Extract of Town Planning Board Guidelines for Application for Development within "GB" zone under Section 16 of the Town Planning Ordinance

(a) there is a general presumption against development (other than redevelopment) in a "GB" zone;

(b) an application for new development in a "GB" zone will only be considered in exceptional circumstances and must be justified with very strong planning grounds. The scale and intensity of the proposed development including the plot ratio, site coverage and building height should be compatible with the character of surrounding areas;

(c) applications for G/IC uses and public utility installations must demonstrate that the proposed development is essential and that no alternative sites are available. The plot ratio of the development site may exceed 0.4 so as to minimize the land to be allocated for G/IC uses;

(d) passive recreational uses which are compatible with the character of surrounding areas may be given sympathetic consideration;

(e) the design and layout of any proposed development should be compatible with the surrounding area. The development should not involve extensive clearance of existing natural vegetation, affect the existing natural landscape, or cause any adverse visual impact on the surrounding environment;

(f) the proposed development should not overstrain the capacity of existing and planned infrastructure such as sewerage, roads and water supply. It should not adversely affect drainage or aggravate flooding in the area;

(g) the proposed development should not overstrain the overall provision of G/IC facilities in the general area;

(h) the proposed development should not be susceptible to adverse environmental effects from pollution sources nearby such as traffic noise, unless adequate mitigating measures are provided, and it should not itself be the source of pollution; and

(i) any proposed development on a slope or hillside should not adversely affect slope stability.

致城市規劃委員會秘書：
專人送遞或郵遞:香港北角渣華道 333 號北角政府合署 15 樓
傳真 : 2877 0245 或 2522 8426
電郵: tpbpd@pland.gov.hk

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

有關的規劃申請編號 **The application no. to which the comment relates**
A/TP/694

意見詳情 (如有需要，請另頁說明)
Details of the Comment (use separate sheet if necessary)
大埔區議員，李漢祥 全力支持

「提意見人」姓名/名稱 Name of person/company making this comment 李漢祥

簽署 Signature

日期 Date 25-March-2024

致城市規劃委員會秘書：
專人送遞或郵遞:香港北角渣華道 333 號北角政府合署 15 樓
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意見詳情 (如有需要，請另頁說明)
Details of the Comment (use separate sheet if necessary)
請見附件信函內容

「提意見人」姓名/名稱 Name of person/company making this comment _____

簽署 Signature _____ 日期 Date 25/3/2024

徐偉棠
高級分區經理

康業服務有限公司
Hong Yip Service Company Ltd.

檔案編號：HYS/TP/CR/24-026

香港新界沙田上禾輋路一號
沙田政府合署
十三樓 1301-1314 室
沙田、大埔及北區規劃處

敬啟者：

有關：新界大埔黃宜坳前魚類統營處大埔小學的政府土地
擬議略為放寬建築物高度限制以作擬論社會福利設施（殘疾人士住宿院舍）
(申請編號: A/TP/694)

本苑收到　貴處於 2024 年 3 月 15 日信函通知黃宜坳前魚類統營處大埔小學的政府土地擬議為社會福利設施（殘疾人士住宿院舍）。經法團了解後，現特函回覆雍怡雅苑意見。

首先，就雍怡雅苑早於 2003 年已多次反映表示，本苑反對在大埔黃宜坳前魚類統營處大埔小學的政府土地興建一些公共院舍或改建其他用途的樓宇，因擔心他們的日常運作會嚴重影響本苑居民日常生活及安寧。

因此，現在對　貴處咨詢將在該處興建作殘疾人士住宿院舍，雍怡雅苑業主立案法團表示反對。同時，本苑更發現在附近位置已提前進行平整工程，移除了山墳前的多棵大樹木，山墳外露影響居民生活及做成心理不安。因此懇請貴處及城規會，安排在山墳前位置種回一些樹木以分隔及阻擋墳景。

如　台端有任何查詢，歡迎致電　　與譚小姐聯絡。

康業服務有限公司
雍怡雅苑客戶服務處

RECEIVED
27 MAR 2024
Town Planning Board

HONG YIP SERVICE CO. LTD.
康業服務有限公司
分區辦事處
(111)
AREA OFFICE

高級分區經理 徐偉棠
持牌物業管理人(第 1 級)P1-836411

2024 年 3 月 25 日

副本致　：　大埔區議會議員陳笑權先生
大埔民政事務處陳巧敏女士
雍怡雅苑業主立案法團

RECYCLED PAPER

3

☐ Urgent ☐ Return Receipt Requested ☐ Sign ☐ Encrypt ☐ Mark Subject Restricted ☐ Expand personal&publi

A/TP/694 Former Fish Marketing Organization Tai Po Primary School, Wong Yi Au
04/04/2024 03:20

From:
To: "tpbpd" <tpbpd@pland.gov.hk>
Sent by: tpbpd@pland.gov.hk
File Ref:

A/TP/694 Applicant: Home of Loving Faithfulness

Former Fish Marketing Organization Tai Po Primary School, Wong Yi Au, Tai Po

Site area: About 3,275sq.m Government Land

Zoning: "GIC" and "Green Belt"

Applied development: Relaxation of BHR / Residential Care Home for Persons with Disabilities / 7 Vehicle Parking

Dear TPB Members,

As this is government land and will, presumably, be granted for a nominal fee, members should ensure that approval comes with provisions that ensure that the promised facilities and services will be provided.

As noted with the recent North Point OZP that involved the take over of a large GIC facility by IECC religious organization that a few weeks later announced it had invested instead the Sunbeam Theatre building, vigilance is required when dealing with religious organizations that pay no taxes and are under no obligation to make disclosure re revenue and expenditure.

Mary Mulvihill

Recommended Advisory Clauses

(a) to note the comments of the Director of Social Welfare (DSW) that:

(i) the RCHD is required to obtain a licence from Social Welfare Department's licensing office before commencement of service. The design and facilities of a RCHD shall comply with the licensing requirements under the Residential Care Homes (Persons with Disabilities) Ordinance, its subsidiary legislation and the Code of Practice for Residential Care Homes (Persons with Disabilities); and

(ii) the applicant should take note that according to paragraph 4.9.2 of the Code of Practice for Residential Care Home (Persons with Disabilities), "every room used for habitation or for the purpose of an office or kitchen in RCHDs shall be provided with adequate natural lighting and ventilation for compliance with sections 29, 30, 31, 32 and 33 of the Building (Planning) Regulations (Cap. 123 sub. leg. F). The DSW may consider exemption if adequate artificial lighting and mechanical ventilation are provided in the kitchen or office to the satisfaction of the DSW".

(b) to note the comments of the District Lands Officer/Tai Po, Lands Department (DLO/TP, LandsD) that:

(i) the Short Term Tenancy (STT) application will be considered by LandsD acting in the capacity of the landlord or lessor at its sole discretion and there is no guarantee that such application will be approved. If such application is approved, it will be subject to such terms and conditions, including among others the payment of rent or fee if not waived, as may be imposed by the LandsD;

(ii) the application site is adjacent to the Permitted Burial Ground (TP/S14) and Ha Wong Yi Au village. As such, the applicant should be reminded to avoid any encroachment to the access/footpath to the said burial ground and village area and impact to the existing graves and urns;

(iii) according to paragraph 5.9.4 of the Supporting Planning Statement, the applicant advised that they would construct a new sewer to connect the application site and the manhole no. FMH1005813 (S1) as shown in Figure 2.1 in the Drainage and Sewerage Impact Assessment thereto. The applicant should apply for permission for the purposes of construction, use and maintenance of the said private sewer on Government land if this is not covered by the proposed STT; and

(iv) the applicant should liaise with Civil Engineering and Development Department about the tree preservation and removal proposal at the application site and surrounding area in connection with the access road.

(c) to note the comments of the Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD) that:

(i) the applicant(s) shall resolve any conflict/disagreement with relevant lot owner(s) and seek LandsD's permission for laying new drains/channels and/or modifying/upgrading existing ones on other private lot(s) or on government land (where required) outside the application site;

(ii) all proposed drainage/sewerage connection works should be carried out by the developer at their own cost to the satisfaction of DSD;

(iii) all drainage/sewerage works to be handed over to DSD shall conform to the requirements stipulated in Stormwater Drainage Manual, Sewerage Manual, DSD standard Drawings, DSD Technical Circulars, Practice Notes and Guidelines, etc.;

(iv) all proposed drainage/sewerage connection works should be carried out by the developer in accordance with DSD Standard Drawings at the developer's cost. Applicant should submit the HBP1 application form together with a cheque to DSD for a technical audit of the completed connection works. Applicant should submit the declaration form (form no.: HBP1_CC) before the inspection and to provide certified as-built drainage plans to DSD for record. For connection works involving special designs, features and/or materials such as couplings, rising mains, welded joints or the like, 2-staged technical audits would be required prior to backfilling and after completion of the connection works;

(v) extreme care should be exercised when working in the vicinity of any existing drainage facilities in order not to disturb, interfere with or cause damage to them. Any damage to the existing drainage facilities due to the proposed works shall be made good at the developer's expense to the satisfaction of DSD;

(vi) please make sure that no muddy water/surface runoff would rush from the application site to the surrounding area/adjacent road;

(vii) temporary stockpile of excavated materials should be at a location where it will not affect any existing drainage system;

(viii) all site formation works should not obstruct any overland flow. All the existing flow paths as well as the runoff falling onto and passing through the application site should be intercepted and disposed of via proper discharge points. Please ensure the proposed works would not cause any adverse drainage impacts to the surrounding areas;

(ix) the lot owner/developer should take all precautionary measures to prevent any disturbance, damage and pollution from the development to any parts of the existing drainage facilities in the vicinity of the lot. In the event of any damage to the existing drainage facilities, the lot owner/developer would be held responsible for the cost of all necessary repair works, compensation and any other consequences arising therefrom;

(x) the lot owner/developer is required to rectify/modify the drainage system if it is found to be inadequate or ineffective during operation. The lot owner/developer shall also be liable for and shall indemnify Government against claims and demands arising out of damage or nuisance caused by failure of the system; and

(xi) the limited desk-top checking by Government on the drainage proposal covers only the fundamental aspects of the drainage design which will by no means relieve his obligations to ensure that (i) the proposed drainage works will not cause any adverse drainage or environmental impacts in the vicinity; and (ii) the proposed drainage works and the downstream drainage systems have the adequate capacity and are in good conditions to receive the flows collected from his lot and all upstream catchments.

(d) to note the comments of the Chief Town Planner/Urban Design and Landscape, Planning Department (CTP/UD&L, PlanD) that approval of the application does not imply approval of the site coverage of greenery requirements under PNAP APP-152. The site coverage of greenery calculation should be submitted separately to Building Department for approval. Similarly for any proposed tree preservation/ removal scheme, the applicant should approach relevant authority/ government department(s) direct to obtain necessary approval.

(e) to note the comments of the Director of Food and Environmental Hygiene (DEFH) that:

(i) no Food and Environmental Hygiene Department's (FEHD) facilities will be affected and all related work or operation shall not cause any environmental nuisance, pest infestation and obstruction to the surrounding;

(ii) for any waste generated from the works, operation or activity, the applicant should arrange disposal properly at his own expenses;

(iii) the project proponent should ensure the works would not affect FEHD's facilities operation and refuses collection service;

(iv) if provision of cleansing service for new roads, streets, cycle tracks, footpaths, paved areas etc., is required, FEHD should be separately consulted. Prior consent from FEHD must be obtained and sufficient amount of recurrent cost should be provided to FEHD; and

(v) proper licence/permit issued by FEHD is required if there is any food business regulated by DFEH under the Public Health and Municipal Services Ordinance (Cap. 132) and other relevant legislation for the public. Pursuant to section 4 of the Food Business Regulation (Cap. 132X), the expression of "food business" does not include any club and canteen for the use exclusively of the persons employed in the work place.

(f) to note the comments of the Chief Building Surveyor/New Territories West, Building Department (CBS/NTW, BD) that:

(i) before any new building works are to be carried out at the application site, prior approval and consent of Building Authority (BA) should be obtained, otherwise they are Unauthorized Building Works (UBW). An Authorized Person (AP) should be appointed as the co-ordinator for the proposed building works in accordance with the Buildings Ordinance (BO);

(ii) the site shall be provided with means of obtaining access thereto from a street and emergency vehicular access in accordance with Regulations 5 and 41D of the Building (Planning) Regulations (B(P)R) respectively;

(iii) if the site does not abut on a specified street of not less than 4.5m wide, its permitted development intensity under Regulation 19(3) of the B(P)R shall be determined at the building plan submission stage;

(iv) a residential care home for persons with disabilities (RCHD) which is for habitation is a domestic use under the BO, and modification may be granted by the Building Authority for treating RCHD as non-domestic building for the purposes of Regulations 20, 21 and 25 of the B(P)R. Comments on the building proposal of

the development would be subject to submission of more detailed plans or application for the approval under the BO;

(v) any parking spaces to be disregarded from gross floor area (GFA) calculation under the Regulation 23(3)(b) of the B(P)R shall be subject to the requirements laid down in Appendix C of PNAP APP-2;

(vi) for features applied to be excluded from the calculation of the total GFA, it shall be subject to compliance with the requirements laid down in the relevant Joint Practice Notes and PNAP. For example, the requirements of site coverage of greenery as stipulated in PNAP APP-152;

(vii) provision of prescribed windows for habitable areas and kitchen to comply with Regulations 30, 31 and 32 of the B(P)R;

(viii) provision of windows for rooms containing soil fitments to comply with Regulation 36 of the B(P)R;

(ix) provision of the means of escape in case of fire or emergency to comply with Regulation 41 of the B(P)R;

(x) provision of access and facilities for persons with a disability in accordance with Regulation 72 of the B(P)R;

(xi) the proposed building may be subject to the issue of licence and should comply with the building and other relevant requirements as may be imposed by the licensing authority; and

(xii) detailed checking under the BO will be carried out at building plan submission stage.

(g) to note the comments of the Director of Fire Services (D of FS) that detailed fire safety requirements will be formulated upon receipt of formal submission of general building plans or upon receipt of referral from relevant licensing authority. Height restriction as stipulated in s.21 of Residential Care Homes (Persons with Disabilities) Regulation, Cap.613A should be observed.

S. 16 PLANNING APPLICATION
APPROVED TAI PO OZP NO. S/TP/30

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones, Government Land at "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

SUPPORTING PLANNING STATEMENT

March 2024

Applicant:
Home of Loving Faithfulness

Consultancy Team:
KTA Planning Limited
AGC Design Limited
CKM Asia Limited
Landes Limited
Ramboll Hong Kong Limited
Greg Wong & Associates Limited

PLANNING LIMITED
規劃顧問有限公司

Executive Summary

The Applicant, Home of Loving Faithfulness (HOLF), seeks approval from the Town Planning Board ("TPB") under Section 16 of the Town Planning Ordinance for Proposed Minor Relaxation of Building Height (BH) Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities (RCHD)) on Government Land at former Fish Marketing Organization Tai Po Primary School, Wong Yi Au, Tai Po ("the Site").

The majority portion of the Site (about 95%) falls within an area zoned "Government, Institution or Community" ("G/IC") on the Approved Tai Po Outline Zoning Plan No. S/TP/30 ("the OZP") with a maximum building height restriction of 1 storey, while a minor portion of it (about 5%) falls within an area zoned "Green Belt" ("GB") on the OZP. According to the Statutory Notes of the OZP, "Social Welfare Facility" is a Column 1 use and is always permitted within the "G/IC" zone. Notwithstanding, it is a Column 2 use in the "GB" zone and requires planning permission.

HOLF has been operating residential care home for children and adults with special needs since 1965 in Kwu Tung (Lot 1952 in D.D. 95). Due to the implementation programme of the development of Kwu Tung North New Development Area (NDA), the concerned parcel of land will be resumed and reverted to the Government in the future. With the aid of the Development Bureau (DEVB), the Site sat by the former Fish Marketing Organization Tai Po Primary School, which is a vacant site now, is selected for the reprovisioning of the concerned RCHD.

The area of the Site in Tai Po (about 3,275m^2) is smaller than the current site (about 4,422m^2) in Kwu Tung. Besides, due to the hillside topography of the Site, part of the Site will be dedicated for access road and slope maintenance, thus limiting the buildable area. Floor area has to be stacked up in order to provide adequate or equivalent floor space for catering the existing RCHD. At a plot ratio of approximately 1.22, the total gross floor area of the Proposed Development is about 3,978m^2. The Proposed Development consists of 3 storeys. Two portions, a 2-storey dormitory in the south and a 1-storey chapel in the north, all atop a 1-storey podium (G/F). With a maximum building height of about +37.4mPD (main roof level), minor relaxation of building height restriction from 1 storey to 3 storeys is required. The Sensory Garden originally provided in the Kwu Tung site will also be reprovisioned at the Site. The Proposed RCHD with minor relaxation of building height restriction is fully justified by the following main reasons:

- The Site is suggested by DEVB. The provision of road access and demolition of existing vacant school by respective government departments demonstrates the suitability of the Site;
- The Proposed RCHD is subsumed under the land use of "Social Welfare Facility" which is in line with planning intention of the "G/IC" zone;
- The loving care and long serving for children and adult with special needs by the operation of HOLF could thus be continued and sustained;
- The reprovision and modernisation of the care home facilities will enhance patience care and staff well-being;

- There is a strong need for building height relaxation due to site constraint;
- The scale of Proposed Development is not excessive;
- No adverse landscape impact and negligible visual impact to the surroundings are anticipated;
- No adverse traffic impact is anticipated; and
- The Proposed Development is technically feasible in terms of drainage, sewerage, environmental and geotechnical aspects with no insurmountable impacts.

In light of justifications given throughout the Supporting Planning Statement, we sincerely request the TPB to give favourable consideration to this Planning Application.

行政摘要
（內文如有差異，應以英文版本為準）

申請人可愛忠實之家現欲根據城市規劃條例第16條，向城市規劃委員會（城規會）將位於大埔黃宜坳前魚類統營處大埔小學的政府土地（「申請地點」）的擬議「社會福利設施」（殘疾院舍）用途申請擬議略為放寬建築物高度限制。申請地點大部份（約95%）位於大埔分區計劃大綱核准圖編號 S/TP/30（「大綱圖」）的「政府、機構或社區」地帶內，而一小部份（約 5%）落入「綠化地帶」地帶。該「政府、機構或社區」地帶列明最高建築物高度為一層。擬議的殘疾院舍為「社會福利設施」用途，屬該「政府、機構或社區」地帶內的第一欄《經常准許用途》，及屬於「綠化地帶」地帶內的第二欄《須先向城規會申請以獲准許的用途》。

申請人由1965年起一直於古洞（丈量約份第95約地段第1952號）營運可愛忠實之家，照顧有特殊需要的兒童和成年人。基於古洞北新發展區項目的推展，有關地段未來將會被收回及歸還政府。在發展局的協助下，一幅曾作魚類統營處大埔小學的空置校舍用地被選作重置可愛忠實之家殘疾院舍。

申請地點的面積（約3,275平方米）少於現時的古洞地段（約4,422平方米）。申請地點由於受制於山形地勢，需騰出土地以作出入通道及斜坡維修，因而進一步限制了可建築樓面的範圍。因此，有需要發展多層樓面以提供足夠空間容納現有的殘疾院舍。擬議發展的地積比率為1.22而總樓面面積為約3,978平方米。擬議發展大體為一座3層的建築物包括 1 層的基座(G/F)及兩座坐於基座上的屋體：位於南面的一座 2 層宿舍，以及位於北面的一座1層小教堂。擬議發展最高建築物高度為主水平基準上37.4米（以主天台層高度計算），因此需向城規會申請將建築物高度由一層放寬至三層。現時位於古洞的感官花園亦會獲得重置。擬議建築物高度放寬的申請具充份理據，原因如下：

- 申請地點由發展局倡議，並由相關政府部門提供道路接駁及進行現有空置校舍拆卸工程，可證明申請地點為合適選址;
- 擬議殘疾院舍屬於「社會福利設施」用途，符合「政府、機構或社區」地帶的規劃意向；
- 擬議發展能延續可愛忠實之家照顧有特殊需要的兒童和成年人的服務；
- 重置和提供現代化的院舍設施有助提升院友照顧的質素及看護者的工作環境；
- 受制於地盤限制，擬議發展極有殷切需要放寬建築物高度限制；
- 考慮到重置現有古洞院舍運作及設施的需要，擬議發展的規模並不過度；
- 不會對周邊帶來負面景觀影響，及帶來極微的視覺影響；
- 不會帶來負面交通影響；
- 擬議發展於排洪、排污、環境及土力工程上為技術上可行，並不會帶來難以克服的影響。

基於以上規劃及技術理由，申請人懇請城規會批准是次規劃申請。

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S.16 Planning Application
Approved Tai Po Outline Zoning Plan No. S/TP/30

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones Government Land at "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

Supporting Planning Statement

1 INTRODUCTION

1.1 Purpose

1.1.1 This Planning Application is prepared and submitted on behalf of Home of Loving Faithfulness (the "Applicant") to seek approval from Town Planning Board ("TPB") for proposed minor relaxation of building height ("BH") restriction for proposed social welfare facility on Government Land at former Fish Marketing Organization Tai Po Primary School, Wong Yi Au, Tai Po ("the Site"). This Supporting Planning Statement is to provide TPB with necessary information to facilitate consideration of this application.

1.2 Report Structure

1.2.1 Following this Introductory Section, the site and planning context will be briefly set out in **Section 2**. The background of the relocation of Home of Loving Faithfulness ("HOLF") is explained in **Section 3**. The Proposed Development Scheme is included in **Section 4** followed by planning merits and justifications for the Planning Application in **Section 5**. **Section 6** concludes and summarises this Supporting Planning Statement.

2 SITE AND PLANNING CONTEXT

2.1 Site Location and Existing Condition

2.1.1 The Site is situated on Government Land at former Fish Marketing Organization Tai Po Primary School in Wong Yi Au, Tai Po (**Figure 2.1** refers). It is located to the southeast of Tai Po Town Centre. The Site has an area of about 3,275m^2 and bounded by Tai Po Road – Tai Po Kau to the north, Permitted Burial Ground Site to the east and a low-rise residential development, namely Chateau Royale to the south and west.

2.1.2 The former school located within the Site was built around 1963. It comprises four major buildings and four ancillary buildings, of which all of them are 1 storey. The school was closed in 1996 and the buildings were therefore abandoned. The northern portion of the Site has been occupied by a temporary structure.

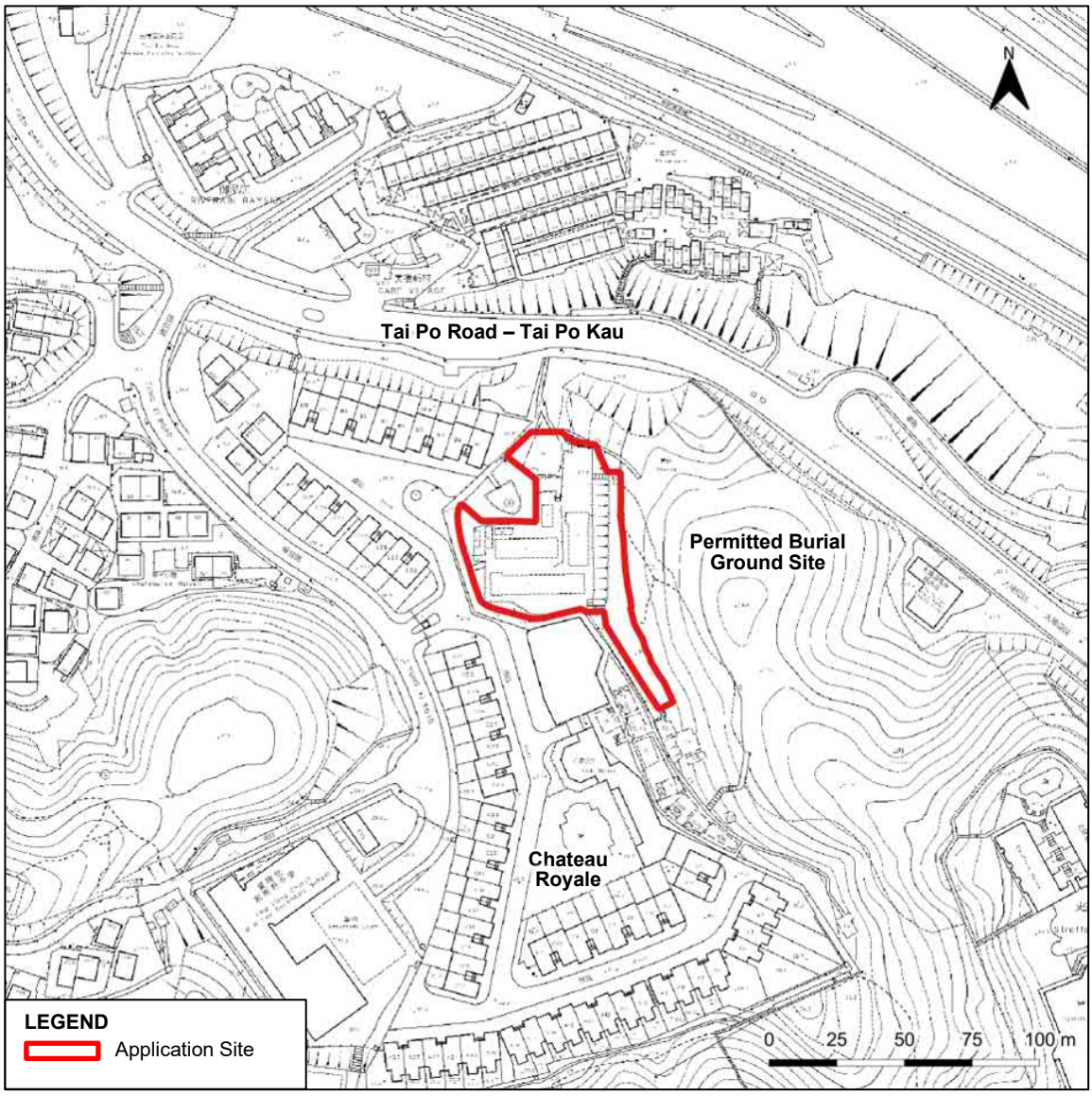


Figure 2.1 Site Location Plan

2.2 Land Status

2.2.1 The land included in the Application Site is solely Government Land. The former school site is under the Vacant School Premises Sites. Application for short-term uses of the site for the Proposed Development has been submitted to Lands Department.

2.3 Statutory Planning Context

2.3.1 The majority portion of the Site (about 3,105m^2, 95%) falls within an area zoned "Government, Institution or Community" ("G/IC") on the Approved Tai Po Outline Zoning Plan No. S/TP/30 ("the OZP"), while a minor portion of it (about 170m^2, 5%) falls within an area zoned "Green Belt" ("GB") on the OZP (Error! Reference source not found. refers).

"G/IC" Zone

2.3.2 According to the Statutory Notes of the OZP, the planning intention of "G/IC" zone is as follows:

"This zone is intended primarily for the provision of Government, institution or community facilities serving the needs of the local residents and/or a wider district, region or the territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institution establishments."

2.3.3 Under the Schedule of Use of "G/IC" zone, 'Social Welfare Facility' use is a Column 1 use which is always permitted. Residential Care Home for Persons with Disabilities (RCHD) which is subsumed under "Social Welfare Facility" according to the Definition of Terms in town planning. Such a use is always permitted in the prevailing "G/IC" zone.

2.3.4 Nevertheless, as stipulated on the OZP, development in the prevailing "G/IC" zone is subject to a maximum BH of 1 storey excluding basement(s).

2.3.5 As stated in Remark (c) of the "G/IC" zone under the Statutory Notes of the Approved OZP, *"[b]ased on the individual merits of a development or a redevelopment proposal, minor relaxation of the building height restriction stated in paragraphs (a) and (b) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance"*. Therefore, minor relaxation of building height restriction from 1 storey to 3 storeys to enable the proposed RCHD in the prevailing "G/IC" zone requires planning permission from TPB.

"Green Belt" Zone

2.3.6 According to the Statutory Notes of the OZP, the planning intention of "GB" zone is as follows:

"The planning intention of this zone is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets. There is a general presumption against development within this zone."

2.3.7 Under the Schedule of Use of "GB" zone, "Social Welfare Facility" use is a Column 2 use which planning permission from TPB is required.

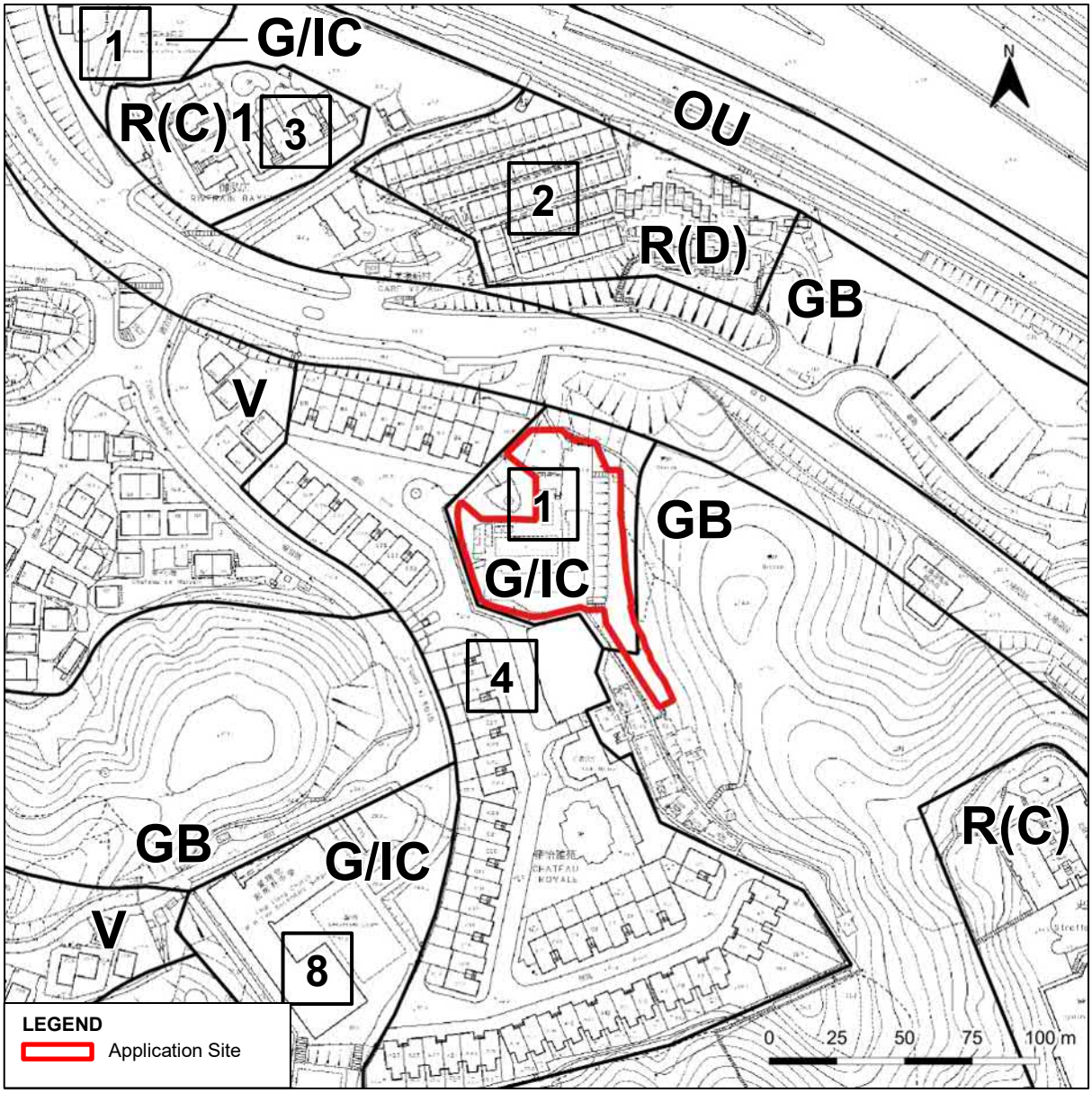


Figure 2.2 Land Use Zoning Plan Based on the Approved Tai Po OZP No. S/TP/30

2.4 Surrounding Context

2.4.1 The Site is surrounded mainly by low-rise residential developments and burial ground (**Figure 2.3** refers):

- To the immediate northwest is a grave. To the further north and northeast across Tai Po Road – Tai Po Kau are mainly residential dwellings of CARE Village zoned "Residential (Group D)" ("R(D)"). To the further northwest is a low-rise residential development (i.e. Riverain Bayside) zoned "Residential (Group C)1";

- To the east is a vegetated small hill containing Permitted Burial Ground Site (No. TP/S14) primarily zoned "GB". To the further east is Tai Po Kau Water Fresh Water Pumping Station;

- To the immediate south are low-rise domestic structures of Ha Wong Yi Au Village zoned "GB". To the further southwest across Yung Yi Road is a secondary school, namely Ling Liang Church M H Lau Secondary School, zoned "G/IC"; and

- To the immediate south and west is a low-rise residential development, namely Chateau Royale, zoned "Residential (Group C)" ("R(C)"). To the further west are low-rise village settlements of Ha Wong Yi Au Village zoned "Village Type Development" ("V").

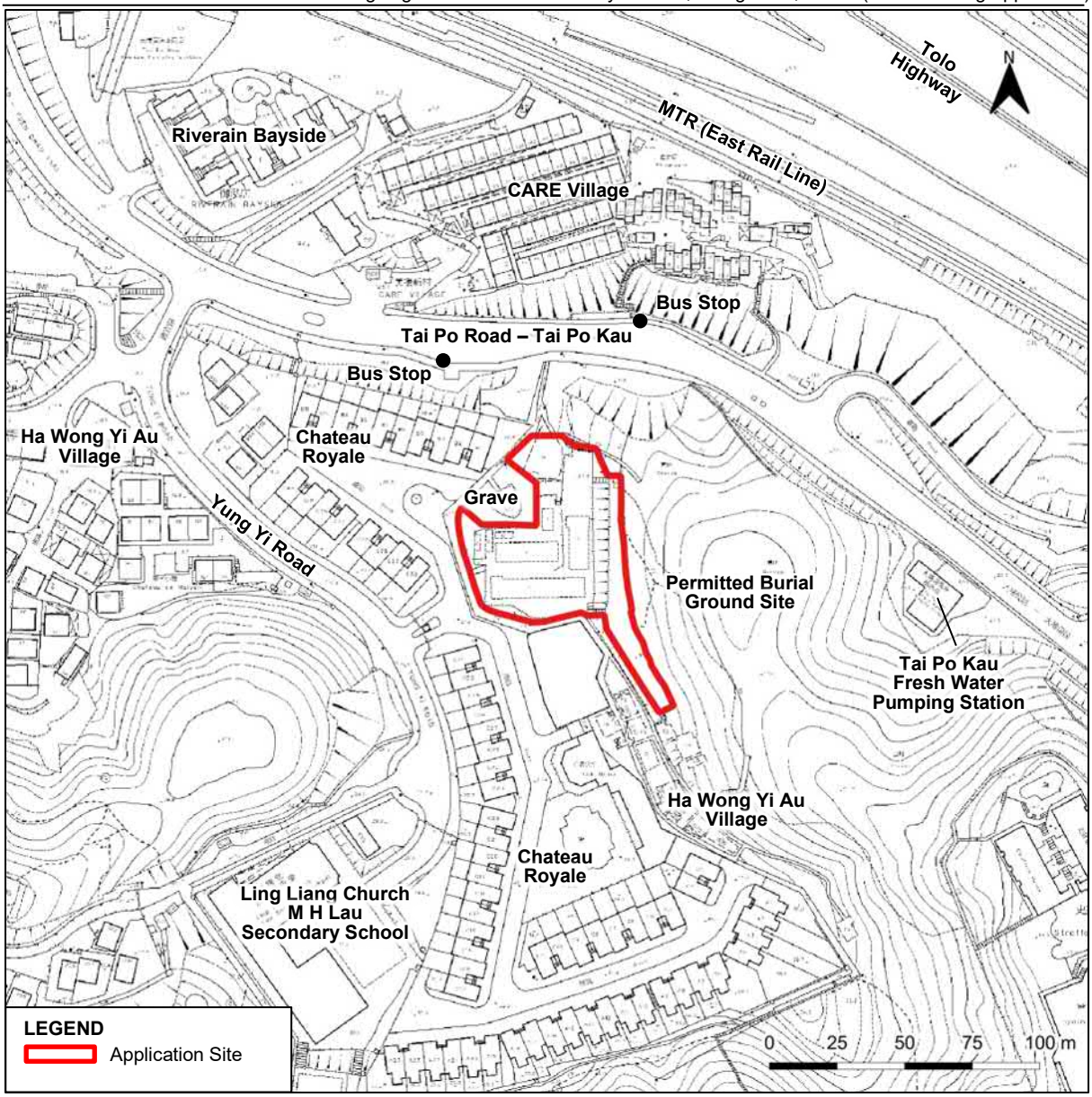


Figure 2.3 Surrounding Context

2.4.2 An access road will be constructed by the Civil Engineering and Development Department (CEDD) from Tai Po Road – Tai Po Kau to the Site. The "Chateau Royale" Bus Stop on Tai Po Road – Tai Po Kau is approximately 50m to the north of the Site. (**Figure 2.4** refers).

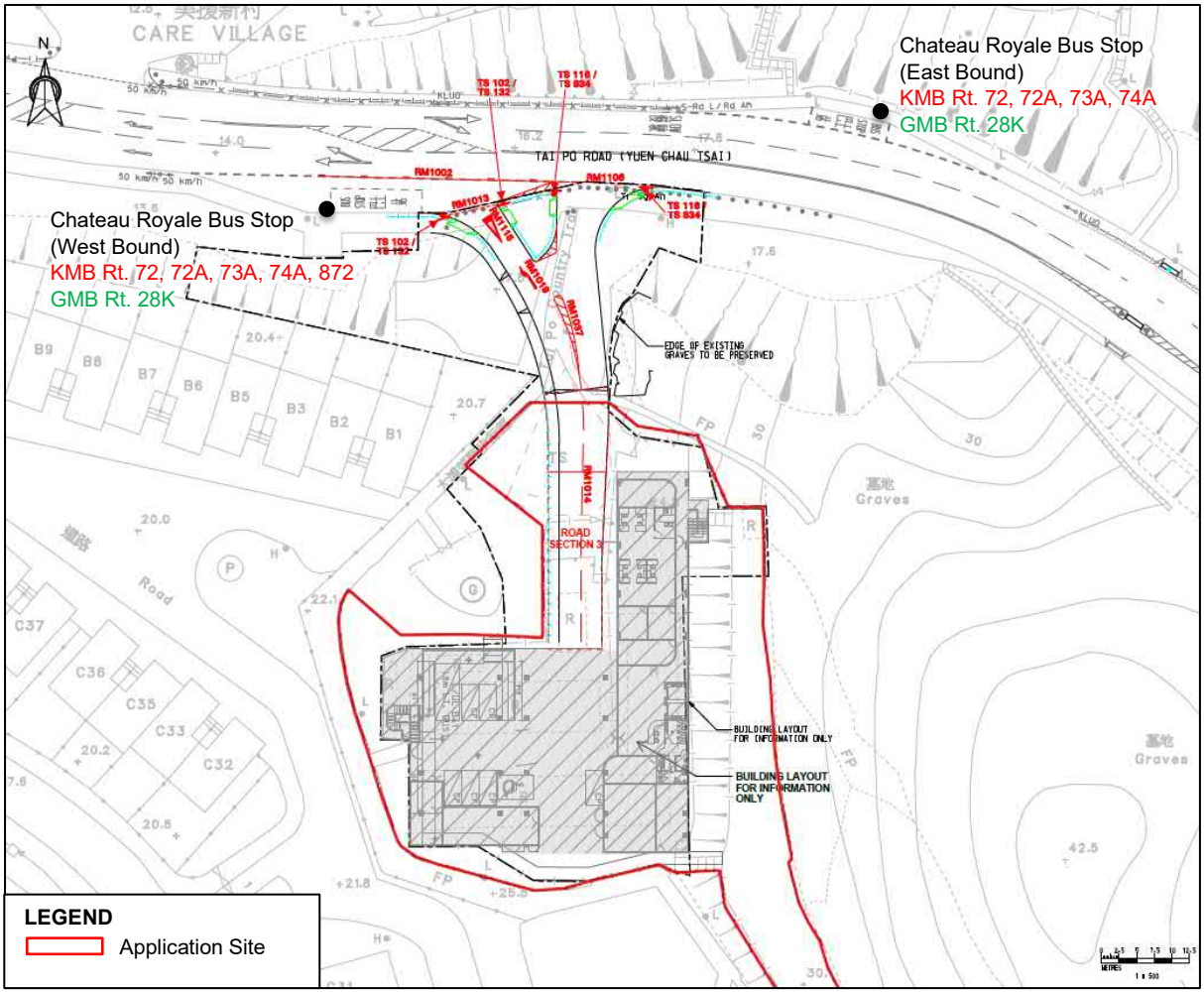
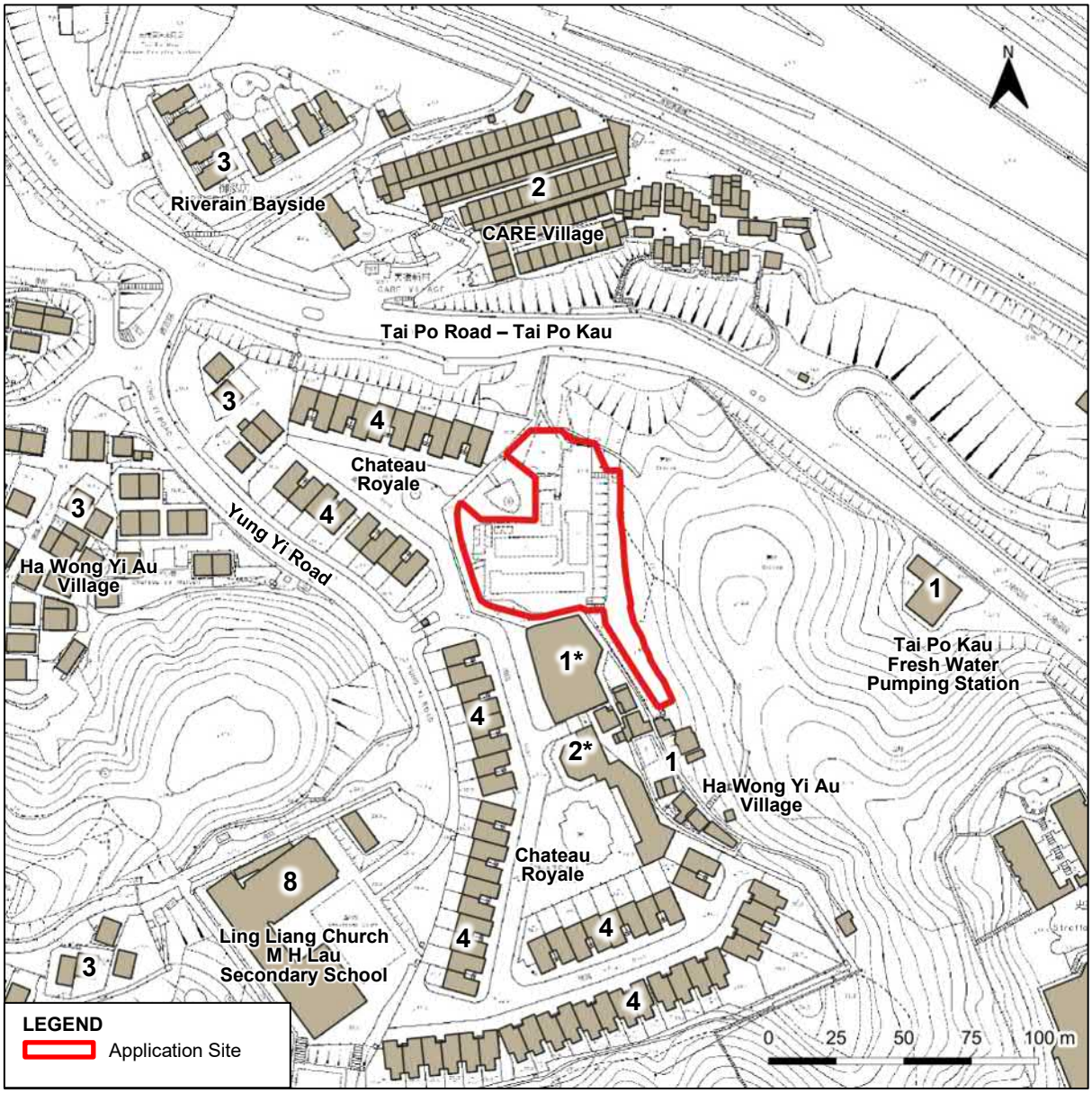


Figure 2.4 Indicative Access Road and Public Transport Nearby

2.5 Surrounding Building Height Profile

The immediate surroundings of the Site have low building height profile of 4 or less than 4 storeys, which are dominated by low-rise residential development, village settlements and temporary structures (**Figure 2.5** refers). About 150m to the south of the Site, an 8-storey secondary school exists. Although the majority of the Site is subject to a BH restriction of 1 storey excluding basement(s) under the prevailing "G/IC" zone, the 1-storey BH restriction is significantly lower than that of the surrounding "G/IC", "R(C)", "R(D)" and "V" zones. Relaxation of BH for development in the prevailing "G/IC" zone is not out of context in terms of building height profile of the surrounding area.



Remark: Buildings with asterisks (*) are clubhouse/ancillary facilities of Chateau Royale

Figure 2.5 Surrounding Building Height Profile (No. of Storeys)

3 RELOCATION OF HOME OF LOVING FAITHFULNESS (HOLF)

3.1 The Story of HOLF

3.1.1 The story of HOLF began in 1960s. Under the calling to be the mothers of the children with special needs in Hong Kong, the founders of HOLF, Ms. Wendy Blackmur and Ms. Valerie Conibear, started operating the care home since 1965. Since then, the HOLF has been providing lifelong residential care for individuals with intellectual and physical disabilities in a loving family home for no charge.

3.1.2 The financing of the operation of HOLF solely relies on donation and gifts from overseas and Hong Kong. At the beginning, the founders rented a bungalow in Fanling taking care of 10 children. After 6 years, HOLF was moved to the current site at 7 Castle Peak Road (Lot 1952 in D.D. 95) in Kwu Tung and continuing its operation till now.

3.2 Current Operation of HOLF in Kwu Tung

3.2.1 According to the information from Social Welfare Department, the current HOLF in Kwu Tung is categorised as a self-financing Residential Care Home for Persons with Disabilities provides (RCHD). A total of 33 high care level non-subsidised places are provided while the maximum number of persons that the residential care home capable of accommodating under the RCHD licence is 95.

3.2.2 The current HOLF in Kwu Tung situated at Lot 1952 in D.D. 95 has a site area of about 4,422m^2, which comprises of five 2-storey building, namely the Existing Building, Block A, Block B, Block C and Block D. The Existing Building is a pre-war building. Blocks A, B and C were constructed in around 1990, while Block D was built in around 2000. The GFA schedule of the blocks is presented in **Table 3.1** below:

Table 3.1 Schedule of Uses in the Current HOLF Site

Building Block	Floor	Use	GFA (m^2)
The Existing Building	1/F	House Mother & Visitors Rooms	224
	G/F	Chapel	75
		Office & Meeting Room	149
Block A	1/F	Laundry Room	77
	G/F	E&M Room & Storage	77
Block B	1/F	Dormitory (Type C)	245
	G/F	Kitchen & Canteen	245
Block C	1/F	Dormitory (Type B)	251
	G/F	Dormitory (Type A)	251
Block D	1/F	Dormitory (Type B)	218
	G/F	Dormitory (Type A)	218
		Total	2,030

3.2.3 For the outdoor facilities, a playground is provided in the middle embraced by the building blocks. There is also a sensory garden outside Blocks B and C. A large parking and open space are located at the west and southwest of the current site (**Figure 3.1** refers).

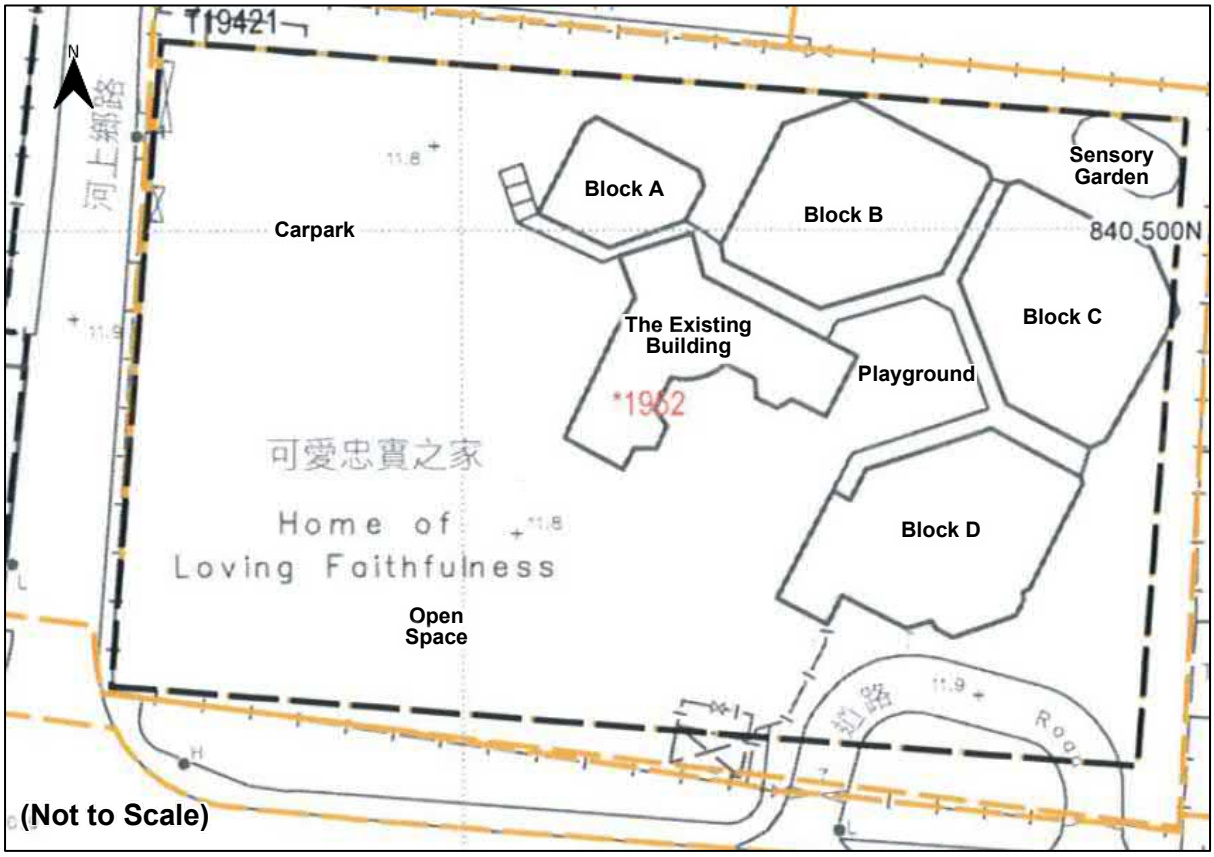


Figure 3.1 Blocking Layout of the Current HOLF in Kwu Tung

3.3 Implementation of Kwu Tung North New Development Area

3.3.1 As announced in the 2007-08 Policy Address, the development of the New Development Areas (NDAs) including Kwu Tung North (KTN) are one of the ten major infrastructure projects for economic growth. The Northeast New Territories NDAs Planning and Engineering Study commissioned in June 2008 formulated a planning and development framework for the implementation of the KTN NDA. Based on the prevailing Approved Kwu Tung North OZP No. S/KTN/4, the Planning Scheme Area of the Kwu Tung North NDA is about 447 hectare and will accommodate additional population of 131,600 and provide 38,700 job opportunities upon full development.

3.3.2 The current HOLF site (Lot 1952 in D.D. 95) is located within the KTN NDA and falls within the Remaining Phase Development of Kwu Tung North and Fanling North NDA. The current HOLF premises together with its land lot will eventually be acquired by the Government in accordance with the Land Resumption Ordinance and Road (Works, Use and Compensation) Ordinance. Please refer to **Figure 3.2** showing the current HOLF site onto the prevailing KTN OZP.

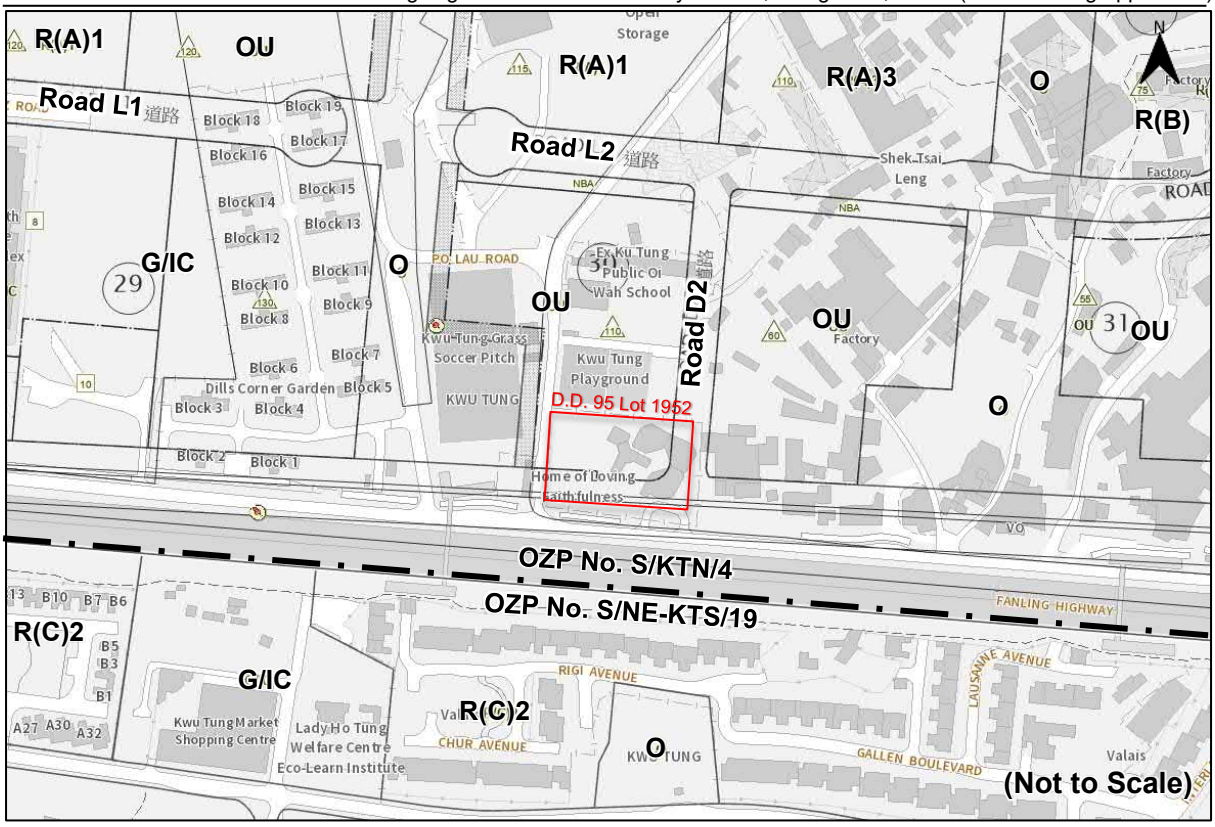


Figure 3.2 Land Use Zoning Plan Base on the Prevailing Approved Kwu Tung North OZP No. S/KTN/4 and Draft Kwu Tung South OZP No. S/NE-KTS/19

3.4 Site Requirements on Relocation

3.4.1 In order to relocate the current HOLF, the new site should fulfil a list of key basic requirements. Firstly, the new site should have similar land area as the current Kwu Tung site to provide adequate floor space area. Secondly, the new site is expected to be in New Territories North or East to maintain the established connection to the schools, social welfare and medical facilities in nearby areas. Thirdly, the new site should be accessible by wheelchair accessible light buses to transport residents with disabilities from HOLF to the abovementioned supporting facilities. Last but not least, a site with less noise impact is preferred to provide a tranquil environment for the residents.

3.4.2 The Applicant has made all-out effort to acquire a suitable relocation site. Taking into account time and financial implication of various options, available Vacant School Premises (VSP) Sites which could satisfy the above requirements are examined piece by piece, in order to continue the operation of HOLF.

3.5 Initial Works of Relocation

3.5.1 After an extensive search for alternate sites and over years of liaison with the Government, the Applicant decided to relocate its premises to the Site in Wong Yi Au, Tai Po. As stated in **Section 2.1**, the Site is occupied by abandoned school buildings. There is no vehicular access to the Site currently and has only two pedestrian

accesses via Tai Po Country Trail. As such, CEDD will be responsible for the design and construction of vehicular access and demolition works of the school building. The latest layout of the access road (subject to the Authorities' final endorsement) is shown in **Figure 2.4**.

3.5.2 Furthermore, since the Applicant is a charitable institution or trust of a public character exempt from tax under section 88 of the Inland Revenue Ordinance (Cap. 112) and the Site is a VSP Site. "Funding Scheme to Support the Use of Vacant Government Sites by Non-government Organisations" will be applied in order to subsidise the necessary expenses incurred from the relocation.

4 THE PROPOSED DEVELOPMENT SCHEME

4.1 Proposed Development Scheme

4.1.1 Schematic drawings and sections for the proposed RCHD are presented at **Appendix 1** of this Supporting Planning Statement. The Proposed Development consists of 3 storeys. Two portions, a 2-storey dormitory in the south and a 1-storey chapel in the north, all atop a 1-storey podium (G/F). The maximum BH of the Proposed Development is about +37.4mPD (at main roof level) (about +43.4mPD at chapel pitched roof top level). The 2-storey dormitory portion will house the dormitories and the staff living quarters. The 1-storey podium will house the major ancillary facilities of the RCHD.

4.1.2 The dormitory portion of the proposed RCHD will be categorised into 4 types of dormitories housing different residents. Type A and C Dormitories on the first floor (1/F) are for residents who require more intensive care, such that a centralised approach is adopted, i.e. more residents are housed in larger rooms. Common area and nurse stations are provided so that caretakers could detect and respond to the needs of the residents promptly. Type B Dormitories on the second floor (2/F) are for more independent residents. Single rooms and necessary ancillary facilities are provided. House mother rooms and guest suites for volunteers are housed in Type D Dormitory on the second floor (2/F). These rooms and suites of similar size also exist in the current Kwu Tung Site.

4.1.3 The Application Site also includes a strip of land above slope (at +30.4mPD) which falls within the "GB" zone, which is proposed as Sensory Garden for the enjoyment and well-being of the future residents.

4.1.4 Major development parameters, proposed floor uses and dormitories parameters are summarized in **Table 4.1**, **Table 4.2** and **Table 4.3** respectively.

Table 4.1 Major Development Parameters

Overall Development	Parameters
Total Site Area	About 3,275m^2
Proposed Non-domestic GFA	About 3,978m^2
Proposed Non-domestic Plot Ratio	About 1.22
Total Site Coverage	About 60%
Building Height Maximum BH at main roof level (at chapel pitched roof top level)	About 13.662m[1] About +37.4mPD (About +43.4mPD)
No. of Storey	3 (including G/F, 1/F and 2/F)
Greenery Provision	Not less than 20% of the site area (>655m^2)

[1] Measured from site formation level at about 23.738mPD.

Overall Development	Parameters
Open Space Provision	Not less than 110m^2
Number of Car Parking Space - Private Car	6 (including 1 parking space for persons with disabilities)
Number of Multi-use Bay - LGV and Light Bus	1
Proposed No. of Bedspace	60

Table 4.2 Schedule of Uses

Floor	Proposed Use
Podium	
G/F	Office, Consultation Room, Physiotherapy Room, Hydrotherapy Pool, Canteen, Kitchen, Laundry, E&M Room, Carpark
Chapel	
1/F	Chapel
Dormitory	
1/F	Dormitory Type A and Type C, Isolation Room
2/F	Dormitory Type B and Type D (House Mother Room & Guest Suite), Isolation Room

Table 4.3 Dormitory Parameters

Dormitory Type	Area (About)	Bedplaces	Description	Ancillary Facilities
Type A (1/F)	575m^2	32	4 Dormitory Rooms (Male:2; Female:2) 8 residents per dormitory room	Common Area Nurse Station Pantry Accessible Bathroom
Type B (2/F)	575m^2	20	20 Single Bedrooms	Day Room Work Station Pantry & Laundry Accessible Bathroom
Type C (1/F)	216m^2	8	2 Dormitory Rooms 4 residents per dormitory room	Common Living Room Nurse Station Pantry & Laundry Accessible Bathroom
Type D (2/F) (House Mother Room & Guest Suite)	216m^2	11	7 Single Bedrooms 2 Double Bedrooms	Meeting Room Pantry Accessible Bathroom

4.2 Design Constraints and Considerations

4.2.1 In view of a range of site constraints, the design of the Proposed Development has taken into account various design considerations in order to create a high-quality loving home in harmony with surrounding environment:

Provision of Road Access and Internal Transport Facilities

4.2.2 Currently, the Site is not served by any vehicular access. Moreover, due to the level difference between Tai Po Road (+16.2mPD) and the site formation level of the Site (+23.738mPD), and short distance between Tai Po Road and the northern boundary of the Site, a road access of gradient 1:9.4 with dedicated footpath has to be constructed at the northern portion of the Site. This occupied a considerable space amongst the limited site area.

4.2.3 Parking and loading/unloading facilities are provided to cater for the transport needs of the residents and staff. There will be 6 nos. of private car parking spaces including 1 no. of accessible parking space as well as 1 no. of loading/unloading (L/UL) bay for light buses. Sufficient manoeuvring space has to be provided upon arrival of the parking platform. In addition, a platform at the back of the L/UL bay is designed to allow persons on wheelchairs to seamlessly be transferred from the vehicle to the care home. More details are provided in the Traffic Impact Assessment in **Appendix 4**.

Geotechnical Constraint

4.2.4 Situated at a hilly topography, a slope (Feature No. 7NW-B/C634) which is currently maintained by Lands Department is found at the eastern portion of the Site. Monitoring of the slope shall be carried out during construction. Stability assessment will be carried out and slope upgrading works will be carried out if found necessary. Space for inspection and maintenance is reserved. More details are provided in the Geotechnical Planning Review Report in **Appendix 7**.

Building Design Consideration

4.2.5 The design would also have to strike a balance between providing adequate floor space to accommodate the necessary functions while keeping outdoor area as much as possible for the enjoyment of the residents.

4.2.6 HOLF believes in the power of prayer. Its mission is to promote a home for the people they care for, giving them the best quality of life in a Christianity family. A chapel is needed as a place of prayer, worship and sharing among the working staff and residents. There is also an existing chapel in the current HOLF site in Kwu Tung. The concept for the design of the pitched roof chapel is to create a space that fosters a sense of peace, tranquillity, and spiritual connection. The design prioritises will be based upon the use of passive techniques such as natural ventilation, daylighting, and thermal mass to minimise the building's environmental impact while creating a

comfortable and inviting interior. The pitch roof allows for the efficient shedding of rainwater and snow, while also providing a sense of verticality and grandeur to the space.

4.2.7 The dormitory portions have also allowed a 5m setback from the site boundary so as to maintain adequate buffer from Chateau Royale (**Figure 4.1** refers). The disposition of the dormitory portions also avoids the overlooking views from Chateau Royale. The residents of high care attention are accommodated on the lower floor (1/F). Apart from provision of lift connecting the carpark and drop-off area at G/F and the dormitories at 1/F, a Barrier Free Access near the Light Bus L/UL Bay at G/F ramping up along the southern and eastern edges of the building up to 1/F deck will be provided.

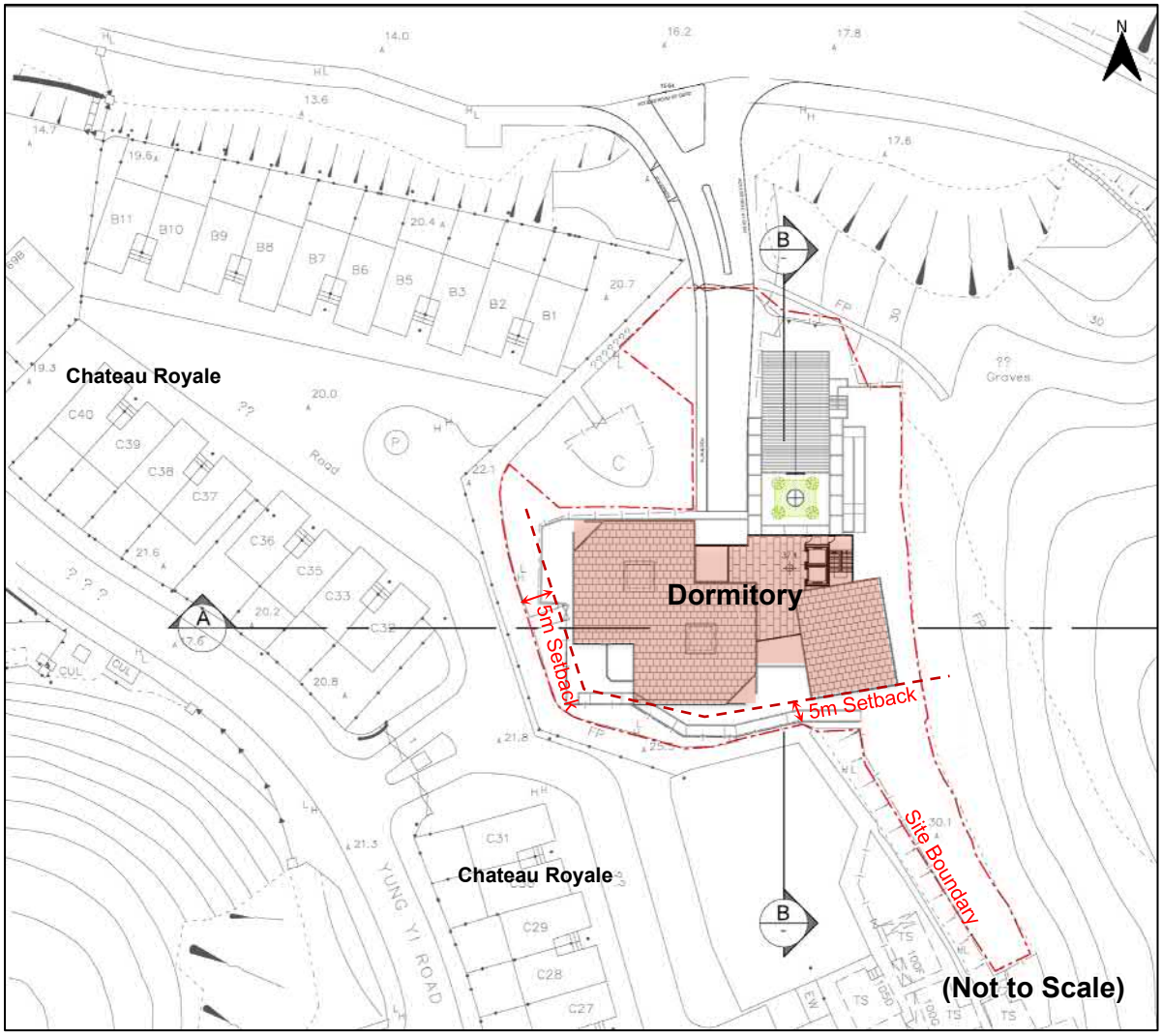


Figure 4.1 Roof Plan Showing Building Setback from the Site Boundary

4.3 Efforts to Minimise Building Height

4.3.1 In formulating the development scheme of the Proposed Development, the Project Team has made every attempt to minimise the number of storeys as far as practicable. Due to the need to provide the required facilities in support of the RCHD catering 60 residents and about 50 staffs, the BH of the Proposed Development would require minor relaxation from 1 storey to 3 storeys.

4.3.2 Apart from the reserved space for access road, traffic facilities and slope of the Site, the Project Team has extended the building profile of the podium to the site boundary. Floor space at G/F are maximised to cater the most supporting and ancillary facilities of the RCHD, so as to reduce the building bulk on top of the podium.

4.3.3 The dormitories are distributed to 1/F and 2/F of the building. Serving as the main living space of the residents, open and covered areas have to be provided around and between dormitories for the well-being of the residents. Cramping all dormitories onto one floor would be undesirable. In addition to reducing the building height, such spatial arrangement has taken into account that the residents with restricted mobility are less accessible to high levels. The design of the chapel is iconic but small in scale and strengthens the Christianity setting of the care home.

4.4 Tree Preservation and Landscape Proposal

Tree Preservation Proposal

4.4.1 As revealed in the Tree Preservation and Landscape Proposal (**Appendix 2**), there are in total 36 nos. of existing trees within the Site, in which 31 nos. will be felled due to the Proposed Development and 5 nos. will be retained. No Old and Valuable Tree (OVT) or protected species has been identified. As stated in the Landscape Proposal, 44 nos. of new trees will be planted.

Open Space Provision

4.4.2 For persons with moderate to severe disabilities who are mainly in wheelchairs or have limited movement, provision of adequate and quality open space/outdoor open space within the care home highly improves their quality of lives. It is expected that there will be about 110 users including 60 residents and 50 staffs while the proposed area of the communal open spaces under the Application shall be not less than 110 m^2. Hence, the provision of the communal open space can meet the requirement set out in HKPSG, i.e. 1 m^2 per person.

4.4.3 Fountain garden and entrance courtyard are provided at G/F while larger outdoor open spaces, including gathering courtyard, organic farm, sensory garden and sitting courtyards, are provided at 1/F. Outdoor furniture, recreational facilities and planting are provided at these gardens for the enjoyment of the residents and visitors as well

as to cater for the recreational need of them. The refined paving and selection of plant combination enrich the colour complexity and visual gradation of the development.

Sensory Garden

4.4.4 A sensory garden is proposed at the linear strip of outdoor area at the southeastern portion of the Site zoned "GB". The sensory garden is aimed to provide with the users the experience of five senses – sight, sound, scent, touch and taste, for the enjoyment, wellbeing and even healing purpose. It is considered particularly important for the healthy life and growth of the future residents.

4.4.5 To stimulate the future users in five senses, the planting species and soft/hard landscape will be carefully considered and design. For example, the garden may include species of different colour (for "sight"), species attracting birds or some moving landscape features producing appealing sound (for "sound"), species of comfortable scent (for "scent"), garden furniture of different texture (for "touch") and even edible landscape (for "taste"). The residents could also engage in planting, painting and creating handicraft within the sensory garden.

4.4.6 No permanent structure will be erected at the sensory garden.

Site Boundary Treatment

4.4.7 The Site abuts the Tai Po Country Trail to its south and west. To avoid a tunnel atmosphere framed by the Proposed Development and the retaining wall of Chateau Royale, edge planting strips in form of ornamental trees, bamboo and shrubs are proposed along the boundary to form a soft-planted edges along the periphery of the Site. This will help to provide smooth transition between the development and the adjacent natural context.

Greenery Provision

4.4.8 Based on the total site area of about 3,275m^2, there will be not less than 20% greenery provision (not less than 655m^2) in the Site.

4.5 Visual Appraisal

4.5.1 This Visual Appraisal aims at evaluating the visual impact of the Proposed Development with minor relaxation of building height restriction from 1 storey to 3 storeys on the public viewers. A total of 2 local public viewpoints ("VP") and 2 distant VPs have been identified as shown in **Figure 4.2**. The photomontages of the Proposed Development can be found at **Appendix 3** of this Supporting Planning Statement.

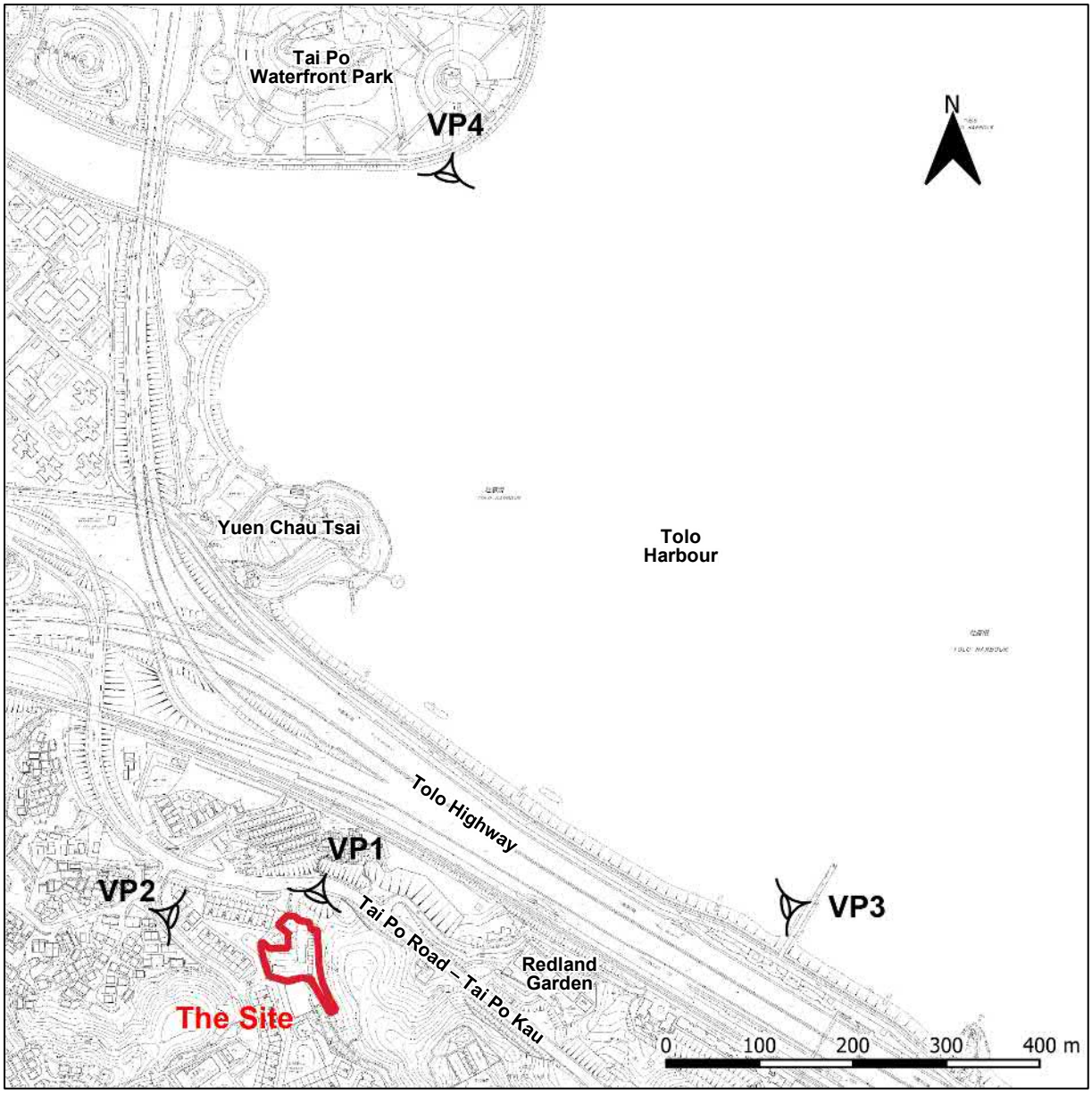


Figure 4.2 Viewpoints Location Plan

VP1: "Chateau Royale" Bus Stop on Tai Po Road – Tai Po Kau

4.5.2 This VP is about 50m to the north of the Site and captures views on the developments along Tai Po Road and the woodland to the east of the Site. As this VP is on the major road serving the area and adjacent to the nearby residential developments, the viewers

of the VP are mainly the residents of Chateau Royale, CARE Village and Riverain Bayside, and travellers on Tai Po Road -Tai Po Kau.

4.5.3 As compared with the current situation, the Proposed Development is generally shielded by the tall trees along Tai Po Road and the vegetated slope next to it. The change in visual quality is negligible even with the increase in building height to 3 storeys. Therefore, the visual impact from VP1 is considered negligible.

VP2: Wong Yi Au Village Pavilion

4.5.4 This VP is located at the entrance of Ha Wong Yi Au Village, about 160m to the west of the Application Site. This VP captures the view of a few 3-storey village houses of Ha Wong Yi Au Village with a backdrop of 4-torey Chateau Royale. The Wong Yi Au Village Pavilion is a gathering space of the villagers and viewers of this VP represent mostly the residents of Ha Wong Yi Au Village.

4.5.5 As seen from the photomontage, the Proposed Development is fully blocked by the buildings in front. The effect on visual experience of the viewers due to the minor relaxation of BH is negligible.

