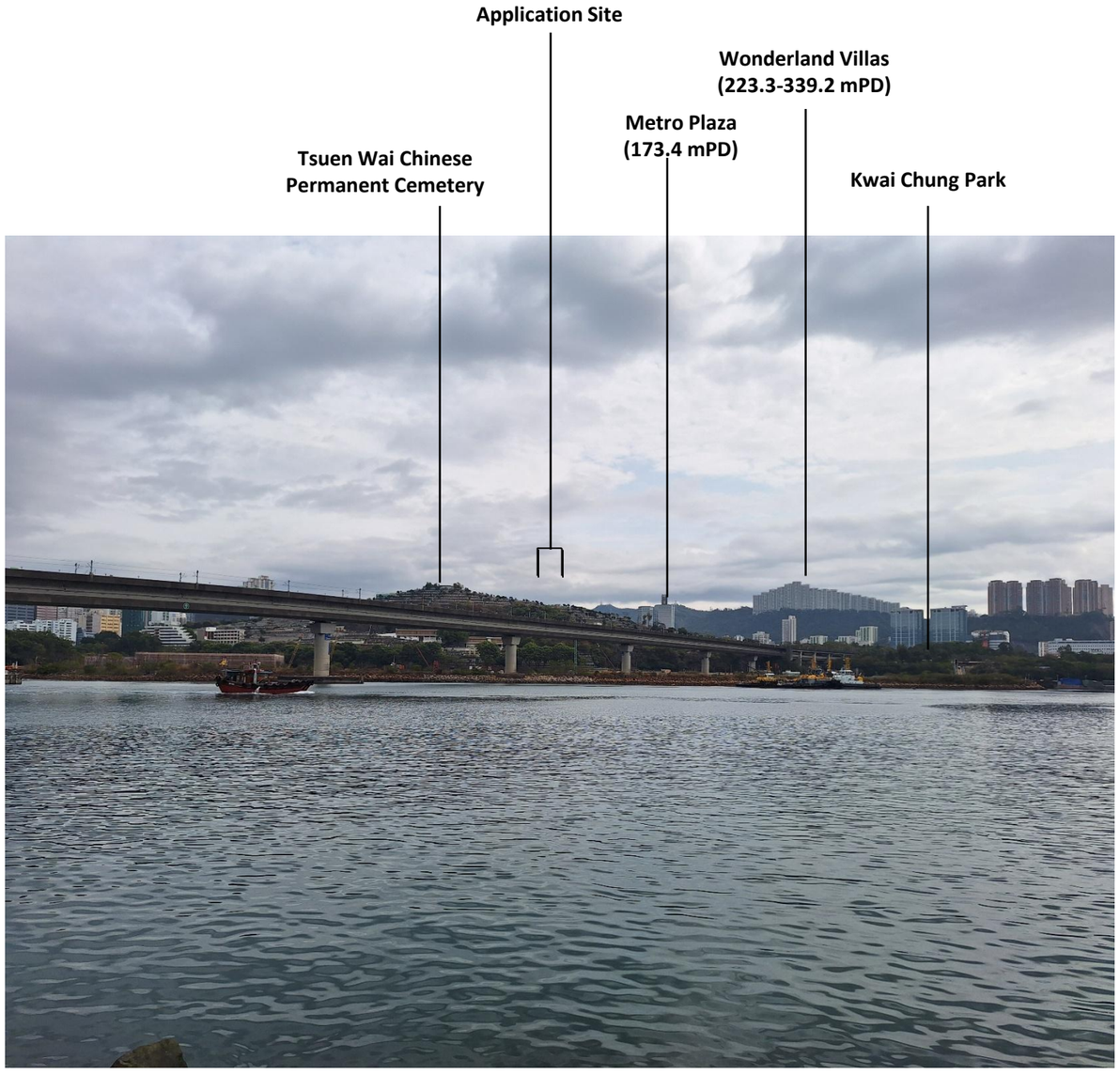
With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Data Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

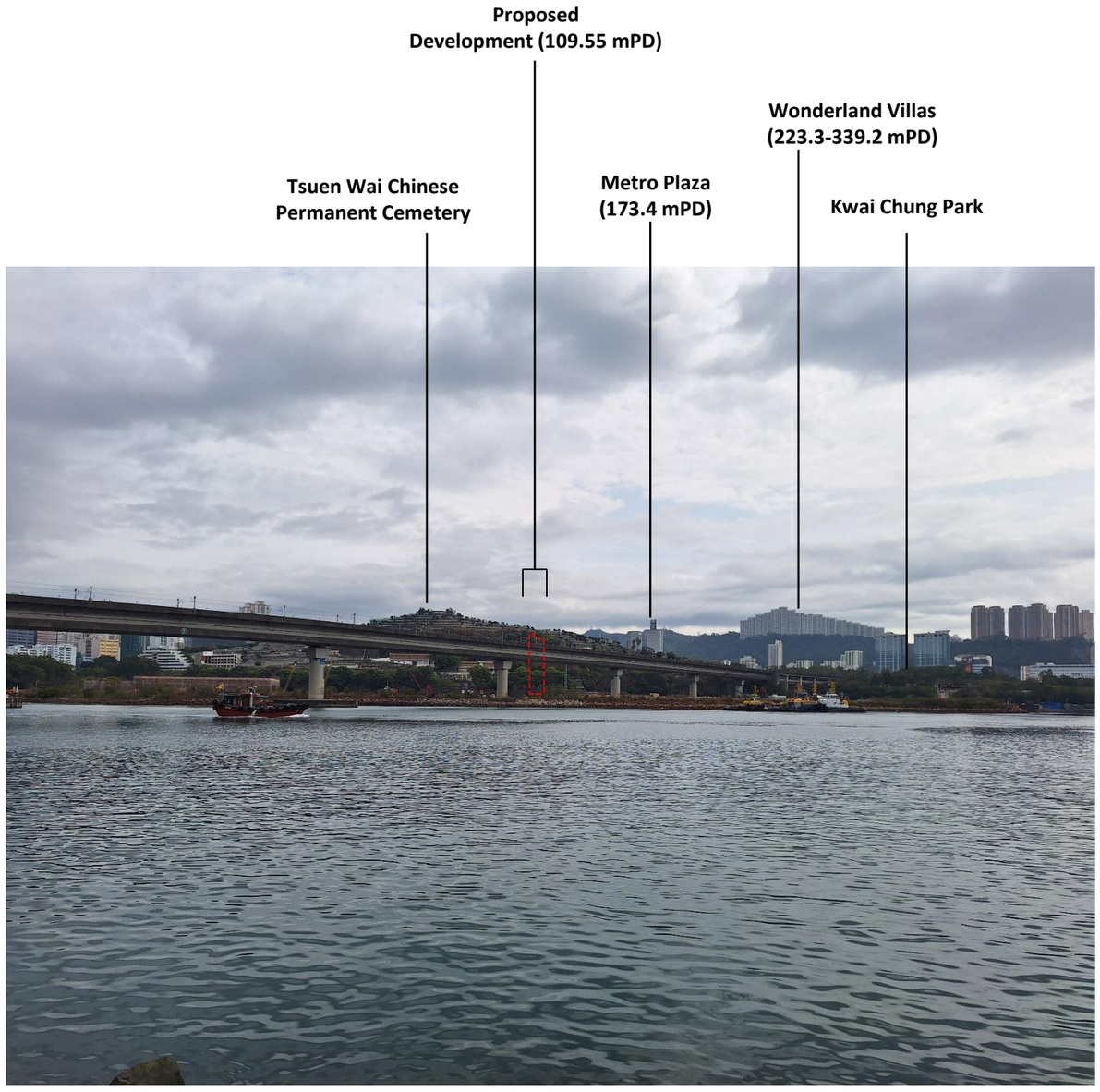
Drawing Title:
Figure 9: Photomontage of VP8 – Temporary Cricket Ground in Kwai Chung Park

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Existing Condition



With Proposed Development

Job Title:
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Data Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

Drawing Title:
Figure 10: Photomontage of VP9 - Tsing Ying Waterfront Promenade

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Attachment 2
Replacement Pages,
Figures and
Appendix 2.2 of the
AQIA Report

2 THE PROPOSED DEVELOPMENT AND THE ENVIRONMENT

2.1 The Site

2.1.1 The Application Site (the "Site") is located in an industrial area in Kwai Chung, bordered by Wing Chong Street to the west, Wing Kin Road to the east, Global Trade Centre to the north, and Hou Feng Industrial Building to the south (see **Figure 2-1**). The Site and its surroundings fall within the industrial zone, as per the Approved Kwai Chung Outline Zoning Plan (OZP) No. S/KC/32 (see **Figure 2-2**).

2.1.2 The Site covers approximately 964 m² (about 929 m² excluding the additional area) and is currently occupied by a 2-storey industrial building. Planning applications have been submitted and approved with conditions in 2020 (Application No.: A/KC/457) and 2023 (Application No.: A/KC/496) for Offensive Trades use (Lard Boiling Factory) and Industrial use (Warehouse), respectively.

2.2 The Proposed Development

General

2.2.1 The Applicant proposes to redevelop the Application Site into a 17-storey data centre with a height of 109.55 mPD and a plot ratio of 11.4. The tentative layout of the proposed development is shown in **Appendix 2-1**, with a planned completion date of 2029.

Backup Generators

2.2.2 The proposed development is intended solely for data centre use and will operate exclusively on electricity supplied by CLP. Backup generators will be provided to address potential electricity outages or emergencies. No diesel or other fossil fuels will be utilized during the normal operation of the proposed development.

2.2.3 Under the current design, a total of 16 backup generators powered by diesel fuel will be installed by the tenant, consisting of 8 units with a capacity of 1,500 kW and 8 units with a capacity of 2,000 kW, resulting in a total capacity of 28,000 kW. No diesel or other fossil fuels will be utilized during the normal operation of the proposed development.

2.2.4 Routine testing of the backup generators will be conducted for 30 minutes each month, resulting in an annual operation time of 6 hours. Each backup generator will be tested sequentially to minimize emission rates.

2.2.5 All backup generators will be housed in fully enclosed spaces, with industrial chimneys serving as their only exhausts. It should be noted that the design of the chimneys is not available at this stage and is subject to detailed design.

2.2.6 According to the Electricity Works in Schedule 1 of the Air Pollution Control Ordinance, the installation of backup generators with a total capacity exceeding 5 MW requires a Specified Process (SP) license. The tenant should be reminded to prepare an air pollution control plan (APCP) for SP license application. The locations of the chimney exhausts, as well as the necessary mitigations, must be approved by the relevant authority (e.g., EPD) before the operation of the backup generators.

2.2.7 Therefore, the proposed development is not considered a source of air pollutants during normal operation. During routine testing, given the short operational duration of the backup

generators and the necessary mitigation measures to be confirmed in the APCP, adverse air quality impacts arising from the routine testing are not anticipated.

Air Sensitive Receivers (ASRs)

2.2.8 Although the data center is generally expected to be unmanned, a minimal number of staff will remain in the proposed development during its operation. For example, staff will occupy the management offices, which are not yet marked in the tentative layout plan. Additionally, staff will occasionally need to be present in the data halls for maintenance. Therefore, the management offices and data halls in the proposed development are considered as Air Sensitive Receivers (ASRs) during the operational phase.

2.2.9 On the other hand, the remaining areas in the proposed development, such as plant rooms, toilets, and staircase are either not normally occupied spaces[1] or unoccupied spaces[2], which are not considered as ASRs during the operational phase.

2.2.10 To ensure air quality in the management offices and data halls during operation, these areas are designed as confined spaces and will rely exclusively on fresh air intakes at suitable locations for ventilation. The potentially polluted air outside is not expected to enter the management offices and data halls.

2.3 Existing Environment in the Vicinity

Existing Developments

Industrial Chimneys

2.3.1 The existing developments in the vicinity are primarily industrial. On-site survey was conducted on 28th August 2025, to identify the industrial chimneys in the area. Multiple industrial chimneys have been identified within 200 meters of the site boundary. The chimneys with potential impacts are listed in **Table 2-1**, illustrated in **Figure 2-3**, and detailed in **Appendix 2-2**.

2.3.2 It is noted that a chimney-like structure was present on the roof of the Mei Kei Industrial Building according to a 3D map from Google. However, based on the site visit on 28th August 2025, there is currently no chimney on the roof of the Mei Kei Industrial Building.

2.3.3 Additionally, chimneys have been identified at the Citic Telecom Tower. According to the building footprint derived from the Digital Topographic Map iB1000 and site observations, all three identified chimneys are more than 200 meters away from the Site.

[1] "Not normally occupied spaces" are enclosed areas within the building where people normally stay less than 1 hour.
[2] "Unoccupied spaces" are areas within the building where the primary function is not intended for human activities. These spaces are occupied by occupants for a short period of time and only occasionally.

Table 2-1 Identified Industrial Chimneys in the Vicinity

ID	Building	Height	Horizontal Distance from Application Site Boundary
CH01a & CH01b	Wing Loi Industrial Building	85 mPD	64 m
CH01c & CH01d		81 mPD	85 m
CH02	Kwai Chung Crematorium	52 mPD	196 m
CH03a & CH03b	Wing Kin Industrial Building	99 mPD	23 m
CH03c		103 mPD	40 m
CH04a, CH04b & CH04c	Citic Telecom Tower	141 mPD	205 m

Note:
[i] Chimneys' height and location were estimated from the building footprint derived from the Digital Topographic Map iB1000, measurements from Open3Dhk, and site observations.

Air Sensitive Receivers (ASRs)

2.3.4 The nearest non-industrial development with air-sensitive uses is the office of the Wing Hau Street Driving Test Centre, located approximately 110 m northwest of the Site.

2.3.5 Most developments with air-sensitive uses are situated in the northeast of the Site, including PCCW, CNEC Lee I Yao Memorial Secondary School, and Kwai Shing West Estate Block 8, located approximately 180 m, 195 m, and 290 m from the Site, respectively. However, as offices are typically present within industrial buildings, all nearby industrial buildings are also considered as Air Sensitive Receivers (ASRs).

2.3.6 The existing developments in the vicinity generally conform to the Outline Zoning Plan (OZP), indicating that no changes in land use are anticipated in the near future.

Road Traffic

2.3.7 The Site is bordered by Wing Kin Road and Wing Chong Street, which are minor roads (local distributors). According to the Annual Traffic Census 2023 (ATC 2023) by the Transport Department, the nearest major road is Tsuen Wan Road (Station 5604), an expressway located approximately 90 m to the northeast of the Site, with an Average Annual Daily Traffic (AADT) of 122,780.

2.4 Key Sources of Potential Air Quality Impact

2.4.1 According to the Hong Kong Planning Standards and Guidelines (HKPSG), areas designated for active or passive recreational uses should be located 5 to 20 m away from road traffic. Since only minor roads are within 20 meters from the site boundary, potential air quality impacts from nearby road traffic are expected to be limited.

2.4.2 Conversely, areas for active or passive recreational uses should be situated 10 to 200 m away from industrial chimneys. Given that multiple industrial chimneys are located within 200 m from the site boundary, the primary concern for the air quality of the proposed development arises from these nearby industrial chimneys.

4 BACKGROUND AIR QUALITY AND KEY CRITERIA POLLUTANTS

4.1 Background Air Quality

4.1.1 EPD has been closely monitoring air quality in Hong Kong through its air quality monitoring stations (AQMS). The Kwai Chung Monitoring Station is the closest AQMS to the Site, while the nearest roadside station is located in Mong Kok.

4.1.2 It is important to note that measurement results at the roadside station are generally higher than those at regular sensitive receivers, such as residential flats, due to proximity to road traffic. Therefore, measurements at the roadside station should be considered a worst-case scenario, while those at the Kwai Chung Monitoring Station should be regarded as representative.

4.1.3 The monitoring results for the Mong Kok Roadside Station and Kwai Chung Monitoring Station from 2019 to 2023 are summarized in **Table 4-1 & Table 4-2**, respectively. For both stations, the measured concentrations of NO_2 demonstrate a decreasing trend from 2019 to 2023. In contrast, the measured concentrations of RSP and FSPs dropped in 2020 and have remained at a similar level since then.

4.1.4 The parameters of particular concern during the past few years have been the NO_2 concentrations. The 1-hour averaged and annual averaged NO_2 have consistently exceeded the AQO's criteria from 2019 to 2023 and the 24-hour averaged NO_2 exceeded the AQO's criteria in 2019 & 2020 for the Mong Kok Roadside Station. The NO_2 concentrations at Kwai Chung Monitoring Station is much lower than that of Mong Kok Roadside Station, however, the annual average still consistently exceeded the AQO's criteria from 2019 to 2023.

4.1.5 With the updated AQO in 2025, the annual averaged FSP concentrations at the Mong Kok Roadside Station have also consistently exceeded the AQO's criteria from 2019 to 2023. Meanwhile, the 24-hour averaged FSP concentrations exceeded the AQO's criteria in 2019 and the annual averaged RSP concentrations exceeded the AQO's criteria in 2019 & 2021. The RSP and FSP concentrations at the Kwai Chung Monitoring Station are significantly lower than those at Mong Kok. However, the annual average FSP concentration exceeded the AQO's criteria in 2019, 2021 & 2023.

Table 4-1 Average Concentrations of Pollutants in the Recent Five Years (Year 2019 - 2023) at Mong Kok Air Quality Monitoring Station

Pollutant	Averaging Time	AQO [i]	Pollutant Concentration (μg/m^3) [ii]				
			2019	2020	2021	2022	2023
Respirable Suspended Particulates (RSP)	10th Highest 24-hour	75 (9)	74	63	69	56	58
	Annual	30	35	29	30	26	29
Fine Suspended Particulates (FSP)	19th Highest 24-hour	37.5 (18)	45	37	37	35	32
	Annual	15	24	18	18	16	18
Nitrogen Dioxide (NO_2)	19th Highest 1-hour	200 (18)	248	214	201	224	212
	10th Highest 24-hour	120 (9)	132	129	120	119	120
	Annual	40	78	74	70	64	68
Sulphur Dioxide (SO_2)	4th Highest 10-Min	500 (3)	39	45	30	28	39
	4th Highest 24-hour	40 (3)	10	10	10	7	9
Ozone (O_3)	10th Highest 8-hour	160 (9)	125	96	97	101	104
	Peak season	100	62	61	60	63	61
Carbon Monoxide (CO)	1st Highest 1-hour	30000 (0)	2280	1810	2130	1670	1340
	1st Highest 8-hour	10000 (0)	2103	1580	1719	1493	1138
	1st Highest 24-hour	4000 (0)	1610	1323	1479	1414	1014

Note:
[i] The numbers in brackets () refer to number of exceedance allowed per year.
[ii] The pollution concentrations are obtained from the Smart Air Modelling Platform.
[iii] Exceedances has been highlighted in orange.

Table 4-2 Average Concentrations of Pollutants in the Recent Five Years (Year 2019 - 2023) at Kwai Chung Air Quality Monitoring Stations

Pollutant	Averaging Time	AQO [i]	Pollutant Concentration (μg/m^3) [ii]				
			2019	2020	2021	2022	2023
Respirable Suspended Particulates (RSP)	10th Highest 24-hour	75 (9)	59	46	56	53	54
	Annual	30	29	23	26	23	25
Fine Suspended Particulates (FSP)	19th Highest 24-hour	37.5 (18)	34	27	32	34	30
	Annual	15	18	14	16	15	16
Nitrogen Dioxide (NO_2)	19th Highest 1-hour	200 (18)	184	184	180	168	182
	10th Highest 24-hour	120 (9)	96	89	96	84	97
	Annual	40	54	48	52	44	50
Sulphur Dioxide (SO_2)	4th Highest 10-Min	500 (3)	53	43	45	59	48
	4th Highest 24-hour	40 (3)	18	12	14	17	13
Ozone (O_3)	10th Highest 8-hour	160 (9)	143	124	124	139	128
	Peak season	100	84	77	74	79	75
Carbon Monoxide (CO)	1st Highest 1-hour	30000 (0)	-	-	-	-	-
	1st Highest 8-hour	10000 (0)	-	-	-	-	-
	1st Highest 24-hour	4000 (0)	-	-	-	-	-

Note:
[i] The numbers in brackets () refer to number of exceedance allowed per year.
[ii] The pollution concentrations are obtained from the Smart Air Modelling Platform.
[iii] Exceedances has been highlighted in orange.

4.2 PATH Background

4.2.1 PATH is a regional-scale air quality model developed by the EPD to predict future air quality of Hong Kong. The PATH v3.0 grids corresponding to the Site are [34,37] and [35,37], as shown in **Figure 4-1**. **Table 4-3** presents the predicted background air quality for the Site and its adjacent areas (Grids [34,37], [34,38], [35,37] and [35,38]) for the year 2029.

4.2.2 Generally, the PATH background for the Site and adjacent areas in 2029 meet the relevant Air Quality Objectives (AQOs) with a significant margin, except for Ozone concentrations.

Table 4-3 Background Ground Level Air Quality of PATH on Year 2029

Pollutant	Averaging Time	AQOs [µg/m^3] [i]	PATH Model Concentration [µg/m^3] on Year 2029			
			Grid [34,37] L1 (0-17m)	Grid [34,38] L1 (0-17m)	Grid [35,37] L1 (0-17m)	Grid [35,38] L1 (0-17m)
Respirable Suspended Particulates (RSP)	10th Highest 24-hour	75 (9)	54.66	55.52	55.08	55.17
	Annual	30	20.94	21.25	21.08	21.31
Fine Suspended Particulates (FSP)	19th Highest 24-hour	37.5 (18)	31.77	32.97	32.79	33.02
	Annual	15	13.27	13.53	13.37	13.57
Nitrogen Dioxide (NO_2)	19th Highest 1-hour	200 (18)	112.23	101.23	104.46	99.87
	10th Highest 24-hour	120 (9)	50.83	44.62	47.93	43.79
	Annual	40	29.73	24.56	23.89	22.79
Sulphur Dioxide (SO_2)	4th Highest 10-Min	500 (3)	21.16	23.28	23.55	23.67
	4th Highest 24-hour	40 (3)	6.77	7.22	7.29	7.31
Ozone (O_3)	10th Highest 8-hour	160 (9)	173.04	176.03	172.17	172.9
	Peak season	100	115.21	117.55	116.09	117.22
Carbon Monoxide (CO)	1st Highest 1-hour	30000 (0)	594.46	592.86	591.21	590.66
	1st Highest 8-hour	10000 (0)	571.48	571.02	564.19	565.06
	1st Highest 24-hour	4000 (0)	538.03	534.32	535.73	530.2

Note:
[i] The numbers in brackets () refer to number of exceedances allowed per year.
[ii] The pollution concentrations are obtained from the Smart Air Modelling Platform.
[iii] Exceedance has been highlighted in orange.

4.3 Identification of Key Criteria Pollutants – Construction Phase

Gaseous Pollutants

4.3.1 Operation of Powered Mechanical Equipment (PME) and/or Non-road Mobile Machinery (NRMMs) during construction work would emit particulates and gaseous air pollutants such as nitrogen dioxide (NO_2) via fuel burning.

4.3.2 Emission of dark smoke is regulated by Air Pollution Control (Smoke) Regulations. By providing routine maintenance and using of ULSD, the potential impact can be significantly suppressed.

4.3.3 According to Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, only approved or exempted Non-Road Mobile Machinery (NRMM) with a proper label are allowed to be used in specified activities and locations including construction sites. Supportive information and documents (e.g. third-party emission certificates, model and serial numbers of machines and engines, etc.) for each NRMM would be provided to EPD to prove that the concerned NRMM is in line with the prescribed emission standards.

4.3.4 As only limited number of PME and/or NRMMs are expected to be used on-site due to the small site area (<1000 m^2), and the PME and/or NRMMs are required to fulfil the relevant emission standards. As a result, no significant impact is anticipated.

Particulates (RSP & FSP)

4.3.5 The air pollutants of concern during the construction phase are construction dust, which includes Respirable Suspended Particulates (RSP) and Fine Suspended Particulates (FSP) generated from the construction activities of the proposed development.

4.3.6 In accordance with the Air Pollution Control (Construction Dust) Regulation, contractors and site agents are obligated to inform the EPD and implement dust reduction measures to minimize dust emissions throughout construction phase, including demolition, site formation, foundation construction, and superstructure construction.