VP3: Tai Po Railway Pier

4.5.6 Tai Po Railway Pier is located at Tolo Harbour adjacent to the Tolo Harbour Garden. This VP is about 550m to the northwest of the Application Site, which captures the view of full picture of Tai Po Kau. Connected to the major cycling track between Sha Tin and Tai Po, it is a popular recreational spot for tourists to take a break and enjoy the panoramic view of Tolo Harbour. The VSRs are mainly visitors of the Tai Po Railway Pier.

4.5.7 Since the VP is far away from the Proposed Development and the visitors would spend more time looking towards Tolo Harbour and the ridges of Pat Sin Leng, it is expected that the viewers are less sensitive to the Proposed Development from VP3. Besides, only the very top part of the building is observed and the main portion is fully immersed into the vegetation background. As such, the visual impact from this VP is considered negligible.

VP4: Tai Po Waterfront Park near Lookout Tower

4.5.8 Tai Po Waterfront Park is the major open space of Tai Po New Town. This VP is about 900m to the north of the Site, which captures the view of Yuen Chau Tsai Peninsula, Tolo Harbour with Tai Po Kau at the back. The Lookout Tower being the landmark of Tai Po is a popular recreational spot for both locals and tourists, and the viewers are mainly visitors of the park for passive and active recreational use.

4.5.9 With reference to the Photomontage, the Proposed Development is well blended with the mountain backdrop and the secondary school nearby. With the far distance away

from the Site, only a glimpse of the Proposed Development could be observed and the visual impact from VP4 is negligible.

Sensitive Design Measures

4.5.10 In summary, due to the small scale and low-rise nature of the Proposed Development, the visual impact due to the Proposed Development is considered negligible. Nevertheless, to minimise the potential visual implication to the nearby residents as well as the hikers or other users walking along Tai Po Country Trail, the following design measures have been adopted:

- Accommodating the chapel (+43.328mPD at chapel pitched roof top level excluding the "cross" feature) in the northeastern portion which is the furthest away from the nearest residential development (i.e. Chateau Royale) and village houses to the south and to the west;

- Providing 5m setback from the site boundary to the dormitory part of the RCHD to maintain adequate buffer from Chateau Royale. The disposition of the dormitory portions also avoids the overlooking views from it;

- Providing periphery planting along the southern and western edges of the building to serve as landscape buffer and soften the building edge as viewed along Tai Po Country Trail; and

- Adopting building materials of lighter appearance or in natural and earth tone to provide a harmony colour tone.

4.6 Implementation Programme

4.6.1 Following the completion of the road access and demolition works by respective government departments at the end of 2024, the construction of the Proposed Development is tentatively scheduled to be commenced at the start of 2025 and for completion by the end of 2026. The relocation of HOLF is tentatively scheduled to be set at early 2027.

5 PLANNING MERITS AND JUSTIFICATIONS

5.1 Suitability of the Site

5.1.1 The Site fulfils all the requirements mentioned in **Section 3.4**. Although the Site in Wong Yi Au (about 3,275m^2) is smaller than the current HOLF site in Kwu Tung (about 4,422m^2), the site area is still comparable and similar floor area could be provided under the scheme for the Proposed Development. The Site is also within New Territories Northeast so that HOLF could maintain the established community network.

5.1.2 Upon completion of the access road, the Site will be accessible by wheelchair access buses. Notwithstanding the improved accessibility, the Site remains a secluded location shielded by slopes and trees. A tranquil home for HOLF residents could be provided.

5.2 In Line with the Planning Intention of "G/IC" and "GB" Zones

5.2.1 The Proposed Development conforms with the prevailing planning intention of the OZP for "G/IC" zone which is for the provision of Government, institution or community facilities serving the needs of the local residents and/or a wider district, region or the territory. The proposal is in line with the prevailing planning intention of "G/IC" zone.

5.2.2 To respect the planning intention of "GB" zone that '*[t]here is a general presumption against development within this zone'*, no building and structures are proposed in the portion of Site zoned "GB". Further, since '*[t]he planning intention of this zone is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets*', the Proposed Sensory Garden which is a passive recreational outlet for HOLF residents is considered in line with the planning intention "GB" zone.

5.3 Sustaining the Operation of HOLF

5.3.1 The Applicant has been operating RCHD for 58 years and continuously providing lifelong residential care for individuals with intellectual and physical disabilities by no charge. The sustain of its operation could continue to provide the residents a loving family home and serving the needs of the society.

5.4 Enhancing Patient Care and Staff Well-being

5.4.1 Seizing the opportunity risen from the relocation, new and modern facilities such as the hydrotherapy pool and ramp for wheelchair users are provided. Dormitory with well-equipped facilities and a separated living quarters for caretakers are also provided. The quality of patient care and staff well-being could be greatly improved.

5.5 Strong Need for Building Height Relaxation due to Site Constraint

5.5.1 In view of the space occupied by access road and slope, the available site area for sitting of the Care Home Building is limited. Floor area has to be stacked up in order to cater the main facilities of the existing HOLF. On the other hand, the current BH restriction of 1 storey imposed on the Site is solely for reflecting the former use of the Site. There is no strong justification for maintaining such stringent BH restriction.

5.6 Scale of Proposed Development is Not Excessive

5.6.1 The Proposed Development is of 3 storeys, which is still low-rise in nature. The total PR of the Proposed Development is a mere 1.22 with a site coverage of about 60% allowing a generous provision of open space. Efforts have been made to minimise the BH of the Proposed Development. As compared with the nearby 8-storey secondary school and the surrounding 4-storey residential development, the Proposed Development is small in scale and not excessive.

5.7 No Adverse Landscape and Negligible Visual Impact to the Surroundings

5.7.1 The landscape proposal is aimed at providing a quality landscape scheme by responding to site conditions, building form and function of the proposed development (Landscape Proposal in **Appendix 3** refers). Out of the total site area 3,275m^2, there will be not less than 20% greenery provision (not less than 655m^2) in the Site. Not less than 110m^2 of open space are provided on the G/F and 1/F of the new building, sufficient to serve the residents and caretakers of the new HOLF.

5.7.2 A total of 36 trees were recorded within the Site. Considering the direct conflict with the Proposed Development, it is proposed to remove 33 existing trees within the Site while 3 existing trees will be retained. 44 heavy standard trees will be planted for compensation. Overall, it is considered that there is no adverse landscape impact due to the proposed development.

5.7.3 The immediate surroundings of the Site have low building height profile of 4 or less than 4 storeys. Within 150m, an 8-storey secondary school could be found. The introduction of a 3-storey building in the Site is fully compatible to surrounding visual context under the planning perspective. The photomontages in **Appendix 3** show the images as viewed from the surroundings.

5.7.4 Overall, the visual impact is considered negligible. The proposed 3-storey new building in the Site will be blended well with the surroundings from various angles. To further enhance the visual quality, more sensitive design measures are incorporated.

5.8 No Adverse Traffic Impact

5.8.1 In the TIA in **Appendix 4**, junction analysis at 5 key junctions have been conducted. It is revealed that the junctions analysed are expected to operate with capacities during

the peak hours for the case without and with the Proposed Development. No adverse traffic impact to the surrounding road network is anticipated.

5.8.2 For the proposed RCHD, 6 car parking spaces and 1 multi-use bay for LGV and light bus are provided based on the provision rate of the Existing RCHD and the operational need. Swept path analysis was conducted to ensure that all vehicles could enter and leave the Site and their respective space / bay with ease. From traffic engineering grounds, the Proposed RCHD is acceptable.

5.9 Technically Feasible with No Insurmountable Impacts

5.9.1 In the EA in **Appendix 5**, air quality impact, road traffic noise impact, railway traffic noise impact and fixed noise impact has been assessed:

- For air quality, no adverse air quality impact due to traffic is anticipated. No major industrial emission source has been identified within 200m from the Site based on the result of the chimney survey.

- For road traffic noise, it has revealed that the noise level at the noise sensitive receivers (NSRs) at the Site complies with the relevant standard and therefore, there will be no anticipated adverse road traffic noise impact.

- For railway noise from East Rail Line, it is found that the noise level at the NSRs complies with relevant standard for the Proposed Development.

- For fixed noise, the predicted noise levels of representative NSRs would comply with the criteria as stipulated in Noise Control Ordinance.

5.9.2 It can be concluded that the Proposed Development would not be subject to adverse fixed noise impact.

5.9.3 The DSIA in **Appendix 6** addressed the drainage impact qualitatively and sewerage impact quantitatively. The Site is currently served by public drainage system. The Proposed Development would result in reduced surface runoff and follow the same flow regime as under existing condition. It would not result in worsened drainage impact. Drainage submission including assessment where required will be provided in detailed design stage.

5.9.4 For sewerage impact, new sewer will be constructed to connect from the Subject Site to manhole no.: FMH1005813 (S1). Based on findings of the sewerage impact assessment results, the new sewer will have adequate capacity to cater for the sewage generation from the Proposed Development and nearby catchment areas. Other existing sewers will have sufficient freeboard under surcharge condition. With the proposed sewerage pipeline in place, this DSIA confirms the feasibility of the proposed development in terms of impacts to the public sewerage system.

5.9.5 Based on the Geotechnical Planning Review Report (GPRR) in **Appendix 7**, it is revealed that the Proposed Development Scheme is considered as a geotechnical feasible scheme. Mini pile or socket H pile with pre-boring is considered to be feasible foundation options. Footing may be an alternative if the soil stratum at shallow level provides adequate bearing capacity. Ground investigation works will be carried out within the Site and the detailed design stage.

6 CONCLUSION AND SUMMARY

6.1.1 This Planning Application is prepared and submitted on behalf of the Applicant to seek approval from TPB on the Proposed Social Welfare Facility (RCHD) at the Site. The majority portion of the Site (about 3,105m^2, 95%) falls within an area zoned "G/IC" on the OZP with maximum building height of 1 storey, while a minor portion of the Site (about 170m^2, 6%) falls within an area zoned "GB" on the OZP.

6.1.2 The Proposed Development consists of 3 storeys. The Proposed RCHD is an always permitted use under the prevailing "G/IC" zone but the proposed building height exceeds the current maximum building height for the "G/IC" zone. Also, the proposed use requires planning permission under the "GB" zone. Therefore, S.16 Planning Application for the proposed use with minor relaxation of building height restriction is required.

6.1.3 The Proposed RCHD with minor relaxation of building height restriction is fully justified with the following reasons:

- The Site is suggested by DEVB and road access and infrastructure for this New Site will be provided by respective government departments which demonstrate the suitability of the Site;
- The Proposed RCHD is subsumed under the land use of "Social Welfare Facility" which is in line with planning intention of the "G/IC" zone;
- The loving care and long serving for children and adult with special needs by the operation of HOLF could thus be continued and sustained;
- The reprovision and modernisation of the care home facilities will enhance patience care and staff well-being;
- There is a strong need for building height relaxation due to site constraint;
- The scale of proposed development is not excessive;
- No adverse landscape impact and negligible visual impact to the surroundings are anticipated;
- No adverse traffic impact is anticipated; and
- The Proposed Development is technically feasible in terms of drainage, sewerage, environmental and geotechnical aspects with no insurmountable impacts;

6.1.4 In light of justifications given throughout the Supporting Planning Statement, we sincerely request the TPB to give favourable consideration to this Planning Application.

Appendix 1

Architectural Drawings of the Proposed Scheme

Master Layout Plan Scale 1 : 600 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD architecture urban design interior

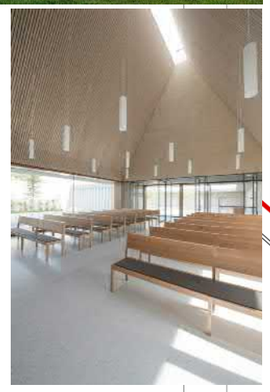
Schematic Design

GROUND FLOOR Plan Scale 1 : 500 (A3)

GROUND FLOOR Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD architecture urban design interior



Healing / Sensory Garden

Sun Deck & Healing Garden

Chapel

Dormitory Type C (8 bed places)

Dormitory Type A (32 bed places)

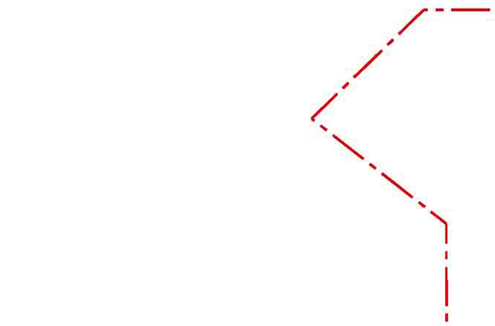
Schematic Design

FIRST FLOOR Plan Scale 1 : 500 (A3)

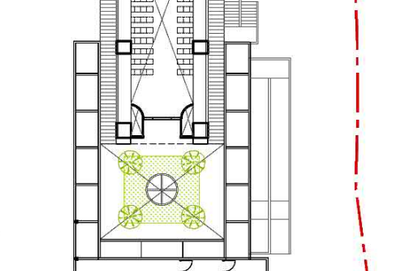
FIRST FLOOR Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD architecture urban design interior



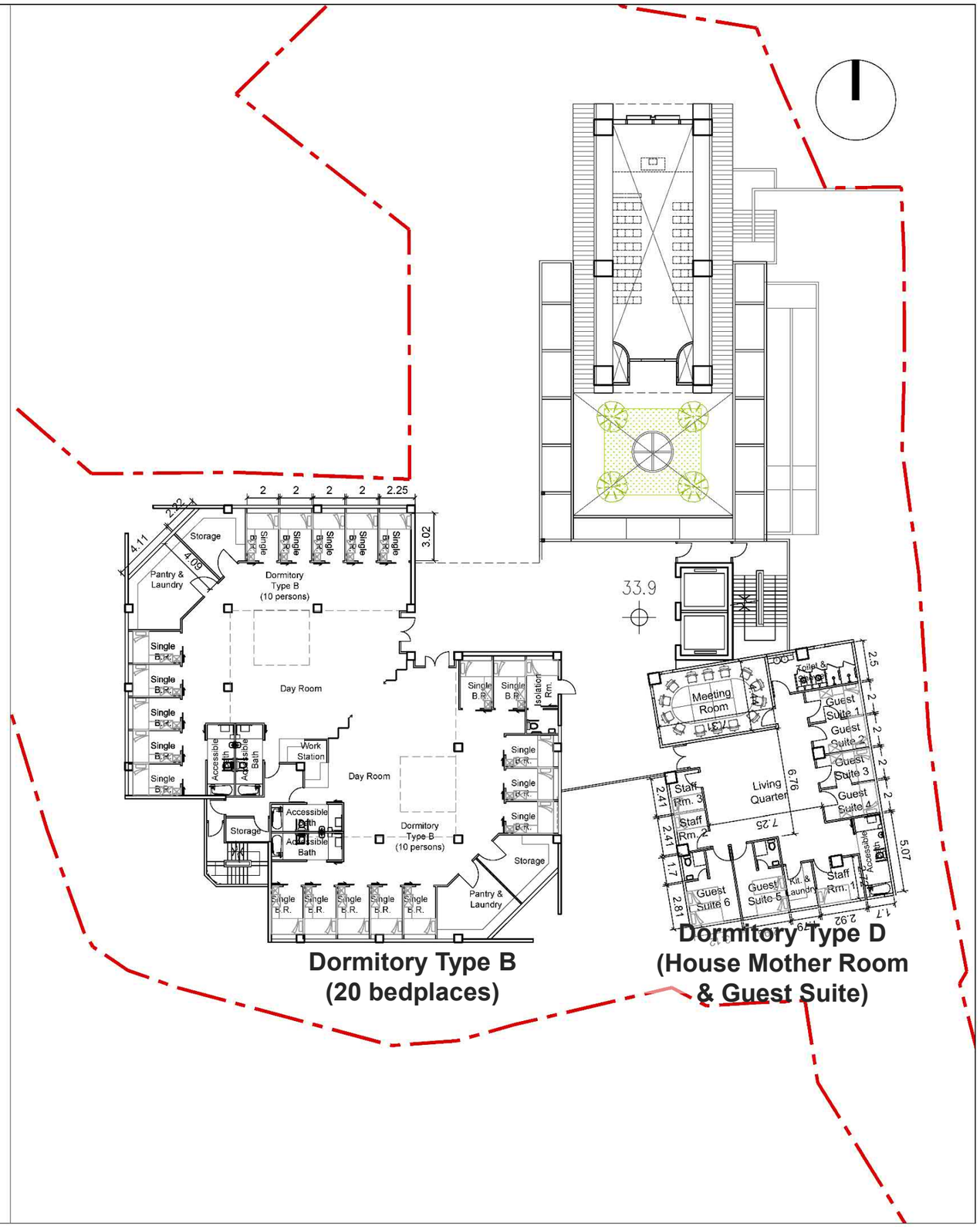
Homey Living Space



Green Picture Frame

Schematic Design

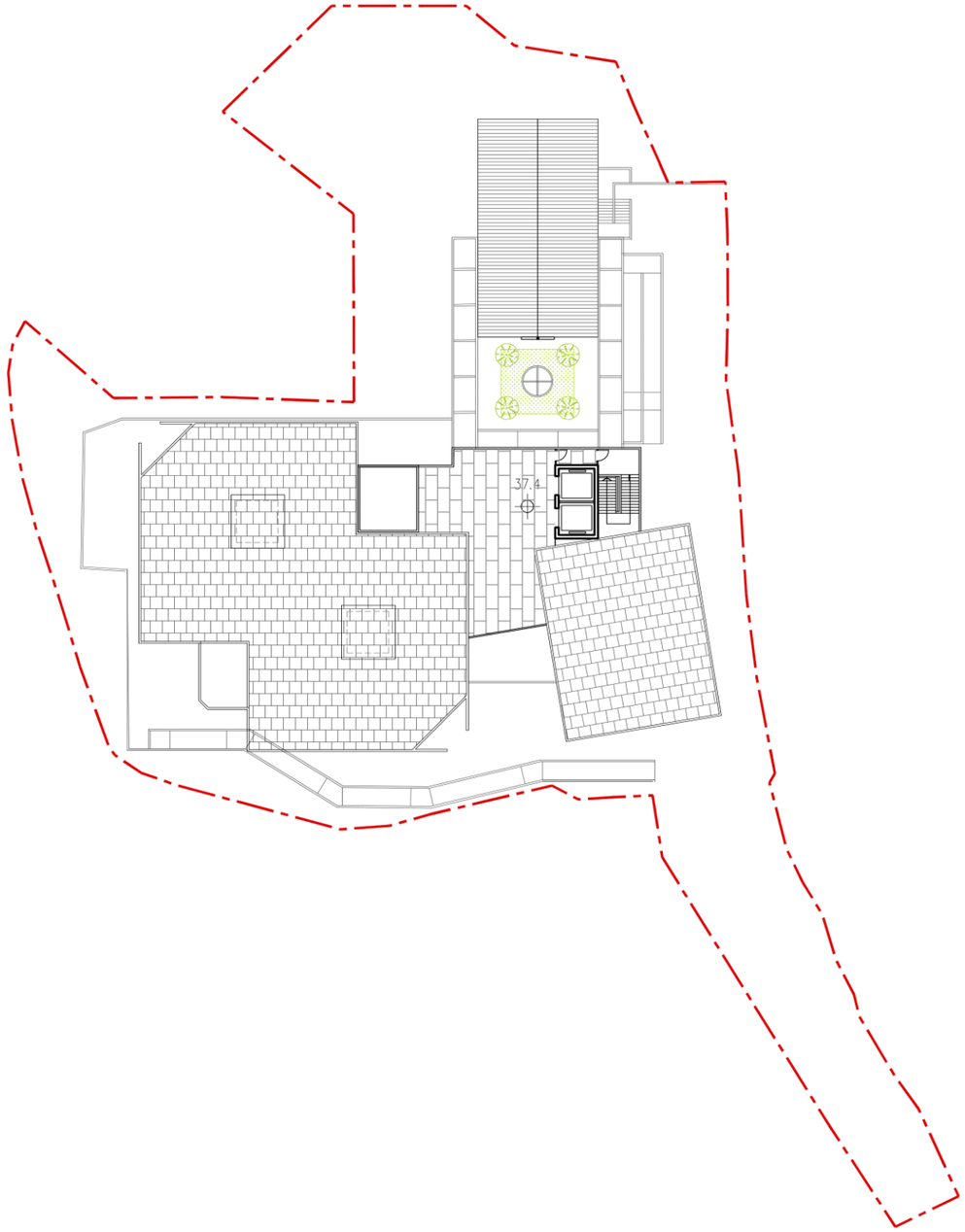
SECOND FLOOR Plan Scale 1 : 500 (A3)



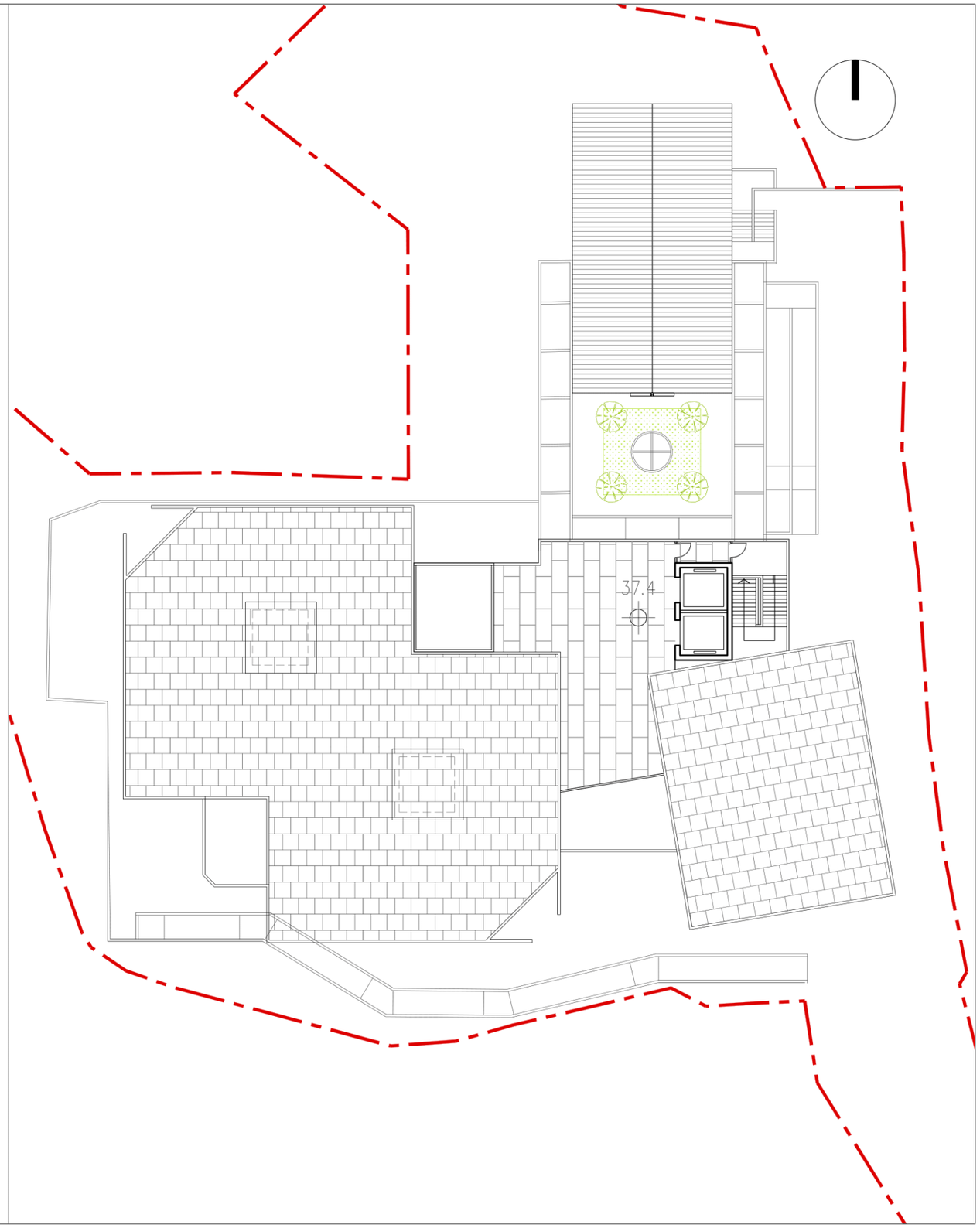
SECOND FLOOR Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD
architecture
urban design
interior



ROOF Plan Scale 1 : 500 (A3)



ROOF Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

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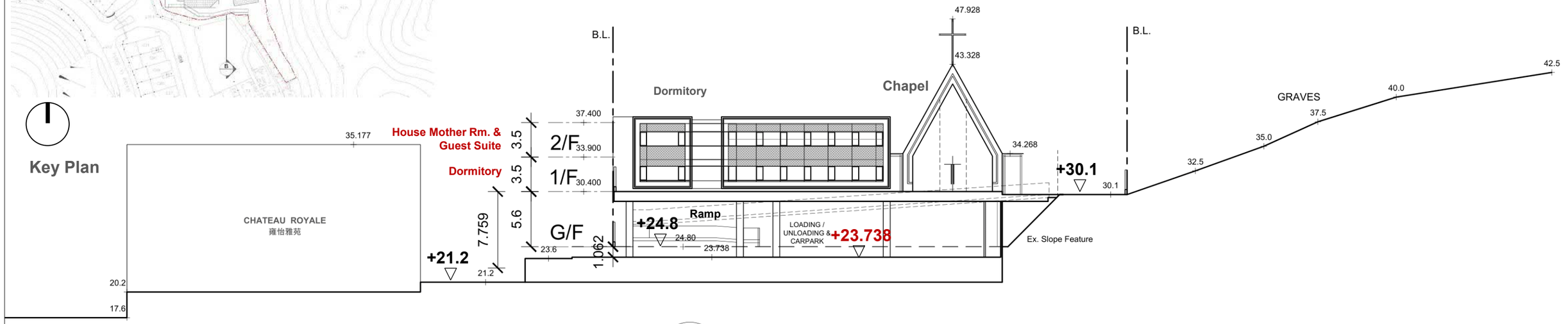
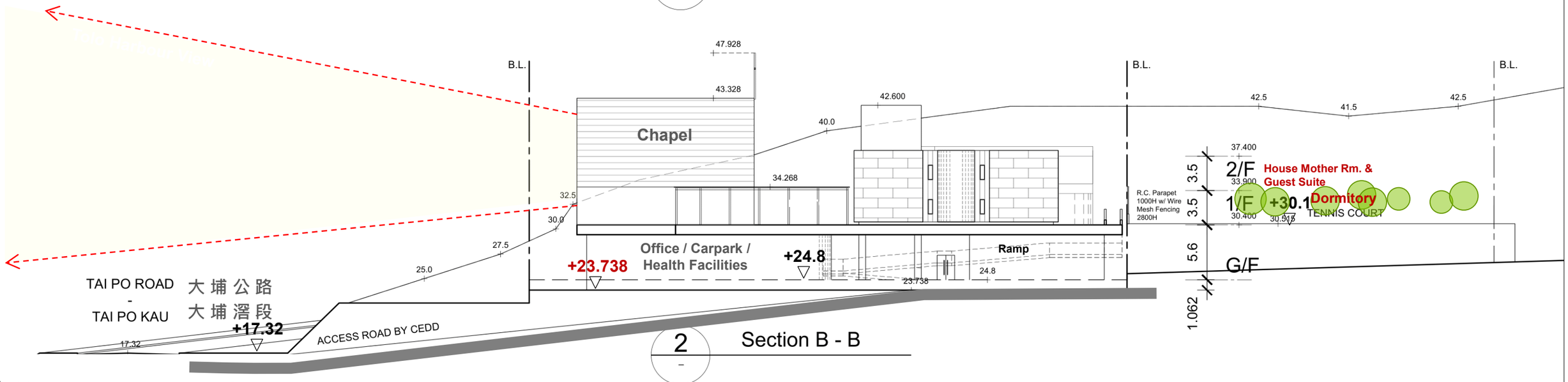
urban design
interior

Key Plan



1 Section A - A



2 Section B - B

Schematic Design

Schematic Sections Scale 1 : 400 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD
architecture
urban design
interior

Appendix 2

Tree Preservation and Landscape Proposal

PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABIITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO

Tree Preservation and Landscape Proposal

1st Submission

by

Landes Limited

Date: 28 February 2024

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2.0 The Site and Its Context

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- 5.1 Landscape Design Concept
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- 5.3 Irrigation
- 5.4 Future Maintenance

6.0 Planting Proposal

7.0 Proposed for Tree Preservation

APPENDICES

Appendix A Tree Survey Plan, Tree Assessment Schedule and Photographic Record of Existing Trees

Appendix B Landscape Master Plan and Landscape Details

Appendix C Planting Plans

Appendix D Maintenance Schedule of Soft Landscape Works

Appendix E Site Coverage of Greenery

Appendix F Communal Open Space Provision

1.0 Introduction

1.1 The proposed Social Welfare Facility – Residential Care Home for Persons with Disabilities (The Proposed Development) is located at "Former Fish Market Organization Tai Po Primary School", Wong Yi Au, Tai Po, New Territories. This report is prepared in support of the Proposed Development under this S16 planning application.

1.2 This report describes the concepts and principles underlying the Landscape Master Plan of the Proposed Development. It describes the proposed Residential Care Home for Persons with Disabilities and the associated landscape design as well as tree preservation strategies. A more comprehensive package of proposals will be formulated during the detailed design stage of the project.

1.3 This landscape proposal presents:
- The existing tree vegetation;
- The Landscape Master Plan;
- Planting Proposal of the Proposed Development; and
- Tree Preservation Proposal.

2.0 The Site and Its Context

2.1 The Site is situated at the "Former Fish Market Organization Tai Po Primary School", Wong Yi Au, Tai Po, New Territories. To the west of the Site is Tai Po Market while Yuen Chau Tsai is located to its north. There is no direct vehicular access connecting the Proposed Development. A new vehicular access will be formed by CEDD to connect Tai Po Road – Tai Po Kau at North and the Site.

2.2 The Site was occupied by former Fish Market Organization (FMO) Tai Po Primary School. It is a sloping area with the lowest point at **+19.95mPD** at north and the highest point at **+30.43mPD** at south. Trees are scattered within the Site. They are generally in semi-mature size but few nos. of mature species were identified. Most of them exhibited fair tree form and health conditions. In accordance with the DEVB TCW No. 5/2020 – Registration and Preservation of Old and Valuable Trees (OVT) and the Forests and Countryside Ordinance, no OVT or protected species has been identified within the Site.

2.3 The landscape character of the Site and its surrounding is mixed and comprised of villages, i.e. Ha Wong Yi Au, Tai Po Kau San Wai, low-rise residential development, i.e. The Paragon, Grand Palisades and natural hillsides, i.e. Tai Po Kau Nature Reserve.

3.0 The Proposed Development

3.1 The development proposal comprises of one 3-storey block for chapel, dormitory, office, carpark, ancillary facilities, living quarter, open spaces and greenery. Drawings of the Proposed Development could be referred to Architect's drawings submitted under the same application.

3.2 There is no direct vehicular access to the Site. A new vehicular access and footpath will be constructed by CEDD for connection to Tai Po Road. Besides, as the ground surface within the Site needs to be recontoured and some of the vegetation would be affected by the site formation work. The detailed tree assessment shall refer to the **Para 4.0** below. The architectural layout has overlaid on the Tree Survey Plan to illustrate the impact of the Proposed Development on existing vegetation. The tree survey plan, tree assessment schedule and photographic record of the trees are included in **Appendix A** for reference.

4.0 Existing Vegetation

4.1 A tree survey was carried out on **4 November 2023** in accordance with LAO PN No. 6/2023. A total of **36** trees were recorded within the Application Site Boundary. The tree survey schedule, tree survey plan and photographic record of existing trees are shown in **Appendix A** and are outlined below:

Table 1.0 Species Composition of Existing Trees

Scientific Name	Chinese Name	Quantity	Tree No.
Acacia confusa	台灣相思	1	T035
Alangium chinense	八角楓	3	T032, T036, T049
Artocarpus heterophyllus	菠蘿蜜	1	T026
Bridelia tomentosa	土蜜樹	1	T042
Celtis sinensis	朴樹	3	T020, T027, T045
Dead tree	死樹	1	T041
Ficus hispida	對葉榕	10	T025, T031, T033, T034, T040, T043, T046, T055, T088, T090
Ficus microcarpa	細葉榕	8	T022, T023, T024, T044, T050, T052, T053, T054
Ficus variegata	青果榕	3	T037, T047, T089
Litsea monopetala	假柿樹	1	T049A
Macaranga tanarius var. tomentosa	血桐	1	T051
Michelia x alba	白蘭	1	T030
Schefflera heptaphylla	鴨腳木	1	T048
	Total:	**36**	

4.2 The Site is dominated by *Ficus hispida* 對葉榕 (**10** nos.) and *Ficus microcarpa* 細葉榕 (**8** nos.) which are common species in Hong Kong. Other common hillside species like *Alangium chinense* 八角楓 (**3** nos.), *Ficus variegata* 青果榕(**3** nos.) are also identified. They are probably propagated from the surrounding natural hillsides.

4.3 The health condition of these trees is generally in Fair condition (**91.67%**) and the remaining trees are in Poor condition (**8.33%**).

4.4 No OVT or protected species has been identified in accordance with the DEVB TCW No. 5/2020 – Registration and Preservation of Old and Valuable Trees and the Forests and Countryside Ordinance respectively.

Impact of the Proposed Development

4.5 Impact of the Proposed Development is generally caused by the site formation works, construction of the building, removal of existing vegetation for the build element and the related construction activities, excavation works for E&M reserves and structural footings. The proposed building layout has been overlaid on **Tree Survey Plan** in **Appendix A** to illustrate the impact on the existing trees.

Retention of Trees

4.6 In this proposal, **5** existing trees, i.e. **T020** – *Cletis sinensis*, **T021** – *Ligustrum sinense* and **T022**, **T023**, **T024** – *Ficus mircocarpa* within Application Site will be unaffected by the Proposed Development. Careful construction arrangement and tree protection measures in accordance with Section 25 - Landscape Work in the General Specification for Building (2012) and "Guidelines on Tree Preservation during Development" by DEVB will be conducted to avoid any disturbance on the trees during construction.

4.7 Some retained trees, i.e. **T020**, **T023** and **T024** are growing in close proximity to the proposed building and pruning works are proposed to be carried out on them. All pruning works will be carried out in accordance with the fact sheet and leaflet of "Do's & Don'ts in Pruning" and "General Guidelines on Tree Pruning" such that the part of the branch pruned at all times shall not have a diameter of greater than 100mm or 15% of the diameter of the DBH, whichever is greater. Besides, the pruning shall not adversely affect the structure and form of the trees. All pruning works will be carried out by competent workers under the supervision of a Competent Person as defined in LAO PN No. 6/2023.

Felling and Transplantation of Trees

4.8 For trees that will be in conflict with the proposed works shall be proposed to be transplanted if they fulfil all the criteria below:

a. Trees have high amenity value;
b. Trees with good form and health;
c. Suitable access;
d. Tree species able to be transplanted easily;
e. Trees have suitable size and;
f. Trees are young to semi-mature.

4.9 In this project, **33** existing trees within the Site Boundary are in direct conflict with the proposed works and cannot be retained in situ. None of the disturbed trees fulfil the above criteria and is recommended for transplantation.

4.10 **19** affected trees including **T035** – *Acacia confusa*, **T032, T036, T049** – *Alangium chinense,* **T025, T031, T033, T034, T040, T043, T046, T055, T088, T090** – *Ficus hispida***, T037, T047, T089** – *Ficus variegata,* **T049A** – *Litsea monopetala,* **T051** – *Macaranga tanarius var. tomentosa* are common hillside species in Hong Kong. As they are propagated from the adjacent hillside, their root systems are very susceptible to environmental change. This renders them a relatively low survival rate after transplantation. Hence, all of these trees are also proposed to be felled.

4.10 **1** fruit tree, i.e. **T026** – *Artocarpus heterophyllus* is in conflict with the proposed works. Due to the nature of fruit tree species, its anticipated survival rate after transplantation is generally low. Therefore, it is proposed to be felled, instead of transplanted.

4.11 Another **10** disturbed trees, i.e. **T042** – *Bridelia tomentosa*, **T027, T045** – *Celtis sinensis*, **T044, T050, T052, T053, T054** – *Ficus microcarpa*, **T030** – *Michelia x alba* and **T048** – *Schefflera heptaphylla* exhibited either poor tree form or health conditions. The transplantation of them would require substantial deformation of the trees and this would lead to irrecoverable tree form after transplantation. It is proposed to fell them and compensated by quality trees.

4.12 Apart from the above, **1** dead tree, i.e. **T041** is found within the Application Site. Its presence may pose potential danger to the occupants in future. It will be removed, for sake of public safety.

4.13 A summary of the tree proposals for the Proposed Development is provided in Table 2.0 below.

Table 2.0 Summary of Proposed Treatment for Existing Trees

Proposed Treatment to Existing Trees	Number of Trees
Number of Trees to be Retained	5
Number of Trees to be Felled	31
Number of Trees to be Transplanted	0
Number of Trees in Survey	**36**

5.0 Landscape Proposals (Refer to Appendix B)

5.0.1 The aim of the landscape proposals is to respond to site conditions, building form and function of the Proposed Development and to provide a quality landscape scheme. The main factors to be taken into consideration are:

- Response to the site context, both in terms of landscape character and visual amenity;
- Response to the proposed building and its architectural style;
- Creation of a green setting by maximising the opportunity for soft landscape;
- Establishment of pleasant landscape areas which meets the varying needs of occupants and satisfy the recreational requirements of them; and
- Minimization of future maintenance requirements.

5.0.2 Landscape drawings showing the proposed landscape treatment for the Proposed Development, and their underlying principles have been attached in **Appendix B** for ease of reference.

- Hong Kong Planning Standards and Guidelines;
- Technical Guidelines on Landscape Treatment for Slopes (GEO Publication No. 1/2011);
- Design Manual: Barrier Free Access 2008 (Buildings Department);
- LAO Practice Note No. 6/2023 – Processing of Tree Preservation and Removal Proposals for Building Development in Private Projects – Compliance with Tree Preservation Clause under Lease; and
- BD PNAP APP-152 – Sustainable Building Design Guidelines (2019 version).

5.1 Landscape Design Concept

5.1.1 The landscape concept mentioned below describe considerations, which had been considered as being general to the whole landscape design.

Screening Plantation on the Periphery of the Proposed Development

5.1.2 The Site is sloping area with the lowest point at **+19.95mPD** at north and the highest point at **+30.43mPD** at south, but has to accommodate with dormitory, ancillary facilities, office, living quarter, chapel, EVA and common landscape areas. The disposition of the proposed building and EVA has taken into account the design requirement like building separation, lighting penetration, air path and fire services. Edge planting strips in form of ornamental trees, bamboo and shrubs are proposed along the boundary to form a soft-planted edges along the periphery of the Site. Please refer to the Landscape Master Plans and Landscape Sections in **Appendix B** for reference. This will help to provide smooth transition between the development and the adjacent natural context. Planting verges will accommodate adequate growing medium for proposed planting which are primary evergreen in nature.

Maximization of Greenery within Site

5.1.3 Car parking and building services are mainly located at ground floor while outdoor open spaces are proposed on flat roofs and landscape deck at 1/F. Planting verges with ornamental plants are proposed at the functional open spaces at 1/F to provide shade and visual amenity to the users and visitors. Heavy standard trees and medium shrubs are proposed to provide the instant greening effect to the Proposed Development.

Landscaped Garden at G/F and 1/F

5.1.4 Several landscaped open spaces, including fountain garden, entrance courtyard, gathering courtyard, organic farm, sensory garden and sitting courtyards… are proposed at vacant spaces at G/F and 1/F. Outdoor furniture, recreational facilities and planting are provided at these gardens for the enjoyment of the users and visitors as well as to cater for the recreational need of them. The refined paving and selection of plant combination enrich the colour complexity and visual gradation of the development.

5.1.5 A sensory garden is proposed on the landscape deck at southeastern corner of the Site in order to promote the emotional and physical health of the users. The design of the garden has considered the enjoyment of the users in five senses including visual, hearing, touching, smelling and taste. For instance, the selection of plants has introduced the seasonal color changes in planting beds which create interesting focal points in garden. Besides, plants that appeal to birds and butterflies are proposed with respect to the adjacent natural context. This garden will be a cozy and relaxing place for users to reflect, mediate, contemplate and talk.

Planting Design

5.1.6 Due to the building configuration, bamboo planting is proposed at planting strips along building edges shall be used to create a landscape and visual buffer to the new building. This will also provide segregation between the building and public environment. Species should be selected which are pollution and drought tolerant and which provide a good visual buffer.

5.1.7 Where practicable and feasible, heavy standard trees, medium shrubs and foliage plants are proposed. These soft landscape measures will enable to soften the hard lines of the Proposed Development. The use of planting heavy standard sized vegetation would offer a more instant greening effect. Planting Plans shall refer to **Appendix C**.

5.1.8 In order to enhance the local biodiversity, local species or broad-leaf species will be selected for tree planting.

5.2 Site Coverage of Greenery

5.2.1 The landscape proposal aims to strengthen the local greenery within the Site. The common greenery calculation is based on BD PNAP-APP 152 – Sustainable Building Design Guidelines the present scheme is shown in the schedule below, and drawing showing the greenery calculation shall refer to dwg. No. GC01 in **Appendix E**.

Table 3.0 Greenery Calculation

Site Area:	3,275.0 m^2
Required Total Greenery	3,275.0 m^2 x 20% = 655.0 m^2
Required Greenery at Primary Zone	3,275.0 m^2 x 10% = 3327.5 m^2
Allowable Greenery Features:	655.0 m^2 x 30% = 196.5 m^2
Provided Greenery:	
Uncovered Planting Area at G/F:	297.0 m^2
Uncovered Planting Area at 1/F:	493.70 m^2
Greenery at Primary Zone:	(297.0+493.70) m^2 = 772.70 m^2 (>325.60 m^2)
Greenery at Other Areas	0 m^2
Total Greenery:	772.70 m^2 (>655.0 m^2)
Greenery Ratio	772.7/3,275.0 x 100% **= 23.59%**

5.2.2 Total Greenery Area is approx. **772.7 m²** (i.e. more than the required 20% greenery requirement, **655.0 m²**), as set out in PNAP APP-152 – Sustainable Building Design Guidelines. Besides, the proposed greenery areas are easily accessible by the public is referred to "Greenery at Primary Zone", i.e. **772.7 m²** (i.e. more than the required **327.5 m²**).

5.3 Recreational Facilities

5.3.1 Recreational facilities like Fountain Garden, Entrance Courtyard at G/F, Gathering Courtyard, Organic Farm, Sensory Garden and Sitting Courtyards at 1/F, in order to cater for the recreational need of the occupants and visitors.

5.3.2 It is expected that there will be about **110** users including **60** residents and **50** staffs while the proposed area of the communal open spaces under application shall not be less than **110** m^2. Hence, the provision of the communal open space can meet the requirement set out in HKPSG, i.e. 1 m^2 per person. Please refer to the Communal Open Space Calculation in **Appendix F**.

5.4 Soil Depth and Drainage for Planting

5.4.1 The requirement of soil depth is directly related to the planting design and its associated loading requirement upon structure. In general, the soil depth provided, with all drainage layers, water-proofing and protective screeding exclusive is listed below:

Table 4.0 Planting Medium (Soil Depth)

Planting Type	**Soil Depth (Minimum)**
Tree/ Palm tree	1200mm
Shrub/ Climbers	600mm
Groundcover/ Turf	300mm

5.4.2 All Planting areas on slab shall be provided with sub-soil drainage system.

5.5 Irrigation

5.5.1 The proposed irrigation system will be by tap water pipe for manual operation. Lockable water points will be provided at 40m centres covering the entire site. The proposed source of water supply is subject to final approval from the Water Services Department.

5.6 Future Maintenance

Hard Landscape Elements

5.6.1 Maintenance for hard landscape elements shall be carried out by the future management office of the Proposed Development with maintenance intention as follows:

I – Routine Maintenance (Daily – Weekly)
a. Rubbish and litter removal
b. Sweeping and cleaning
c. Damage inspection and repair for site furniture and light bulb replacement

II – Annual/ Long Term Maintenance
a. Repainting
b. Resurfacing of worn pavements
c. Replacing worn parts site furniture, lighting fixture and other facilities
d. Replacement of worn landscape furniture.

Soft Landscape Element

5.6.2 The softworks contractor will be responsible for maintenance of the planting during the establishment period allowed for in the construction contract, usually for the first year after the beginning of the schemes operational phase. This will ensure that the soft landscape measures are in a healthy condition prior to the finished scheme being handed back to the lot owner.

5.6.3 Ultimately the future management office will employ skilled maintenance staff to take care of all landscape areas within the Site.

5.6.4 The maintenance schedule for soft landscape works has been included in **Appendix D**. It is important to mention that tree risk assessment will be conducted at appropriate time to facilitate proper tree management and maintenance.

6.0 PLANTING PROPOSALS (Refer to Appendix C)

6.1 In order to provide quality landscape for the Proposed Development, soft landscape works will be the major landscape element of the landscaping proposal and satisfy the following criteria:

- To compensate the loss of affected trees;
- To screen the proposed building and reduce the visual impact to the nearby residents/ visitors;
- To minimize future maintenance; and
- To be compatible with the hillside environment.

6.2 The proposed planting species list is shown as follows and details shall refer to the Planting Plans in **Appendix C.**

Table 6.0 Proposed Planting Schedule

Botanical Name	Chinese Name	Size (mm)	Spacing (mm)
TREES		**Height x Spread x DBH (mm)**	
Garcinia Subelliptica	菲島福木	6000x1500x80	4000
*Michelia chapensis**	樂昌含笑	4000x2000x80	4000
*Sapium dicolor**	山烏桕	5500x2000x80	4000
*Sterculia lanceolata**	假蘋婆	4500x2000x80	4000
Terminalia mantaly	細葉欖仁	6500x2000x80	4000
*Native Species			
SHRUBS		**Height x Spread (mm)**	
Carmona microphylla	福建茶	450x400	400
Codiaeum variegatum	黃洒金	350x300	300
Codiaeum variegatum 'mixed'	洒金榕	600x500	450
Iris tectorum	鳶尾	500x350	200
Juniperus chinensis	龍柏	1200x600	As shown
Madagascar jasmine stephanotis floribumda	非洲茉莉	500x500	400
Murraya paniculata	九里香	600x500	450
Rhapis excelsa	小葉棕竹	1200x600	600
Ruellia coerulea	翠蘆莉	400x400	350
Schefflera arboricola "Trinette"	黃金鵝掌藤	500x500	450
GROUNDCOVERS		**Height x Spread (mm)**	
Lantana montevidensis	小葉馬纓丹	300x300	250
Nephrolepis auriculata	腎蕨	250x150	150
Ophiopogon bodinieri	沿階草	250x250	200
Phyllanthus myrtifolius	錫蘭葉下珠	200x300	300

BAMBOO		**Height x Spread (mm)**	
Phyllostachys aurea	羅漢竹	2500x500	500
GRASS			
Zoysia japonica	朝鮮草	-	-

6.3 In this study area, a total of **36** trees within the Application Site Boundary were recorded. **5** trees will be retained in-situ while the **31** trees inside the Site will be felled due to in conflict with the Proposed Development and the associated works.

6.4 **33** heavy standard trees with average DBH approx. **80**mm are proposed to be planted to compensate the loss of the **31** existing trees. They will be planted at the common landscape areas, peripherical planting strips and roadside planting verge within the site boundary. All these new trees within the lot boundary will all be maintained by the future management office and the individual Lot owners of the Proposed Development.

6.5 Upon the above, the compensation ratio in terms of quantity is shown as follows:

Quantity of loss of trees: 31 nos.
Quantity of compensatory trees: 44 nos.
Quantity compensation ratio: 1: 1.42

7.0 PROPOSAL FOR TREE PRESERVATION

7.1 In this project, **5** existing trees within the Application Site Boundary is proposed to be retained. The following measures should be undertaken:

7.2 In order to determine the impact to the existing vegetation by the proposed development, a full Tree Felling Application in accordance with and LAO Practice Note No. 6/2023 "Processing of Tree Preservation and Removal Proposals for Building Development in Private Projects – Compliance with Tree Preservation Clause under Lease" should be undertaken and submitted to the relevant Government departments for approval.

7.3 Retention of all trees where possible. It is proposed that unaffected trees are to be retained on site due to their amenity and conservation value. The contractor will need to be made aware of the need to minimize the encroachment of the construction works on the trees, so as to minimize the impact on them. The area under the drip line of the tree canopy will be fenced by 1.2m high temporary protective fencing during construction stage. Besides, all provisions for tree preservation and protection measures of retained trees should follow the details in Section 25 – Landscape Work in the General Specification for Building (2017).

7.4 Appropriate protection to these trees, e.g. wrapping of the tree stems with protective cover will be adopted during the construction process. As a precautionary measure and only if necessary, pruning of branches of existing trees identified for retention will be on an absolute need basis and strictly adhere to the principle of crown thinning in maintaining their form and amenity value. The tree preservation works will be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect. The site situation will be carefully monitored, including the key stages in the preparation of the trees, the implementation of protection measures and health monitoring throughout the construction period. A tree protection specification would be included within the contract document.

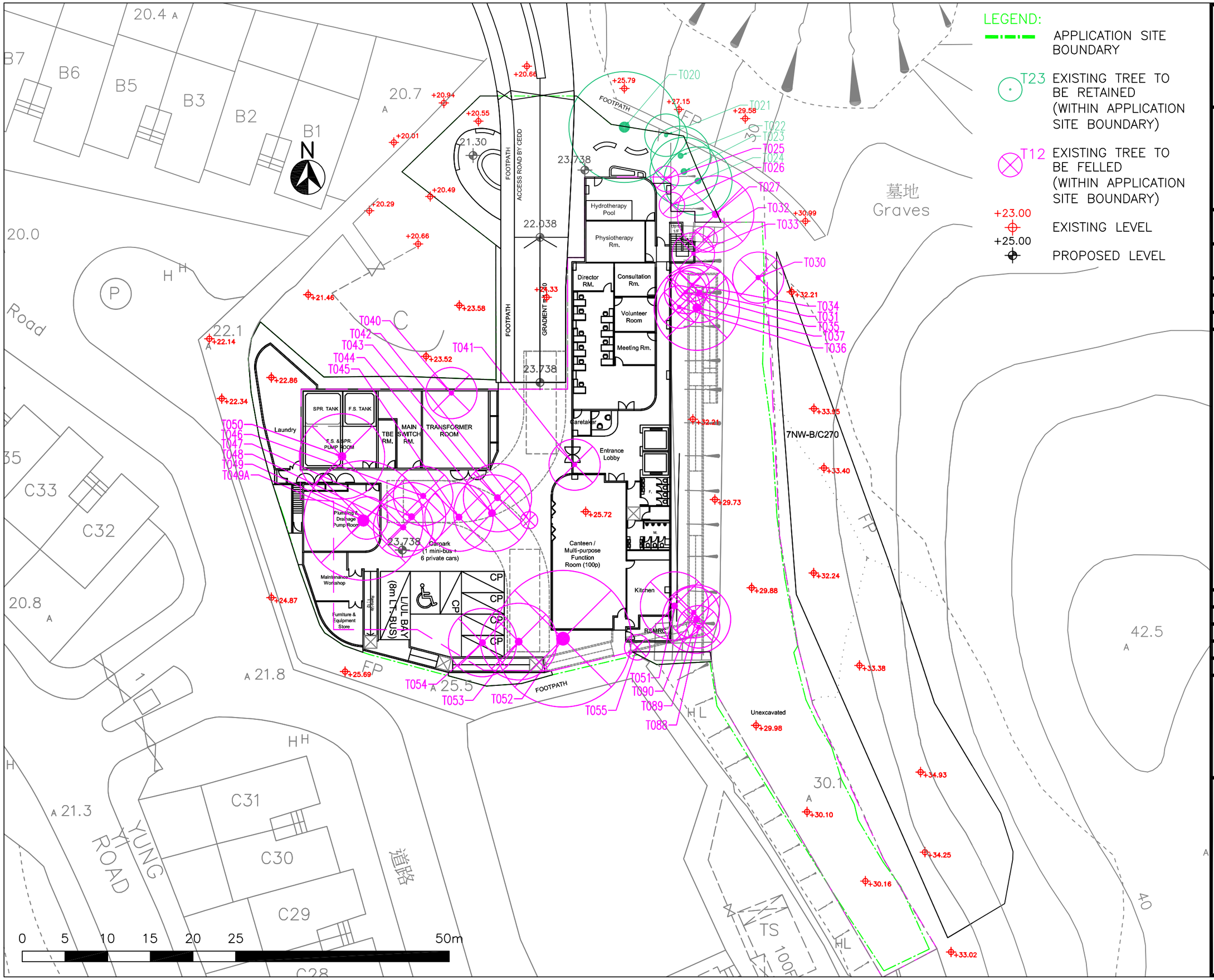
7.5 The softworks contractor will be responsible for maintenance of the planting during the establishment period allowed for in the construction contract, usually for the first year after the beginning of the schemes operational phase. This will ensure that the soft landscape measures within lot boundary and at open space are in a healthy condition prior to the finished scheme being handed back to management office of the site.

Appendix A

Tree Survey Plan, Tree Assessment Schedule

and

Photographic Record of Existing Trees



PROJECT :

PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITIES(RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUITION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO

DRAWING TITLE :

TREE SURVEY PLAN

PROJECT No. C2335

DRAWING No. TS01

SCALE : 1:400

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-TS01

REV	DESCRIPTION	DATE

DESIGN BY : TEL

DRAWN BY : CAD

CHECKED BY : TEL

APPROVED BY : TEL

NOTES :

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2. COPYRIGHT OF THE DRAWING IS RETAINED BY THE AUTHORIZED PERSON.
3. ALL DIMENSIONS ARE TO BE CHECKED AT SITE BY THE MAIN CONTRACTOR.
4. READ THIS DWG. IN CONNECTION WITH GEN. ARCH. PLANS, STRUCT. PLANS, AND OTHER RELATED DWGS.

LanDes

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Tree Assessment Schedule
Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po
Prepared by Ted Lam (R.L.A. No. R-073) on 04/11/2023
To be read in conjunction with Tree Survey Plan, dwg. no. C2335-TS01

Tree	Name		Original Location		Size			Tree Form	Health Condition	Amenity Value	Survival Rate after Transplantation	Proposed Treatment in Curestricted rootent Proposal	Justification for Tree Felling	Remark
No.	Botancial Name	Chinese Name	(Within/ Outside Application Site Boundary)	Level at Root Collar (mPD)	DBH (mm)	Height (m)	Spread (m)	(Good/Fair/Poor)	(Good/Fair/Poor)	(High/Med/Low)	(High/Med/Low)	(Retain/Fell/Transplant)		
T020	*Celtis sinensis*	朴樹	Within Application Site Boundary	25.25	498	9	13	Poor	Fair	Low	Low	Retain and Prune	-	restricted root, co-dominant trunks, included bark, trunk topped, imbalanced crown, pruning is required
T021	*Ligustrum sinense*	山指甲	Within Application Site Boundary	25.60	170	4	5	Poor	Poor	Low	Low	Retain	-	restricted root, co-dominant trunks, included bark, decay trunk
T022	*Ficus microcarpa*	細葉榕	Within Application Site Boundary	27.55	435	10	7	Poor	Fair	Med	Low	Retain	-	restricted root, leaning, co-dominant trunks, included bark
T023	*Ficus microcarpa*	細葉榕	Within Application Site Boundary	27.62	448	10	8	Poor	Fair	Med	Low	Retain and Prune	-	restricted root, leaning, co-dominant trunks, imbalanced crown
T024	*Ficus microcarpa*	細葉榕	Within Application Site Boundary	28.19	500	10	8	Poor	Fair	Med	Low	Retain and Prune	-	restricted root, cross branches, imbalanced crown
T025	*Ficus hispida*	對葉榕	Within Application Site Boundary	24.89	170	9	3	Poor	Poor	Low	Low	Fell	1,2,3,4,5,7	restricted root, leaning, decay trunk, decay branch
T026	*Artocarpus heterophyllus*	菠蘿蜜	Within Application Site Boundary	25.62	107	6	3	Poor	Fair	Med	Low	Fell	1,2,4,5	restricted root, leaning
T027	*Celtis sinensis*	朴樹	Within Application Site Boundary	26.55	238	4	9	Poor	Fair	Low	Low	Fell	1,2,3,4,5	restricted root, trunk crooked, imbalanced crown
T030	*Michelia x alba*	白蘭	Within Application Site Boundary	30.17	250	7	6	Poor	Fair	Med	Low	Fell	1,2,4,5	restricted root, trunk crooked, V-shaped branch union
T031	*Ficus hispida*	對葉榕	Within Application Site Boundary	27.79	200	8	7	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	leaning, cross branches
T032	*Alangium chinense*	八角楓	Within Application Site Boundary	27.51	185	9	3	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	restricted root, trunk conflicted with wall, bulge in trunk
T033	*Ficus hispida*	對葉榕	Within Application Site Boundary	26.93	110	6	5	Fair	Fair	Low	Low	Fell	1,2,3,5	restricted root
T034	*Ficus hispida*	對葉榕	Within Application Site Boundary	27.07	127	6	4	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	leaning, co-dominant trunks, trunk topped
T035	*Acacia confusa*	台灣相思	Within Application Site Boundary	26.28	210	9	5	Poor	Fair	Low	Low	Fell	1,2,3,4,5	restricted root, leaning
T036	*Alangium chinense*	八角楓	Within Application Site Boundary	25.57	127	5	5	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	restricted root, leaning, V-shaped branch union
T037	*Ficus variegata*	青果榕	Within Application Site Boundary	27.51	554	10	10	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	co-dominant trunks, included bark
T040	*Ficus hispida*	對葉榕	Within Application Site Boundary	23.85	238	5	6	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	restricted root, co-dominant trunks, included bark, branches on roof
T041	*Dead tree*	死樹	Within Application Site Boundary	24.21	205	4	6	Poor	Poor	Low	Low	Fell	1,2,3,4,5,7	restricted root, decay trunk, decay branch
T042	*Bridelia tomentosa*	土蜜樹	Within Application Site Boundary	25.78	108	3	2	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	restricted root, trunk bending, heartwood damage in trunk
T043	*Ficus hispida*	對葉榕	Within Application Site Boundary	25.14	253	5	8	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	restricted root, multiple trunks, included bark, branches on roof
T044	*Ficus microcarpa*	細葉榕	Within Application Site Boundary	25.33	390	9	9	Fair	Fair	Med	Low	Fell	1,2,5	restricted root, multiple attachments, aerial roots on roof
T045	*Celtis sinensis*	朴樹	Within Application Site Boundary	25.59	495	9	8	Poor	Fair	Low	Low	Fell	1,2,3,4,5	restricted root, leaning, branches on roof
T046	*Ficus hispida*	對葉榕	Within Application Site Boundary	25.10	205	6	7	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	restricted root, co-dominant trunks, included bark, branches on roof
T047	*Ficus variegata*	青果榕	Within Application Site Boundary	25.13	130	7	8	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	restricted root, leaning, cross branches with T048, branches on roof
T048	*Schefflera heptaphylla*	鴨腳木	Within Application Site Boundary	25.84	320	9	7	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	restricted root, trunk bending, cross branches with T047
T049	*Alangium chinense*	八角楓	Within Application Site Boundary	25.54	158	9	5	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	restricted root, leaning, cavity in trunk, corss trunk with T049A
T049A	*Litsea monopetala*	假柿樹	Within Application Site Boundary	25.54	439	13	14	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	restricted root, decay in trunk, corss trunk with T049
T050	*Ficus microcarpa*	細葉榕	Within Application Site Boundary	24.91	300	8	10	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	restricted root, leaning, tree on broken house
T051	*Macaranga tanarius var. tomentosa*	血桐	Within Application Site Boundary	26.03	258	9	8	Poor	Fair	Low	Low	Fell	1,2,3,4,5	restricted root, leaning, branches on roof
T052	*Ficus microcarpa*	細葉榕	Within Application Site Boundary	26.34	820	12	16	Poor	Fair	Med	Low	Fell	1,2,4,5,7	restricted root, multiple trunks, included bark, imbalanced crown
T053	*Ficus microcarpa*	細葉榕	Within Application Site Boundary	26.18	576	10	9	Poor	Fair	Med	Low	Fell	1,2,4,5,7	restricted root, co-dominant trunks, included bark, imbalanced crown
T054	*Ficus microcarpa*	細葉榕	Within Application Site Boundary	26.04	580	11	8	Poor	Fair	Med	Low	Fell	1,2,4,5,7	restricted root, co-dominant trunks, included bark, imbalanced crown

Tree	Name		Original Location		Size			Tree Form	Health Condition	Amenity Value	Survival Rate after Transplantation	Proposed Treatment in Curestricted rootent Proposal	Justification for Tree Felling	Remark
No.	Botancial Name	Chinese Name	(Within/ Outside Application Site Boundary)	Level at Root Collar (mPD)	DBH (mm)	Height (m)	Spread (m)	(Good/Fair/Poor)	(Good/Fair/Poor)	(High/Med/Low)	(High/Med/Low)	(Retain/Fell/Transplant)		
T055	*Ficus hispida*	對葉榕	Within Application Site Boundary	27.00	122	5	3	Poor	Fair	Low	Low	Fell	1,2,3,4,5,7	restricted root, decay in trunk, imbalanced crown
T088	*Ficus hispida*	對葉榕	Within Application Site Boundary	28.66	175	5	5	Poor	Fair	Low	Low	Fell	1,2,4,6	restricted root, multiple trunks, included bark, cross branches with T090
T089	*Ficus variegata*	青果榕	Within Application Site Boundary	28.59	331	11	8	Poor	Fair	Low	Low	Fell	1,2,4,6	restricted root, co-dominant trunks, included bark
T090	*Ficus hispida*	對葉榕	Within Application Site Boundary	28.37	295	6	6	Poor	Fair	Low	Low	Fell	1,2,4,6	multiple trunks, included bark, cross branches with T088

Abbreivations in the tree schedule

*Justification for Tree felling:
1. Tree is in direct conflict with the proposed works.
2. Preparation of intact and sufficient-sized root ball not practical due to the topography (e.g. on rock, steep slope, shallow substratum, structures, near pond).
3. Weedy species without special ecological significance or species creating maintenance problem.
4. Tree with poor health and/or form for transplantation.
5. Lack of access for transplantation machinery or vehicle.
6. Species of low post-transplantation survival rate.
7. Tree has structural problem and may create hazard to public during root ball preparation and/or after transplantation, while auxiliary support will not be sufficient / practical.

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T20 - Trunk Topped

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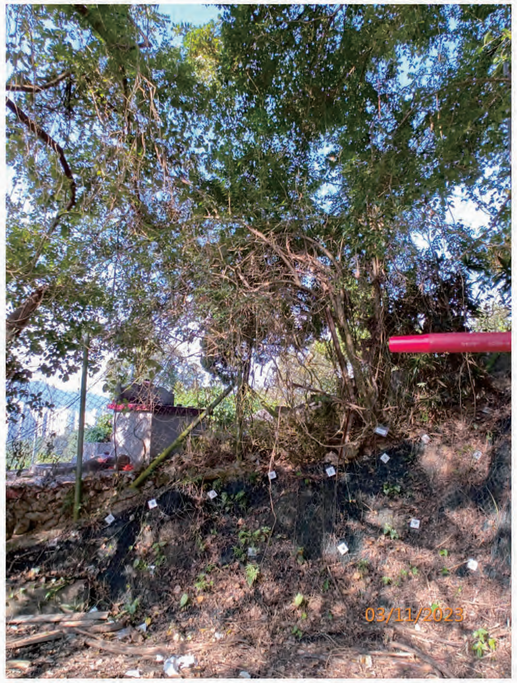

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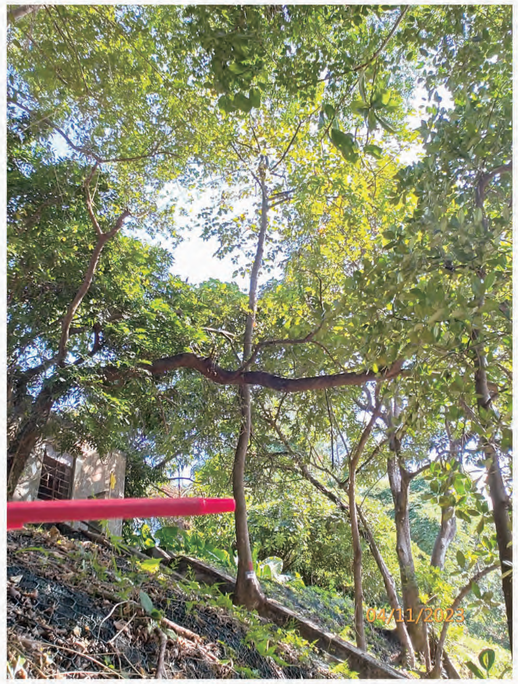

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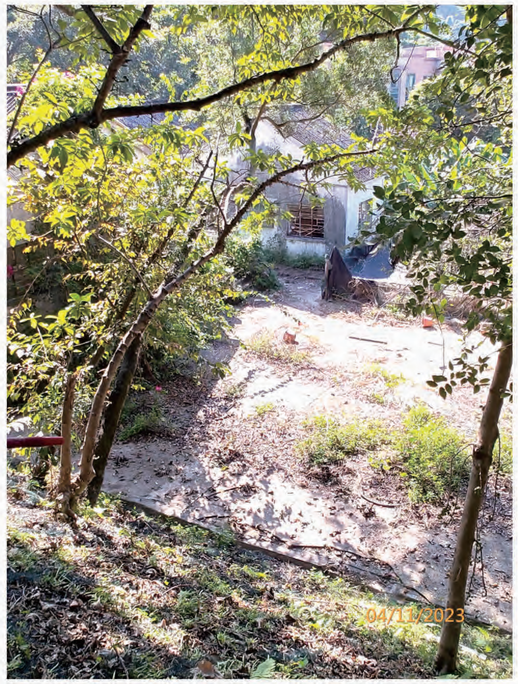

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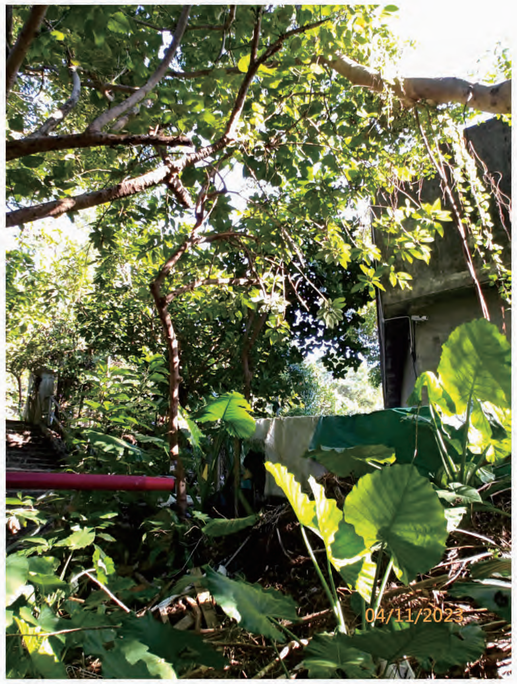

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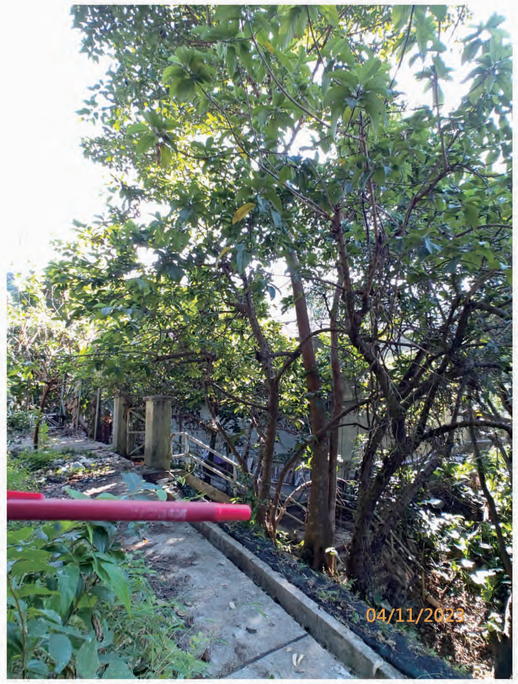

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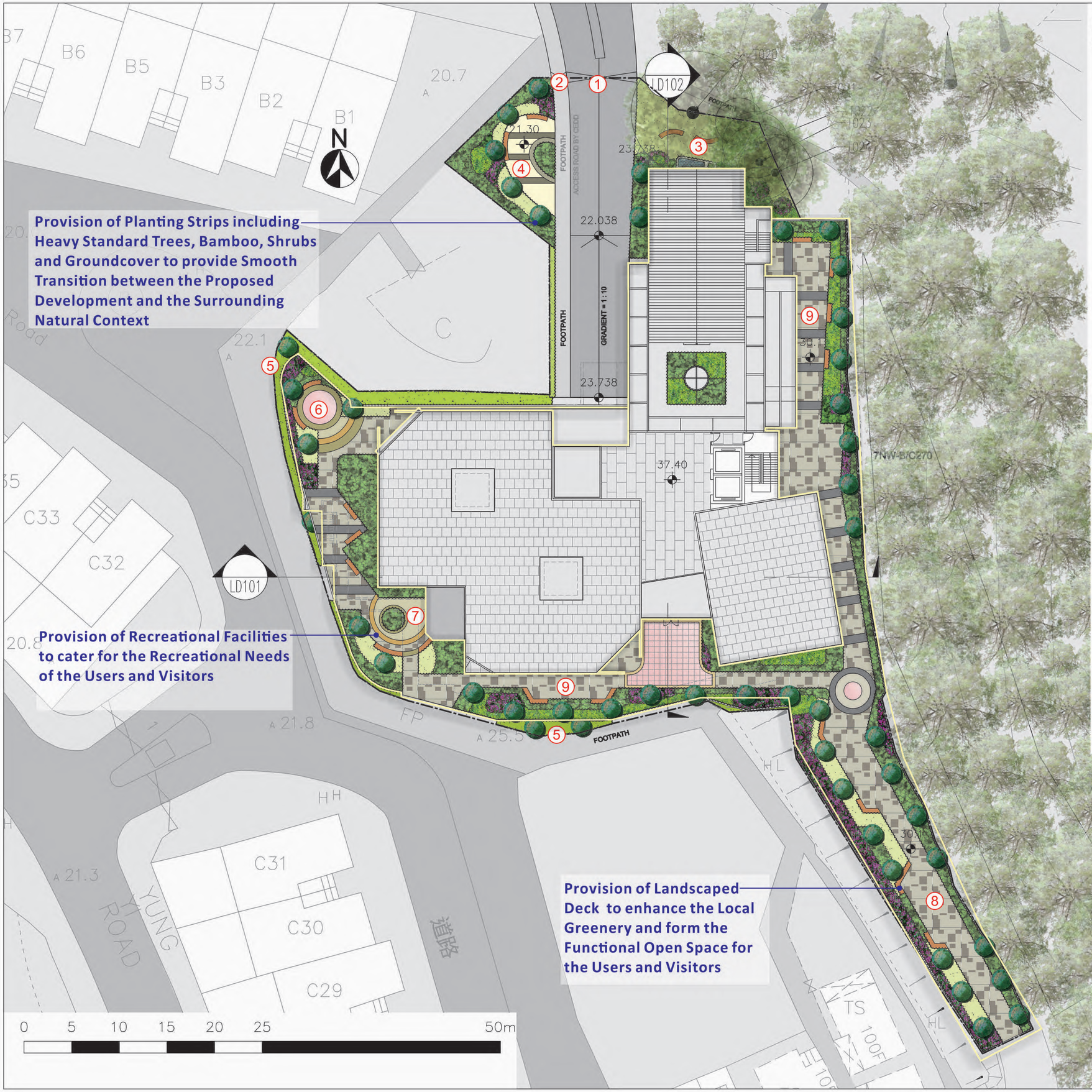
Appendix B

Landscape Master Plan

And

Landscape Details



LEGEND:

- APPLICATION SITE BOUNDARY
- T23 EXISTING TREE TO BE RETAINED
- PROPOSED HEAVY STANDARD TREE
- PROPOSED BAMBOO
- PROPOSED SHRUB/ GROUNDCOVER
- PROPOSED LAWN
- +5.0 PROPOSED LEVEL
- SEAT BENCH
- PROPOSED PAVING

KEY:

1. Vehicular Access
2. Pedestrian Access
3. Fountain Garden
4. Entrance Courtyard
5. Edge Planting Verge (Bamboo Planting)
6. Gathering Courtyard
7. Organic Farm
8. Sensory Garden
9. Sitting Courtyard

PROJECT :
PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITIES(RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO

DRAWING TITLE :
LANDSCAPE MASTER PLAN (OVERALL VIEW)

PROJECT No. C2335

DRAWING No. LMP01

SCALE : 1:400

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-LMP01

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PROJECT :

PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITIES(RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUITION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO

DRAWING TITLE :

LANDSCAPE MASTER PLAN (G/F)

PROJECT No. C2335

DRAWING No. LMP02

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DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-LMP02

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LEGEND:

- APPLICATION SITE BOUNDARY
- T23 EXISTING TREE TO BE RETAINED
- PROPOSED HEAVY STANDARD TREE
- PROPOSED BAMBOO
- PROPOSED SHRUB/ GROUNDCOVER
- PROPOSED LAWN
- +5.0 PROPOSED LEVEL
- SEAT BENCH
- PROPOSED PAVING

KEY:

1. **Gathering Courtyard**
2. **Organic Farm**
3. **Sensory Garden**
4. **Sitting Courtyard**

PROJECT :

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DRAWING TITLE :

LANDSCAPE MASTER PLAN (1/F)

PROJECT No. C2335

DRAWING No. LMP03

SCALE : 1:400

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-LMP03

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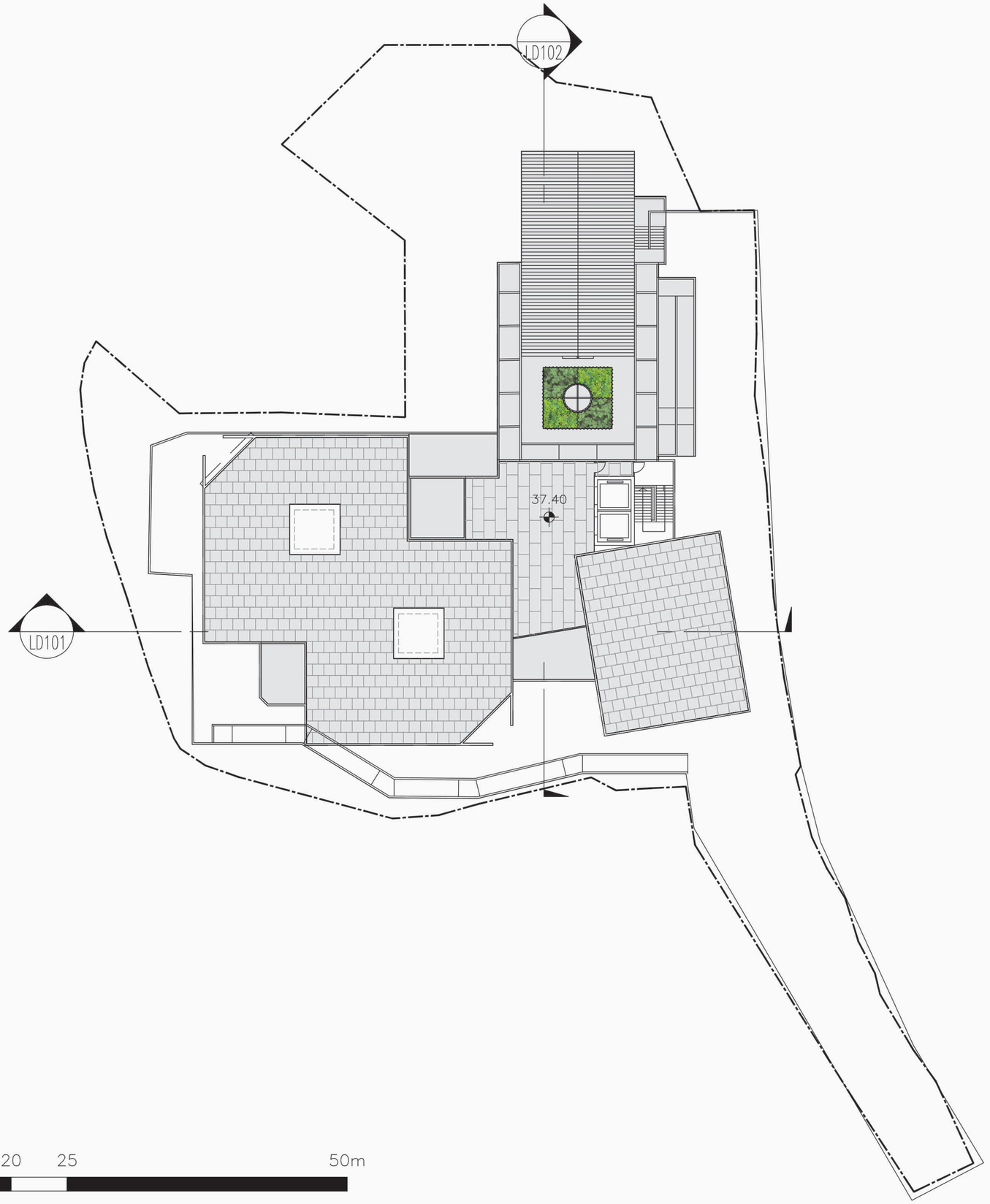

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- PROPOSED SHRUB/ GROUNDCOVER
- PROPOSED LAWN
- +5.0 PROPOSED LEVEL
- PROPOSED PAVING

PROJECT :

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DRAWING TITLE :

LANDSCAPE MASTER PLAN (R/F)

PROJECT No. C2335

DRAWING No. LMP04

SCALE : 1:400

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-LMP04

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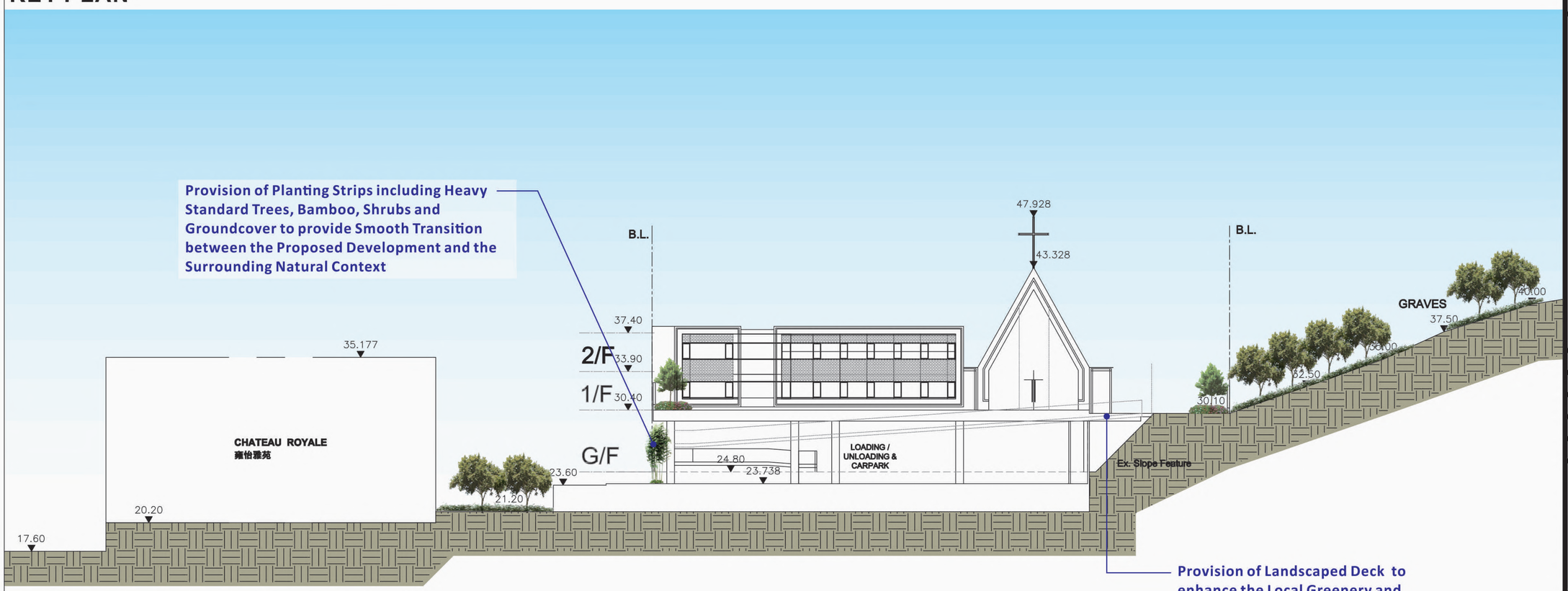
KEY PLAN



PROJECT :

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DRAWING TITLE :

LANDSCAPE SECTION

PROJECT No. C2335

DRAWING No. LD101

SCALE : 1:400

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-LD101

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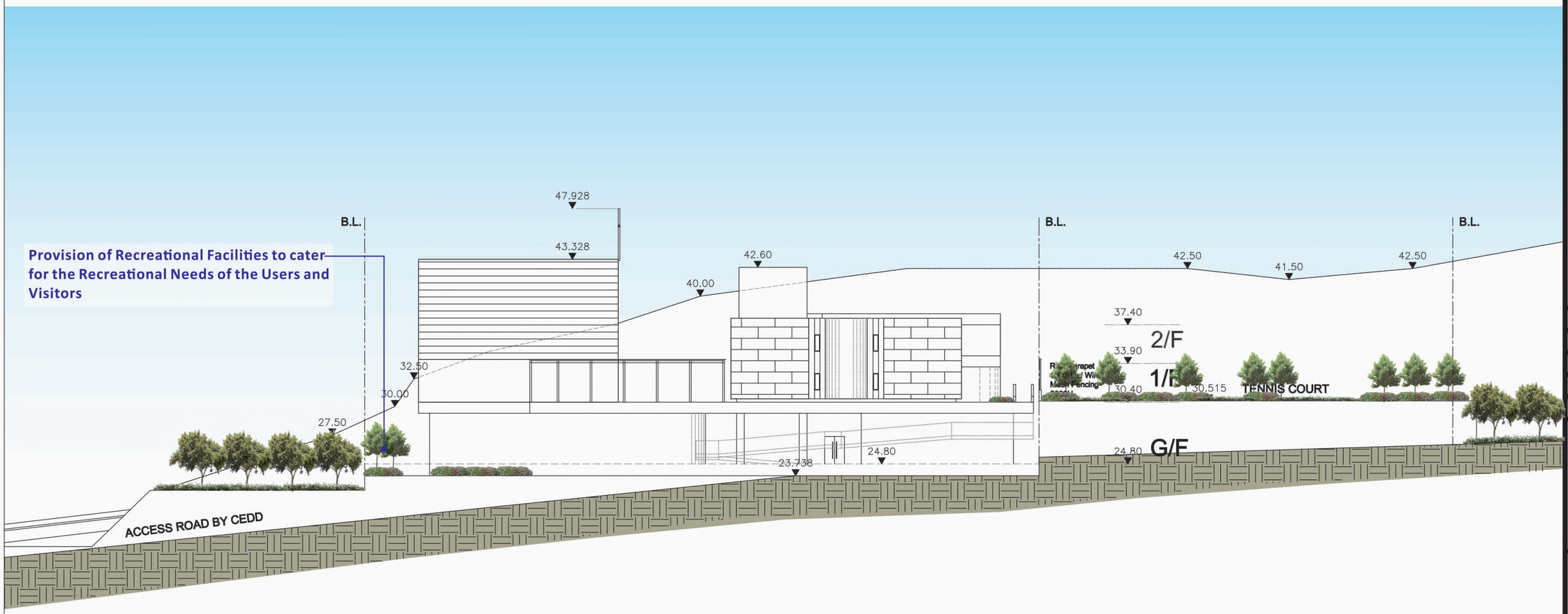

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DRAWING TITLE :

LANDSCAPE SECTION

PROJECT No. C2335

DRAWING No. LD102

SCALE : 1:400

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-LD102

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Appendix C

Planting Plans

Quantity	Code	Chinese Name	Botanical Name	Height (mm)	Spread (mm)	DBH (mm)	Spacing (mm)	Remark
HEAVY STANDARD TREES								
3	GS	菲島福木	*Garcinia Subelliptica*	6000	1500	80	4000	Straight trunk, balanced form
9	MI	樂昌含笑	*Michelia chapensis**	4000	2000	80	4000	Straight trunk, balanced form
7	SD	山烏桕	*Sapium dicolor**	5500	2000	80	4000	Straight trunk, balanced form
10	SL	假蘋婆	*Sterculia lanceolata**	4500	2000	80	4000	Straight trunk, balanced form
15	TM	細葉欖仁	*Terminalia mantaly*	6500	2000	80	4000	Straight trunk, balanced form
* Native Species								
SHRUBS								
-	Cam	福建茶	*Carmona microphylla*	450	400	-	400	Abundance of Foliage, Balanced form
-	Cov	黃洒金	*Codiaeum variegatum*	350	300	-	300	Abundance of Foliage, Balanced form
-	Cvm	洒金榕	*Codiaeum variegatum 'mixed'*	600	500	-	450	upright form, small stem exposure, consistent foliage color
-	Ite	鳶尾	*Iris tectorum*	500	350	-	200	upright form
-	Jch	龍柏	*Juniperus chinensis*	1200	600	-	As shown	Abundance of Foliage, Balanced form
-	Mj	非洲茉莉	*Madagascar jasmine stephanotis floribumda*	500	500	-	400	Abundance of Foliage, Balanced form
-	Mpa	九里香	*Murraya paniculata*	600	500	-	450	Abundance of Foliage, Balanced form
-	Rhe	小葉棕竹	*Rhapis excelsa*	1200	600	-	600	at least 5 shoots per plant
-	Rue	翠蘆莉	*Ruellia coerulea*	400	400	-	350	Balanced form
-	Sch	黃金鵝掌藤	*Schefflera arboricola "Trinette"*	500	500	-	450	Abundance of Foliage, Balanced form
GROUNDCOVERS								-
-	Lmo	小葉馬纓丹	*Lantana montevidensis*	300	300	-	250	Abundance of Foliage
-	Nau	腎蕨	*Nephrolepis auriculata*	250	150	-	150	Abundance of Foliage
-	Opb	沿階草	*Ophiopogon bodinieri*	250	250	-	200	Abundance of Foliage
-	Pmy	錫蘭葉下珠	*Phyllanthus myrtifolius*	200	300	-	300	Abundance of Foliage
BAMBOO								
-	Pha	羅漢竹	*Phyllostachys aurea*	2500	500	-	500	Balanced form, abundance of foliage
LAWN								
-	Zja	朝鮮草	*Zoysia japonica*	-	-	-	-	-

PROJECT :

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DRAWING TITLE :

PLANTING SCHEDULE

PROJECT No. C2335

DRAWING No. PS01

SCALE : N.T.S.

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-PS01

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LEGEND:

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- T23 — EXISTING TREE TO BE RETAINED
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- PROPOSED LAWN
- +5.0 — PROPOSED LEVEL

PROJECT :
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DRAWING TITLE :
PLANTING PLAN
(G/F)

PROJECT No. C2335

DRAWING No. PT01

SCALE : 1:400

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-PT01

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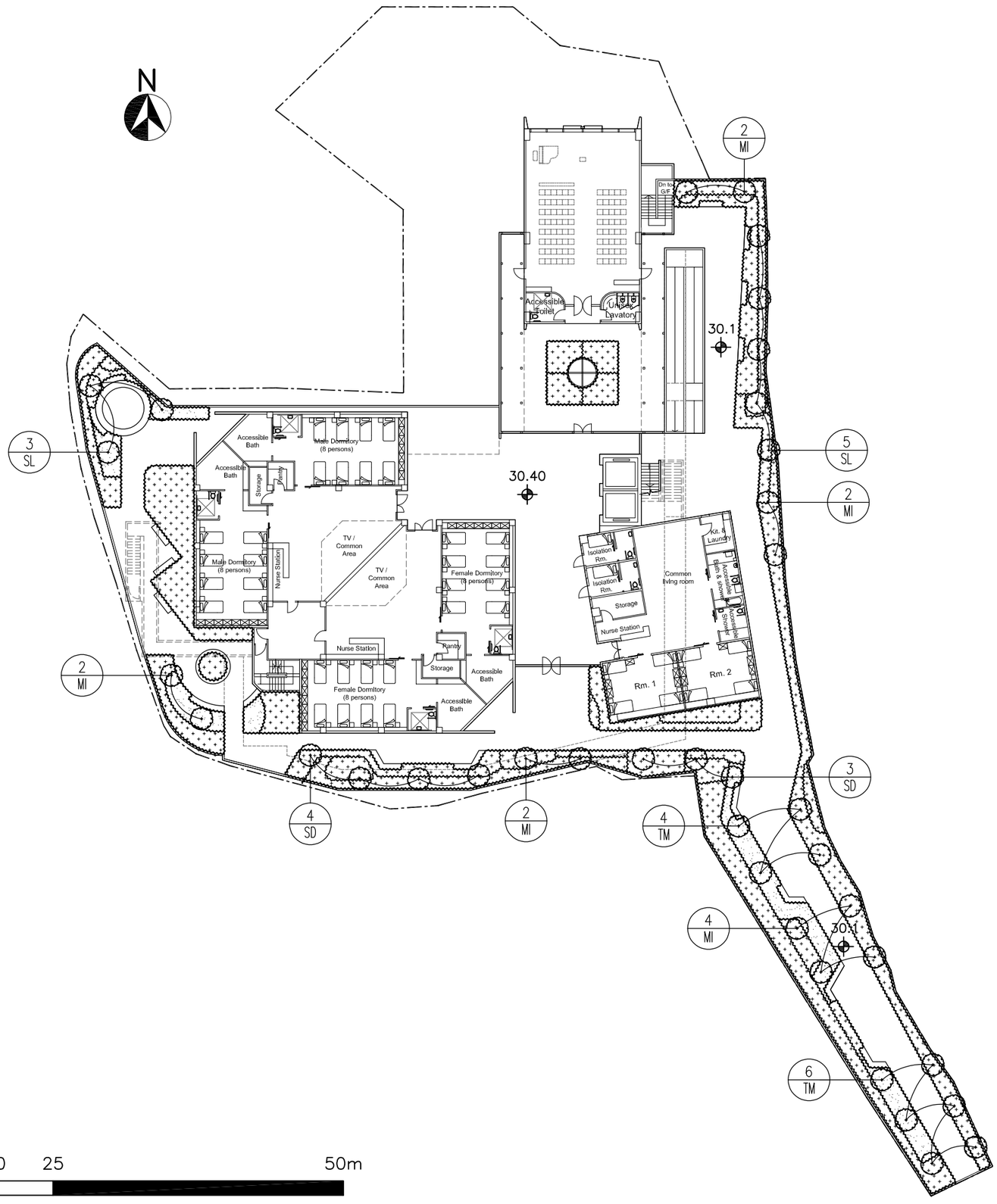

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PROJECT :
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DRAWING TITLE :
PLANTING PLAN
(1/F)

PROJECT No. C2335

DRAWING No. PT02

SCALE : 1:400

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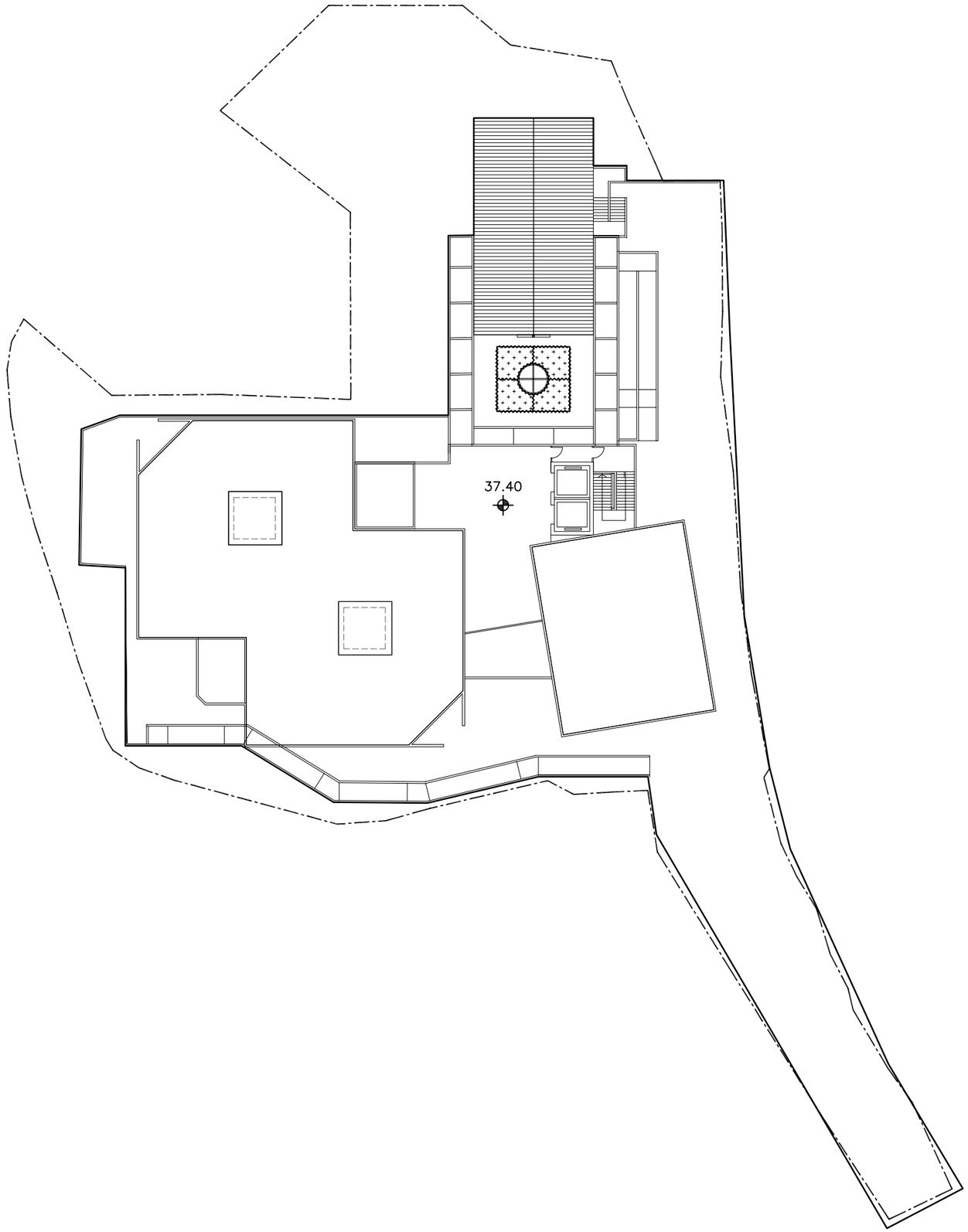

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DRAWING TITLE :

PLANTING PLAN
(R/F)

PROJECT No. C2335

DRAWING No. PT03

SCALE : 1:400

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-PT03

REV	DESCRIPTION	DATE

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Appendix D

Maintenance Schedule

Of

Soft Landscape Works

OPERATIONS	SPRING			SUMMER			AUTUMN			WINTER			REMARKS
	March	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
DISEASE CONTROL INSPECTION	O	O	O	O	O	O	O	O	O	O	O	O	Treatment immediately after detection
FERTILIZATION Applications	O						O						
GENERAL PLANT INSPECTION	O	O	O	O	O	O	O	O	O	O	O	O	Treatment immediately after detection
IRRIGATION Watering operation	D	D	D	D	D	D	D	D	D	D	D	D	Early morning / late afternoon, as appropriate
PROTECTION Inspection of fence, tree grates, guards, stakes & ties	O			O			O			O			Inspection also after heavy storms and adverse weather. Treatments immediately after detection
FIRMING UP of plants & supports	O			O			O			O			Inspection also after heavy storms and adverse weather. Firm-up operations immediately after detection
WEEDING Weeding operation & litter collection	O	O	O	O	O	O	O	O	O	O	O	O	Additional litter inspection & collection after heavy use
THINNING INSPECTION	O						O						Thinning operations in appropriate pruning season
MULCH Topping up	O						O						And following run off caused by rain / wind storm
PRUNING	O						O						As appropriate
FORKING OVER	O						O						As appropriate
TREE RISK ASSESSMENT	O												As appropriate

KEY:
D = once daily W = once weekly 2W = twice weekly
Bi-W = Bi-weekly O = once R = repeat if necessary

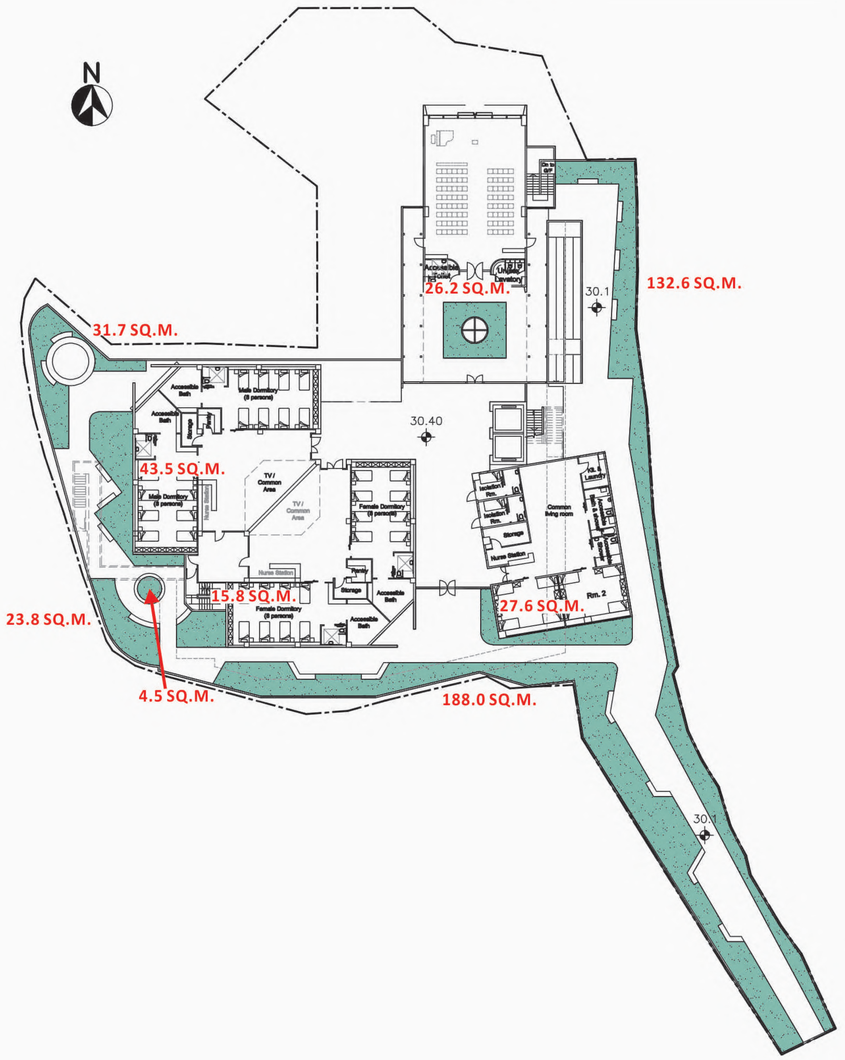
Appendix E

Site Coverage of Greenery

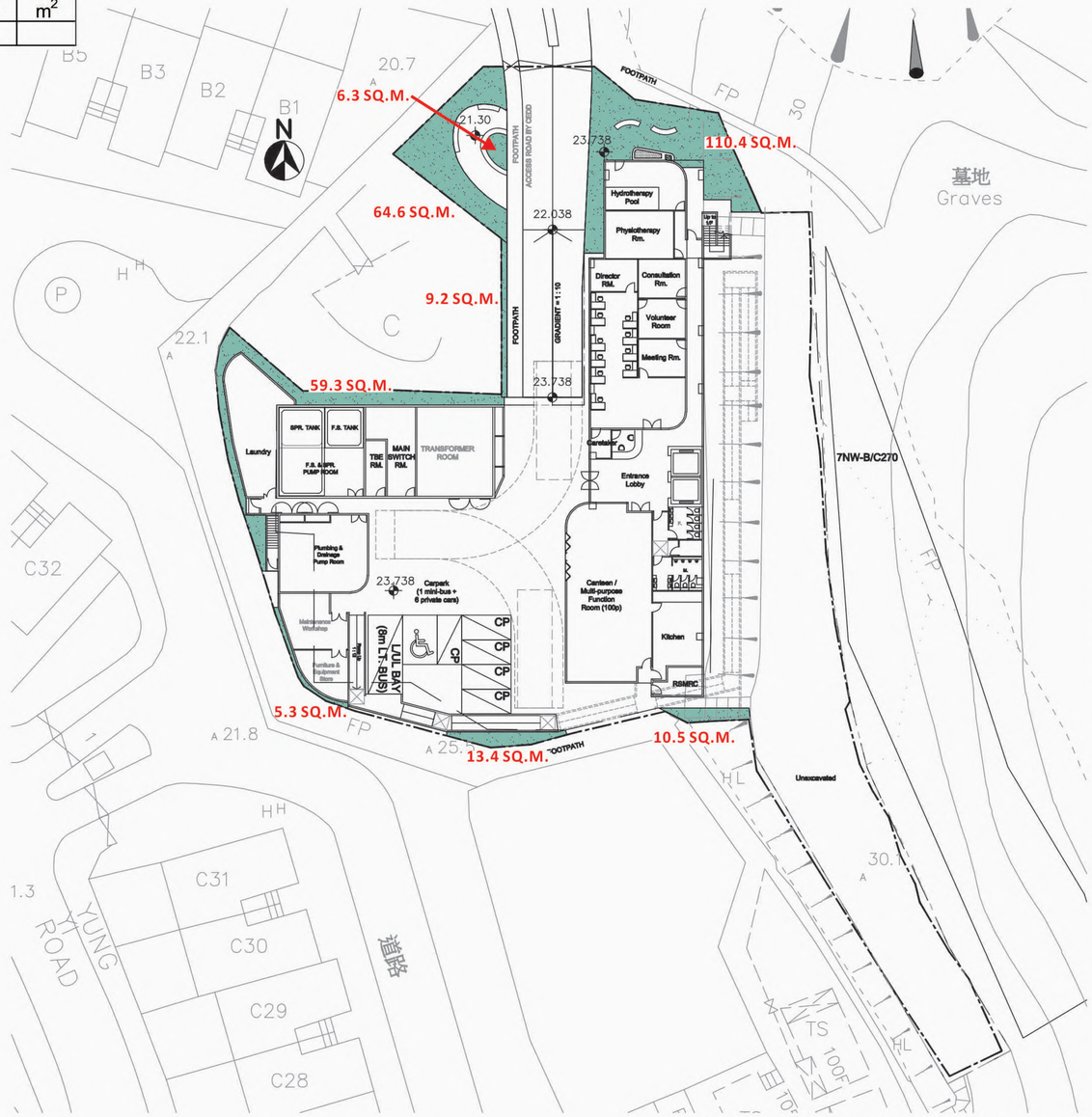
LEGEND:

- APPLICATION SITE BOUNDARY
- UNCOVERED GREENERY IN PRIMARY ZONE
- UNCOVERED GREENERY IN OTHER AREAS
- +5.0 PROPOSED LEVEL

Required Greenery	Area	Unit
Site Area:	3,275.00	m^2
Required Area at Primary Zone:	327.50	m^2
Required Total Greenery:	655.00	m^2
Allowable Greenery Features:	196.50	m^2
Provided Greenery at Primary Zone	**Area**	**Unit**
Uncovered Planitng Area at G/F	279.00	m^2
Uncovered Planitng Area at 1/F	493.70	
Greenery at Primary Zone	**772.70**	m^2
	(>327.50)	m^2
Greenery Ratio at Primary Zone	**23.59%**	
Provided Greenery at Other Areas	**Area**	**Unit**
Greenery at Other Areas	**0.00**	m^2
Greenery Ratio at Other Areas	**0.00%**	
Total Greenery	**772.70**	m^2
	(>655.00)	m^2
Greenery Ratio	**23.59%**	



B GREENERY AT 1/F
SCALE 1:600



A GREENERY AT G/F
SCALE 1:600

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PROJECT :
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DRAWING TITLE :
COMMON GREENERY PROVISION (G/F&1/F)

PROJECT No. C2335

DRAWING No. GC01

SCALE : 1:600

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-GC01

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Appendix F

Communal Open Space Provision

LEGEND:

APPLICATION SITE BOUNDARY

COMMUNAL OPEN SPACE

+5.0 PROPOSED LEVEL

TARGET POPULATION: **110 PERSONS (60 residents + 50 staffs)**

REQUIRED COMMUNAL OPEN SPACE: (1 SQ.M. PER PERSON IN ACCORDANCE WITH HKPSG) **110 SQ.M.**

PROVIDED COMMUNAL OPEN SPACE : **130 SQ.M. (>110 SQ.M.)**

PROJECT :

PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITIES(RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO

DRAWING TITLE :

COMMUNAL OPEN SPACE PROVISION (1/F)

PROJECT No. C2335

DRAWING No. OS01

SCALE : 1:400

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-OS01

REV	DESCRIPTION	DATE

DESIGN BY : TEL

DRAWN BY : CAD

CHECKED BY : TEL

APPROVED BY : TEL

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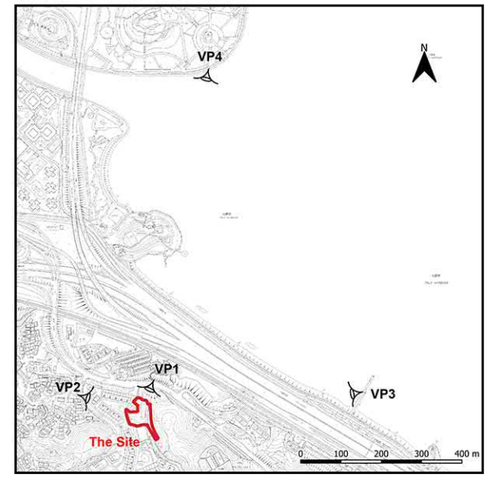
Appendix 3

Photomontages in support of the Visual Appraisal

Existing View

With Proposed Development



Key Plan

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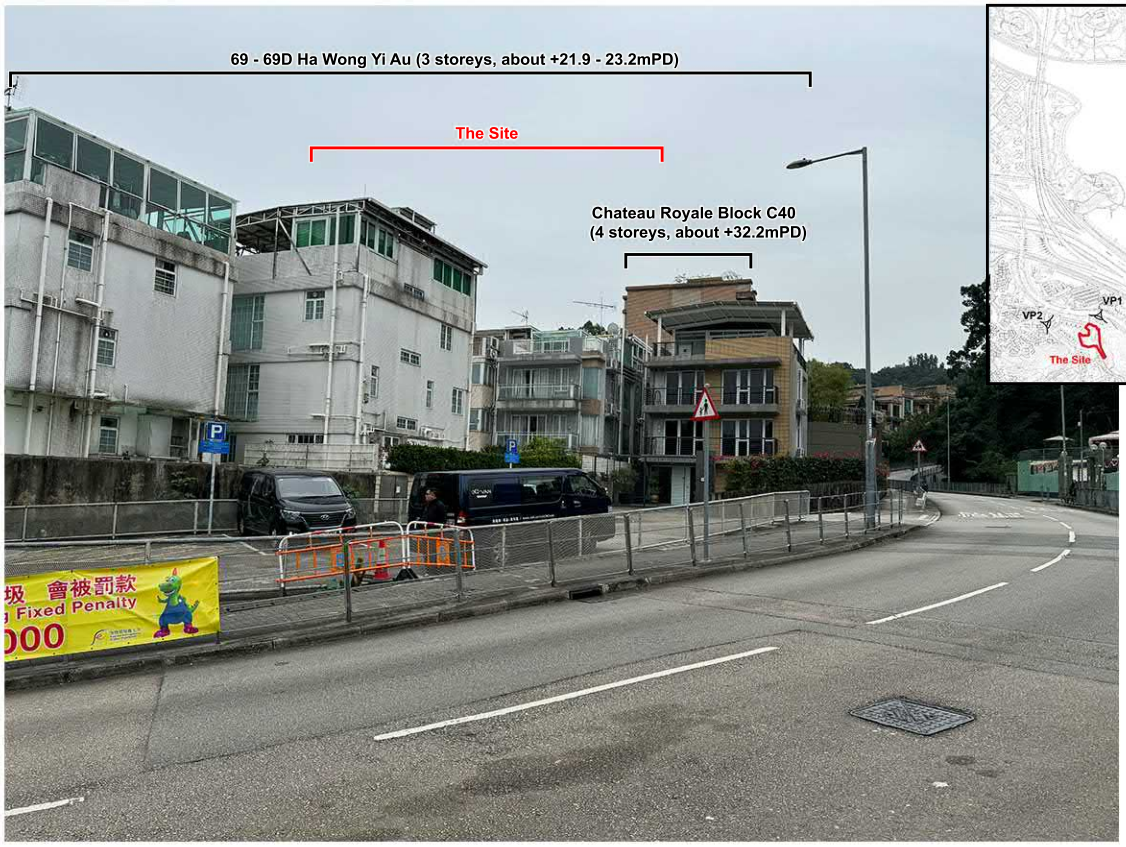
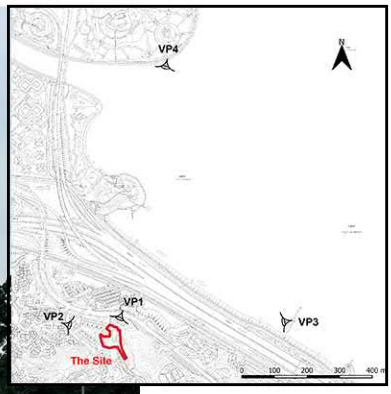
Viewpoint 1 – “Chateau Royale” Bus Stop on Tai Po Road -Tai Po

(at +18.5mPD, about 50m to the north)

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in “Government, Institution or Community” and “Green Belt” Zones Government Land at “Former Fish Marketing Organization Tai Po Primary School”, Wong Yi Au, Tai Po

Date: 1 March 2024





Key Plan

Existing View

With Proposed Development

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Viewpoint 2 -
Wong Yi Au Pavilion

(at +13.5mPD, about 160m to the west)

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones Government Land at "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

Date: 1 March 2024

Key Plan

Existing View

With Proposed Development

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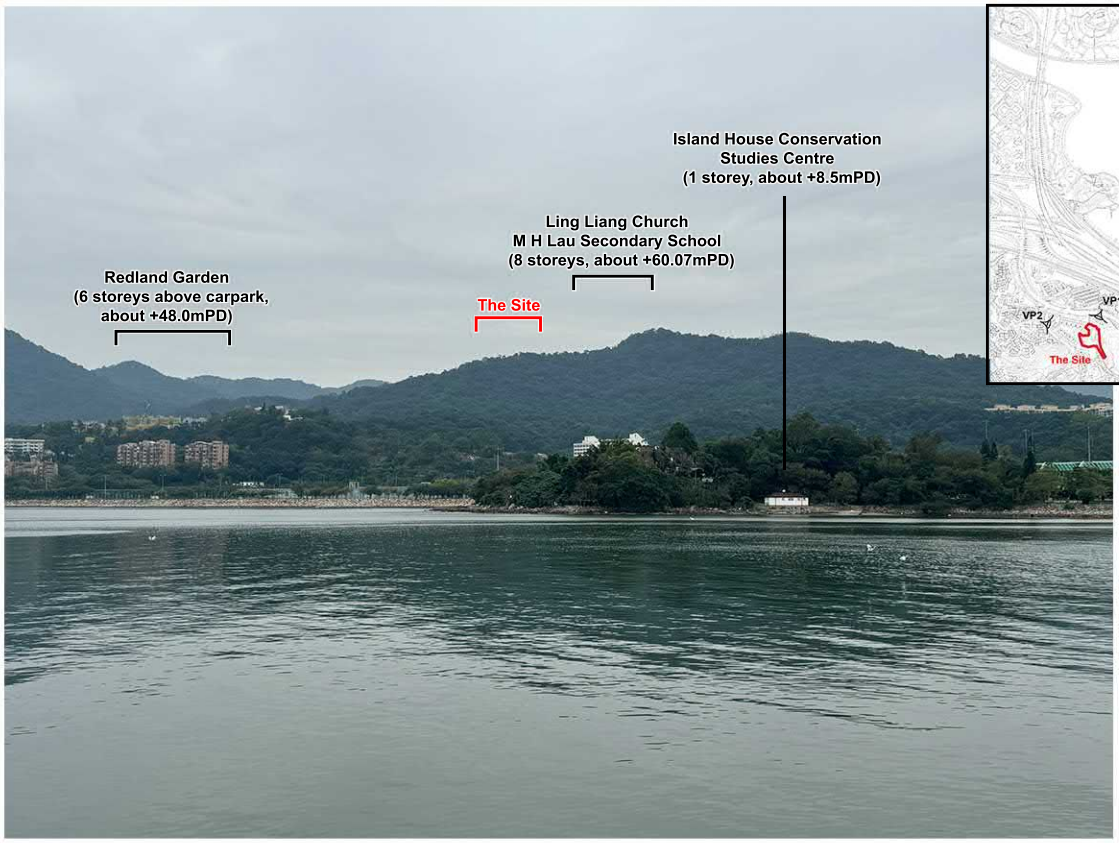
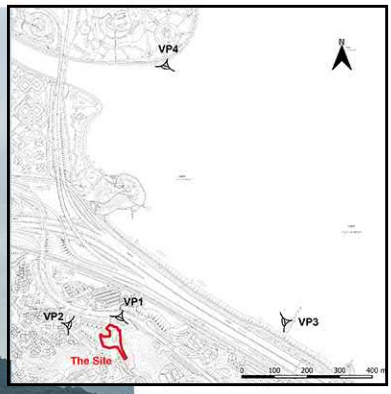
Viewpoint 3 -
Tai Po Railway Pier

(at +3.4mPD, about 550m to the east)

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones Government Land at "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

Date: 1 March 2024





Key Plan

Existing View

With Proposed Development

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Viewpoint 4 - Tai Po Waterfront Park Near Lookout Tower

(at +5.4mPD, about 900m to the north)

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones
Government Land at "Former Fish Marketing Organization Tai Po Primary School",
Wong Yi Au, Tai Po

Date: 1 March 2024

Appendix 4

Traffic Impact Assessment

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

Traffic Impact Assessment
Final Report
March 2024

Prepared by: **CKM Asia Limited**

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

FIGURES

NUMBER

1.1 Location of Subject Site

2.1 Location of surveyed junctions

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5.1 Pedestrian connectivity between the Proposed RCHD and the nearest bus stops

5.2 Location of surveyed footpaths

5.3 Existing peak pedestrian flows

5.4 Year 2031 peak hour pedestrian flows without the Proposed RCHD

5.5 Year 2031 peak hour pedestrian flows with the Proposed RCHD

1.0 INTRODUCTION

Background

1.1 The existing Residential Care Home for Persons with Disabilities ("RCHD") for Home of Loving Faithfulness ("HOLF") is located at 7 Castle Peak Road in Kwu Tung (the "Existing RCHD"). Due to the implementation of the Kwu Tung North ("KTN") new development area, the Existing RCHD will be relocated to the vacant Former Fish Marketing Organization Tai Po Primary School (the "Subject Site"). Compared with the Existing RCHD, which has 33 beds, the relocated RCHD ("the Proposed RCHD") will have 60 beds. The location of the Subject Site is shown in **Figure 1.1**.

1.2 Against this background, CKM Asia Limited, a traffic and transportation planning consultancy firm, was commissioned to conduct a Traffic Impact Assessment ("TIA") in support of the Proposed RCHD. The report presents the findings and recommendations of the traffic impact assessment for the Proposed RCHD.

Scope of the Assessment

1.3 The main objectives of this TIA are as follows:

- To assess the existing traffic issues in the vicinity of the Subject Site;
- To quantify the amount of traffic generated by the Proposed RCHD; and
- To examine the traffic impact on the local road network in the vicinity of the Subject Site.

Contents of the Report

1.4 After this introduction, the remaining chapters contain the following:

Chapter Two	-	describes the existing situation;
Chapter Three	-	outlines the RCHD proposal;
Chapter Four	-	presents the traffic impact analysis;
Chapter Five	-	presents the pedestrian impact analysis and
Chapter Six	-	summarises the overall conclusion

2.0 THE EXISTING SITUATION

The Subject Site

2.1 The Subject Site is located to the immediate south of Tai Po Road – Tai Po Kau. It is bounded by Chateau Royale to the west and south, and graves to the east. At present, there is no vehicular access to the Subject Site.

Existing Road Network

2.2 Tai Po Road – Tai Po Kau is a rural road, connecting to Tai Po Road – Yuen Chau Tsai to the west and Tai Po Road – Ma Liu Shui to the east. The portion of Tai Po Road – Tai Po Kau fronting the Subject Site is a single carriageway 2 / 3 lane road.

Traffic Survey

2.3 To quantify the traffic flows at the junctions chosen for the capacity analysis, manual classified count was conducted on Wednesday, 8 November 2023 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 2.6**.

2.4 The surveyed junctions include the following:

- J1: Priority Junction of Tai Po Road – Tai Po Kau / access road to Redland Garden;
- J2: Priority Junction of Tai Po Road – Tai Po Kau / access road to Trackside Villas;
- J3: Signalised Junction of Tai Po Road near Yung Yi Road;
- J4: Priority Junction of Tai Po Road – Yuen Chau Tsai / Yung Yi Road;
- J5: Priority Junction of Tai Po Road – Yuen Chau Tsai / slip road to Tolo Highway Northbound;

2.5 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 0730 – 0830 and 1730 – 1830 hours respectively, and the existing AM and PM peak hour traffic flows are presented in **Figure 2.7**.

Operational Performance of the Surveyed Junctions

2.6 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	Tai Po Road – Tai Po Kau / Access road to Redland Garden	Priority	DFC	0.025	0.018
J2	Tai Po Road – Tai Po Kau / Access road to Trackside Villas	Priority	DFC	0.065	0.035
J3	Tai Po Road near Yung Yi Road	Signalised	RC	59%	>100%
J4	Tai Po Road – Yuen Chau Tsai / Yung Yi Road	Priority	DFC	0.359	0.184
J5	Tai Po Road – Yuen Chau Tsai / slip road to Tolo Highway Northbound	Priority	DFC	0.617	0.551

Notes: [1] RC – reserve capacity DFC – Design flow / capacity ratio

Public Transport Facilities

2.7 The Subject Site is located close to public transport services with franchised bus and public light bus routes operating in the vicinity. Details of these public transport services are presented in **Figure 2.8** and **Table 2.2**.

TABLE 2.2 FRANCHISED BUS AND GMB SERVICES OPERATING CLOSE TO THE SUBJECT SITE

Route	Routing	Frequency (minutes)
KMB 72	Tai Po (Tai Wo) – Cheung Sha Wan	15 – 30
KMB 72A	Tai Wai Station – Tai Po Industrial Estate	20 – 35
KMB 73A	Fanling (Wah Ming) – Yu Chui Court	20 – 30
KMB 74A	Tai Po (Tai Wo) – Kai Yip	60
GMB 28K	Tai Po Market Station – Sha Tin (Pak Hok Ting Street)	6 – 9

Note: KMB – Kowloon Motor Bus GMB – Green Minibus

Traffic Generation of Existing RCHD

2.8 The TPDM does not have trip generation rates for RCHD, hence, in order to estimate the traffic generation of the Proposed RCHD, trip generation survey was conducted at the Existing RCHD. The results of the trip generation survey and the calculated AM and PM peak hour trip generation rates are presented in **Table 2.3**.

TABLE 2.3 TRAFFIC GENERATION OF EXISTING RCHD

Item	Traffic Generation			
	AM Peak Hour		PM Peak Hour	
	IN	OUT	IN	OUT
Existing RCHD with 33 Beds (pcu/hour)	3	2	1	1
Trip Rates (pcu/hour/bed)	0.0909	0.0606	0.0303	0.0303

3.0 THE PROPOSED RCHD

Proposed RCHD

3.1 The Proposed RCHD consists of 1 building block with 60 beds and is targeted for completion by 2027.

3.2 A vehicular access to the Proposed RCHD from Tai Po Road – Tai Po Kau will be constructed by Civil Engineering and Development Department ("CEDD"), and is expected to be completed by the end of 2024.

Provision of Internal Transport Facilities

3.3 The Hong Kong Planning Standards and Guidelines ("HKPSG") has no recommendation on the provision of internal transport facilities for RCHD, hence, reference is made to the provision in the Existing RCHD. Details of the Existing RCHD are found in **Table 3.1**.

TABLE 3.1 INTERNAL TRANSPORT FACILITIES PROVIDED IN EXISTING RCHD

Site	No. of beds	Car Parking Space	Provision rate (space / bed)
Existing RCHD	33	3	0.0909

3.4 To meet the operational needs, a multi-use bay for LGV and light bus will be provided for the Proposed RCHD. Details on the provision of internal transport facilities are found in **Table 3.2**.

TABLE 3.2 PROVISION OF INTERNAL TRANSPORT FACILITES FOR PROPOSED RCHD

Item	Provision	Dimensions
Car Parking Space	6[(1)]	5 @ 5m (L) x 2.5m (W) x 2.4m (H) 1 @ 5m (L) x 3.5m (W) x 2.4m (H) for persons with disabilities
Multi-use bay for LGV and light bus	1	1 @ 8m (L) x 3.5m (W) x 3.6m (H)

Note: [(1)] As per provision rate in Table 3.1: 60 beds x 0.0909 = 5.45, say 6 nos.

3.5 The carpark is provided on the ground floor and the layout plan is found in **Figure 3.1**.

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 2**.

4.0 TRAFFIC IMPACT

Design Year

4.1 The Proposed RCHD is expected to be completed in 2027, and the TIA year is 2031.

Traffic Forecasting

4.2 The 2031 traffic flows used for the junction analysis are produced with reference to the following:

1. 2031 traffic flows derived with reference to BDTM;
2. the planned / committed developments in the vicinity and
3. Traffic generated by the Proposed RCHD.

The planned / committed developments in the vicinity

4.3 The major planned / committed development included in the 2031 reference traffic flows is presented in **Table 4.1**.

TABLE 4.1 MAJOR PLANNED / COMMITTED DEVELOPMENTS IN THE VICINITY OF THE PROPOSED RCHD

Site	Location	Use
1	Tai Po Town Lot No. 230	Residential use with 135 flats
2	Tai Po Town Lot No. 231	Residential use with 23 flats
3	Tai Po Town Lot No. 234	Residential use with 163 flats
4	Tai Po Town Lot No. 241	Residential use with 116 flats
5	Various lots in D.D. 34 and 36 and adjoining	Residential use with 2,198 flats
6	Tai Po Town Lot Nos. 244 (Silicon Hill and University Hill)	Residential use with 1,871 flats
7	Proposed Sports Centre, Social Welfare Facilities and PVP in Area 6	Sports Centre, Social Welfare Facilities and Public Vehicle Park
8	Tai Po Town Lot No. 243 (Ma Wo Road)	Residential use with 1,650 flats
9	Proposed Public Housing Development at To Yuen Tung, Ma Wo Road	Residential use with 2,400 flats

Traffic Generated by the Proposed RCHD

4.4 In view that the TPDM does not provide trip generation rates for RCHD, the traffic generation associated with the Proposed RCHD is estimated based on trip generation rates in **Table 2.3** and traffic generation associated with the Proposed RCHD is presented in **Table 4.2**.

TABLE 4.2 TRAFFIC GENERATION OF THE PROPOSED RCHD

Item	AM Peak Hour			PM Peak Hour		
	In	Out	2-way	In	Out	2-way
*Trip Generation Rates for RCHD (pcu/hour/bed) from **Table 2.3***						
RCHD	0.0909	0.0606	NA	0.0303	0.0303	NA
Traffic Generation of Proposed RCHD (pcu/hour)						
RCHD: 60 beds	**6**	**4**	**10**	**2**	**2**	**4**

4.5 **Table 4.2** shows that the total 2-way traffic generated by the Proposed RCHD is only 10 and 4 pcu/hour (2-way) during the AM and PM peak hours respectively.

2031 Traffic Flows

4.6 Year 2031 traffic flows for the following cases are derived:

2031 without the Proposed RCHD [A]	*= (i)2031 traffic flows derived with reference to BDTM + (ii) the planned / committed developments in the vicinity*
2031 with the Proposed RCHD [B]	*= [A] + (iii) Traffic generated by the Proposed RCHD (Table 4.2)*

4.7 The 2031 peak hour traffic flows for the cases without and with the Proposed RCHD, are shown in **Figures 4.1 - 4.2**, respectively.

2031 Junction Operational Performance

4.8 Year 2031 capacity analysis for the cases without and with the Proposed RCHD are summarised in **Table 4.3** and detailed calculations are found in the **Appendix 1**.

TABLE 4.3 2031 JUNCTION OPERATIONAL PERFORMANCE

Ref.	Junction	Type of Junction / Parameter[(1)]	Without the Proposed RCHD		With the Proposed RCHD	
			AM Peak	PM Peak	AM Peak	PM Peak
J1	Tai Po Road – Tai Po Kau / Access road to Redland Garden	Priority / DFC	0.032	0.023	0.032	0.023
J2	Tai Po Road – Tai Po Kau / Access road to Trackside Villas	Priority / DFC	0.088	0.046	0.088	0.046
J3	Tai Po Road near Yung Yi Road	Signalised / RC	29%	>100%	29%	>100%
J4	Tai Po Road – Yuen Chau Tsai / Yung Yi Road	Priority / DFC	0.448	0.220	0.450	0.221
J5	Tai Po Road – Yuen Chau Tsai / slip road to Tolo Highway Northbound	Priority / DFC	0.741	0.683	0.784	0.685

4.9 **Table 4.3** shows that the junctions operate with capacities during the AM and PM peak hours for the cases without and with the Proposed RCHD.

5.0 PEDESTRIAN ASSESSMENT

Location of Surveyed Footpaths

5.1 The pedestrian assessment is undertaken for footpaths likely used by staff and visitors of the Proposed RCHD, which lead to the nearest bus stops including: (1) Chateau Royale Westbound (towards Tai Po), and (2) Chateau Royale Eastbound (towards Shatin). These bus stops are located some 50m or 1 minutes' walk and 150m or 2 minutes' walk respectively. The pedestrian connectivity between the Proposed RCHD and the nearest bus stops (1) and (2) is shown in **Figure 5.1** and the location of the surveyed footpaths is shown in **Figure 5.2**.

Estimation of Future Pedestrian Flows

5.2 The year 2031 pedestrian flow is estimated based on the following:

(i) Existing pedestrian flows;
(ii) Estimated annual pedestrian growth rates from 2023 to 2031; and
(iii) Pedestrian generated by the Proposed RCHD.

Existing Pedestrian Flows

5.3 To quantify the existing pedestrian flows using the footpaths presented in **Figure 5.2**, pedestrian count was conducted on Wednesday, 8 November 2023 during the AM and PM peak periods. The existing peak two-way pedestrian flows, which are obtained from the pedestrian counts, are presented in **Figure 5.3**.

Estimated Annual Pedestrian Growth Rates from 2023 to 2031

5.4 The (a) 2019 – based Territorial Population and Employment Data Matrix ("TPEDM") data produced by Planning Department for Tai Po District, and (b) Hong Kong Population Projection 2022 – 2046, published by Census and Statistics Department are summarised in **Tables 5.1 and 5.2**.

TABLE 5.1 2019-BASED TPEDM DATA FOR TAI PO DISTRICT

Item	TPEDM Estimation / Projection			Annual Growth Rate		
	2019	2026	2031	2019 to 2026	2026 to 2031	2019 to 2031
Population	250,050	285,850	263,800	1.9%	-1.6%	0.5%
Employment	86,750	83,700	78,550	-0.5%	-1.3%	-0.8%
Total	336,800	369,550	342,350	**1.3%**	-1.5%	0.1%

TABLE 5.2 HONG KONG POPULATION PROJECTIONS 2023 – 2031

Whole Territory Population		Annual Growth Rate
Year 2023	Year 2031	2023 to 2031
7,498,100	7,820,200	**0.5%**

5.5 **Table 5.1** shows that the highest annual growth rate for total population and employment is 1.3% and **Table 5.2** shows that the annual growth rate from 2023 to 2031 is +0.5%. To be conservative, the growth rate of +1.3% per annum is adopted for the pedestrian growth between 2023 and 2031.

Pedestrian Generated by the Proposed RCHD

5.6 The pedestrian generated by the Proposed RCHD is calculated based on the pedestrian generation rates at the Existing RCHD found in **Table 5.3**.

TABLE 5.3 PEDESTRIAN GENERATION OF PROPOSED RCHD

Item	AM Peak		PM Peak	
	In	Out	In	Out
Existing RCHD (33 beds)				
Observed Pedestrian Generation (ped/hr) [a]	6	2	2	3
Pedestrian Generation Rates (ped/hr/bed) [b] = [a] / 33	0.1818	0.0606	0.0606	0.0909
Proposed RCHD (60 beds)				
Pedestrian Generation (ped/hr) [c] = [b] x 60	**11**	**4**	**4**	**6**

5.7 **Table 5.3** shows that the RCHD is expected to generate 15 and 10 ped/hr (2-way) during the AM and PM peak hours respectively.

2031 Pedestrian Flows

5.8 The 2031 pedestrian flows without and with the Proposed RCHD are derived using the following method:

2031 without the Proposed RCHD [A]	*= (i) existing pedestrian flows + (ii) estimated annual pedestrian growth rates from 2023 to 2031*
2031 with the Proposed RCHD [B]	*= [A] + (iii) pedestrian generated by the Proposed RCHD **(Table 5.3)***

5.9 The 2031 pedestrian flows without and with the Proposed RCHD are presented in **Figures 5.4** and **5.5**.

Level-of-Service

5.10 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 5.4**.

TABLE 5.4 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

5.11 The effective width of the surveyed footpaths is presented in **Table 5.5**.

TABLE 5.5 EFFECTIVE WIDTH OF THE SURVEYED FOOTPATHS

Location		**Footpath Width (m)**	**Effective Width (m)**
Tai Po Road – Tai Po Kau between Yung Yi Road and access road to Trackside Villas	Southern footpath	2.8	1.8
	Northern footpath	1.8	0.8

5.12 The 2031 weekday LOS at the surveyed footpaths for the cases without and with the Proposed RCHD is presented in **Table 5.6**.

TABLE 5.6 2031 LOS WITHOUT AND WITH THE PROPOSED RCHD

Location		**Peak Period**	**Year 2031 without the Proposed RCHD**			**Year 2031 with the Proposed RCHD**		
			Ped / hr	**Ped / min/m**	**LOS**	**Ped / hr**	**Ped / min/m**	**LOS**
Tai Po Road – Tai Po Kau between Yung Yi Road and access road to Trackside Villas	Southern footpath	AM	85	0.8	A	93	0.9	A
		PM	120	1.1	A	125	1.2	A
	Northern footpath	AM	76	1.6	A	83	1.8	A
		PM	67	1.4	A	72	1.5	A

5.13 **Table 5.6** shows that the surveyed footpaths operate with LOS A for the case without and with the Proposed RCHD. The Proposed RCHD has no impact to the footpaths assessed.

Impact on Utilisation of Public Transport Services

5.14 The impact of the Proposed RCHD to the nearest bus stops (1) and (2) is assessed. The results of utilisation survey are presented in **Tables 5.7 and 5.8**.

TABLE 5.7 RESULTS OF THE UTILISATION SURVEY OF PUBLIC TRANSPORT SERVICES AT BUS STOP (1) CHATEAU ROYALE WESTBOUND (TOWARDS TAI PO)

Route[1]	No. of Vehicle	No. of Passenger on Vehicle[2] [a]	Capacity [b]	Vacant [b] – [a]	Occupancy [a] / [b]
AM Peak					
KMB 72	2	95	272	177	35.0%
KMB 72A	2	165	272	107	60.7%
KMB 73A	2	95	272	177	35.0%
KMB 74A	1	28	81	53	34.7%
GMB 28K	10	148	190	42	78.0%
Total	**17**	**531**	**1087**	**556**	**48.9%**
PM Peak					
KMB 72	4	190	544	354	35.0%
KMB 72A	2	165	272	107	60.7%
KMB 73A	2	95	272	177	35.0%
KMB 74A	1	28	81	53	34.7%
GMB 28K	10	143	190	47	75.4%
Total	**19**	**621**	**1359**	**738**	**45.7%**

Note: [1] KMB – Kowloon Motor Bus GMB – Green Minibus
[2] Passenger was counted at the moment before the bus arrived

TABLE 5.8 RESULTS OF THE UTILISATION SURVEY OF PUBLIC TRANSPORT SERVICES AT BUS STOP (2) CHATEAU ROYALE EASTBOUND (TOWARDS SHATIN)

Route[1]	No. of Vehicle	No. of Passenger on Vehicle[2] [a]	Capacity [b]	Vacant [b] – [a]	Occupancy [a] / [b]
AM Peak					
KMB 72	4	290	544	254	53.4%
KMB 72A	2	165	272	107	60.7%
KMB 73A	2	165	272	107	60.7%
KMB 74A	1	69	81	12	85.3%
GMB 28K	10	162	190	28	85.0%
Total	**19**	**851**	**1359**	**508**	**62.6%**
PM Peak					
KMB 72	3	218	408	190	53.4%
KMB 72A	2	165	272	107	60.7%
KMB 73A	2	165	272	107	60.7%
KMB 74A	1	69	81	12	85.3%
GMB 28K	10	145	190	45	76.3%
Total	**18**	**762**	**1223**	**461**	**62.3%**

Note: [1] KMB – Kowloon Motor Bus GMB – Green Minibus
[2] Passenger was counted at the moment before the bus arrived

5.15 To be conservative, it is assumed all pedestrians generated by the Proposed RCHD in **Table 5.3** use public transport services and the result of the occupancy with the Proposed RCHD is presented in **Table 5.9**.

TABLE 5.9 THE UTILISATION OF THE PUBLIC TRANSPORT SERVICES FOR THE CASE WITH THE PROPOSED RCHD

Bus Stop	Occupancy			
	Existing		With the Proposed RCHD	
	AM Peak	PM Peak	AM Peak	PM Peak
(1) Chateau Royale Westbound (towards Tai Po)	48.9%	45.7%	49.6%	46.1%
(2) Chateau Royale Eastbound (towards Shatin)	62.6%	62.3%	63.1%	62.7%

5.16 **Table 5.9** shows that the public transport service have capacity to accommodate the passenger demand generated by the Proposed RCHD.

6.0 CONCLUSION

6.1 The Existing RCHD for HOLF is located at 7 Castle Peak Road in Kwu Tung. Due to the implementation of the KTN new development area, the Existing RCHD will be relocated to the Former Fish Marketing Organization Tai Po Primary School, which is now vacant. Compared with the Existing RCHD, which has 33 beds, the Proposed RCHD will have 60 beds.

6.2 Manual classified counts were conducted at surveyed junctions located in the vicinity of the Proposed RCHD in order to establish the peak hour traffic flows. Currently, these junctions operate with capacities during the AM and PM peak hours.

6.3 At present, there is no vehicular access to the Subject Site, a vehicular access to Proposed RCHD from Tai Po Road – Tai Po Kau will be constructed by CEDD, by the end of 2024.

6.4 The Proposed RCHD has 6 car parking spaces and 1 multi-use bay for LGV and light bus. These are provided based on the provision rate of the Existing RCHD and the operational need. Swept path analysis was conducted to ensure that all vehicles could enter and leave the Subject Site and their respective space / bay with ease.

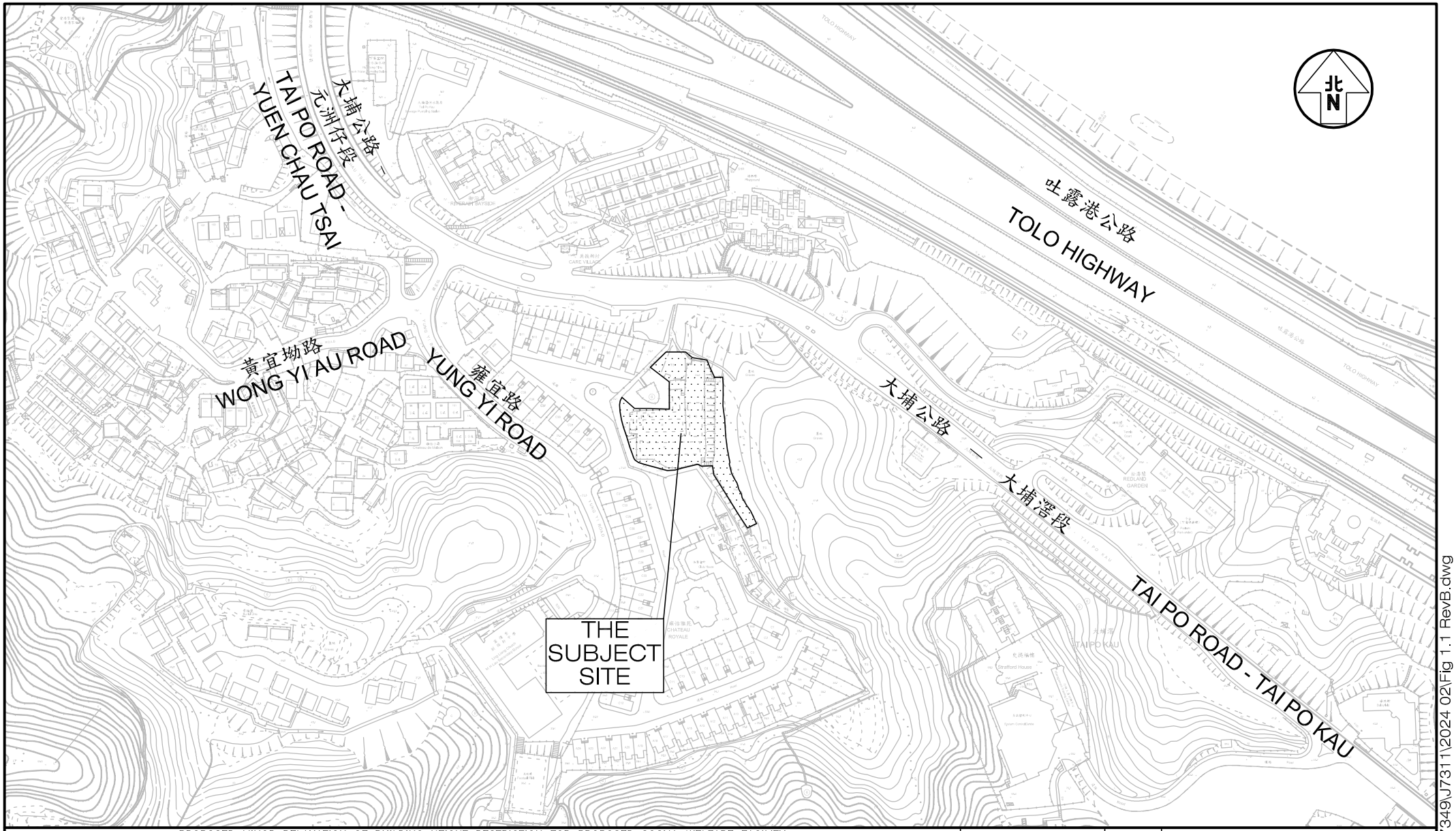
6.5 The Proposed RCHD is expected to be completed in 2027. The 2031 junctions analysed are expected to operate with capacities during the peak hours for the case without and with the Proposed RCHD.

6.6 The pedestrian assessment conducted found that the surveyed footpaths would operate with LOS A in 2031 for the case without and with the Proposed RCHD. Hence, the Proposed RCHD has no adverse impact to the footpaths assessed.

6.7 The impact of the Proposed RCHD was assessed for the nearest bus stops (1) Chateau Royale Westbound (towards Tai Po) and (2) Chateau Royale Eastbound (towards Shatin). It was found that the public transport service observing these bus stops have capacity to accommodate the passenger demand generated by the Proposed RCHD.

6.8 It is concluded that the Proposed RCHD will result in no adverse traffic impact to the surrounding road network. From traffic engineering grounds, the Proposed RCHD is acceptable.

Figures



Project Title	PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO	J7311	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 : 3000 / Date 01 MAR 2024

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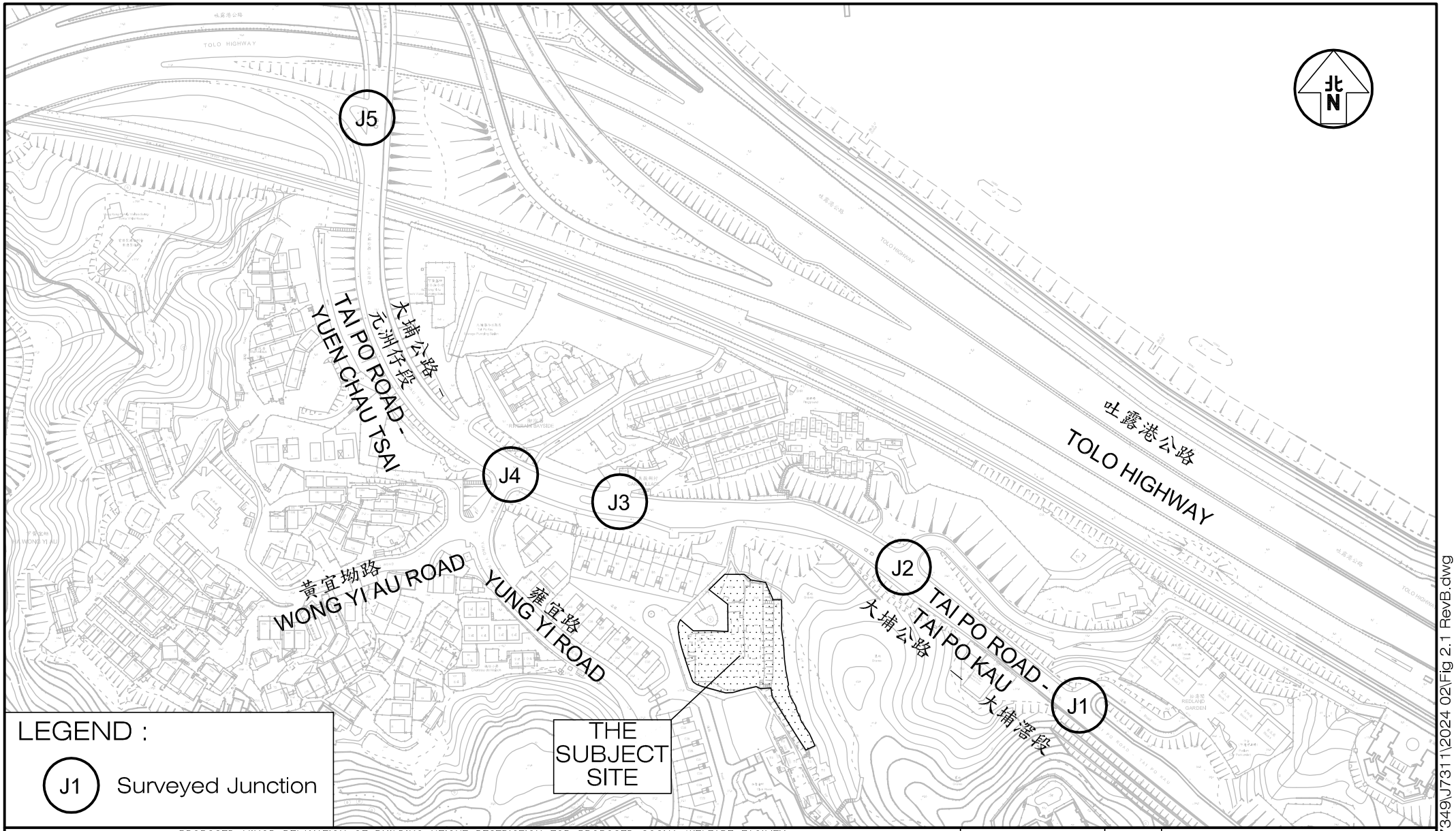

LEGEND :

J1 Surveyed Junction

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Figure Title	LOCATION OF SURVEYED JUNCTIONS		Designed by L C H / Drawn by N C M / Checked by K C	
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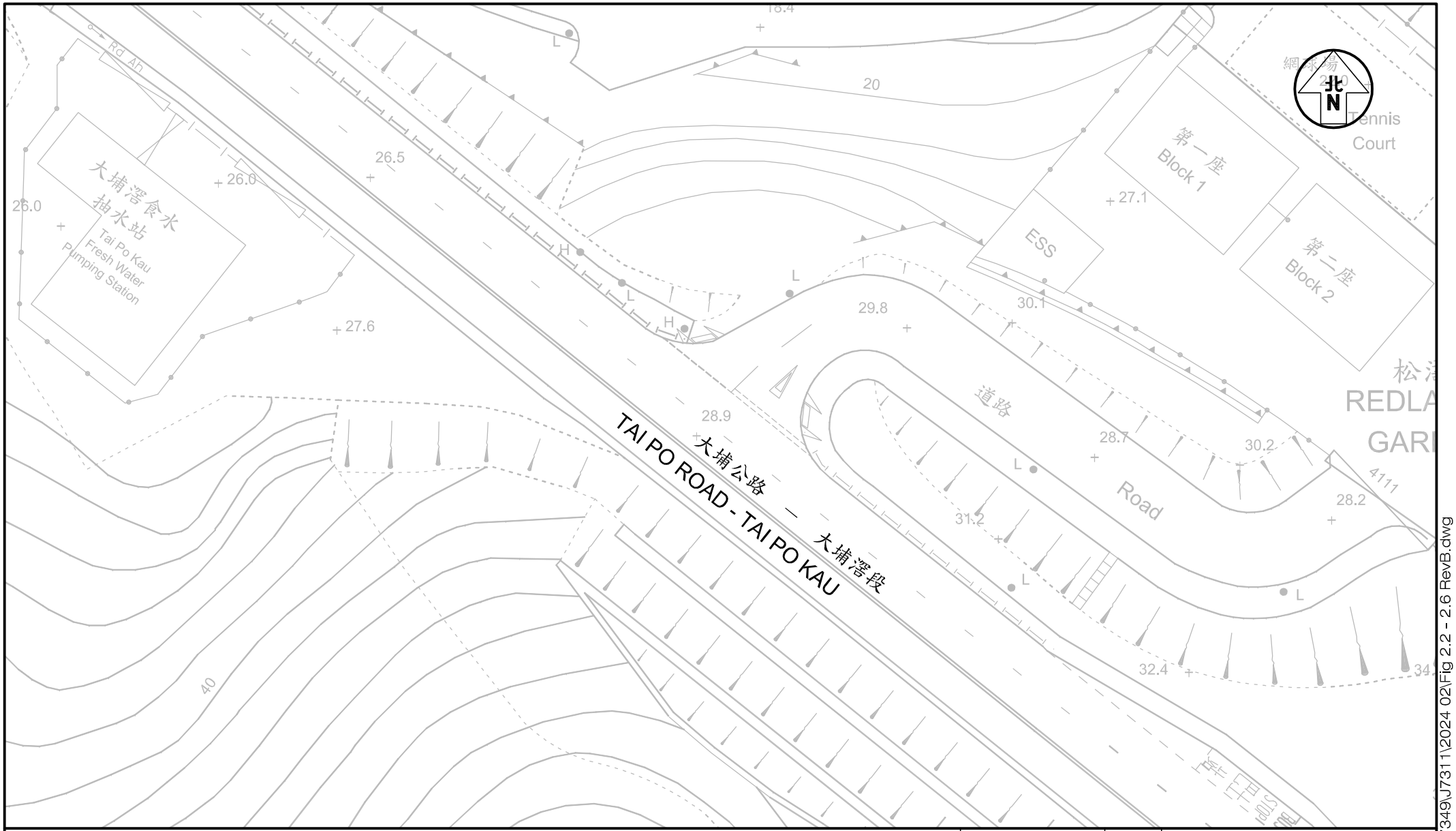

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Figure Title	LAYOUT OF JUNCTION OF TAI PO ROAD – TAI PO KAU / ACCESS ROAD TO REDLAND GARDEN		Designed by C Y Y / Drawn by N C M / Checked by K C / Scale in A4 1 : 500 / Date 01 MAR 2024

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Figure Title	LAYOUT OF JUNCTION OF TAI PO ROAD – TAI PO KAU / ACCESS ROAD TO TRACKSIDE VILLAS		Designed by C Y Y / Drawn by N C M / Checked by K C / Scale in A4 1 : 500 / Date 01 MAR 2024

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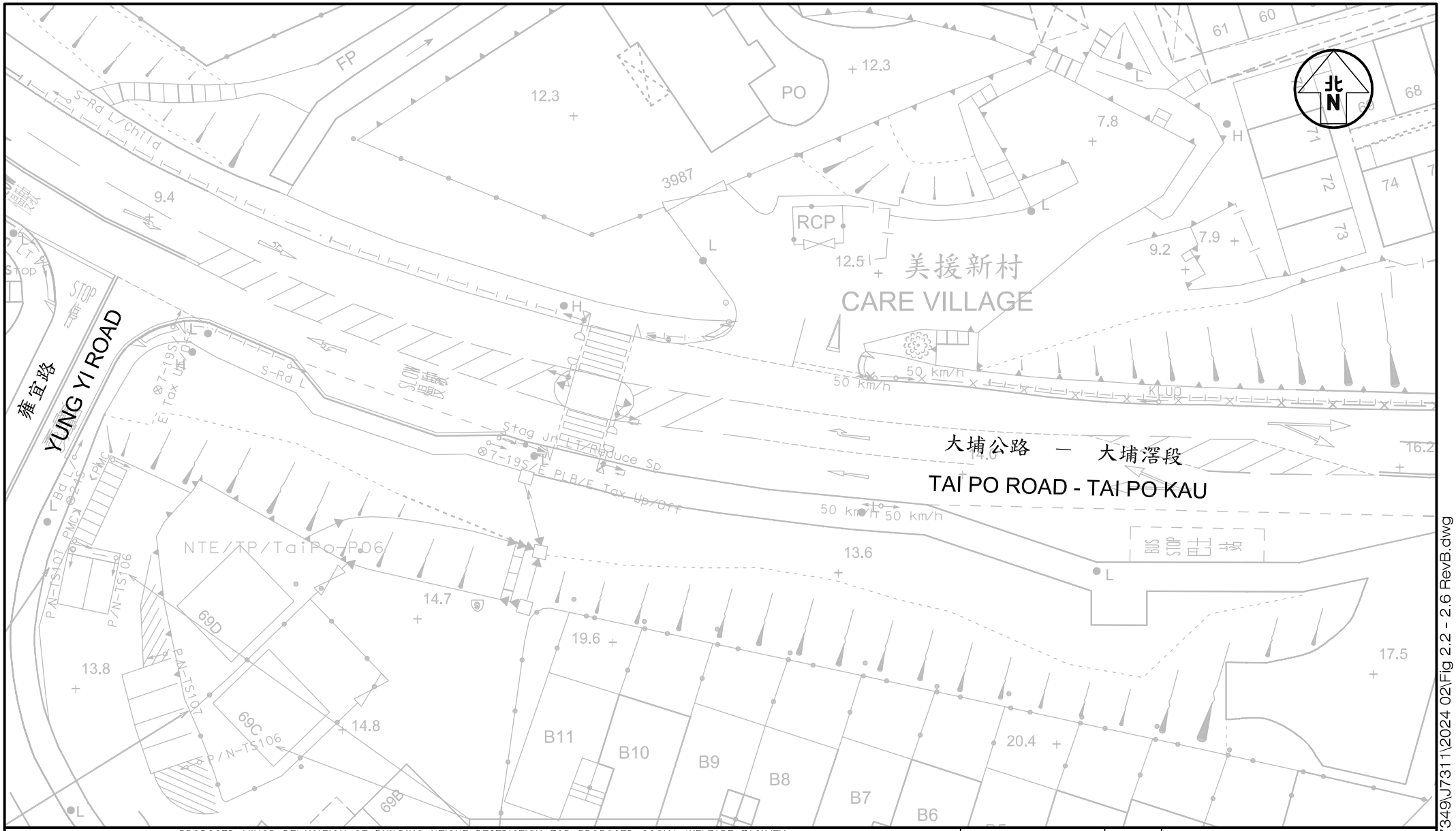

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Figure Title	LAYOUT OF JUNCTION OF TAI PO ROAD NEAR YUNG YI ROAD	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 500 / Date 01 MAR 2024