4.4 Identification of Key Criteria Pollutants – Operation Phase

Sulphur Dioxide (SO_2)

4.4.1 In Hong Kong, Sulphur Dioxide (SO_2) is primarily from the combustion of Sulphur-containing fossil fuels in power stations and marine vessels.

4.4.2 The Air Pollution Control (Fuel Restriction) Regulations restrict commercial and industrial processes to use ULSD with a sulphur content of only 0.001%. In December 2007, the Government offered a concessionary duty rate for Euro V diesel for motor vehicles which has a sulphur content of 0.001%. Since then, all petrol filling stations in Hong Kong provide only Euro V diesel, which has a sulphur content of 0.001%. Reference to the *2023 Hong Kong Emission Inventory Report*[3], SO_2 emission from the road traffic contribute less than 1% of the total SO_2 emissions, thus SO_2 from road traffic emissions is not considered as key air pollutant. On the other hand, although the SO_2 emission from the industrial sources contribute little to the total SO_2 emissions, due to the proximity, SO_2 emission from the industrial chimneys is considered as key air pollutant.

Particulates (RSP & FSP)

4.4.3 The emission source during the operational phase of the Project would be the vehicular emission on the roads and industrial emission from industrial chimneys.

Nitrogen Dioxide (NO_2)

4.4.4 NO_2 is the major air pollutant in concern during operation phase of the Project. NO_2 could be emitted directly via combustion, or generated from the reaction between nitrogen oxides (NO_x) and ozone (O_3).

4.4.5 The major emission source of NO_x and NO_2 during the operational phase of the Scheme would be the vehicular emission on the roads and industrial emission from industrial chimneys.

[3] 2023 Hong Kong Emission Inventory Report
https://www.epd.gov.hk/epd/sites/default/files/epd/2023_Emission_Inventory_Report_Eng_final.pdf

Ozone

4.4.6 Ozone (O_3) is formed from dioxygen by the action of ultraviolet light and also atmospheric electrical discharges. It is not a primary pollutant emitted from vehicular emission & industrial emission thus is not considered as key criteria pollutants for the Project.

Carbon Monoxide

4.4.7 Road transportation is the dominant source of CO emissions. However, considering the low CO concentration measured in the roadside air quality monitoring station (**Table 4-1**) as compared to the respective AQO criteria, the emission of CO from road transportation is unlikely to cause a significant air quality impact to the proposed development.

Lead

4.4.8 Leaded petrol has been banned in Hong Kong since 1999. It is not considered concerned pollutants for vehicular emission.

Summary

4.4.9 During the operation phase, the primary sources of pollutants will be traffic and industrial emissions, specifically SO_2, NO_2, RSP and FSP. These pollutants have been identified as the key criteria pollutants for the project's operation.

5 CONSTRUCTION PHASE AIR QUALITY IMPACT ASSESSMENT

5.1 Dust Source of the Project

5.1.1 Major dust-emitting construction activities will include the demolition of existing structures, excavation for basement construction, foundation works, and other construction activities (e.g., superstructure construction). A summary of the construction works is provided in **Table 5-1**.

5.1.2 Due to the small site area (964.2 m²), the scale of construction activities for the Project will be limited. The Site currently houses a 2-storey industrial building, and the demolition works are considered minor, as only a single low-rise development is involved. It is important to note that excavation for the basement is required for the entire Site, with an excavation depth of ~10 meters. This is expected to generate ~9,642 m³ of inert C&D material (calculated as 964.2 m² x 10 m). The maximum number of Powered Mechanical Equipment (PME), including trucks, expected to be deployed at the worksite is 8, excluding small plants such as water pumps and fans.

Table 5-1 Summary of the Construction Works

Site Area (m²)	Structures to be demolished	Excavating for Basement	Construction of Superstructure	Number of Concurrent PME [1]
964.2	A 2-storey industrial building	Expected to generate ~9,642m³ of inert C&D material	Yes (17-storey)	8

Note:
[1] Excluding small plants such as water pump and fan. Estimated numbers based on projects in similar scales.

5.2 Concurrent Projects

5.2.1 No planned and/or committed developments in the vicinity of the Site has been identified.

5.3 Air Sensitive Receivers in the Vicinity

5.3.1 The representative ASRs for the construction phase of the proposed development are illustrated in **Figure 5-1** and listed in **Table 5-2**. Although commercial, residential, and educational developments are located away from the Site, offices are typically present within industrial buildings. Therefore, the nearby industrial buildings are also considered ASRs.

Table 5-2 Representative Air Sensitive Receivers (Construction Phase)

ID	Building/Location	Type	Building Height (mPD) [1]	Horizontal Distance from Application Site Boundary (m) [2]
ASR01	Wing Hau Street Driving Test Centre	Office	25	110
ASR02	PCCW	Utility and Offices	79	180
ASR03	CNEC Lee I Yao Memorial Secondary School	Education	52	195
ASR04	Kwai Shing West Estate Block 8	Residential	127	290
ASR05	Hopewell Logistics Centre	Industrial	52	9

ID	Building/Location	Type	Building Height (mPD) [1]	Horizontal Distance from Application Site Boundary (m) [2]
ASR06	Aji Ichiban Centre	Industrial	57	9
ASR07	Global Trade Centre	Industrial	93	0 [note 2]
ASR08	8-12 Wing Kin Road	Industrial	20	16
ASR09	Wing Kin Industrial Building	Industrial	95	16
ASR10	Hou Feng Industrial Building	Industrial	87	0 [note 2]

Note:
[1] Extracted from Open3Dhk, rounded to integer.
[2] Estimated from the building footprint derived from the Digital Topographic Map iB1000.
[3] The windows do not face the Site.

5.4 Identification of the Major Pollutant Sources and of Potential Impacts

Emission from PME & Non-road Mobile Machinery

5.4.1 As stated in **Section 4.3.1**, the operation of Powered Mechanical Equipment (PME) during construction work would emit gaseous air pollutants, such as nitrogen dioxide (NO_2), due to fuel combustion. Several types of Powered Mechanical Equipment, such as excavators, can be utilized for the construction works at the Site. However, the number of PME expected to be used on-site will be limited to a maximum of 8. As a result, no significant impact is anticipated from the operation of PME.

5.4.2 According to the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, only approved or exempted Non-Road Mobile Machinery (NRMM) with proper labelling are allowed to be utilized in the construction site. Supportive information and documents, such as third-party emission certificates, model and serial numbers of machines and engines, will be provided to the EPD to demonstrate that the concerned NRMM complies with the prescribed emission standards. As a result, no significant impact is anticipated from the operation of NRMM.

Construction Dust

5.4.3 Fugitive dust will be generated during the construction phase, with the primary air pollutants of concern being Respirable Suspended Particulates (RSP) and Fine Suspended Particulates (FSP) resulting from the Project's construction activities. Sources of dust during construction phase include demolition, foundation and superstructure construction activities, as well as handling and transportation of temporary stockpiles, dusty material, excavated material and concrete production. Additionally, particulates emitted from plant equipment could pose a concern if not properly mitigated. The exposed earth after the completion of work may also serve as a potential dust source.

5.4.4 The major sources of dust during the construction phase of this Project will be the demolition of existing structures and the excavation for the basement. Despite the small scale of the works, mitigation measures will be necessary to minimize the potential impacts arising from these activities.

5.4.5 The movement of dump trucks is also considered a significant potential dust source if not properly mitigated. A rough estimate indicates that approximately 5 trips per day will be required during the demolition period, increasing to about 10 trips per day during the excavation period.

5.5 Mitigation Measures

5.5.1 Dust control measures under the Air Pollution Control (Construction Dust) Regulation (Cap. 311R) and good site practice shall be implemented to mitigate dust impact arising from construction works by preventing dust generation and/or by screening, suppressing and removing dust generated:

- Enclose the whole wall of the building to a height of at least 1m higher than the highest level of the structure to be demolished with impervious dust screens or sheeting on façade abutting or fronting upon a street
- Existing structures are proposed to be demolished by non-percussive equipment such as hydraulic crusher to reduce dust emission; no blasting will be involved.
- Water or a dust suppression chemical shall be sprayed immediately prior to, during and immediately after demolition/excavation works
- Cover stockpile or dusty materials with tarpaulin to prevent wind erosion
- Any dusty materials remaining after a stockpile is removed shall be wetted with water and cleared from the surface of roads or streets
- Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the construction site
- Where a vehicle leaving a construction site is carrying a load of dusty materials, the load shall be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle
- Store cement bags in shelter with 3 sides and the top covered by impervious materials if the stack exceeds 20 bags
- Maintain a reasonable height when dropping excavated materials to limit dust generation
- Limit vehicle speed within Site to 10 km/h and confine vehicle movement in haul road
- Minimize exposed earth after completion of work in a certain area by hydroseeding, vegetating or soil compacting
- Cover materials on trucks before leaving the Site to prevent dropping or being blown away by wind
- Regular maintenance of plant equipment to prevent black smoke emission
- Throttle down or switch off unused machines or machine in intermittent use
- Plan the Site layout so that machineries, dust causing activities and stockpilings are away from receptors as far as possible.
- Site hoarding higher than 2.4m should be implemented where there are receptors at close proximity to the construction site and dusty activities.
- Haul road shall be away from the project boundary as much as possible

5.5.2 No adverse dust impact on the surrounding air sensitive receivers (ASRs) is expected with proper implementation of mitigation measures.

5.5.3 As the project is still in planning stage, the necessary of EM&A program shall be determined in detailed design stage.

6 OPERATION PHASE AIR QUALITY IMPACT ASSESSMENT

6.1 Operation of the Proposed Development

Potential Source of Air Quality Impact within the Proposed Development

6.1.1 The proposed development is intended solely for data centre use and will operate exclusively on electricity supplied by CLP.

6.1.2 As stated in **Sections 2.2**, 16 backup generators powered by diesel fuel, with a total capacity of 28,000 kW, will be installed. Routine testing of each backup generator will be conducted sequentially for 30 minutes each month, which may pose a potential source of air quality impact.

6.1.3 Since the backup generators and exhaust chimneys require a Specified Process license, it is expected that the potential impact will be mitigated to an acceptable level prior to the approval of the APCP and issuance of the license.

6.1.4 Therefore, the proposed development is not expected to induce adverse air quality impact during operation phase.

Air Sensitive Receivers (ASRs)

6.1.5 Based on the current tentative layout, only the management offices and data halls in the proposed development are considered ASRs, as stated in **Sections 2.2**. To ensure air quality in these areas during operation, they are designed as confined spaces and will rely exclusively on fresh air intakes for ventilation. The potentially polluted air from outside is not expected to enter the management offices and data halls. Therefore, it is necessary to identify suitable locations for the fresh air intakes.

6.2 Buffer Distance Recommended by HKPSG

6.2.1 The suggested buffer distances from the Hong Kong Planning Standards and Guidelines (HKPSG) outlined in **Table 3-1** shall be adhered to in order to avoid potential air quality impacts.

6.2.2 The adjoining Wing Kin Road and Wing Chong Street are classified as Local Distributors according to Transport Department (See **Appendix 6-1**), requiring a buffer distance of more than 5 m, as shown in **Figure 6-1**. Since the buffer zones for roads are independent of elevation, the fresh air intake for the data hall should be located outside these buffer regions, irrespective of elevation.

6.2.3 For the industrial chimneys in the vicinity, a buffer distance of 10 to 200 meters is required, depending on the elevation difference between the emission point and the receptor. A list of the chimneys in the vicinity is provided in **Table 6-1**.

Table 6-1 List of Chimneys within 200m from Application Site Boundary

Chimney ID	Description	Height of chimney (mPD)	Horizontal Distance from application site boundary (m)	Horizontal Distance from building footprint (m)
CH01a **CH01b**	Wing Loi Industrial Building	85	64	67
CH01c **CH01d**		81	85	87
CH02	Kwai Chung Crematorium	52	196	198
CH03a **CH03b**	Wing Kin Industrial Building	99	23	31
CH03c		103	40	49

Note: Chimneys' height and location were estimated from the building footprint derived from the Digital Topographic Map iB1000, measurements from Open3Dhk, and site observations. Please refer to **Appendix 2-2** for details.

Table 6-2 Required Buffer Distance for Various Elevations

Assessed Elevation	Chimney ID	Industrial Chimney Exit above the Highest Assessed Elevation (m)	Required buffer distance (m)	The Proposed Development Completely Outside of Buffer Region (Y/N)	Corresponding Drawing
At or Below 32 mPD	CH01a, CH01b	53	10	Y	Figure 6-2a
	CH01c, CH01d	49	10	Y	
	CH02	20	100	Y	
	CH03a, CH03b	67	10	Y	
	CH03c	71	10	Y	
Between 32 mPD and 51 mPD	CH01a, CH01b	34	50	Y	Figure 6-2b
	CH01c, CH01d	30	50	Y	
	CH02	1	200	N	
	CH03a, CH03b	48	10	Y	
	CH03c	52	10	Y	
Between 51 mPD and 55 mPD	CH01a, CH01b	30	50	Y	Figure 6-2c
	CH01c, CH01d	26	100	N	
	CH02	-3	200	N	
	CH03a, CH03b	44	10	Y	
	CH03c	48	10	Y	
Between 55 mPD and 59 mPD	CH01a, CH01b	26	100	N	Figure 6-2d
	CH01c, CH01d	22	100	N	
	CH02	-7	200	N	
	CH03a, CH03b	40	10	Y	
	CH03c	44	10	Y	
Between 59 mPD and 109.55 mPD	CH01a, CH01b	-24.55	200	N	Figure 6-2e
	CH01c, CH01d	-28.55	200	N	
	CH02	-57.55	200	N	
	CH03a, CH03b	-10.55	200	N	
	CH03c	-6.55	200	N	

6.2.4 The required buffer regions for the identified chimneys at different elevations are illustrated in **Figures 6-2a to 6-2e**. All industrial chimneys within 200 m from the application site boundary have been identified.

- Below 32 mPD (**Figure 6-2a**)
  - The Site is not within the buffer region of any chimney; thus, the only constraint for fresh air intakes is from the nearby roads.
- Between 32 mPD and 51 mPD (**Figure 6-2b**)
  - A small portion of the Site at the southwest corner falls within the buffer region of the chimney at Kwai Chung Crematorium (CH02).
- Between 51 mPD and 55 mPD (**Figure 6-2c**)
  - The southern portion of the Site is within the buffer region of the chimney at Wing Loi Industrial Building (CH01c).
- Between 55 mPD and 59 mPD (**Figure 6-2d**)
  - Most of the Site is within the buffer region of the chimney at Wing Loi Industrial Building (CH01b).
- Between 59 mPD and 109.55 mPD (**Figure 6-2e**)
  - The Site is entirely within the buffer regions of the nearby chimneys.

6.3 Suitable Locations for Fresh Air Intakes for Areas with Sensitive Uses

6.3.1 The floor and ceiling levels of the Proposed Development under the current design are summarised in **Table 6-3**.

Table 6-3 Floor and Ceiling Levels of the Proposed Development

Floor	Height (m)	Floor Level (mPD)	Ceiling Level (mPD)	Corresponding Drawing
G/F	11	9	20	Fig 6-3a
1/F	6	20	26	Fig 6-3b
2/F	6	26	32	Fig 6-3c
3/F	6	32	38	Fig 6-3d
4/F	5.5	38	43.5	Fig 6-3e
5/F	5.5	43.5	49	Fig 6-3e
6/F	5.5	49	54.5	Fig 6-3f
7/F	5.5	54.5	60	Fig 6-3g
8/F and above	5.5	-	-	-

Note:
[1] The design of the proposed development is subject to change.

6.3.2 The proposed façades for fresh air intakes are illustrated in **Figures 6-3a to 6-3g**. All industrial chimneys within 200 meters of the application site boundary have been identified. It should be noted that the ASRs of the proposed development, namely the management offices and data halls, are designed as confined spaces and will rely exclusively on fresh air intakes at suitable locations for ventilation, as mentioned in **Section 2.2.10**. The potentially polluted air outside is not expected to enter the management offices and data halls. If any additional ASRs are identified in the proposed development at a later stage, those areas should receive the same treatment as the management offices and data halls.

- G/F to 2/F (9 to 32 mPD) (**Figures 6-3a to 6-3c**)
  - The entire eastern façade is suitable for fresh air intake.
  - The western façade is within the buffer region of Wing Chong Street.
- 3/F to 6/F (32 to 54.5 mPD) (**Figures 6-3d to 6-3f**)
  - The entire eastern façade is suitable for fresh air intake.
  - A small portion of the western façade is outside the buffer region of Wing Chong Street and suitable for fresh air intake.
- 7/F (54.5 to 60 mPD) (**Figure 6-3g**)
  - At or above 59 mPD, the entire Site is within the buffer regions of the chimneys at Wing Loi Industrial Building (CH01b) and Wing Kin Industrial Building (CH03a).
  - Below 59mPD, only the northern half of the eastern façade is suitable for fresh air intake.
  - No suitable locations for fresh air intake at or above 59mPD.
- 8/F & above (> 60 mPD)
  - No suitable locations for fresh air intake.

6.3.3 Generally, the entire eastern façade from G/F to 7/F (up to 59 mPD) and a small portion of the western façade from 3/F to 6/F (32 to 54.5 mPD) are suitable for fresh air intake. However, no fresh air intake shall be provided at 8/F or above.

6.3.4 With the fresh air intakes for areas with air-sensitive uses positioned at the proposed locations, no adverse air quality impacts during the operation of the Project are anticipated.

6.4 Provision of Emergency Generators

6.4.1 A total of 16 backup generators powered by diesel fuel, with a combined capacity of 28,000 kW, will be installed by the tenant. Routine testing of each backup generator will be conducted sequentially for 30 minutes each month, which may pose a potential source of air quality impact.

6.4.2 Since the operation of the backup generators requires a SP license, the APCP for SP license application must be approved by the relevant authority (e.g., EPD). Given the short operational duration of the backup generators and the necessary mitigation measures to be confirmed in the APCP, adverse air quality impacts arising from the routine testing are not anticipated.

6.5 Provision of Basement Carparks

6.5.1 It should be noted that there are basement carparks in the Proposed Development. However, the details of the carparks including the locations of the exhaust outlet are not available.

6.5.2 The project team is reminded to fulfill the requirements, including design, maintenance and operation of the ventilation systems, as stipulated in ProPECC PN 2/96 - Control of Air Pollution in Car Parks. In addition, the exhaust outlet for the basement carpark shall be located as far away as possible from nearby ASRs and/or fresh air intake to avoid causing any potential air pollutant nuisance.

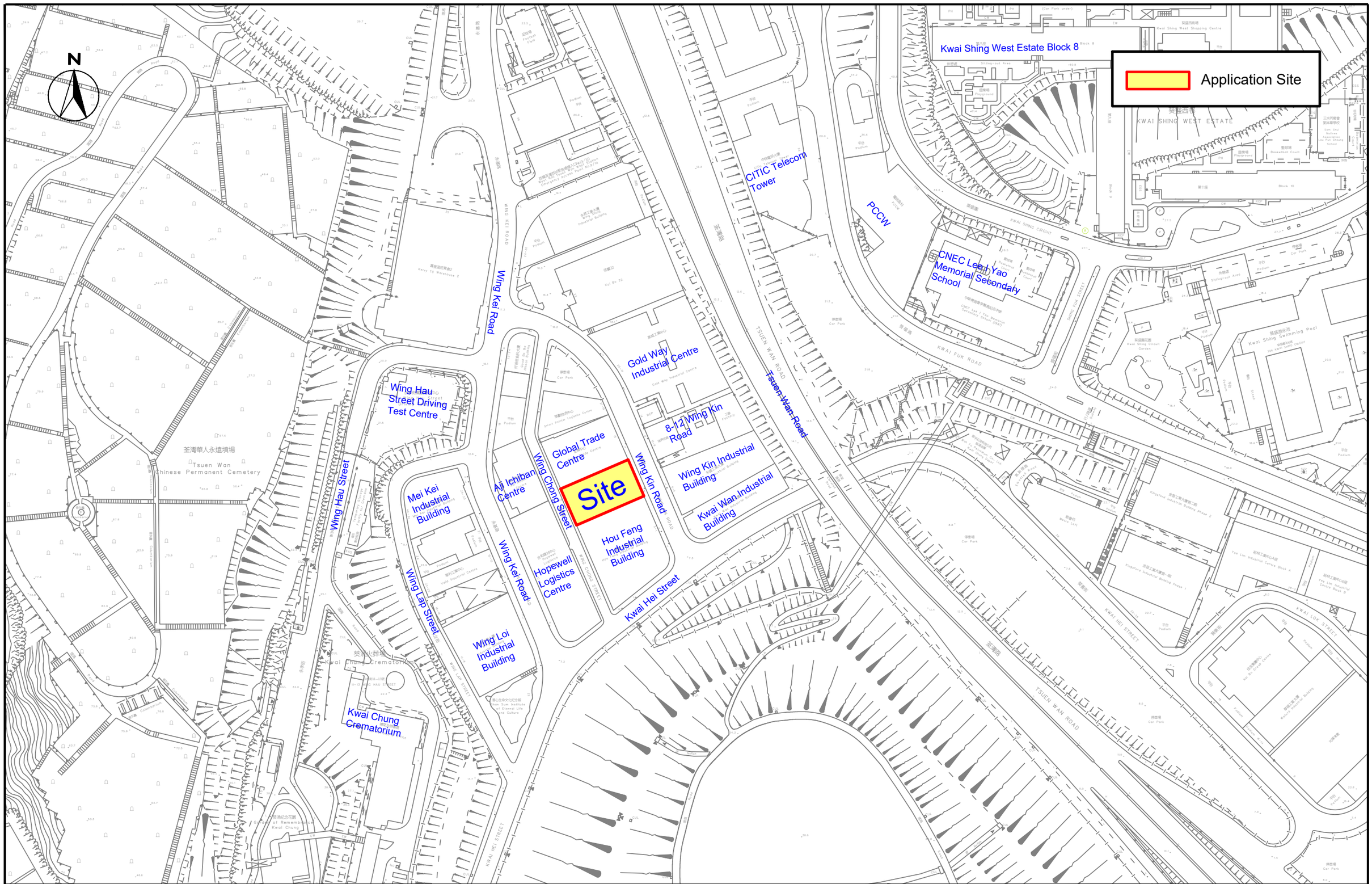
7 CONCLUSION

7.1.1 The air quality impact from the construction of the proposed development on the surrounding area, as well as the impact from the surrounding area on the proposed development, has been assessed. With the implementation of dust suppression measures as outlined in the Air Pollution Control (Construction Dust) Regulation and adherence to good site practices, no adverse air quality impacts associated with the construction works are expected.

7.1.2 The proposed development is not considered a source of air pollutants during normal operation. Backup generators powered by diesel fuel, with a combined capacity of 28,000 kW, will be installed by the tenant. Routine testing may pose a potential source of air quality impact. Since the operation of the backup generators requires a Specified Process (SP) license, the air pollution control plan (APCP) for the SP license application must be approved by the EPD. Given the short operational duration of the backup generators and the necessary mitigation measures to be confirmed in the APCP, adverse air quality impacts arising from the routine testing are not anticipated.

7.1.3 A qualitative assessment indicates that vehicular and industrial emissions are not expected to constrain the proposed development, provided that the locations of the fresh air intakes for ASRs and exhaust outlets for the basement carpark are carefully designed.