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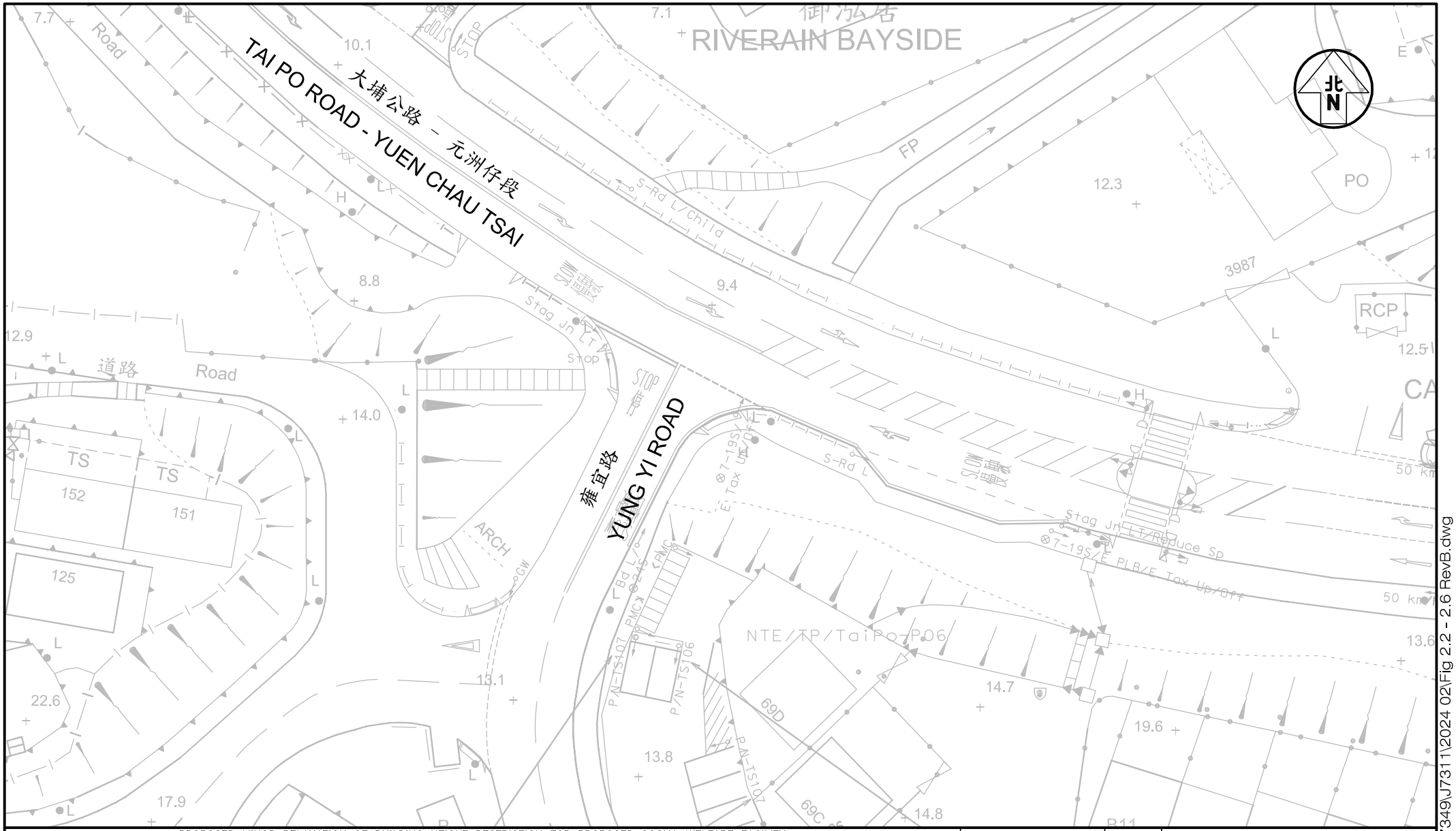

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Figure Title	LAYOUT OF JUNCTION OF TAI PO ROAD – YUEN CHAU TSAI / YUNG YI ROAD	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 500 / Date 01 MAR 2024

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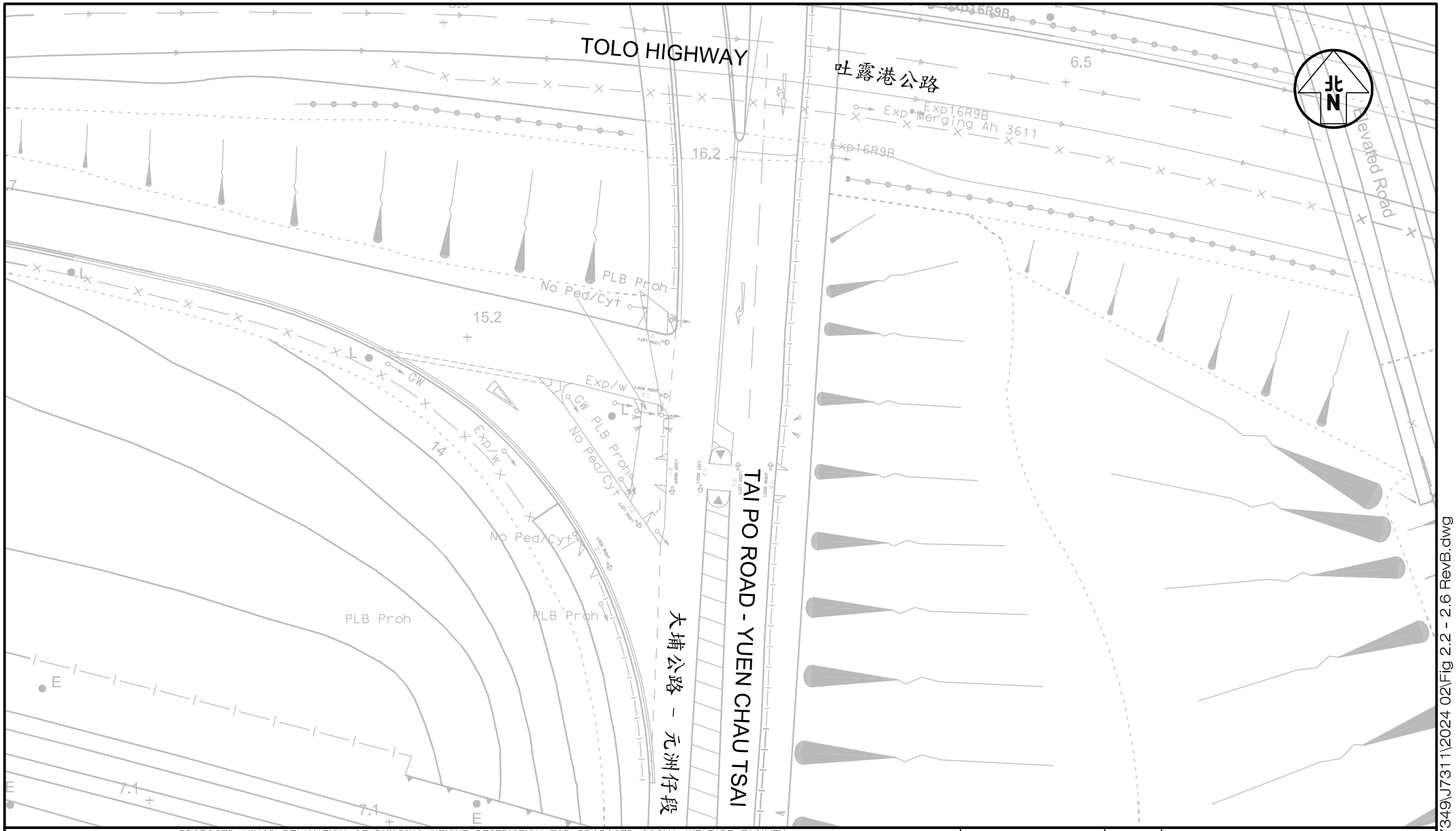

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Figure Title	LAYOUT OF JUNCTION OF TAI PO ROAD – YUEN CHAU TSAI / SLIP ROAD TO TOLO HIGHWAY NORTHBOUND	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 500 / Date 01 MAR 2024

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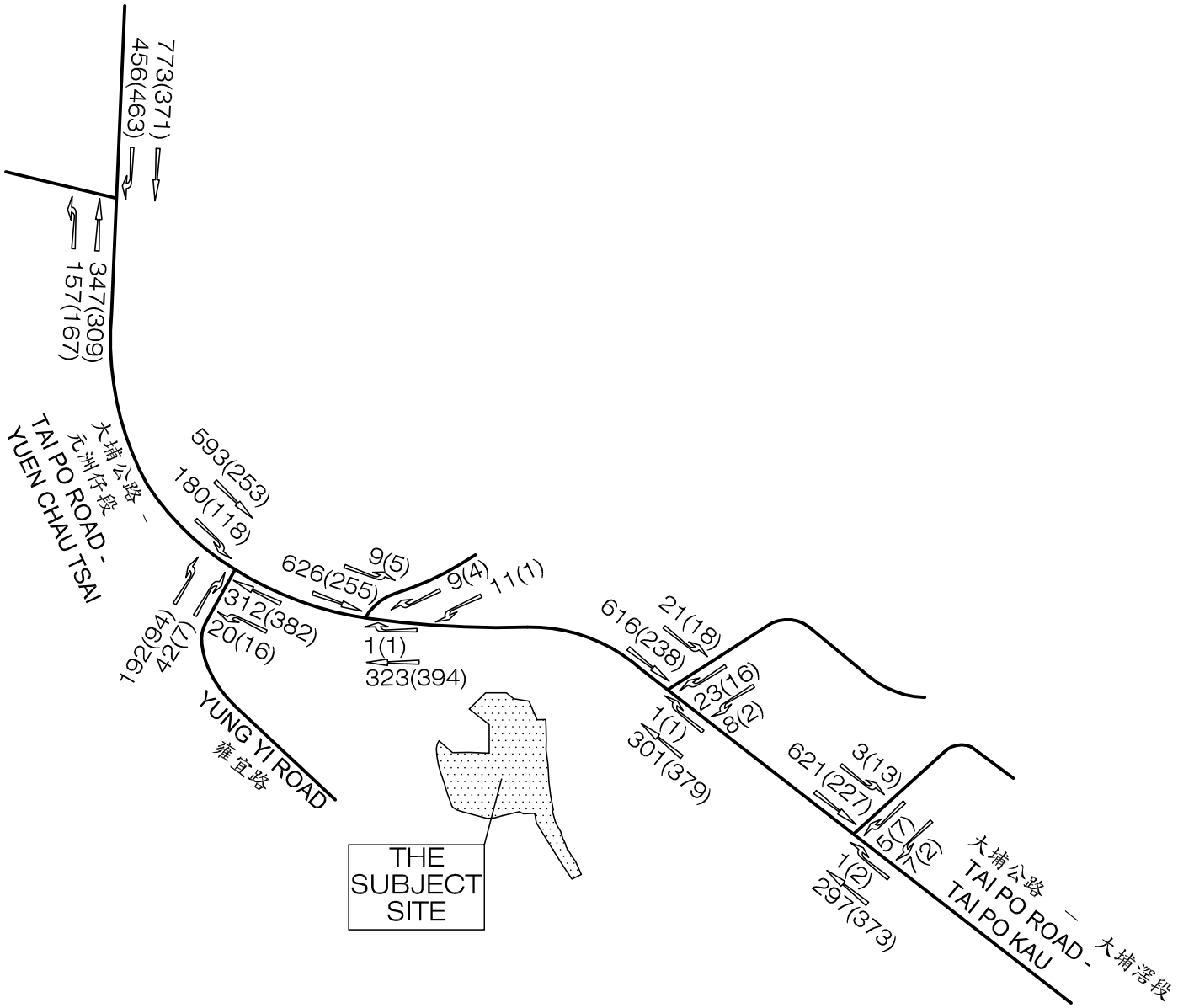

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Figure Title	EXISTING PEAK HOUR TRAFFIC FLOWS	Designed by A Y T / Drawn by N C M / Checked by K C	Scale in A4 N.T.S. / Date 01 MAR 2024

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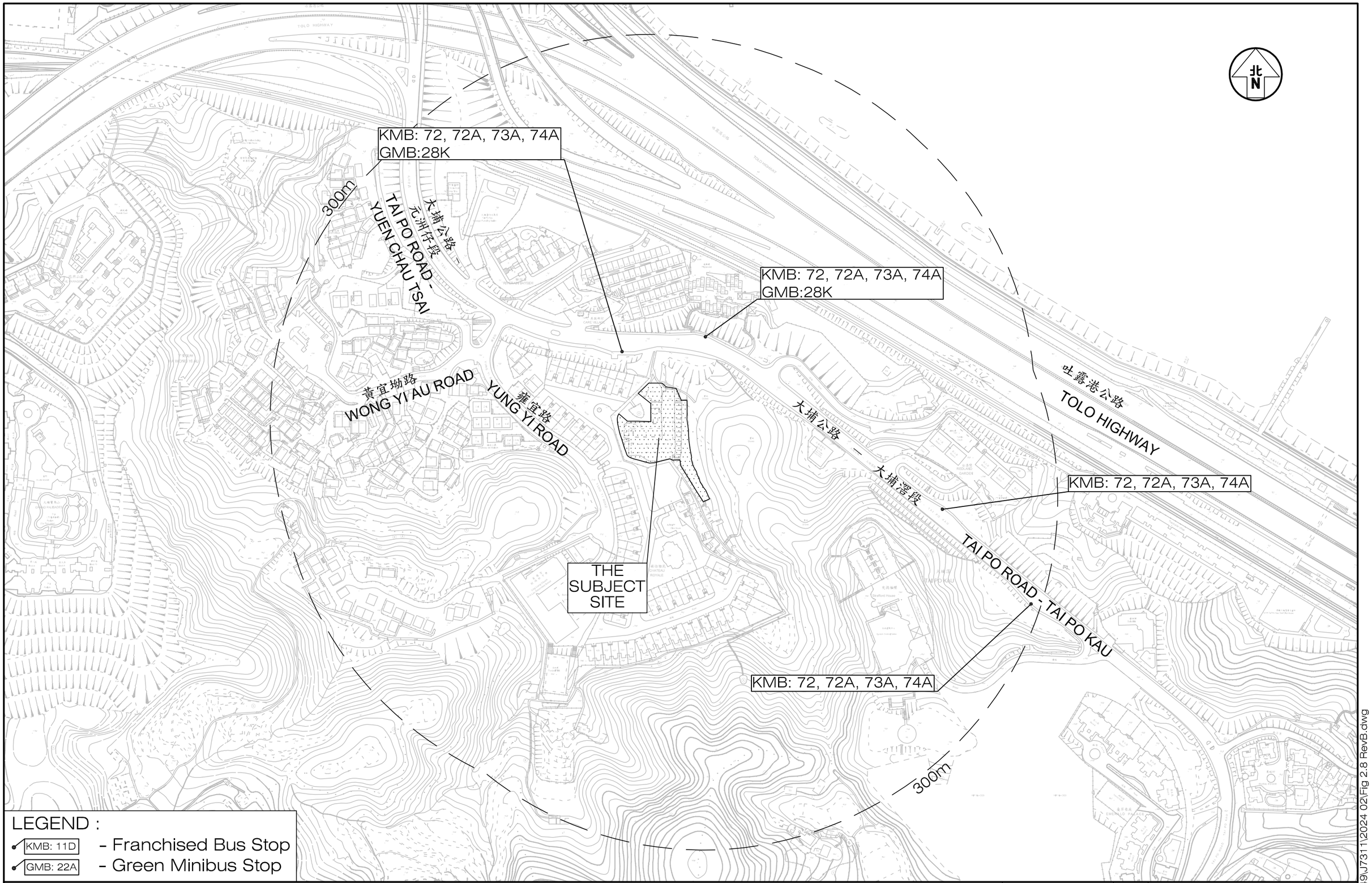

Project Title

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Figure Title

THE PUBLIC TRANSPORT SERVICES PROVIDED IN THE VICINITY OF THE SUBJECT SITE

Figure No.	Revision
2.8	B

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A Y T	N C M	K C

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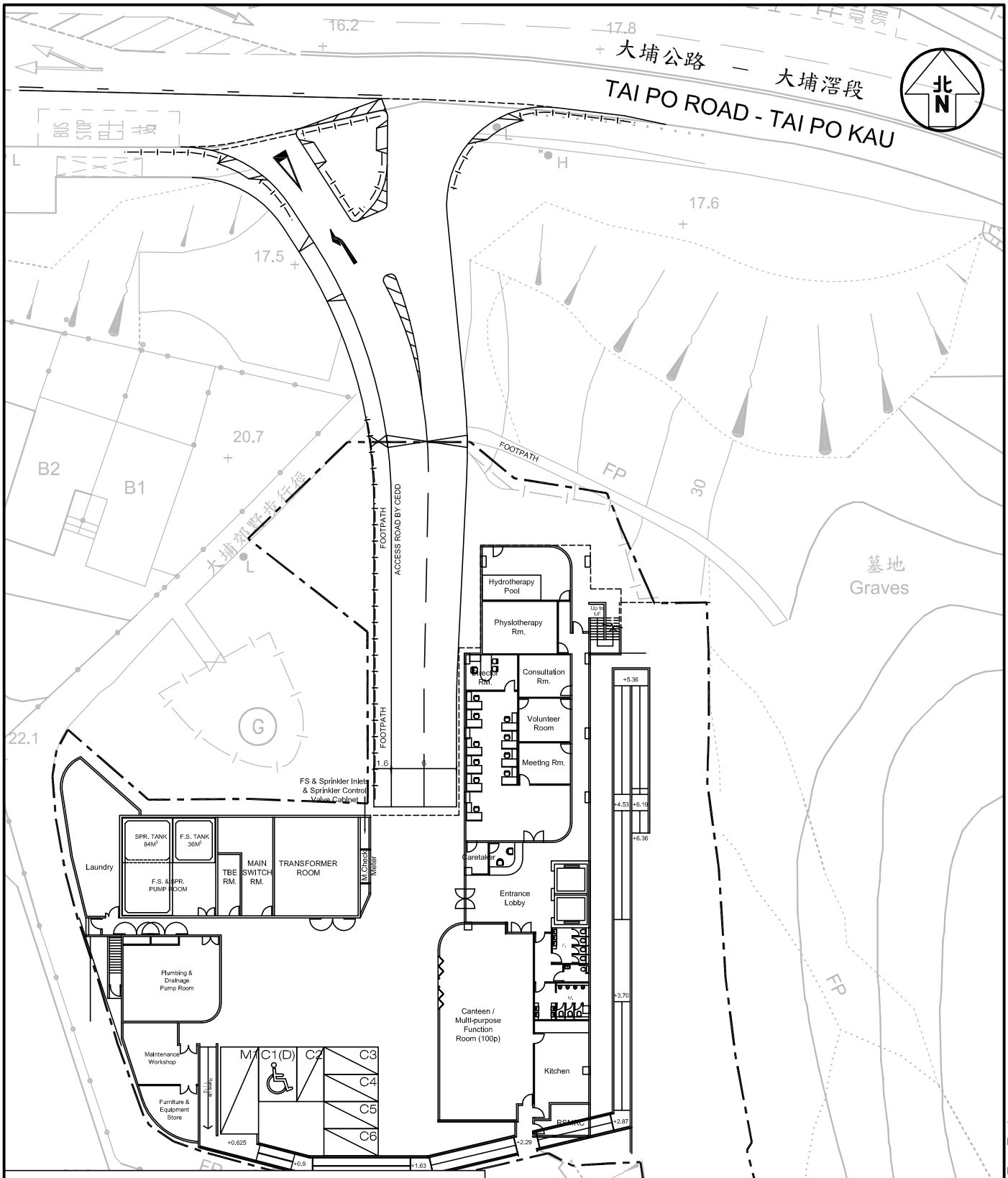

LEGEND :

- M1 — Mutli-use bay for LGV and light bus @8m(L) X 3.5m(W) X 3.6m(H)
- C1(D) — Accessible car parking space @5m(L) X 3.5m(W) X 2.4m(H)
- C2 — Private car parking space @5m(L) X 2.5m(W) X 2.4m(H)

Project Title
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Job No.	Figure No.			Scale in A4
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Figure Title

G/F LAYOUT PLAN

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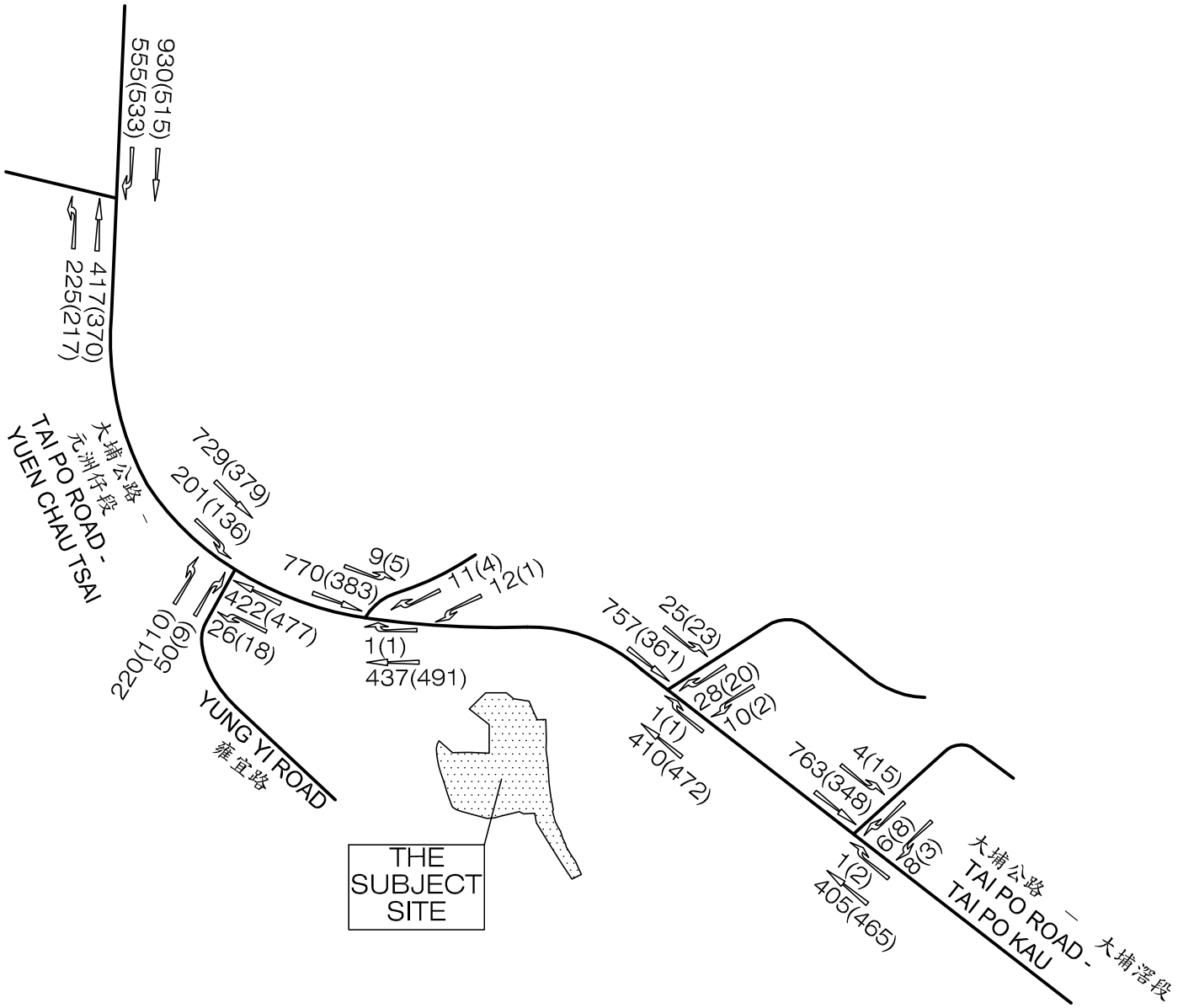

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Figure Title	YEAR 2031 PEAK HOUR TRAFFIC FLOWS WITHOUT THE PROPOSED RCHD	Designed by A Y T / Drawn by N C M / Checked by K C	Scale in A4 N.T.S. / Date 01 MAR 2024

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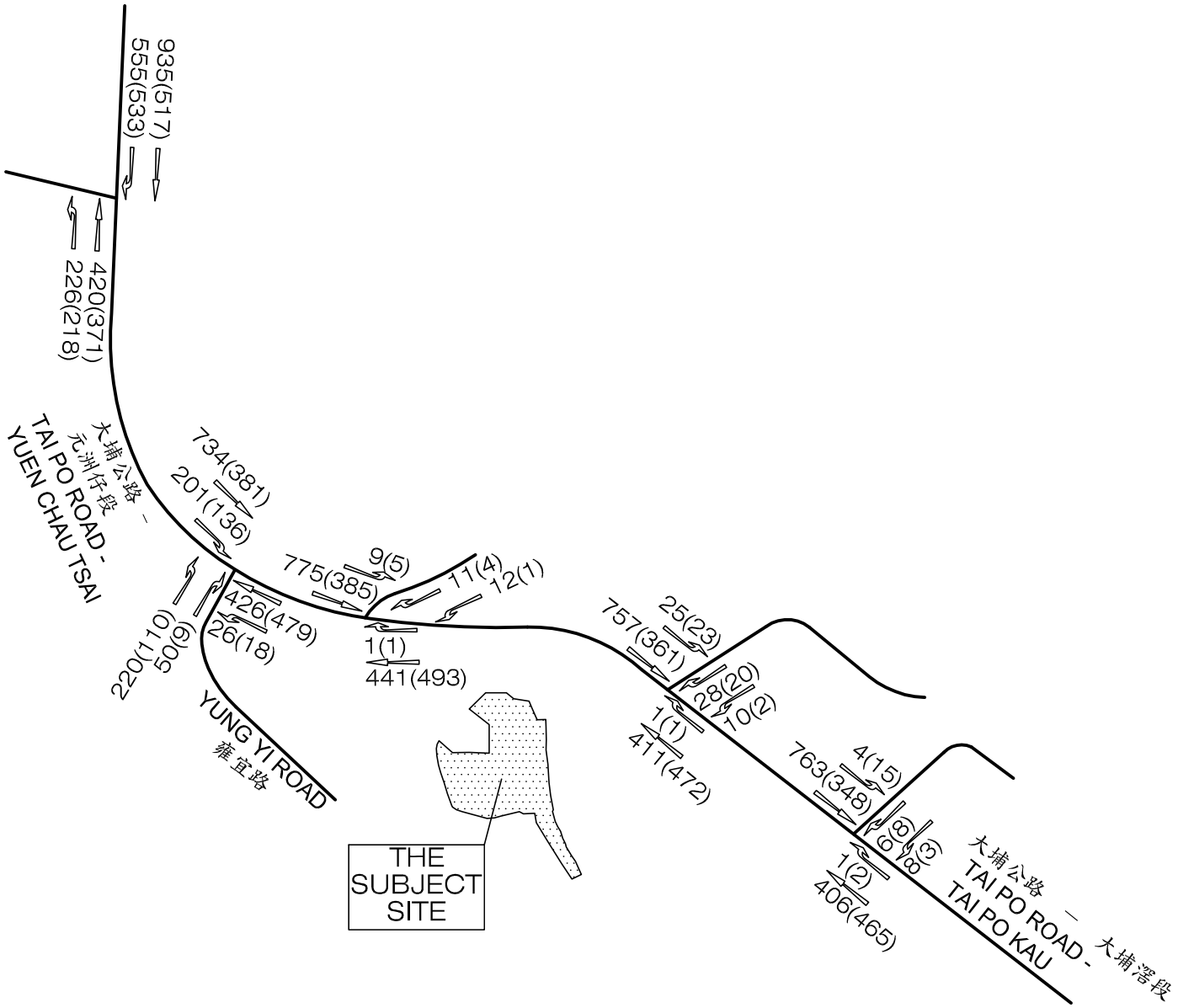

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Figure Title	YEAR 2031 PEAK HOUR TRAFFIC FLOWS WITH THE PROPOSED RCHD	Designed by A Y T / Drawn by N C M / Checked by K C	Scale in A4 N.T.S. / Date 01 MAR 2024

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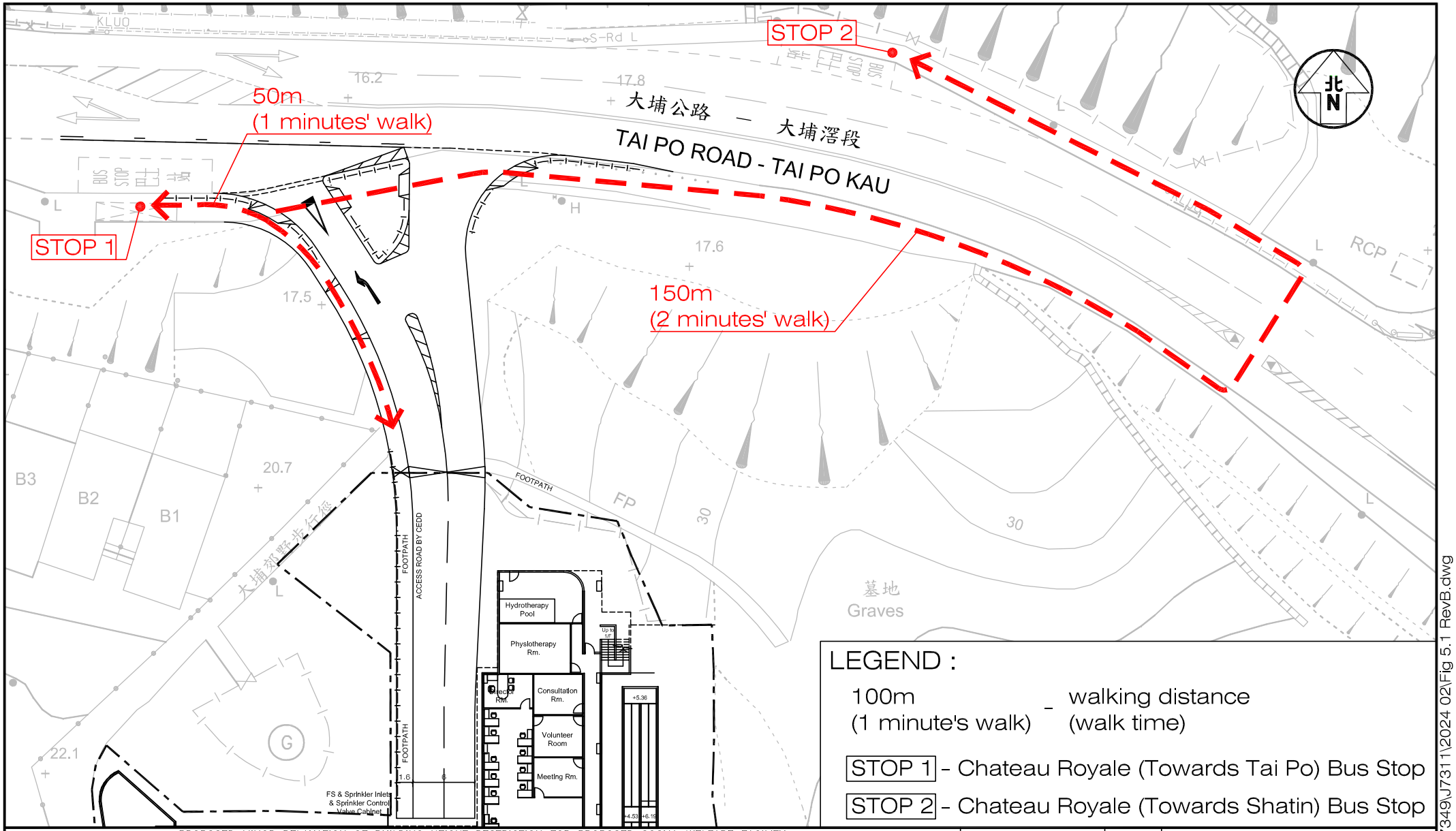

Project Title

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J7311

Figure Title

PEDESTRIAN CONNECTIVITY BETWEEN THE PROPOSED RCHD AND THE NEAREST BUS STOPS

Figure No.	Revision
5.1	B

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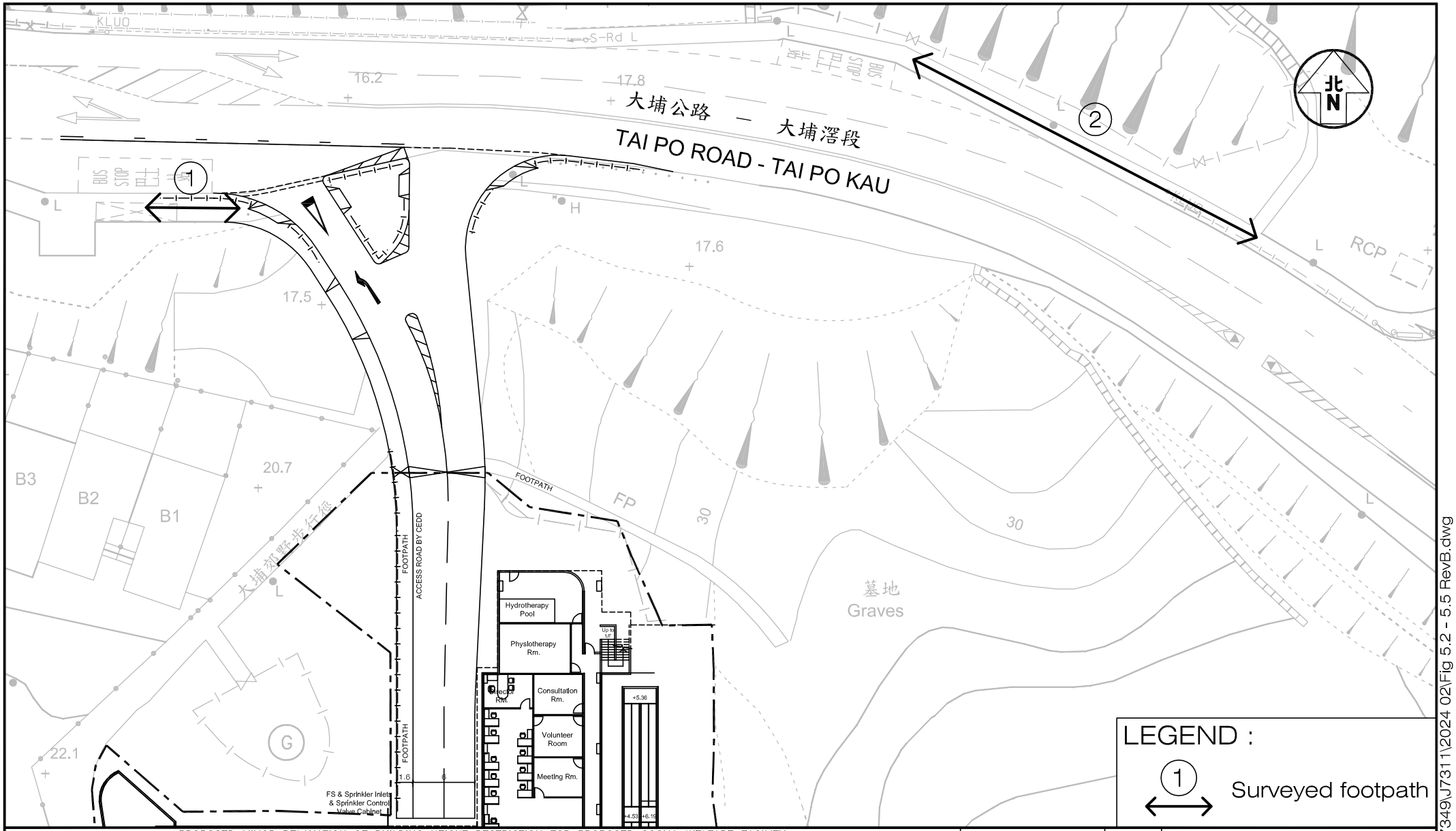

Project Title	PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO	J7311	Figure No. 5.2 / Revision B
Figure Title	LOCATION OF SURVEYED FOOTPATHS	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 500 / Date 01 MAR 2024

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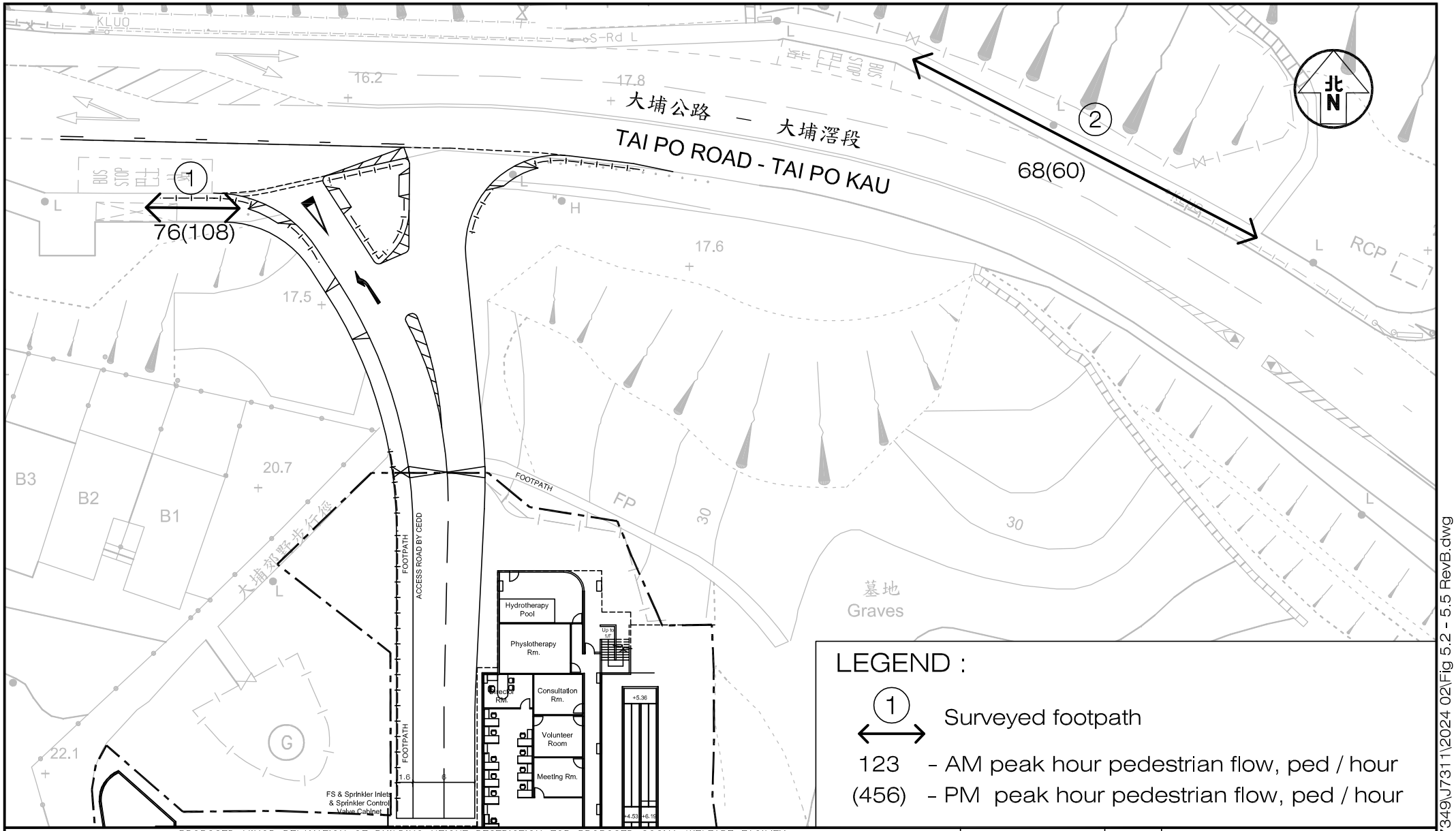
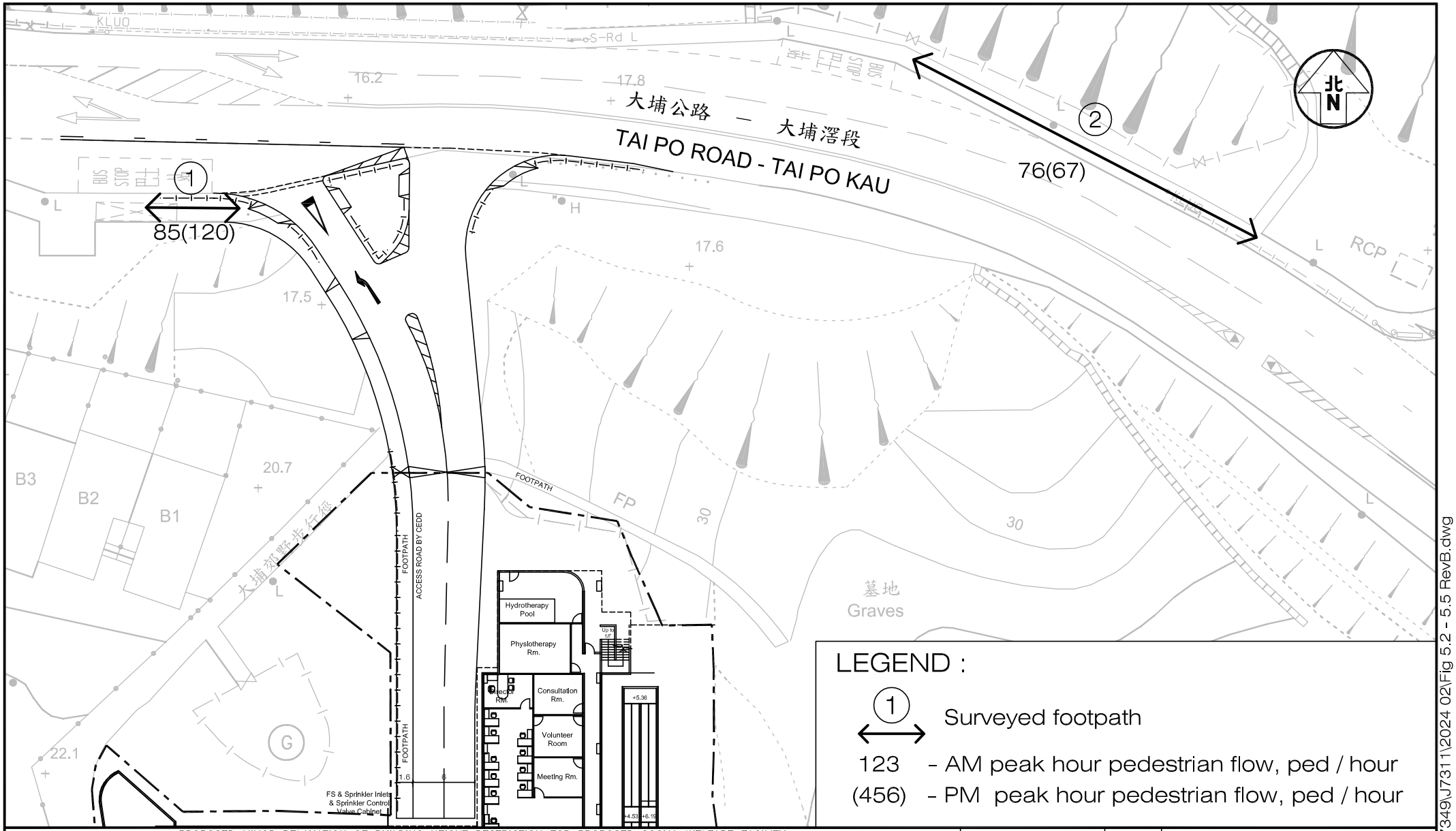


Project Title	PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO	J7311	Figure No. 5.3 / Revision B
Figure Title	EXISTING PEAK PEDESTRIAN FLOWS	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 500 / Date 01 MAR 2024

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\J7300-J7349\J7311\2024 02\Fig 5.2 - 5.5 RevB.dwg



LEGEND :

① Surveyed footpath

123 - AM peak hour pedestrian flow, ped / hour

(456) - PM peak hour pedestrian flow, ped / hour

Project Title	PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO
	J7311
Figure No.	5.4
Revision	B
Figure Title	YEAR 2031 PEAK HOUR PEDESTRIAN FLOWS WITHOUT THE PROPOSED RCHD
Designed by	C Y Y
Drawn by	N C M
Checked by	K C
Scale in A4	1 : 500
Date	01 MAR 2024

CKM Asia Limited
Traffic and Transportation Planning Consultants
21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong
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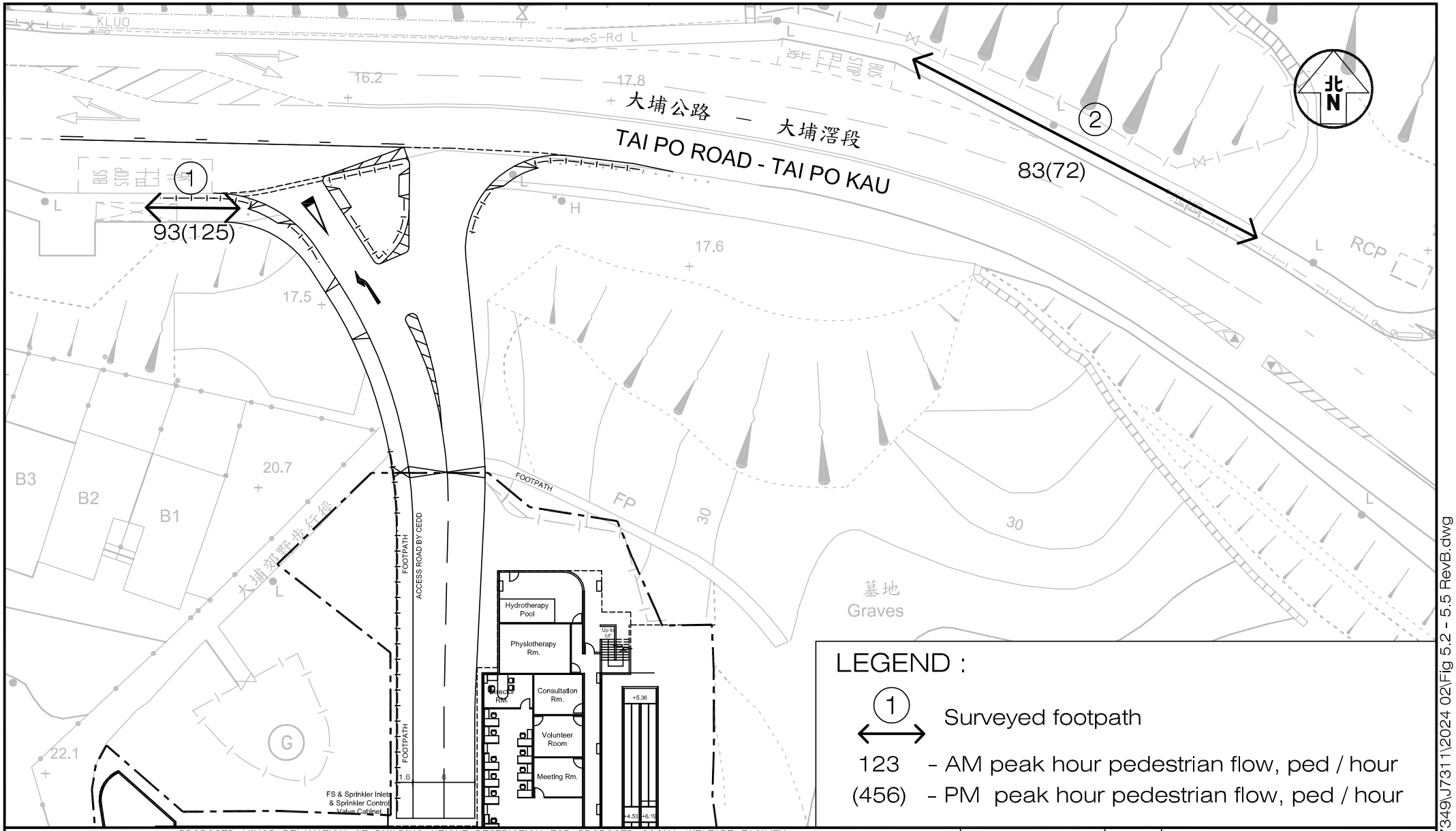
Email : mail@ckmasia.com.hk

T:\JOB\J7300-J7349\J7311\2024 02\Fig 5.2 - 5.5 RevB.dwg



LEGEND :

① Surveyed footpath

123 - AM peak hour pedestrian flow, ped / hour

(456) - PM peak hour pedestrian flow, ped / hour

Project Title	PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO	J7311	Figure No. 5.5 / Revision B
Figure Title	YEAR 2031 PEAK HOUR PEDESTRIAN FLOWS WITH THE PROPOSED RCHD	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 500 / Date 01 MAR 2024

CKM Asia Limited
Traffic and Transportation Planning Consultants
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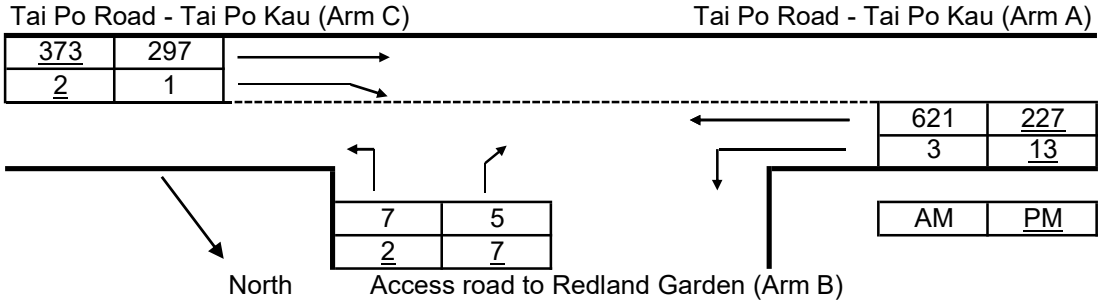
Appendix 1 – Calculation

Priority Junction Analysis

Junction:	Tai Po Road - Tai Po Kau / Access road to Redland Garden				
Design Year:	2023	Job Number:	J7311	Date:	11 January 2024
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	10.20	V-rBA	30	w-BA	4.30	D	0.9049
	W-CR	0.00	V-lBA	30	w-BC	4.30	E	0.9752
			V-rBC	30	w-CB	2.20	F	0.9259
			V-rCB	200			Y	0.6481

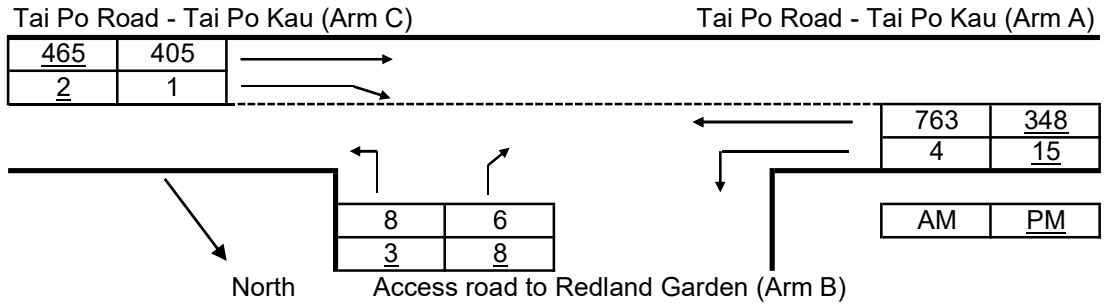
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	297	373	Q-BA	394	467
q-CB	1	2	Q-BC	583	673
q-AB	3	13	Q-CB	553	637
q-AC	621	227	Q-BAC	486	501
q-BA	5	7			
q-BC	7	2			
f	0.583	0.222			

Design Flow/Capacity Ratio	AM	PM	
C-B	0.002	0.003	
B-AC	0.025	0.018	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Tai Po Road - Tai Po Kau / Access road to Redland Garden				
Design Year:	2031	Job Number:	J7311	Date:	11 January 2024
Scenario:	Without the Proposed RCHD				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	10.20	V-rBA	30	w-BA	4.30	D	0.9049
	W-CR	0.00	V-lBA	30	w-BC	4.30	E	0.9752
			V-rBC	30	w-CB	2.20	F	0.9259
			V-rCB	200			Y	0.6481

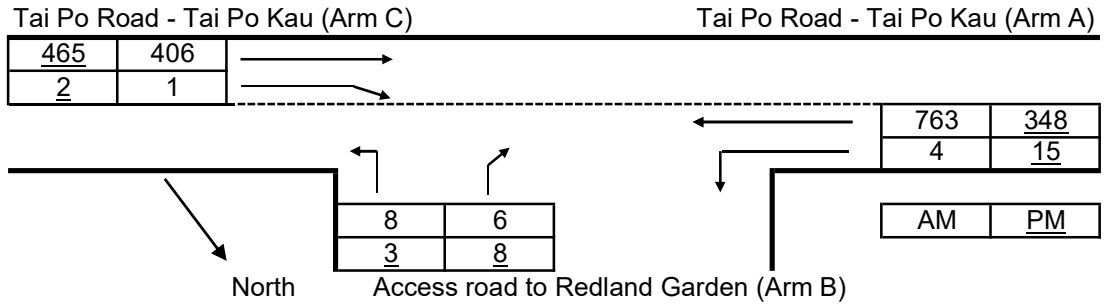
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	405	465	Q-BA	349	429
q-CB	1	2	Q-BC	551	645
q-AB	4	15	Q-CB	522	610
q-AC	763	348	Q-BAC	442	472
q-BA	6	8			
q-BC	8	3			
f	0.571	0.273			

Design Flow/Capacity Ratio	AM	PM	
C-B	0.002	0.003	
B-AC	0.032	0.023	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Tai Po Road - Tai Po Kau / Access road to Redland Garden				
Design Year:	2031	Job Number:	J7311	Date:	11 January 2024
Scenario:	With the Proposed RCHD				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	10.20	V-rBA	30	w-BA	4.30	D	0.9049
	W-CR	0.00	V-lBA	30	w-BC	4.30	E	0.9752
			V-rBC	30	w-CB	2.20	F	0.9259
			V-rCB	200			Y	0.6481

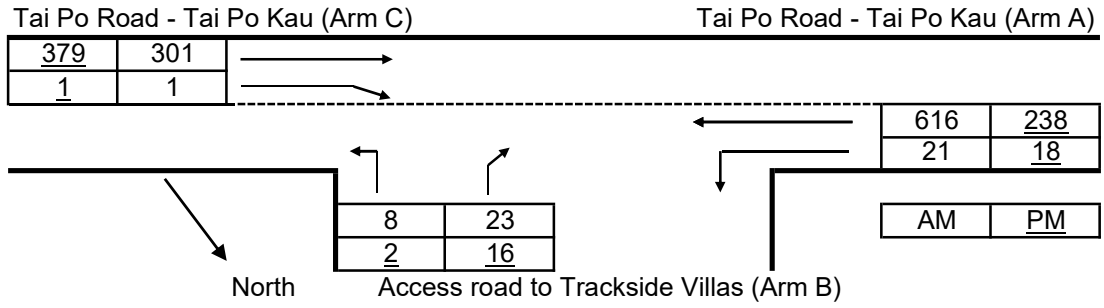
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	406	465	Q-BA	349	429
q-CB	1	2	Q-BC	551	645
q-AB	4	15	Q-CB	522	610
q-AC	763	348	Q-BAC	442	472
q-BA	6	8			
q-BC	8	3			
f	0.571	0.273			

Design Flow/Capacity Ratio	AM	PM	
C-B	0.002	0.003	
B-AC	0.032	0.023	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Tai Po Road - Tai Po Kau / Access road to Trackside Villas				
Design Year:	2023	Job Number:	J7311	Date:	11 January 2024
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	12.10	V-rBA	130	w-BA	3.90	D	0.9584
	W-CR	0.00	V-lBA	30	w-BC	3.90	E	1.0327
			V-rBC	130	w-CB	2.20	F	0.8365
			V-rCB	85			Y	0.5826

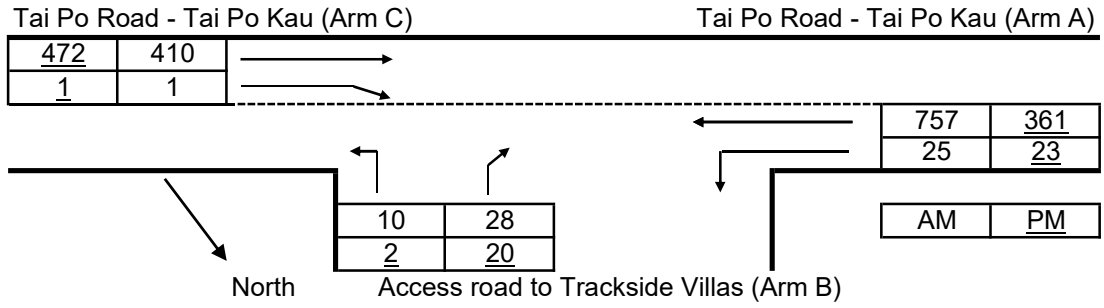
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	301	379	Q-BA	435	502
q-CB	1	1	Q-BC	633	716
q-AB	21	18	Q-CB	510	578
q-AC	616	238	Q-BAC	473	520
q-BA	23	16			
q-BC	8	2			
f	0.258	0.111			

Design Flow/Capacity Ratio	AM	PM	
C-B	0.002	0.002	
B-AC	0.065	0.035	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Tai Po Road - Tai Po Kau / Access road to Trackside Villas				
Design Year:	2031	Job Number:	J7311	Date:	11 January 2024
Scenario:	Without the Proposed RCHD				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	12.10	V-rBA	130	w-BA	3.90	D	0.9584
	W-CR	0.00	V-lBA	30	w-BC	3.90	E	1.0327
			V-rBC	130	w-CB	2.20	F	0.8365
			V-rCB	85			Y	0.5826

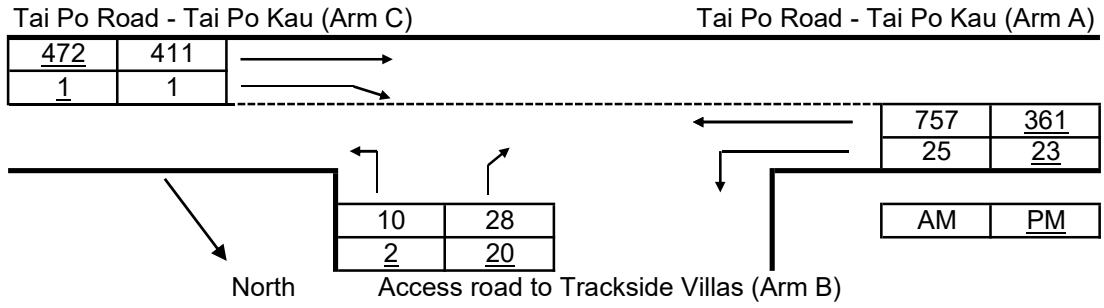
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	410	472	Q-BA	392	465
q-CB	1	1	Q-BC	601	688
q-AB	25	23	Q-CB	484	555
q-AC	757	361	Q-BAC	432	479
q-BA	28	20			
q-BC	10	2			
f	0.263	0.091			

Design Flow/Capacity Ratio	AM	PM	
C-B	0.002	0.002	
B-AC	0.088	0.046	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Tai Po Road - Tai Po Kau / Access road to Trackside Villas				
Design Year:	2031	Job Number:	J7311	Date:	11 January 2024
Scenario:	With the Proposed RCHD				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	12.10	V-rBA	130	w-BA	3.90	D	0.9584
	W-CR	0.00	V-lBA	30	w-BC	3.90	E	1.0327
			V-rBC	130	w-CB	2.20	F	0.8365
			V-rCB	85			Y	0.5826

Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	411	472	Q-BA	392	465
q-CB	1	1	Q-BC	601	688
q-AB	25	23	Q-CB	484	555
q-AC	757	361	Q-BAC	432	479
q-BA	28	20			
q-BC	10	2			
f	0.263	0.091			

Design Flow/Capacity Ratio	AM	PM	
C-B	0.002	0.002	
B-AC	0.088	0.046	(for shared lane BA, BC)

Signal Junction Analysis

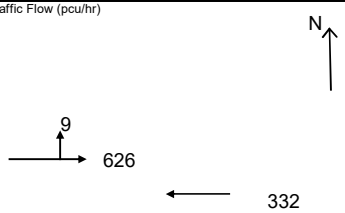
Junction: Tai Po Road near Yung Yi Road | Job Number: J7311

Scenario: Existing Condition | Page 7

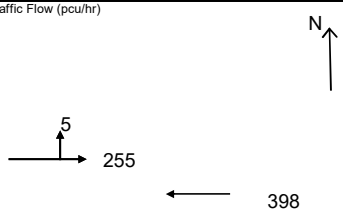
Design Year: 2023 | Designed By: | Checked By: | Date: 11 January 2024

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
Tai Po Road EB	LT+SA	A1	1	4.00	6.0		1	2008	635	0.316	0.316	2	2005	260	0.130	
Tai Po Road WB	SA	A2	1	4.80				2095	332	0.158			2095	398	0.190	0.190
pedestrian phase		B	2		min crossing time =		5	sec GM +		10	sec FGM =		15	sec		

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)



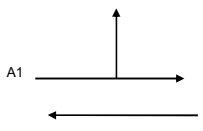
$S = 1940 + 100 (W-3.25)$ $S = 2080 + 100 (W-3.25)$

$S_M = S / (1 + 1.5 f/r)$ $S_M = (S - 230) / (1 + 1.5 f/r)$

	AM Peak 1		PM Peak 1	
Sum y	0.316		0.190	
L (s)	23		23	
C (s)	52		52	
practical y	0.502		0.502	
R.C. (%)	59%		164%	

Note:

1



2

AM	G =	I/G = 5	G = 15	I/G = 4	G =	I/G =	G =	I/G =	G =
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =
PM	G =	I/G = 5	G = 15	I/G = 4	G =	I/G =	G =	I/G =	G =
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =

Signal Junction Analysis

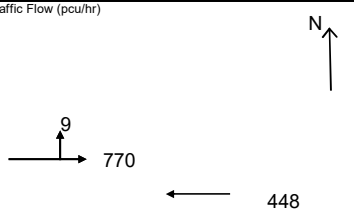
Junction: Tai Po Road near Yung Yi Road — Job Number: J7311

Scenario: Without the Proposed RCHD — Page 8

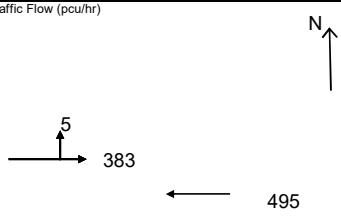
Design Year: 2031 — Designed By: — Checked By: — Date: 11 January 2024

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
Tai Po Road EB	LT+SA	A1	1	4.00	6.0		1	2009	779	0.388	0.388	1	2009	388	0.193	
Tai Po Road WB	SA	A2	1	4.80				2095	448	0.214			2095	495	0.236	0.236
pedestrian phase		B	2		min crossing time =		5	sec GM +		10	sec FGM =		15	sec		

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)



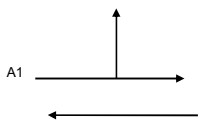
$S = 1940 + 100\ (W-3.25)$ $S = 2080 + 100\ (W-3.25)$

$S_M = S / (1 + 1.5\ f/r)$ $S_M = (S - 230) / (1 + 1.5\ f/r)$

	AM Peak 1		PM Peak 1	
Sum y	0.388		0.236	
L (s)	23		23	
C (s)	52		52	
practical y	0.502		0.502	
R.C. (%)	29%		112%	

Note:

1



2

AM	G =	I/G = 5	G = 15	I/G = 4	G =	I/G =	G =	I/G =	G =
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =
PM	G =	I/G = 5	G = 15	I/G = 4	G =	I/G =	G =	I/G =	G =
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =

Signal Junction Analysis

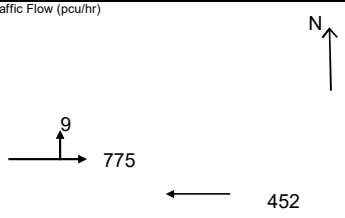
Junction: Tai Po Road near Yung Yi Road | Job Number: J7311

Scenario: With the Proposed RCHD | Page 9

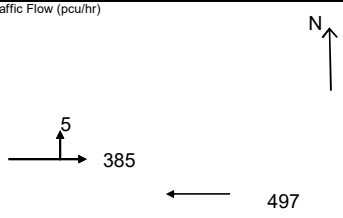
Design Year: 2031 | Designed By: | Checked By: | Date: 11 January 2024

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
Tai Po Road EB	LT+SA	A1	1	4.00	6.0		1	2009	784	0.390	0.390	1	2009	390	0.194	
Tai Po Road WB	SA	A2	1	4.80				2095	452	0.216			2095	497	0.237	0.237
pedestrian phase		B	2		min crossing time =		5	sec GM +		10	sec FGM =		15	sec		

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)



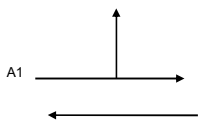
S = 1940 + 100 (W-3.25) S = 2080 + 100 (W-3.25)

S_M = S / (1 + 1.5 f/r) S_M = (S - 230) / (1 + 1.5 f/r)

	AM Peak 1		PM Peak 1	
Sum y	0.390		0.237	
L (s)	23		23	
C (s)	52		52	
practical y	0.502		0.502	
R.C. (%)	29%		112%	

Note:

1

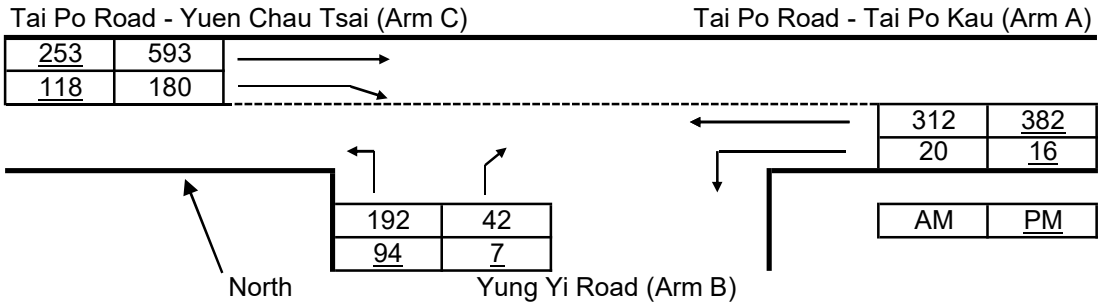


2

AM	G =	I/G = 5	G = 15	I/G = 4	G =	I/G =	G =	I/G =	G =
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =
PM	G =	I/G = 5	G = 15	I/G = 4	G =	I/G =	G =	I/G =	G =
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =

Priority Junction Analysis

Junction:	Tai Po Road - Yuen Chau Tsai / Yung Yi Road				
Design Year:	2023	Job Number:	J7311	Date:	11 January 2024
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	7.90	V-rBA	200	w-BA	3.90	D	1.0774
	W-CR	2.90	V-lBA	120	w-BC	3.90	E	1.0972
			V-rBC	200	w-CB	2.90	F	1.0048
			V-rCB	210			Y	0.7275

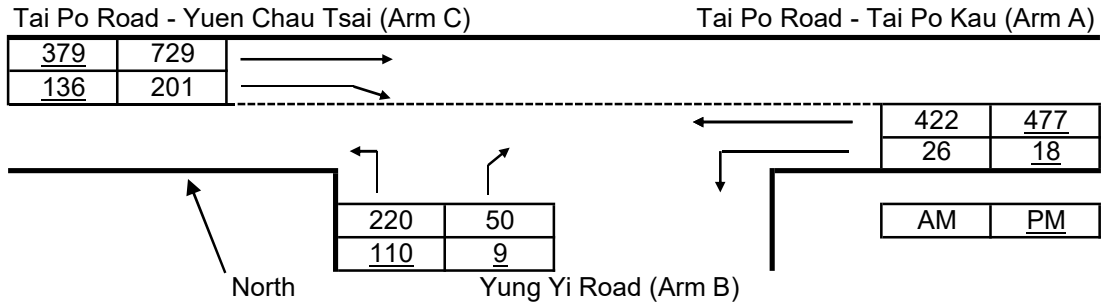
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	593	253	Q-BA	448	515
q-CB	180	118	Q-BC	724	705
q-AB	20	16	Q-CB	660	643
q-AC	312	382	Q-BAC	652	687
q-BA	42	7			
q-BC	192	94			
f	0.821	0.931			

Design Flow/Capacity Ratio	AM	PM	
C-B	0.273	0.184	
B-AC	0.359	0.147	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Tai Po Road - Yuen Chau Tsai / Yung Yi Road				
Design Year:	2031	Job Number:	J7311	Date:	11 January 2024
Scenario:	Without the Proposed RCHD				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	7.90	V-rBA	200	w-BA	3.90	D	1.0774
	W-CR	2.90	V-lBA	120	w-BC	3.90	E	1.0972
			V-rBC	200	w-CB	2.90	F	1.0048
			V-rCB	210			Y	0.7275

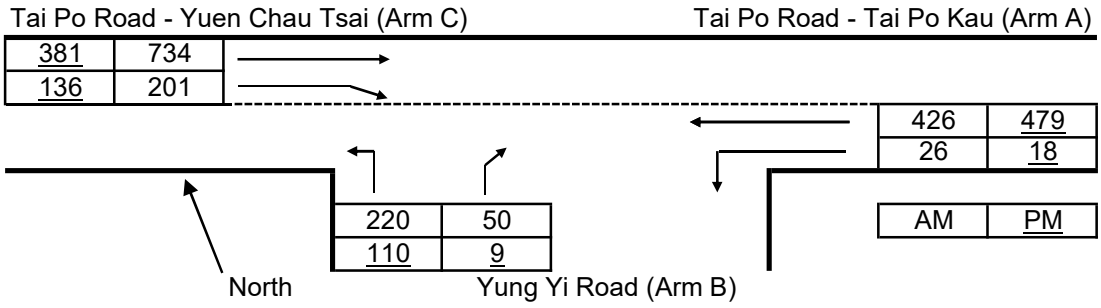
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	729	379	Q-BA	383	458
q-CB	201	136	Q-BC	692	677
q-AB	26	18	Q-CB	629	617
q-AC	422	477	Q-BAC	602	653
q-BA	50	9			
q-BC	220	110			
f	0.815	0.924			

Design Flow/Capacity Ratio	AM	PM	
C-B	0.319	0.220	
B-AC	0.448	0.182	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Tai Po Road - Yuen Chau Tsai / Yung Yi Road				
Design Year:	2031	Job Number:	J7311	Date:	11 January 2024
Scenario:	With the Proposed RCHD				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	7.90	V-rBA	200	w-BA	3.90	D	1.0774
	W-CR	2.90	V-lBA	120	w-BC	3.90	E	1.0972
			V-rBC	200	w-CB	2.90	F	1.0048
			V-rCB	210			Y	0.7275

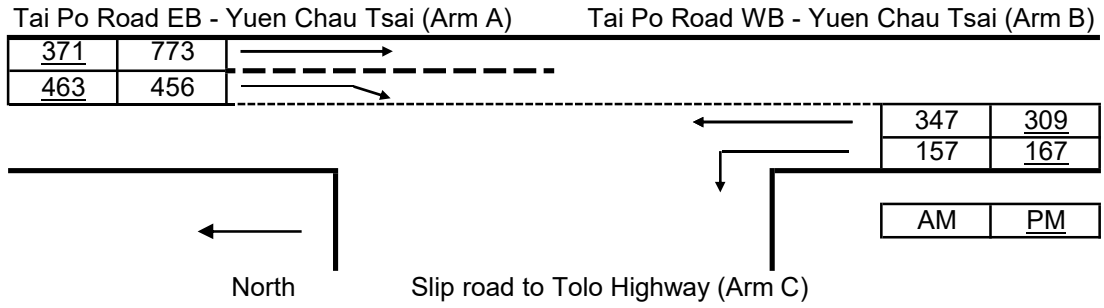
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	734	381	Q-BA	381	457
q-CB	201	136	Q-BC	691	676
q-AB	26	18	Q-CB	628	616
q-AC	426	479	Q-BAC	600	652
q-BA	50	9			
q-BC	220	110			
f	0.815	0.924			

Design Flow/Capacity Ratio	AM	PM	
C-B	0.320	0.221	
B-AC	0.450	0.182	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Tai Po Road - Yuen Chau Tsai / Slip road to Tolo Highway				
Design Year:	2023	Job Number:	J7311	Date:	11 January 2024
Scenario:	Existing Condition				P. 13



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	8.00	V-rBA	80	w-BA	4.50	D	1.0410
	W-CR	2.40	V-lBA	150	w-BC	6.30	E	1.2041
			V-rBC	80	w-CB	0.00	F	0.5860
			V-rCB	0			Y	0.7240

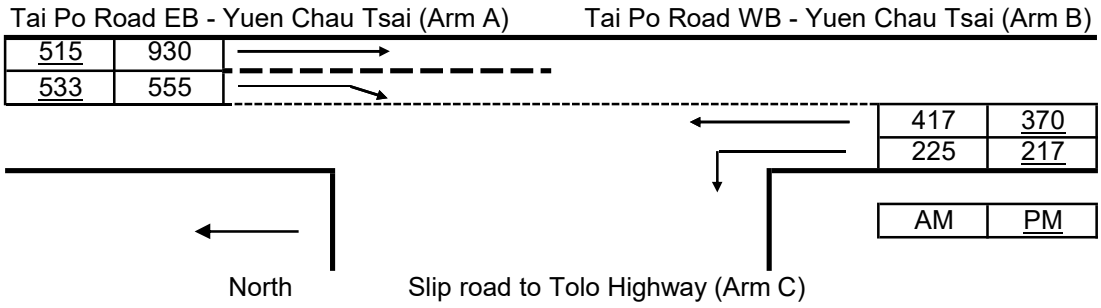
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	0	0	Q-BA	563	561
q-CB	0	0	Q-BC	752	750
q-AB	0	0	Q-CB	366	365
q-AC	456	463	Q-BAC	611	615
q-BA	347	309			
q-BC	157	167			
f	0.312	0.351			

Design Flow/Capacity Ratio	AM	PM
B-A	0.617	0.551
B-C	0.209	0.223
C-B	0.000	0.000

Priority Junction Analysis

Junction:	Tai Po Road - Yuen Chau Tsai / Slip road to Tolo Highway				
Design Year:	2031	Job Number:	J7311	Date:	11 January 2024
Scenario:	Without the Proposed RCHD				P. 14



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	8.00	V-rBA	80	w-BA	4.50	D	1.0410
	W-CR	2.40	V-lBA	150	w-BC	6.30	E	1.2041
			V-rBC	80	w-CB	0.00	F	0.5860
			V-rCB	0			Y	0.7240

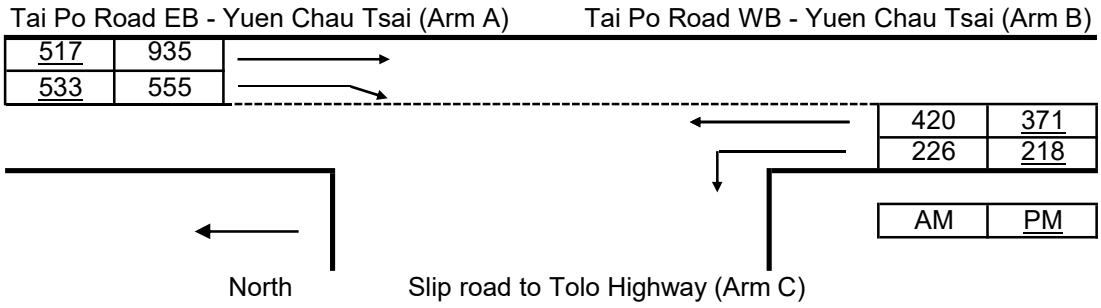
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	0	0	Q-BA	535	541
q-CB	0	0	Q-BC	721	728
q-AB	0	0	Q-CB	351	354
q-AC	555	533	Q-BAC	594	598
q-BA	397	370			
q-BC	245	217			
f	0.382	0.370			

Design Flow/Capacity Ratio	AM	PM
B-A	0.741	0.683
B-C	0.340	0.298
C-B	0.000	0.000

Priority Junction Analysis

Junction:	Tai Po Road - Yuen Chau Tsai / Slip road to Tolo Highway				
Design Year:	2031	Job Number:	J7311	Date:	11 January 2024
Scenario:	With the Proposed RCHD				P. 15



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

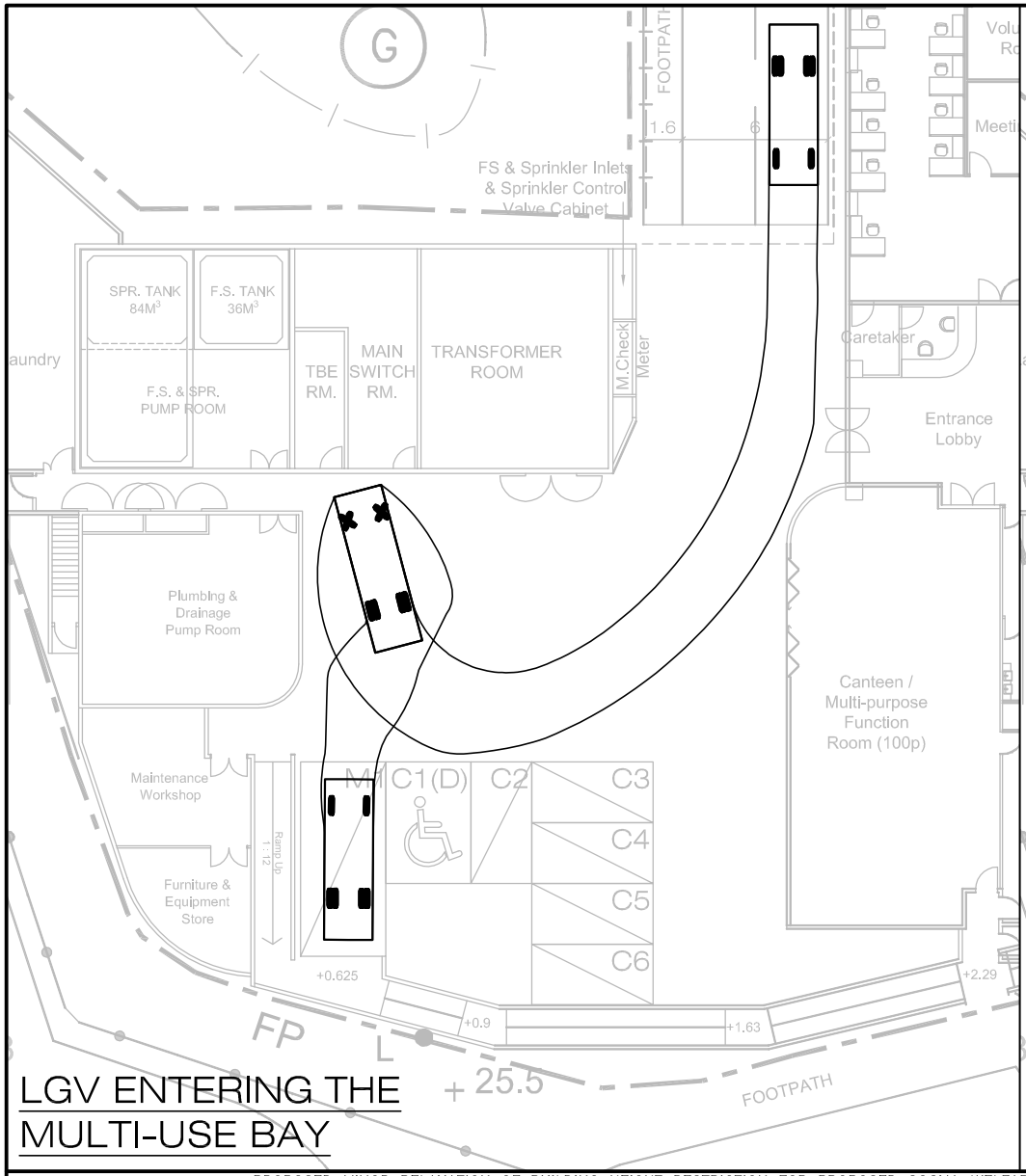
Geometry :	Input		Input		Input		Calculated	
	W	8.00	V-rBA	80	w-BA	4.50	D	1.0410
	W-CR	2.40	V-lBA	150	w-BC	6.30	E	1.2041
			V-rBC	80	w-CB	0.00	F	0.5860
			V-rCB	0			Y	0.7240

Analysis :

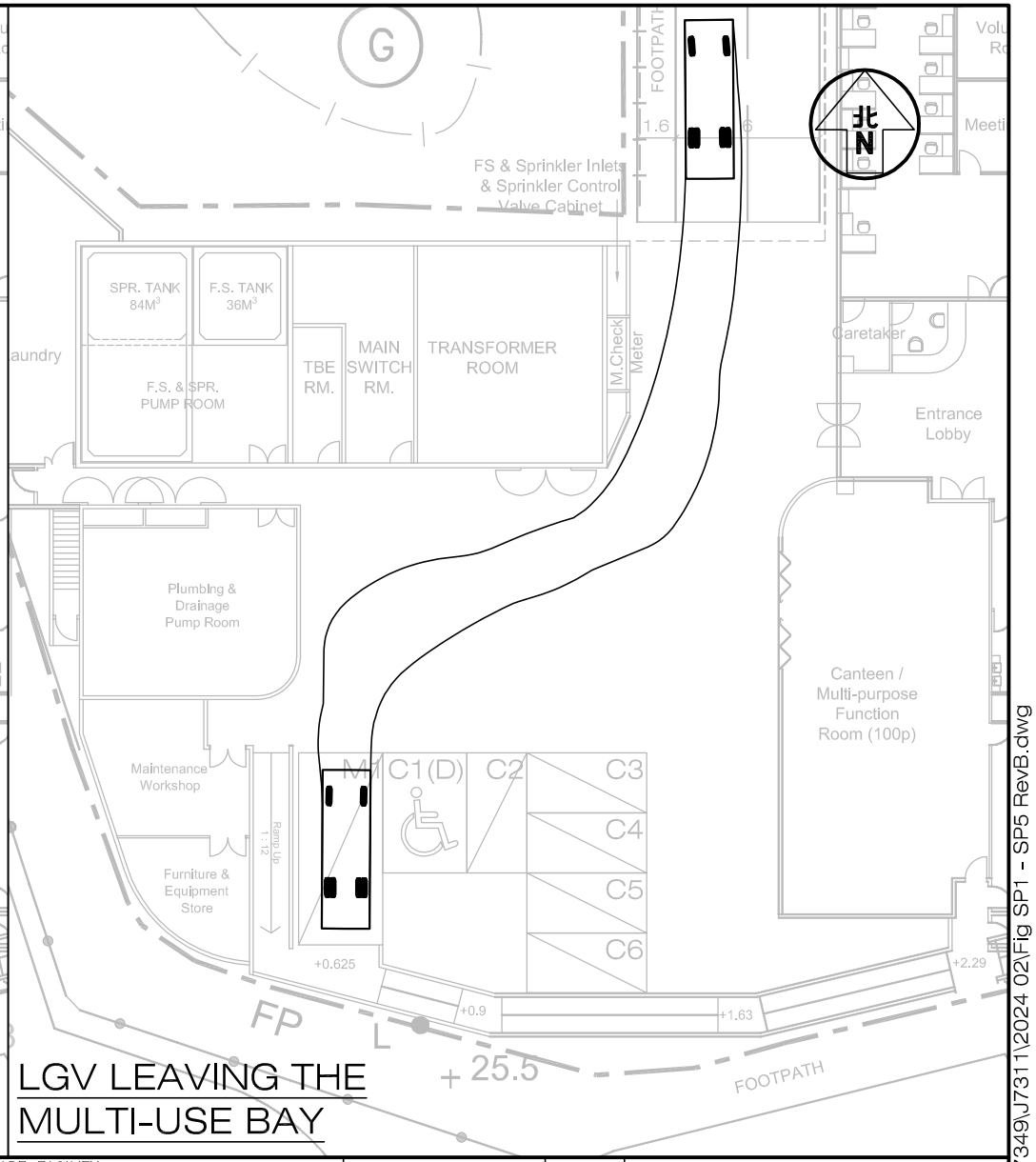
Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	0	0	Q-BA	535	541
q-CB	0	0	Q-BC	721	728
q-AB	0	0	Q-CB	351	354
q-AC	555	533	Q-BAC	588	598
q-BA	420	371			
q-BC	226	218			
f	0.350	0.370			

Design Flow/Capacity Ratio	AM	PM
B-A	0.784	0.685
B-C	0.313	0.299
C-B	0.000	0.000

Appendix 2 –
Swept Path Analysis



LGV ENTERING THE MULTI-USE BAY



LGV LEAVING THE MULTI-USE BAY

Project Title	PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO	J7311	Figure No. SP1 / Revision B
Figure Title	SWEPT PATH OF LGV ENTERING AND LEAVING THE MULTI-USE BAY M1 ON G/F	Designed by C Y Y / Drawn by N C M / Checked by K C	Scale in A4 1 : 300 / Date 01 MAR 2024

CKM Asia Limited
Traffic and Transportation Planning Consultants
21st Floor, Methodist House, 36 Hennessy Road, Wan Chai, Hong Kong
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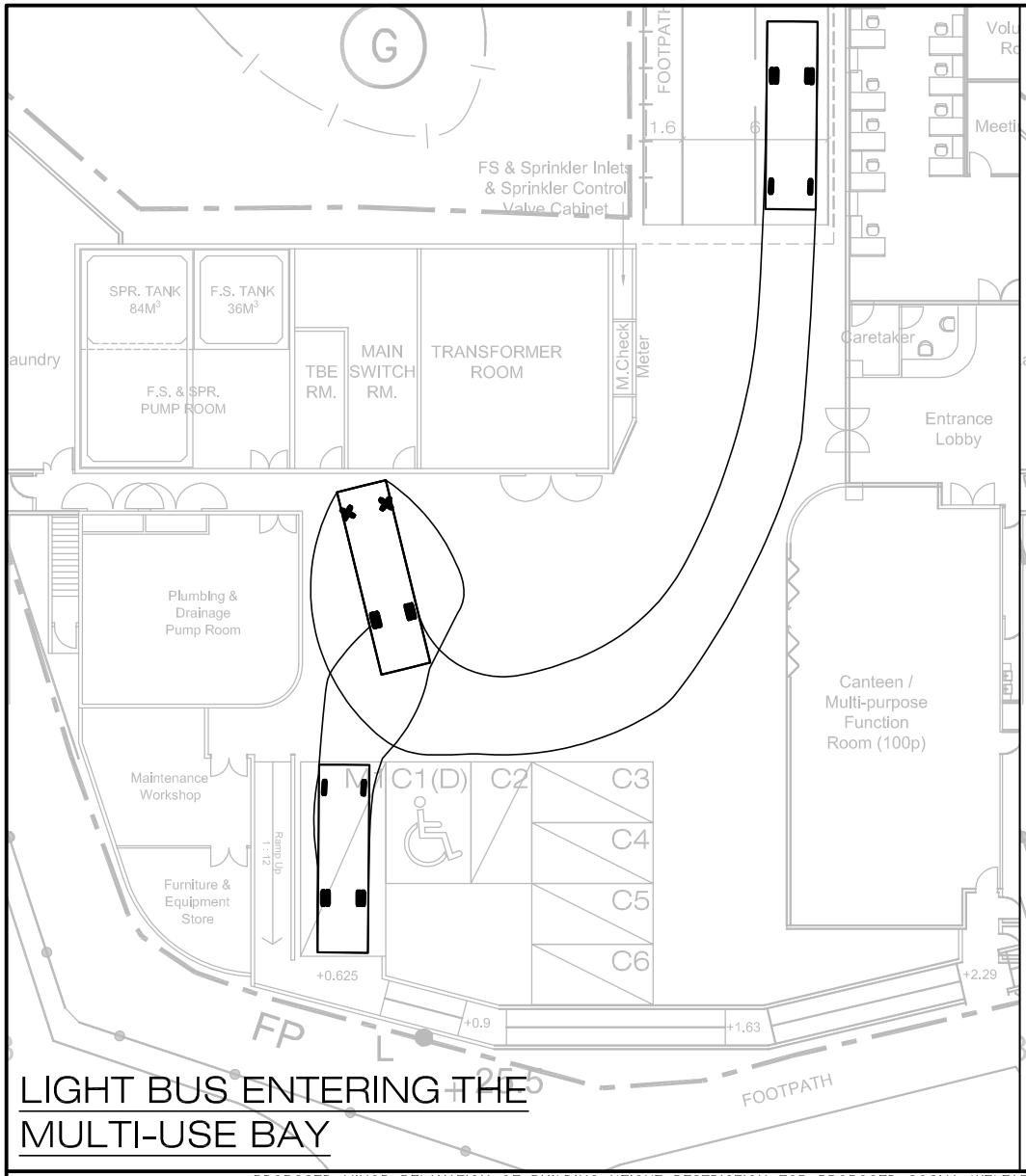
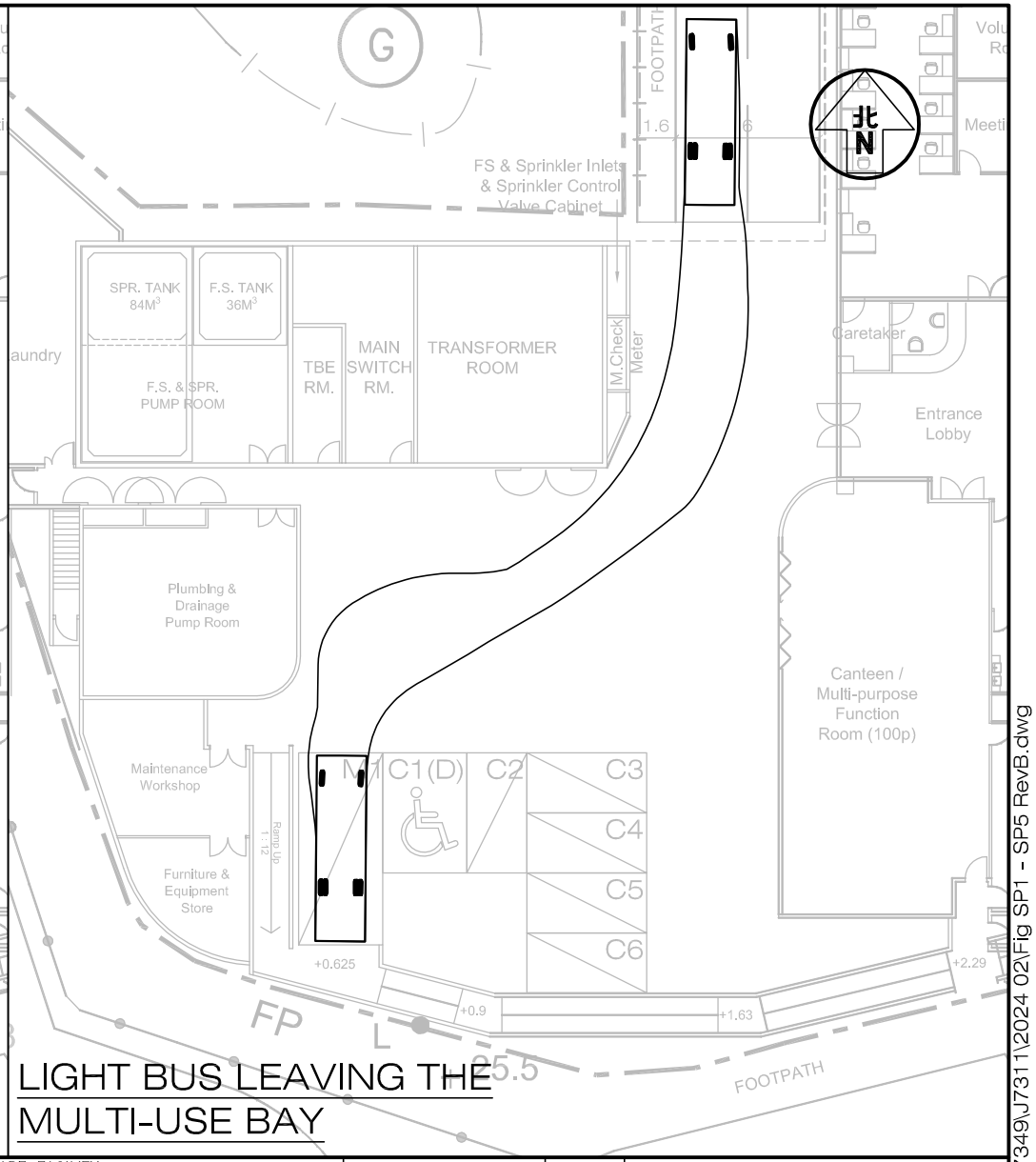


LIGHT BUS ENTERING THE MULTI-USE BAY



LIGHT BUS LEAVING THE MULTI-USE BAY

Project Title	PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO	J7311	Figure No. SP2 / Revision B
Figure Title	SWEPT PATH OF LIGHT BUS ENTERING AND LEAVING THE MULTI-USE BAY M1 ON G/F		Designed by C Y Y / Drawn by N C M / Checked by K C; Scale in A4 1 : 300 / Date 01 MAR 2024

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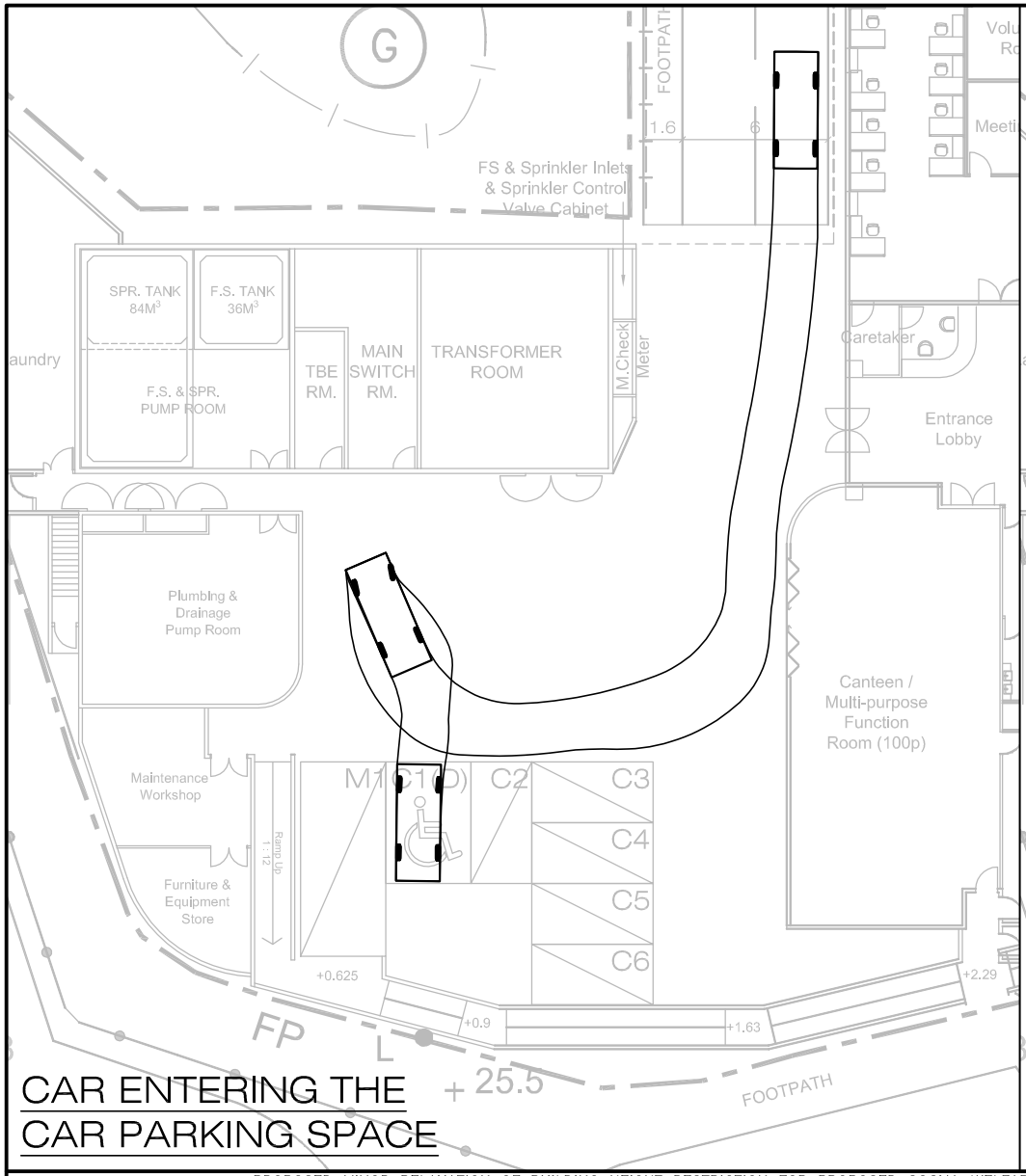
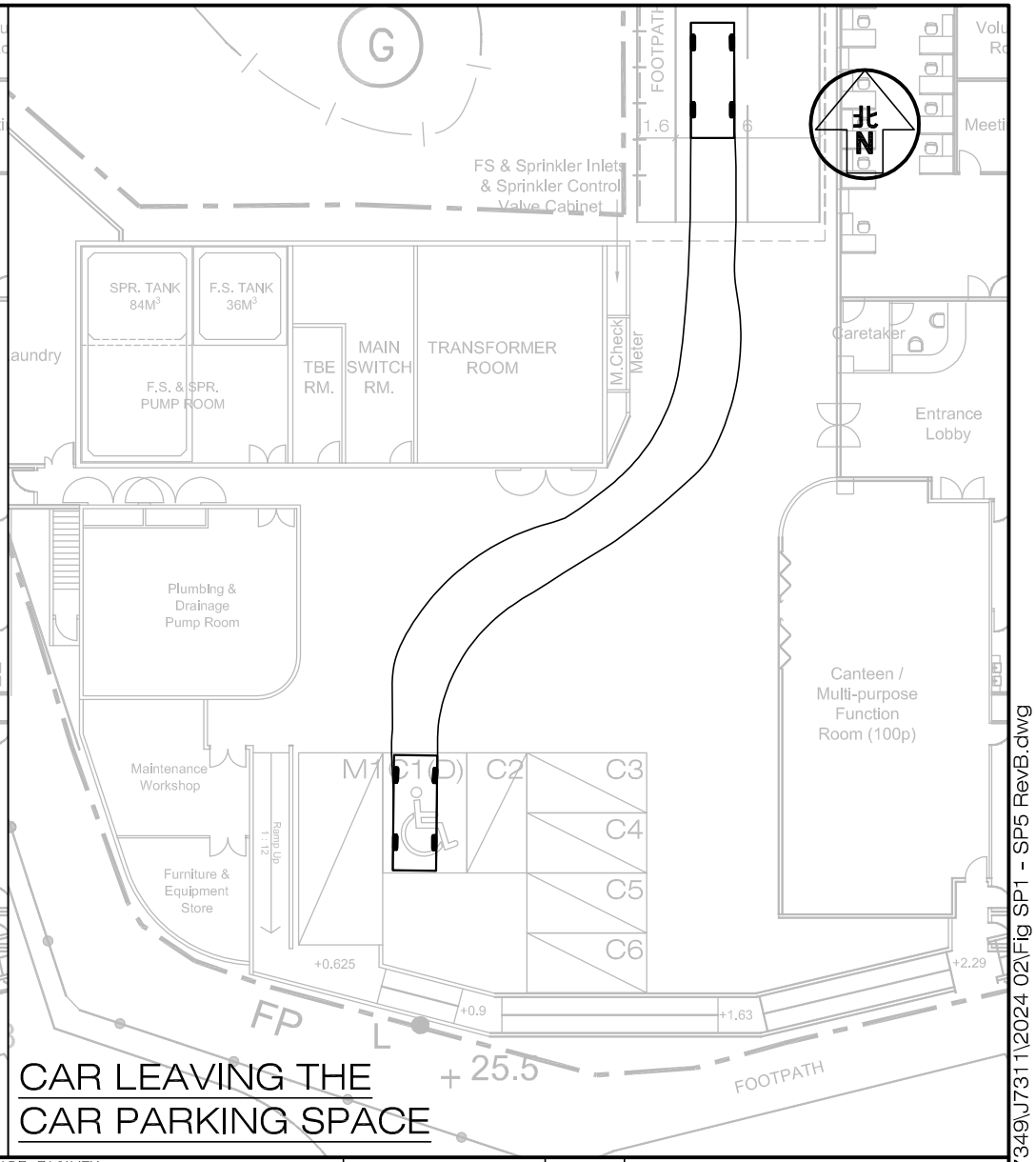


CAR ENTERING THE CAR PARKING SPACE



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Project Title	PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO	J7311	Figure No. SP3 / Revision B
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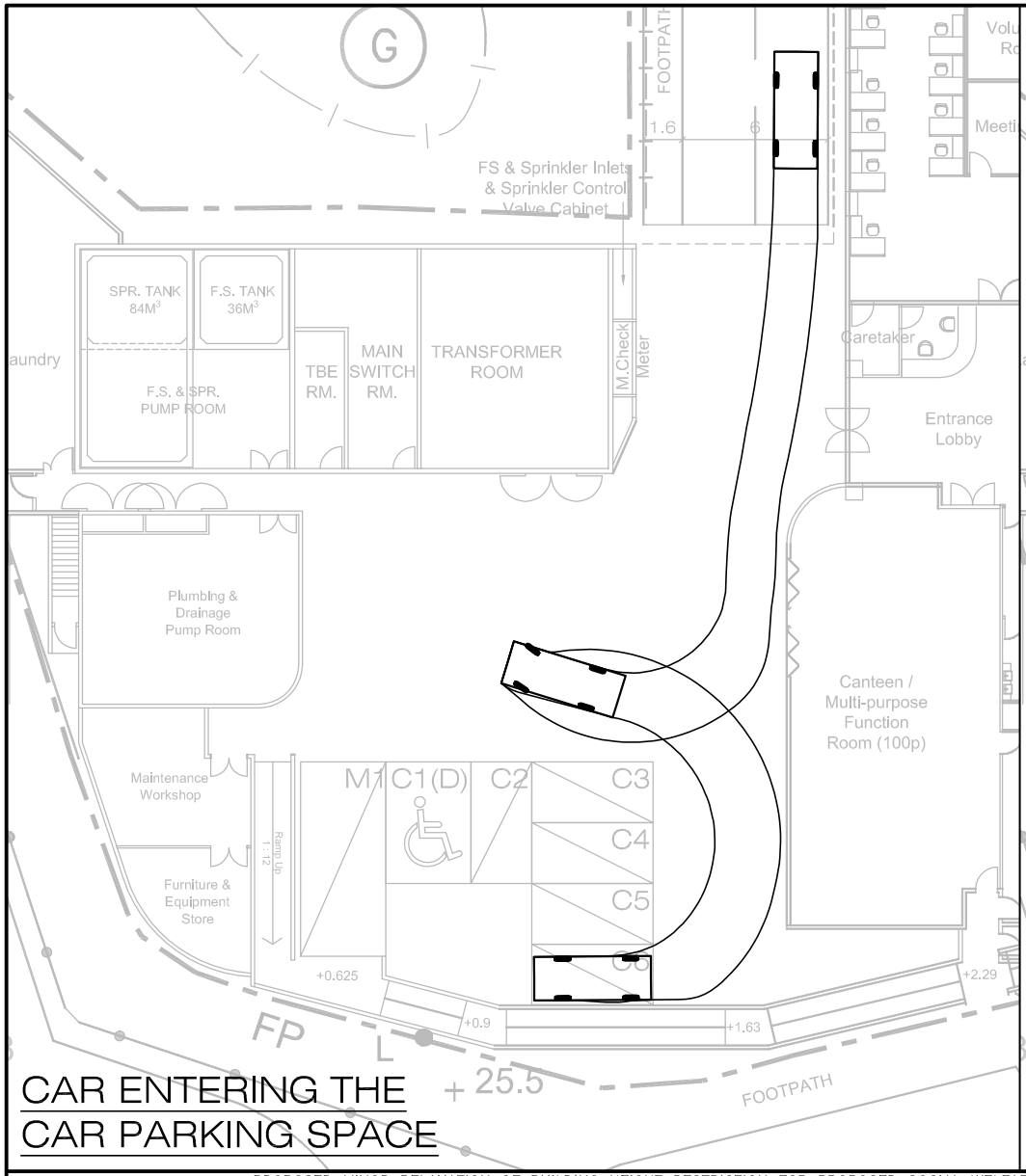

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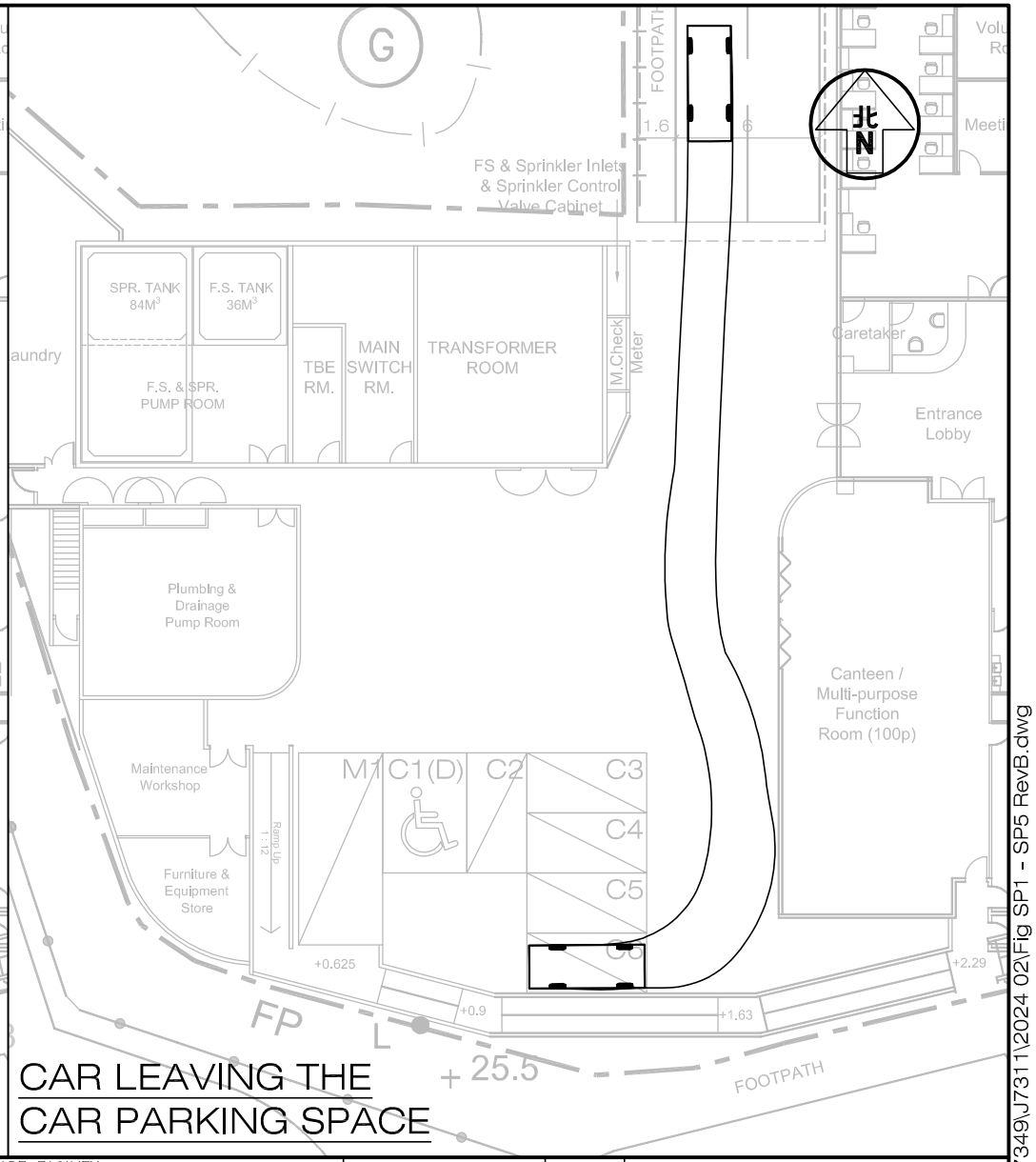

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Figure Title	SWEPT PATH OF PRIVATE CAR ENTERING AND LEAVING THE CAR PARKING SPACE C6 ON G/F		Designed by C Y Y / Drawn by N C M / Checked by K C; Scale in A4 1 : 300 / Date 01 MAR 2024

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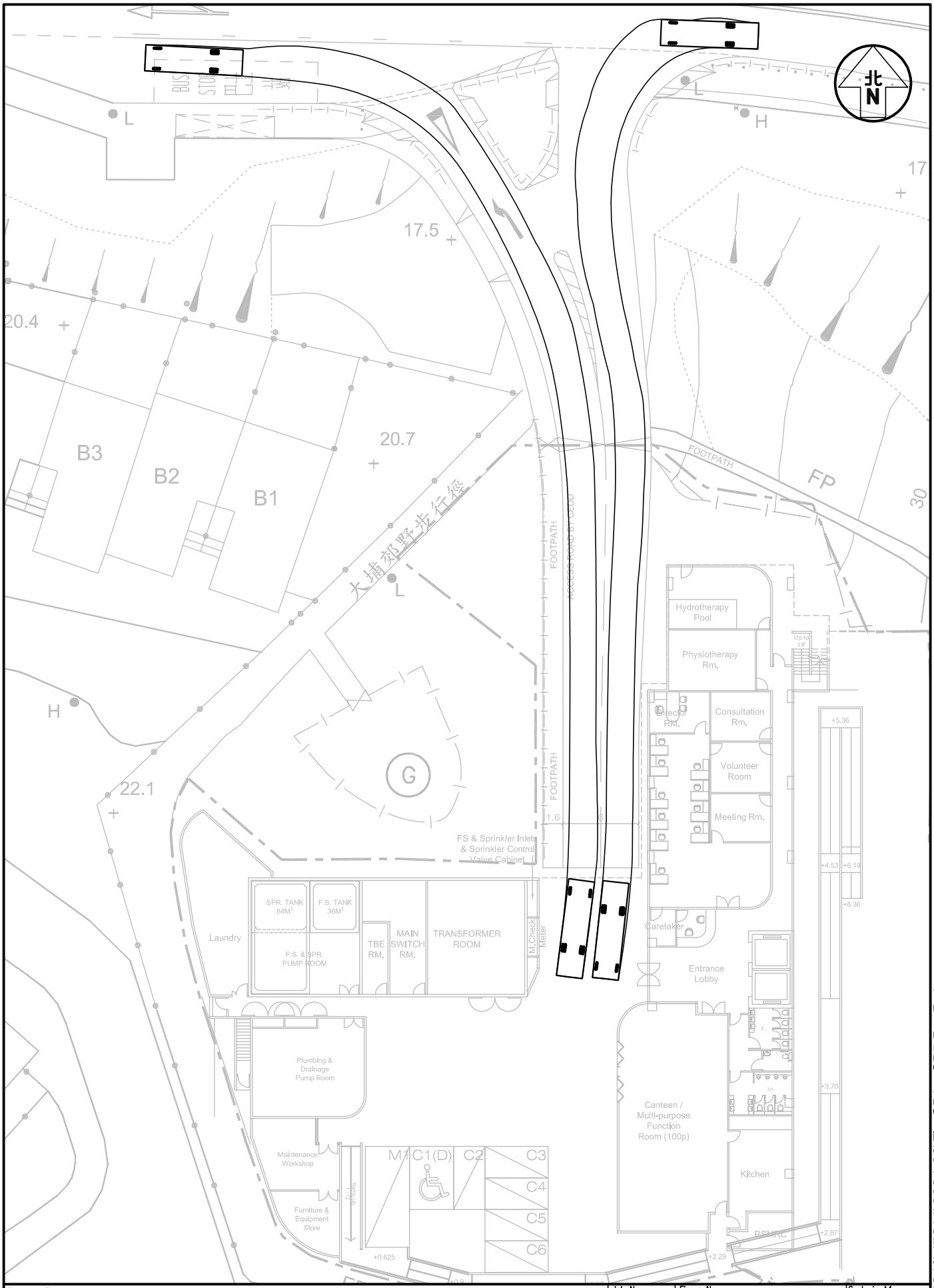

Project Title

PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL', WONG YI AU, TAI PO

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Figure Title

SWEPT PATH OF LGV ENTERING AND LEAVING THE SUBJECT SITE

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Appendix 5

Environmental Assessment

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Ramboll Hong Kong Limited

PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO

ENVIRONMENTAL ASSESSMENT

Date	**February 2024**
Prepared by	**Mike KWAN** **Assistant Environmental Consultant**
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Signed	
Project Reference	**KTAHOLF-EI00**
Document No.	**R9271_V1.1.docx**

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1. INTRODUCTION

1.1 Background

1.1.1 A social welfare facility (the Proposed Development) has been proposed at the former Fish Marketing Organisation (FMO) Tai Po Primary School, Wong Yi Au, Tai Po (the Application Site). Most of the Application Site is currently zoned as "Government, Institution or Community" (G/IC) with small portion area falling within "Green Belt" (GB) zone under the Approved Tai Po Outline Zoning Plan (OZP) No. S/TP/30.

1.1.2 The Applicant intends to develop the Application Site for proposed minor relaxation of building height restriction for residential care homes for persons with disabilities.

1.1.3 Ramboll Hong Kong Limited is commissioned by the Applicant to provide environmental consultancy service to prepare the Environmental Assessment (EA) based on the latest development scheme. This EA is prepared as a technical supporting document to demonstrate that the Proposed Development is environmentally acceptable by addressing potential environmental noise and air quality impact on the proposed development while other environmental issues are generally discussed.

1.1.4 The design of master layout plan (MLP) and other technical information on the Proposed Development are provided by the Project Architect (AGC Design Ltd.) whereas the traffic forecast is provided by the Project Traffic Consultant (CKM Limited).

1.2 The Application Site and Its Environs

1.2.1 The Application Site is approximately 3,275m^2. It is located at Tai Po Road – Tai Po Kau. To the immediate west of the Application Site is Chateau Royale. To the north on opposite side of Tai Po Road – Tai Po Kau is Care Village. Tolo Highway is situated to its further north. Some other residential uses are scatted mainly on east, north and west sides. The area is characterised by low-rise residential developments.

1.2.2 The Application Site was previously occupied by Fish Marketing Organization (FMO) Tai Po Primary School. The primary school was closed in year 1996 and has been vacant since then. **Figure 1.1** shows the location of the Application Site and its environment.

1.2.3 An access road will be constructed by the Civil Engineering and Development Department (CEDD) from Tai Po Road – Tai Po Kau to the Application Site. Relevant roadworks design has been submitted to relevant government departments for approval. The management party of the section of the road outside the access gate is regarded as public road and thus should be managed by Highways Department (HyD), while the section of the road within the Application Site would be managed by the Applicant.

1.3 The Proposed Development

1.3.1 It is proposed to demolish the abandoned FMO Tai Po Primary School and to construct a residential care home for persons with disabilities (RCHD), mainly consisting of dormitories and other ancillary facilities. The Proposed Development consists of 3 storeys (G/F to 2/F, no basement). There are altogether 60 bedspaces provided. It is estimated that there would be maximum 50 number of workers. A chapel is also proposed at the northern portion of the Application Site. As advised by Project Architect, only the dormitories of the Proposed Development will be provided with operable window for natural ventilation purpose. Other uses including but not limited to office and therapy area (e.g. physiotherapy room and hydrotherapy room) would not rely on openable window for ventilation purpose.

1.3.2 The tentative completion year is 2026.

1.3.3 The MLP of the Proposed Development is included in **Appendix 1.1**.

1.4 Appraisal of Environmental Impacts

Air Quality

1.4.1 Site survey was conducted on 21 December 2023 to identify any environmental nuisance and focus on area within 200m from the Application Site. The potential industrial and vehicular emission impact has been addressed in this context (detailed in **Section 2**).

Road Traffic Noise Impact

1.4.2 The major road traffic noise source with respect to the Application Site is arising from road carriageways to the east (i.e. Tai Po Road – Tai Po Kau and Tolo Highway). As observed in the survey on 21 December 2023, the noise environment is dominated by road traffic noise. Road traffic noise impact assessment has been conducted to address the potential road traffic noise impact with necessary noise mitigation measures proposed (detailed in **Section 3**).

Railway Noise Impact

1.4.3 The existing East Rail Line (EAL) (in the form of open track) is aligned on the northern side at around 130m away from the Application Site. Railway noise impact assessment has been conducted and detailed in **Section 4**.

Fixed Noise Impact

1.4.4 Site survey was conducted on 21 December 2023 to identify any environmental nuisance. Various fixed noise sources are identified within 300m from the Application Site, including chillers and VRVs. They have been taken into account in the fixed noise impact assessment detailed in **Section 5**.

Other Environmental Impact

Water Quality Impact

1.4.5 There are existing drainage and sewerage pipes situated at the immediate north of the Application Site along Tai Po Road – Tai Po Kau, which would convey the discharge towards west.

1.4.6 A separate Drainage and Sewerage Impact Assessment (DSIA) has been prepared to address potential drainage and sewerage impact during operation of the Proposed Development. Please refer to the separate DSIA report under this application for details.

1.4.7 The Proposed Development will be connected to public drainage and sewerage system for proper discharge of treated surface runoff and effluent. ProPECC PN 1/23 will be referenced and followed. All surface runoff originated from the Application Site will be properly collected and drained via systems such as sand trap, oil interceptor, grease trap for treatment. The treated surface runoff will be discharged to the public drainage system. On the other hand, all wastewater generated onsite will be discharged to public sewerage system. No adverse water quality impact during operation of the project is anticipated.

Construction Phase Environmental Impact

1.4.8 The major air quality impact during construction should be fugitive dust impact in relation to dusty activity and emission from dusty materials. Best management practice and practical mitigation measures will be adopted where appropriate.

1.4.9 Construction noise is usually generated by using powered mechanical equipment. It will be controlled with reference to relevant technical memorandum. Best Management practice will be adopted where appropriate to suppress the impact.

1.4.10 For water quality aspect, during construction of the Proposed Development, water pollution is likely due to sediments, construction runoff and drainage, sewage effluent and liquid spillage if not mitigated. Best management practice will be adopted. No sewage effluent discharge will be allowed. ProPECC PN2/23 on construction site drainage will be observed and followed.

1.4.11 Waste generation during construction will be sorted and handled in compliance with the Waste Disposal Ordinance and regulations.

1.4.12 With adequate mitigation measures incorporated during construction of the project, no significant construction phase environmental impact is anticipated. Further discussion on construction phase environmental impact is also included in **Section 6**.

1.5 Organization of this Report

1.5.1 The report is structured as follows: -

- **Section 2** is an air quality impact assessment;
- **Section 3** is a road traffic noise impact assessment;
- **Section 4** is a railway noise impact assessment;
- **Section 5** is a fixed noise impact assessment;
- **Section 6** includes discussion of construction phase fugitive dust, noise, water quality and waste management issues; and
- **Section 7** is a concluding summary.

2. AIR QUALITY IMPACT ASSESSMENT

2.1 Introduction

2.1.1 This section evaluates the air quality impact during operation of the Proposed Development.

2.2 Legislative Requirement and Evaluation Criteria

Hong Kong Planning Standards and Guidelines

2.2.1 Table 3.1 in Chapter 9 of the Hong Kong Planning Standards and Guidelines (HKPSG) (shown below as **Table 2.1**) has been referenced for provision of buffer separation from identified air pollution sources in the vicinity.

Table 2.1 Guidelines on Usage of Open Space Site

Pollution Source	Parameter	Buffer Distance	Permitted Uses
Road and Highways	*Type of Road*		
	Trunk Road and Primary Distributor	>20m	Active and passive recreation uses
		3-20m	Passive recreational uses
		<3m	Amenity areas
	District Distributor	>10m	Active and passive recreation uses
		<10m	Passive recreational uses
	Local Distributor	>5m	Active and passive recreation uses
		<5m	Passive recreational uses
	Under Flyovers	<5m	Passive recreational uses
Industrial Areas	*Difference in Height between Industrial Chimney Exit and the Site*		
	<20m	>200m	Active and passive recreation uses
		5-200m	Passive recreational uses
	20 – 30m (*)	>100m	Active and passive recreation uses
		5-100m	Passive recreational uses
	30m - 40m	>50m	Active and passive recreation uses
		5 - 50m	Passive recreational uses
	>40m	>10m	Active and passive recreation uses

Remarks:

a) In situations where the height of chimneys is not known, use the set of guidelines marked with an asterisk for preliminary planning purpose and refine as and when more information is available.

b) 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.

c) The guidelines are generally applicable to major industrial areas but NOT individual large industrial establishments which are likely to be significant air pollution sources. Consult EPD when planning open space sites close to such establishments.

d) Amenity areas are permitted in any situation.

Air Pollution Control Ordinance (Cap.311)

2.2.2 The Hong Kong Government has set out Hong Kong's Air Quality Objectives (AQOs) in the Air Pollution Ordinance (Cap. 311), and is required to review the AQOs at least once every five years and submit a report of the review to the Advisory Council on the Environment.

Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation

2.2.3 The Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation comes into operation on 1 June 2015. Under the Regulation, Non-road mobile machinery (NRMMs), except those exempted, are required to comply with the prescribed emission standards. From 1 September 2015, all regulated machines sold or leased for use in Hong Kong must be approved or exempted with a proper label in a prescribed format issued by EPD. Starting from 1 December 2015, only approved or exempted NRMMs with a proper label are allowed to be used in specified activities and locations including construction sites. The Contractor is required to ensure the adopted machines or non-road vehicle under the Project could meet the prescribed emission standards and requirement.

2.3 Existing Air Quality at the Application Site

2.3.1 The nearest air quality monitoring station (AQMS) to the Proposed Development is the Tai Po AQMS. The five most recent years of air quality monitoring data, 2018 to 2022, from this station are summarized in **Table 2.2** below.

2.3.2 The tentative year of completion of the Proposed Development is 2026. As the data of the PATH v2.1 for the year of 2026 is not available, the data for Year 2025 was extracted from PATH v2.1 developed and released by EPD in July 2021 (Grid: 40,47; Grid: 41,47; Grid: 41,46) are summarized in **Table 2.2**.

2.4 Air Sensitive Receivers during Operation Phase

2.4.1 The sleeping room (including isolation room), dormitories and associated common area, office and meeting rooms, therapy rooms, canteen and chapel are identified as air sensitive receivers (ASRs) during operation phase.

2.5 Industrial Emission Impact

2.5.1 The Application Site is mainly surrounded by low density residential developments, village type developments, green belt, and rural landscape. Site survey was conducted on 21 December 2023 to identify any environmental nuisance and focus on area within 200m from the Application Site.

2.5.2 There is no industrial use identified within 200m from the Application Site. There is no emission source such as chimney stack or any other emission like fluff, odour, smoke, identified within same study area.

2.5.3 Regarding the Proposed Development is a RCHD with ancillary facilities (i.e. office and chapel), it is not considered environmental polluting in nature. There will be no chimney from the Proposed Development.

2.6 Vehicular Emission Impact

2.6.1 Tai Po Road – Tai Po Kau is situated to the immediate north of the Application Site, while Tolo Highway is situated to its further north. Tolo Highway is considered as expressway according to Annual Traffic Census 2022. Thus, 20m buffer distance from

Tolo Highway should be provided. Another road carriageway, Yung Yi Road is to the west of the Application Site separated by an existing development (Chateau Royale).

2.6.2 Tai Po Road – Tai Po Kau and Yung Yi Road are not classified in the Annual Traffic Census 2022. Considering that the roads in the vicinity in the Annual Traffic Census 2022 (i.e. Yau King Lane and Tai Po Road – Ma Liu Shui) are either rural road or local distributor, Tai Po Road – Tai Po Kau and Yung Yi Road is considered as equivalent to local or at most district distributor. To be prudent, a 10m buffer distance from Tai Po Road – Tai Po Kau and Yung Yi Road is assumed to be provided.

2.6.3 **Figure 2.1** shows the separation distance provided. The Application Site is outside the buffer zone from Tolo Highway and Yung Yi Road. Only the access road to the Application Site is within buffer zone from Tai Po Road – Tai Po Kau. There is no air sensitive use within the buffer zone. Therefore, no significant vehicular emission impact is anticipated.

2.7 Conclusion

2.7.1 There is absence of chimney stack in the surrounding area (within 200m) and adequate building setback has been provided as recommended in Table 3.1, Chapter 9 of the HKPSG.

2.7.2 Buffer zones are defined with respect to Tai Po Road – Tai Po Kau, Yung Yi Road and Tolo Highway. There will be no air sensitive uses, including openable windows of domestic premises, fresh air intake or outdoor recreational area located within the buffer zones as stipulated in the HKPSG.

2.7.3 It is considered that no significant adverse air quality impact on the Proposed Development is anticipated.

Table 2.2 Background Air Quality data from Tai Po AQMS (2018-2022) and Latest Version of PATH v2.1 (Year 2025)

Pollutant	Averaging time	Parameter	AQO ($\mu g/m^3$)	Concentration ($\mu g/m^3$)							
				2018	2019	2020	2021	2022	PATH Grid (40, 47)	PATH Grid (41, 47)	PATH Grid (41, 46)
RSP(PM_{10})	24-hour	10th highest	100	69	65	58	60	48	64.56	64.08	64.33
	Annual	Maximum	50	31	31	24	26	21	27.13	27	26.67
FSP($PM_{2.5}$)	24-hour	19th highest	50	38	41	33	32	30	33.23	34.58	33.42
	24-hour	36th highest	50	33	35	28	27	25	22.75	22.74	22.3
	Annual	Maximum	25	19	20	15	16	NA	14.98	14.69	14.72
NO_2	1-hour	19th highest	200	125	142	106	115	93	91.08	79.05	69.91
	Annual	Maximum	40	36	36	30	32	27	15.98	14.33	14.46
SO_2	10-minute	4th highest	500	24	20	19	15	12	65.37	68.48	66.17
	24-hour	4th highest	50	8	10	7	8	5	9.92	9.83	9.9
O_3	8-hour	10th highest	160	167	197	165	168	188	198.71	195.1	191.47
CO	1-hour	1st highest	30,000	NA	NA	NA	NA	NA	859.63	853.67	876.65
	8-hour	1st highest	10,000	NA	NA	NA	NA	NA	774.92	774.45	776.44

Notes:

[i] All measurement 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 293 Kelvin and a reference pressure of 101.325 kilopascal.

[ii] Respirable suspended particulates means suspended particles in air with a nominal aerodynamic diameter of 10m or less.

[iii] Fine suspended particulates means suspended particles in air with a nominal aerodynamic diameter of 2.5 m or less.

3. ROAD TRAFFIC NOISE IMPACT ASSESSMENT

3.1 Introduction

3.1.1 This road traffic noise impact assessment is prepared to address potential road traffic noise impact on the noise sensitive uses of the Proposed Development and to recommend mitigation measures where practicable to attenuate the impact.

3.2 Assessment Criteria

3.2.1 Noise standards are recommended in the Hong Kong Planning Standards and Guidelines (HKPSG) for planning against noise impact from sources such as road traffic, railway and aircraft. The Proposed Development comprises car park, plant room, office, dormitory and chapel. Office area and chapel will be air conditioned and will not rely on open window for ventilation, which is not considered as noise sensitive in nature. Under the HKPSG, the criterion for road traffic noise impact on domestic premises (habitable rooms) is $L_{10(1\text{-hour})}$ 70dB(A).

3.3 Assessment Methodology

3.3.1 In the assessment, the potential noise impact arising from nearby road carriageways on the development has been assessed.

3.3.2 It involved the prediction of future noise impacts on Noise Sensitive Receivers (NSRs) arising from traffic flows along existing and future road carriageways situated within the vicinity of the Application Site. Calculation of predicted road traffic noise was based on the worst case peak hour traffic flows projected within a 15-year period from the tentative completion date (Year 2026) of the Proposed Development. For worst-case scenario evaluation, the assessment year was chosen to be Year 2041, which has the maximum forecasted traffic flow within the 15-year period. The year 2041 traffic forecast data is attached in **Appendix 3.1**. Endorsement of the traffic forecast will be provided once available.

3.3.3 The U.K. Department of Transport's procedure "Calculation of Road Traffic Noise" (CRTN) was used to predict the hourly $L_{10(1\text{-hour})}$ noise levels generated from road traffic at selected representative NSRs. Practicable environmental mitigation measures have been recommended, where necessary. The predicted noise levels were compared with the relevant HKPSG noise standards (i.e. $L_{10(1\text{-hour})}$ 70dB(A)).

3.3.4 In this assessment, all roads are assumed of impervious surface. The correspondence from HyD is attached in **Appendix 3.4**. Speed limit of 50km/hr is assumed for most of the roads. It is assumed 70km/hr for Road ID 20 and 24 and 100km/hr for Road ID 21, 22, 23, 26, 27 and 28 (Road ID indicated in **Appendix 3.1**).

3.4 Noise Sensitive Receivers

3.4.1 As discussed under **S1.3**, only the dormitories (and other sleeping rooms) will be provided with window for natural ventilation while other uses will be provided with air conditioning. A number of Noise Sensitive Receivers (NSRs) representing window opening of dormitories, which are likely to be subject to adverse traffic noise impacts, were selected for the assessment. All assessment points were taken at 1.2m above the floor and 1m away from the façade of openable windows (which would be for ventilation purpose) of rooms of sensitive use. **Figure 3.1** illustrates the locations of the selected representative NSRs for road traffic noise impact assessment.

3.5 Assessment Result for Base Case Scenario

3.5.1 The predicted road traffic noise levels on the representative NSRs have been assessed for the base case scenario (without direct noise mitigation measures in place) as presented in **Appendix 3.2**.

3.5.2 The maximum predicted noise level is 68dB(A). No adverse road traffic noise impact on the Proposed Development is anticipated.

3.6 Conclusion

3.6.1 Road traffic noise impact assessment has been carried out for the Proposed Development.

3.6.2 According to the assessment result under base case scenario, no exceedance is found. Therefore, the Proposed Development would not subject to any adverse road traffic noise impact.

4. RAILWAY NOISE IMPACT ASSESSMENT

4.1 Introduction

4.1.1 This railway noise impact assessment is prepared to assess airborne railway noise impact on the noise sensitive uses of the Proposed Development due to the operation of East Rail Line (EAL) nearby and recommend noise mitigation measures where practicable to attenuate the impact.

4.2 Assessment Criteria

4.2.1 Operation of the EAL would be subject to control under the Noise Control Ordinance (NCO) by the "*Technical Memorandum for the Assessment of Noise from Places Other Than Domestic Premises, Public Spaces or Construction Sites*" (IND-TM). The airborne noise shall comply with the Acceptable Noise Level (ANL), which depends on the Area Sensitivity Rating (ASR).

4.2.2 According to the IND-TM, four (4) types of areas are defined and including: Rural Area, Low Density Residential Area, Urban Area and Area Other Than Those Above. The Application Site is located in Tai Po Kau area and surrounded by various low-rise residential developments of low density. It is therefore considered as Low Density Residential Area.

4.2.3 It is noted that Tolo Highway is situated at about 150m to the north of the Application Site on the same side of EAL. It has an Annual Average Daily Traffic (AADT) of 147,630 with reference to the Annual Traffic Census 2022 published by the Transport Department, and acts as an Influencing Factor (IF). According to the submitted road traffic noise model, Tolo Highway has the highest contribution to the facades with direct line of sight. These facades with direct line of sight to Tolo Highway are considered to be directly affected by IF. Therefore, ASR "C" is assigned to them. The ASR and ANLs according to IND-TM are tabulated below.

Table 4.1 Area Sensitivity Rating

Type of Area Containing NSR		Degree to which NSR is affected by Influencing Factors (IFs)		
		Not Affected	Indirectly Affected	Directly Affected
i.	Rural area, including country parks, or village type development	A	B	B
ii.	Low density residential area consisting of low-rise or isolated high-rise developments	A	B	C
iii.	Urban Area	B	C	C
iv.	Area other than those above	B	B	C

Table 4.2 Acceptable Noise Levels for Railway Noise Impact Assessment

Time Period	ANL for ASR "C", Leq(30min), dB(A)
Day & Evening (0700 to 2300 hours)	70
Night (2300 to 0700 hours)	60

4.2.4 Noise standards are also recommended in Chapter 9 of HKPSG for planning against potential noise impact. The relevant railway noise standard is tabulated below:

Table 4.3 Relevant Noise Standard under HKPSG

Description	Standard, dB(A)
Lmax (2300-0700)	85
Leq (24-hour)	65

Remark: The above standards apply to uses which rely on opened windows for ventilation

4.3 Existing and Future Condition of East Rail Line

4.3.1 EAL lies along to the north and northeast of the Application Site. Vertical trackside barrier has been implemented between the EAL tracks and the Application Site to mitigate the operational airborne noise from the at-grade open track on existing developments nearby the Application Site. As advised by MTRC, the vertical barrier has approximate length of 350m near Care Village and Riverain Bayside. The Consultant has visited MTRC's office to observe relevant barrier drawings and adopt the same in this railway noise impact assessment. Correspondence with MTRC has been provided in **Appendix 4.1**.

4.4 Assessment Methodology

Operational Parameters

4.4.1 The current peak frequency at the section between Tai Po Market Station and University Station has been compared with the latest Variation of Environmental Permit for the *Shatin to Central Link – Mong Kok East to Hung Hom Sectio*n (VEP-510/2016, hereafter referred as "SCL-VEP") (i.e. future train frequency, see **Appendix 4.2**). It is observed that the scenario under the SCL-VEP is more frequent than the existing scenario. Therefore, the SCL-VEP train frequency is adopted for this assessment.

4.4.2 The EAL maximum operating train frequency during the period of 0700-2300 would be 30 trains per hour in each direction, while there would be 24 trains per hour per direction during 0600-0700.

4.4.3 The current maximum permitted train speed is about 120kph for both directions within the vicinity of the Application Site. There are currently 9 cars per train for the operating condition of the EAL.

Sound Exposure Level and Lmax

4.4.4 On-site railway noise measurement was conducted at the access road near Trackside Villas to determines reference sound exposure level (SEL) from the East Rail. The measured SELs at 25m are 81.9dB(A) and 80.4dB(A) for near track and far track respectively. The measured Lmax at 25m are 75.5dB(A) and 77.2dB(A) for near track and far track respectively. **Appendix 4.3** shows the measurement details.

Correction Terms

4.4.5 Given that onsite measurement is conducted in the vicinity of the Application Site, the effect due to speed along tracks nearby on the noise level is already accounted in the measured SELs. Therefore, no speed correction is considered.

4.4.6 The U.K. Department of Transport's procedure "Calculation of Railway Noise" (CRN) was used to predict the hourly Leq (30 min) noise levels generated from railway tracks at selected NSRs. For ordinary assessment based on the reference SEL, the Leq (30 min) level can be determined by accounting the following factors:

- Distance correction [DC = 10 x log (Dref / D)] where Dref is reference distance during measurement;
- View angle correction [VAC = 10 x log ($\pi\theta/180$ – $Cos2\alpha Sin\theta$) - 5] where θ = view angle to railway track not shielded from the NSR & α = acute angle defined in CRN;
- Barrier correction is determined as per Chart 6(a) of CRN. It is given by the equation below.
    - Shadow Zone

      For path difference, δ > 2.5m, CB = 21.0;

      For path difference, 0 < δ < 2.5m, CB = -7.75 log (5.2 + 203 x δ)
    - Illuminated Zone

      For path difference, δ > 0.4m, CB = 0;

      For path difference, 0 < δ < 0.4m, CB = 0.88 + 2.14 log (10^{-3} + δ)
- Deterioration correction [+3dB(A)] to account for deterioration in rail and rolling stock condition.
- Façade correction [+2.5dB(A)];
- Air Absorption Correction [AAC = 0.2 – 0.008 x d] where d = distance between segment and receiver. As sound propagates through the air, some attenuation will occur due to absorption by the atmosphere.
- Conversion from SEL to Leq (30 min) during day & evening time/night-time [a frequency of 30/24 trains per hour per direction based on information from the SCL-VEP with 1 additional train to capture possible worst case impact].
- The maximum train frequency in a day will be 30 trains per hour per direction. Assuming EAL operates 24 hours a day with peak frequency at each of 24 hours, the frequency in 24 hours will not be higher than 30 x 24 = 720 trains. Conversion from SEL to Leq (24-hr) will be made based on 720 trains in 24 hours as most conservative scenario.

4.4.7 Similarly, Lmax noise level at selected NSRs is determined by accounting factors including distance correction, deterioration correction, façade correction, and air absorption correction.

4.5 Noise Assessment Point

4.5.1 Representative assessment point has been selected for this study, which is nearest to EAL with direct line of sight. The assessment point is located at north façade of the chapel representing the worst affected location disregard no ventilation opening will be provided at this chapel. The night time noise standard is considered as the most stringent. Should the predicted night time noise level at this worst affected location be within the acceptable criterion, no unacceptable railway noise impact on ventilation opening location of habitable area (dormitory) is anticipated.

4.5.2 The assessment point is taken at 1m away from the façade and 1.2m above the corresponding floor slab. **Figure 4.2** showed the location of the representative NAP.

4.6 Railway Noise Impact Assessment Result (Base Case)

Leq (30min) Noise Level during Day & Evening and Night Time

4.6.1 The predicted day & evening time and nighttime maximum noise level of NAP R2-01 are 54.1dB(A) and 53.2dB(A), which comply with relevant standard.

Leq (24-hour) and Lmax Noise Level

4.6.2 The predicted Leq (24-hour) and Lmax maximum noise levels for NAP R2-01 are 53.8dB(A) and 67.2dB(A). No exceedance is found.

4.6.3 It is understood that the selected NAP is considered to be the worst affected location from railway noise point of view. Therefore, all other not-selected NAPs within the Proposed Development will also meet their relevant standard.

4.7 Conclusion

4.7.1 Railway noise impact assessment has been carried out for the Proposed Development.

4.7.2 The worst affected NAP due to the operation of EAL has been selected for this assessment. According to the assessment result, no exceedance is found at the selected NAP. Therefore, no adverse railway noise impact shall be expected at the remaining noise sensitive uses of the Proposed Development.

5. FIXED NOISE IMPACT ASSESSMENT

5.1 Introduction

5.1.1 The aim of this study is to assess potential noise impact arising from nearby fixed noise source within 300m assessment area of the Proposed Development. Practical noise mitigation measures would be recommended, where necessary.

5.2 Assessment Criteria

5.2.1 According to the IND-TM issued under the NCO, the airborne noise shall comply with the ANL, which depends on the ASR as described in **Table 4.1**.

5.2.2 Same as railway noise impact assessment in previous chapter, ASR "C" is applicable to the facades with direct line of sight and affected by the IF (i.e. Tolo Highway). ASR "B" would be assigned to the façades having no line of sight with Tolo Highway.

5.2.3 **Table 5.1** below presents the fixed noise impact assessment criteria for Daytime & Evening time and Nighttime Periods adopted in this assessment.

Table 5.1 Acceptable Noise Levels for Fixed Noise Impact Assessment

Time Period	ANL for ASR "B", Leq(30min), dB(A)	ANL for ASR "C", Leq(30min), dB(A)
Day & Evening (0700 to 2300 hours)	65	70
Night (2300 to 0700 hours)	55	60

5.3 Fixed Noise Sources

5.3.1 Desktop review and site investigations have been carried out to identify potential fixed noise sources in the vicinity of the Application Site. Site visits were conducted on 21 December 2023 during daytime periods in an attempt to identify fixed noise sources in the vicinity and determine their operating hours.

5.3.2 Details of identified fixed noise sources are listed as follows:

(a) China Light Power (CLP) System Control Centre

China Light Power (CLP) System Control Centre is located to the southeast of the Application Site, with approximately 130m of separation from the nearest site boundary. Five chillers (Source ID: C01 to C05) are identified and placed at roof of CLP System Control Centre. Twelve VRVs (Source ID: V01 to V12) are also identified at the roof.

Noticeable noise from these AC units is not observed from the site survey during December 2023 at accessible location near to CLP System Control Centre. It is advised by the guard of CLP System Control Centre that the AC units would be under operation for 24 hours. The facility is not accessible. Request was made to CLP System Control Centre to collect information of the identified AC units (e.g. equipment model, noise data) and to request for access to conduct onsite measurement. The copies of letters of request are shown in **Appendix 5.1**. Since CLP had not responded and on-site noise measurement cannot be conducted without permission from CLP. By observing the scale of the equipment, reference equipment catalogue model of a similar scale is adopted (see **Appendix 5.3**).

(b) WSD Tai Po Kau Fresh Water Pumping Station

The pumping station is situated at about 100m apart to the east of the Application Site along Tai Po Road – Tai Po Kau (Source ID: P01). The station is fenced off and it is not accessible by public. During the site survey conducted on 21 December 2023, the pumping station was in operation but there was no noticeable noise. Thus, the noise source would not be considered in the fixed noise impact assessment.

(c) WSD Ha Wong Yi Au Fresh Water Pumping Station and DSD Tai Po Kau Sewage Pumping Station

The two stations (Source ID: P02 & P03) are located at the northwest of the Application Site and at immediate south of the East Rail Line track. Both stations are currently under construction and coordinated by ATAL Engineering Ltd. and Kuly Construction & Engineering Co. Ltd respectively. No significant noise is observed from the pumping station during the site survey on 21 December 2023.

As advised by DSD, the Tai Po Kau Sewage Pumping Station (SPS) is currently under upgrading works and noise inventory is not available at the moment (see **Appendix 5.5**). On the other hand, there is no reply from WSD. Nevertheless, the pumping stations should be designed to meet HKPSG requirement so that no exceedance of NCO standard is anticipated.

5.3.3 The noise strength of the identified fixed noise sources mentioned above at different time of a day has been derived based on backward calculation. To illustrate, the existing Riverain Bayside and Redland Garden are taken as the existing NSRs. The most exposed NSRs (i.e. BF-01 for Riverain Bayside and BF-02 for Redland Garden) have been selected for the calculation. As a conservative approach, it is assumed that these NSRs can marginally comply with statutory fixed noise standard only (ASR "C" for BF-01 and ASR "A" for BF-02). Backward calculation is then conducted to estimate the sound power level of the identified noise sources (see **Appendix 5.2**).

5.3.4 According to desktop review and site survey, it is observed that there is a planned residential development (i.e. TPTL 230) situated at approximately 270m to the southeast of the Proposed Development. It is observed that the residential development is low-rise or house development in nature. Clubhouse may be included, where MVAC units may be installed. However, given that there is a long separation distance between the nearest NSR of the Proposed Development and the site boundary of TPTL 230 (i.e. ~295m), the possible MVAC equipment or building service systems for communal use of TPTL 230, if any, would unlikely have any significant adverse contribution to the overall fixed noise impact.

5.3.5 Locations of the fixed noise sources are indicated in Figure 5.1 Location of Identified Fixed Noise Sources**Figure 5.1**. Summary of SWLs applied in this fixed noise impact assessment is included in **Appendix 5.4**.

5.4 Representative Noise Sensitive Receivers

5.4.1 Representative NSRs which have direct line of sight and shortest horizontal distance with the identified fixed nose sources have been selected for the assessment. The concerned NSRs (F1-11 & F1-12) at the southern façade of 1/F Dormitory Room 1 and Room 2 (assumed not affected by IF and have most stringent assessment criteria, i.e. ASR "B") are selected to represent the worst impacted location due to the identified fixed noise sources. Should the predicted fixed noise levels for the concern NSRs comply with the nighttime noise standard, no adverse fixed noise impact on remaining façade of the Proposed Development is anticipated.

5.4.2 The location of the representative NSRs is presented in **Figure 5.2**.

5.5 Assessment Methodology

5.5.1 Standard acoustic principles were adopted for prediction of cumulative fixed noise impact. In accordance with the IND-TM, a barrier correction of -10 dB(A) is applied where the line of sight from the representative NSR would be completely blocked by building structure or barriers. A façade correction of +3dB(A) is also adopted. Tonality of 6dB(A) is also assumed for all fixed noise sources as a conservative assessment approach.

5.5.2 Prediction of the fixed noise level can be represented by the formula below:

$$SPL_{NSR} = SWL_{source} + Corr_{dist} + Corr_{bar} + Corr_{fac} + Corr_{ton}$$

where

SPL_{NSR} = Predicted Noise Level at Selected Representative NSR

SWL_{source} = Derived Sound Power Level of the Fixed Noise Source

$Corr_{dist}$ = Distance Correction (20 x Log (Horizontal Distance between NSR and Source))

$Corr_{bar}$ = Barrier Correction (-10 dB(A) when line of sight is totally blocked)

$Corr_{fac}$ = Façade Correction (+3 dB(A))

$Corr_{ton}$ = Tonality Correction (+6 dB(A), where applicable)

5.6 Assessment Result

5.6.1 A summary of predicted fixed noise levels at representative NSRs is tabulated in **Table 5.2**. The maximum predicted fixed noise levels Leq(30mins) for daytime & evening period is up to 58dB(A), whilst for night-time period is 48dB(A). Therefore, the above results show that the predicted noise level is in compliance with the assessment criteria of 65dB(A) and 55dB(A) for daytime & evening and night-time periods respectively.

Table 5.2 Predicted Fixed Noise Level

Selected Representative NSRs	Predicted Fixed Noise Level, ($L_{eq\ (30mins)}$, dB(A))	
	Day and Evening Time (07:00-23:00)	Night-time (23:00-07:00)
F1-11	58	48
F1-12	57	48

5.7 Conclusion

5.7.1 The potential noise impact from fixed sources has been assessed. According to the assessment results, the Proposed Development would not be subject to adverse fixed noise impact.

5.7.2 Furthermore, in order to ensure that the fixed noise generated by the Proposed Development would not cause excessive impact to neighbouring noise sensitive uses, the potentially noisy facilities onsite (e.g. ventilation system, plant room etc.) will be designed and installed with adequate noise mitigation measures to meet the relevant noise criteria as stipulated in the HKPSG.

6. CONSTRUCTION PHASE IMPACTS

6.1 Introduction

6.1.1 During the construction phase of the Proposed Development, there may be potential dust, noise and water quality impacts upon the nearby sensitive receivers such as villages. Waste generation (including possible land contamination) is another consideration. Practicable environmental mitigation measures are recommended to reduce these impacts to acceptable ranges.

6.2 Fugitive Dust Emission

6.2.1 The major air quality impact of concern during the construction phase will be the potential fugitive dust emission. The major dust emission sources during the construction phase of the Proposed Development are expected to arise from construction activities during site formation stage such as:

- Excavation resulting in exposed ground vulnerable to air erosion;
- Earth moving, loading and unloading of excavated material;
- Wind effect on material stockpiling; and
- Vehicle movements on haul roads and over the construction site.

6.2.2 There will be potential impacts from the criteria pollutants (e.g. nitrogen oxides (NOx), sulphur dioxide (SO_2), and carbon monoxide (CO)). Emission from diesel trucks for the haulage of materials and construction plants will contain high percentage of smoke particulate and unburned hydrocarbons in comparison with petrol driven vehicles. Ultra-low sulphur diesel (ULSD) with sulphur content not exceeding 0.005% by weight will be used as fuel to minimize SO_2 emission. In all circumstances, the contractor will be required to observe all relevant regulations and maintain all equipment in good condition to avoid any excessive emission. Under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, only approved or exempted non-road mobile machineries (including mobile generator, air compressor, excavator, crawler crane, bulldozer and etc.) with a proper label are allowed to be used in the construction site. In addition, availability of electricity supply during construction of the project will be explored and such requirement will be specified in future contract. In all circumstances, contractor should maximise use of electricity and with least reliance of diesel fuelled equipment (e.g. for electricity powered stationary equipment such as pump instead of using generator).

6.2.3 There are some residential uses situated in the vicinity from the Application Site and considered as Air Sensitive Receivers (ASRs). **Figure 6.1** shows the separation distance between the Application Site and the nearby ASRs.

Table 6.1 Summary of Representative Air Sensitive Receivers

ASR	Description	Type	Building Height, mPD	Approximate Horizontal Distance to the Proposed Development
ASR01	Chateau Royale & Clubhouse	Residential	~30	~8m to the northwest; ~3m to the south
ASR02	Care Village	Residential	~12	~55m to the north
ASR03	Redland Garden	Residential	~47	~182m to the east
ASR04	Strafford House	Residential	~75	~111m to the southeast

6.2.4 The Proposed Development is a 3-storeys building with no basement. Therefore, excavation work is limited for the Proposed Development. However, demolition of the abandoned FMO Tai Po Primary School is required. It is estimated that about 13,000m^3 of demolished and excavated material will be generated. Assuming a period of 0.5 years for demolition, site formation and excavation, about 1 truckload per hour will be generated.

6.2.5 It is observed that there are 2 residential developments (i.e. TPTL No. 230 and TPTL No. 231) under construction to the southeast of the Proposed Development. They are separated by approximately 270m and 400m respectively. Cumulative fugitive dust impact during concurrent construction of these 3 projects is anticipated. Best management practice and applicable fugitive dust mitigation measures are expected to be implemented for the Proposed Development as well as the concurrent project.

6.3 Mitigation Measures for Fugitive Dust Emission

6.3.1 Fugitive dust emission arising from construction activities can be effectively suppressed by incorporating proper mitigation measures into work procedures through contractual clauses with reference to EPD's Recommended Pollution Control Clauses for Construction Contracts, where applicable, good site management, and close monitoring by the resident engineers. The contractor shall be required to follow the requirements of the Air Pollution Control (Construction Dust) Regulations for demolition and construction of the project. With the adaptation of good practices, it is expected that emission of construction dust can be kept at an acceptable level. Mitigation measures including but not limited to the followings with respect to demolition, superstructure construction of a building and hoarding should be implemented as appropriate:

- In the case of demolition of a building
  - the area at which demolition work takes place shall be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the demolition activities so as to maintain the entire surface wet;
  - for any wall of the building to be demolished that abuts or fronts upon a street, service lane or other open area accessible to the public, impervious dust screens or sheeting shall be used to enclose the whole wall to a height of at least 1m higher than the highest level of the structure being demolished;
  - any dusty materials remaining after a stockpile is removed shall be wetted with water and cleared from the surface of roads or streets.
- In the case of the superstructure construction of a building
  - Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting shall be provided to enclose the scaffolding from the ground floor level of the building, or if a canopy is provided at the first floor level, from the first floor level, up to the highest level of the scaffolding;
  - Any skip hoist for material transport shall be totally enclosed by impervious sheeting; and
  - Any relevant requirements set outs in Parts III and IV of Air Pollution Control (Construction Dust) Regulations shall be met.
- Except for road opening or resurfacing work, or for construction work carried out in a construction site that is completely paved or completely covered with hardcore

- Vehicle washing facilities including a high pressure water jet shall be provided at every discernible or designated vehicle exit point;
- The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point shall be paved with concrete, bituminous materials or hardcores;
- Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4 m high from ground level shall be provided along the entire length of that portion of the site boundary except for a site entrance or exit. As nearest air sensitive uses are identified on north and east sides, higher hoarding is recommended along northern and eastern site boundary.

6.3.2 In particular, for ASR (i.e. Chateau Royale) in close proximity to the Subject Site, the following control measures are suggested to minimize the potential construction impact to the nearby ASR(s).

- Higher site hoarding where practicable should be implemented where there are receptors at close proximity to the construction site and dusty activities;
- Haul road shall be away from the site boundary as much as possible;
- Dusty works or stockpiles storage should be avoided at locations near to the concerned ASRs;
- Unpaved and exposed earth should be minimized by immediate covering/ permanent paving as soon as the works have been completed.

6.3.3 The recommended dust mitigation measures are described below.

General Site Management

6.3.4 Appropriate working methods should be devised and arranged to minimise dust emissions and to ensure any installed control system and/or measures are operated and/or implemented in accordance with their design merits. No free falling of construction debris should be allowed, which should be let down by hoist or enclosed tunnel to the ground.

6.3.5 A high standard of housekeeping shall be maintained. Any piles of materials accumulated on or around the work areas shall be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas shall be carried out in a manner that does not generate fugitive dust emissions. Prior to cleaning, the materials should be handled properly to prevent fugitive dust emission. Any exposed earth shall be properly treated by compacting or hydro seeding, within 6 months after the last construction activity.

6.3.6 Frequent mist/ water spraying should be applied on dusty areas and among dusty activities such as excavation work. The frequency of spraying will depend upon local conditions such as rainfall, temperature, wind speed and humidity. The amount of water spraying should be just enough to dampen the material without over-watering which could result in surface water runoff.

6.3.7 It is also recommended that the environmental officer of the contractor should conduct regular audit to ensure that all practical mitigation measures are properly implemented onsite and there is no excessive dust emission.

Vehicles and Unpaved Site Roads

6.3.8 Dust emission from unpaved roads comes predominantly from travelling of vehicles. Areas within the site where there are regular vehicle movements should have an

approved hard surface. Speed controls at an upper limit of 10km/hr should be imposed and their movements should be confined to designed roadways within the site. All dusty vehicle loads should have side and tail boards covered by tarpaulin extending at least 300mm over the edges of the side and tail boards. Wheel-wash troughs and hoses should be provided at exit points of the site.

Material Stockpiling and Handling

6.3.9 The amount of stockpiling should be minimised where possible. Construction material or debris should be covered and stored inside enclosed areas. Other control measures such as enclosed or semi-enclosed windboard should be used, where applicable, to minimise dust emission. Regular watering is needed at areas such as storage piles, where there could be potential dust emission.