FIGURES

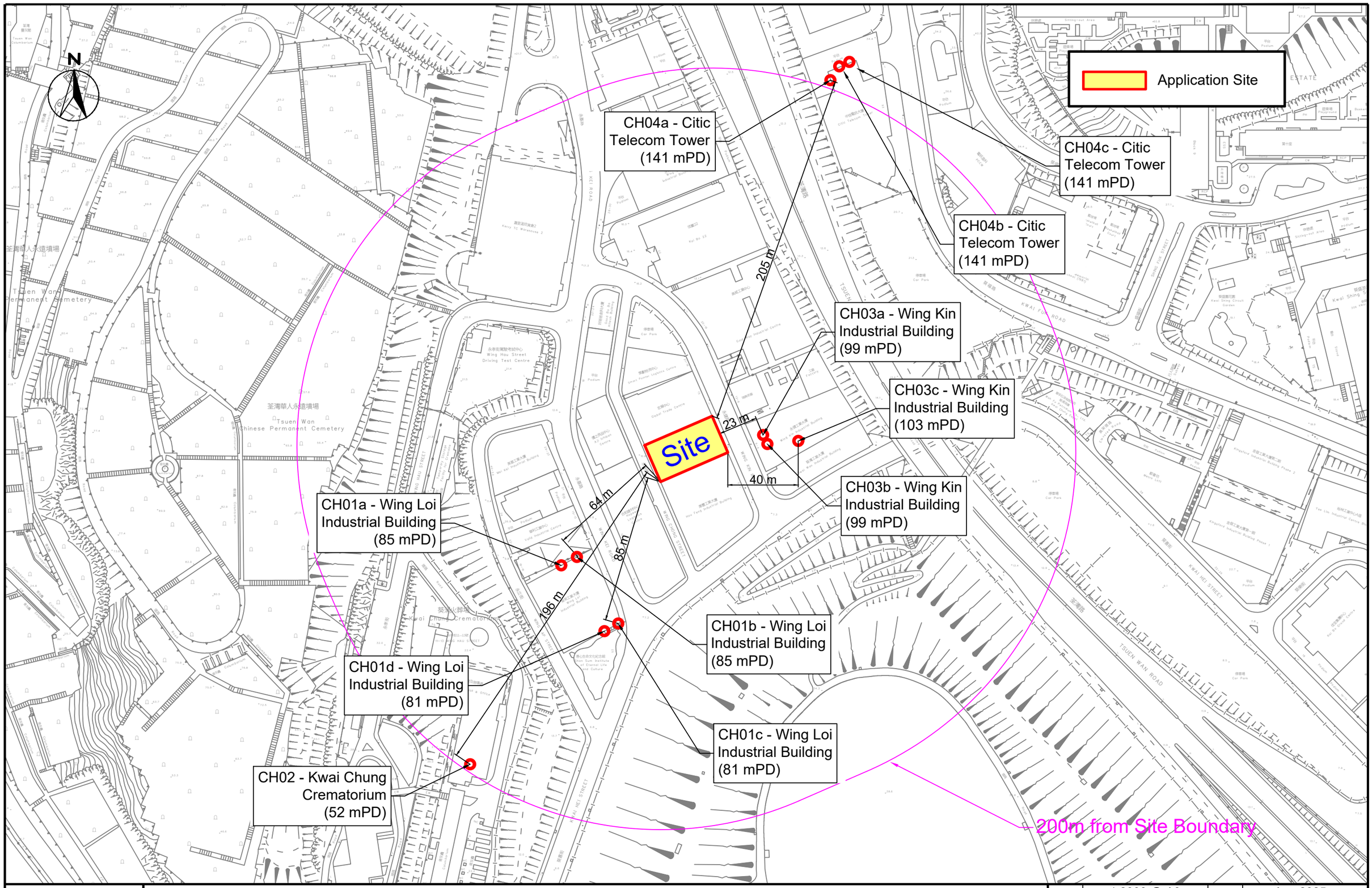


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Site Location Plan

SCALE	1:2000 @ A3	DATE	Aug 2025
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JOB No.	IA23170	DRAWING No.	2-1
		REV	-

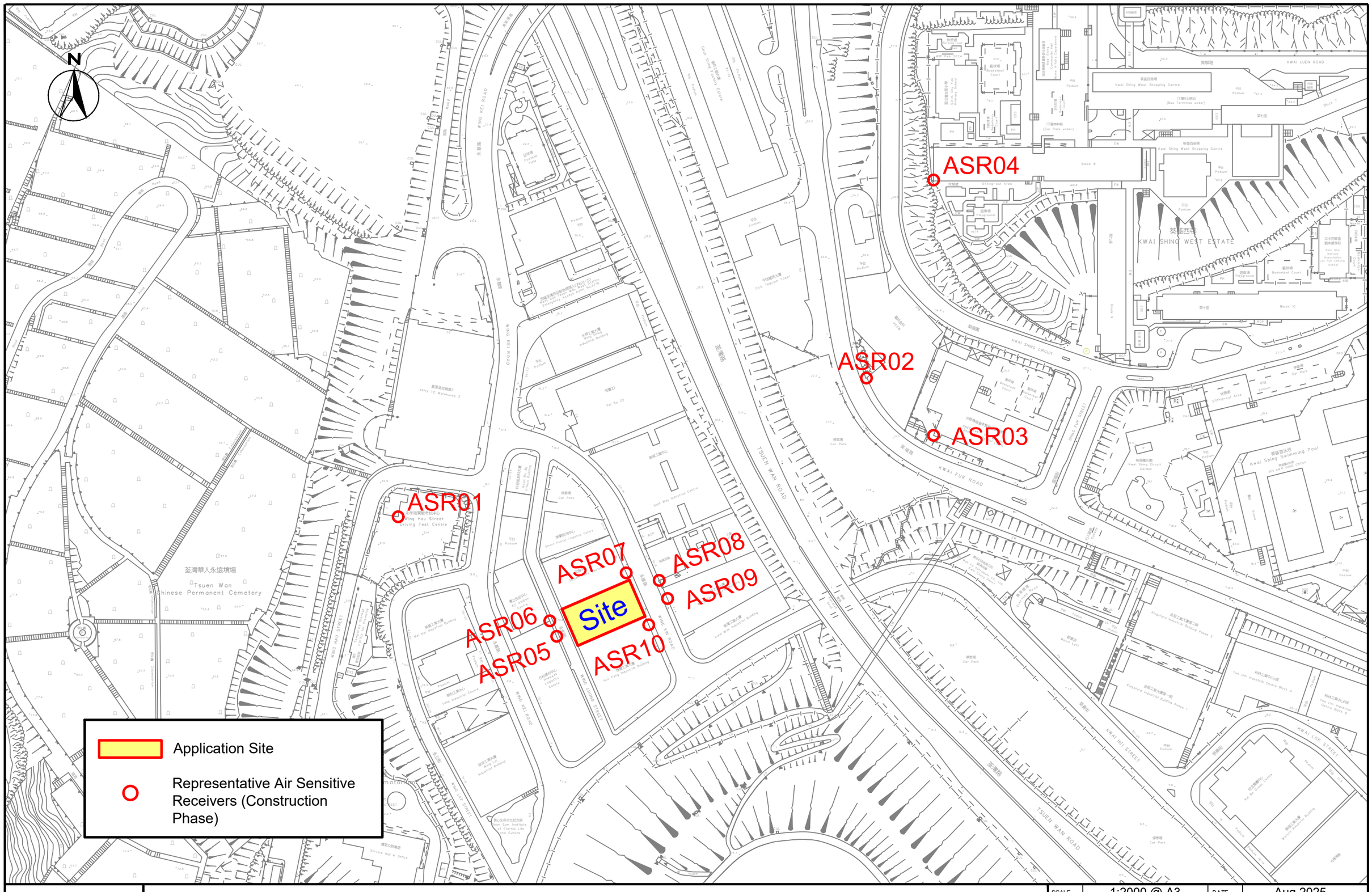


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Location of the Identified Chimneys

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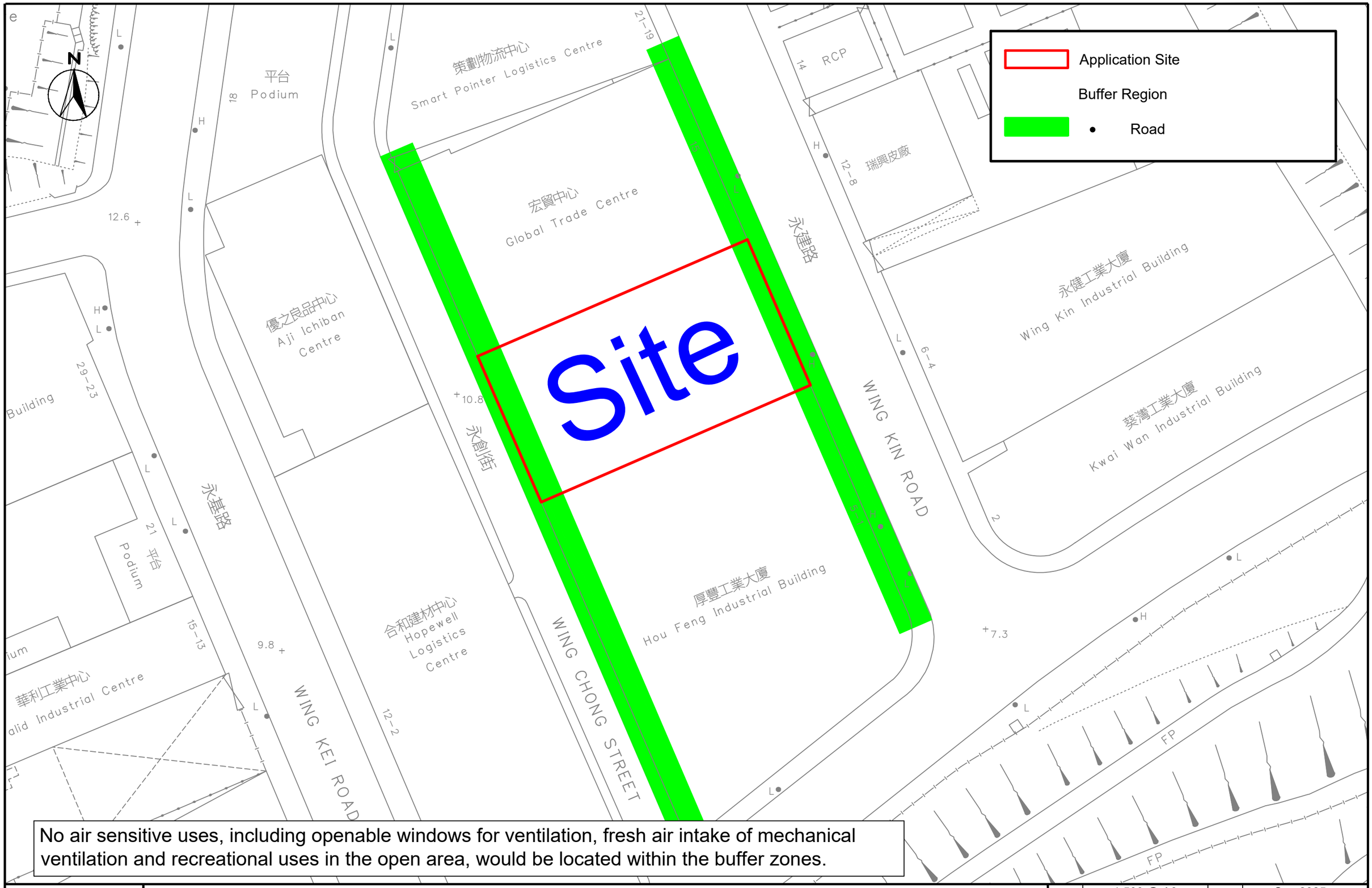


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Representative Air Sensitive Receivers (Construction Phase)

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		REV	-



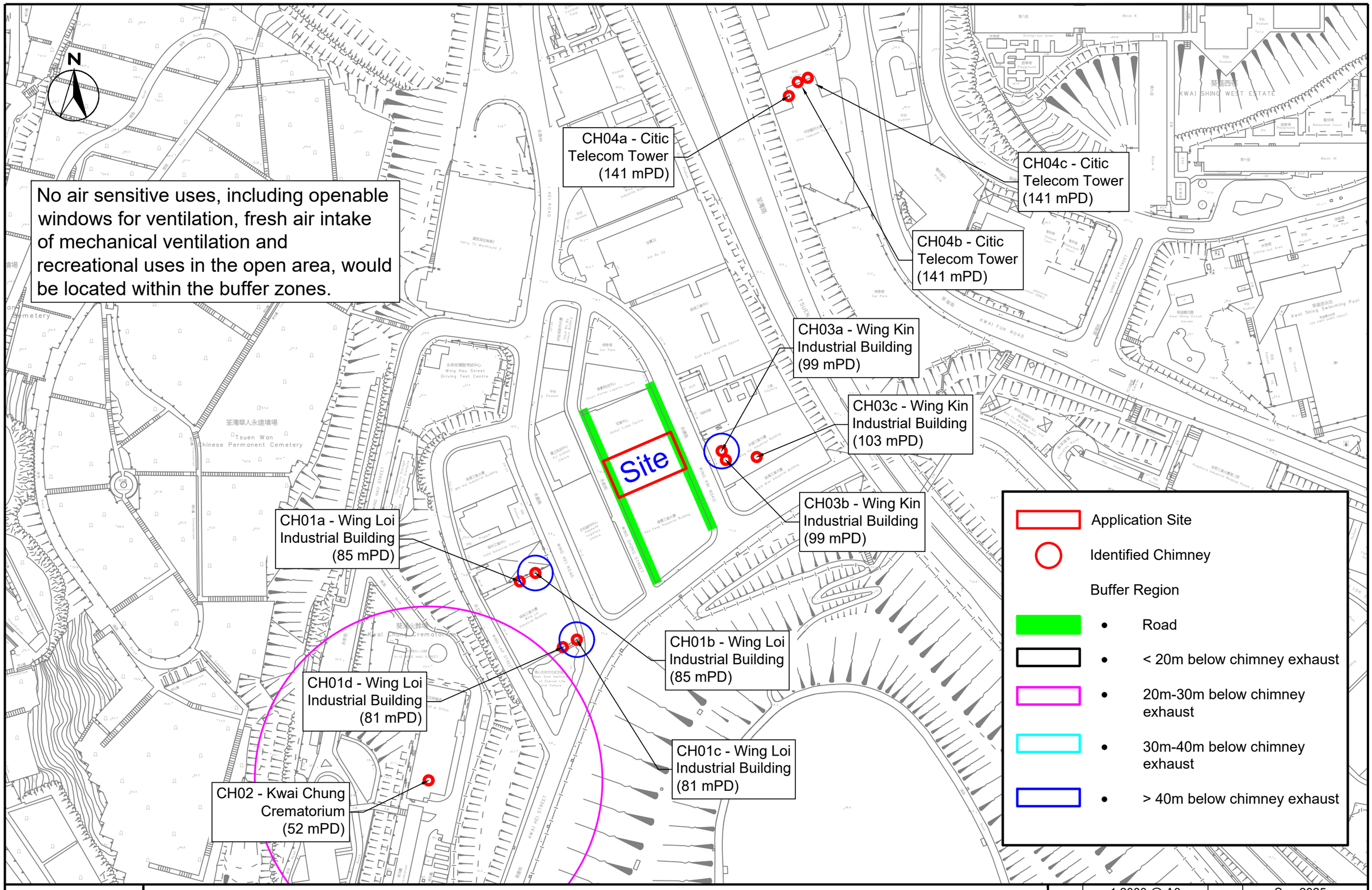
No air sensitive uses, including openable windows for ventilation, fresh air intake of mechanical ventilation and recreational uses in the open area, would be located within the buffer zones.

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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Buffer Regions of Nearby Roads

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JOB No.	IA23170	DRAWING No.	6-1
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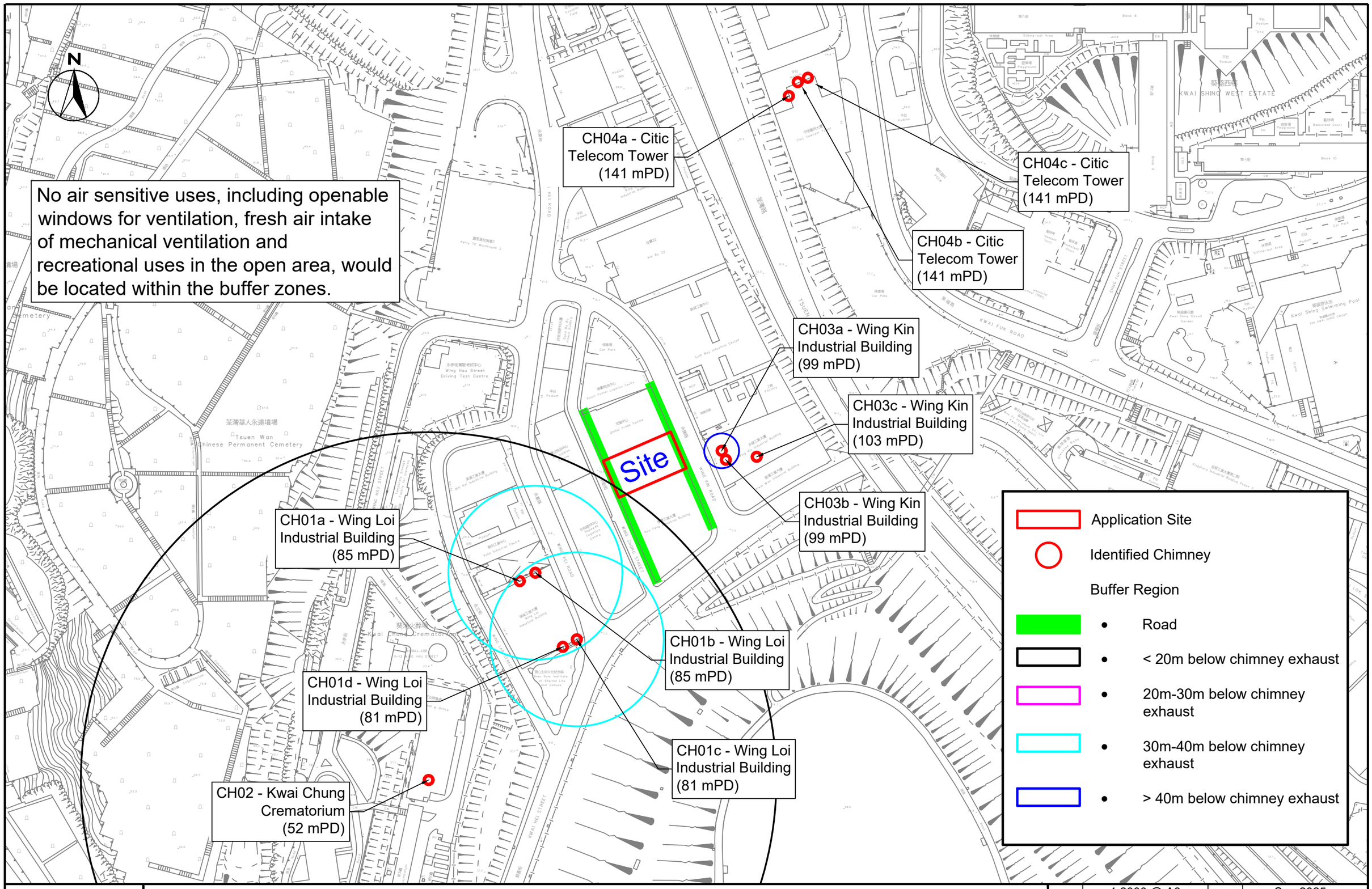


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Regions (Below 32mPD)

SCALE	1:2000 @ A3	DATE	Sep 2025
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JOB No.	IA23170	DRAWING No.	6-2a
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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Regions (32-51mPD)

SCALE	1:2000 @ A3	DATE	Sep 2025
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JOB No.	IA23170	DRAWING No.	6-2b
		REV	-

No air sensitive uses, including openable windows for ventilation, fresh air intake of mechanical ventilation and recreational uses in the open area, would be located within the buffer zones.

CH04a - Citic Telecom Tower (141 mPD)

CH04c - Citic Telecom Tower (141 mPD)

CH04b - Citic Telecom Tower (141 mPD)

CH03a - Wing Kin Industrial Building (99 mPD)

CH03c - Wing Kin Industrial Building (103 mPD)

CH03b - Wing Kin Industrial Building (99 mPD)

Site

CH01a - Wing Loi Industrial Building (85 mPD)

CH01b - Wing Loi Industrial Building (85 mPD)

CH01d - Wing Loi Industrial Building (81 mPD)

CH01c - Wing Loi Industrial Building (81 mPD)

CH02 - Kwai Chung Crematorium (52 mPD)

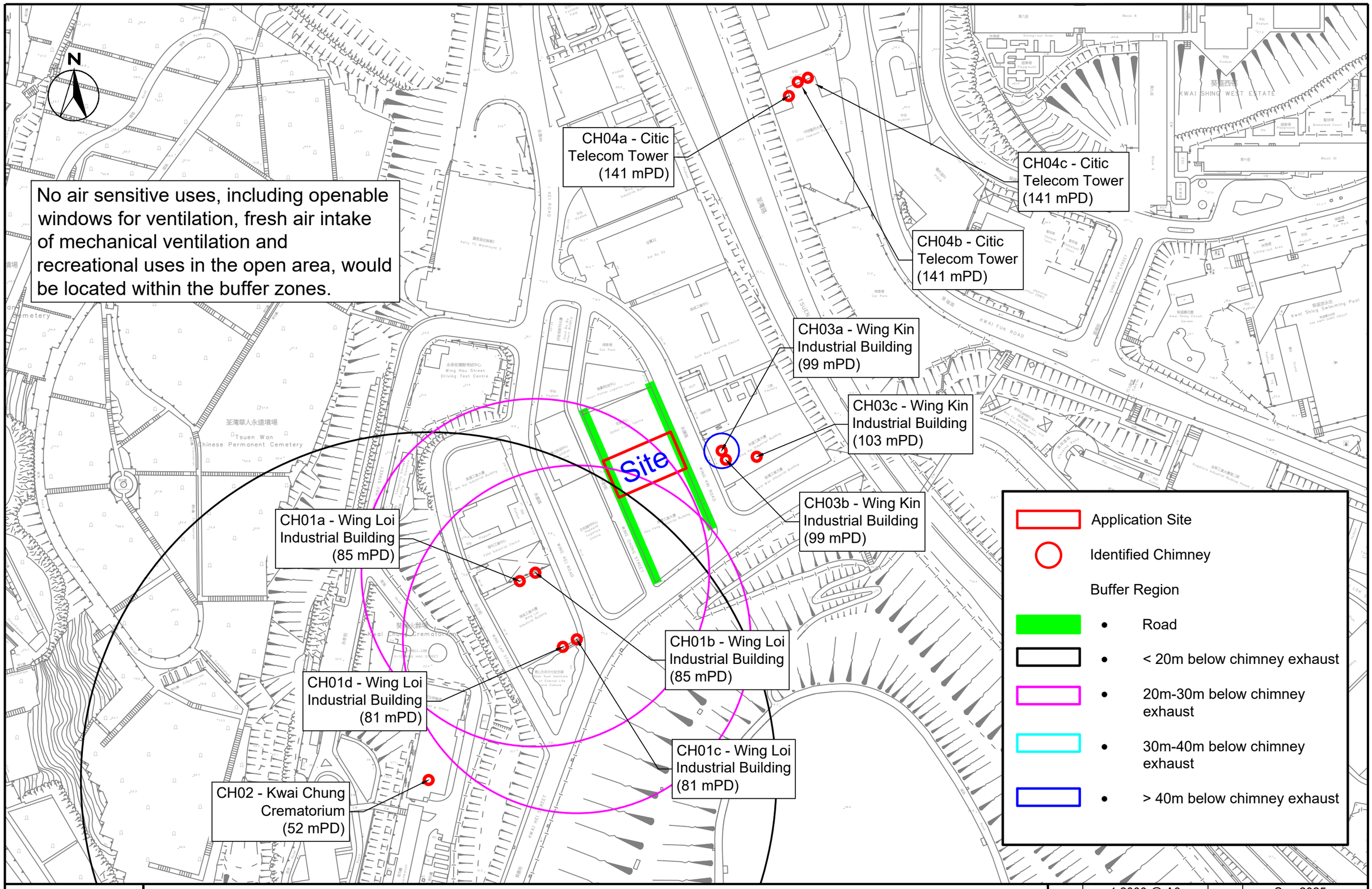
- Application Site
- Identified Chimney
- Buffer Region
  - Road
  - < 20m below chimney exhaust
  - 20m-30m below chimney exhaust
  - 30m-40m below chimney exhaust
  - > 40m below chimney exhaust

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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Region (51-55mPD)