6.3.10 In addition, electric power supply shall be provided for onsite machinery as far as practicable to minimize aerial emissions.

6.4 Construction Noise Impact

6.4.1 During the construction phase of the Proposed Development, major noise impacts would arise from piling works, operation of Powered Mechanical Equipment (PME), and construction-related traffic.

Construction Noise Criteria

6.4.2 Construction noise is controlled under the Noise Control Ordinance (NCO) which prohibits the use of powered mechanical equipment (PME) during the restricted hours (7 p.m. to 7 a.m. on normal weekdays and any time on a public holiday, including Sunday) without a valid Construction Noise Permit (CNP) from the Authority. The criteria and procedures for issuing such a permit are specified in the "Technical Memorandum on Noise From Construction Works Other than Percussive Piling" (TM1). While there is no planned construction works to be carried out during the restricted hours, TM1 should be followed in case there is any need to carry out works in such time period in future.

6.4.3 With effect from 1 November 96, the use of specified powered mechanical equipment (SPME) for carrying out construction work other than percussive piling and/ or the carrying out of prescribed construction work (PCW) within a designated area are also brought under control. The relevant technical details are provided in the "Technical Memorandum on Noise from Construction Work in Designated Areas" (TM2).

6.4.4 Percussive pilling is controlled similarly by a construction noise permit system and described in the NCO and the "Technical Memorandum On Noise From Percussive Piling" (TM3) which restrict the number of hours during which piling can be conducted. Percussive piling is prohibited between 7 p.m. and 7 a.m. and on holidays (including Sundays). Percussive piling during the daytime (i.e. between 7 a.m. and 7 p.m. on any day not being a holiday) may be carried out in accordance with the permitted hours and other conditions under a valid construction noise permit.

6.4.5 For construction works other than percussive piling, although TM1 does not provide control over daytime construction activities, noise limits as shown in below Table are set out in the "Practice Note for Professional Persons Environmental Consultative Committee" (ProPECC) PN 1/24 "Minimizing Noise from Construction Activities" issued by EPD.

Table 6.2 Noise Limit for Daytime Construction Activities

NSR	0700 to 1900 Hours on Any Day Not Being a Sunday or General Holiday, Leq (30 min), dB(A)
All domestic premises Temporary housing accommodation Hostels Convalescences homes Homes for the aged	75
Places of public worship Courts of law Hospitals and medical clinics	70
Educational institutions (including kindergartens and nurseries)	70 (65 during examination)

6.4.6 Sufficient noise mitigation measures should be introduced to alleviate potential noise impacts on nearby NSRs. The Contractor(s) will be required under the contract to ensure regular maintenance of all plant and equipment, and that noise generation at source would be minimized and practicable noise mitigation measures would be in use. The Contractor(s) will be required to adopt quiet type construction plants (e.g. EPD's quality powered mechanical equipment (QPME) inventory), wherever practicable. Similarly, quieter method other than percussive piling will be adopted as far as practicable for any piling works subject to ground investigation result (which usually dictates the piling method). Movable noise barriers will also be erected around noisy plants in order to minimize noise generation at source. With these measures in place noise generation due to construction activities would be minimized.

6.4.7 The following general noise mitigation measures are recommended for implementation:

- Application of properly designed silencers, mufflers, acoustically dampened panels and acoustic sheds or shields, etc.;
- Use of electric-powered equipment where applicable instead of diesel-powered or pneumatic-powered equipment;
- Erecting noise enclosures/ movable noise barriers around noisy plants;
- Only well-maintained plants should be operated on-site;
- Plants should be serviced regularly during the construction programme;
- Noisy activities can be scheduled to minimize exposure of nearby NSRs to high levels of construction noise. For example, noisy activities can be scheduled for midday or at times coinciding with periods of high background noise;
- Noisy equipment such as emergency generators shall always be sited as far away as possible from noise sensitive receivers;
- Location of noise emitting plants at maximum possible distances from sensitive receivers;
- Contractual clauses for construction works; and
- Schedule of noisy operations during non-restricted hours where possible.

6.4.8 The above-mentioned noise mitigation measures will be included in the contractual clauses for implementation by the contractor(s) during the construction stage. With these measures in place, construction noise due to the Proposed Development can be minimized, and no significant noise impact is anticipated.

6.5 Water Quality and Construction Wastewater Impact

Source of Construction Wastewater

6.5.1 Construction activities would inevitably have the potential to generate wastewater and affect the nearby water quality. Works should be carried out in such a manner so as to minimise significant impacts on local water bodies. Activities that are likely to cause water pollution include:

- Construction runoff and drainage;
- Sewage effluent from the site; and
- Liquid spillage, e.g. oil, diesel, solvents etc.

6.5.2 Construction runoff contains increased loads of sediments, other suspended solids and contaminants. Potential sources of pollution include runoff and erosion from the site surfaces, drainage channels; bentonite slurries and other grouting materials and drainage from dust suppression sprays, fuel, oil and lubricants from construction vehicles and other equipment.

6.5.3 Water sensitive receivers exist in the immediate surrounding of the Proposed Development (see **Figure 6.2**). Precautionary measures should be incorporated to avoid and minimise potential water quality impact on the water sensitive receivers.

Table 6.3 Summary of Representative Water Sensitive Receivers

WSR	Description	Type	Status	Approximate Horizontal Distance to the Proposed Development
WSR01	Tolo Harbour	Harbour	Active	~250m
WSR02	Watercourse nearby road lane/ development/ green belt	Natural watercourse/ Modified watercourse/ Channelized	Active	~45-460m
WSR03	Pond nearby Yat Yiu Avenue	Pond	Active	~430m

Mitigation Measures

6.5.4 The good practice given in the Practice Notes for Professional Persons on "Construction Site Drainage" (ProPECC PN 2/23) in controlling water pollution at construction site shall be implemented during the construction phase of the Proposed Development. Soil erosion from the construction site can be minimised through good on-site management practices by implementing viable erosion control measures which should be incorporated in contract clauses. The main practices provided in the above-mentioned document (i.e. ProPECC PN 2/23) are also summarized in the following paragraphs which should be enforced to prevent unacceptable construction stage impacts and for compliance with the statutory criteria.

A. Construction Site Runoff

- Exposed soil surfaces should be protected from rainfall through, for example, by covering temporarily exposed slope surfaces or stockpiles with tarpaulin and protect temporary access roads by crushed stone or gravel;
- Exposed soil areas should be minimised to reduce the potential for increased siltation and contamination of runoff;
- Minimise the time that soil surfaces are exposed;
- Slow down water run-off flowing across exposed soil surfaces;
- Channels, earth bunds or sand bag barriers should be provided on site to properly direct surface runoff through drainage systems;
- Oil interceptors are also recommended to be provided for stormwater drains near plant maintenance/ repair areas, where necessary.
- Manholes (including newly constructed ones) should be adequately covered or temporarily sealed so as to prevent slit, construction materials or debris from getting into the drainage system;
- Construction works should be programmed to minimise soil excavation works where practicable during rainy conditions;
- Drainage facilities must be adequate for the controlled release of storm flows;
- Sedimentation basins and sand traps designed in accordance with the requirements of ProPECC Note PN 2/23 should be installed at the construction site for collecting surface runoff. Perimeter channels at site boundaries should be provided where necessary to intercept surface runoff from outside the site. Silt removal facilities, channels and manholes should be maintained and deposited silt and grit should be removed regularly;
- There should be no direct discharge without treatment of construction site runoff into the nearby streams and public drains;
- The Contractor shall prepare a construction site drainage management plan with details of the construction phase drainage system proposed to be constructed; discharge location(s); and screening facilities; and
- The Contractor(s) shall apply for a discharge licence under the WPCO and the discharge shall comply with the terms and conditions of the licence throughout the construction phase.
- Construction works should be arranged so that there should be no disturbance to water quality at the nearby stream. Construction site runoff should be intercepted by drains so that there will be no direct discharge without treatment into the nearby stream and other sensitive areas.

B. Wastewater from Construction Site

- Sewage generated from the construction workforce should be contained by chemical toilets before connection to public foul sewer can be provided. The number of chemical toilets required would be subject to the capacity of the chemical toilets, and contractor's practices/ work programme. The Contractor(s) will be required to provide an estimation on the amount of sewage to be generated and to provide sufficient number of chemical toilets for construction workers. The chemical toilets should be serviced and cleaned by a specialist contractor at regular intervals. No discharge of sewage into nearby environment will be allowed during

construction stage. Such requirements will be incorporated into relevant contractual clauses of this Proposed Development for proper implementation;

- Foul water from canteens on-site, if any, should also be contained by chemical toilets before connection to public foul sewer can be provided;
- Vehicle wheel washing facilities should be provided at every site exit such that mud, debris, etc. deposited onto the vehicle wheels or body can be washed off before leaving the site area;
- Section of construction road between the wheel washing bay and the public road should be paved to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains; and
- If bentonite is used, bentonite slurry should be reconditioned and reused as far as practicable. Spent bentonite should be kept in a separate slurry collection system for disposal at a marine spoil grounds subject to obtaining a marine dumping licence from EPD. If used bentonite slurry is to be disposed of through public drainage system, it should be treated to the respective effluent standards applicable to foul sewers, storm drains or the receiving waters as set out in the WPCO Technical Memorandum on Effluent Standards in accordance with ProPECC PN 2/23.

C. Oils and Solvents

- Spillage of fuel oils or other polluting fluids should be prevented at source. It is recommended that all stocks should be stored inside proper containers and sited on sealed areas, preferably surrounded by berms;
- Regular site inspections to ensure the proper implementation of the above measures shall be carried out.

6.6 Construction Waste Disposal

Legislation

6.6.1 The principal legislation controlling waste materials in Hong Kong is the Waste Disposal Ordinance (WDO) (Cap. 354) and its subsidiary regulations.

Construction Waste Impact

6.6.2 Construction activities for the Proposed Development will generate waste materials requiring appropriate management and disposal. Likely range of waste types includes:

- Waste from demolition of existing building and site clearance;
- Excavated C&D materials ;
- Inert and non-inert C&D materials (including waste timber formwork);
- General refuse generated by the workforce;
- Chemical and oily wastes due to maintenance of equipment; and
- Asbestos containing materials

Waste Management Strategy

6.6.3 The general waste management strategy is to avoid waste generation in the first place. If that is unavoidable, source reduction and segregation should be exercised as far as practicable and at the same time, recycling and reuse should be adopted to salvage as much as possible all the recyclable and reusable materials.

Construction Waste Disposal Measures

6.6.4 On-site sorting of construction wastes will be recommended. On-site sorting can be achieved by avoiding the generation of "mixed waste" through good site control.

6.6.5 Waste generated by construction activities should be sorted into inert C&D materials and non-inert C&D materials. The inert C&D materials which comprise soil, rock, concrete, brick, cement plaster/mortar, inert building debris, aggregates and asphalt shall be reused in earth filling, reclamation or site formation works. The non-inert C&D materials which comprises metal, timber, paper, glass, junk and general garbage shall be reused or recycled and, as the last resort, disposal of at landfills.

6.6.6 It is estimated that about 9250m^3 of inert C&D material and 3720m^3 of non-inert C&D material will be generated during the course of construction (including demolition). Adequate areas for sorting and storage of segregated materials should be provided onsite. Construction wastes shall be sorted, with the inert C&D materials broken up into small pieces for disposal at public fill reception facility, and the non-inert C&D materials should be disposed of at landfill.

6.6.7 Chemical and oily wastes generated from the construction activities, vehicle and plant maintenance and oil interceptors should be disposed of as chemical waste in strict compliance with the Waste Disposal (Chemical Waste) (General) Regulation.

6.6.8 Asbestos was widely used in the construction industry prior to the early 1980s for fireproofing, thermal and electrical insulation as well as in sound absorption materials. However, asbestos is currently recognized as hazardous materials, due to its etiological effects on human respiratory system.

6.6.9 Asbestos containing material (ACM) may be present in the buildings within the Application Site. Thus, ACM which may be disturbed during demolition activities, should be removed and disposed of in a proper manner prior to the demolition work, so as to avoid the release of harmful asbestos fibres to environment and minimise potential hazard.

6.6.10 All ACM if confirmed to be present within the existing premises must be removed and disposed of in accordance with the Air Pollution Control Ordinance (APCO) and WDO prior to the demolition works. A Registered Asbestos Consultant and Registered Asbestos Laboratory shall be engaged to conduct investigation for the presence of ACM. An Asbestos Investigation report, an Asbestos Abatement Plan (AAP) (if required) and a notification of commencement of asbestos abatement works commenced. Also, the removal of ACM should be carried out by a Registered Asbestos Contractor according to the approved AAP under the supervision of a Registered Asbestos Consultant. The asbestos waste generated shall be disposed by a licenced collector in compliance with the WDO.

6.6.11 Waste disposal from construction site is subject to control under the Waste Disposal Ordinance.

6.6.12 To estimate the general refuse generated during construction phase, an assumption of 30 workers per day with 0.65kg per worker per day has been made.

6.6.13 **Table 6.4** presents the estimation of waste generated during construction phase.

Table 6.4 Estimated Quantities of Waste during Construction Phase

Waste Material	Estimated Waste Generation	**Proposed Disposal Method and Destination**
Inert C&D Material	~9540 m^3	~0.5% (i.e. 50m^3) would be reused and the remaining (i.e. 99.5% or ~9490m^3) would be delivered offsite to public fill reception facilities
Non-Inert C&D Material	~3810 m^3	Disposal to landfill
General Refuse	~20 kg per day	Recyclables to recyclers; Non-recyclables to landfill
Chemical Waste	Anticipated to be limited (around some hundred litres at most)	To be collected by licensed chemical waste collectors and deliver to Chemical Waste Treatment Centre
Asbestos Containing Materials	TBC (Subject to further investigation by the asbestos specialist)	Disposal to landfill

6.7 Land Contamination Review

Current and Historic Land Uses

6.7.1 The Application Site is located in south of Tai Po Road – Tai Po Kau at Wong Yi Au, Tai Po and occupied by the abandoned FMO Tai Po Primary School. There is a strip of plantation within the Application Site.

6.7.2 Selection of historical aerial photos taken in year 1949 to 2021 are shown in **Appendix 6.1**. It was covered by dense vegetation at year 1949 and school building started to be constructed in year 1964. The school building is in place up to present.

Table 6.5 Land Use Summary on the Application Site

Period / Year	**Land Use / Description**	**Owner / Occupier**	**Source of Information**	**Off-site Property Affected?**
1949	Application Site was covered by dense vegetation without any building structure and trace of any disturbance.	N/A	Aerial Photos available from Lands Department	No
1964	Part of the Application Site was paved and former FMO Tai Po Primary School started to be constructed.	N/A	Aerial Photos available from Lands Department	No
1973	The Application Site was generally paved. All school buildings of former FMO Tai Po Primary School were developed.	N/A	Aerial Photos available from Lands Department	No

Period / Year	Land Use / Description	Owner / Occupier	Source of Information	Off-site Property Affected?
1998	No change in landuse.	N/A	Aerial Photos available from Lands Department	No
2010	No change in landuse. Denser vegetation around the building, due to abandon of use.	N/A	Aerial Photos available from Lands Department	No
2014	No change in landuse. Denser vegetation around the building, due to abandon of use.	N/A	Aerial Photos available from Lands Department	No
2021	No change in landuse. Denser vegetation around the building, due to abandon of use.	Government	Aerial Photos available from Lands Department	No

Information from Government Department

6.7.3 Apart from the historical aerial photos, the following Hong Kong Administration Region (HKSAR) Government Departments have been enquired on the latest update on the availability of land use status and records of land contamination and/or spillage of the Application Site. The summary of correspondences is tabulated in **Table 6.6** below. Copy of letters which the Consultants sent to various Government Department and relevant replies are shown in **Appendix 6.5**.

6.7.4 Building Records Access and Viewing On-line (BRAVO) of Building Department (BD) was visited in January 2024 to obtain records for completed private building. There is neither records of building, structure, drainage, alternation & additions, site formation, minor works nor any existing building available at the Application Site. The captured screen of BRAVO is provided in **Appendix 6.2**. There was only slope work conducted at Application Site.

6.7.5 As advised by Planning Department (PlanD), the Application Site falls within an area zoned "Government, Institution or Community" ("G/IC") and "Green Belt" ("GB") on the Approved Tai Po Outline Zoning Plan (OZP) (No. S/TP/30).

6.7.6 As advised by Environment Protection Department (EPD), the Consultant visited the territory-wide register of chemical waste producers (CWPs) maintained at Territory Control Office. The register record as of 13 October 2023 has confirmed that no CWP at the Application Site.

6.7.7 As advised by Fire Services Department (FSD), no Dangerous Goods Licence is issued within the Application Site. There is also no fire incidents nor incidents of spillage leakage of dangerous goods was found.

Table 6.6 Enquires and Responses on Land Contamination Related Records in the Application Site

Consultant's Letter Ref.	Department	Response Letter Ref.	Response Date	Summary
KTAHOLF-EI00_0_0005 L.23	Planning Department	-	20/12/2023	The Application Site falls within an area zoned "Government, Institution or Community" ("G/IC") and partly "Green Belt" ("GB") on the Approved Tai Po Outline Zoning Plan (OZP) No. S/TP/30. The Site was occupied by the Fish Marking Organization (FMO) Tai Po Primary School site of which the registration of the school has been cancelled in 1997. The Site is currently occupied by abandoned school buildings and being one of the Vacant School Premises with long term "G/IC" uses to meet the needs of the local community reviewed under the Central Clearing House Mechanism by Planning Department.
KTAHOLF-EI00_0_0008 L.23	Environmental Protection Department	() in EP550/W2/4	29/12/2023	There is no record of chemical spillage accident and submission relating to land contamination assessment at the Application Site in the past 3 years. A visit to the Territorial Control Office for chemical waste producer registry inspection was performed. According to the register record as of 13/10/2023, no valid CWP is found at the Application Site.
KTAHOLF-EI00_0_0006 L.23	Fire Service Department	(85) in FSD GR 6-5/4 R Pt. 51	23/01/2024	There is no dangerous goods licence issued in the Application Site. There is also no fire incidents nor incidents of spillage/ leakage of dangerous goods.
-	Lands Department	Topographic Map available from Lands Department was reviewed. Application Site were a school from year 1976 to year 2004. From year 2004 to current version, the Application site is a ruin shown in topographic map. Topographic Map records generally tally with observations in aerial photos.		

Discussion and Site Observation

6.7.8 Based on the above, the desktop review of historical information that the Application Site was covered by dense vegetation in year 1949. The school started to be constructed in year 1964 and apparently abandoned after 1998. There is no change of landuse after developed.

6.7.9 Site visit was conducted on 21 Dec 2023. It was observed that the Application Site was with abandoned school buildings. Site walkover checklist and photo records were shown in **Appendix 6.3** and **Appendix 6.4** respectively. There was no sign of obvious/ suspected contamination such as oil staining, abnormal odour, dangerous goods storage and/ or chemical storage.

6.7.10 It is therefore considered that the risk of land contamination problem arising from the historical and existing use is unlikely. Further investigation of potential land contamination problem is not considered necessary.

6.8 Conclusion

6.8.1 Potential environmental impacts arising from construction activities of the Proposed Development, including dust emission, construction wastewater, noise and waste impacts have been qualitatively assessed. Potential environmental impacts are anticipated to be acceptable with the implementation of effective environmental mitigation measures. In conclusion, it is envisaged that construction phase environmental impacts arising from the Proposed Development would be acceptable.

6.8.2 According to the historical and existing use observed during site survey, the risk of land contamination problem is unlikely. Further investigation of potential land contamination problem is not considered necessary.

7. OVERALL SUMMARY

7.1.1 An environmental assessment has been conducted for the proposed redevelopment to address the potential air quality, environmental noise, construction phase environmental impact.

7.1.2 There is no air sensitive uses including openable window, fresh air intake and recreational uses within the recommended buffer zone from HKPSG. Therefore, no adverse air quality impact due to traffic is anticipated. Chimney stacks are not identified within 200m of the Application Site. Hence, it is unlikely to have industrial emission impact.

7.1.3 Road traffic noise impact assessment has been carried out for the Proposed Development. According to the predicted results, no unacceptable road traffic noise impact due to surrounding roads on the proposed development is anticipated. No noise mitigation is considered necessary.

7.1.4 Railway noise impact from open track section has been assessed. The East Rail Line is distant apart from the Application Site and already erected with noise barrier. The predicted railway noise level at worst representative location would comply with the relevant criteria. No adverse railway noise impact is anticipated.

7.1.5 Fixed Noise Impact Assessment has also been conducted. The predicted noise levels of representative NSRs would comply with the criteria as stipulated in NCO. It can be concluded that the Proposed Development would not be subject to adverse fixed noise impact. On the other hand, any potentially noisy equipment of the Proposed Development will be designed and installed with adequate noise mitigation measures to comply with the HKPSG standard.

7.1.6 Environmental implication during construction (including demolition) of the project has been appraised. With best management practice and relevant environmental mitigation measures implemented, no adverse construction phase environmental impact is anticipated. Moreover, according to the historical and existing land use observed in site survey, the risk of land contamination is unlikely. Further investigation of potential land contamination problem is not considered necessary.

7.1.7 No insurmountable environmental noise, air quality, water quality impact and construction phase environmental impact is anticipated with the recommended environmental mitigation measures properly implemented. The environmental acceptability of the Proposed Development is demonstrated in this study.

Figure

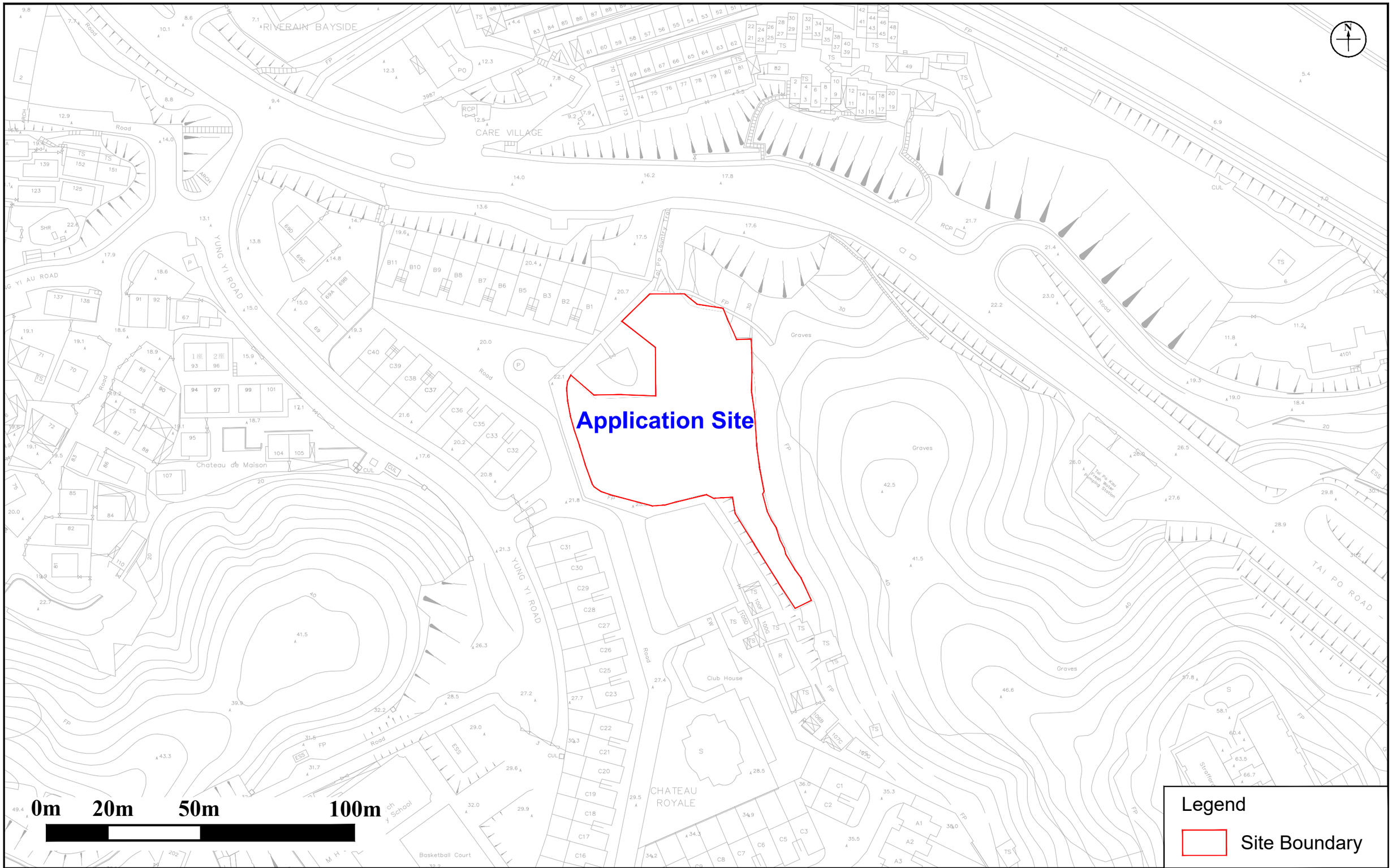

Figure: 1.1	RAMBOLL
Title: Location of the Application Site and its Environs	Drawn by: MK Checked by: CC
Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po	Rev.: 1.0 Date: Jan 2024

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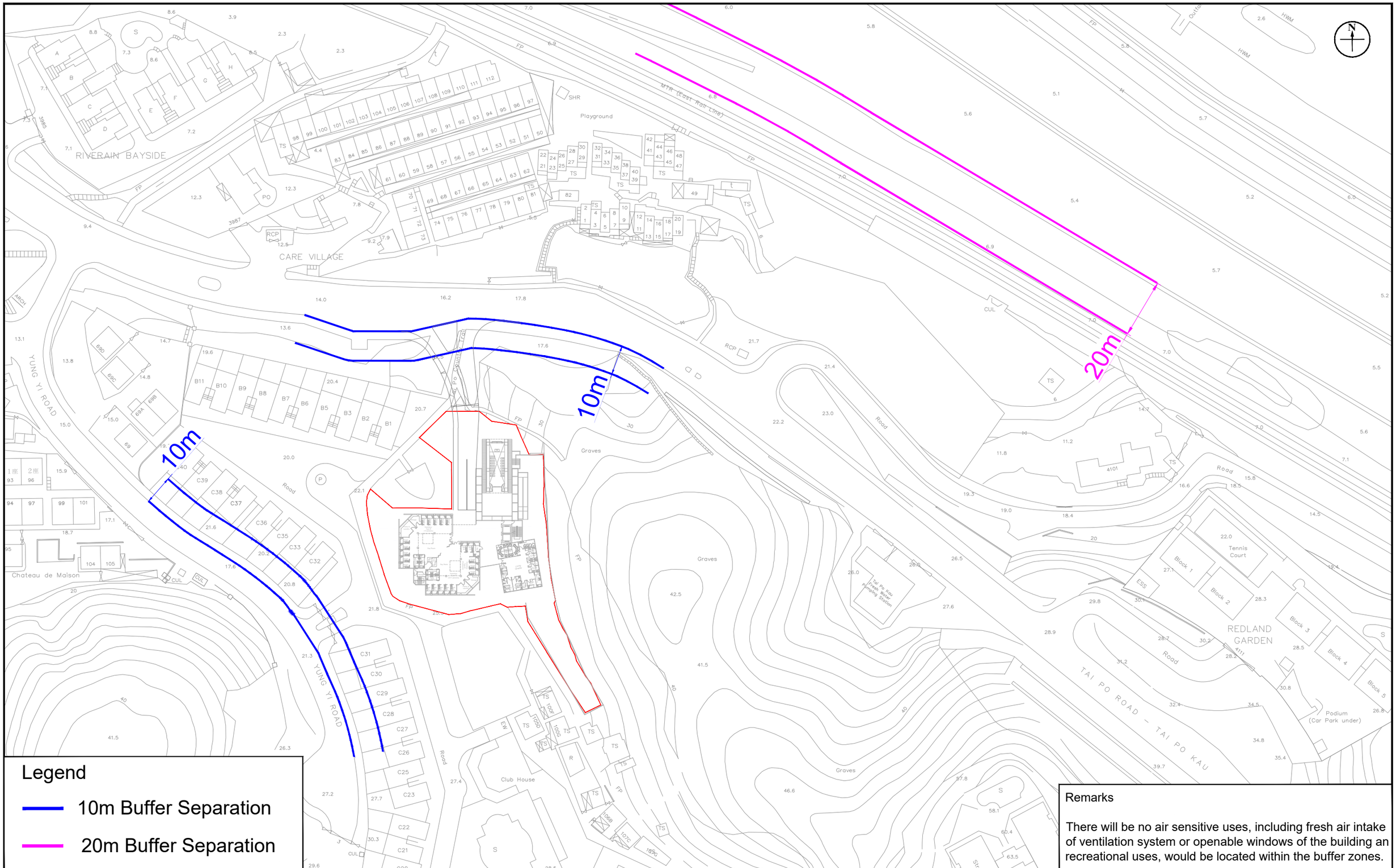

Legend

- 10m Buffer Separation
- 20m Buffer Separation

Remarks

There will be no air sensitive uses, including fresh air intake of ventilation system or openable windows of the building an recreational uses, would be located within the buffer zones.

Figure: 2.1

Title: HKPSG Vehicular Emission Buffer Distance for Nearby Road Network

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

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Rev.:	1.0
Date:	Jan 2024

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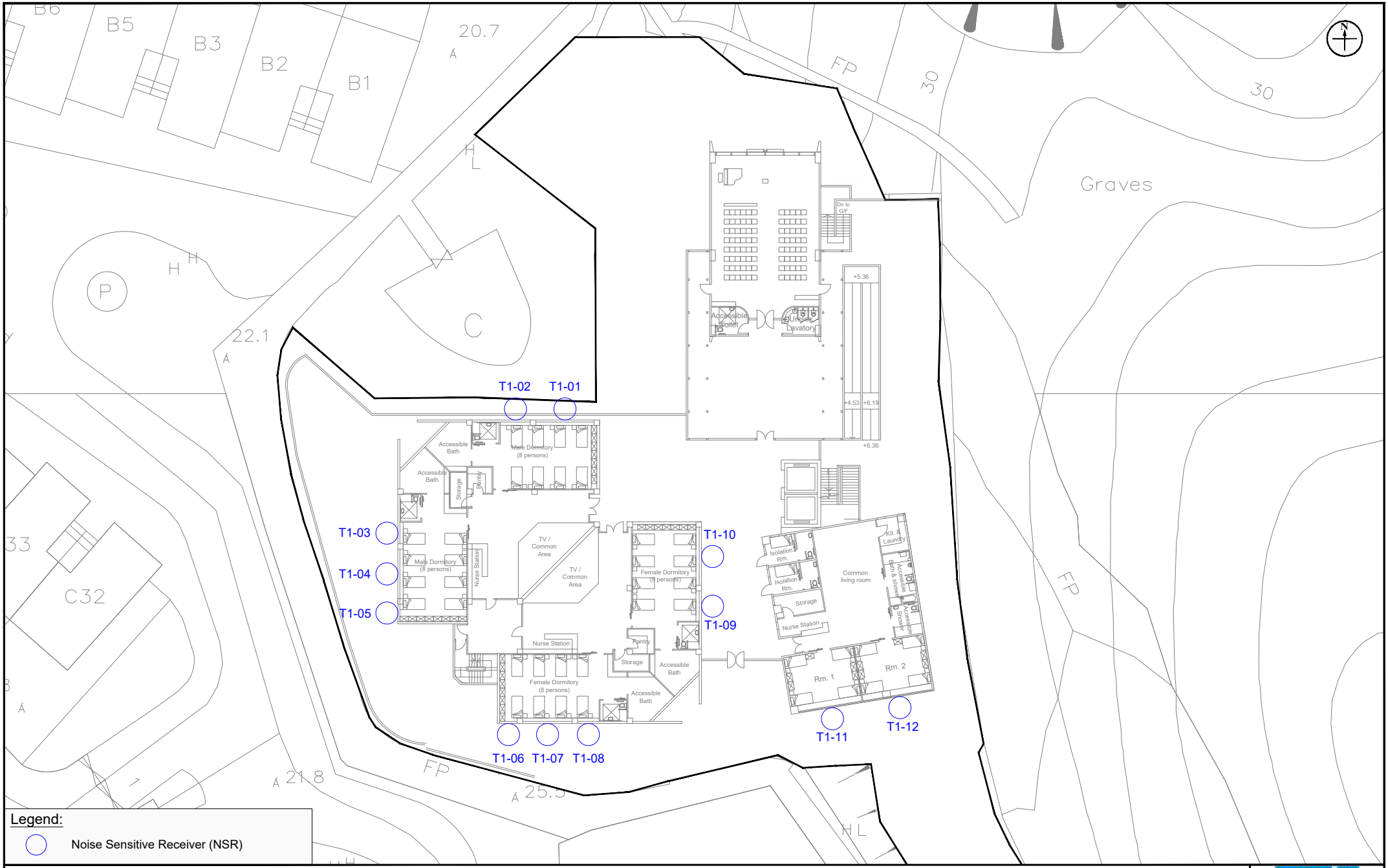

Figure: 3.1a

Title: Locations of Selected Noise Sensitive Receivers for Road Traffic Noise Impact Assessment (1/F)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

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Checked by:	CC
Rev.:	1.1
Date:	Feb 2024

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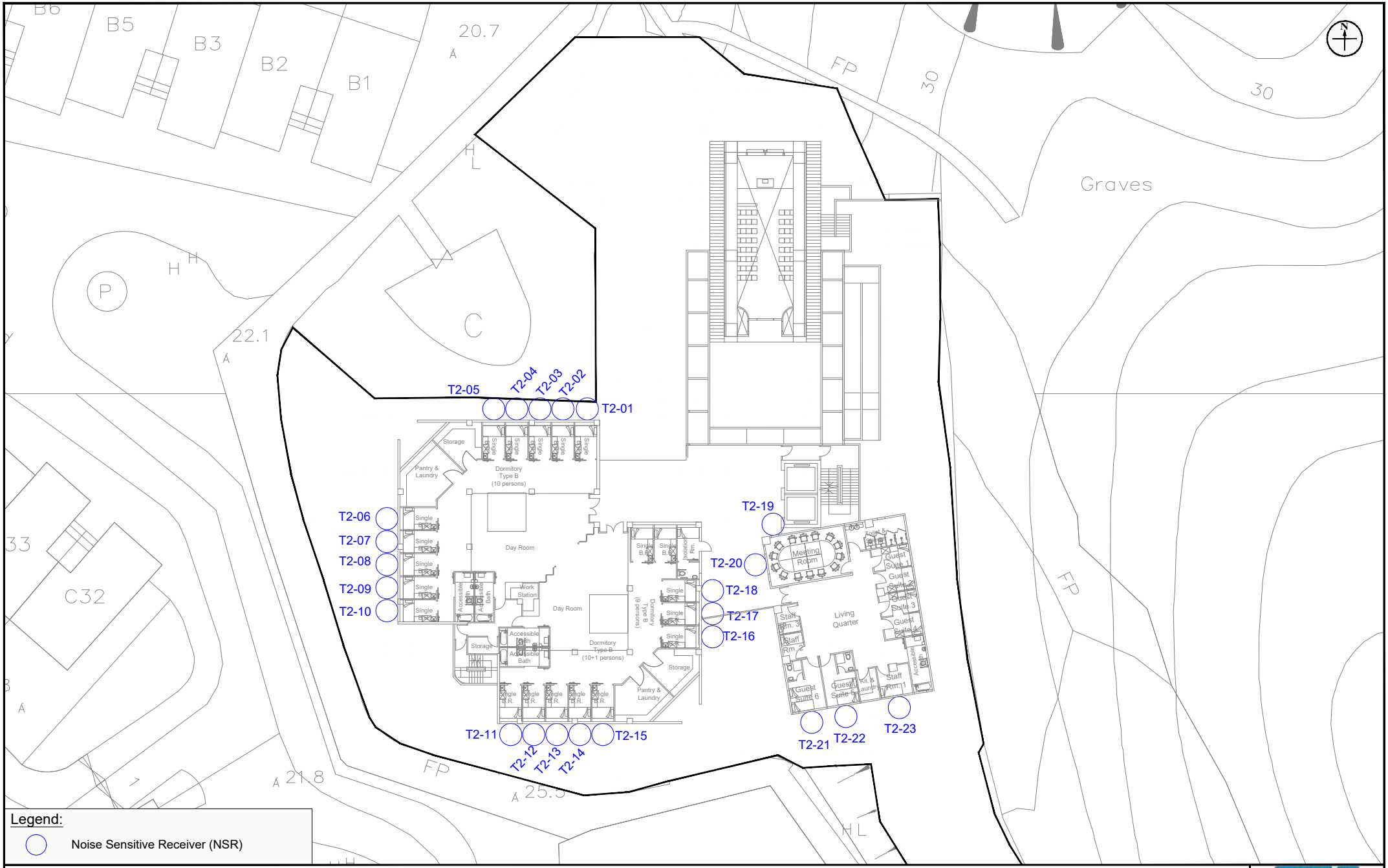

Figure: 3.1b

Title: Locations of Selected Noise Sensitive Receivers for Road Traffic Noise Impact Assessment (2/F)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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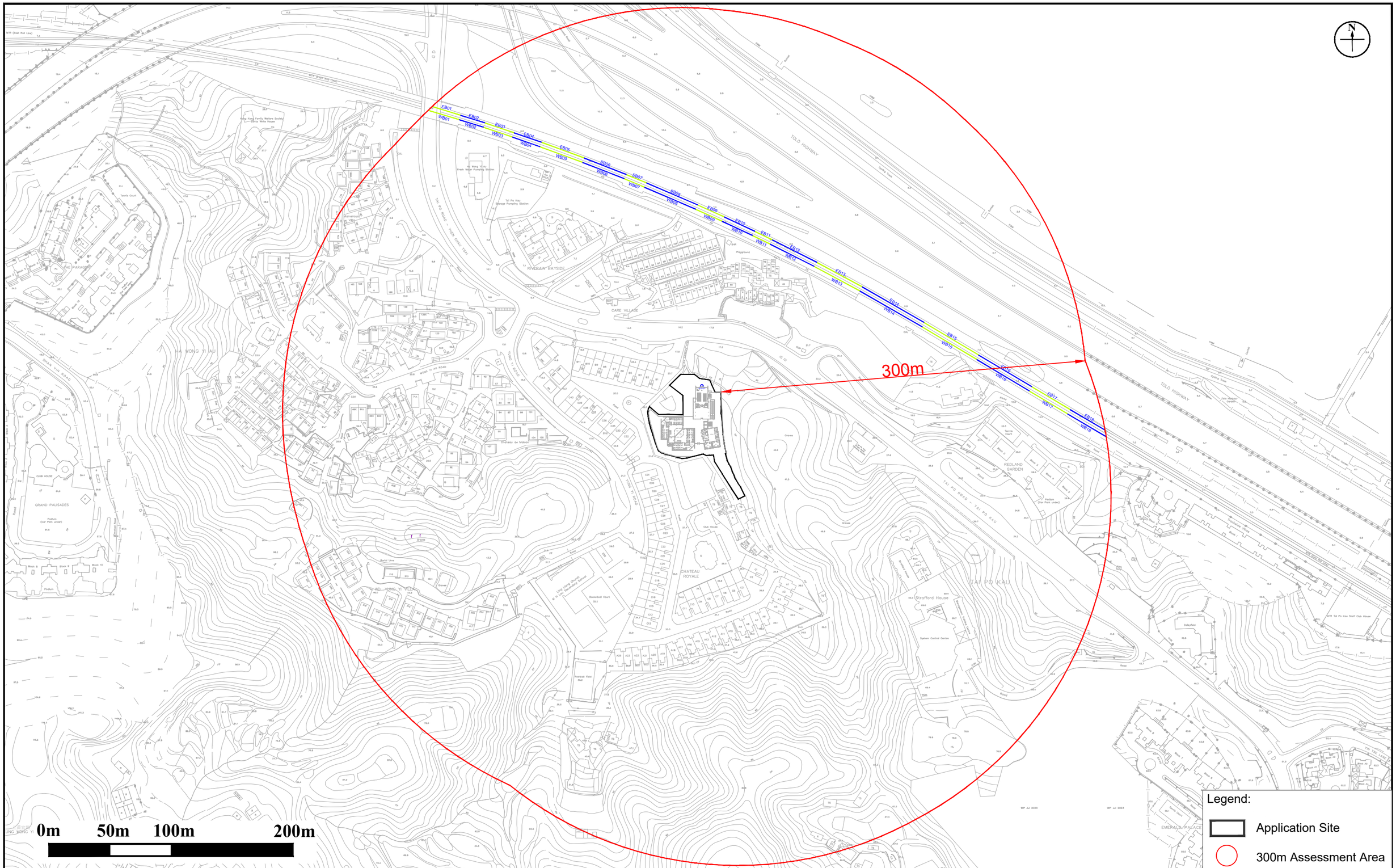

Figure: 4.1

Title: Location of the Rail Segments Within 300m Assessment Area

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

Drawn by:	MK
Checked by:	CC
Rev.:	1.0
Date:	Jan 2024

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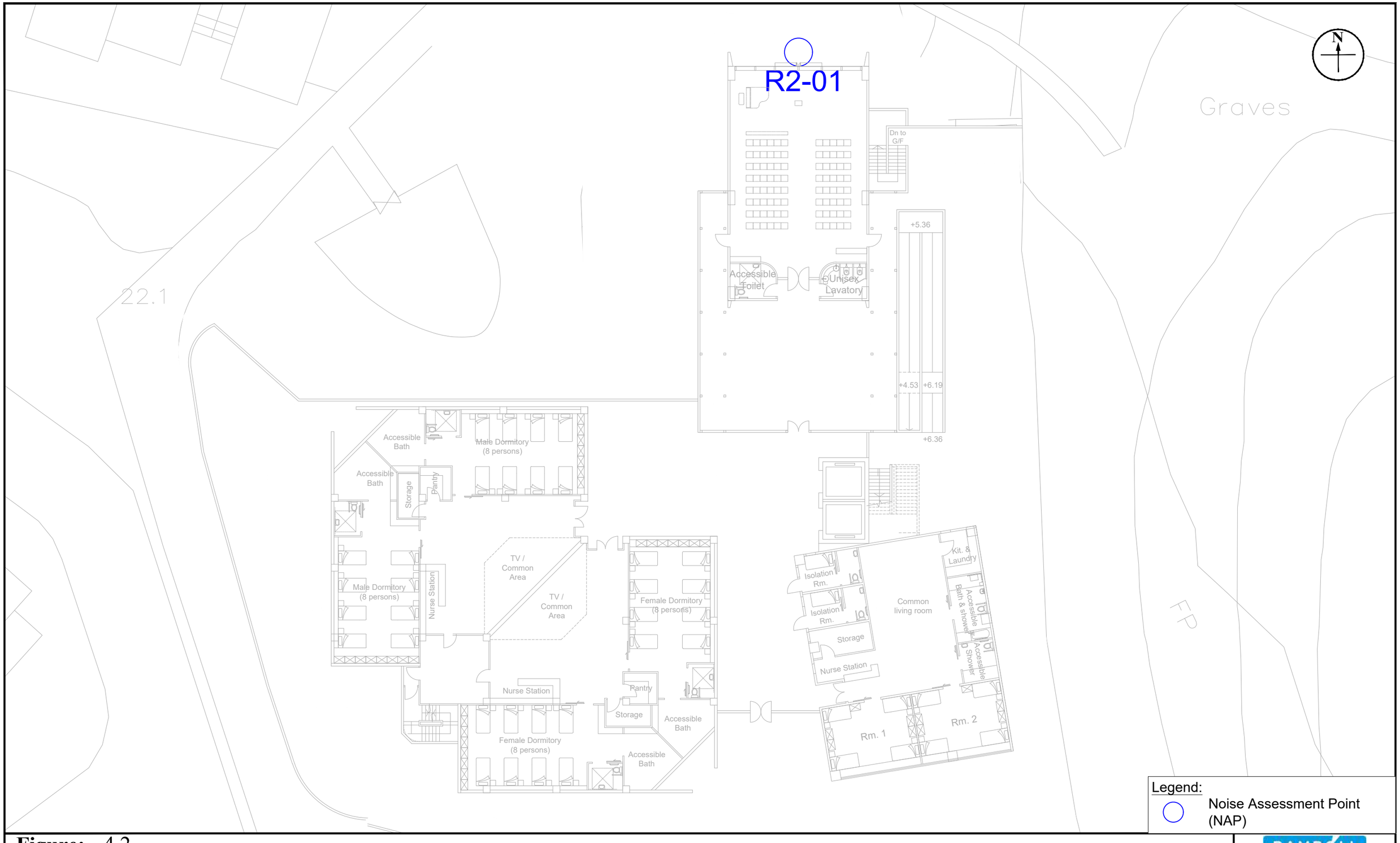

Figure: 4.2

Title: Location of Selected Noise Assessment Point for Railway Noise Impact Assessment

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Date:	Feb 2024

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Figure: 5.1	RAMBOLL
Title: Location of Fixed Noise Sources	Drawn by: MK
	Checked by: CC
Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po	Rev.: 1.1
	Date: Feb 2024

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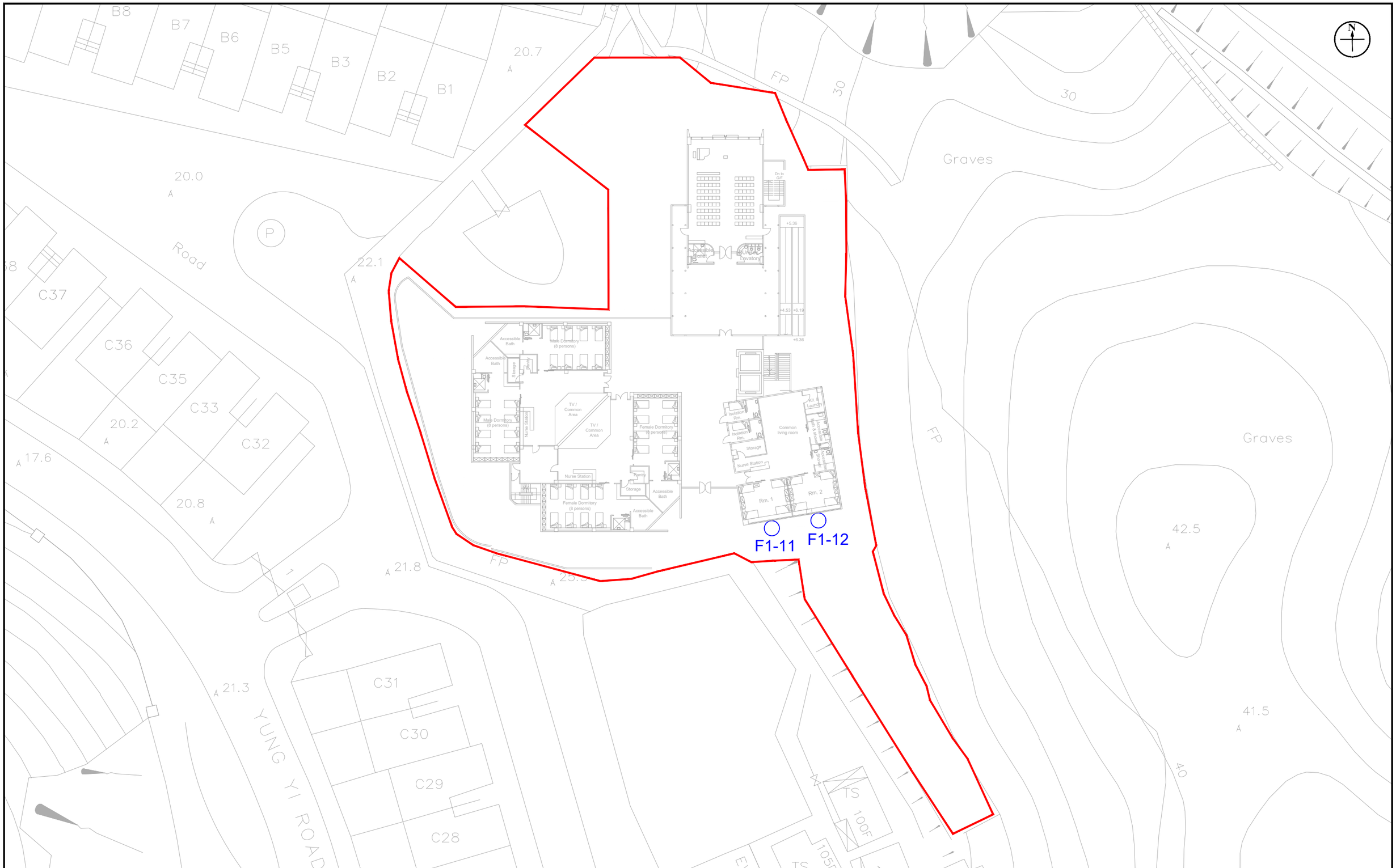

Figure: 5.2	RAMBOLL
Title: Locations of Selected Noise Sensitive Receivers for Fixed Noise Impact Assessment	Drawn by: MK Checked by: CC
Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po	Rev.: 1.1 Date: Feb 2024

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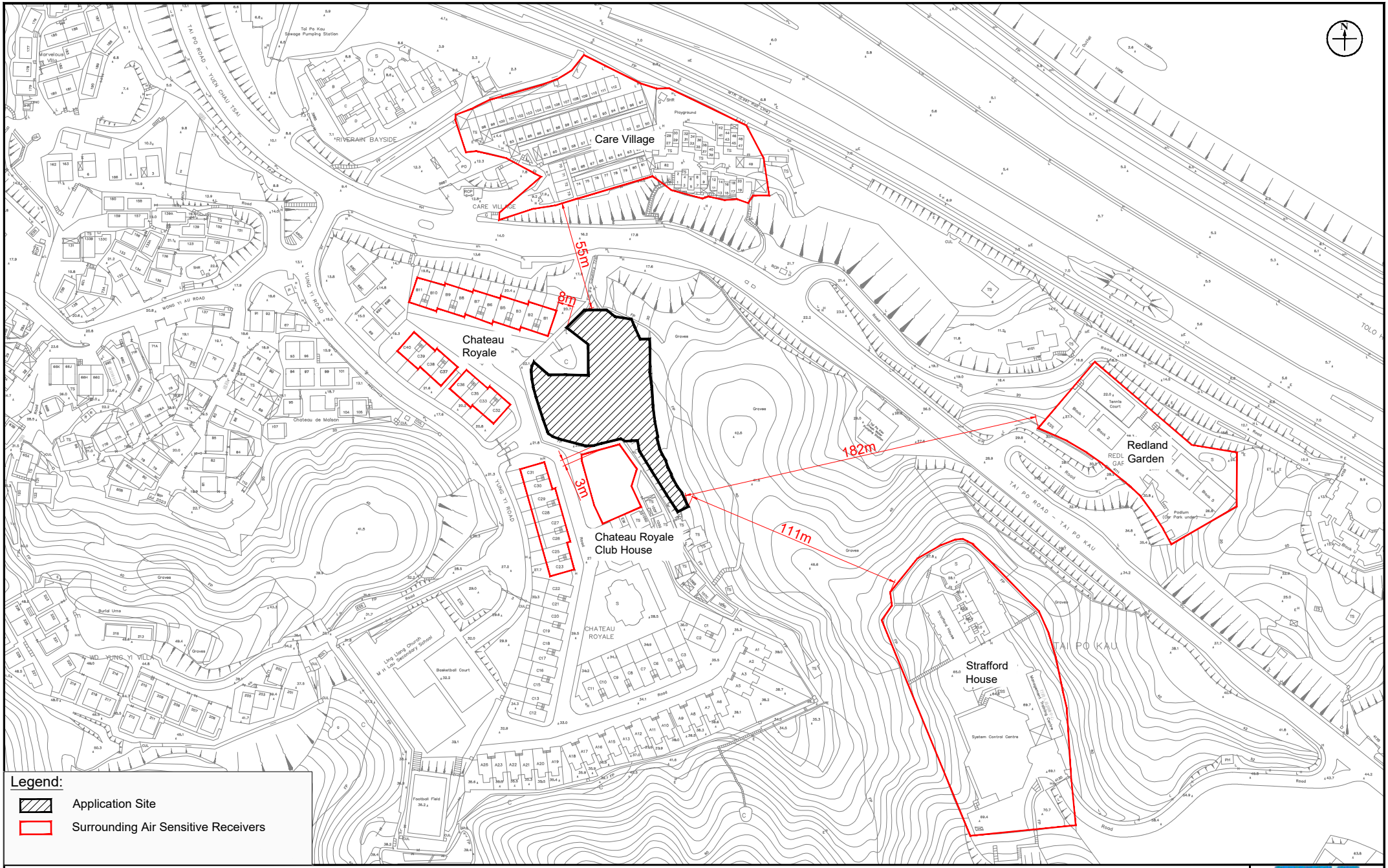

Figure: 6.1

Title: Location of Representative Air Sensitive Receivers for Construction Phase

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Date:	Feb 2024

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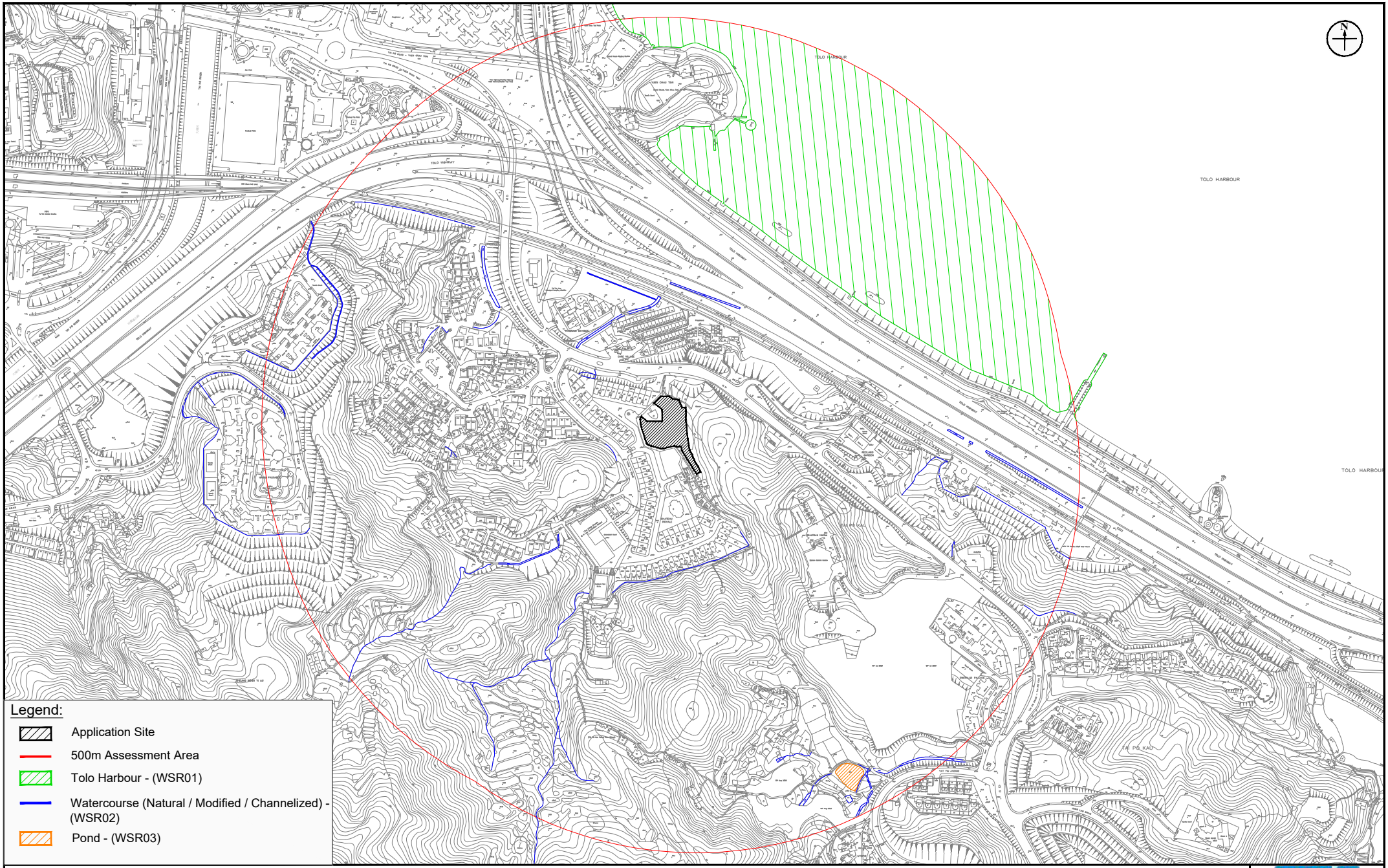

Figure: 6.2

Title: Location of Water Sensitive Receivers

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

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Rev.:	1.1
Date:	Feb 2024

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Appendix 1.1 Master Layout Plan, Floor Plans and Sections of the Proposed Development

Master Layout Plan Scale 1 : 600 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD architecture urban design interior

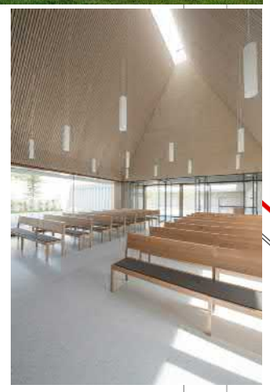
Schematic Design

GROUND FLOOR Plan Scale 1 : 500 (A3)

GROUND FLOOR Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD architecture urban design interior



Healing / Sensory Garden

Sun Deck & Healing Garden

Chapel

Dormitory Type C (8 bed places)

Dormitory Type A (32 bed places)

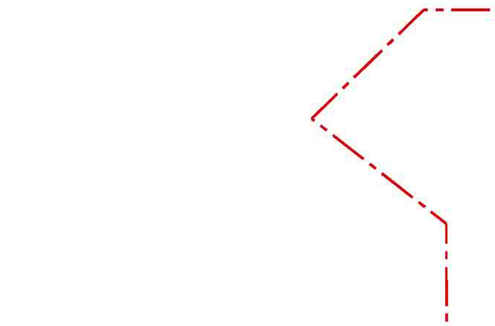
Schematic Design

FIRST FLOOR Plan Scale 1 : 500 (A3)

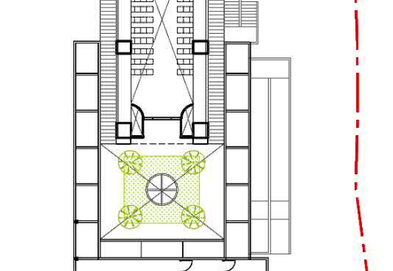
FIRST FLOOR Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD architecture urban design interior



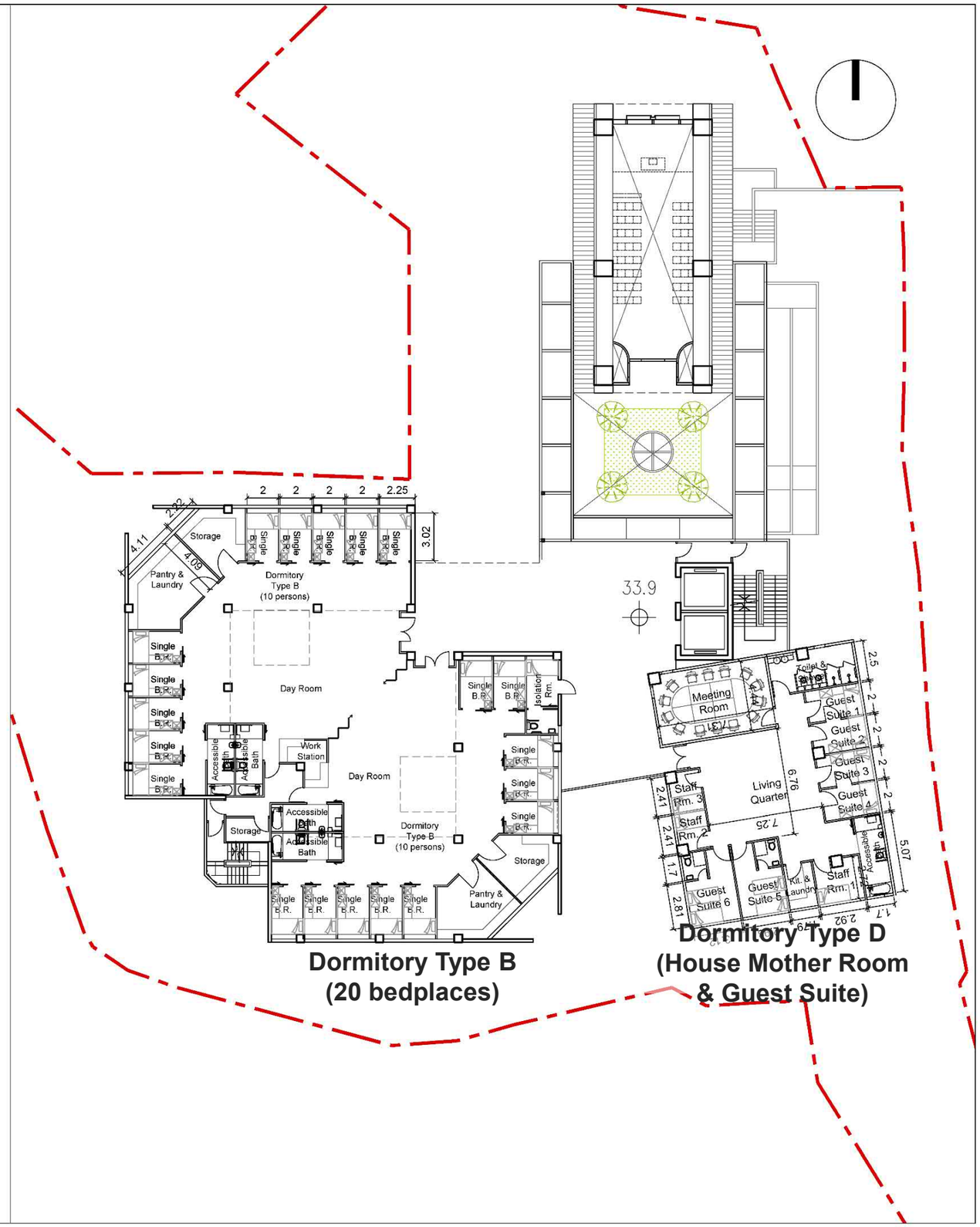
Homey Living Space



Green Picture Frame

Schematic Design

SECOND FLOOR Plan Scale 1 : 500 (A3)



SECOND FLOOR Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

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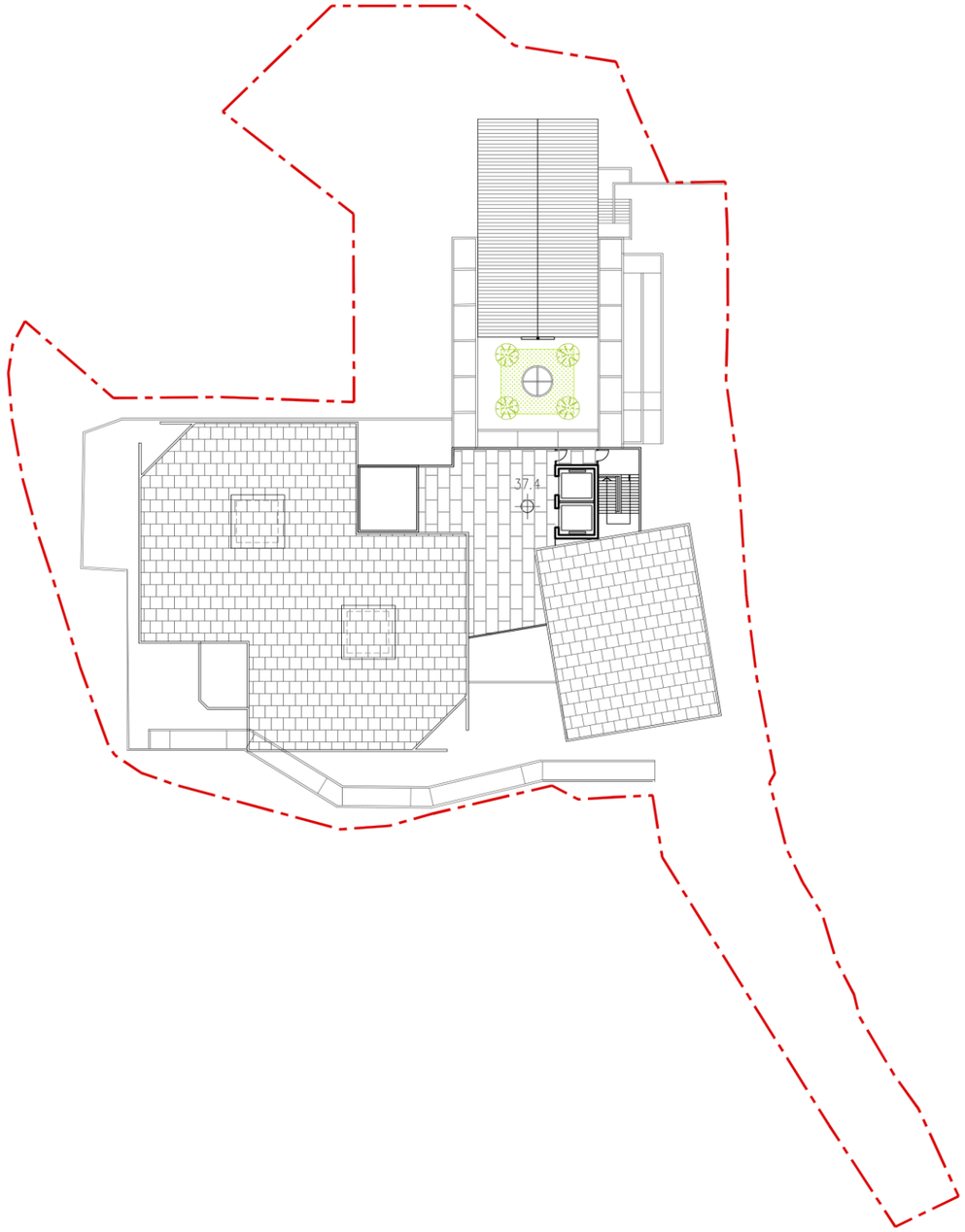
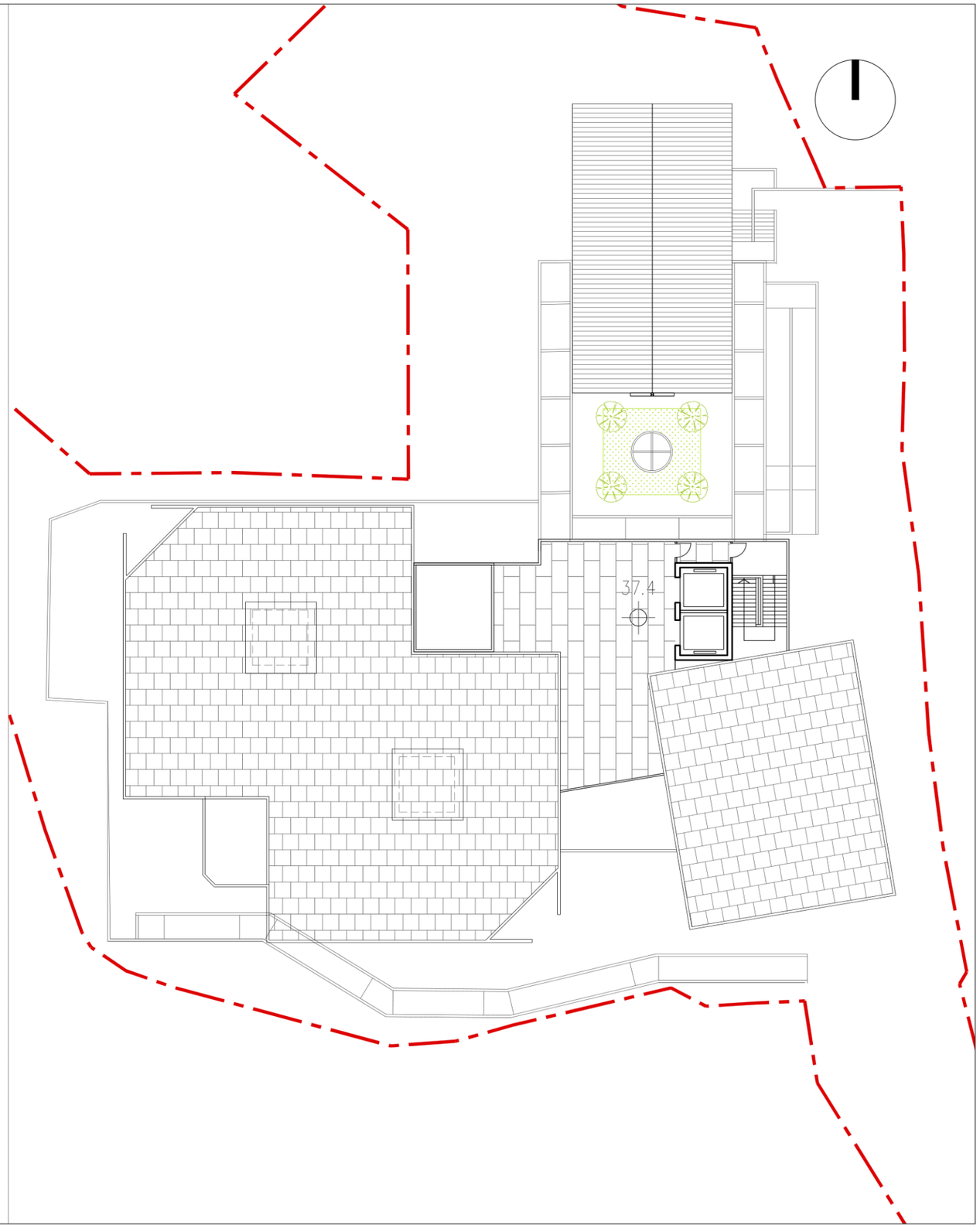
interior



ROOF Plan Scale 1 : 500 (A3)

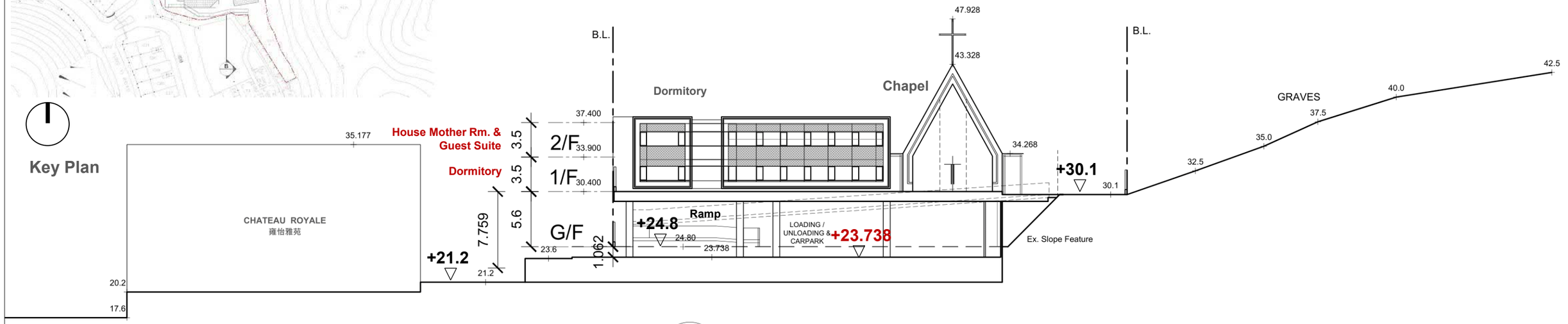


ROOF Plan Scale 1 : 300 (A3)

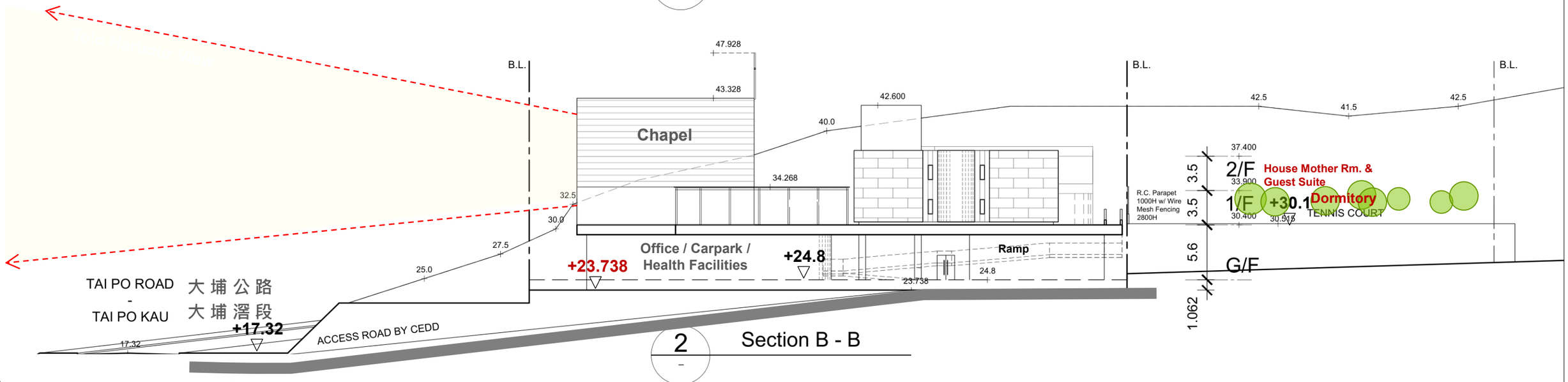
Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD
architecture
urban design
interior

Key Plan



1 Section A - A



2 Section B - B

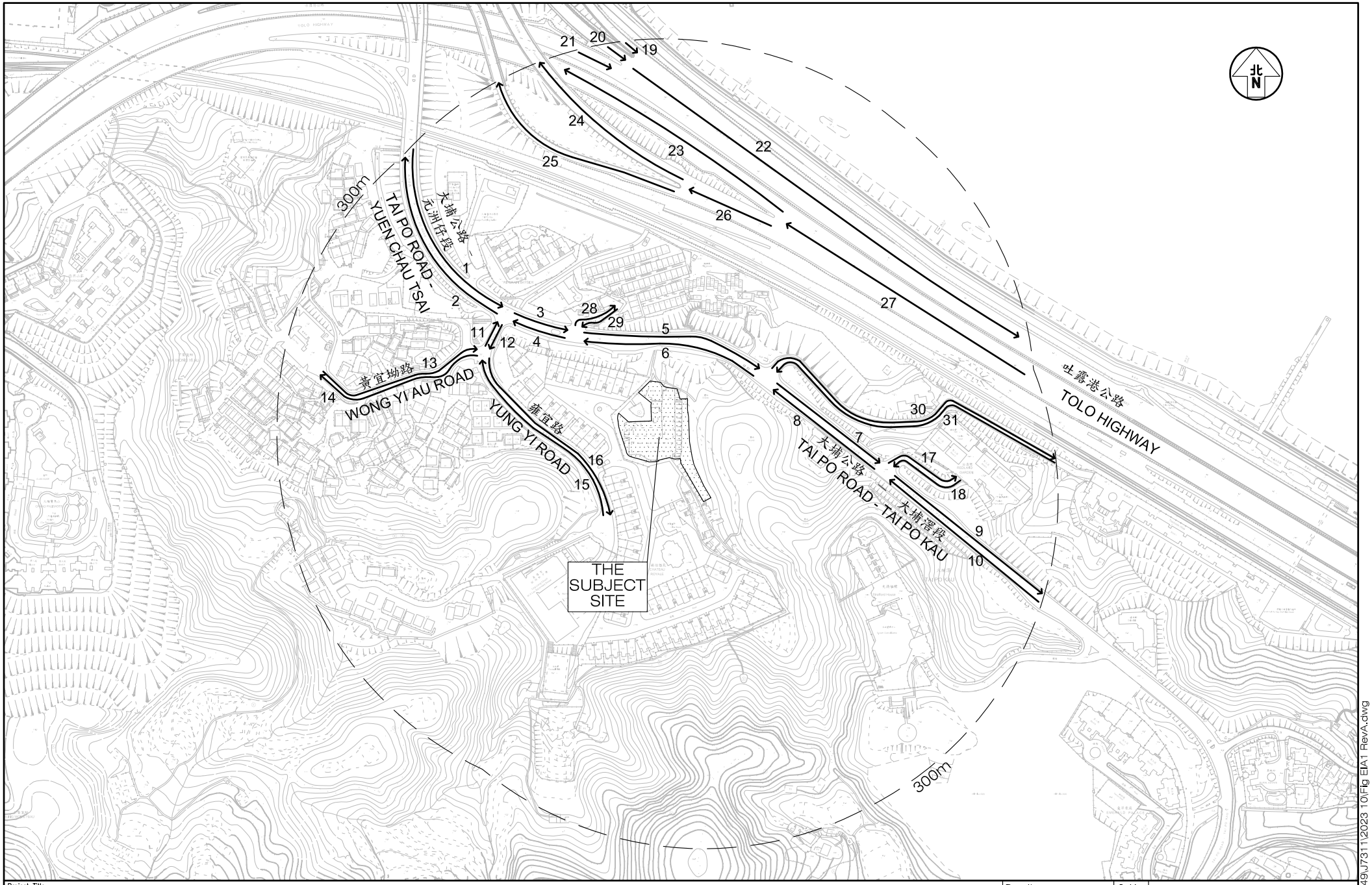
Schematic Design

Schematic Sections Scale 1 : 400 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD
architecture
urban design
interior

Appendix 3.1 Traffic Forecast for Year 2041



Project Title	PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PERMITTED SOCIAL WELFARE FACILITIES (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION (FMO) TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO	J7311	
Figure Title	LOCATION OF TRAFFIC DATA	Figure No. EIA1	Revision A
		Designed by A Y T / Drawn by N C M / Checked by K C	
		Scale in A3 1 : 3000 / Date 10 JAN 2024	

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T:\JOB\J7300-J7349\J7311\2023 10\Fig EIA1 RevA.dwg

TABLE E – PEAK HOUR TRAFFIC FLOW AND VEHICLE COMPOSITION

YEAR 2041 TRAFFIC FORECAST

Date: 10 January 2024 **Job No.: J7311**

Link ID	Road Section	From Road	To Road	AM Peak Hour		
				Traffic Flows (veh/hr)	Vehicle Composition	
					LV	HV
L001	Tai Po Road - Yuen Chau Tsai (EB)	Tolo Highway	Yung Yi Road	900	83.2%	16.8%
L002	Tai Po Road - Yuen Chau Tsai (WB)	Yung Yi Road	Tolo Highway	600	82.3%	17.7%
L003	Tai Po Road - Tai Po Kau (EB)	Yung Yi Road	Access road to Care Village	750	82.1%	17.9%
L004	Tai Po Road - Tai Po Kau (WB)	Access road to Care Village	Yung Yi Road	400	77.6%	22.4%
L005	Tai Po Road - Tai Po Kau (EB)	Access road to Care Village	Access road to Trackside Villas	750	81.6%	18.4%
L006	Tai Po Road - Tai Po Kau (WB)	Access road to Trackside Villas	Access road to Care Village	400	77.9%	22.1%
L007	Tai Po Road - Tai Po Kau (EB)	Access road to Trackside Villas	Access road to Redland Garden	750	81.2%	18.8%
L008	Tai Po Road - Tai Po Kau (WB)	Access road to Redland Garden	Access road to Trackside Villas	400	78.1%	21.9%
L009	Tai Po Road - Tai Po Kau (EB)	Access road to Redland Garden	Daisyfield	750	81.1%	18.9%
L010	Tai Po Road - Tai Po Kau (WB)	Daisyfield	Access road to Redland Garden	400	77.5%	22.5%
L011	Yung Yi Road (NB)	Wong Yi Au Road	Tai Po Road -Yuen Chau Tsai	300	88.7%	11.3%
L012	Yung Yi Road (SB)	Tai Po Road -Yuen Chau Tsai	Wong Yi Au Road	250	85.4%	14.6%
L013	Wong Yi Au Road (EB)	Wong Yi Au Village	Yung Yi Road	100	86.2%	13.8%
L014	Wong Yi Au Road (WB)	Yung Yi Road	Wong Yi Au Village	50	83.0%	17.0%
L015	Yung Yi Road (NB)	Access road to WD · Yung Yi Villa	Wong Yi Au Road	200	90.1%	9.9%
L016	Yung Yi Road (SB)	Wong Yi Au Road	Access road to WD · Yung Yi Villa	200	87.0%	13.0%
L017	Access road to Redland Garden (EB)	Tai Po Road - Tai Po Kau	Redland Garden	50	75.0%	25.0%
L018	Access road to Redland Garden (WB)	Redland Garden	Tai Po Road - Tai Po Kau	50	84.6%	15.4%
L019	Tolo Highway slip road (EB)	Tai Po Road - Yuen Chau Tsai	Tolo Highway	650	61.8%	38.2%
L020	Yuen Shin Road (SB)	Tai Po Tai Wo Road	Tolo Highway	1,750	72.6%	27.4%
L021	Tolo Highway (SB)	Tolo Highway	Tolo Highway	5,050	71.3%	28.7%
L022	Tolo Highway (SB)	Yuen Shin Road	Tolo Highway slip road (SB)	7,550	70.7%	29.3%
L023	Tolo Highway (NB)	Tolo Highway	Tolo Highway	4,200	74.1%	25.9%
L024	Yuen Shin Road (NB)	Tolo Highway	Yuen Shin Road	1,550	78.5%	21.5%
L025	Tolo Highway slip road (WB)	Tolo Highway	Tai Po Road - Yuen Chau Tsai	650	70.1%	29.9%
L026	Tolo Highway slip road (WB)	Tolo Highway	Yuen Shin Road	2,150	76.2%	23.8%
L027	Tolo Highway (NB)	Tolo Highway	Tolo Highway	6,300	74.7%	25.3%
L028	Access Road to Care Village (EB)	Tai Po Road - Tai Po Kau	Care Village	50	75.0%	25.0%
L029	Access Road to Care Village (WB)	Care Village	Tai Po Road - Tai Po Kau	50	52.6%	47.4%
L030	Access Road to Trackside Villas (EB)	Tai Po Road - Tai Po Kau	Trackside Villas	50	72.7%	27.3%
L031	Access Road to Trackside Villas (WB)	Trackside Villas	Tai Po Road - Tai Po Kau	50	64.5%	35.5%

Note: "LV" includes motorcycle, private car and taxi

"HV" includes light / medium / heavy goods vehicle, public / private light bus, non-franchised bus and franchised bus

TABLE E – PEAK HOUR TRAFFIC FLOW AND VEHICLE COMPOSITION

YEAR 2041 TRAFFIC FORECAST

Date: 10 January 2024 **Job No.: J7311**

Link ID	Road Section	From Road	To Road	PM Peak Hour		
				Traffic Flows (veh/hr)	Vehicle Composition	
					LV	HV
L001	Tai Po Road - Yuen Chau Tsai (EB)	Tolo Highway	Yung Yi Road	500	85.7%	14.3%
L002	Tai Po Road - Yuen Chau Tsai (WB)	Yung Yi Road	Tolo Highway	600	82.6%	17.4%
L003	Tai Po Road - Tai Po Kau (EB)	Yung Yi Road	Access road to Care Village	400	84.9%	15.1%
L004	Tai Po Road - Tai Po Kau (WB)	Access road to Care Village	Yung Yi Road	500	82.6%	17.4%
L005	Tai Po Road - Tai Po Kau (EB)	Access road to Care Village	Access road to Trackside Villas	400	84.9%	15.1%
L006	Tai Po Road - Tai Po Kau (WB)	Access road to Trackside Villas	Access road to Care Village	500	82.7%	17.3%
L007	Tai Po Road - Tai Po Kau (EB)	Access road to Trackside Villas	Access road to Redland Garden	350	85.6%	14.4%
L008	Tai Po Road - Tai Po Kau (WB)	Access road to Redland Garden	Access road to Trackside Villas	500	83.1%	16.9%
L009	Tai Po Road - Tai Po Kau (EB)	Access road to Redland Garden	Daisyfield	350	84.7%	15.3%
L010	Tai Po Road - Tai Po Kau (WB)	Daisyfield	Access road to Redland Garden	450	82.4%	17.6%
L011	Yung Yi Road (NB)	Wong Yi Au Road	Tai Po Road -Yuen Chau Tsai	150	79.8%	20.2%
L012	Yung Yi Road (SB)	Tai Po Road -Yuen Chau Tsai	Wong Yi Au Road	200	84.9%	15.1%
L013	Wong Yi Au Road (EB)	Wong Yi Au Village	Yung Yi Road	50	79.2%	20.8%
L014	Wong Yi Au Road (WB)	Yung Yi Road	Wong Yi Au Village	100	89.6%	10.4%
L015	Yung Yi Road (NB)	Access road to WD · Yung Yi Villa	Wong Yi Au Road	100	80.9%	19.1%
L016	Yung Yi Road (SB)	Wong Yi Au Road	Access road to WD · Yung Yi Villa	100	79.3%	20.7%
L017	Access road to Redland Garden (EB)	Tai Po Road - Tai Po Kau	Redland Garden	50	88.2%	11.8%
L018	Access road to Redland Garden (WB)	Redland Garden	Tai Po Road - Tai Po Kau	50	90.9%	9.1%
L019	Tolo Highway slip road (EB)	Tai Po Road - Yuen Chau Tsai	Tolo Highway	650	72.4%	27.6%
L020	Yuen Shin Road (SB)	Tai Po Tai Wo Road	Tolo Highway	1,650	80.7%	19.3%
L021	Tolo Highway (SB)	Tolo Highway	Tolo Highway	5,050	77.5%	22.5%
L022	Tolo Highway (SB)	Yuen Shin Road	Tolo Highway slip road (SB)	7,250	77.6%	22.4%
L023	Tolo Highway (NB)	Tolo Highway	Tolo Highway	4,400	77.5%	22.5%
L024	Yuen Shin Road (NB)	Tolo Highway	Yuen Shin Road	1,700	76.4%	23.6%
L025	Tolo Highway slip road (WB)	Tolo Highway	Tai Po Road - Yuen Chau Tsai	900	70.3%	29.7%
L026	Tolo Highway slip road (WB)	Tolo Highway	Yuen Shin Road	2,600	74.2%	25.8%
L027	Tolo Highway (NB)	Tolo Highway	Tolo Highway	6,950	76.2%	23.8%
L028	Access Road to Care Village (EB)	Tai Po Road - Tai Po Kau	Care Village	50	83.3%	16.7%
L029	Access Road to Care Village (WB)	Care Village	Tai Po Road - Tai Po Kau	50	80.0%	20.0%
L030	Access Road to Trackside Villas (EB)	Tai Po Road - Tai Po Kau	Trackside Villas	50	76.2%	23.8%
L031	Access Road to Trackside Villas (WB)	Trackside Villas	Tai Po Road - Tai Po Kau	50	72.2%	27.8%

Note: "LV" includes motorcycle, private car and taxi

"HV" includes light / medium / heavy goods vehicle, public / private light bus, non-franchised bus and franchised bus

Appendix 3.2 Results of Road Traffic Noise Impact Assessment

Predicted Road Traffic Noise at Selected Sensitive Receivers (AM)
Base Scenario

		Dormitory Type A										Dormitory Type C	
		Male Dorm					Female Dorm					Rm.1	Rm.2
Floor	mPD	T1-01	T1-02	T1-03	T1-04	T1-05	T1-06	T1-07	T1-08	T1-09	T1-10	T1-11	T1-12
1/F	30.4	67	67	62	62	63	59	58	57	60	63	57	60
Exceedance		0										0	

		Dormitory Type B																	Dormitory Type D				
		BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	Meeting Rm	Meeting Rm	Suite	Suite	Staff Rm
Floor	mPD	T2-01	T2-02	T2-03	T2-04	T2-05	T2-06	T2-07	T2-08	T2-09	T2-10	T2-11	T2-12	T2-13	T2-14	T2-15	T2-16	T2-17	T2-18	T2-19	T2-20	T2-21	T2-22	T2-23
2/F	33.9	68	68	68	68	68	65	65	65	65	65	63	63	62	62	61	62	62	63	66	64	61	61	62
Exceedance		0																		0				

	AM
Total no. of Exceedance:	0
Compliance Level:	100%
Max. Noise Level:	68

Noted:
Noise level exceed stardand of 70 dB(A)

Predicted Road Traffic Noise at Selected Sensitive Receivers (PM)
Base Scenario

		Dormitory Type A										Dormitory Type C	
		Male Dorm					Female Dorm					Rm.1	Rm.2
Floor	mPD	T1-01	T1-02	T1-03	T1-04	T1-05	T1-06	T1-07	T1-08	T1-09	T1-10	T1-11	T1-12
1/F	30.4	66	66	61	61	62	57	56	55	59	62	56	59
Exceedance		0										0	

		Dormitory Type B																	Dormitory Type D				
		BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	BR	Meeting Rm	Meeting Rm	Suite	Suite	Staff Rm
Floor	mPD	T2-01	T2-02	T2-03	T2-04	T2-05	T2-06	T2-07	T2-08	T2-09	T2-10	T2-11	T2-12	T2-13	T2-14	T2-15	T2-16	T2-17	T2-18	T2-19	T2-20	T2-21	T2-22	T2-23
2/F	33.9	67	67	67	67	66	64	64	64	64	64	62	61	61	61	60	61	61	62	65	63	60	60	61
Exceedance		0																		0				

	PM
Total no. of Exceedance:	0
Compliance Level:	100%
Max. Noise Level:	67

Noted:
Noise level exceed stardand of 70 dB(A)

Appendix 3.3 Drawings of Noise Barrier

REV 修訂	DESCRIPTION 內容摘要	DES. 設計	CHECKED 核查	APPROVED 批准人	DATE 日期
F	AS BUILT DRAWING	TKML	TKH	AKWL	OCT 03
E	NB3 (F) CORRECTED TO NB3a FIH) & SETTING OUT DATA OF NB3a FIH) ADDED	TKML	TKH	AKWL	OCT 01
D	NB1 & NB10 AMENDED AND RELEVANT SETTING OUT DATA ADDED	TKML	TKH	AKWL	NOV 00
C	LEGEND AMENDED, NB4 OMITTED	TKML	TKH	AKWL	SEP 00
B	WORKING DRAWING	TKML	YL	CW	MAR 99
A	TENDER ADDENDUM NO. 1	TKML	YL	CW	DEC 98
-	TENDER DRAWING	TKML	YL	CW	NOV 98

Highways Department 路政署
MAJOR WORKS PROJECT MANAGEMENT OFFICE 主要工程管理處

WIDENING OF TOLO HIGHWAY BETWEEN ISLAND HOUSE INTERCHANGE AND MA LIU SHUI INTERCHANGE

NOISE BARRIER LAYOUT

SHEET 1 OF 9

MAUNSELL CONSULTANTS ASIA LTD.
茂盛(亞洲)工程顧問有限公司

DRG.NO. 圖紙編號 94497/ 2501F

DESIGNED BY 設計 T.W	CONTRACT NO. 合約編號 HY/98/02	DATE OF ISSUE 發出日期 -
DRAWN BY 繪圖 LJ	STATUS 階段 AS BUILT DRAWING	
SCALE 比例 A0 1 : 500 A2 1 : 1000		
DIMENSIONS ARE IN 尺寸單位 METRES	© COPYRIGHT RESERVED 版權所有	

Maunsell

Q:/PROJECTS/94497/2501DGN

NOTES:-

1. FOR NOTES & LEGEND SEE DRG. No. 94497/2501

SETTING OUT DATA OF INNER FACE OF NOISE BARRIER 1a F(H), 1ba (U) AND 1bb (U)

POINT No.	EASTING	NORTHING
~~1~~	~~836470.287~~	~~833767.298~~
~~2~~	~~836468.287~~	~~833773.448~~
~~3~~	~~836596.326~~	~~833779.547~~
~~4~~	~~836596.264~~	~~833785.486~~
5	836578.282	833791.464
6	836578.230	833797.483
7	836564.972	833852.260
8	836562.403	833803.544
9	836554.469	833809.630
10	836546.534	833815.717
11	836538.600	833821.803
12	836530.665	833827.889
13	836522.731	833833.976
14	836514.796	833840.062
15	836506.862	833846.148
16	836498.927	833852.235
17	836490.643	833858.439
18	836491.683	833858.376
19	836483.222	833864.524
20	836475.152	833870.443
21	836467.178	833876.416
22	836463.793	833876.996
23	836462.816	833879.282
24	836453.888	833887.298
25	836430.865	833906.111
26	836405.236	833926.784

REV. 修訂	DESCRIPTION 內容摘要	D.D. / CHECKED 核對	F.D. / APPROVED 批准人	DATE 日期
G	AS BUILT DRAWING	TKML / TKH	AKWL	OCT 03
F	TYPE OF NOISE BARRIERS NB1a, NB1ba, NB1c, NB1d & NB1f ARE REVISED. (V.O.489 & 525)	TKML	TKH	AKWL	JAN 02
E	NOISE BARRIER ALIGNMENT FROM CH 1110 TO CH. 1182 OF S.D.L.T100 REVISED. NB1b (H) CHANGED TO NB1ba TYPE H FOOTING AND NB1bb (H)	TKML	TKH	AKWL	OCT 01
D	V.O. 389 & 389A INCORPORATED. NOISE BARRIER FROM CH 1333 TO CH. 1365 REVISED	TKML	TKH	AKWL	MAY 01
C	NB1 & NB1U AMENDED AND RELEVANT SETTING OUT DATA ADDED	TKML	TKH	AKWL	NOV 00
B	RECESS FOR GANTRY OMITTED	TKML	TKH	AKWL	SEP 00
A	WORKING DRAWING	TKML	YL	CW	MAR 99
-	TENDER DRAWING	TKML	YL	CW	NOV 98

Highways Department 路政署

MAJOR WORKS PROJECT MANAGEMENT OFFICE 主要工程管理處

WIDENING OF TOLO HIGHWAY BETWEEN ISLAND HOUSE INTERCHANGE AND MA LIU SHUI INTERCHANGE

NOISE BARRIER LAYOUT

SHEET 2 OF 9

MAUNSELL CONSULTANTS ASIA LTD.
茂盛(亞洲)工程顧問有限公司

DRG.NO. 圖紙編號 94497/ 2502 G

DESIGNED BY 設計	CONTRACT NO. 合約編號	DATE OF ISSUE 發出日期
T.W.	HY/98/02	-
DRAWN BY 繪圖 JYH	STATUS 狀況 AS BUILT DRAWING	
SCALE 比例 A0 1 : 500, A2 1 : 1000		
DIMENSIONS ARE IN 尺寸單位 METRES	© COPYRIGHT RESERVED 版權所有	

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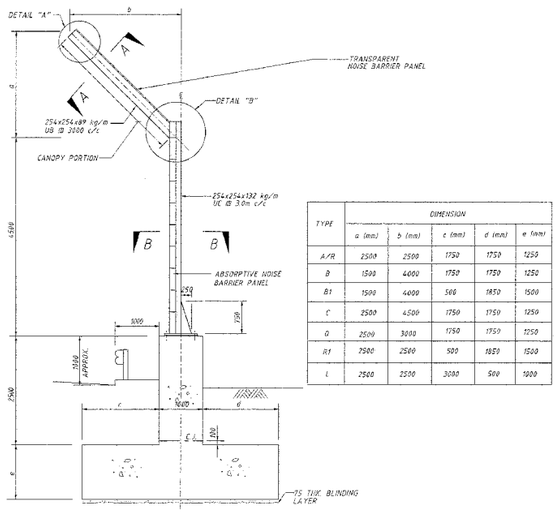
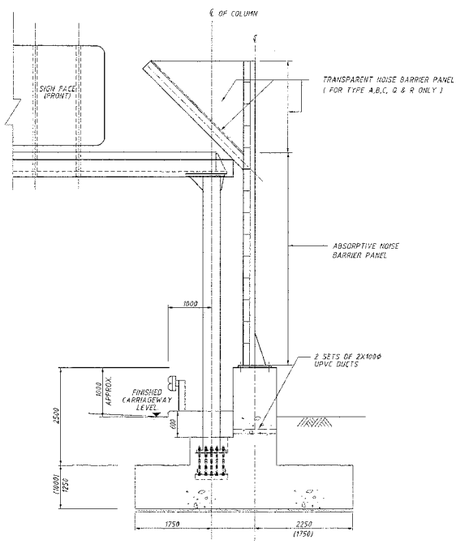
Q:/PROJECTS/94497/2502.DGN



TYPE	DIMENSION				
	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)
A/R	2500	2500	1750	1750	1250
B	1500	4000	1750	1750	1250
B1	1500	4000	500	1850	1500
C	2500	4500	1750	1750	1250
Q	2500	3000	1750	1750	1250
R1	2500	2500	500	1850	1500
L	2500	2500	3000	500	1000

NOISE BARRIER TYPES A, B, B1, C, L, Q, R & R1
SCALE 1:50



SECTION E-E
(DIMENSION IN BRACKET FOR TYPE G ONLY)
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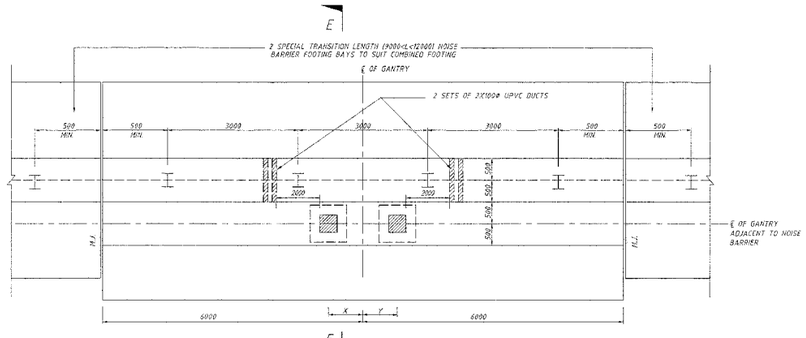
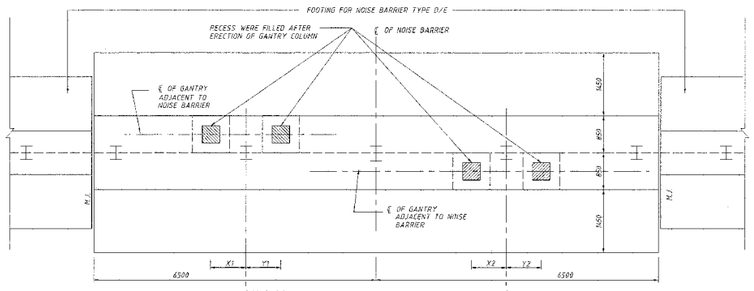
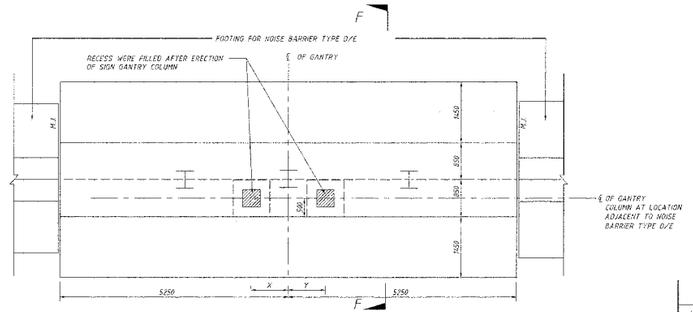


PLAN OF COMBINED NOISE BARRIER/GANTRY FOOTING FOR NOISE BARRIER TYPES A, B, C, G, Q & R (GANTRY FOOTING TYPE N AT VERGE)
(DIMENSIONS X AND Y WERE DETERMINED BY THE CONTRACTOR TO SUIT THE ACTUAL GANTRY COLUMN LOCATION UNLESS OTHERWISE STATED)



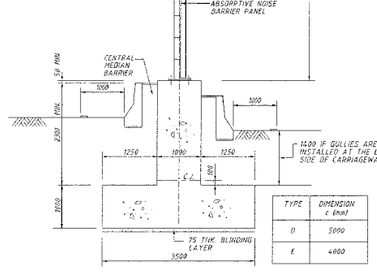
PLAN OF COMBINED NOISE BARRIER/GANTRY FOOTING FOR NOISE BARRIER TYPES D AND E AT CENTRAL MEDIAN WITH 2 GANTRIES (GANTRY FOOTING TYPE M)
(DIMENSIONS X1, Y1 AND X2, Y2 WERE DETERMINED BY THE CONTRACTOR TO SUIT THE ACTUAL GANTRY COLUMN LOCATION UNLESS OTHERWISE STATED)



PLAN OF COMBINED NOISE BARRIER/GANTRY FOOTING FOR NOISE BARRIER TYPE D & E (GANTRY FOOTING TYPE N AT CENTRAL MEDIAN)
(DIMENSIONS X AND Y WERE DETERMINED BY THE CONTRACTOR TO SUIT THE ACTUAL GANTRY COLUMN LOCATION UNLESS OTHERWISE STATED)
SCALE 1:50

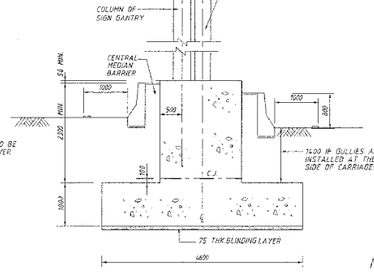
NOTES:

1. FOR GENERAL LAYOUT OF BARRIERS, REFER TO DRG. Nos. 94497/2501-2509 AND 2511-2519.
2. STRUCTURAL STEEL IS GRADE 50D TO BS 4360.
3. FIXING BOLTS STUDS AND NUTS FOR STRUCTURAL STEELWORK WERE MADE OF STAINLESS STEEL COMPLYING WITH BS 6105, GRADE A4-80. WASHERS WERE STAINLESS STEEL TO BS 1449 PART 2, GRADE 316 S 33 WITH COMPATIBLE NYLON WASHERS.
4. ALL HOLDING DOWN BOLTS WERE MADE OF STAINLESS STEEL COMPLYING WITH BS6105, GRADE A4-80.
5. 20mm x 20mm CHAMFERS WERE PROVIDED AT ALL EXPOSED RIGHT-ANGLED EDGES OF CONCRETE EXCEPT SPECIFIED OTHERWISE.
6. ALL STRUCTURAL CONCRETE WAS GRADE 40/20D TO CS1:1990. BLINDING CONCRETE WAS GRADE 10/20.
7. COVER TO REINFORCEMENT WAS 50mm.
8. CONCRETE SURFACE FINISHES WERE:
   - FORMED SURFACES: EXPOSED F5, BURIED F1
   UNFORMED SURFACES: EXPOSED U5, BURIED U1
9. ALL FIXING DETAILS FOR NOISE BARRIER PANELS AND DOOR OPENING DETAILS ARE INDICATIVE ONLY. THE CONTRACTOR SUBMITTED RELEVANT ICE CERTIFIED DESIGN CALCULATIONS AND SHOP DRAWINGS FOR APPROVAL OF THE ENGINEER.
10. THE DESIGN OF NOISE BARRIER FIXING WAS CARRIED OUT IN ACCORDANCE WITH THE STRUCTURES DESIGN MANUAL FOR HIGHWAYS AND RAILWAYS PUBLISHED BY HIGHWAYS DEPARTMENT 1997.
11. ALL MATERIALS FOR THE WORKS AND WORKMANSHIP UNLESS SPECIFIED OTHERWISE, COMPLIED GENERALLY WITH THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS (1992 EDITION).
12. WELDING COMPLIED WITH BS 5135:1974. FULL PENETRATION BUTT-WELD WAS USED FOR STRUCTURAL CONNECTION UNLESS OTHERWISE SPECIFIED.
13. FOR REFLECTIVE SURFACES OF THE TRANSPARENT BARRIERS, THE MINIMUM SURFACE DENSITY WAS 7 kg/m^2
14. FOR ABSORPTIVE SURFACE OF THE BARRIERS, THE ABSORPTIVE COEFFICIENT WAS NOT LESS THAN 0.5 (ON TOP OF THE MINIMUM SURFACE DENSITY).
15. THE CONTRACTOR SUBMITTED THE DETAILS AND MATERIALS FOR SEALING THE GAP BETWEEN VERTICAL ABSORPTIVE NOISE BARRIER PANEL AND INCLINED TRANSPARENT NOISE BARRIER PANEL FOR THE ENGINEER'S APPROVAL.
16. ALL THE STRUCTURAL STEELWORKS AND THE DOWEL BARS FOR MOVEMENT JOINTS WERE GALVANIZED AND IN ADDITION BE PAINTED IN ACCORDANCE WITH PAINT SYSTEMS 2E AND 2.9F STRUCTURES DESIGN MANUAL FOR HIGHWAYS AND RAILWAYS RESPECTIVELY.
17. ALL CONCRETES COMPLIED WITH P.S. CLAUSE 16.16A.
18. ALL ABSORPTIVE NOISE BARRIER PANELS WERE EACH 580mm IN HEIGHT AND OF LENGTH WAS ABLE TO FIT IN SPECIFIED SPACING OF BARRIER POSTS AT 2500mm. REFER TO PS CLAUSE 27.05 FOR MATERIALS FOR ABSORPTIVE NOISE BARRIER PANEL.
19. TRANSPARENT NOISE BARRIER PANELS AT VERTICAL NOISE BARRIERS WERE POLYM PLEXIGLAS GS 247 (IMPROVED) FIRE RETARDANT GRADE PMMA CLEAR SHEET WITH A MINIMUM THICKNESS OF 22mm, OR AN APPROVED EQUIVALENT. REFER TO PS CLAUSE 27.05 FOR MATERIALS FOR TRANSPARENT NOISE BARRIER PANELS.
20. THE CONTRACTOR DESIGNED ANY SUBFRAME NEEDED FOR TRANSPARENT NOISE BARRIER PANEL FOR THE ENGINEER'S APPROVAL. COST OF SUBFRAME WAS DEEM TO BE INCLUDED IN THE PRICE FOR NOISE BARRIER PANELS. SUBFRAME CONTAINED LEAST NUMBER OF STRUCTURALLY ADEQUATE THIN RHS MEMBERS.
21. FOR VERTICAL TRANSPARENT NOISE BARRIER PANELS HORIZONTAL MEMBERS OF THE SUBFRAME WERE LIMITED TO MINIMUM REQUIRED. NO VERTICAL MEMBERS ARE PERMITTED BETWEEN BARRIER POSTS.
22. TRANSPARENT NOISE BARRIER PANELS AT VERTICAL NOISE BARRIERS WERE POLYM PLEXIGLAS GS247 (IMPROVED) FIRE RETARDANT GRADE PMMA CLEAR SHEET WITH A MINIMUM THICKNESS OF 25mm, OR AN APPROVED EQUIVALENT. TOP EDGE OF THE PLEXIGLAS PANEL WAS EXPOSED AND POLISHED EDGE WITHOUT BACKING SUPPORT. REFER TO PS CLAUSE 27.05 FOR MATERIALS FOR TRANSPARENT NOISE BARRIER PANEL.
23. FOR THE 16mm THICK TRANSPARENT NOISE BARRIER PANELS AT INCLINED CANOPY PORTIONS, MEMBERS OF SUBFRAME SPANNED BETWEEN BARRIER POSTS AND THE SPACING OF MEMBERS WAS NOT GREATER THAN 1000mm FOR SAFETY REASON.

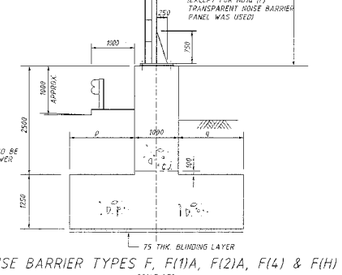


TYPE	DIMENSION c (mm)
D	5000
E	4000

NOISE BARRIER TYPES D & E
SCALE 1:50

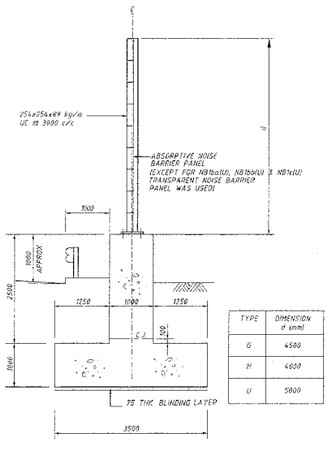


SECTION F - F
SCALE 1:50



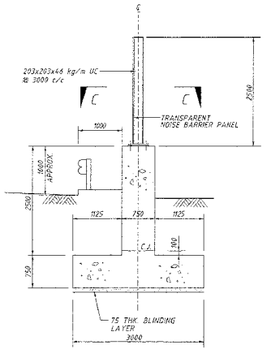
TYPE	DIMENSION		
	p	q	d
F	1500	1500	6000
F1(A	1300	600	6000
F(2)A	1500	900	6000
F(4)	2000	900	6000
F(H)	1500	1500	6000

NOISE BARRIER TYPES F, F(1)A, F(2)A, F(4) & F(H)
SCALE 1:50

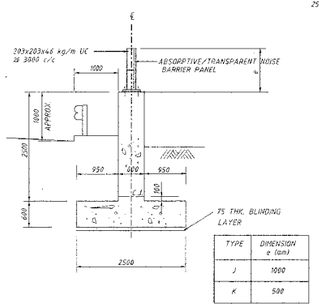


TYPE	DIMENSION c (mm)
G	4500
H	4000
U	5000

NOISE BARRIER TYPES G & H
SCALE 1:50

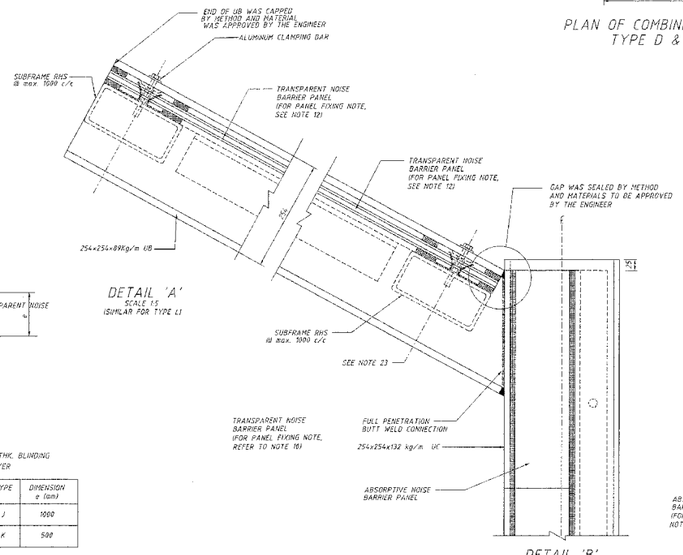


NOISE BARRIER TYPE I
SCALE 1:50



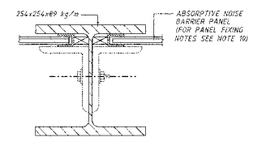
TYPE	DIMENSION q (mm)
J	1000
K	500

NOISE BARRIER TYPES J & K
SCALE 1:50

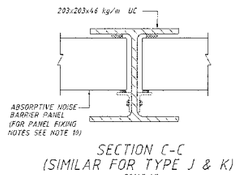


DETAIL 'A'
SCALE 1:5
(SIMILAR FOR TYPE L)

DETAIL 'B'
SCALE 1:5
(SIMILAR FOR TYPE L)

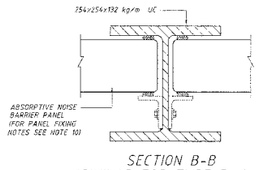


SECTION A-A
SCALE 1:5

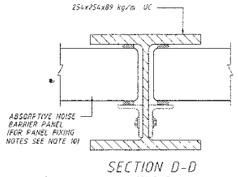


SECTION C-C
(SIMILAR FOR TYPE J & K)
SCALE 1:5

(SIMILAR FOR TYPE L)



SECTION B-B
(SIMILAR FOR TYPE F, & L)
SCALE 1:5



SECTION D-D
SCALE 1:5
(SIMILAR FOR TYPE G & H)

NO.	DESCRIPTION	DESIGNED	DRAWN	CHECKED	APPROVED	DATE
H	AS BUILT DRAWING	TKML	TKH	AKWL		OCT 03
G	MINOR AMENDMENT OF DESCRIPTION TO NOISE BARRIER PANELS (N.O. 6,98 & Y.O. 525)	TKML	TKH	AKWL		JAN. 02
F	GENERAL REVISION	TKML	TKH	AKWL		MAR 01
E	MINOR REVISION	TKML	TKH	AKWL		SEP 00
D	ARRANGEMENT AT GANTRIES ADDED	TKML	TKH	AKWL		SEP 00
C	WORKING DRAWING	TKML	YL	CW		MAR 99
B	TENDER ADDENDUM NO. 3	TKML	YL	CW		JAN 99
A	TENDER ADDENDUM NO. 2	TKML	YL	CW		DEC 98
-	TENDER DRAWING	TKML	YL	CW		NOV 98

Highways Department 路政署
MAJOR WORKS PROJECT MANAGEMENT OFFICE 主要工程管理處

WIDENING OF TOLO HIGHWAY BETWEEN ISLAND HOUSE INTERCHANGE AND MA LIU SHUI INTERCHANGE

NOISE BARRIER DETAILS

SHEET 1 OF 4

MAUNSELL CONSULTANTS ASIA LTD.
茂盛(亞洲)工程顧問有限公司

DRG.NO. 圖紙編號 94497/ 2519 H

DESIGNED BY 設計	CONTRACT NO. 合約編號	DATE OF ISSUE 發出日期
TW	HY/98/02	-
DRAWN BY 繪圖 LYQ	STATUS 階段 AS BUILT DRAWING	
SCALE 比例 AS SHOWN		
DIMENSIONS ARE IN 尺寸單位 MILLIMETRES	© COPYRIGHT RESERVED 版權所有	

Maunsell

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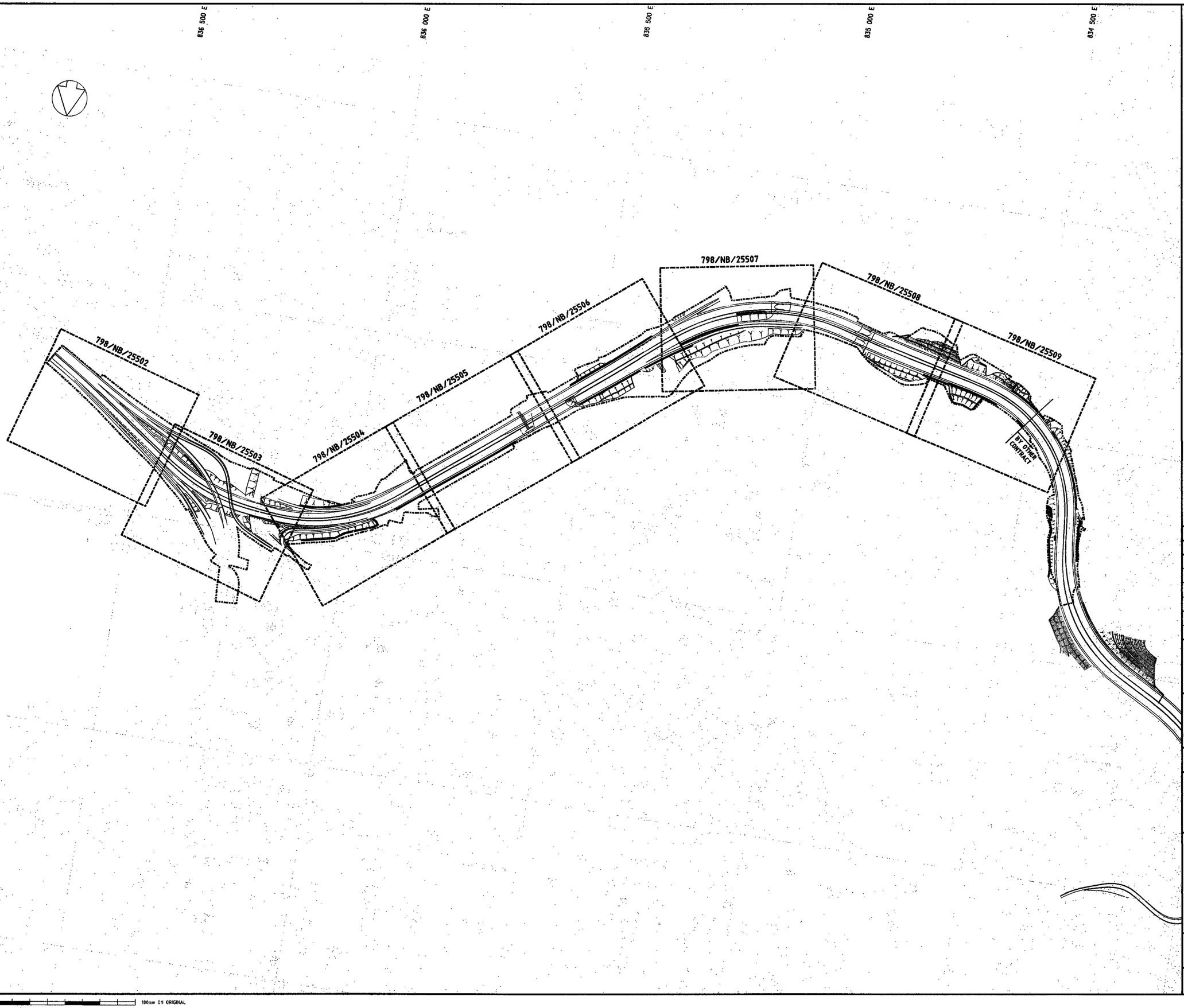

NOTES:

1. FOR LAYOUT OF NOISE BARRIERS, SEE DRAWING NO. 798/NB/25502-25509.

REV. 參訂	DATE 日期	DESCRIPTION 內容摘要	CHECKED 核訂	APPD. 批准人
Z	MAR 2015	AS-BUILT DRAWING	KHL	WJS

REVISION

DESIGNED 設計	KK	CHECKED 核訂	KHL
DRAWN 繪圖	SZ	CHECKED 核訂	KHL
APPROVED FOR ISSUE 批准人	WJS	©	Copyright Reserved 版權所有
DATE 日期	MAY 2008	All dimensions are in mm unless shown otherwise. No measurement should be taken from drawing directly.	
SCALE 比例	A1 = 1 : 4000 A3 = 1 : 8000		
CAD REF. 最新名稱	E-25501Z.DGN		

路政署
HIGHWAYS DEPARTMENT
主要工程管理處
MAJOR WORKS PROJECT MANAGEMENT OFFICE

CONTRACT TITLE 合約項目

Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling (Stage 1 - Between Island House Interchange and Ma Wo)

CONTRACT NO. HY/2008/09

CONSULTANT 工程顧問

Hyder ARUP BLACK & VEATCH

DRAWING TITLE 圖名

NOISE BARRIER LOCATION PLAN

AS-BUILT

DRAWING NO. 圖紙編號 798/NB/25501

REV. 參訂 Z

PRINTED BY: TOLO-1 18/1/2017 9:55:40 AM FILENAME: O:\Drawing Contract 1\as-constructed drawings - BV\as-constructed drawings - Noise Barrier\E-25501Z.DGN

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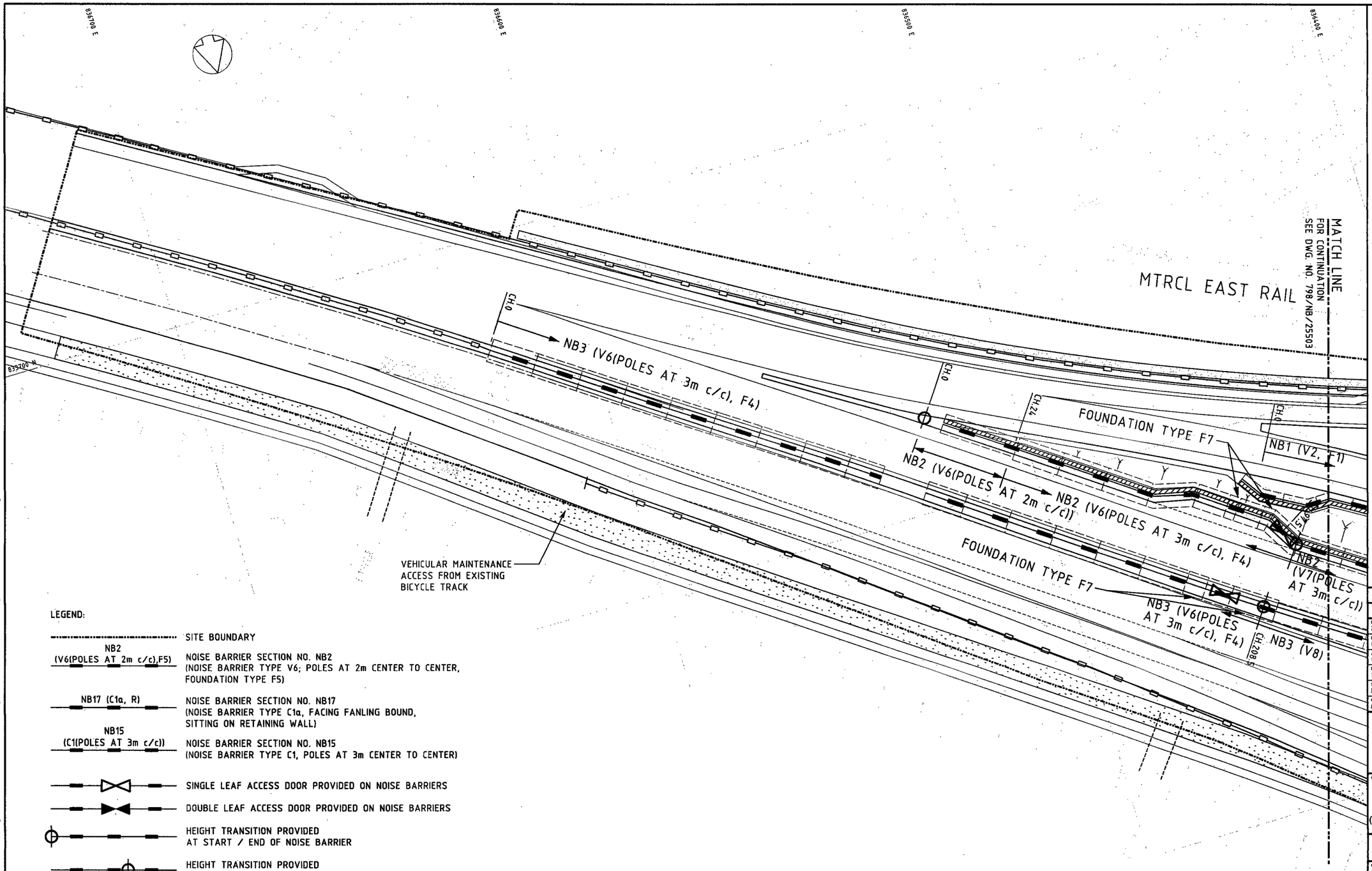

NOTES:
1. ALL CHAINAGES AND COORDINATES IN METERS.
2. THE CHAINAGES SHOWN ON PLAN ARE NOMINAL FIGURES MEASURED ALONG THE CENTRE LINE OF NOISE BARRIER POST AND SHOULD ONLY BE A MEANS OF REFERENCE.
3. ALL MAINTENANCE ACCESS ARE PAVED WITH GRASSCRETE.
4. A 4m WIDE FIRE RESISTING FIELD MADE OF NON-COMBUSTIBLE ELEMENT ARE PROVIDED AT MAXIMUM 100m INTERVALS ALONG THE NOISE BARRIERS.
5. EXTEND OF FOUNDATION SITTING ON RETAINING WALL NOT SHOWN FOR CLARITY.

LEGEND:

- SITE BOUNDARY
- NB2 (V6(POLES AT 2m c/c),F5) — NOISE BARRIER SECTION NO. NB2 (NOISE BARRIER TYPE V6; POLES AT 2m CENTER TO CENTER, FOUNDATION TYPE F5)
- NB17 (C1a, R) — NOISE BARRIER SECTION NO. NB17 (NOISE BARRIER TYPE C1a, FACING FANLING BOUND, SITTING ON RETAINING WALL)
- NB15 (C1(POLES AT 3m c/c)) — NOISE BARRIER SECTION NO. NB15 (NOISE BARRIER TYPE C1, POLES AT 3m CENTER TO CENTER)
- SINGLE LEAF ACCESS DOOR PROVIDED ON NOISE BARRIERS
- DOUBLE LEAF ACCESS DOOR PROVIDED ON NOISE BARRIERS
- HEIGHT TRANSITION PROVIDED AT START / END OF NOISE BARRIER
- HEIGHT TRANSITION PROVIDED BETWEEN TWO TYPES OF NOISE BARRIERS
- CHAIN LINK FENCE
- EXISTING NOISE BARRIER
- NOISE BARRIER ON BRIDGE
- BEAM BARRIER FOR VEHICULAR MAINTENANCE ACCESS TYPE 2 RAILING FOR MAINTENANCE FOOTWAY
- VEHICULAR MAINTENANCE ACCESS FROM EXISTING BICYCLE TRACK
- 1m MAINTENANCE FOOTWAY
- 2m MAINTENANCE FOOTWAY
- EXTENT OF FOUNDATION FOR NOISE BARRIER

REV. 修訂	DATE 日期	DESCRIPTION 內容摘要	CHECKED 核訂	APPD. 批準人
Z	MAR 2015	AS-BUILT DRAWING	KHL	WJS

REVISION

DESIGNED 設計	KK	CHECKED 審核	KHL
DRAWN 繪圖	SZ	CHECKED 審核	KHL
APPROVED FOR ISSUE 批準人	WJS	©	Copyright Reserved 版 權 所 有
DATE 日期	MAY 2008	All dimensions are in mm unless shown otherwise. No measurement should be taken from drawing directly.	
SCALE 比例	A1 = 1 : 500 A3 = 1 : 1000		
CAD REF. 檔案名稱	E-25502Z.DGN		

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HIGHWAYS DEPARTMENT
主要工程管理處
MAJOR WORKS PROJECT MANAGEMENT OFFICE

CONTRACT TITLE 合約第 II

Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling (Stage 1 - Between Island House Interchange and Ma Wo)

CONTRACT NO. HY/2008/09

CONSULTANT 工程顧問

Hyder ARUP BLACK & VEATCH

DRAWING TITLE 圖名

NOISE BARRIER LAYOUT PLANS

(SHEET 1 OF 8)

AS-BUILT

DRAWING NO. 圖紙編號 798/NB/25502

REV. 修訂 Z

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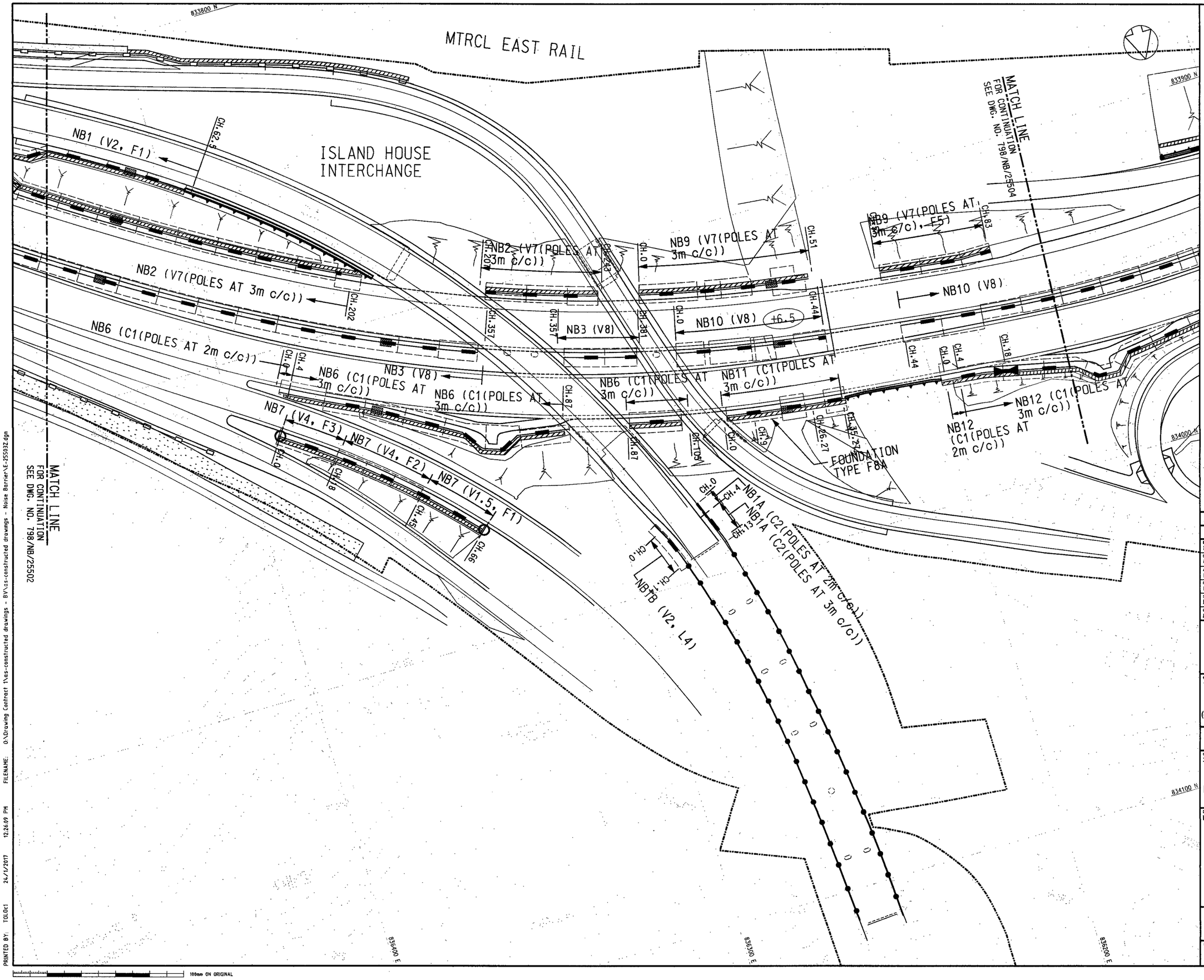

NOTE:

1. FOR NOTES AND LEGEND, SEE DRAWING NO. 798/NB/25502.

REV. 修訂	DATE 日期	DESCRIPTION 內容摘要	CHECKED 審核	APPD. 批准人
Z	MAR 2015	AS-BUILT DRAWING	KHL	WJS

REVISION

DESIGNED 設計	KK
DRAWN 繪圖	SZ
APPROVED FOR ISSUE 批准人	WJS
DATE 日期	MAY 2008
SCALE 比例	A1 = 1 : 500 A3 = 1 : 1000
CAD REF. 基英名稱	E-25503Z.DGN
CHECKED 審核	KHL
CHECKED 審核	KHL

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路政署
HIGHWAYS DEPARTMENT
主要工程管理處
MAJOR WORKS PROJECT MANAGEMENT OFFICE

CONTRACT TITLE 合約項目

Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling (Stage 1 - Between Island House Interchange and Ma Wo)

CONTRACT NO. HY/2008/09

CONSULTANT 工程顧問

Hyder ARUP BLACK & VEATCH

DRAWING TITLE 圖名

NOISE BARRIER LAYOUT PLANS

(SHEET 2 OF 8)

AS-BUILT

DRAWING NO. 圖紙號數 798/NB/25503

REV. 修訂 Z

PRINTED BY: TOLOcI 24/1/2017 12.26.09 PM FILENAME: O:\Drawing Contract 1\as-constructed drawings - BV\as-constructed drawings - Noise Barrier\E-25503Z.dgn

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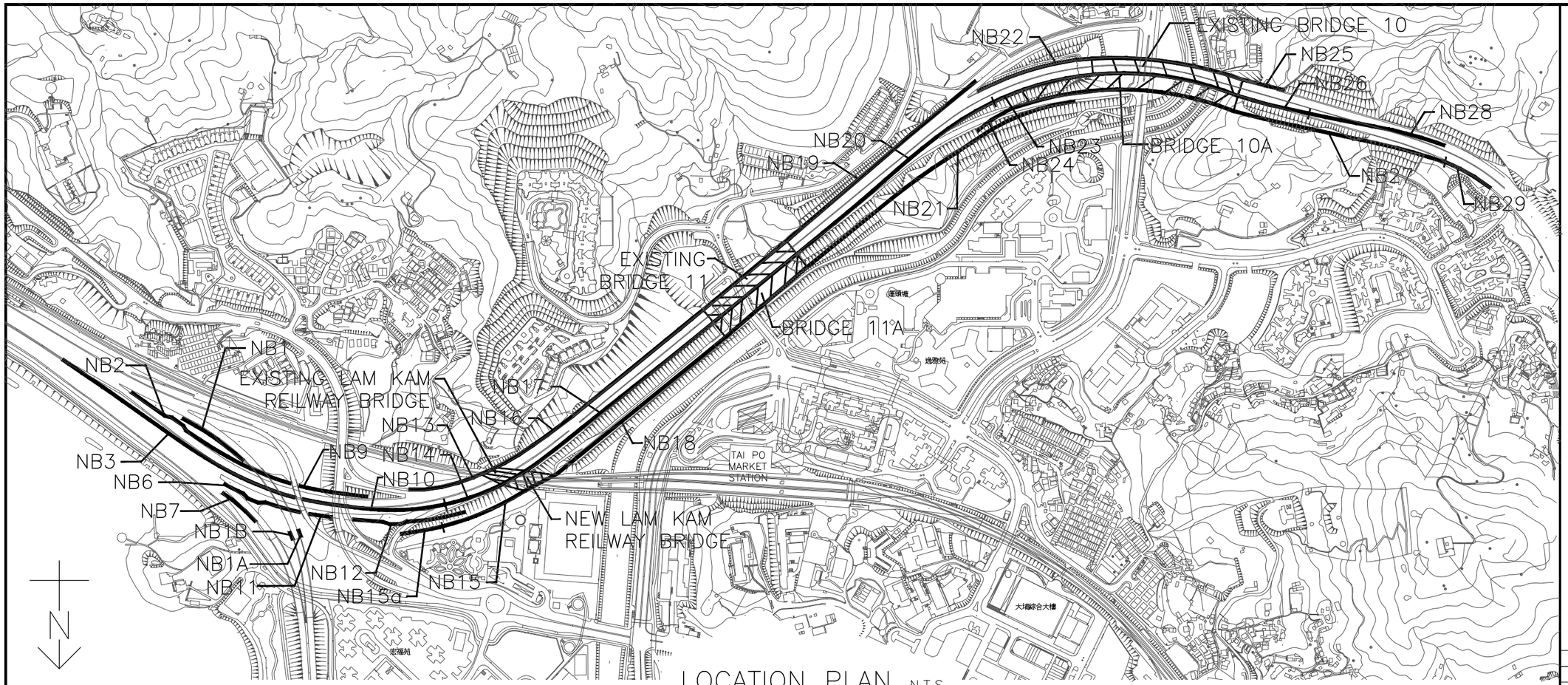

LOCATION PLAN N.T.S.

GENERAL NOTES :

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DRAWING NO. 798/HS/00016 TO 00027.
2. ACTUAL DIMENSIONS REFER TO THE SITE MEASUREMENT.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED, ALL LEVELS REFER TO THE PRINCIPAL DATUM OF HONG KONG.
4. ALL DISTANCES SHOWN ON LONGITUDINAL ELEVATIONS ARE MEASURED HORIZONTALLY.
5. DISCREPANCIES IN THE WORKS CONSTRUCTED BY OTHERS ARE IMMEDIATELY BROUGHT TO THE ATTENTION OF THIS COMPANY FOR FURTHER CONFIRMATION.
6. THE MAIN STRUCTURAL STEEL FRAMES ARE DESIGNED BY THE ENGINEER. FOR MAIN FRAME DETAILS AND MATERIALS SPECIFICATION, REFER TO HERE UNDER ENGINEER'S DRAWINGS:
   798/HS/20004,
   798/HS/20581 & 20582,
   798/HS/20791 & 20792,
   798/HS/20991 & 20992,
   798/HS/22561, 22651 & 22751,
   798/GN/25015, 798/NB/25021 TO 25027
7. UNLESS OTHERWISE STATED, ALL STEEL SUBFRAME IS DESIGNED WITH MATERIAL SPECIFICATION OF GRADE S275JR TO BS EN 10025
8. WELDING COMPLY WITH BS EN 1011, 4mm CONTINUOUS FILLET WELD SHALL BE USED, UNLESS OTHERWISE NOTED.
9. CONNECTION BOLTS TO BE DESIGNED FOR STEEL SUBFRAME AND NOISE BARRIER SYSTEM ARE STAINLESS STEEL WITH GRADE A4-80 TO BS EN ISO 3506-1 & 3506-2 UNLESS OTHERWISE STATED.
10. WELDING SYMBOLS FOR STEELWORKS ARE COMPLIED WITH BS 499: PART 2 : 1980.
11. UNLESS OTHERWISE STATED, ALL STEEL SUBFRAME IS HOT DIP GALVANIZED TO BS EN ISO 1461 : 1999.
12. DAMAGED GALVANIZED SURFACES OF STEELWORKS ARE TREATED WITH 2 COATS OF ANTI-CORROSIVE COLD GALVANIZED PRIMER.
13. PROTECTIVE COATING ON EXPOSED STRUCTURAL STEEL SUBFRAME IS SYSTEM F TO PARTICULAR SPECIFICATION CLAUSE 28.08(6)(a).

    PRE-TREATMENT: TWO-PACK ETCH PRIMER

    PRIMER : TWO-PACK EPOXY ZINC PHOSPHATE PRIMER, 80 MICRON MIN. TOTAL DRY-FILM THICKNESS.

    UNDERCOAT : TWO-PACK MICACEOUS IRON OXIDE EPOXY UNDERCOAT, 140 MICRON MIN. TOTAL DRY-FILM THICKNESS.

    FINISH : TWO-PACK POLYURETHANE FINISH COAT, 100 MICRON MIN. TOTAL DRY-FILM THICKNESS.

    COLOR CODE TO BE PANTONE 5435U.
14. ACOUSTICAL SEALING TO BE EPDM SEALING PROFILE WITH HARDNESS OF MIN. 60 DEGREE SHORE.
15. ALL STRUCTURAL EXTRUDED ALUMINIUM PROFILES SHOULD BE ALUMINIUM ALLOY 6063-T6 TO BS 1474. ALUMINIUM CLADDING AND FLASHING TO BE ALUMINIUM ALLOY 3003-H14 TO BS 1470.
16. EXPOSED SURFACE OF STRUCTURAL ALUMINIUM FRAME AND ENCLOSURE CAPPING/SEALING PLATE ARE COATED BEFORE DELIVEREY TO SITE WITH POWDER COATING. COLOR CODE TO BE PANTONE 5435U.
17. FASTENER FOR ALUMINIUM COMPONENTS AND STRUCTURAL ALUMINIUM FRAME TO BE STAINLESS STEEL GRADE A4-70 TO BS EN ISO 3506-1 & 3506-2.
18. ELECTROLYTIC PROTECTION BETWEEN FINISHES OF ALUMINIUM AND GALVANIZED STEEL / R.C. STRUCTURE.

    SOLUTION 1 : BITUMINOUS PAINT OR SIMILAR FUNCTION TO BE APPLIED TO THE CONTACT SURFACE OF ALUMINIUM TO R.C. STRUCTURE OR GALVANIZED STEEL TO COMPLY WITH THE REQUIREMENT OF BS 8118.

    SOLUTION 2 : 1mm THICK OF ASPHALT / RUBBER SHEET SHALL BE USED AS "ISOLATOR " TO SEPARATE THE CONTACT SURFACE BETWEEN ALUMINIUM AND GALVANIZED STEEL.
19. THE DYNAMIC PRESSURE HEAD FOR THE DESIGN OF NOISE BARRER SYSTEM SHALL BE IN ACCORDANCE WITH PARTICULAR SPECIFICATION CLAUSE 28.13 (1)

    THE DESIGN OF THE SUPPORTING FRAME AND THE NOISE BARRIER PANEL:
    DYNAMIC PRESSURE = 3.3 kN/m²

    NOISE BARRIER SYSTEM IS DESIGNED TO THE REQUIREMENT GIVEN IN THE STRUCTURE DESIGN MANUAL FOR HIGHWAY AND RAILWAY-HIGHWAYS DEPARTMENT.
20. ACOUSTICAL NOISE BARRIER PANELS ARE AS FOLLOWS:

LOCATION	TYPE OF PANEL
ROOF-REFLECTIVE PANEL	15mm TRANSPARENT PLEXIGLAS SOUNDSTOP WITH ONE SIDE MATT FINISH IN MID-NIGHT BLUE COLOUR WITH COATED STRUCTURAL ALUMINIUM FRAME
WALL-REFLECTIVE PANEL *	15mm OR 20mm TRANSPARENT PLEXIGLAS SOUNDSTOP BIRD GUARD IN TINTED COLOURS WITH COATED STRUCTURAL ALUMINIUM FRAME
ABSORPTIVE WALL PANEL (FOR CARRIAGEWAY ON BOTH SIDES)	FORSTER ALUMINIUM BOTH SIDES HIGH ABSORBING NOISE BARRIER ELEMENT TYPE SB11 / EP
ABSORPTIVE WALL PANEL (FOR CARRIAGEWAY ON ONE SIDE)	FORSTER ALUMINIUM ONE SIDE HIGH ABSORBING NOISE BARRIER ELEMENT TYPE SE11 / EP
FIRE BREAK PANEL	FORSTER ALUMINIUM HIGHLY REFLECTING NOISE BARRIER ELEMENT TYPE SR11 / EP

    DIMENSION TOLERANCE (LENGTH, WIDTH AND THICKNESS) SHOULD BE REFERED TO MANUFACTURER'S RECOMMENDATION

    * EMBEDDED BIRD GUARD LINE PATTERN ARE FACE TO CARRIAGE WAY UNLESS OTHERWISE STATED.
21. COLOUR OF ELEMENTS ARE AS FOLLOWS.

	ELEMENTS	COLOUR REFERENCE
1.	MAIN STEEL FRAME	PANTONE 5435U
2.	STEEL SUB-FRAME	PANTONE 5435U
3.	STRUCTURAL ALUMINUM FRAME	PANTONE 5435U
4.	ALUMINUM GUTTER AND FLASHING	PANTONE 5435U
5.	TRANSPARENT WALL PANEL	SPRING GREEN FOREST GREEN STEEL BLUE
6.	TRANSPARENT ROOF PANEL	MIDNIGHT BLUE
7.	FIRE BREAKER	PANTONE 577U
8.	ABSORPTIVE TYPE PANEL (SINGLE SIDE / DOUBLE SIDES)	PANTONE 575U PANTONE 577U PANTONE 607U PANTONE 642U PANTONE 645U PANTONE 653U
9.	ALUMINIUM SEALING PLATE	PANTONE 5435U FOR NB1, NB7 AND ACCESS DOOR PANTONE 577U FOR OTHERS

COLOUR SCHEME (PATTERN) OF SUB-FRAME AND NOISE BARRIER SYSTEM SHALL REFER TO GENERAL ARRANGEMENT IN SEPARATED SUBMISSIONS.

REV.	DESCRIPTION	DATE	PREPARED BY
Z	AS BUILT DRAWING	15-JUL-14	
C	AS BUILT DRAWING	08-MAY-14	ORIGINAL SIGNED
B	MINOR AMENDMENT	21-MAR-11	ORIGINAL SIGNED
A	MINOR AMENDMENT	25-SEP-10	ORIGINAL SIGNED
-	FIRST ISSUE	2-AUG-10	ORIGINAL SIGNED

CLIENT.
路政署
HIGHWAYS DEPARTMENT
主要工程管理處
Major Works Project Management Office

Engineer
Hyder ARUP
BLACK & VEATCH

Noise Barrier Works Sub-Contractor
ACTIVE WAY LTD
愛達威有限公司

Designer
ATKINS 阿特金斯顧問有限公司
Atkins China Ltd

CONTRACT NO. : HY/2008/09

Contract Title
WIDENING OF TOLO HIGHWAY / FANLING HIGHWAY BETWEEN ISLAND HOUSE INTERCHANGE AND FANLING
(STAGE 1 - BETWEEN ISLAND HOUSE INTERCHANGE AND MA WO)

Title
LOCATION PLAN AND GENERAL NOTES

Scale: AS SHOWN	Status: AS BUILT DRAWING
Designed by: AWL	
Prepared by:	Drawing No. 798/NB/25001 Rev. Z
Cad Ref. D01C.DWG	REF No. 0903-03-D01

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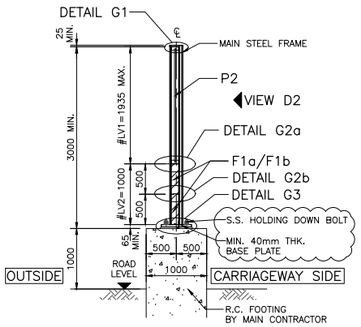
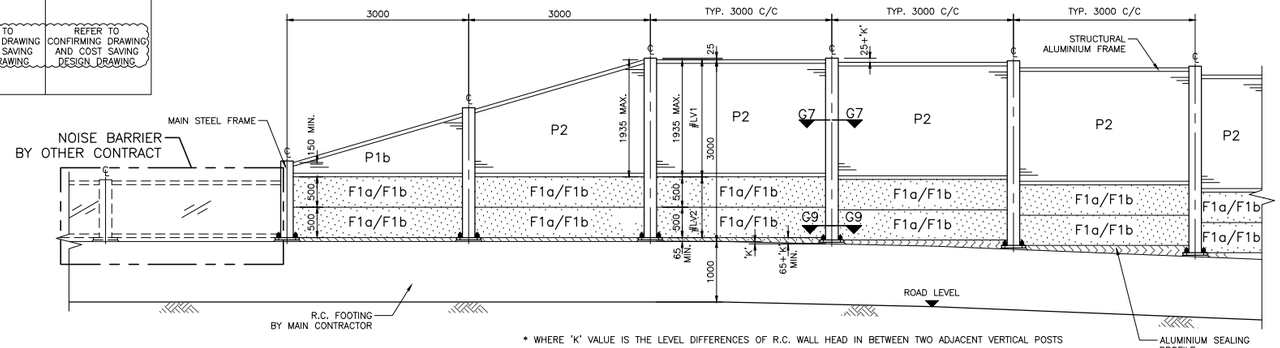
MEMBER SCHEDULE OF MAIN STEEL FRMAE

NOISE BARRIER TYPE	VERTICAL POST	BASE PLATE	HOLDING DOWN BOLT
V4	203x203x71 kg/m		
V6	254x254x132 kg/m	REFER TO CONFIRMING DRAWING AND COST SAVING DESIGN DRAWING	REFER TO CONFIRMING DRAWING AND COST SAVING DESIGN DRAWING
V6 (FOR NB3 ONLY)			
V7	305x305x240 kg/m		

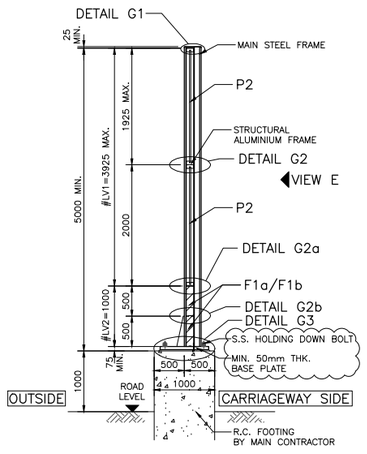


TYPICAL SECTION OF NOISE BARRIER TYPE V4 1 : 50
(FOR NOISE BARRIER NB29)

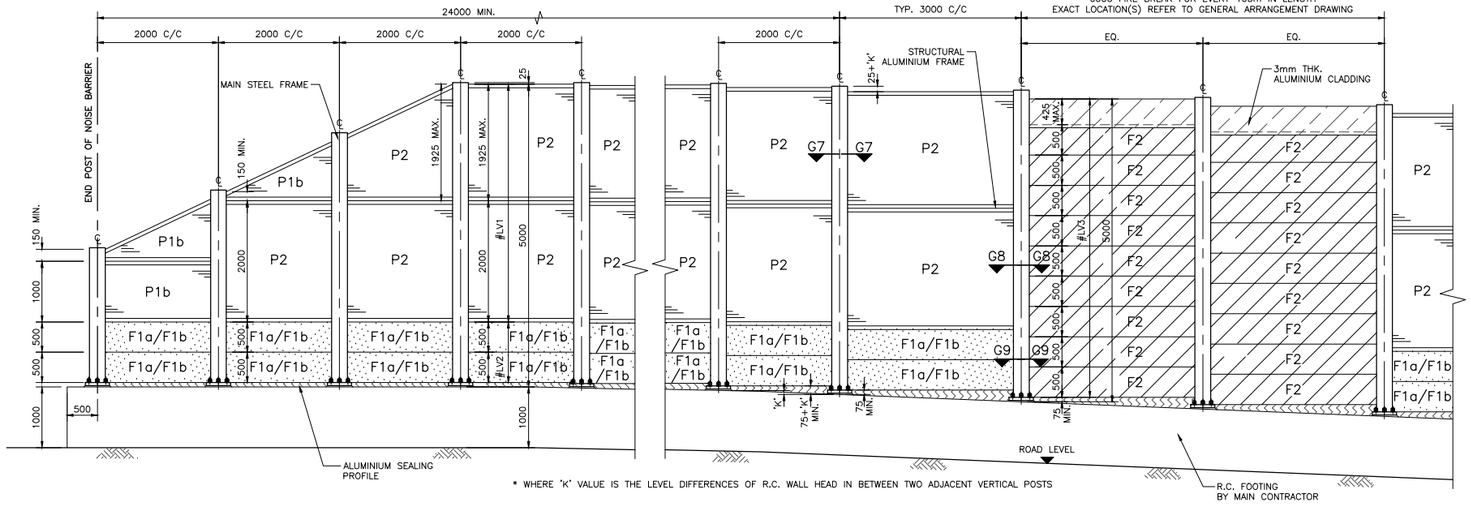


* WHERE 'K' VALUE IS THE LEVEL DIFFERENCES OF R.C. WALL HEAD IN BETWEEN TWO ADJACENT VERTICAL POSTS

VIEW D2 1 : 50
(TYPICAL ELEVATION OF NOISE BARRIER TYPE V4 FOR NOISE BARRIER NB29)

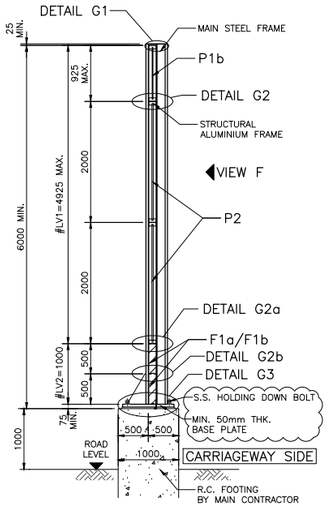


TYPICAL SECTION OF NOISE BARRIER TYPE V6 1 : 50

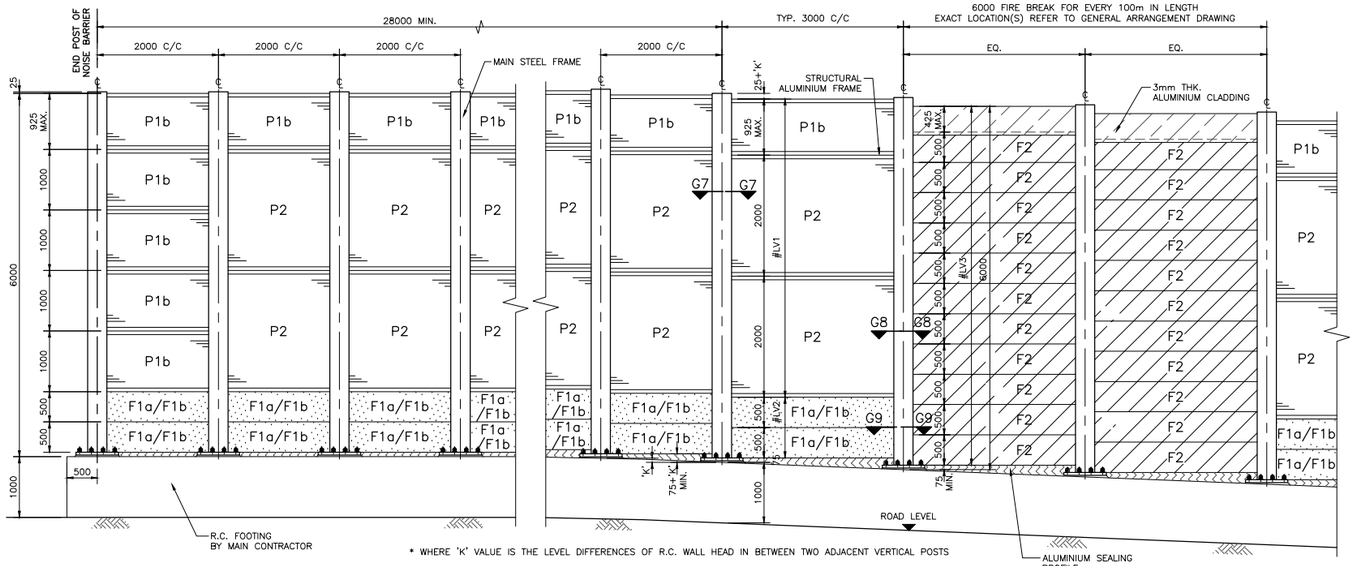


* WHERE 'K' VALUE IS THE LEVEL DIFFERENCES OF R.C. WALL HEAD IN BETWEEN TWO ADJACENT VERTICAL POSTS

VIEW E 1 : 50
(TYPICAL ELEVATION OF NOISE BARRIER TYPE V6 FOR NOISE BARRIER NB2, 3, 15a & 26)



TYPICAL SECTION OF NOISE BARRIER TYPE V7 1 : 50



* WHERE 'K' VALUE IS THE LEVEL DIFFERENCES OF R.C. WALL HEAD IN BETWEEN TWO ADJACENT VERTICAL POSTS

VIEW F 1 : 50
(TYPICAL ELEVATION OF NOISE BARRIER TYPE V7 FOR NOISE BARRIER NB2 & 9)

NOTES :

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DRAWING NO. 798/NB/25001, 25002 AND 25004 TO 25013.