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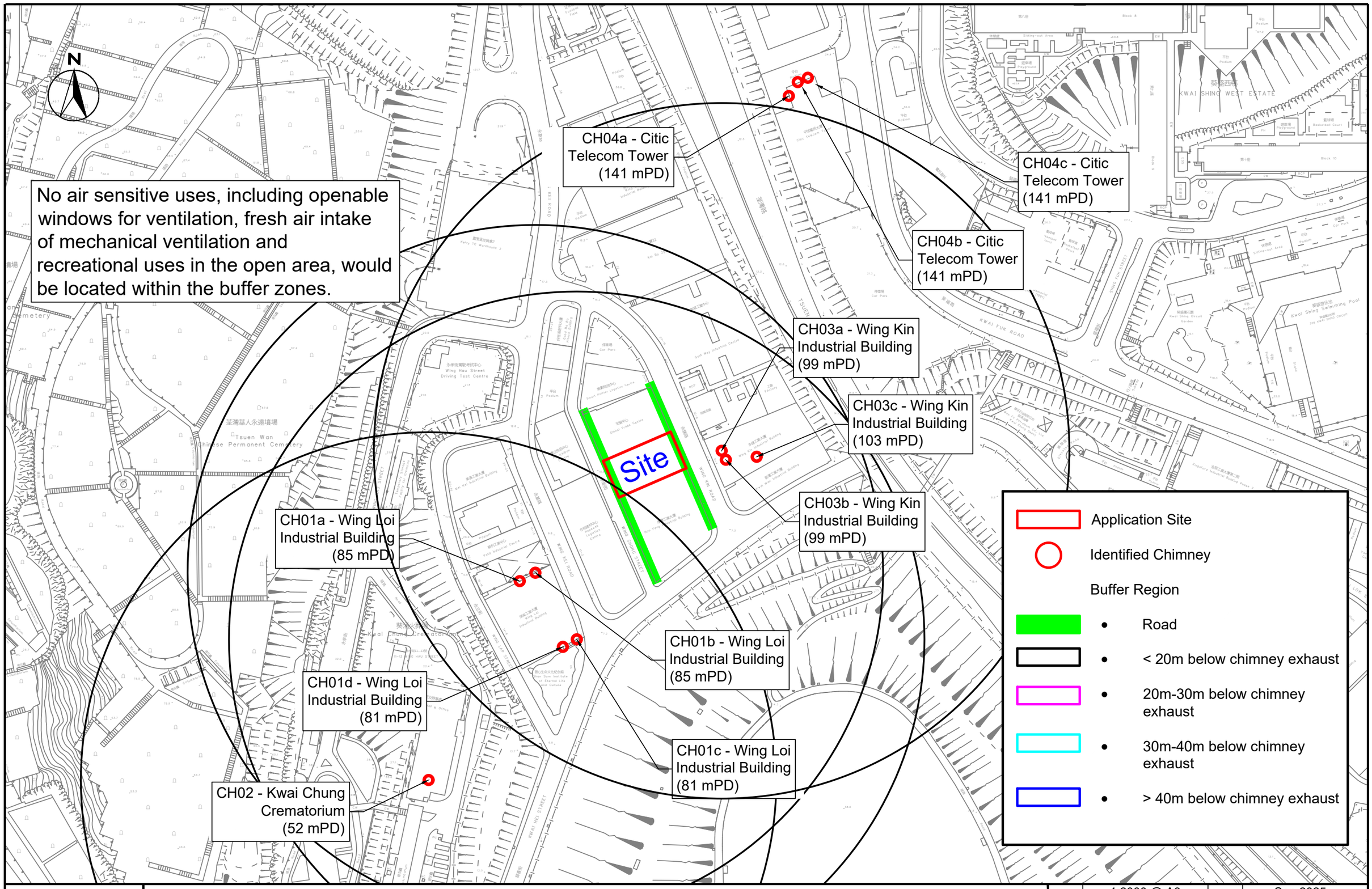


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Region (55-59mPD)

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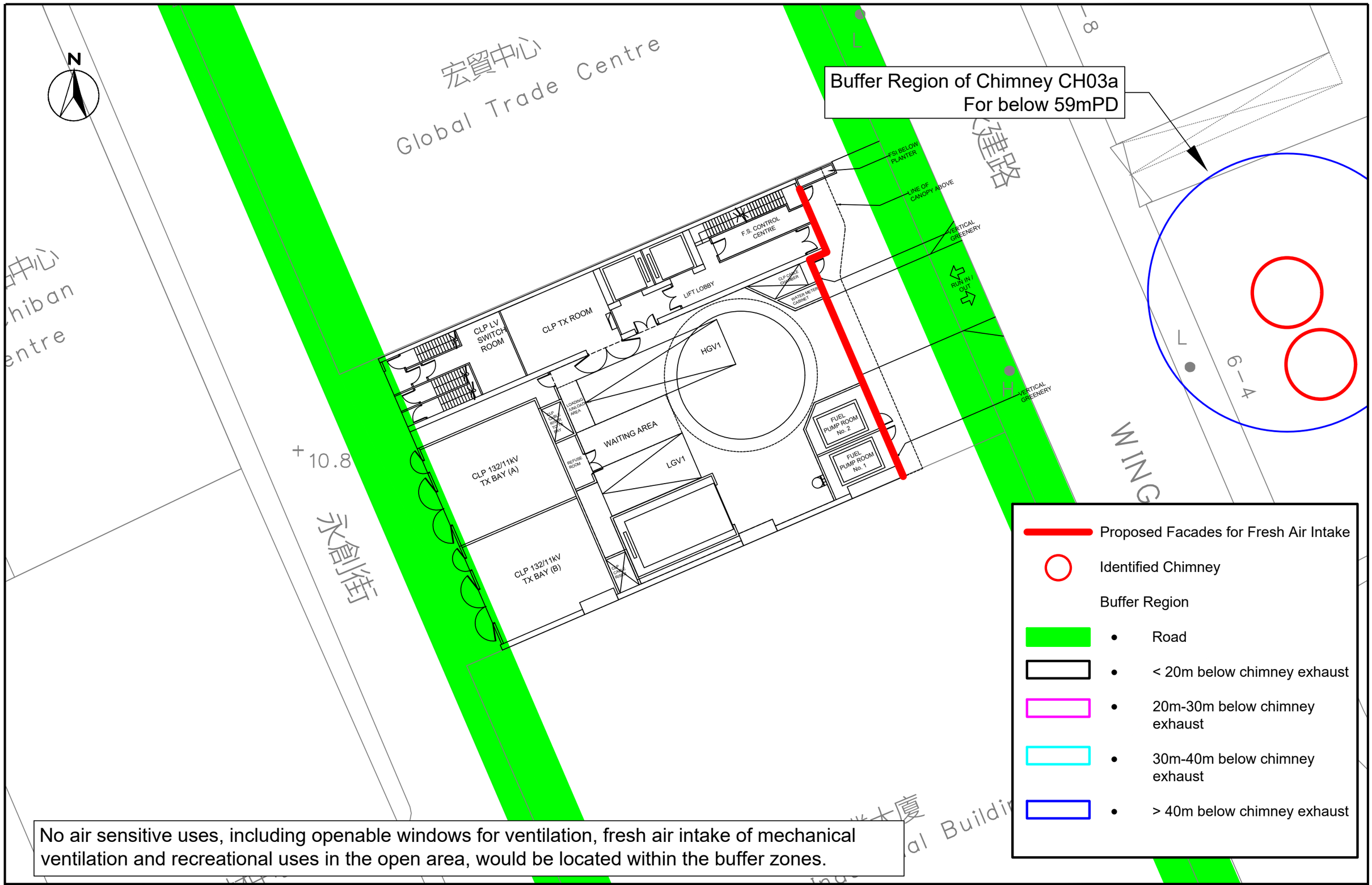


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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Required Buffer Region (59-109.55mPD)

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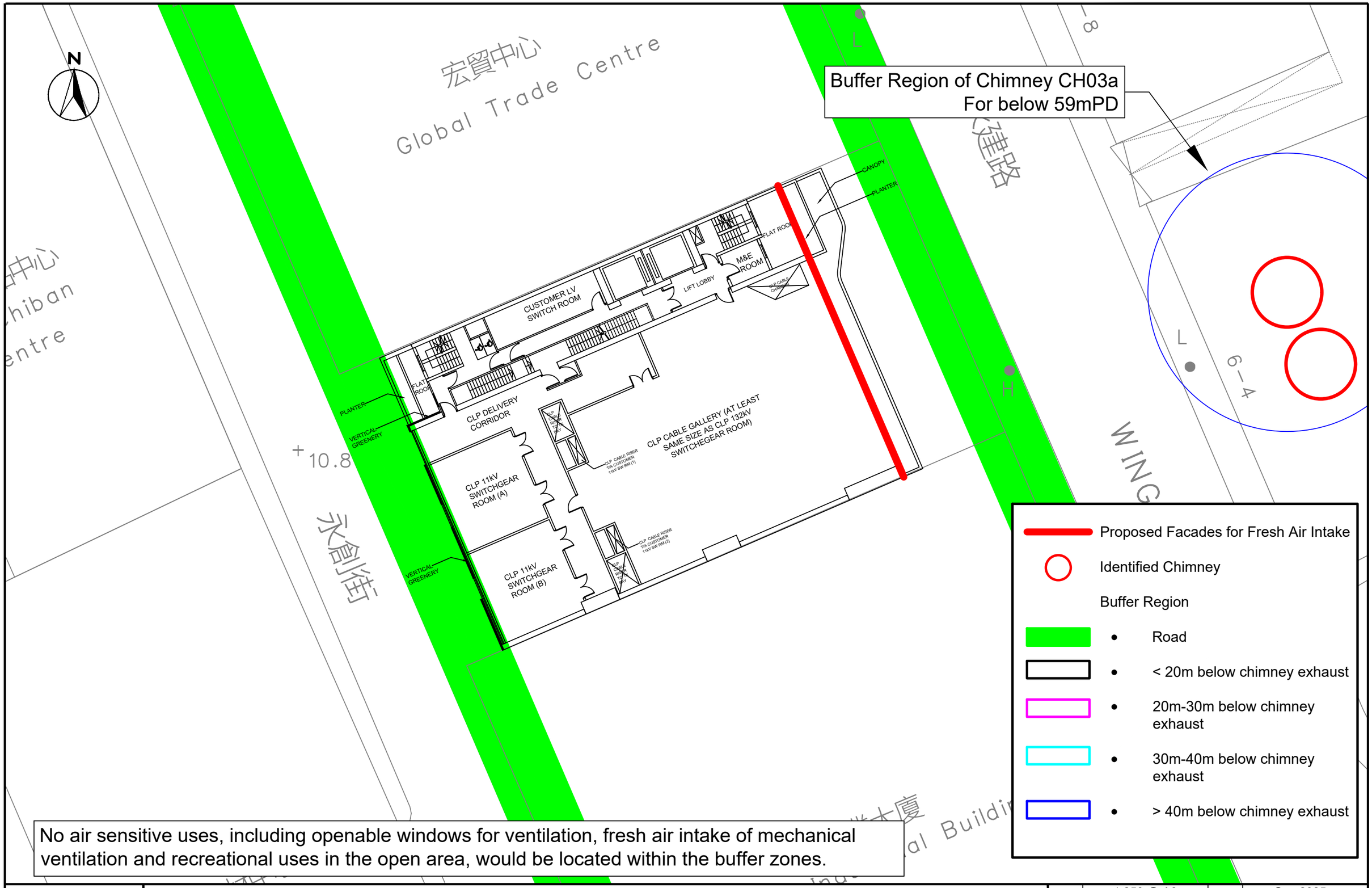
No air sensitive uses, including openable windows for ventilation, fresh air intake of mechanical ventilation and recreational uses in the open area, would be located within the buffer zones.

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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (G/F - 9mPD to 20mPD)

SCALE	1:250 @ A3	DATE	Sep 2025
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JOB No.	IA23170	DRAWING No.	6-3a
		REV	-



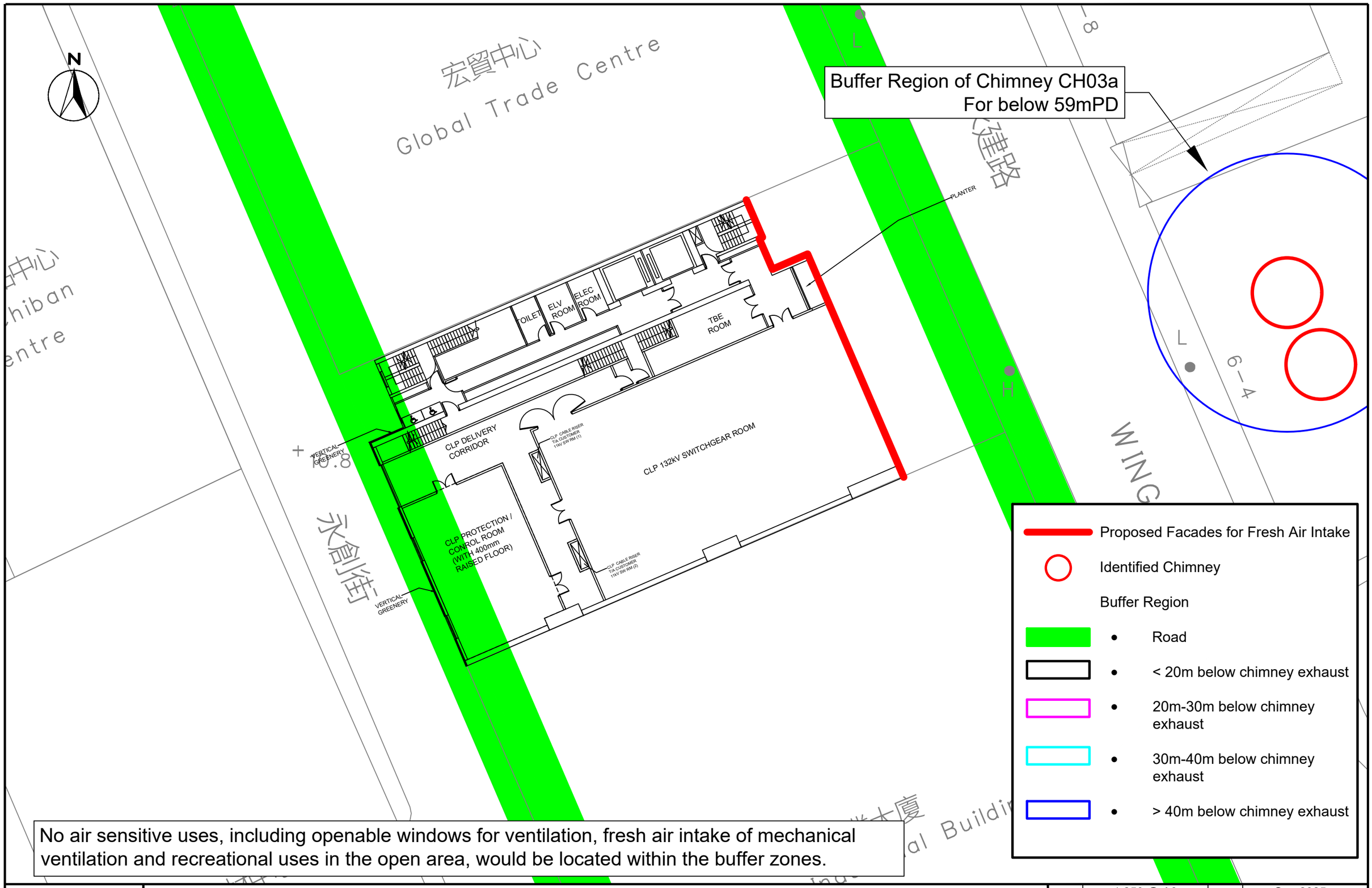
No air sensitive uses, including openable windows for ventilation, fresh air intake of mechanical ventilation and recreational uses in the open area, would be located within the buffer zones.

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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (1/F - 20mPD to 26mPD)

SCALE	1:250 @ A3	DATE	Sep 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3b
		REV	-



No air sensitive uses, including openable windows for ventilation, fresh air intake of mechanical ventilation and recreational uses in the open area, would be located within the buffer zones.

CINOTECH
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Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (2/F - 26mPD to 32mPD)

SCALE	1:250 @ A3	DATE	Sep 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3c
		REV	-

Buffer Region of Chimney CH03a
For below 59mPD

Buffer Region of Chimney CH02
For above 32mPD

宏貿中心
Global Trade Centre

永康街

WING KIN ROAD

PLANTER

FLAT ROOF

M&E ROOM

OILET

ELV ROOM

ELEC ROOM

VERTICAL GREENERY

CLP BATTERY & CHARGER ROOM (B)

CLP BATTERY & CHARGER ROOM (A)

CUSTOMER 11kV SWITCHROOM (1)

CUSTOMER 11kV SWITCHROOM (2)

CLP CABLE RISER F/B TO CUSTOMER 11kV SW RM (1)

CLP CABLE RISER F/B TO CUSTOMER 11kV SW RM (2)

UPPER PART OF CLP 132kV SWITCHGEAR ROOM ON 2/F

CLP TELECOM ROOM (WITH 400mm RAISED FLOOR)

+10.8

L

T

6–4

8

N

Proposed Facades for Fresh Air Intake

Identified Chimney

Buffer Region

- Road
- < 20m below chimney exhaust
- 20m-30m below chimney exhaust
- 30m-40m below chimney exhaust
- > 40m below chimney exhaust

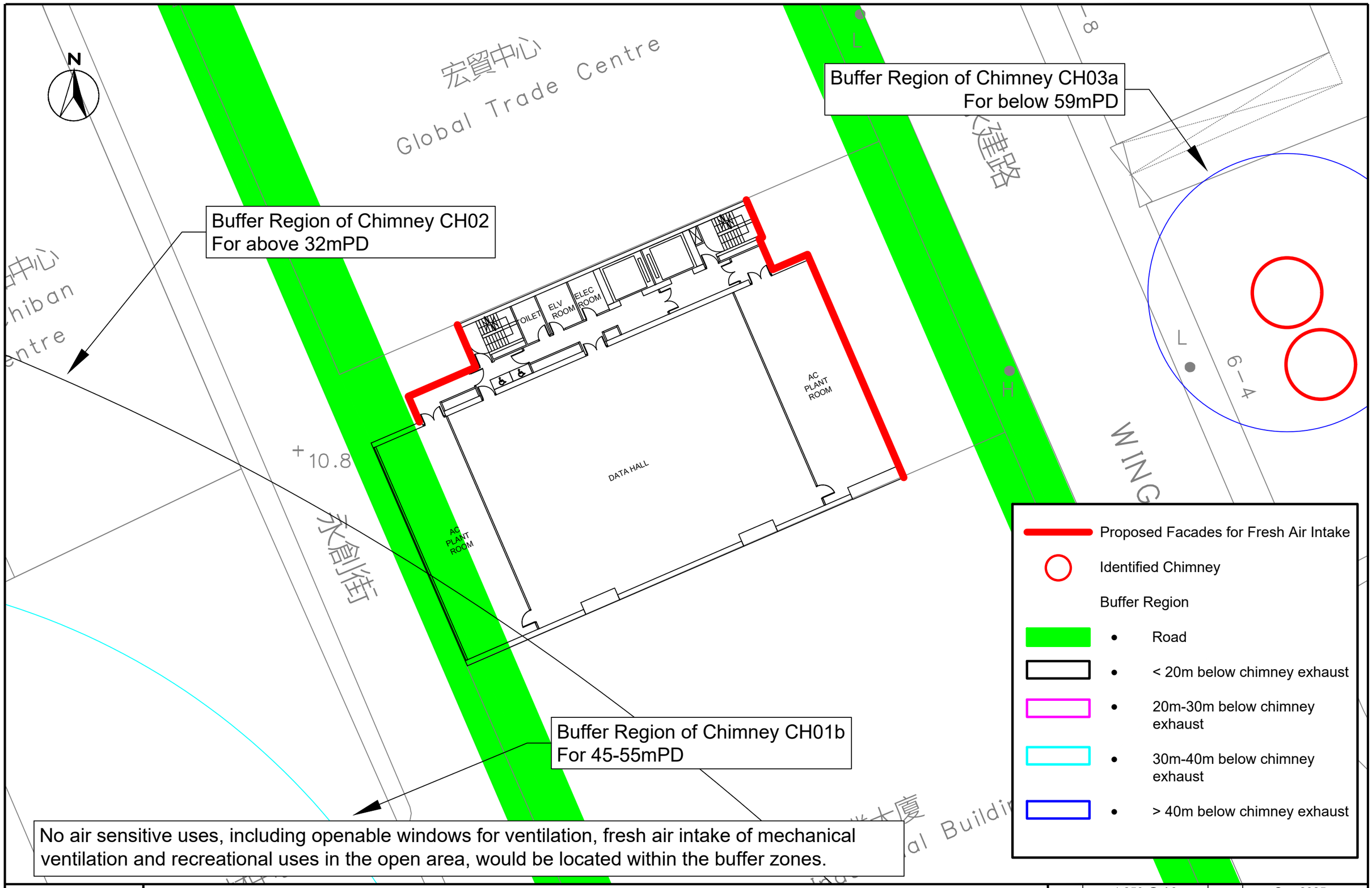
No air sensitive uses, including openable windows for ventilation, fresh air intake of mechanical ventilation and recreational uses in the open area, would be located within the buffer zones.

CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (3/F - 32mPD to 38mPD)

SCALE	1:250 @ A3	DATE	Sep 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3d
		REV	-



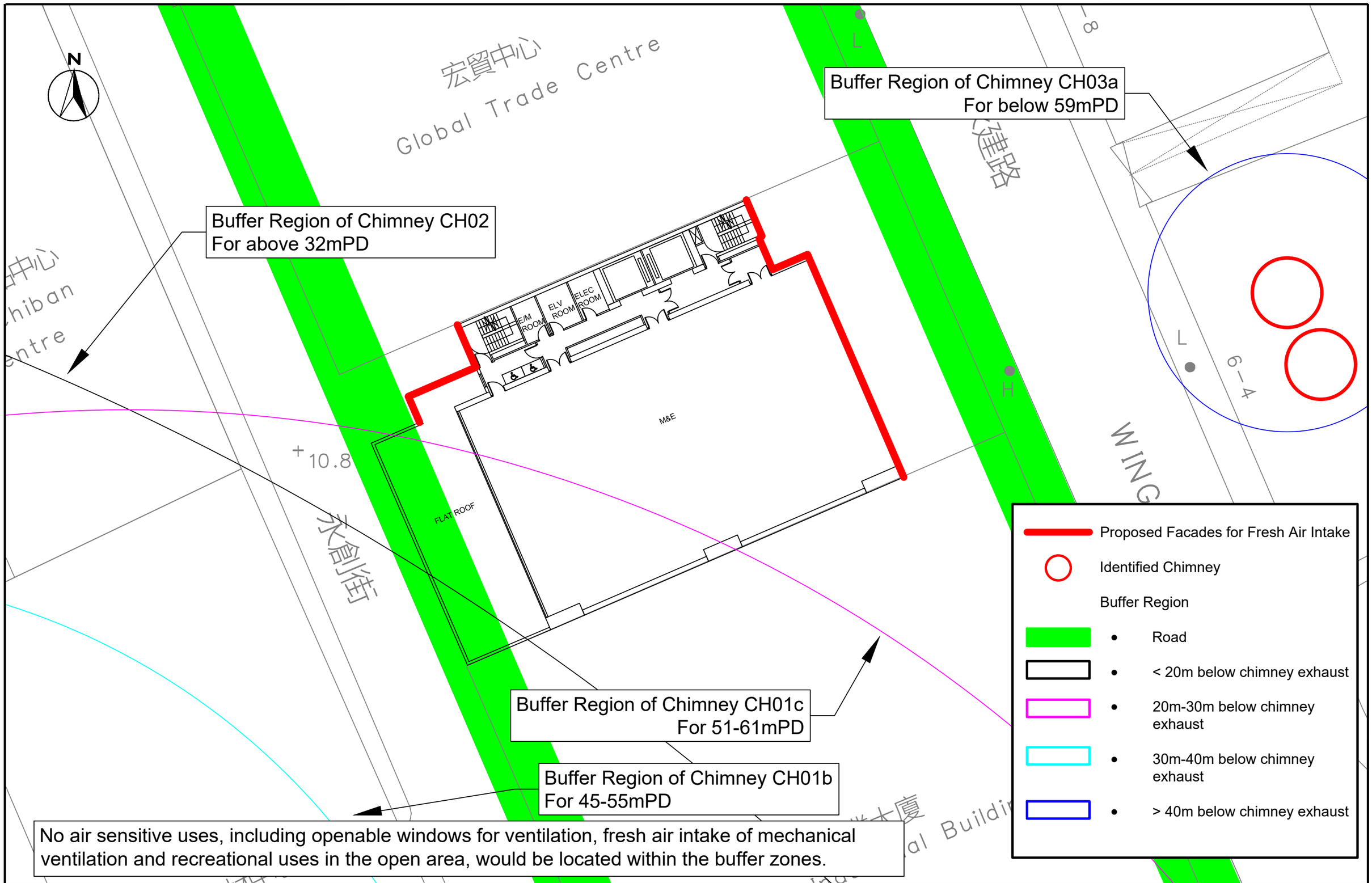
No air sensitive uses, including openable windows for ventilation, fresh air intake of mechanical ventilation and recreational uses in the open area, would be located within the buffer zones.

CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (4-5/F - 38mPD to 49mPD)

SCALE	1:250 @ A3	DATE	Sep 2025
CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3e
		REV	-



CINOTECH
Cinotech Consultants Limited

Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

Proposed Facades for Fresh Air Intake (6/F - 49mPD to 54.5mPD)

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JOB No.	IA23170	DRAWING No.	6-3f
		REV	-

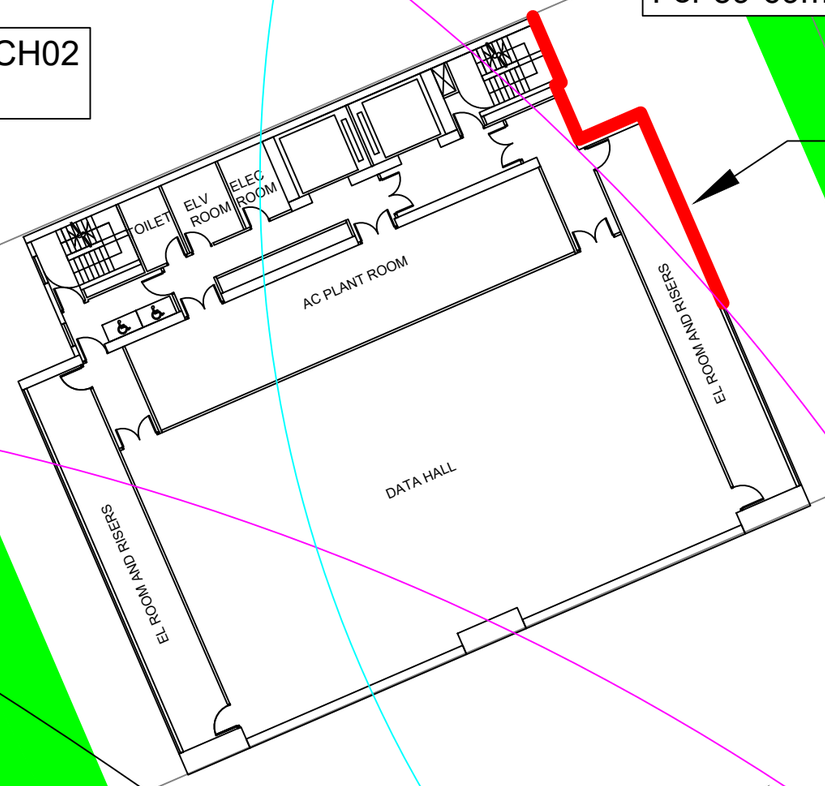
Buffer Region of Chimney CH01b
For 55-65mPD

Buffer Region of Chimney CH02
For above 32mPD

Buffer Region of Chimney CH03a
For below 59mPD

Buffer Region of Chimney CH03a
For 59-69mPD

The fresh air intake shall be located below 59mPD for 7/F



No air sensitive uses, including openable windows for ventilation, fresh air intake of mechanical ventilation and recreational uses in the open area, would be located within the buffer zones.

Buffer Region of Chimney CH01c
For 51-61mPD

Buffer Region of Chimney CH01b
For 45-55mPD

- Proposed Facades for Fresh Air Intake
- Identified Chimney
- Buffer Region
  - Road
  - < 20m below chimney exhaust
  - 20m-30m below chimney exhaust
  - 30m-40m below chimney exhaust
  - > 40m below chimney exhaust

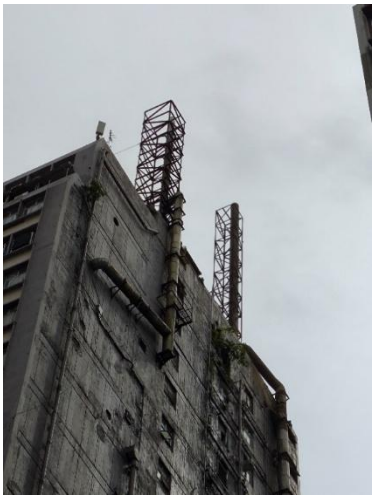
CINOTECH
Cinotech Consultants Limited

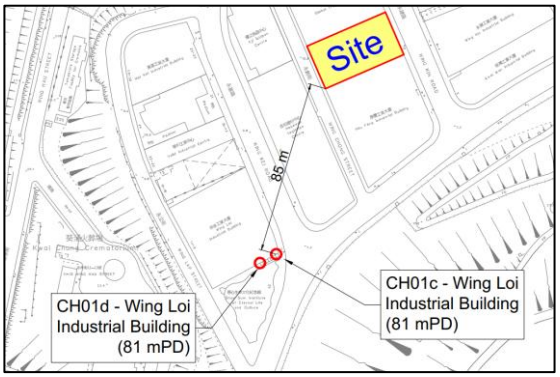
Proposed Data Centre at No. 7-11 Wing Kin Road, Kwai Chung (K.C.T.L. 145)

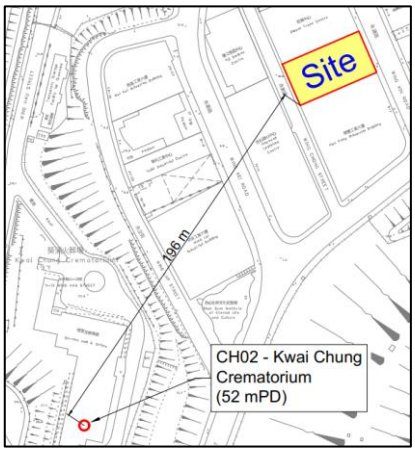
Proposed Facades for Fresh Air Intake (7/F - 54.5mPD to 60mPD)

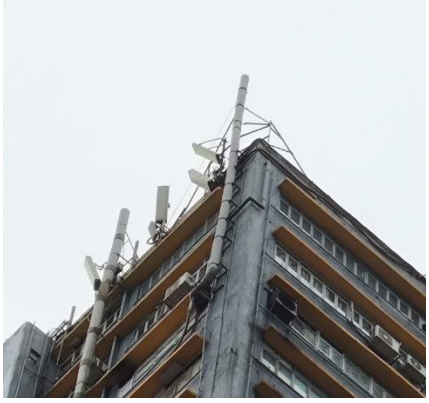
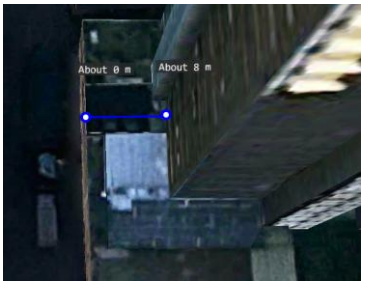
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CHECK	CC	DRAWN	DK
JOB No.	IA23170	DRAWING No.	6-3g
		REV	-

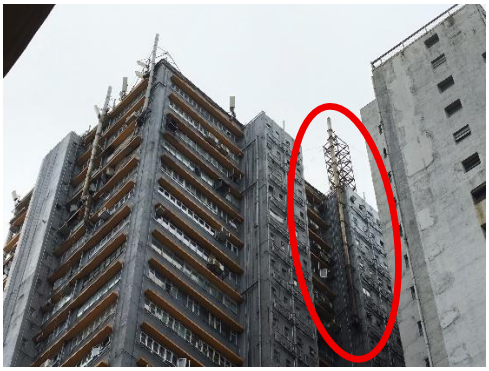
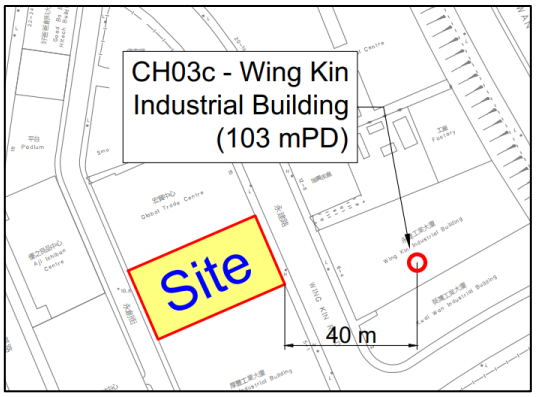
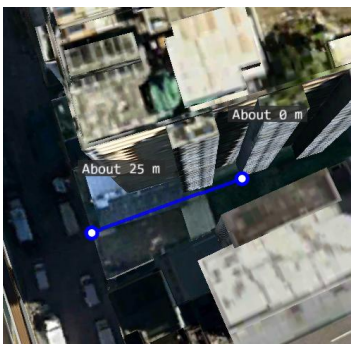
APPENDIX 2-2
IDENTIFIED CHIMNEY IN THE VICINITY

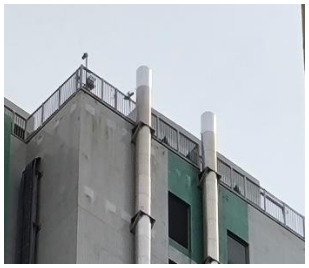
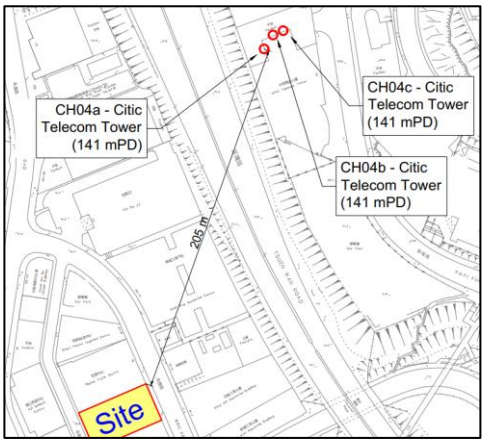
ID	Description
CH01a & CH01b	**Wing Loi Industrial Building** Photo Records   viewed from southwest viewed from northeast Photos taken during site visit on 28th August 2025 Location of the Chimneys Estimated from the building footprint derived from the Digital Topographic Map iB1000 and site observations. Distance from site boundary: ~64 m  Chimney Height Roof Level: ~77 mPD Source: Open3Dhk Chimney Height: ~8m above roof = ~85 mPD Source: Estimation from site observation (the chimneys' exhausts are at least 3 stories above roof level).

ID	Description
CH01c & CH01d	**Wing Loi Industrial Building** Photo Records   viewed from east viewed from southwest Photos taken during site visit on 28th August 2025 Location of the Chimneys Estimated from the building footprint derived from the Digital Topographic Map iB1000 and site observations. Distance from site boundary: ~85 m  Chimney Height Roof Level: ~77 mPD Source: Open3Dhk Chimney Height: ~4m above roof = ~81 mPD Source: Estimation from site observation (the chimneys' exhausts are around 1.5 stories above roof level).

ID	Description
CH02	**Kwai Chung Crematorium** Photo Records  viewed from north  viewed from east Photos taken during site visit on 28th August 2025 Location of the Chimneys Estimated from the building footprint derived from the Digital Topographic Map iB1000 and site observations. Distance from site boundary: ~196 m   Screen captured from Open3Dhk Chimney Height Roof Level: ~31 mPD Source: Open3Dhk Chimney Height: ~21m above roof = ~52 mPD Source: Measured in Open3Dhk

ID	Description
CH03a & CH03b	**Wing Kin Industrial Building** Photo Records  viewed from southwest  (Tower setback) Photos taken during site visit on 28th August 2025 Location of the Chimneys Estimated from the building footprint derived from the Digital Topographic Map iB1000, measurement from Open3Dhk and site observations. The tower is setback by ~8m according to site survey and Open3Dhk. Distance from site boundary: ~23 m   Screen captured from Open3Dhk (Tower setback) Chimney Height Roof Level: ~95 mPD Source: Open3Dhk Chimney Height: ~4m above roof = ~99 mPD Source: Estimation from site observation (the chimneys' exhausts are ~1.5 stories above roof level).

ID	Description
CH03c	**Wing Kin Industrial Building** Photo Records   viewed from southwest Photos taken during site visit on 28th August 2025 Location of the Chimneys Estimated from the building footprint derived from the Digital Topographic Map iB1000, measurement from Open3Dhk and site observations. The chimney around 25m from the west boundary of the building footprint according to site survey and Open3Dhk. Distance from site boundary: ~40 m   Screen captured from Open3Dhk (Tower setback) Chimney Height Roof Level: ~95 mPD Source: Open3Dhk Chimney Height: ~8m above roof = ~103 mPD Source: Estimation from site observation (the chimney' exhaust is ~3 stories above roof level).

ID	Description
CH04a, CH04b &CH04c	**Citic Telecom Tower** Photo Records  viewed from northeast  viewed from south  viewed from west (north portion of the roof)  viewed from west (core and south portion of the roof) Photos taken during site visit on 28th August 2025 There are exhausts pipes identified along both the south and north façade of the building. However, chimney exhausts are only identified at or near the north facades. Location of the Chimneys Estimated from the building footprint derived from the Digital Topographic Map iB1000 and site observations. Distance from site boundary: ~205 m 

ID	Description
	Chimney Height Roof Level: ~139 mPD Source: Open3Dhk Chimney Height: ~2m above roof = ~141 mPD Source: Estimation from site observation (the chimneys' exhausts are ~2m above roof level).
--	**Mei Kei Industrial Building** A Chimney likely structure is identified in google 3D map, but not found in site visit on 28th Aug 2025.  **Captured from 3D view of google map (last checked on 29th Aug 2025)** Photo Records  viewed from north  viewed from west Photos taken during site visit on 28th August 2025

Attachment 3
Replacement Pages 8 to 9
and 13 of the Planning
Statement

3.2. Traffic consideration

3.2.1. The proposed data centre is expected to be completed by 2029, and the design year adopted in the Traffic Impact Assessment (TIA) for the capacity analysis is 2032, i.e., approximately three years after its completion.

3.2.2. The 2032 traffic flows used for the junction analysis are produced regarding the following:

(1) 2031 traffic flows derived with reference to the Base District Traffic Model ("BDTM");

(2) The estimated traffic growth from 2031 to 2032 is based on the higher of the (a) 2019–based Territorial Population and Employment Data Matrix ("TPEDM") data produced by the Planning Department ("PlanD") for Kwai Chung District, (b) Hong Kong Population Projections 2022 – 2046 published by Census and Statistics Department ("C&SD"), or (c) historic Annual Average Daily Traffic Growth ("AADT") produced by Transport Department ("TD");

(3) The traffic generated by the proposed data centre.

3.2.3. The traffic consultant conducted manual classified counts at the critical junctions near the proposed data centre to establish the peak-hour traffic flows. The key junctions operate with capacities during the AM and PM peak hours.

3.2.4. The internal transport facilities are provided per the requirement of the draft Provisional Basic Terms Offer ("draft PBTO"). A light goods vehicle lift is provided to access B1/F and B2/F from G/F. All vehicles can quickly enter and leave the proposed data centre and their respective space/bay.

3.2.5. The proposed data centre is expected to be completed by 2029, and the junction capacity analysis is undertaken for 2032. For the design year 2032, the junctions analysed are expected to operate with capacities during the peak hours for the case without and with the proposed data centre (refer to Section 4 of the Traffic Impact Assessment in Appendix I).

3.2.6. The TIA concludes, therefore, that the proposed data centre will have no adverse traffic impact on the surrounding road network, which is acceptable from the traffic engineering point of view.

3.2.7. Please refer to the Traffic Impact Assessment in **Appendix I** for details.

3.3. Air Quality consideration

3.3.1. An air quality Impact Assessment (AQIA) has been prepared to address the air quality impact of the proposed development's construction on the surrounding area and the impact of the surrounding area on the proposed development.

3.3.2. With the implementation of dust suppression measures as outlined in the Air Pollution Control (Construction Dust) Regulation and adherence to good site practices, no adverse air quality impacts associated with the construction works are expected.

3.3.3. The proposed development is not considered a source of air pollutants during normal operation. Backup generators powered by diesel fuel, with a combined capacity of 28,000 kW, will be installed by the tenant. Routine testing may pose a potential source of air quality impact. Since the operation of the backup generators requires a Specified Process (SP) license, the air pollution control plan (APCP) for the SP license application must be approved by the EPD. Given the short operational duration of the backup generators and the necessary mitigation measures to be confirmed in the APCP, adverse air quality impacts arising from the routine testing are not anticipated.

3.3.4. A qualitative assessment indicates that vehicular and industrial emissions are not expected to constrain the proposed development, provided that the locations of the fresh air intakes for air-sensitive receivers (ASRs) and exhaust outlets for the basement carpark are carefully designed.

3.3.5. Therefore, no air quality impact arising from the proposed development is expected. Please refer to the Air Quality Impact Assessment in **Appendix II.**

3.4 Noise consideration

3.4.1 A Noise Impact Assessment (NIA) has been prepared to address the potential noise impacts from the construction and operation of the proposed development.

3.4.2 The overall noise impact during the construction phase is considered insignificant. Depending on the detailed site work arrangements, mitigation measures will be implemented as necessary and applicable, per ProPECC PN 1/24, to minimise construction noise impacts on nearby NSRs.

3.4.3 The provision of openable windows for ventilation is not anticipated. Therefore, potential impacts of road traffic and existing fixed noise sources on the proposed development are not expected.

3.4.4 The planned fixed noise sources of the proposed development should not cause any adverse noise impacts if the maximum allowable sound power levels (SWLs) are properly implemented. Thus, no planned fixed noise impacts are anticipated.

3.4.5 Therefore, no noise impact arising from the proposed development is expected. Please refer to the Noise Impact Assessment in Appendix III.

3.5 Sewerage consideration

3.5.1 A Sewage Impact Assessment (SIA) has been prepared to address all the potential adverse sewerage impacts from the proposed development and recommend mitigation measures, improvement works, and other measures and works if required.

3.5.2 The estimated daily sewage discharge from the Project is 157 m^3/day. Sewage from the Project will be collected by the new terminal sewage manhole FTMH01 and discharged to the existing sewer manhole FMH4022807 via a proposed 225mm PE sewer with a slope of 1:100. The actual layout and invert levels of the proposed sewer are subject to detailed design.

3.5.3 The sewage network is considered to have sufficient capacities to cater for the

4.4 The proposed scheme fully utilises the development potential of the application site with modern-day building standards

4.4.1 The application site is occupied by a two-storey industrial building completed in 1972 with a GFA of about 941m^2. The existing building has been left mainly vacant since its previous industrial use was suspended in 2018

4.4.2 This application's positive impact is replacing an old industrial building with a new data centre with modern-day standards and supporting facilities to meet the changing market needs.

4.5 The proposed minor relaxation of plot ratio and building height will not adversely affect the surrounding areas visually.

4.5.1 The proposed development is compatible with the surrounding neighbourhood. The application site is mainly surrounded by buildings in the "I" zone, with a maximum plot ratio of 9.5 and a maximum height of 105mPD under the OZP.

4.5.2 Based on the Visual Impact Assessment in Appendix V, the proposed development's scale and height are considered visually compatible with the surrounding industrial developments. Planters and Vertical greening at the lower levels of the proposed development will soften the proposed building structure. Replacing the old industrial building with a modern-day development with a greening provision will enhance the area's street environment and visual amenities.

4.6 The proposed building setback at Wing Chong Street and Wing Kin Road will provide a better streetscape, walking environment and visual permeability.

4.6.1 The proposed building setback at Wing Kin Road and Wing Chong Street, both one-way streets, will provide a wider separation from buildings to enhance the walking environment and visual permeability. Air ventilation along these streets could also be enhanced.

4.7 The proposed greening, including vertical greening, will enhance the streetscape and improve visual amenity

4.7.1 Greening space provision has been maximised by providing planters at ground level and 1/F to 3/F fronting Wing Kin Road and Wing Chong Street. The vertical greening at sections of building facades fronting Wing Chong Street and Wing Kin Road will improve the street environment and visual amenity.

4.8 The proposed development will be seen as a catalyst and precedent in the gradual transformation of this industrial area

4.8.1 The area was characterised by the concentration of offensive trade businesses and polluting industries, including but not limited to the application site in the 1960s'. The proposed minor relaxation of the plot ratio restriction and change of uses in this application will form a catalyst and a precedent in gradually transforming the area, once predominated by offensive trades and polluting industries, to non-polluting industrial uses.

KJL Ltd.
development consultancy

File Ref.: TPB/A/KC/510

BY EMAIL & BY POST (tpbpd@pland.gov.hk)

16th September 2025

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

Attn: The Secretary of the Town Planning Board

Dear Sir/Madam,

7-11 Wing Kin Road, Kwai Chung, New Territories
Section 16 Planning Application No. A/KC/510

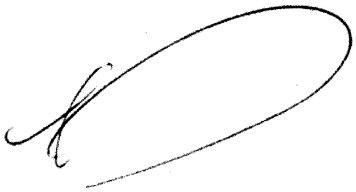
We refer to the captioned section 16 application received by the Town Planning Board (the Board) on 18.3.2025 and 21.3.2025.

As per Town Planning Board Guideline No. 32B, the applicant submits our responses, along with supporting information, to clarify the minor comments from the Environmental Protection Department on the Further Information submitted on 4.9.2025, which we received through the Planning Department on 10.9.2025. We submit four hard copies and one soft copy of the R to C table and supporting information for the Board's consideration.

This further information is considered not to be proposing a material change in the nature of the application. Therefore, it could be exempt from the publication and recounting requirements, as per TPB PG-No. 32B. However, if this further information is accepted but not exempt from the publication and recounting requirements, we would still like to proceed with the application, providing the additional information.

Should you have any queries, please contact Ms. Mina Leung at [redacted] or the undersigned at [redacted] Thank you.

Yours sincerely,



Kenneth J. Li
Director



Encl.

c.c. Tsuen Wan and West Kowloon District Planning Office, Planning Department – Attn: Messrs. W.C. Lui and Cecil Chow [By Email at wclui@pland.gov.hk and cccchow@pland.gov.hk

Application under Section 16 of the Town Planning Ordinance
Proposed Minor Relaxation of Plot Ratio and Building Height Restrictions
for Permitted Information Technology and Telecommunications Industries (Data Processing Centre)
at 7-11 Wing Kin Road, Kwai Chung, New Territories
in DD 446, Kwai Chung Town Lot 145 and adjoining Government Land
at Wing Chong Street (Application No. A/KC/510)

Departmental Comments (Further Information (F.1.)(3)	Response to Comments
Comments by Environmental Protection Department (10.9.2025) ***Revised Air Quality Impact Assessment (AQIA)*** 1. Section 2.1.2: Please add *"The existing building has been left mainly vacant since its previous industrial use suspended in 2018"* to the end of this section.	**Section 2.1.2** has been revised accordingly.
2. Section 2.2.3: Please revise the last Line to *"The backup generators will operate solely during electricity outages or emergencies"*.	**Section 2.2.3** has been revised accordingly.
3. Sections 2.3.1 – 2.3.3, 6.2.3, Appendix 2.2: Please be reminded that the applicant and their consultants are responsible for verifying the accuracy of the chimney data by their own site surveys. If the information regarding the industrial chimneys is later discovered to be incorrect, the assessment results presented in the planning application will be considered invalid.	Noted.
4. Section 2.2.5: (i) Please delete *"industrial"* in Line 1.	**Section 2.2.5** has been revised accordingly.

(ii) Please add the following text after the Line 1: *"Due to the backup generators being operated solely during electricity outages or emergencies and monthly testing as mentioned in Section 2.2.4, the chimneys associated with these backup generators are not considered as industrial chimneys, which are similar in nature to those emergency generator(s) installed in buildings."* (iii) Although the design of the chimneys is not available at this stage, please add the following statement to the end of this section: *"The exhaust outlets/chimneys for the backup generators shall be located away from nearby ASRs."*	
5. Sections 2.2.7, 7.1.2 and Section 3.3.3 of Revised Planning Statement: Please delete Line 1 as air pollutant will be emitted during routine testing.	**Sections 2.2.7 & 7.1.2** have been revised accordingly. **Sections 3.3.3 of the Planning Statement** has been revised accordingly.
6. Sections 2.2.7, 6.1.3, 6.4.2 and 7.1.2 and Section 3.3.3 of Revised Planning Statement: Please provide examples of "necessary mitigation measures" as mentioned in respective Section, to minimize air pollutant emissions from the backup generators.	Market-available mitigation measures, such as activated carbon filters, selective catalytic reduction, diesel oxidation catalysts, and electrostatic precipitator systems, have been included as examples. **Sections 2.2.7, 6.4.2 and 7.1.2** have been revised accordingly. **Section 3.3.3 of Revised Planning Statement** has been revised accordingly.

7. Section 2.2.9: Please review whether this section can be revised to *"On the other hand, the remaining areas within the proposed development, such as plant rooms, staircase, and similar spaces, are unoccupied areas in which exposure is transient in nature. These areas are not considered as ASRs during the operational phase"*. If the above is affirmative, please remove the footnotes.	**Section 2.2.9** has been revised accordingly.
8. Section 2.2.10: Please revise as *"To ensure no adverse air quality in any ASRs in the proposed development (including management offices and data halls) during operation, these areas will be designed as confined spaces and will rely exclusively on fresh air intakes at suitable locations for ventilation. The potentially polluted air outside is not expected to enter any ASRs"*.	**Section 2.2.10** has been revised accordingly.
9. Section 2.4.1: Please revise Line 2 to *"As the buffer distance requirements for roads by HKPSG have been fulfilled, no adverse air quality impacts from road traffic are expected"*.	**Section 2.4.1** has been revised accordingly.
10. Section 5.1.2: Please remove *"including trucks,"* in Line 7 to ensure consistency with the content in Section 5.4.1.	**Section 5.1.2** has been revised accordingly.
11. Table 5-2: Please review whether *"[note 2]"* for the horizontal separation distances for ASR07 and ASR10 can be removed, while revising "0" to "<5 m" accordingly.	**Table 5-2** has been revised accordingly.
12. Sections 6.1.2 and 6.4.1: (i) Please add *"for emergency use only"* after *"will be installed"*. (ii) Please revise Line 2 to *"During the monthly routine testing, the backup generators will be operated one at a time, with the total*	**Sections 6.1.2 & 6.4.1** have been revised accordingly.

testing duration restricted to 30 minutes for each backup generator".	
13. Section 6.1.5: Please update this Section according to the above comment for Section 2.2.10.	**Section 6.1.5** has been revised accordingly.
14. Section 6.3.2: (i) Please revise Line 3 to *"It should be noted that any ASRs of the proposed development (including the management offices and data halls) will be designed as confined spaces and will rely exclusively on fresh air intakes at suitable location for ventilation, as mentioned in Section 2.2.10"*. (ii) Please delete the last Line *"If any additional ASRs are identified in the proposed development at a later stage, those areas should receive the same treatment as the management offices and data halls"*.	**Section 6.3.2** has been revised accordingly.
15. Section 7.1.2 and Section 3.3.3 of Revised Planning Statement: Please revise Line 2 to *"Backup generators, powered by diesel fuel and with a combined capacity of 28,000 kW, will be installed by the tenant for emergency use only. Routine monthly testing will be conducted, during which the generators will be operated one at a time, with the total testing duration restricted to 30 minutes for each backup generator"*.	**Section 7.1.2** has been revised accordingly. **Section 3.3.3 of Planning Statement** has been revised accordingly.
Revised Planning Statement (PS) 16. Section 3.3.5: Please add *"adverse"* before *"air quality"* in Line 1.	**Section 3.3.5 of Planning Statement** has been revised accordingly.

Enclosures

1. **Attachment 1** – Replacement Sections 2, 5, 6 and 7 of the AQIA Report
2. **Attachment 2** – Replacement Section 3.3 of the Planning Statement

Attachment 1
Replacement
Sections 2, 5, 6 and
7 of the AQIA
Report

2 THE PROPOSED DEVELOPMENT AND THE ENVIRONMENT

2.1 The Site

2.1.1 The Application Site (the "Site") is located in an industrial area in Kwai Chung, bordered by Wing Chong Street to the west, Wing Kin Road to the east, Global Trade Centre to the north, and Hou Feng Industrial Building to the south (see **Figure 2-1**). The Site and its surroundings fall within the industrial zone, as per the Approved Kwai Chung Outline Zoning Plan (OZP) No. S/KC/32 (see **Figure 2-2**).

2.1.2 The Site covers approximately 964 m² (about 929 m² excluding the additional area) and is currently occupied by a 2-storey industrial building. Planning applications have been submitted and approved with conditions in 2020 (Application No.: A/KC/457) and 2023 (Application No.: A/KC/496) for Offensive Trades use (Lard Boiling Factory) and Industrial use (Warehouse), respectively. The existing building has been left mainly vacant since its previous industrial use suspended in 2018.

2.2 The Proposed Development

General

2.2.1 The Applicant proposes to redevelop the Application Site into a 17-storey data centre with a height of 109.55 mPD and a plot ratio of 11.4. The tentative layout of the proposed development is shown in **Appendix 2-1**, with a planned completion date of 2029.

Backup Generators

2.2.2 The proposed development is intended solely for data centre use and will operate exclusively on electricity supplied by CLP. Backup generators will be provided to address potential electricity outages or emergencies. No diesel or other fossil fuels will be utilized during the normal operation of the proposed development.

2.2.3 Under the current design, a total of 16 backup generators powered by diesel fuel will be installed by the tenant, consisting of 8 units with a capacity of 1,500 kW and 8 units with a capacity of 2,000 kW, resulting in a total capacity of 28,000 kW. The backup generators will operate solely during electricity outages or emergencies.

2.2.4 Routine testing of the backup generators will be conducted for 30 minutes each month, resulting in an annual operation time of 6 hours. Each backup generator will be tested sequentially to minimize emission rates.

2.2.5 All backup generators will be housed in fully enclosed spaces, with chimneys serving as their only exhausts. Due to the backup generators being operated solely during electricity outages or emergencies and monthly testing as mentioned in **Section 2.2.4**, the chimneys associated with these backup generators are not considered as industrial chimneys, which are similar in nature to those emergency generator(s) installed in buildings. It should be noted that the design of the chimneys is not available at this stage and is subject to detailed design. The exhaust outlets/chimneys for the backup generators shall be located away from nearby ASRs.

2.2.6 According to the Electricity Works in Schedule 1 of the Air Pollution Control Ordinance, the installation of backup generators with a total capacity exceeding 5 MW requires a Specified Process (SP) license. The tenant should be reminded to prepare an air pollution control plan (APCP) for SP license application. The locations of the chimney exhausts, as well as the

necessary mitigations, must be approved by the relevant authority (e.g., EPD) before the operation of the backup generators.

2.2.7 During routine testing, given the short operational duration of the backup generators and the necessary mitigation measures, such as activated carbon filters, selective catalytic reduction, diesel oxidation catalysts, and electrostatic precipitator systems, to be confirmed in the APCP, adverse air quality impacts arising from the routine testing are not anticipated.

Air Sensitive Receivers (ASRs)

2.2.8 Although the data center is generally expected to be unmanned, a minimal number of staff will remain in the proposed development during its operation. For example, staff will occupy the management offices, which are not yet marked in the tentative layout plan. Additionally, staff will occasionally need to be present in the data halls for maintenance. Therefore, the management offices and data halls in the proposed development are considered as Air Sensitive Receivers (ASRs) during the operational phase.

2.2.9 On the other hand, the remaining areas within the proposed development, such as plant rooms, staircase, and similar spaces, are unoccupied areas in which exposure is transient in nature. These areas are not considered as ASRs during the operational phase.

2.2.10 To ensure no adverse air quality in any ASRs in the proposed development (including management offices and data halls) during operation, these areas will be designed as confined spaces and will rely exclusively on fresh air intakes at suitable locations for ventilation. The potentially polluted air outside is not expected to enter any ASRs.

2.3 Existing Environment in the Vicinity

Existing Developments

Industrial Chimneys

2.3.1 The existing developments in the vicinity are primarily industrial. On-site survey was conducted on 28th August 2025, to identify the industrial chimneys in the area. Multiple industrial chimneys have been identified within 200 meters of the site boundary. The chimneys with potential impacts are listed in **Table 2-1**, illustrated in **Figure 2-3**, and detailed in **Appendix 2-2**.

2.3.2 It is noted that a chimney-like structure was present on the roof of the Mei Kei Industrial Building according to a 3D map from Google. However, based on the site visit on 28th August 2025, there is currently no chimney on the roof of the Mei Kei Industrial Building.

2.3.3 Additionally, chimneys have been identified at the Citic Telecom Tower. According to the building footprint derived from the Digital Topographic Map iB1000 and site observations, all three identified chimneys are more than 200 meters away from the Site.

Table 2-1 Identified Industrial Chimneys in the Vicinity

ID	Building	Height	Horizontal Distance from Application Site Boundary
CH01a & CH01b	Wing Loi Industrial Building	85 mPD	64 m
CH01c & CH01d		81 mPD	85 m
CH02	Kwai Chung Crematorium	52 mPD	196 m
CH03a & CH03b	Wing Kin Industrial Building	99 mPD	23 m
CH03c		103 mPD	40 m
CH04a, CH04b & CH04c	Citic Telecom Tower	141 mPD	205 m

Note:
[i] Chimneys' height and location were estimated from the building footprint derived from the Digital Topographic Map iB1000, measurements from Open3Dhk, and site observations.

Air Sensitive Receivers (ASRs)

2.3.4 The nearest non-industrial development with air-sensitive uses is the office of the Wing Hau Street Driving Test Centre, located approximately 110 m northwest of the Site.

2.3.5 Most developments with air-sensitive uses are situated in the northeast of the Site, including PCCW, CNEC Lee I Yao Memorial Secondary School, and Kwai Shing West Estate Block 8, located approximately 180 m, 195 m, and 290 m from the Site, respectively. However, as offices are typically present within industrial buildings, all nearby industrial buildings are also considered as Air Sensitive Receivers (ASRs).

2.3.6 The existing developments in the vicinity generally conform to the Outline Zoning Plan (OZP), indicating that no changes in land use are anticipated in the near future.

Road Traffic

2.3.7 The Site is bordered by Wing Kin Road and Wing Chong Street, which are minor roads (local distributors). According to the Annual Traffic Census 2023 (ATC 2023) by the Transport Department, the nearest major road is Tsuen Wan Road (Station 5604), an expressway located approximately 90 m to the northeast of the Site, with an Average Annual Daily Traffic (AADT) of 122,780.

2.4 Key Sources of Potential Air Quality Impact

2.4.1 According to the Hong Kong Planning Standards and Guidelines (HKPSG), areas designated for active or passive recreational uses should be located 5 to 20 m away from road traffic. As the buffer distance requirements for roads by HKPSG have been fulfilled, no adverse air quality impacts from road traffic are expected.

2.4.2 Conversely, areas for active or passive recreational uses should be situated 10 to 200 m away from industrial chimneys. Given that multiple industrial chimneys are located within 200 m from the site boundary, the primary concern for the air quality of the proposed development arises from these nearby industrial chimneys.

5 CONSTRUCTION PHASE AIR QUALITY IMPACT ASSESSMENT

5.1 Dust Source of the Project

5.1.1 Major dust-emitting construction activities will include the demolition of existing structures, excavation for basement construction, foundation works, and other construction activities (e.g., superstructure construction). A summary of the construction works is provided in **Table 5-1**.

5.1.2 Due to the small site area (964.2 m²), the scale of construction activities for the Project will be limited. The Site currently houses a 2-storey industrial building, and the demolition works are considered minor, as only a single low-rise development is involved. It is important to note that excavation for the basement is required for the entire Site, with an excavation depth of ~10 meters. This is expected to generate ~9,642 m³ of inert C&D material (calculated as 964.2 m² x 10 m). The maximum number of Powered Mechanical Equipment (PME) expected to be deployed at the worksite is 8, excluding small plants such as water pumps and fans.

Table 5-1 Summary of the Construction Works

Site Area (m^2)	Structures to be demolished	Excavating for Basement	Construction of Superstructure	Number of Concurrent PME [1]
964.2	A 2-storey industrial building	Expected to generate ~9,642m^3 of inert C&D material	Yes (17-storey)	8

Note:
[1] Excluding small plants such as water pump and fan. Estimated numbers based on projects in similar scales.

5.2 Concurrent Projects

5.2.1 No planned and/or committed developments in the vicinity of the Site has been identified.

5.3 Air Sensitive Receivers in the Vicinity

5.3.1 The representative ASRs for the construction phase of the proposed development are illustrated in **Figure 5-1** and listed in **Table 5-2**. Although commercial, residential, and educational developments are located away from the Site, offices are typically present within industrial buildings. Therefore, the nearby industrial buildings are also considered ASRs.

Table 5-2 Representative Air Sensitive Receivers (Construction Phase)

ID	Building/Location	Type	Building Height (mPD) [1]	Horizontal Distance from Application Site Boundary (m) [2]
ASR01	Wing Hau Street Driving Test Centre	Office	25	110
ASR02	PCCW	Utility and Offices	79	180
ASR03	CNEC Lee I Yao Memorial Secondary School	Education	52	195
ASR04	Kwai Shing West Estate Block 8	Residential	127	290
ASR05	Hopewell Logistics Centre	Industrial	52	9

ID	Building/Location	Type	Building Height (mPD) [1]	Horizontal Distance from Application Site Boundary (m) [2]
ASR06	Aji Ichiban Centre	Industrial	57	9
ASR07	Global Trade Centre	Industrial	93	< 5
ASR08	8-12 Wing Kin Road	Industrial	20	16
ASR09	Wing Kin Industrial Building	Industrial	95	16
ASR10	Hou Feng Industrial Building	Industrial	87	< 5

Note:
[1] Extracted from Open3Dhk, rounded to integer.
[2] Estimated from the building footprint derived from the Digital Topographic Map iB1000.

5.4 Identification of the Major Pollutant Sources and of Potential Impacts

Emission from PME & Non-road Mobile Machinery

5.4.1 As stated in **Section 4.3.1**, the operation of Powered Mechanical Equipment (PME) during construction work would emit gaseous air pollutants, such as nitrogen dioxide (NO_2), due to fuel combustion. Several types of Powered Mechanical Equipment, such as excavators, can be utilized for the construction works at the Site. However, the number of PME expected to be used on-site will be limited to a maximum of 8. As a result, no significant impact is anticipated from the operation of PME.

5.4.2 According to the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, only approved or exempted Non-Road Mobile Machinery (NRMM) with proper labelling are allowed to be utilized in the construction site. Supportive information and documents, such as third-party emission certificates, model and serial numbers of machines and engines, will be provided to the EPD to demonstrate that the concerned NRMM complies with the prescribed emission standards. As a result, no significant impact is anticipated from the operation of NRMM.

Construction Dust

5.4.3 Fugitive dust will be generated during the construction phase, with the primary air pollutants of concern being Respirable Suspended Particulates (RSP) and Fine Suspended Particulates (FSP) resulting from the Project's construction activities. Sources of dust during construction phase include demolition, foundation and superstructure construction activities, as well as handling and transportation of temporary stockpiles, dusty material, excavated material and concrete production. Additionally, particulates emitted from plant equipment could pose a concern if not properly mitigated. The exposed earth after the completion of work may also serve as a potential dust source.

5.4.4 The major sources of dust during the construction phase of this Project will be the demolition of existing structures and the excavation for the basement. Despite the small scale of the works, mitigation measures will be necessary to minimize the potential impacts arising from these activities.

5.4.5 The movement of dump trucks is also considered a significant potential dust source if not properly mitigated. A rough estimate indicates that approximately 5 trips per day will be required during the demolition period, increasing to about 10 trips per day during the excavation period.

5.5 Mitigation Measures

5.5.1 Dust control measures under the Air Pollution Control (Construction Dust) Regulation (Cap. 311R) and good site practice shall be implemented to mitigate dust impact arising from construction works by preventing dust generation and/or by screening, suppressing and removing dust generated:

- Enclose the whole wall of the building to a height of at least 1m higher than the highest level of the structure to be demolished with impervious dust screens or sheeting on façade abutting or fronting upon a street
- Existing structures are proposed to be demolished by non-percussive equipment such as hydraulic crusher to reduce dust emission; no blasting will be involved.
- Water or a dust suppression chemical shall be sprayed immediately prior to, during and immediately after demolition/excavation works
- Cover stockpile or dusty materials with tarpaulin to prevent wind erosion
- Any dusty materials remaining after a stockpile is removed shall be wetted with water and cleared from the surface of roads or streets
- Every vehicle shall be washed to remove any dusty materials from its body and wheels before leaving the construction site
- Where a vehicle leaving a construction site is carrying a load of dusty materials, the load shall be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle
- Store cement bags in shelter with 3 sides and the top covered by impervious materials if the stack exceeds 20 bags
- Maintain a reasonable height when dropping excavated materials to limit dust generation
- Limit vehicle speed within Site to 10 km/h and confine vehicle movement in haul road
- Minimize exposed earth after completion of work in a certain area by hydroseeding, vegetating or soil compacting
- Cover materials on trucks before leaving the Site to prevent dropping or being blown away by wind
- Regular maintenance of plant equipment to prevent black smoke emission
- Throttle down or switch off unused machines or machine in intermittent use
- Plan the Site layout so that machineries, dust causing activities and stockpilings are away from receptors as far as possible.
- Site hoarding higher than 2.4m should be implemented where there are receptors at close proximity to the construction site and dusty activities.
- Haul road shall be away from the project boundary as much as possible

5.5.2 No adverse dust impact on the surrounding air sensitive receivers (ASRs) is expected with proper implementation of mitigation measures.

5.5.3 As the project is still in planning stage, the necessary of EM&A program shall be determined in detailed design stage.

6 OPERATION PHASE AIR QUALITY IMPACT ASSESSMENT

6.1 Operation of the Proposed Development

Potential Source of Air Quality Impact within the Proposed Development

6.1.1 The proposed development is intended solely for data centre use and will operate exclusively on electricity supplied by CLP.

6.1.2 As stated in **Sections 2.2**, 16 backup generators powered by diesel fuel, with a total capacity of 28,000 kW, will be installed for emergency use only. During the monthly routine testing, the backup generators will be operated one at a time, with the total testing duration restricted to 30 minutes for each backup generator.

6.1.3 Since the backup generators and exhaust chimneys require a Specified Process license, it is expected that the potential impact will be mitigated to an acceptable level prior to the approval of the APCP and issuance of the license.

6.1.4 Therefore, the proposed development is not expected to induce adverse air quality impact during operation phase.

Air Sensitive Receivers (ASRs)

6.1.5 Based on the current tentative layout, only the management offices and data halls in the proposed development are considered ASRs, as stated in **Sections 2.2**. To ensure no adverse air quality in any ASRs in the proposed development (including management offices and data halls) during operation, these areas will be designed as confined spaces and will rely exclusively on fresh air intakes at suitable locations for ventilation. The potentially polluted air outside is not expected to enter any ASRs. Therefore, it is necessary to identify suitable locations for the fresh air intakes.

6.2 Buffer Distance Recommended by HKPSG

6.2.1 The suggested buffer distances from the Hong Kong Planning Standards and Guidelines (HKPSG) outlined in **Table 3-1** shall be adhered to in order to avoid potential air quality impacts.

6.2.2 The adjoining Wing Kin Road and Wing Chong Street are classified as Local Distributors according to Transport Department (See **Appendix 6-1**), requiring a buffer distance of more than 5 m, as shown in **Figure 6-1**. Since the buffer zones for roads are independent of elevation, the fresh air intake for the data hall should be located outside these buffer regions, irrespective of elevation.

6.2.3 For the industrial chimneys in the vicinity, a buffer distance of 10 to 200 meters is required, depending on the elevation difference between the emission point and the receptor. A list of the chimneys in the vicinity is provided in **Table 6-1**.

Table 6-1 List of Chimneys within 200m from Application Site Boundary

Chimney ID	Description	Height of chimney (mPD)	Horizontal Distance from application site boundary (m)	Horizontal Distance from building footprint (m)
CH01a **CH01b**	Wing Loi Industrial Building	85	64	67
CH01c **CH01d**		81	85	87
CH02	Kwai Chung Crematorium	52	196	198
CH03a **CH03b**	Wing Kin Industrial Building	99	23	31
CH03c		103	40	49

Note: Chimneys' height and location were estimated from the building footprint derived from the Digital Topographic Map iB1000, measurements from Open3Dhk, and site observations. Please refer to **Appendix 2-2** for details.

Table 6-2 Required Buffer Distance for Various Elevations

Assessed Elevation	Chimney ID	Industrial Chimney Exit above the Highest Assessed Elevation (m)	Required buffer distance (m)	The Proposed Development Completely Outside of Buffer Region (Y/N)	Corresponding Drawing
At or Below 32 mPD	CH01a, CH01b	53	10	Y	Figure 6-2a
	CH01c, CH01d	49	10	Y	
	CH02	20	100	Y	
	CH03a, CH03b	67	10	Y	
	CH03c	71	10	Y	
Between 32 mPD and 51 mPD	CH01a, CH01b	34	50	Y	Figure 6-2b
	CH01c, CH01d	30	50	Y	
	CH02	1	200	N	
	CH03a, CH03b	48	10	Y	
	CH03c	52	10	Y	
Between 51 mPD and 55 mPD	CH01a, CH01b	30	50	Y	Figure 6-2c
	CH01c, CH01d	26	100	N	
	CH02	-3	200	N	
	CH03a, CH03b	44	10	Y	
	CH03c	48	10	Y	
Between 55 mPD and 59 mPD	CH01a, CH01b	26	100	N	Figure 6-2d
	CH01c, CH01d	22	100	N	
	CH02	-7	200	N	
	CH03a, CH03b	40	10	Y	
	CH03c	44	10	Y	
Between 59 mPD and 109.55 mPD	CH01a, CH01b	-24.55	200	N	Figure 6-2e
	CH01c, CH01d	-28.55	200	N	
	CH02	-57.55	200	N	
	CH03a, CH03b	-10.55	200	N	
	CH03c	-6.55	200	N	

6.2.4 The required buffer regions for the identified chimneys at different elevations are illustrated in **Figures 6-2a to 6-2e**. All industrial chimneys within 200 m from the application site boundary have been identified.

- Below 32 mPD (**Figure 6-2a**)
  - The Site is not within the buffer region of any chimney; thus, the only constraint for fresh air intakes is from the nearby roads.
- Between 32 mPD and 51 mPD (**Figure 6-2b**)
  - A small portion of the Site at the southwest corner falls within the buffer region of the chimney at Kwai Chung Crematorium (CH02).
- Between 51 mPD and 55 mPD (**Figure 6-2c**)
  - The southern portion of the Site is within the buffer region of the chimney at Wing Loi Industrial Building (CH01c).
- Between 55 mPD and 59 mPD (**Figure 6-2d**)
  - Most of the Site is within the buffer region of the chimney at Wing Loi Industrial Building (CH01b).
- Between 59 mPD and 109.55 mPD (**Figure 6-2e**)
  - The Site is entirely within the buffer regions of the nearby chimneys.

6.3 Suitable Locations for Fresh Air Intakes for Areas with Sensitive Uses

6.3.1 The floor and ceiling levels of the Proposed Development under the current design are summarised in **Table 6-3**.

Table 6-3 Floor and Ceiling Levels of the Proposed Development

Floor	Height (m)	Floor Level (mPD)	Ceiling Level (mPD)	Corresponding Drawing
G/F	11	9	20	Fig 6-3a
1/F	6	20	26	Fig 6-3b
2/F	6	26	32	Fig 6-3c
3/F	6	32	38	Fig 6-3d
4/F	5.5	38	43.5	Fig 6-3e
5/F	5.5	43.5	49	Fig 6-3e
6/F	5.5	49	54.5	Fig 6-3f
7/F	5.5	54.5	60	Fig 6-3g
8/F and above	5.5	-	-	-

Note:
[1] The design of the proposed development is subject to change.

6.3.2 The proposed façades for fresh air intakes are illustrated in **Figures 6-3a to 6-3g**. All industrial chimneys within 200 meters of the application site boundary have been identified. It should be noted that any ASRs of the proposed development (including the management offices and data halls) will be designed as confined spaces and will rely exclusively on fresh air intakes at suitable location for ventilation, as mentioned in **Section 2.2.10**. The potentially polluted air outside is not expected to enter the management offices and data halls.

- G/F to 2/F (9 to 32 mPD) (**Figures 6-3a to 6-3c**)
  - The entire eastern façade is suitable for fresh air intake.
  - The western façade is within the buffer region of Wing Chong Street.
- 3/F to 6/F (32 to 54.5 mPD) (**Figures 6-3d to 6-3f**)
  - The entire eastern façade is suitable for fresh air intake.
  - A small portion of the western façade is outside the buffer region of Wing Chong Street and suitable for fresh air intake.
- 7/F (54.5 to 60 mPD) (**Figure 6-3g**)
  - At or above 59 mPD, the entire Site is within the buffer regions of the chimneys at Wing Loi Industrial Building (CH01b) and Wing Kin Industrial Building (CH03a).
  - Below 59mPD, only the northern half of the eastern façade is suitable for fresh air intake.
  - No suitable locations for fresh air intake at or above 59mPD.
- 8/F & above (> 60 mPD)
  - No suitable locations for fresh air intake.

6.3.3 Generally, the entire eastern façade from G/F to 7/F (up to 59 mPD) and a small portion of the western façade from 3/F to 6/F (32 to 54.5 mPD) are suitable for fresh air intake. However, no fresh air intake shall be provided at 8/F or above.

6.3.4 With the fresh air intakes for areas with air-sensitive uses positioned at the proposed locations, no adverse air quality impacts during the operation of the Project are anticipated.

6.4 Provision of Emergency Generators

6.4.1 A total of 16 backup generators powered by diesel fuel, with a combined capacity of 28,000 kW, will be installed for emergency use only by the tenant. During the monthly routine testing, the backup generators will be operated one at a time, with the total testing duration restricted to 30 minutes for each backup generator.

6.4.2 Since the operation of the backup generators requires a SP license, the APCP for SP license application must be approved by the relevant authority (e.g., EPD). Given the short operational duration of the backup generators and the necessary mitigation measures, such as activated carbon filters, selective catalytic reduction, diesel oxidation catalysts, and electrostatic precipitator systems, to be confirmed in the APCP, adverse air quality impacts arising from the routine testing are not anticipated.

6.5 Provision of Basement Carparks

6.5.1 It should be noted that there are basement carparks in the Proposed Development. However, the details of the carparks including the locations of the exhaust outlet are not available.

6.5.2 The project team is reminded to fulfill the requirements, including design, maintenance and operation of the ventilation systems, as stipulated in ProPECC PN 2/96 - Control of Air Pollution in Car Parks. In addition, the exhaust outlet for the basement carpark shall be located as far away as possible from nearby ASRs and/or fresh air intake to avoid causing any potential air pollutant nuisance.

7 CONCLUSION

7.1.1 The air quality impact from the construction of the proposed development on the surrounding area, as well as the impact from the surrounding area on the proposed development, has been assessed. With the implementation of dust suppression measures as outlined in the Air Pollution Control (Construction Dust) Regulation and adherence to good site practices, no adverse air quality impacts associated with the construction works are expected.

7.1.2 Backup generators, powered by diesel fuel and with a combined capacity of 28,000 kW, will be installed by the tenant for emergency use only. Routine monthly testing will be conducted, during which the generators will be operated one at a time, with the total testing duration restricted to 30 minutes for each backup generator. Since the operation of the backup generators requires a Specified Process (SP) license, the air pollution control plan (APCP) for the SP license application must be approved by the EPD. Given the short operational duration of the backup generators and the necessary mitigation measures, such as activated carbon filters, selective catalytic reduction, diesel oxidation catalysts, and electrostatic precipitator systems, to be confirmed in the APCP, adverse air quality impacts arising from the routine testing are not anticipated.

7.1.3 A qualitative assessment indicates that vehicular and industrial emissions are not expected to constrain the proposed development, provided that the locations of the fresh air intakes for ASRs and exhaust outlets for the basement carpark are carefully designed.

Attachment 2
Planning Statement with
Amended Pages 8 and 9

3.2. Traffic consideration

3.2.1. The proposed data centre is expected to be completed by 2029, and the design year adopted in the Traffic Impact Assessment (TIA) for the capacity analysis is 2032, i.e., approximately three years after its completion.

3.2.2. The 2032 traffic flows used for the junction analysis are produced regarding the following:

(1) 2031 traffic flows derived with reference to the Base District Traffic Model ("BDTM");

(2) The estimated traffic growth from 2031 to 2032 is based on the higher of the (a) 2019–based Territorial Population and Employment Data Matrix ("TPEDM") data produced by the Planning Department ("PlanD") for Kwai Chung District, (b) Hong Kong Population Projections 2022 – 2046 published by Census and Statistics Department ("C&SD"), or (c) historic Annual Average Daily Traffic Growth ("AADT") produced by Transport Department ("TD");

(3) The traffic generated by the proposed data centre.

3.2.3. The traffic consultant conducted manual classified counts at the critical junctions near the proposed data centre to establish the peak-hour traffic flows. The key junctions operate with capacities during the AM and PM peak hours.

3.2.4. The internal transport facilities are provided per the requirement of the draft Provisional Basic Terms Offer ("draft PBTO"). A light goods vehicle lift is provided to access B1/F and B2/F from G/F. All vehicles can quickly enter and leave the proposed data centre and their respective space/bay.

3.2.5. The proposed data centre is expected to be completed by 2029, and the junction capacity analysis is undertaken for 2032. For the design year 2032, the junctions analysed are expected to operate with capacities during the peak hours for the case without and with the proposed data centre (refer to Section 4 of the Traffic Impact Assessment in Appendix I).

3.2.6. The TIA concludes, therefore, that the proposed data centre will have no adverse traffic impact on the surrounding road network, which is acceptable from the traffic engineering point of view.

3.2.7. Please refer to the Traffic Impact Assessment in **Appendix I** for details.

3.3. Air Quality consideration

3.3.1. An air quality Impact Assessment (AQIA) has been prepared to address the air quality impact of the proposed development's construction on the surrounding area and the impact of the surrounding area on the proposed development.

3.3.2. With the implementation of dust suppression measures as outlined in the Air Pollution Control (Construction Dust) Regulation and adherence to good site practices, no adverse air quality impacts associated with the construction works are expected.

3.3.3. Backup generators, powered by diesel fuel and with a combined capacity of 28,000 kW, will be installed by the tenant for emergency use only. Routine monthly testing will be conducted, during which the generators will be operated one at a time, with the total testing duration restricted to 30 minutes for each backup generator. Since the operation of the backup generators requires a Specified Process (SP) license, the air pollution control plan (APCP) for the SP license application must be approved by the EPD. Given the short operational duration of the backup generators and the necessary mitigation measures, such as activated carbon filters, selective catalytic reduction, diesel oxidation catalysts, and electrostatic precipitator systems, to be confirmed in the APCP, adverse air quality impacts arising from the routine testing are not anticipated.

3.3.4. A qualitative assessment indicates that vehicular and industrial emissions are not expected to constrain the proposed development, provided that the locations of the fresh air intakes for air-sensitive receivers (ASRs) and exhaust outlets for the basement carpark are carefully designed.

3.3.5. Therefore, no adverse air quality impact arising from the proposed development is expected. Please refer to the Air Quality Impact Assessment in **Appendix II.**

3.4 Noise consideration

3.4.1 A Noise Impact Assessment (NIA) has been prepared to address the potential noise impacts from the construction and operation of the proposed development.

3.4.2 The overall noise impact during the construction phase is considered insignificant. Depending on the detailed site work arrangements, mitigation measures will be implemented as necessary and applicable, per ProPECC PN 1/24, to minimise construction noise impacts on nearby NSRs.

3.4.3 The provision of openable windows for ventilation is not anticipated. Therefore, potential impacts of road traffic and existing fixed noise sources on the proposed development are not expected.

3.4.4 The planned fixed noise sources of the proposed development should not cause any adverse noise impacts if the maximum allowable sound power levels (SWLs) are properly implemented. Thus, no planned fixed noise impacts are anticipated.

3.4.5 Therefore, no noise impact arising from the proposed development is expected. Please refer to the Noise Impact Assessment in Appendix III.

3.5 Sewerage consideration

3.5.1 A Sewage Impact Assessment (SIA) has been prepared to address all the potential adverse sewerage impacts from the proposed development and recommend mitigation measures, improvement works, and other measures and works if required.

KJL Ltd.

development consultancy

File Ref.: TPB/A/KC/510

BY EMAIL & BY POST (tpbpd@pland.gov.hk)

22nd September 2025

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

Attn: The Secretary of the Town Planning Board

Dear Sir/Madam,

7-11 Wing Kin Road, Kwai Chung, New Territories
Section 16 Planning Application No. A/KC/510

We refer to the captioned section 16 application received by the Town Planning Board (the Board) on 18.3.2025 and 21.3.2025.

As per Town Planning Board Guideline No. 32B, the applicant submits our responses, along with supporting information, to clarify the minor comments from the Environmental Protection Department on the Further Information submitted on 16.9.2025, which we received through the Planning Department on 19.9.2025. We submit four hard copies and one soft copy of the R to C table and supporting information for the Board's consideration.

This further information is considered not to be proposing a material change in the nature of the application. Therefore, it could be exempt from the publication and recounting requirements, as per TPB PG-No. 32B. However, if this further information is accepted but not exempt from the publication and recounting requirements, we would still like to proceed with the application, providing the additional information.

Should you have any queries, please contact Ms. Mina Leung at [redacted] or the undersigned at [redacted]. Thank you.

Yours sincerely,

RECEIVED
22 SEP 2025
Town Planning Board

Kenneth J. Li
Director

Encl.

c.c. Tsuen Wan and West Kowloon District Planning Office, Planning Department – Attn: Messrs. W.C. Lui and Cecil Chow [By Email at wclui@pland.gov.hk and cccchow@pland.gov.hk

Application under Section 16 of the Town Planning Ordinance
Proposed Minor Relaxation of Plot Ratio and Building Height Restrictions
for Permitted Information Technology and Telecommunications Industries (Data Processing Centre)
at 7-11 Wing Kin Road, Kwai Chung, New Territories
in DD 446, Kwai Chung Town Lot 145 and adjoining Government Land
at Wing Chong Street (Application No. A/KC/510)

Departmental Comments (Further Information (F.1.)(4)	Response to Comments
Comments by Environmental Protection Department (10.9.2025) ***Revised Air Quality Impact Assessment (AQIA)*** 1. Section 2.2.4: To ensure consistency with other sections (e.g. S.2.2.5, S.6.1.2, S.6.4.1, etc.), please update this section as: "Routine testing of ~~the~~ **each** backup generator~~s~~ will be conducted for 30 minutes **monthly** ~~each month~~, resulting in an annual operation time of 6 hours **for each backup generator**. **The** ~~each~~ backup generators will be tested **one at a time** ~~sequentially~~ to minimize emission**s** ~~rates~~."	**Section 2.2.4** has been revised accordingly.
2. The Applicant should ensure consistency of information in the AQIA.	Noted. We have checked and can confirm the consistency in the report.

Enclosures

1. **Attachment 1** – Replacement Section 2.2.4 of the AQIA Report

Attachment 1
Replacement
Section 2.2.4 of
the AQIA Report

2 THE PROPOSED DEVELOPMENT AND THE ENVIRONMENT

2.1 The Site

2.1.1 The Application Site (the "Site") is located in an industrial area in Kwai Chung, bordered by Wing Chong Street to the west, Wing Kin Road to the east, Global Trade Centre to the north, and Hou Feng Industrial Building to the south (see **Figure 2-1**). The Site and its surroundings fall within the industrial zone, as per the Approved Kwai Chung Outline Zoning Plan (OZP) No. S/KC/32 (see **Figure 2-2**).

2.1.2 The Site covers approximately 964 m² (about 929 m² excluding the additional area) and is currently occupied by a 2-storey industrial building. Planning applications have been submitted and approved with conditions in 2020 (Application No.: A/KC/457) and 2023 (Application No.: A/KC/496) for Offensive Trades use (Lard Boiling Factory) and Industrial use (Warehouse), respectively. The existing building has been left mainly vacant since its previous industrial use suspended in 2018.

2.2 The Proposed Development

General

2.2.1 The Applicant proposes to redevelop the Application Site into a 17-storey data centre with a height of 109.55 mPD and a plot ratio of 11.4. The tentative layout of the proposed development is shown in **Appendix 2-1**, with a planned completion date of 2029.

Backup Generators

2.2.2 The proposed development is intended solely for data centre use and will operate exclusively on electricity supplied by CLP. Backup generators will be provided to address potential electricity outages or emergencies. No diesel or other fossil fuels will be utilized during the normal operation of the proposed development.

2.2.3 Under the current design, a total of 16 backup generators powered by diesel fuel will be installed by the tenant, consisting of 8 units with a capacity of 1,500 kW and 8 units with a capacity of 2,000 kW, resulting in a total capacity of 28,000 kW. The backup generators will operate solely during electricity outages or emergencies.

2.2.4 Routine testing of each backup generator will be restricted to 30 minutes monthly, resulting in an annual operation time of 6 hours for each backup generator. The backup generators will be tested one at a time to minimize emissions.

2.2.5 All backup generators will be housed in fully enclosed spaces, with chimneys serving as their only exhausts. Due to the backup generators being operated solely during electricity outages or emergencies and monthly testing as mentioned in **Section 2.2.4**, the chimneys associated with these backup generators are not considered as industrial chimneys, which are similar in nature to those emergency generator(s) installed in buildings. It should be noted that the design of the chimneys is not available at this stage and is subject to detailed design. The exhaust outlets/chimneys for the backup generators shall be located away from nearby ASRs.

2.2.6 According to the Electricity Works in Schedule 1 of the Air Pollution Control Ordinance, the installation of backup generators with a total capacity exceeding 5 MW requires a Specified Process (SP) license. The tenant should be reminded to prepare an air pollution control plan (APCP) for SP license application. The locations of the chimney exhausts, as well as the

Previous Applications

No.	OZP Zoning Application No.	Address (Site Area)	Proposed Uses[1]	Proposed Minor Relaxation	Date of Consideration	Typical Floor Height (Uses)	Major Planning & Design Merits
1.	S/KC/29 "I" A/KC/457 BHR: 105mPD	7-11 Wing Kin Road (928m^2)	Offensive Trades (Boiling of Lard only)	Nil	**Approved** with conditions on 17.3.2020	N/A Lift Lobby & Workshop	
2.	S/KC/31 "I" A/KC/496 BHR: 105mPD	Kwai Chung Town Lot 145 and Adjoining Government Land, 7-11 Wing Kin Road (964m^2)	Warehouse (excluding Dangerous Goods Godown)	PR 9.5 to 11.4 (+20%) BH 105mPD to 115.2mPD (+9.7%)	**Approved** with conditions on 14.7.2023	5.5m to 5.6m (Warehouse)	● A full-height setback of about 4.1m and 2.948m with paving at the frontage of Wing Kin Road and Wing Chong Street respectively ● Landscape treatments including planters at the building edges of G/F, 1/F. 4/F and 8/F, vertical greenery on the building façade of G/F to 1/F, canopy of 1.5m-wide and seating bench along the frontage at Wing Kin Road ● Overall greenery coverage of about 20% ● Building separation, building setback and site coverage of greenery complies with SBDG and PNAP APP-132 [Remarks: SDEV considers the proposal does not applicable to IB revitalisation policy as the site was granted for "special factory" purpose]

Similar Applications

No.	OZP Zoning Application No.	Address (Site Area)	Proposed Uses[1]	Proposed Minor Relaxation	Date of Consideration	Typical Floor Height (Uses)	Major Planning & Design Merits
Kwai Chung							
1.	S/KC/29 "I" A/KC/454 BHR: 90mPD	Cargo Consolidation Complex, 43 Container Port Road ($2,656m^2$)	Information Technology and Telecom-munications Industries	PR 9.5 to 10.269 (+8.1%) BH Nil	**Approved** with conditions on 1.2.2019	N/A	● Facilitating the development for data centre to sustain the development in data services and knowledge-based economy
2.	S/KC/29 "OU(B)" A/KC/460 BHR: 130mPD	57 – 61 Ta Chuen Ping Street ($2,261m^2$)	I-O	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 5.7.2019	N/A	● Full-height setback along Ta Chuen Ping Street wider than OZP requirement for long-term road widening and improving air ventilation
3.	S/KC/29 "OU(B)" A/KC/464 BHR: 105mPD	20-24 Kwai Wing Road ($1,579m^2$)	I	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 29.11.2019	4.2m (Workshop)	● Voluntary full-height setbacks at the northern portion of site and along Castle Peak Road - Kwai Chung for improving pedestrian environment, air ventilation and visual permeability ● Greening provision of $316m^2$ (about 20% of Site Area) ● Provision of communal escalator with universal accessible lift and staircase open to the public for improving pedestrian connectivity, accessibility and comfort ● Compliance with SBDG and incorporation of green building design measures
4.	S/KC/29 "OU(B)" A/KC/463 BHR: 105mPD	Kwai Chung Town Lot (KCTL) 49 and Ext. RP, 45-51 Kwok Shui Road (Gross Site Area: $1,324.3m^2$ Net Site Area [2]: $1,181.727m^2$)	I	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 17.3.2020	4.20m (Workshop)	● 2m voluntary full-height setback along Kwok Shui Road for proposed pedestrian footpath and landscaped area ● Weather protection canopy along the northern and western facades ● Greening ratio of about 28.37% ($335m^2$) ● Incorporation of landscaped area at G/F, 1/F, 3/F and the rooftop ● Compliance with SBDG and incorporation of green building design measures

No.	OZP Zoning Application No.	Address (Site Area)	Proposed Uses[1]	Proposed Minor Relaxation	Date of Consideration	Typical Floor Height (Uses)	Major Planning & Design Merits
5.	S/KC/29 "OU(B)" A/KC/466 BHR: 130mPD	2-16 Lam Tin Street (1,858m^2)	Information Technology and Telecom-munications Industries	PR 9.5 to 11.4 (+20%) BH 130mPD to 146.5mPD (+12.7%)	**Approved** with conditions on 29.5.2020	5.5m (Data Centre)	● Full-height NBAs along Lam Tin Street and Chun Pin Street in accordance with OZP requirement to cater for the long-term road widening proposal and enhance the air permeability of the area ● Incorporation of landscape area at B1/F, G/F, 1/F, 3/F and R/F and vertical greening at the low zone of the building along the western and eastern façades ● Greening ratio of about 22.69% (421.501m^2) ● Compliance with SBDG and incorporation of green building design measures
6.	S/KC/29 "I" A/KC/465 BHR: 120mPD	No. 22 Yip Shing Street (532m^2)	I-O	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 12.6.2020	4.32m (Workshop)	● Basement levels are provided to minimize the BH of the proposed development and make it compatible with the existing BH profile ● Provision of a communal podium garden with a clear height of 4.5m to enhance the visual and wind permeability with the floor-to-floor height in typical floors fine-tuned from 4.4m to 4.32m such that the incorporation of communal podium garden would not result in increase in development bulk ● Building setback of about 1.4m in width on G/F to 3/F and a weather-proof canopy at the building frontage facing Yip Shing Street ● Bollard installation and new kerbline to enhance pedestrian safety ● Compliance with SBDG and incorporation of green building design measures
7.	S/KC/29 "OU(B)" A/KC/467 BHR: 105mPD	132-134 Tai Lin Pai Road (569.4 m^2)	I	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 10.7.2020	N/A	● Full-height setback along Tai Lin Pai Road to the corner of Ka Hing Road for long-term road widening for Tai Lin Pai Road ● Voluntary full-height setback of about 2.01m along Ka Hing Road ● Greening/landscaping treatments including greening at the building frontage along Ka Hing Road and Tai Lin Pai Road, peripheral greenery at 2/F flat roof, and a sky garden with vegetated edge at 10/F ● Proposed green building design measures, including the compliance with BEAM Plus requirements and the adoption of glass with external reflectance of less than 20%.
8.	S/KC/29 "OU(B)" A/KC/469 BHR: 130mPD	57-61 Ta Chuen Ping Street (2,248m^2)	Hotel	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 6.11.2020	3.3m (Hotel Rooms)	● Full-height NBAs abutting Ta Chuen Ping Street in accordance with OZP requirement and voluntary full-height setback to further improve permeability and streetscape ● Incorporation of landscaped area at G/F, 1/F and 2/F and vertical greening at 1/F façades ● Greening ratio of about 26.09% (586.5m^2) ● Compliance with SBDG and incorporation of green building design measures

No.	OZP Zoning Application No.	Address (Site Area)	Proposed Uses[1]	Proposed Minor Relaxation	Date of Consideration	Typical Floor Height (Uses)	Major Planning & Design Merits
9.	S/KC/29 "OU(B)" A/KC/471 BHR: 105mPD	10-16 Kwai Ting Road (1,381.457m^2)	I	PR[3] 11.75 to 14.1 (+20%) BH 105mPD to 121.2mPD (+15.43%)	**Approved** with conditions on 14.5.2021	4.1m (Workshop)	● 7m full-height NBA (without underground structures) from the northern lot boundary abutting Kwai On Road ● Voluntary 1m full-height setback and a further 2.685m up to 15m in height above the abutted street level ● Canopy along the building edge facing Kwai On Road ● Bollards on pavement along the frontage of the Site to prevent illegal parking of vehicles ● Plantings on street level within the Site along Kwai On Road and the western footpath ● Vertical greening features alongside the building facade facing Kwai On Road, a sky garden cum refuge floor on 13/F, communal landscape garden on 3/F, and green roof ● Greening ratio of about 20.01% (276.43m^2) ● Compliance with SBDG and incorporation of green building design measures
10.	S/KC/29 "OU(B)" A/KC/473 BHR: 130mPD	2-10 Tai Yuen Street (1,865m^2)	Information Technology and Telecom-munications Industries	PR[3] 9.75 to 11.7 (+20%) BH Nil	**Approved** with conditions on 11.6.2021	5.5m (Data Centre)	● 2m voluntary full-height setbacks from lot boundary along Tai Yuen Street and Kwok Shui Road ● Glass canopy above the main entrance at Tai Yuen Street ● Bollards on footpath along the frontage of the Site to prevent illegal parking of vehicles ● Incorporation of landscaped area at G/F, rooftop greening at 1/F, 2/F and R/F, and vertical greening at G/F to 2/F façades fronting Tai Yuen Street ● Greening ratio of about 20.3% (379.98m^2) ● Compliance with SBDG and incorporation of green building design measures
11.	S/KC/29 "I" A/KC/474 BHR: 120mPD	45-51 Tai Lin Pai Road (2,189m^2)	I	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 23.7.2021	3.5m (Workshop)	● 3.5m and 0.5 to 1.7m full-height setbacks along Tai Lin Pai Road and Wah Sing Street respectively ● A passage for the public as 'short-cut' connecting Tai Lin Pai Road at LG/F and Wah Sing Street at UG/F ● A landscape entrance courtyard at the southwestern corner of LG/F near Tai Lin Pai Road ● Traffic measures including installation of bollards to prevent illegal parking on the street ● Sky garden cum refuge floor with peripheral greening on 6/F, landscape treatments in the form of trees, planters, vertical greening and seating at LG/F, UG/F, 1/F, 2/F and 6/F ● Total greenery coverage of not less than 20% of the Site ● Compliance with SBDG and incorporation of green building design measures

No.	OZP Zoning Application No.	Address (Site Area)	Proposed Uses[1]	Proposed Minor Relaxation	Date of Consideration	Typical Floor Height (Uses)	Major Planning & Design Merits
12.	S/KC/29 "I" A/KC/475 BHR: 120mPD	14-15 Yip Shing Street (1,319.1m^2)	I	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 15.10.2021	3.585m/4.75m (Workshop/ Warehouse)	● Voluntary full-height setbacks of 3.55m along Yip Shing Street, 0.9m along the north-western boundary and 2.5m at the rear portion of the building ● Additional voluntary setback of about 19m at the rear portion of the building above 15m ● Continuous canopy along Yip Shing Street building facade ● Landscape treatments including tree planting/planters, vertical greening, rooftop greening on R/F, and peripheral planting at the podium garden on 3/F ● Greening ratio of about 34.58% (456.15m^2) ● Installation of steel bollards along Yip Shing Street as the traffic measure to deter possible illegal parking ● Compliance with SBDG and incorporation of green building design measures
13.	S/KC/29 "I" A/KC/480 BHR: 120mPD	45-51 Tai Lin Pai Road (2,189m^2)	Information Technology and Telecom-munications Industries	PR 9.5 to 11.4 (+20%) BH 120mPD to 129.35mPD (+7.8%)	**Approved** with conditions on 24.12.2021	6m (Data Centre)	● Voluntary Setback of 5.35m (full-height) along southern site boundary (not accessible to the public) ● Continuous canopies along Tai Lin Pai Road and Wah Sing Street building facades ● Landscaping in the form of trees, planters and vertical greening on LG/F to 3/F and part of the southern setback ● Greening ratio of about 23.02% (504.24m^2) ● Greywater recycling system will be adopted for irrigation of greenery ● Installation of bollards along Tai Lin Pai Road and Wah Sing Street to deter the possible carparking ● Applicant intends to apply for the BEAM plus Certification and electricity loading capacity would be sufficient for providing power supply for electric vehicle charging facilities at all parking spaces ● Compliance with SBDG and incorporation of green building design measures
14.	S/KC/29 "OU(B)" A/KC/483 BHR: 105mPD	10-16 Kwai Ting Road (1,381.5m^2)	Permitted Office, Shop, Service and Eating Place Uses	PR[3] 11.75 to 14.1 (+20%) BH 105mPD to 125.3mPD (+19.3%)	**Approved** with conditions on 14.1.2022	5.5m (Office, Shop, Service and Eating Place)	● Voluntary Setback of 1 m along the western site boundary ● Further 2.5m setbacks (up to 9m in height) along the corner of the western footpath and Kwai On Road ● Continuous canopies along Kwai On Road and Kwai Ting Road building façades ● Landscaping in the form of sky garden on 14/F, communal landscape garden on 3/F, greenery on rooftop level, vertical greening along the building facade along Kwai On Road, Kwai Ting Road and the western footpath, road-side planters on setback along Kwai On Road at pedestrian level ● Greening ratio of about 20.1% ● Compliance with SBDG and incorporation of green building design measures
15.	S/KC/29 "OU(B)" A/KC/476 BHR: 130mPD	94-100 Ta Chuen Ping Street (1,486m^2)	I	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on on 28.1.2022	4.1m (Workshop)	● 3.5m full-height NBA along Ta Chuen Ping Street, which includes pedestrian footpath and at-grade planters ● Tree/shrub planting, at-grade greenery, vertical greenery, edge greening, rooftop greening, planter strip with shrubs/groundcover provided at G/F, 1/F, 2/F and the roof ● Greening ratio of about 20% (298m^2) ● Compliance with SBDG and incorporation of green building design measures

No.	OZP Zoning Application No.	Address (Site Area)	Proposed Uses[1]	Proposed Minor Relaxation	Date of Consideration	Typical Floor Height (Uses)	Major Planning & Design Merits
16.	S/KC/29 "OU(B)" A/KC/486 BHR: 130mPD	66-72 Lei Muk Road (1,648.55m^2)	I	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 18.3.2022	3.9m (Workshop)	● A full-height building setback along Lei Muk Road for future road widening and the associated proposed lay-by under the ODP requirement ● Weather protection measure in the form of recessed entrance lobby to offer rain shelter and shading for the pedestrian pathways ● Landscaping in the form of green courtyard with tree planting and planters, removed potted planters at the setback area fronting Lei Muk Road, vertical greening from G/F to 2/F and edge planters at 3/F, 4/F, 21/F to 23/F ● Greening ratio of about 20.2% (about 332.8m^2) ● Compliance with SBDG and incorporation of green building design measures [Remark: SDEV does not object but concerns the redevelopment will eventually be used as office, commercial studios or de facto residential studios]
17.	S/KC/29 "OU(B)" A/KC/487 BHR: 105mPD	543-549 Castle Peak Road (About 1327.7m^2)	I	PR[3] 10.309 to 12.371 (+20%) BH Nil	**Approved** with conditions on 22.4.2022	3.5m (Workshop)	● Minimum 1.8m full-height setback along Yiu Wing Street, minimum 1m setback at G/F and 1/F along Castle Peak Road and 0.8m full-height setback at northeastern end of Yiu Wing Lane ● Weather protection measure in the form of building overhang to offer rain shelter and shading for the pedestrian pathways ● Landscaping in the form of podium garden, peripheral greenery, planters, vertical greening and roof greenery ● Greening ratio of about 20.6% (about 273.7m^2) ● Compliance with SBDG and incorporation of green building design measures [Remark: SDEV does not object but concerns the redevelopment will eventually be used as office, commercial studios or de facto residential studios]
18.	S/KC/29 "OU(B)" A/KC/478 BHR: 130mPD	7-13 Lam Tin Street (About 836m^2)	I	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 20.5.2022	4.2m (Workshop)	● 4m full-height NBA along Lam Tin Street, which includes pedestrian footpath and at-grade planters ● Continuous canopies at split level along Lam Tin Street frontage ● Landscaping in the form of planters, vertical greening and roof greenery ● Greening ratio of about 20.1% (about 168m^2) ● Compliance with SBDG and incorporation of green building design measures [Remark: SDEV does not object but concerns the redevelopment will eventually be used as commercial use]

No.	OZP Zoning Application No.	Address (Site Area)	Proposed Uses[1]	Proposed Minor Relaxation	Date of Consideration	Typical Floor Height (Uses)	Major Planning & Design Merits
19.	S/KC/30 "OU(B)" A/KC/484 BHR: 130mPD	57-61 Ta Chuen Ping Street (About 2,261m^2)	Information Technology and Telecom-munications Industries	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 24.6.2022	5.5m (Data Centre)	● 3.5m full-height NBA along Ta Cheun Ping Street, which includes pedestrian footpath ● Voluntary setbacks of 2.15m at the frontage of Ta Cheun Ping Street, 3.11m and 2.45m abutting the adjoining sites to the west and east respectively ● Canopy over the pedestrian entrance at Ta Cheun Ping Street frontage ● Landscaping in the form of planters, vertical greening and roof greenery ● Greening ratio of about 26.57% (about 600.8m^2) ● Compliance with SBDG and incorporation of green building design measures
20.	S/KC/29 "I" A/KC/488 BHR: 120mPD	11-19 Wing Yip Street (3,214m^2)	Information Technology and Telecom-munications Industries	PR 9.5 to 10.19 (+7.3%) BH Nil	**Approved** with conditions on 15.7.2022	N/A	● Landscaping in the form of edge planters and vertical greening along Wing Yip Street
21.	S/KC/30 "I" A/KC/491 BHR: 120mPD	13-17 Wah Sing Street (1,778m^2)	Information Technology and Telecom-munications Industries	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 26.8.2022	5.625m (Data Centre)	● A full-height setback of about 1.6m to 3.6m along Wah Sing Street in crescent shape as set out under the ODP to facilitate the future road widening along Wah Sing Street ● A voluntary full-height setback of about 5.1m with greenery adjoining the setback on ODP for enhancing visual and air permeability, and improving pedestrian comfort ● A canopy of 1.2m-wide above the pedestrian entrance and a canopy of 0.9m to 1.3m-wide at the eastern building edge along Wah Sing Street for weather protection ● The applicant agrees to further extend the canopy at the eastern building edge by 0.5m outside the Site boundary (i.e. a total of 1.4m to 1.8m wide) subject to approval of the Building Authority at building plan submission stage ● Land scape treatments in form of tree planting with shrubs at G/F, vertical greening at building façade, edge planters at various floors and roof greenery for enhancing the visual quality of street level environment ● Green building design elements and compliance with SBDG requirements. The applicant will consider to apply for BEAM Plus and LEED at the detailed design stage
22.	S/KC/31 "I" A/KC/497 BHR: 120mPD	14-15 Yip Shing Street (1,319m^2)	I	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 31.3.2023	4.6m (Industrial Use)	● A full-height voluntary building setback of about 5m along Yip Shing Street ● Other setbacks along the lot boundary and recessed façades of upper floors ● Landscape treatments including tree plants at the setback area, podium garden with peripheral planting at 3/F, vertical greenery and green roofs at roof floor and upper roof floor ● Overall greenery coverage of about 21% ● Compliance with SBDG ● Design aimed to maximise sunlight exposure for the proposed landscape features, the planting species section take into consideration of tolerance to wind and shade condition and low maintenance requirement to enhance sustainability

No.	OZP Zoning Application No.	Address (Site Area)	Proposed Uses[1]	Proposed Minor Relaxation	Date of Consideration	Typical Floor Height (Uses)	Major Planning & Design Merits
23.	S/KC/31 "I" A/KC/502 BHR: 90mPD	Cargo Consolidation Complex, 43 Container Port Road (2,655m^2)	Information Technology and Telecom-munications Industries	PR 9.5 to 10.263 (+8.1%) BH Nil	**Approved** with conditions on 11.8.2023	N/A	● Utilise land current telecommunications networks in a more efficient way as G/F and 1/F are underutilized due to low parking and logistics demand with upper floors already converted mainly for data centre
24.	S/KC/32 "I" A/KC/505 BHR 120mPD	13-17 Wah Sing Street (1,778m^2)	Warehouse (excluding Dangerous Goods Godown)	PR 9.5 to 11.4 (+20%) BH Nil	**Approved** with conditions on 24.5.2024	5.5m (Warehouse)	● A full-height setback with an area of about 64m^2 along Wah Sing Street in crescent shape as required under the ODP to facilitate the future road widening along Wah Sing Street ● A full-height building setback from G/F and above with an area of about 414m2 from Wah Sing Street for enhancing visual and air permeability ● A glass canopy of 1.5m-wide along part of Wah Sing Street for weather protection and enhancement of existing pedestrian pathway to other parts of Kwai Chung to the north ● Landscape treatments in the form of sitting area which is directly accessible from the NBA to the east of the Site with planters and bench at 1/F, vertical greening at building façade at 1/F, edge planters at various floors and roof greenery for enhancing the visual quality of street level environment ● The proposed development has taken into account the Sustainable Building Design Guidelines (SBDG) requirements. Besides, the applicant may consider applying the Building Environmental Assessment Method Plus and Leadership in Energy and Environmental Design at the detailed design stage

Notes

[1] Proposed Uses: Industrial (I), Commercial/ Office (C/O), Office (O) and Industrial-Office (I-O).

[2] The Site comprises parent lot KCTL No.49 (about 1,181.727m^2) and Ext. RP (about 142.6m^2). The extension area was granted after the building plans for the existing Toppy Tower were approved in 1974. Under the lease, no structure other than boundary walls and fences is permitted to be erected within the extension area except with prior approval of the Director of Lands, and the extension area shall not be PR/site coverage accountable. Hence, only the area of KCTL 49, i.e. about 1,181.727m^2 should be accountable for PR/GFA calculation.

[3] Planning applications involving minor relaxation of PR from the PR of the existing buildings.

Appendix III of
MPC Paper No. A/KC/510B

Detailed Departmental Comments

1. Comments of SITI and CDP:

   the applicant is advised to assess the availability and acquire for sufficient provision of water, power supply as well as the telecommunications network for the proposed data centre development.

2. Comments of CBS/NTW of BD:

   (a) regarding the relaxation of site coverage under First Schedule of B(P)R, i.e. 82%, which is only permissible in non-domestic building for the building height not more than 40m from street level on the basis of complying requirements as stipulated in PNAP APP-132, modification should also be applied with specified form and justification during building submission stage for BD further consideration;

   (b) prerequisites under PNAP APP-151 and sustainable building design requirements (building separation, building set back and site coverage of greenery) under PNAP APP-152 would be applicable to the building plan submission if gross floor area (GFA) concessions for non-mandatory areas/greenery features are to be applied or relaxation of site coverage in accordance with PNAP APP-132. Attention is drawn to the applicant that the proposed building shall be set back from Wing Chong Street in compliance with the provision in paragraph 7 of PNAP APP-152. Given that the site area does not exceed 20,000m^2 and the continuous projected façade length is less than 60m, and considering that the site area is also less than 1,000m^2, it follows that building separation and the provision of greenery are generally not required in accordance with PNAP APP-152;

   (c) regarding the canopy project over street, it was subjected to the compliance with the requirements of regulation 10 of the B(P)R. Attention is drawn to the applicant that the site coverage and plot ratio for the canopy may be excluded if the criteria set in paragraph 3(k) of PNAP APP-19 was met;

   (d) emergency vehicular access shall be provided for all the buildings to be erected on the site in accordance with the requirement under the Regulation 41D of the B(P)R; and

   (e) for UBW erected on leased land, enforcement action may be taken by the Building Department to effect their removal in accordance with the prevailing enforcement policy against UBW as and when necessary. The granting of any planning approval should not be construed as an acceptance of any existing building works or UBW on the application site under the BO.

3. Comments of D of FS:

(a) detailed fire services requirements will be formulated upon receipt of formal submission of general building plans;

(b) the applicant should be reminded to read the FSD Publication "A Guide to Application for Dangerous Goods License and Approval" before submitting a DG application to FSD;

(c) in addition, D of FS raises no objections to the proposed two 30,000L underground fuel tank on B1/F and Fuel Tank Rom on R/F from a Dangerous Goods licensing perspective.

4. Comments of C for T:

The applicant is advised to well maintain the turntable in an operable condition.

☐Urgent ☐Return receipt ☐Expand Group ☐Restricted ☐Prevent Copy

From:
Sent: 2025-04-11 星期五 03:03:07
To: tpbpd/PLAND <tpbpd@pland.gov.hk>
Subject: A/KC/510 7-11 Wing Kin Road, Kwai Chung Lard Factory

A/KC/510

Kwai Chung Town Lot 145 and Adjoining Government Land, 7-11 Wing Kin Road, Kwai Chung

Site area: 964.2sq.m Includes Government Land of 35.169sq.m

Zoning: "Industrial"

Applied development: Proposed **MR of Plot Ratio 11.4** / 110mPD / SC 82% / 17 Vehicle Parking

Dear TPB Members,

496 approved 14 July 2023. While it was obvious that the Visual Impact was considerable and negative, members ignored this issue.

The only interest they expressed was in the need to 'Improve landscape treatment".

Now the applicant has jumped on the datacentre bandwagon. He should take time to study the recent comments made by Joe Tsai of Alibaba, who should know a thing or three about this business.

Alibaba's Joe Tsai voices concern about AI data center construction bubble

https://www.datacenterdynamics.com/en/news/alibabas-joe-tsai-voices-concern-about-ai-data-center-construction-bubble/

Re the landscape treatment, nothing more than some squares of wall planting.

Get real, the development is proposed to be a data centre, DCs are significant emitters of greenhouse gas. The plants would wither and die in no time.

Previous objections re visual impact upheld.

Mary Mulvihill

From:
To: tpbpd <tpbpd@pland.gov.hk>
Date: Wednesday, 29 March 2023 2:41 AM HKT
Subject: Re: A/KC/496 7-11 Wing Kin Road, Kwai Chung Lard Factory

☐Urgent ☐Return receipt ☐Expand Group ☐Restricted ☐Prevent Copy

Dear TPB Members,

Additional information and response to Depts reinforces the fact that the Visual Impact is significant and unacceptable.

The benefits of green panorama to many thousands of both residents and workers should take precedence over the venality of developer.

That providing some seating at pavement level can mitigate this is risible.

Mary Mulvihill

From:
To: tpbpd <tpbpd@pland.gov.hk>
Date: Wednesday, 22 February 2023 2:42 AM CST
Subject: Re: A/KC/496 7-11 Wing Kin Road, Kwai Chung Lard Factory

Dear TPB Members,

The negative visual impact of the increased height is unacceptable.
Figure 4: Photomontage of VP3 - Tsuen Wan Chinese Permanent Cemetery. Would eliminate the already very reduced view of the ridgeline
Figure 10: Photomontage of VP9 - Tsing Yi Waterfront Promenade. The development protrudes above the bridge line and interferes with the panorama. Note that this is an impact on the community/public enjoyment not the rights of individual developments.

The proposed height of 116mPD is unacceptable. The height should be maintained at at the 105mPD as per OZP.

From:
To: tpbpd <tpbpd@pland.gov.hk>
Date: Friday, 14 October 2022 3:04 AM CST
Subject: A/KC/496 7-11 Wing Kin Road, Kwai Chung Lard Factory

A/KC/496

Kwai Chung Town Lot 145 and Adjoining Government Land, 7-11 Wing Kin Road, Kwai Chung

Site area : 964.2sq.m Includes Government Land of 35.169sq.m

Zoning : "Industrial"

Applied development : Proposed **MR of Plot Ratio 11.4** / 106mPD / SC 91% / 25 Vehicle Parking (116mPD, typo)

☐Urgent ☐Return receipt ☐Expand Group ☐Restricted ☐Prevent Copy

Dear TPB Members,

Application 457 approved 17 March 2020 was for a development with a much smaller site coverage.

While the developer is proposing setbacks, this plan should be considered in tandem with 494, Nos 19-21, which has no setback. There is little point in having a higgledy-piggledy streetscape with one building set further back than the others. Clearly some co-ordination is required here. Members should question if instead of set backs at front and back an alleyway between buildings would better serve to improve ventilation.

The green measures are all green wall, a dodgy concept on an industrial building façade, expensive to maintain, there is no indication as to what the community benefit would be. If the street is not busy then why not some tree planting on the expanded pavement?

I would refer to the minutes of 31 May 2019 re a similar application: strong justification and planning merits for the proposed minor relaxation of BH restriction. Approving such applications without strong justification and planning merits would set an undesirable precedent.

(a) the planning and design merits of the proposed scheme, taking into account the site specific characteristics and local context;

(b) design of street level on pedestrian accessibility, connectivity and comfort;

(c) compliance with relevant provisions of Sustainable Building Design Guidelines; and

(d) consideration of green building design

The data supplied does not tick the boxes.

Mary Mulvihill

From:
To: tpbpd <tpbpd@pland.gov.hk>
Date: Wednesday, 9 January 2019 2:46 AM CST
Subject: A/KC/457 7-11 Wing Kin Road, Kwai Chung Lard Factory

A/KC/457
Kwai Chung Town Lot 145, 7-11 Wing Kin Road (odd numbers), Kwai Chung
Site area : About 928m²
Zoning : "Industrial"
Applied Development : Proposed Offensive Trades (Lard Boiling Factory) (PR 9.5 / SC 57.7 / 105mPD /22 Vehicle Parking)

Dear TPB Members,

Clarification should be sought as to where the raw materials come from. Are the pig skins brought in from a few or many locations?

While the district is Industrial, there should be a master plan in place with regard to amalgamating Offensive Trades in specific locations in order to minimize the impact and make best use of the most update technologies and amenities.

Are the adjoining buildings also used for similar purposes or is their production process more benign?

Hopefully members will ask questions and ensure that operations like this are sited in the most suitable location.

Mary Mulvihill

Mary Mulvihill

獅子會蔣翠琼中學
Lions Clubs International Tseung Chui King College

校址 :
Add. :
網址 :

Tel. :
Fax :

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To: **Secretary, Town Planning Board**

By hand or post: 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong

By Fax: 2877 0245 or 2522 8426

By e-mail: tpbpd@pland.gov.hk

The application no. to which the comment relates **A/KC/510**

Details of the Comment:

Dear Sir / Madam,

We refer to the above planning application and wish to submit our views as follows:

1. The existing industrial building is located in an area dedicated for offensive trades such as chemical production. It is very close to our school premises.

2. As our school is near the existing building site, any offensive trade such as chemical production may be re-started any time under existing permitted use of the building which has long term adverse impact to safety and health of our students and staff.

3. The planning application for redevelopment of the captioned site into a non-polluting warehouse use is thus fully supported by us, as it will be built to current safety standards, and the warehouse use will not pose threat to safety and health of our students and staff.

Name of person/company making this comment: Mr. Kwok Yui Ham, Principal of Lions Clubs

Signature: Kwok Yui Ham

Date: 11 April 2025

RECEIVED
12 APR 2025
Town Planning Board

Appendix V of
MPC Paper No. A/KC/510B

Recommended Advisory Clauses

(a) to note the comments of SITI and CDP that:

the applicant is advised to access the availability and acquire for sufficient provision of water, power supply as well as the telecommunications network for the proposed data centre development.

(b) to note the comments of DLO/TW&KT that:

(i) LandsD reserves comment on the proposed schematic design, including the proposed canopy, which would only be examined in detail during the building plan submission stage upon completion of the land exchange. There is no guarantee that the schematic design presented in the subject application will be acceptable under lease if it is so reflected in future building plan submission.

(ii) The owner of KCTL 145 has submitted a land exchange application to permit modern industrial uses in the subject site, which is being considered by LandsD acting in the capacity as the landlord at its sole discretion. There is no guarantee that the proposed land exchange will be completed. The proposed land exchange, if subsequently completed, will be subject to such terms and conditions including among others, the payment of such appropriate fees and premium, as may be imposed by LandsD.

(c) to note the comment of DEP that:

since demolition of the existing industrial building and excavation works would be required, the applicant is advised to minimise the generation of Construction and Demolition (C&D) materials, reuse and recycle the C&D materials on-site as far as possible for the proposed development.

(d) to note the comment of CHE/NTW, HyD that:

should there be any HyD's inventory such as existing pavement, exclusive road drain etc. affected due to the proposed development, the relevant details shall be submitted for HyD's comment and the roadworks carried out by the Applicant shall be in accordance with HyD's standard.

(e) to note the comments of CBS/NTW of BD that:

(i) regarding the relaxation of site coverage under First Schedule of B(P)R, i.e. 82%, which is only permissible in non-domestic building for the building height not more than 40m from street level on the basis of complying requirements as stipulated in PNAP APP-132, modification should also be applied with specified form and justification during building submission stage for BD further consideration;

(ii) prerequisites under PNAP APP-151 and sustainable building design requirements (building separation, building set back and site coverage of greenery) under PNAP APP-152 would be applicable to the building plan submission if gross floor area (GFA) concessions for non-mandatory areas/greenery features are to be applied or relaxation of site coverage in accordance with PNAP APP-132. Attention is drawn to the applicant that the proposed building shall be set back from Wing Chong Street in compliance with the provision in paragraph 7 of PNAP APP-152. Given that the site area does not exceed 20,000m^2 and the continuous projected façade length is less than 60m, and considering that the site area is also less than 1,000m^2, it follows that building separation and the provision of greenery are generally not required in accordance with PNAP APP-152;

(iii) regarding the canopy project over street, it was subjected to the compliance with the requirements of regulation 10 of the B(P)R. Attention is drawn to the applicant that the site coverage and plot ratio for the canopy may be excluded if the criteria set in paragraph 3(k) of PNAP APP-19 was met;

(iv) emergency vehicular access shall be provided for all the buildings to be erected on the site in accordance with the requirement under the Regulation 41D of the B(P)R;

(v) for UBW erected on leased land, enforcement action may be taken by the Building Department to effect their removal in accordance with the prevailing enforcement policy against UBW as and when necessary. The granting of any planning approval should not be construed as an acceptance of any existing building works or UBW on the application site under the BO; and

(vi) detailed checking under the BO will be carried out at building plan submission stage.

(f) to note the comment of D of FS that:

(i) detailed Fire Services requirements will be formulated upon receipt of a formal submission of short term tenancy/waiver, general building plans or referral of application via relevant licensing authority;

(ii) the applicant should be reminded to read the FSD Publication "A Guide to Application for Dangerous Goods License and Approval" before submitting a DG application to FSD; and

(iii) in addition, D of FS raises no objections to the proposed two 30,000L underground fuel tank on B1/F and Fuel Tank Rom on R/F from a Dangerous Goods licensing perspective.

(g) to note the comments of Director-General of Communications that:

the applicant may contact relevant network operators directly for service provisioning

(h) to note the comments of CTP/UD&L, PlanD that:

(i) the approval of the planning application does not imply approval of the site coverage of greenery requirements under BD's APP-PNAP 152 and/or under lease. The site coverage of greenery calculation should be submitted separately to BD for approval; and

(ii) the applicant is reminded that approval of the planning application under Town Planning Ordinance does not imply approval of tree preservation/removal scheme under lease. Thus, the applicant should seek comments and approval from the relevant authority on the concerned tree works and/or compensatory/replacement planting proposal, where appropriate.

(i) to note the comments of C for T that:

the turntable should be well maintained in an operable condition.