LEGEND :

	MARK	DESCRIPTION
VERTICAL PANEL	P1a	15mm THK. PLEXIGLAS SOUNDSTOP TRANSPARENT NOISE BARRIER TINTED PANELS WITH BIRD GUARD (HORIZONTAL BLACK LINE-PATTERN EMBEDDED) FOR *ZONE A & B OF TYPE V2, V3 & V4, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
	P1b	15mm THK. PLEXIGLAS SOUNDSTOP TRANSPARENT NOISE BARRIER TINTED PANELS WITH BIRD GUARD (HORIZONTAL BLACK LINE-PATTERN EMBEDDED) FOR TYPICAL BAY, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
	P2	20mm THK. PLEXIGLAS SOUNDSTOP TRANSPARENT NOISE BARRIER TINTED PANELS WITH BIRD GUARD (HORIZONTAL BLACK LINE-PATTERN EMBEDDED), COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
ROOF PANEL	P3	15mm THK. PLEXIGLAS SOUNDSTOP TRANSPARENT TINTED PANEL WITH TOP SIDE MATT FINISH, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
FORSTER ALUMINIUM PANEL	F1a	SINGLE SIDE HIGHLY ABSORPTIVE NOISE BARRIER ELEMENT SE11/EP, SOUND ABSORBING SURFACE FACING THE CARRIAGEWAY SIDE, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
	F1b	BOTH SIDES HIGHLY ABSORPTIVE NOISE BARRIER ELEMENT SB11/EP AT CENTRAL DIVIDER, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
	F2	HIGHLY REFLECTING NOISE BARRIER ELEMENT TYPE SR11/EP – FIRE BREAK, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
SEALING PLATE		3mm THK. ALUMINIUM SEALING PLATE COLOUR TO BE MATCHED THE ADJACENT POST/MULLION IN PANTONE 5435U.

*INTERPRETATION OF ZONE A, B, C & D REFERED TO ENGINEER'S DRAWING NO. 798/NB/25001.

\# LV1 : LENGTH OF TINTED TRANSPARENT PANEL AT VERTICAL PORTION
LV2 : LENGTH OF ABSORPTIVE PANEL, SINGLE /DOUBLE SIDE(S) ABSORBENT
LV3 : LENGTH OF FIRE RESISTANCE FIELD AT VERTICAL PORTION
LR1 : LENGTH OF TINTED NON-GLARING PANEL AT INCLINED CANOPY PORTION
LR2 : LENGTH OF FIRE RESISTANCE FIELD AT INCLINED CANOPY PORTION

REV.	DESCRIPTION	DATE	PREPARED BY
Z	AS BUILT DRAWING	15-JUL-14	
A	MINOR AMENDMENT	25-SEP-10	ORIGINAL SIGNED
–	FIRST ISSUE	2-AUG-10	ORIGINAL SIGNED

CLIENT:
路政署
HIGHWAYS DEPARTMENT
主要工程管理處
Major Works Project Management Office

Engineer:
Hyder ARUP BLACK & VEATCH

Main Contractor:
中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGRG. (HONG KONG) LTD.

Noise Barrier Works Sub-Contractor:
ACTIVE WAY LTD 愛達威有限公司

Designer:
ATKINS 阿特金斯顧問有限公司 Atkins China Ltd

CONTRACT NO. : HY/2008/09

Contract Title:
WIDENING OF TOLO HIGHWAY / FANLING HIGHWAY BETWEEN ISLAND HOUSE INTERCHANGE AND FANLING
(STAGE 1 – BETWEEN ISLAND HOUSE INTERCHANGE AND MA WO)

Title:
TYPICAL ELEVATIONS AND SECTIONS OF NOISE BARRIER TYPE V4, V6 & V7 ON GRADE

Scale: AS SHOWN	Status: AS BUILT DRAWING
Designed by: AWL	
Prepared by:	Drawing No. 798/NB/25003 Rev. Z
Cad Ref. D03A.DWG	REF No. 0903-03-D03

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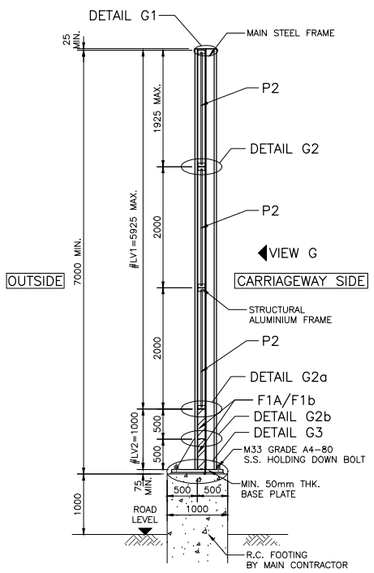
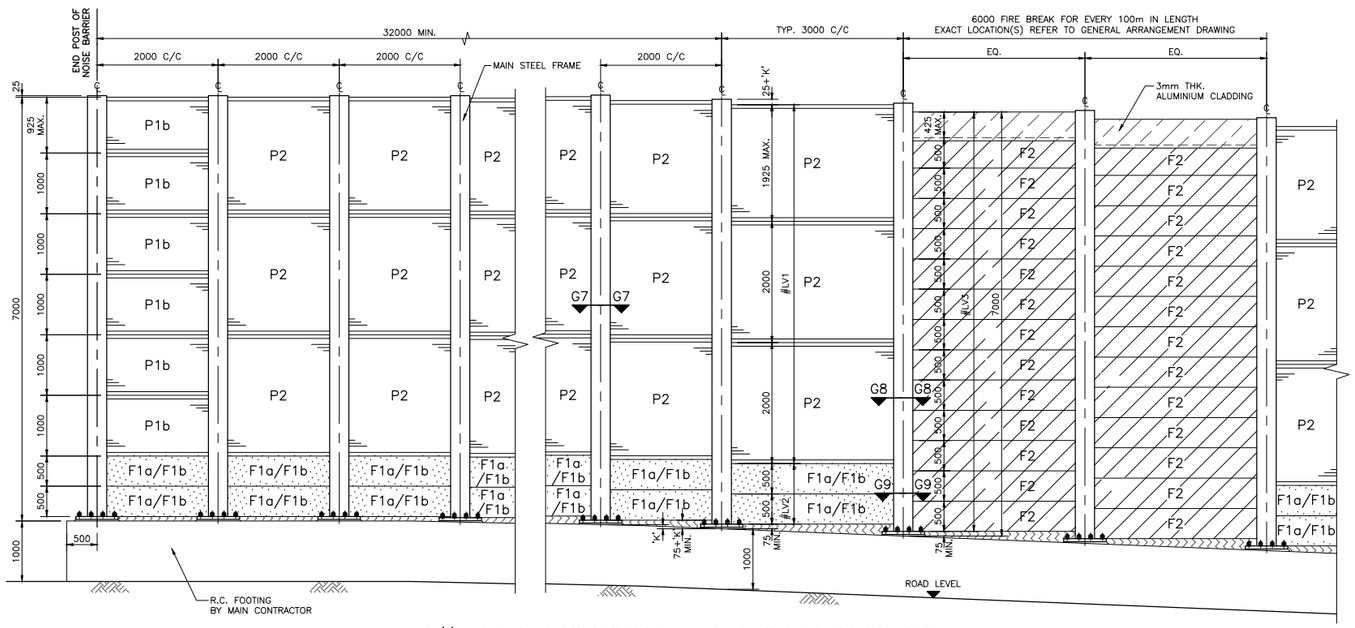
MEMBER SCHEDULE OF MAIN STEEL FRMAE

NOISE BARRIER TYPE	VERTICAL POST	CANTILEVER BEAM	BASE PLATE	HOLDING DOWN BOLT
V8	305x305x240 kg/m	N/A	REFER TO CONFIRMING DRAWING AND COST SAVING DESIGN DRAWING	REFER TO CONFIRMING DRAWING AND COST SAVING DESIGN DRAWING
C1Y	305x305x283 kg/m	305x305x158 kg/m		

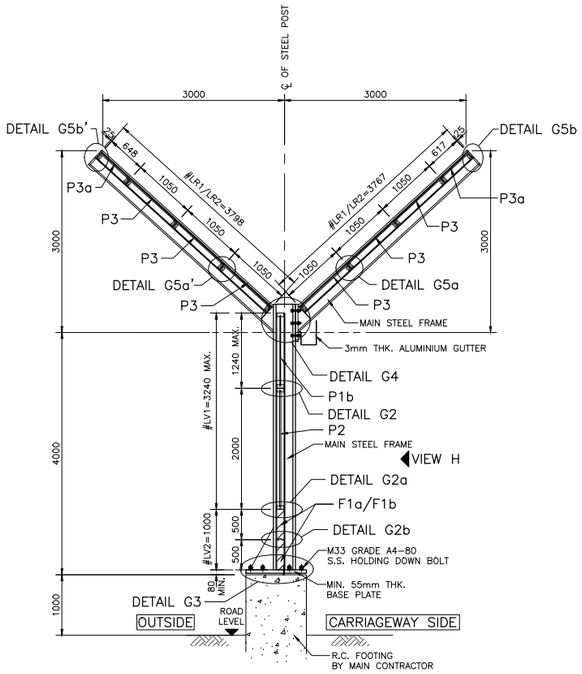


TYPICAL SECTION OF NOISE BARRIER TYPE V8 1 : 50

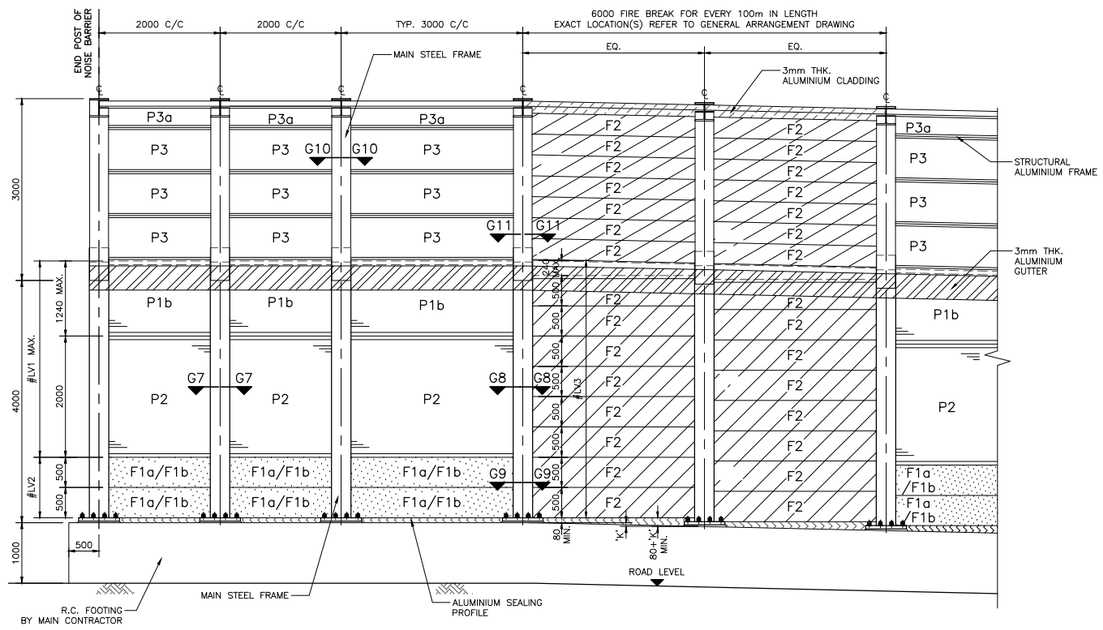


* WHERE 'K' VALUE IS THE LEVEL DIFFERENCES OF R.C. WALL HEAD IN BETWEEN TWO ADJACENT VERTICAL POSTS

VIEW G 1 : 10
(TYPICAL ELEVATION OF NOISE BARRIER TYPE V8 FOR NOISE BARRIER NB3, 10, 14, 15, 17 & 18)



TYPICAL SECTION OF NOISE BARRIER TYPE C1Y 1 : 50



* WHERE 'K' VALUE IS THE LEVEL DIFFERENCES OF R.C. WALL HEAD IN BETWEEN TWO ADJACENT VERTICAL POSTS

VIEW H 1 : 50
(TYPICAL ELEVATION OF NOISE BARRIER TYPE C1Y FOR NOISE BARRIER NB17 & 20)

NOTES :

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DRAWING NO. 798/NB/25001 TO 25003 AND 25005 TO 25013.

LEGEND :

	MARK	DESCRIPTION
VERTICAL PANEL	P1a	15mm THK. PLEXIGLAS SOUNDSTOP TRANSPARENT NOISE BARRIER TINTED PANELS WITH BIRD GUARD (HORIZONTAL BLACK LINE-PATTERN EMBEDDED) FOR *ZONE A & B OF TYPE V2, V3 & V4, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
	P1b	15mm THK. PLEXIGLAS SOUNDSTOP TRANSPARENT NOISE BARRIER TINTED PANELS WITH BIRD GUARD (HORIZONTAL BLACK LINE-PATTERN EMBEDDED) FOR TYPICAL BAY, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
	P2	20mm THK. PLEXIGLAS SOUNDSTOP TRANSPARENT NOISE BARRIER TINTED PANELS WITH BIRD GUARD (HORIZONTAL BLACK LINE-PATTERN EMBEDDED), COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
ROOF PANEL	P3/ P3A	15mm THK. PLEXIGLAS SOUNDSTOP TRANSPARENT TINTED PANEL WITH TOP SIDE MATT FINISH, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
FORSTER ALUMINIUM PANEL	F1a	SINGLE SIDE HIGHLY ABSORPTIVE NOISE BARRIER ELEMENT SE11/EP, SOUND ABSORBING SURFACE FACING THE CARRIAGEWAY SIDE, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
	F1b	BOTH SIDES HIGHLY ABSORPTIVE NOISE BARRIER ELEMENT SB11/EP AT CENTRAL DIVIDER, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
	F2	HIGHLY REFLECTING NOISE BARRIER ELEMENT TYPE SR11/EP – FIRE BREAK, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
SEALING PLATE		3mm THK. ALUMINIUM SEALING PLATE COLOUR TO BE MATCHED THE ADJACENT POST/MULLION IN PANTONE 5435U.

*INTERPRETATION OF ZONE A, B, C & D REFERED TO ENGINEER'S DRAWING NO. 798/NB/25001.

\# LV1 : LENGTH OF TINTED TRANSPARENT PANEL AT VERTICAL PORTION
LV2 : LENGTH OF ABSORPTIVE PANEL, SINGLE /DOUBLE SIDE(S) ABSORBENT
LV3 : LENGTH OF FIRE RESISTANCE FIELD AT VERTICAL PORTION
LR1 : LENGTH OF TINTED NON-GLARING PANEL AT INCLINED CANOPY PORTION
LR2 : LENGTH OF FIRE RESISTANCE FIELD AT INCLINED CANOPY PORTION

REV.	DESCRIPTION	DATE	PREPARED BY
Z	AS BUILT DRAWING	15-JUL-14	
B	MINOR AMENDMENT	21-MAR-11	ORIGINAL SIGNED
A	MINOR AMENDMENT	25-SEP-10	ORIGINAL SIGNED
–	FIRST ISSUE	2-AUG-10	ORIGINAL SIGNED

CLIENT.
路政署
HIGHWAYS DEPARTMENT
主要工程管理處
Major Works Project Management Office

Engineer
Hyder ARUP BLACK & VEATCH

Main Contractor
中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGRG. (HONG KONG) LTD.

Noise Barrier Works Sub-Contractor
ACTIVE WAY LTD 愛達威有限公司

Designer
ATKINS 阿特金斯顧問有限公司 Atkins China Ltd

CONTRACT NO. : HY/2008/09

Contract Title
WIDENING OF TOLO HIGHWAY / FANLING HIGHWAY BETWEEN ISLAND HOUSE INTERCHANGE AND FANLING (STAGE 1 – BETWEEN ISLAND HOUSE INTERCHANGE AND MA WO)

Title
TYPICAL ELEVATIONS AND SECTIONS OF NOISE BARRIER TYPE V8 & C1Y ON GRADE

Scale: AS SHOWN	Status: AS BUILT DRAWING
Designed by: AWL	
Prepared by:	Drawing No.: 798/NB/25004 Rev.: Z
Cad Ref.: D04B.DWG	REF No. 0903-03-D04

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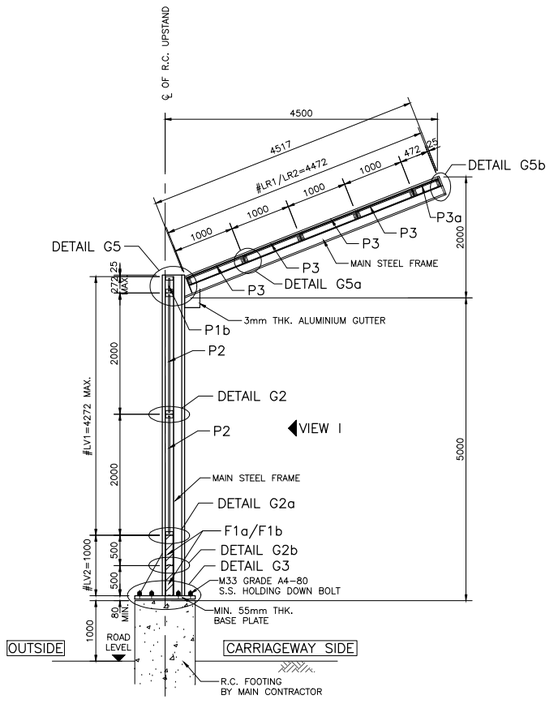
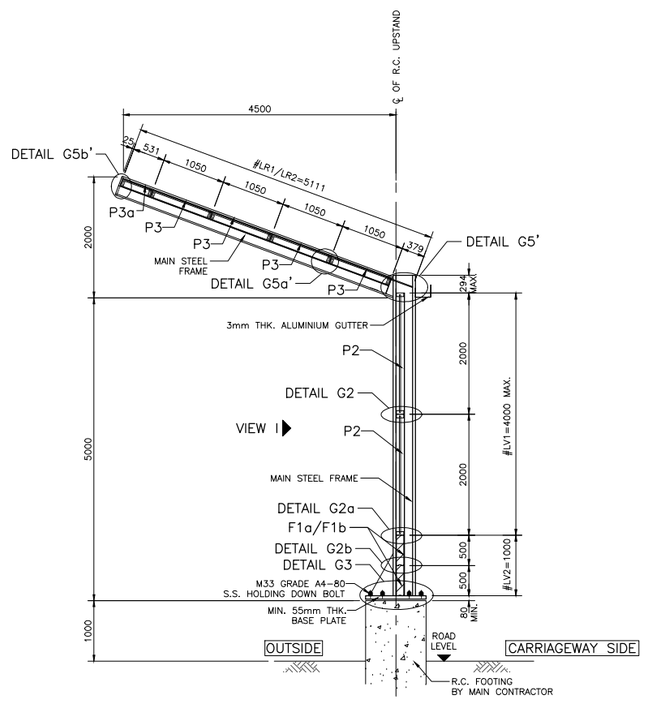
MEMBER SCHEDULE OF MAIN STEEL FRMAE

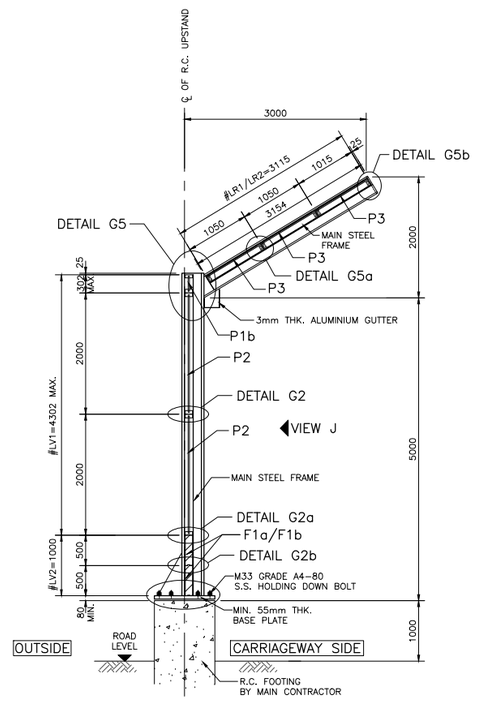
NOISE BARRIER TYPE	VERTICAL POST	CANTILEVER BEAM	BASE PLATE	HOLDING DOWN BOLT
C1, C1a & C2	305x305x283 kg/m	305x305x158 kg/m	REFER TO CONFIRMING DRAWING AND COST SAVING DESIGN DRAWING	REFER TO CONFIRMING DRAWING AND COST SAVING DESIGN DRAWING



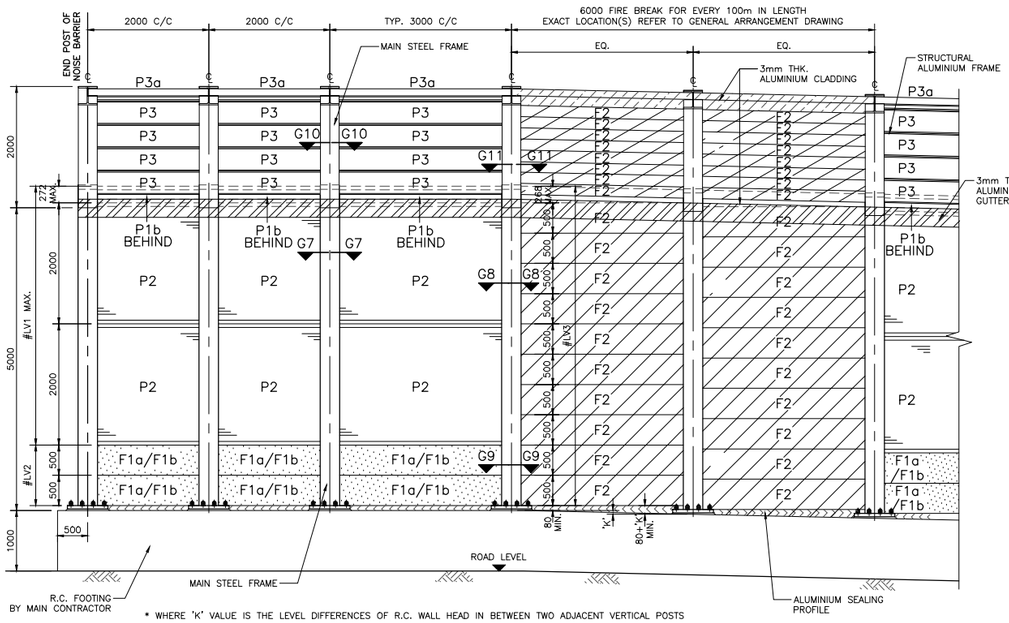
TYPICAL SECTION OF NOISE BARRIER TYPE C1 1 : 50



TYPICAL SECTION OF NOISE BARRIER TYPE C1a 1 : 50

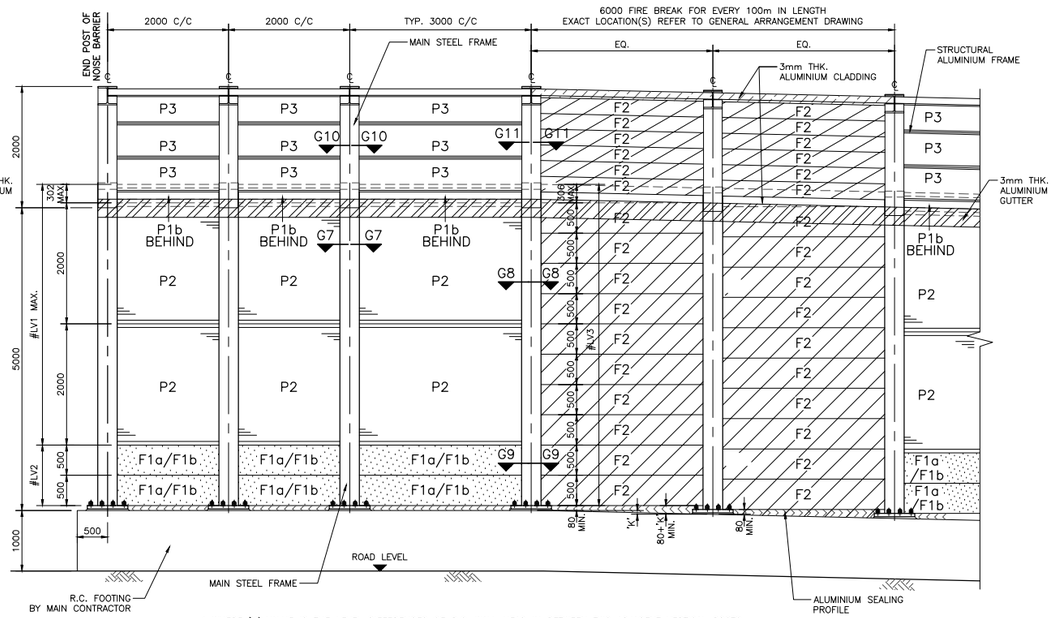


TYPICAL SECTION OF NOISE BARRIER TYPE C2 1 : 50



* WHERE 'K' VALUE IS THE LEVEL DIFFERENCES OF R.C. WALL HEAD IN BETWEEN TWO ADJACENT VERTICAL POSTS

VIEW I 1 : 50
(TYPICAL ELEVATION OF NOISE BARRIER TYPE C1/C1a
FOR NOISE BARRIER NB6, 11, 12, 15, 17, 18, 19, 21, 23, 24 & 27)



* WHERE 'K' VALUE IS THE LEVEL DIFFERENCES OF R.C. WALL HEAD IN BETWEEN TWO ADJACENT VERTICAL POSTS

VIEW J 1 : 50
(TYPICAL ELEVATION OF NOISE BARRIER TYPE C2 FOR NOISE BARRIER NB1A, 13 & 16)

NOTES :

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DRAWING NO. 798/NB/25001 TO 25004 AND 25006 TO 25013.

LEGEND :

	MARK	DESCRIPTION
VERTICAL PANEL	P1a	15mm THK. PLEXIGLAS SOUNDSTOP TRANSPARENT NOISE BARRIER TINTED PANELS WITH BIRD GUARD (HORIZONTAL BLACK LINE-PATTERN EMBEDDED) FOR *ZONE A & B OF TYPE V2, V3 & V4, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
	P1b	15mm THK. PLEXIGLAS SOUNDSTOP TRANSPARENT NOISE BARRIER TINTED PANELS WITH BIRD GUARD (HORIZONTAL BLACK LINE-PATTERN EMBEDDED) FOR TYPICAL BAY, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
	P2	20mm THK. PLEXIGLAS SOUNDSTOP TRANSPARENT NOISE BARRIER TINTED PANELS WITH BIRD GUARD (HORIZONTAL BLACK LINE-PATTERN EMBEDDED), COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
ROOF PANEL	P3/ P3A	15mm THK. PLEXIGLAS SOUNDSTOP TRANSPARENT TINTED PANEL WITH TOP SIDE MATT FINISH, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
FORSTER ALUMINIUM PANEL	F1a	SINGLE SIDE HIGHLY ABSORPTIVE NOISE BARRIER ELEMENT SE11/EP, SOUND ABSORBING SURFACE FACING THE CARRIAGEWAY SIDE, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
	F1b	BOTH SIDES HIGHLY ABSORPTIVE NOISE BARRIER ELEMENT SB11/EP AT CENTRAL DIVIDER, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
	F2	HIGHLY REFLECTING NOISE BARRIER ELEMENT TYPE SR11/EP - FIRE BREAK, COLOUR OF PANEL IS SHOWN ON GENERAL ARRANGEMENT DRAWING IN SEPARATED SUBMISSION
SEALING PLATE		3mm THK. ALUMINIUM SEALING PLATE COLOUR TO BE MATCHED THE ADJACENT POST/MULLION IN PANTONE 5435U.

*INTERPRETATION OF ZONE A, B, C & D REFERED TO ENGINEER'S DRAWING NO. 798/NB/25001.

\# LV1 : LENGTH OF TINTED TRANSPARENT PANEL AT VERTICAL PORTION
LV2 : LENGTH OF ABSORPTIVE PANEL, SINGLE /DOUBLE SIDE(S) ABSORBENT
LV3 : LENGTH OF FIRE RESISTANCE FIELD AT VERTICAL PORTION
LR1 : LENGTH OF TINTED NON-GLARING PANEL AT INCLINED CANOPY PORTION
LR2 : LENGTH OF FIRE RESISTANCE FIELD AT INCLINED CANOPY PORTION

REV.	DESCRIPTION	DATE	PREPARED BY
Z	AS BUILT DRAWING	15-JUL-14	
B	MINOR AMENDMENT	21-MAR-11	ORIGINAL SIGNED
A	SETTING OUT OF CANTILEVER BEAM REVISED	25-SEP-10	ORIGINAL SIGNED
-	FIRST ISSUE	2-AUG-10	ORIGINAL SIGNED

CLIENT.
路政署
HIGHWAYS DEPARTMENT
主要工程管理處
Major Works Project Management Office

Engineer
Hyder ARUP BLACK & VEATCH

Main Contractor
中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGRG. (HONG KONG) LTD.

Noise Barrier Works Sub-Contractor
ACTIVE WAY LTD
愛達威有限公司

Designer
ATKINS 阿特金斯顧問有限公司 Atkins China Ltd

CONTRACT NO. : HY/2008/09

Contract Title
WIDENING OF TOLO HIGHWAY / FANLING HIGHWAY BETWEEN ISLAND HOUSE INTERCHANGE AND FANLING (STAGE 1 - BETWEEN ISLAND HOUSE INTERCHANGE AND MA WO)

Title
TYPICAL ELEVATIONS AND SECTIONS OF NOISE BARRIER TYPE C1, C1a & C2 ON GRADE

Scale	Status
AS SHOWN	AS BUILT DRAWING
Designed by: AWL	
Prepared by:	Drawing No. 798/NB/25005 Rev. Z
Cad Ref. D05B.DWG	REF No. 0903-03-D05

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LEGENDS:

▼ GS23 GROUND SETTLEMENT CHECKPOINTS

▽ T1 SETTLEMENT CHECKPOINTS ON FOOTING FOR NOISE BARRIER

REV. 修訂	DATE 日期	DESCRIPTION 內容摘要	CHECKED 覆核	APPD 批准人
Z	MAY2014	AS-BUILT DRAWING	-	-

REVISION

DESIGNED 設計 -	CHECKED 覆核 -
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DATE 日期 5/14	All dimensions are in mm unless shown otherwise
SCALE 比例 A1 = 1 : 500 A3 = 1 : 1000	No measurement should be taken from drawing directly
CAD REF 檔案名稱 E-25201Z.DGN	

路政署
HIGHWAYS DEPARTMENT
主要工程管理處
MAJOR WORKS PROJECT MANAGEMENT OFFICE

CONTRACT TITLE 合約名稱

Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling (Stage 1 - Between Island House Interchange and Ma Wo)

CONTRACT NO HY/2008/09

CONSULTANT 工程顧問

Hyder ARUP BLACK & VEATCH

CONTRACTOR 承建商

中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGINEERING (HONG KONG) LTD.

DESIGNER 設計

Victor Li & Associates Ltd.
Consulting Engineers

DRAWING TITLE 圖名

NOISE BARRIER NB1A AND NB3 LAYOUT PLAN

AS-BUILT

DRAWING NO 圖紙編號	REV. 修訂
798/NB/25201	Z

PRINTED BY: TDL0c1 22/8/2015 11.11.32 AM FILENAME O:\Drawing Contract 1\as-constructed drawings - Noise Barrier\NB1A & NB3\E-25201Z.dgn

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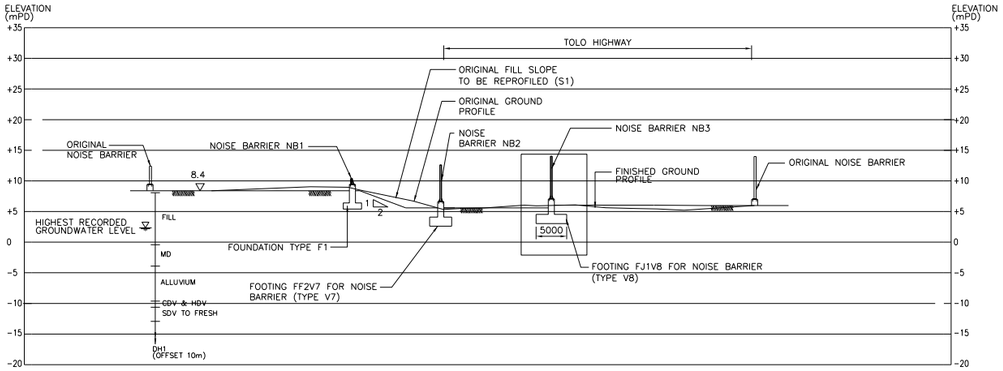
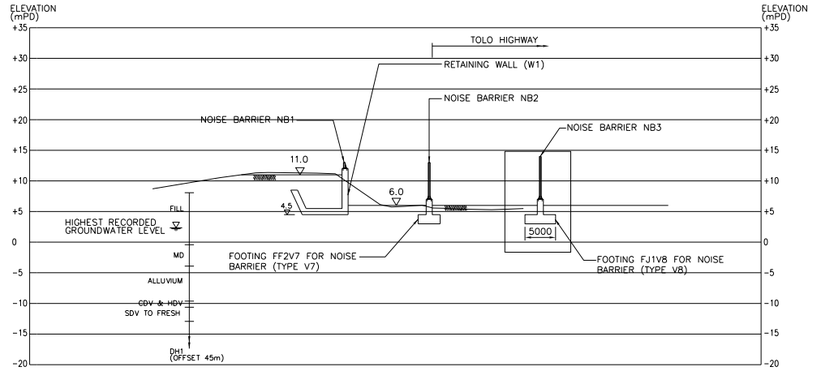
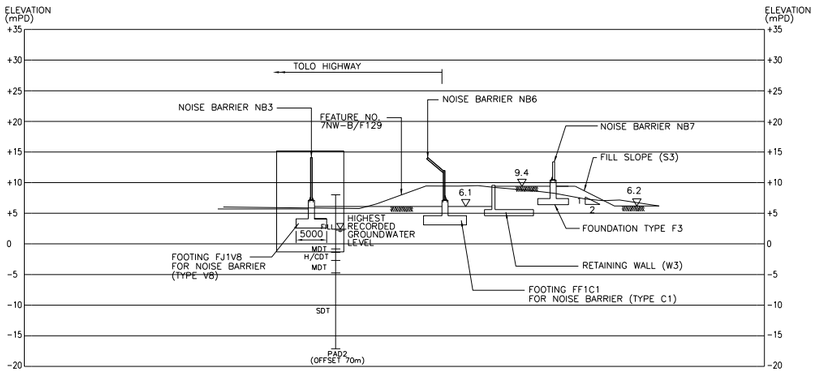


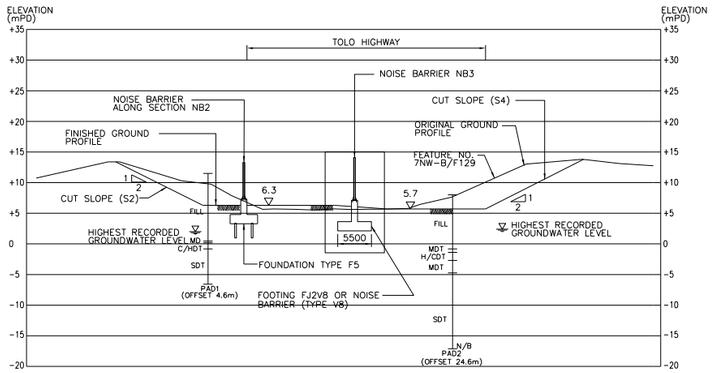
SECTION 1–1



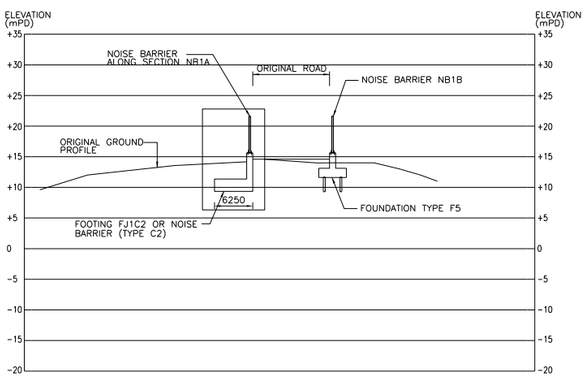
SECTION 2–2



SECTION 3–3



SECTION 4A–4A



SECTION 5B–5B

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REV. 修訂	DATE 日期	DESCRIPTION 內容摘要	CHECKED 復核	APPD 批准人
Z	MAY2014	AS-BUILT DRAWING	-	-

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CAD REF 檔案名稱 E-25202Z.DGN	

路政署
HIGHWAYS DEPARTMENT
主要工程管理處
MAJOR WORKS PROJECT MANAGEMENT OFFICE

CONTRACT TITLE 合約名稱

Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling (Stage 1 - Between Island House Interchange and Ma Wo)

CONTRACT NO HY/2008/09

CONSULTANT 工程顧問

Hyder ARUP BLACK & VEATCH

CONTRACTOR 承建商

中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGINEERING (HONG KONG) LTD.

DESIGNER 設計

Victor Li & Associates Ltd.
Consulting Engineers

DRAWING TITLE 圖名

NOISE BARRIER NB1A AND NB3
SECTIONS

AS-BUILT

DRAWING NO 圖則編號 798/NB/25202

REV 修訂 Z

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Appendix 3.4 Correspondence with HyD

Peter Leung

From: dest1.nt@hyd.gov.hk
Sent: 18 January 2024 16:53
To: Dereck Chan
Cc: Peter Leung; ctohsre4.nt@hyd.gov.hk; ctotp.nt@hyd.gov.hk; diowtp.nt@hyd.gov.hk
Subject: Re: FW: Enquiry on Tolo Highway - Section 16 Planning Application for Proposed Development at Wong Yi Au, Tai Po
Attachments: location and road.pdf

You don't often get email from dest1.nt@hyd.gov.hk. Learn why this is important

Dear Dereck,

Please be advised that no NRHS was guaranteed on Yuen Shin Road, Tolo Highway, Tai Po Road (Yuen Chau Tsai), Tai Po Road (Tai Po Kau), Wong Yi Au Road and Yung Yi Road.

Regards,
Anson WAI
DE/ST(1) & DE/TP(2) (Ag.), HyD
Tel: 2762 4098

From: "Dereck Chan" <DKLCHAN@ramboll.com>
To: "dest1.nt@hyd.gov.hk" <dest1.nt@hyd.gov.hk>
Cc: "Peter Leung" <PETERLEUNG@ramboll.com>
Date: 17/01/2024 17:18
Subject: FW: Enquiry on Tolo Highway - Section 16 Planning Application for Proposed Development at Wong Yi Au, Tai Po

---

Dear Mr. Wai,

I refer to our tele-con and the past email, we would like to seek clarification on the road surfacing material within the assessment area.
Thank you for your attention to this matter. Should you have any query, please do not hesitate to contact the undersigned at 3465 2876 (email: dklchan@ramboll.com) or Mr. Peter Leung at 3465 2831 (email: peterleung@ramboll.com)

Regards,
Dereck Chan
Assistant Environmental Consultant

D +852 3465 2876
dklchan@ramboll.com
_____

Ramboll
21st Floor
BEA Harbour View Centre
56 Gloucester Road
Wan Chai
Hong Kong
https://ramboll.com

Classification: Confidential

From: Dereck Chan <DKLCHAN@ramboll.com>
Sent: Wednesday, December 6, 2023 11:45 AM
To: dest1.nt@hyd.gov.hk
Cc: adetp1.nt@hyd.gov.hk; Aaron Leung <ANLLEUNG@ramboll.com>; Peter Leung <PETERLEUNG@ramboll.com>; ptoc.nt@hyd.gov.hk; sto3.nt@hyd.gov.hk
Subject: RE: Enquiry on Tolo Highway - Section 16 Planning Application for Proposed Development at Wong Yi Au, Tai Po

Dear Mr. Wai,

I refer to our tele-con yesterday. In order to prepare the Environmental Assessment (EA), we would like to seek clarification on the road surfacing material within the assessment area. Attached please find the location plan with concerned roads highlighted.

Grateful if you could confirm whether any of the following surfacing materials have been applied to the concerned roads' extent:

- Carriageway with N.R.H.S Using Polymer Modified Friction Course
- Carriageway with N.R.H.S Using Porous Friction Course
- Carriageway with N.R.H.S Using SMA Surfacing

If negative, is there any other low noise road surfacing being applied to the concerned roads?

Thank you for your attention to this matter. Should you have any query, please do not hesitate to contact our Mr. Dereck Chan at 3465 2876 (email: dklchan@ramboll.com) or Mr. Aaron Leung 3465 2820 (email: anlleung@ramboll.com)

Regards,
Dereck Chan
Assistant Environmental Consultant

D +852 3465 2876
dklchan@ramboll.com
_____

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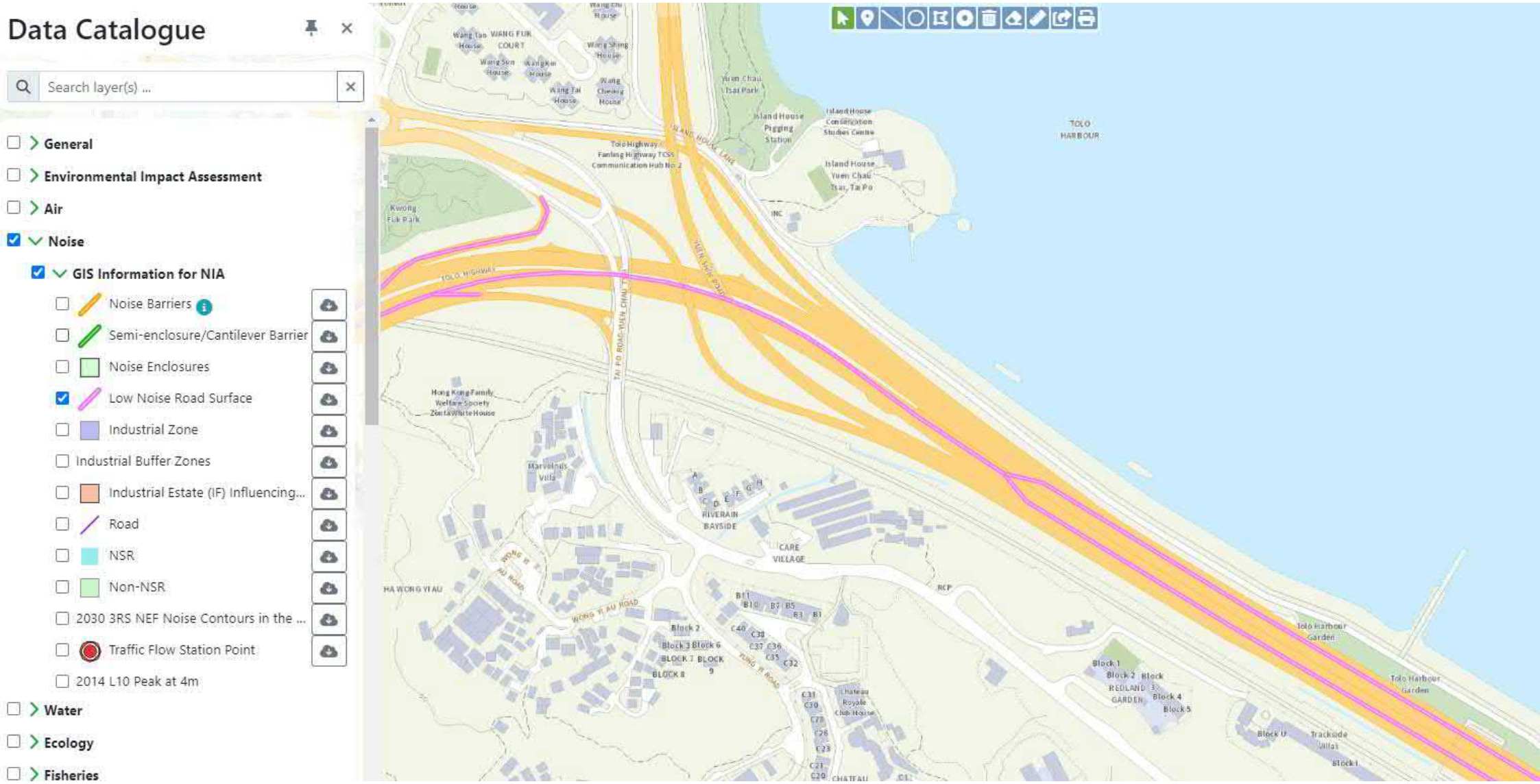
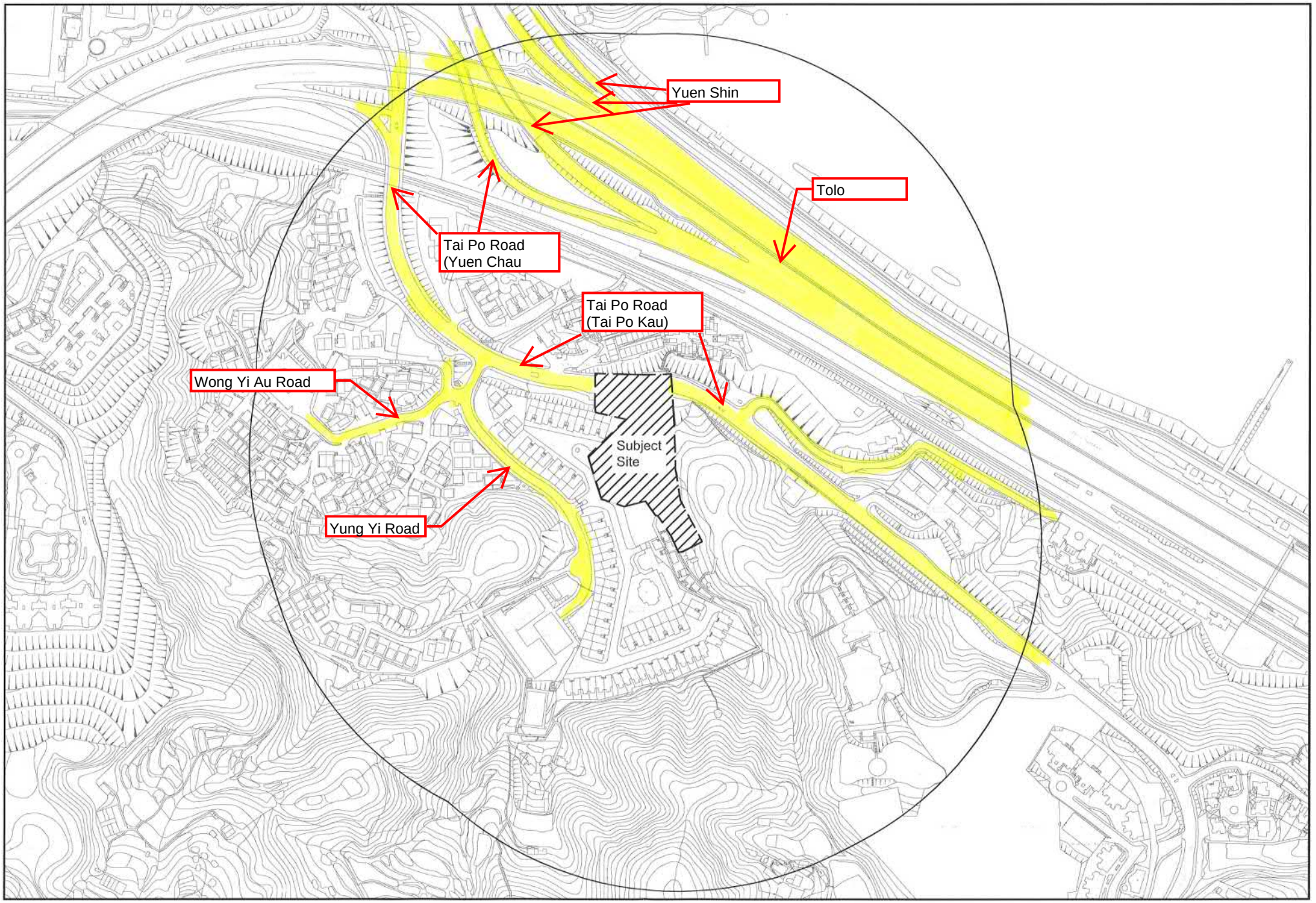
21st Floor
BEA Harbour View Centre
56 Gloucester Road
Wan Chai
Hong Kong
https://ramboll.com


Data Catalogue
Search layer(s) ...
General
Environmental Impact Assessment
Air
Noise
GIS Information for NIA
Noise Barriers
Semi-enclosure/Cantilever Barrier
Noise Enclosures
Low Noise Road Surface
Industrial Zone
Industrial Buffer Zones
Industrial Estate (IF) Influencing...
Road
NSR
Non-NSR
2030 3RS NEF Noise Contours in the ...
Traffic Flow Station Point
2014 L10 Peak at 4m
Water
Ecology
Fisheries
TOLO HARBOUR
TOLO HIGHWAY
TAI PO ROAD-YUEN CHAU TSAI
WONG YI AU ROAD
RIVERAIN
BAYSIDE
CARE
VILLAGE
REDLAND
GARDEN
Tolo Harbour
Garden
Trackside
Villas
CHATEAU


Yuen Shin
Tolo
Tai Po Road
(Yuen Chau
Tai Po Road
(Tai Po Kau)
Wong Yi Au Road
Subject
Site
Yung Yi Road

Appendix 4.1 Correspondence with MTRC

MTR Corporation Limited
香港鐵路有限公司
www.mtr.com.hk

RECEIVED
16 NOV 2023
BY:.....

MTR

Ramboll Hong Kong Limited
21/F, BEA Harbour View Center,
56 Gloucester Road,
Wan Chai, Hong Kong

Our ref: T&ESD/E&IC/ES/EnvE/L1217

Date: 14 NOV 2023

Attention: Mr. Peter Leung

By Post and Fax
(Fax no.: 3465 2899)

Dear Mr. Leung,

Re: Section 16 Planning Application for Proposed Development at Wong Yi Au, Tai Po – Request for Operation Mode and Conditions of East Rail Line

We refer to your letter (ref.: KTAHOLF-EI00_0_0001L.23.docx) dated 18 October 2023 requesting operational information regarding East Rail Line (EAL) for the section between Tai Po Market Station (TAP) and University Station (UNI).

Operational Information

- The daily operating hours for EAL at the concerned section is approximately from 05:30 to 01:00 hours.
- There are currently 9 cars per train for the operation condition of the EAL.
- The current peak train frequency at the section between TAP and UNI during the period of 07:00-23:00 hours and 23:00-07:00 hours are about 21 trains per hour per direction and about 11 trains per hour per direction respectively.
- For the future EAL operating train frequency, please refer to the latest Environmental Permit for the *Shatin to Central Link (SCL) – Mong Kok East to Hung Hom Section* available via the EPD website.

Trackform

The concerned track section is in ballast trackform.

Speed Profile

The current maximum permitted train speed for the concerned track section is 120 km/h for both directions.

Datum Level, Locations of Rail Crossing/Joint and Noise Mitigation Measures

There is currently a vertical trackside noise barrier with approximate length of 350m near Care Village and Riverain Bayside. The Corporation does not have any plan to provide additional trackside noise barriers or enclosures along the concerned track sections of EAL. We suggest that your organization contact us to arrange the checking of the respective drawings on the requested information suitable for your study.

MTR Headquarters Building, Telford Plaza, Kowloon Bay,
Kowloon, Hong Kong. GPO Box 9916, Hong Kong
Tel (852) 2993 2111 Fax (852) 2798 8822

香港九龍灣德福廣場港鐵總部大樓
香港郵政總局信箱9916號
電話 (852) 2993 2111 傳真 (852) 2798 8822

MTR Corporation Limited
香港鐵路有限公司
www.mtr.com.hk

Our ref: T&ESD/E&IC/ES/EnvE/L1217
Date: 14 NOV 2023

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Should you have any additional enquiries, please feel free to contact the undersigned at 2993-4127.

Yours sincerely,

Catherine Leung
Lead Environmental Manager

Ramboll Hong Kong Ltd.

Project: K7AH017-EZ00-02-00003F.23
Maconomy no.:
Circulation:

		Read	Action
DL		☑	☐
MK		☐	☐
		☐	☐
		☐	☐

	Yes	No
Document Scan	☐	☐

MTR Headquarters Building, Telford Plaza, Kowloon Bay,
Kowloon, Hong Kong. GPO Box 9916, Hong Kong
Tel (852) 2993 2111 Fax (852) 2798 8822

香港九龍灣德福廣場港鐵總部大樓
香港郵政總局信箱9916號
電話 (852) 2993 2111 傳真 (852) 2798 8822

Appendix 4.2 Extract of SCL-VEP (VEP-510/2016)

Contamination Assessment Report (CAR) to document the findings of the land contamination investigation works and assessment on the nature and extent of land contamination;

(c) if land contamination is confirmed, submit to the Director for approval four hard copies and one electronic copy of Remedial Action Plan (RAP) to formulate necessary remedial measures. All remedial measures described in the approved RAP shall be fully and properly implemented. No demolition of the existing above-ground diesel tank for Wan Chai Swimming Pool shall be carried out before the CAP/RAP is approved by the Director.

Before submission to the Director, the CAP, CAR and RAP shall be certified by the ET Leader and verified by the IEC as conforming to the information and recommendations contained in the EIA Report.

Measures for Mitigating Aerial Emissions from Construction Plant

2.25 All diesel fuelled construction plant, including marine vessels if possible, used by the contractors within the works areas of the Project shall be powered by ultra low sulphur diesel fuel.

Submissions and Measures Before and During Operational Stage

Submission of As-Built Drawings of Measures for Mitigating Visual and Landscape Impact and Tree Planting

2.26 At least one month before the Project commences operation, four hard copies and one electronic copy of as-built drawing(s) on landscape and visual mitigation measures with an explanatory statement showing the final locations, size, number and species of planting to demonstrate compliance with the approved submissions under Condition 2.14 of this Permit shall be deposited with the Director. This as-built submission shall be certified by the ET Leader and verified by the IEC that the Visual, Landscape and Tree Planting & Tree Protection Plan approved under Condition 2.14 has been fully and properly implemented.

Submissions and Measures for Mitigating Operational Noise

2.27 The Permit Holder shall operate 9-car SP1900 train, or other train type with equivalent or better noise performance supported with justifications by the ET Leader and verified by the IEC as conforming to the information, requirements and recommendations as set out in the EIA Report. The maximum train frequency operating in the Project from hours 0700 to 2300 shall not exceed 30 trains per hour in each direction. The maximum train frequency operating in the Project from hours 2300 to 0700 of the following day shall not exceed 24 trains per hour in each direction.

2.28 The Permit Holder shall, no later than one month after completion of corresponding parts of the tunnel excavation of the Project, deposit with the Director four hard copies and one electronic copy of an updated Operational Ground-borne Noise Mitigation Measures Plan to justify the adequacy of the proposed operational ground borne noise mitigation measure recommended for that part of the tunnel in the EIA Report. The plan shall include the review and verification of the assumptions adopted in the EIA Report, such as line source response and ground vibration conditions, and shall include justifications and recommendations for any additional noise mitigation measures found necessary, including but not limited to:

a) medium attenuation baseplates (Type 1);
b) high attenuation baseplate or booted dual sleepers (Type 2); or
c) floating mini slab trackform (Type 3).

Before submission to the Director, the Operational Ground-borne Noise Mitigation Measures Plan shall be certified by the ET Leader and verified by the IEC as conforming to the information, requirements and recommendations as set out in the EIA Report.

2.29 The Permit Holder shall, no later than one month after the completion of installing the rail tracks, deposit with the Director four hard copies and one electronic copy of a set of as-built drawing(s) for the operational ground-borne noise mitigation measures as recommended in the updated Operational Ground-borne Noise Mitigation Plan deposited under Condition 2.28 above. Before submission to the Director, the set of as-built drawing(s) shall be certified by the ET Leader and verified by the IEC who shall confirm that the measures set out in the updated Operational Ground-borne Noise Mitigation Plan under Condition 2.28 has been fully and properly implemented.

2.30 At least one month before commencement of operation of the Project, the Permit Holder shall carry out noise performance test in accordance with Sections 8.3 to 8.10 of the EM&A Manual and deposit with the Director four hard copies and one electronic copy of a Noise Performance Test Report to confirm the compliance of the operational ground-borne levels in accordance with the EIA Report. Before submission to the Director, the Noise Performance Test Report shall be certified by the ET Leader and verified by the IEC as conforming to the information and recommendations contained in the EIA Report. All measure(s) recommended in the deposited Noise Performance Test Report shall be fully and properly implemented.

Appendix 4.3 Location of Noise Measurement Point

WB10
EB11
WB11
EB12
WB12
EB13
WB13
EB14
WB14
EB15
WB15
EB16
WB16
EB17
WB17
EB18
WB18

Corrected SEL at 25m
EB: 81.9 dB(A)
WB: 80.4 dB(A)

Application Site

Measurement Point 1

0m 20m 50m 100m

Appendix: 4.3

Title: Location of Noise Measurement Point

Project: Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facilities (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization (FMO) Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

Drawn by:	MK
Checked by:	CC
Rev.:	1.0
Date:	Jan 2024

Q:\Projects\KTAHOLF-EI00\05 Assessments\02 Noise\03 Rail\20231109\RNIA.dwg

Calculation of Reference SEL based on onsite measurement of East Rail Line next to Trackside Villas

Train ID	Train Direction / Track	Date of Measurement	Time (Start)	Time (End)	Duration, s	Min Laeq	SEL w/o Background
EB1	To Admiralty	20-Dec-23	16:52:33	16:52:42	10	61.8	83.7
EB2			16:54:59	16:55:08	10	66.6	85.6
EB3			16:58:21	16:58:30	10	66.1	85.0
EB4			17:01:25	17:01:34	10	65	84.3
EB5			17:06:02	17:06:11	10	63.8	84.8
EB6			17:13:46	17:13:55	10	64.4	84.5
						Log Average	**84.7**

Train ID	Train Direction / Track	Date of Measurement	Time (Start)	Time (End)	Duration, s	Min Laeq	SEL w/o Background
WB1	To Lo Wu	20-Dec-23	16:55:15	16:55:24	10	66.6	82.4
WB2			16:58:05	16:58:15	10	70.1	84.5
WB3			17:03:17	17:03:26	10	67.3	82.1
WB4			17:06:15	17:06:24	10	65.5	87.0
WB5			17:10:26	17:10:35	10	63	86.4
WB6			17:14:09	17:14:18	10	70	83.7
						Log Average	**84.7**

Note:
Measurement point is located at the access road near Trackside Villas (the SEL is considered to be free-field, such that no façade correction is accounted)
SEL and Lmax are measured for the period when noise from railway operation is audible
Duration represents the length of measurement period
Min Laeq is the minimum noise level measured within the period
SEL w/o background is derived by discounting noise contribution from background

	SEL		Lmax	
Measurement Result:	**To AD**	**To LW**	**To AD**	**To LW**
Measured SEL / Lmax with background correction, dB(A)	84.7	84.7	78.3	81.6
Measurement point distance from tack, m	13.25	9.04	13.25	9.04
View angle , degree	175.74	177.22	175.74	177.22
Acute angle, degree	87.84	89.87	87.84	89.87
Number of cars per train	9	9	9	9

Application of number of car, distance and view angle correction

Expected number of car per train upon completion of development	9	9	9	9
Number of car correction, dB(A)	0.0	0.0	0.0	0.0
Distance correction, dB(A)	-2.76	-4.42	-2.76	-4.42
View angle correction (refer to CRN), dB(A)	0.03	0.03	-	-
Reference SEL / Lmax, dB(A)	81.9	80.4	75.5	77.2

Appendix 4.4 Sample Calculation of Railway Noise Impact Assessment

Project	**HOLF**
NSR ID	**R2-01**
NSR (x)	**836434.5**
NSR (y)	**833623.0**
NSR (z)	35.80
Receptor Type	RCHD
Noise Criterion, dB(A)	**60**

DETAILED CALCULATIONS

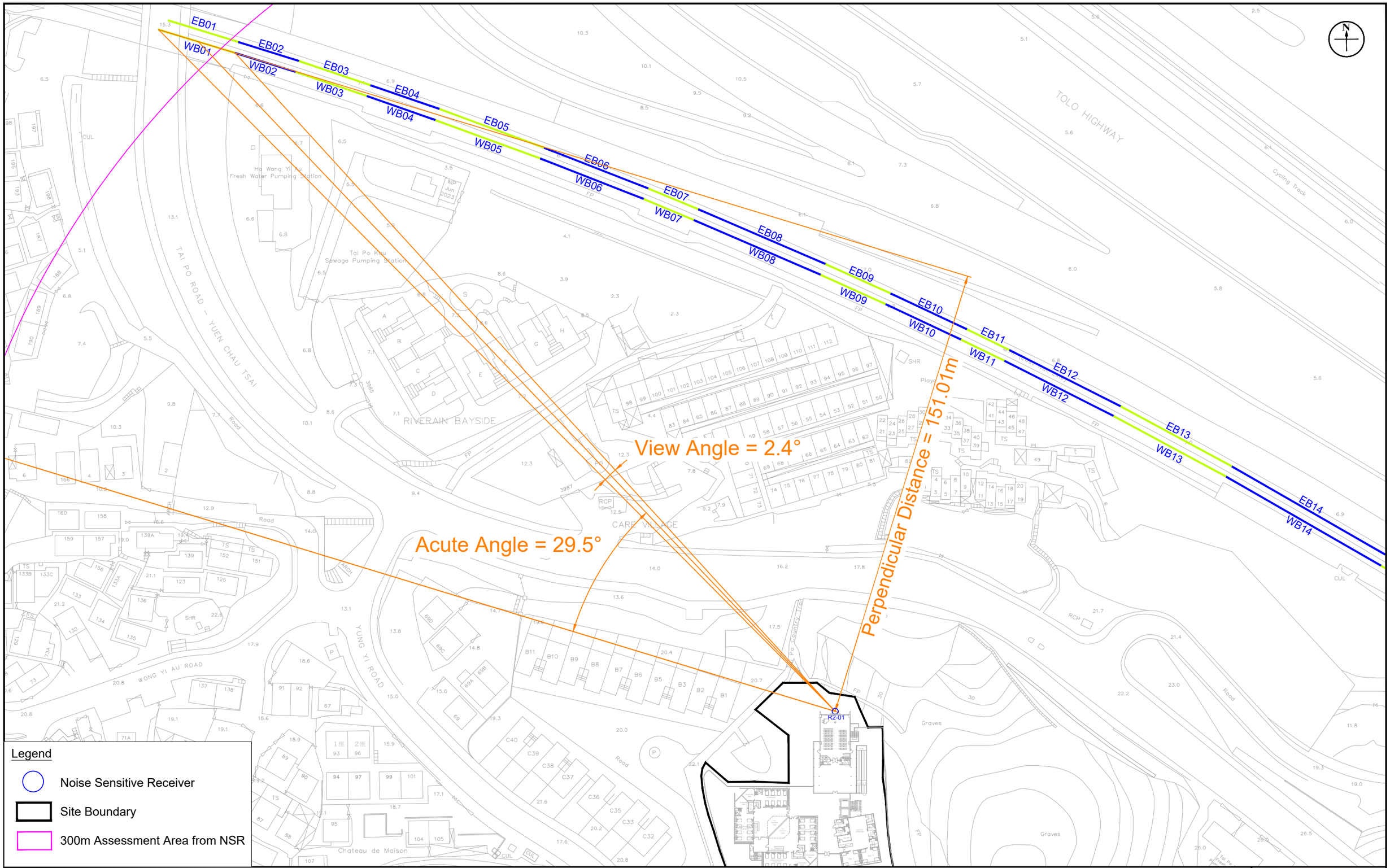
NA/BNA/0	BNA	0	0	0	0	0	0	0	0	0	0	0	0	BNA	BNA	BNA	BNA
Track ID	**EB01**	**EB02**	**EB03**	**EB04**	**EB05**	**EB06**	**EB07**	**EB08**	**EB09**	**EB10**	**EB11**	**EB12**	**EB13**	**EB14**	**EB15**	**EB16**	**EB17**
Near Track / Far Track	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**
Railway Noise																	
SEL [a]	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**
Corrected Measurement Distance, m	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**
Height of Receiver, mPD	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80
Height of Notional Noise Source, mPD	7.00	7.00	7.00	6.90	6.90	6.80	6.80	6.90	7.00	7.00	6.90	6.80	6.90	7.00	6.90	7.00	7.10
Solid Parapet/ Noise Barrier Height, mPD	0.00	12.00	12.00	11.9	11.90	11.80	11.80	11.90	12.00	12.00	11.90	11.80	11.90	0.00	0.00	0.00	0.00
Barrier Start Point (x)	0.00	836234.61	836254.17	836277.22	836300.52	836335.23	836368.90	836386.14	836428.15	836449.73	836474.67	836489.14	836525.24	0.00	0.00	0.00	0.00
Barrier Start Point (y)	0.00	833837.82	833831.74	833822.15	833815.68	833803.00	833788.02	833782.69	833764.42	833754.80	833742.93	833736.04	833717.69	0.00	0.00	0.00	0.00
Barrier End Point (x)	0.00	836254.17	836277.79	836299.94	836335.23	836369.52	836385.48	836428.15	836449.73	836474.67	836489.14	836525.24	836562.56	0.00	0.00	0.00	0.00
Barrier End Point (y)	0.00	833831.74	833823.76	833814.10	833803.00	833789.64	833781.10	833764.42	833754.80	833742.93	833736.04	833717.69	833697.64	0.00	0.00	0.00	0.00
Horizontal Distance Between Receiver and Barrier Start Point (B1R), m	NA	293.41	275.83	253.75	234.67	205.54	177.58	166.84	141.56	132.69	126.49	125.57	131.18	NA	NA	NA	NA
Horizontal Distance Between Barrier Start Point and Barrier End Point (B1B2), m	NA	20.48	24.93	24.10	36.96	36.81	17.96	45.81	23.63	27.61	16.03	40.49	42.37	NA	NA	NA	NA
Horizontal Distance Between Receiver and Barrier End Point (B2R), m	NA	275.83	254.66	233.71	205.54	178.85	165.52	141.56	132.69	126.49	125.57	131.18	148.27	NA	NA	NA	NA
Bisected View Angle of Barrier	NA	1.06	1.42	1.57	2.97	3.79	2.23	7.14	4.58	5.96	3.64	8.99	7.99	NA	NA	NA	NA
Angle RB1B2	NA	29.83	30.50	32.20	35.12	39.85	45.66	49.66	63.43	71.15	83.07	88.87	105.55	NA	NA	NA	NA
Length of Bisected Barrier, m	NA	10.56	12.96	12.55	19.70	19.68	9.30	24.78	12.20	14.14	8.05	19.80	19.89	NA	NA	NA	NA
Angle Bisected Barrier point O (x)	NA	836244.70	836266.45	836289.05	836319.02	836353.57	836377.48	836408.87	836439.29	836462.50	836481.93	836506.79	836542.76	NA	NA	NA	NA
Angle Bisected Barrier point O (y)	NA	833834.69	833827.59	833817.96	833808.92	833795.85	833784.44	833772.80	833759.45	833748.72	833739.47	833727.06	833708.28	NA	NA	NA	NA
Barrier Projection Point (x)	NA	836477.91	836479.32	836479.05	836481.11	836482.36	836483.18	836484.88	836486.43	836487.95	836489.49	836491.09	836494.56	NA	NA	NA	NA
Barrier Projection Point (y)	NA	833761.55	833755.55	833752.60	833748.83	833745.49	833740.70	833740.07	833738.19	833736.75	833735.78	833735.00	833734.30	NA	NA	NA	NA
Horizontal Distance Between Notional Noise Source and Solid Parapet/Noise Barrier, m	NA	7.51	7.48	9.30	7.63	7.53	9.26	7.66	7.68	7.69	7.69	7.65	7.67	NA	NA	NA	NA
Horizontal Distance Between Notional Noise Source and NSR, m	**153.8**	**152.7**	**147.4**	**146.4**	**141.8**	**139.1**	**136.6**	**135.1**	**134.1**	**133.4**	**133.2**	**133.2**	**134.2**	**136.2**	**138.3**	**138.3**	**138.0**
View angle, degree	**2.3**	**2.2**	**2.9**	**3.3**	**6.0**	**7.6**	**4.5**	**14.0**	**8.8**	**11.5**	**6.7**	**17.4**	**15.2**	**15.8**	**9.5**	**6.5**	**3.5**
Acute angle, degree	**30.0**	**32.0**	**33.3**	**36.1**	**39.4**	**45.1**	**50.1**	**58.5**	**68.9**	**78.1**	**86.4**	**82.4**	**67.6**	**53.7**	**41.9**	**33.9**	**28.8**
Slant Distance Between Notional Noise Source and Noise Barrier (SB), m	0.0	9.0	9.0	10.6	9.1	9.0	10.5	9.1	9.2	9.2	9.2	9.1	9.2	0.0	0.0	0.0	0.0
Slant Distance Between Solid Parapet/NoiseBarrier and Receiver (BR), m	0.0	147.1	142.0	139.1	136.3	133.7	129.6	129.7	128.6	127.9	127.8	127.8	128.7	0.0	0.0	0.0	0.0
Slant Distance Between Source and Receiver (SR) (d'), m	156.5	155.4	150.2	149.2	144.8	142.0	139.7	138.2	137.1	136.5	136.3	136.3	137.2	139.2	141.2	141.3	141.0
Path Length Difference (P.L.D.), m	0.0	0.8	0.7	0.5	0.7	0.7	0.5	0.7	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0
Angle SB, degree	NA	57.9	58.1	52.0	57.3	57.5	51.9	57.2	57.4	57.3	57.1	57.0	57.2	NA	NA	NA	NA
Angle SR, degree	0.0	10.7	11.1	11.2	11.5	11.8	12.0	12.1	12.1	12.2	12.2	12.3	12.2	0.0	0.0	0.0	0.0
Shadow Zone	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Distance Correction, dB(A) [c]	**-8.0**	**-7.9**	**-7.8**	**-7.8**	**-7.6**	**-7.5**	**-7.5**	**-7.4**	**-7.4**	**-7.4**	**-7.4**	**-7.4**	**-7.4**	**-7.5**	**-7.5**	**-7.5**	**-7.5**
View Angle Correction (CRN), dB(A) [d]	**-22.0**	**-21.6**	**-20.1**	**-19.0**	**-15.8**	**-13.7**	**-15.4**	**-9.5**	**-10.7**	**-9.2**	**-11.3**	**-7.3**	**-8.5**	**-9.5**	**-13.3**	**-16.5**	**-20.4**
Barrier Correction (CRN), dB(A) [e]	**0.0**	**-17.1**	**-17.0**	**-15.7**	**-16.8**	**-16.8**	**-15.5**	**-16.6**	**-16.5**	**-16.5**	**-16.5**	**-16.5**	**-16.5**	**0.0**	**0.0**	**0.0**	**0.0**
Time Correction (30min), dB(A) [g]	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**
Track Deterioration Correction, dB(A) [h]	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**
Façade Correction, dB(A) [j]	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**
Air Absorption Correction, dB(A) [l]	**-1.1**	**-1.0**	**-1.0**	**-1.0**	**-1.0**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**
L_{Aeq} ([a] + [c] + [d] + [e] + [g] + [h] + [j] + [l])	**34.9**	**18.3**	**20.1**	**22.5**	**24.9**	**27.0**	**26.8**	**31.6**	**30.4**	**32.0**	**29.9**	**33.9**	**32.7**	**48.1**	**44.2**	**41.1**	**37.1**
Intensity	3114.98	67.92	102.00	177.88	308.63	502.53	473.25	1435.31	1100.73	1595.77	977.39	2467.45	1858.78	65146.34	26577.31	12741.91	5131.06
Railway Noise Overall L_{Aeq}	**53.2**	**53.2 at 26mPD**															

PROJECTIONS OF d, e, α

Track	**EB01**	**EB02**	**EB03**	**EB04**	**EB05**	**EB06**	**EB07**	**EB08**	**EB09**	**EB10**	**EB11**	**EB12**	**EB13**	**EB14**	**EB15**	**EB16**	**EB17**
Preset Track Start Point (x)	836213.0	836236.3	836256.5	836280.2	836303.1	836337.8	836372.3	836389.1	836431.3	836452.9	836478.3	836492.4	836529.3	836566.3	836617.3	836661.9	836705.7
Preset Track Start Point (y)	833852.4	833845.2	833838.9	833830.8	833823.0	833810.1	833796.6	833789.7	833771.5	833761.7	833749.8	833742.9	833724.2	833704.3	833675.0	833648.4	833622.2
Preset Track Start Point (z)	7.0	7.0	7.0	6.9	6.9	6.8	6.8	6.9	7.0	7.0	6.9	6.8	6.9	7.0	6.9	7.0	7.1
Preset Track End Point (x)	836236.3	836256.5	836280.2	836303.1	836337.8	836372.3	836389.1	836431.3	836452.9	836478.3	836492.4	836529.3	836566.3	836617.3	836661.9	836705.7	836737.1
Preset Track End Point (y)	833845.2	833838.9	833830.8	833823.0	833810.1	833796.6	833789.7	833771.5	833761.7	833749.8	833742.9	833724.2	833704.3	833675.0	833648.4	833622.2	833603.5
Preset Track End Point (z)	7.0	7.0	7.0	6.9	6.9	6.8	6.8	6.9	7.0	7.0	6.9	6.8	6.9	7.0	6.9	7.0	7.1
Track Start Point (x)	836213.0	836236.3	836256.5	836280.2	836303.1	836337.8	836372.3	836389.1	836431.3	836452.9	836478.3	836492.4	836529.3	836566.3	836617.3	836661.9	836705.7
Track Start Point (y)	833852.4	833845.2	833838.9	833830.8	833823.0	833810.1	833796.6	833789.7	833771.5	833761.7	833749.8	833742.9	833724.2	833704.3	833675.0	833648.4	833622.2
Track Start Point (z)	7.0	7.0	7.0	6.9	6.9	6.8	6.8	6.9	7.0	7.0	6.9	6.8	6.9	7.0	6.9	7.0	7.1
Track End Point (x)	836236.3	836256.5	836280.2	836303.1	836337.8	836372.3	836389.1	836431.3	836452.9	836478.3	836492.4	836529.3	836566.3	836617.3	836661.9	836705.7	836737.1
Track End Point (y)	833845.2	833838.9	833830.8	833823.0	833810.1	833796.6	833789.7	833771.5	833761.7	833749.8	833742.9	833724.2	833704.3	833675.0	833648.4	833622.2	833603.5
Track End Point (z)	7.0	7.0	7.0	6.9	6.9	6.8	6.8	6.9	7.0	7.0	6.9	6.8	6.9	7.0	6.9	7.0	7.1
Track Slope (s)	-0.309	-0.314	-0.338	-0.344	-0.371	-0.391	-0.414	-0.431	-0.451	-0.470	-0.488	-0.506	-0.540	-0.575	-0.596	-0.596	-0.595
Projection Point																	
Projection Point (x)	836479.9	836480.2	836481.7	836482.1	836483.8	836485.1	836486.7	836487.9	836489.6	836491.2	836492.9	836494.5	836498.2	836502.3	836505.3	836505.3	836505.1
Projection Point (y)	833770.0	833768.7	833762.6	833761.4	833756.0	833752.5	833749.3	833747.1	833745.2	833743.7	833742.7	833741.8	833741.0	833741.1	833741.7	833741.8	833741.6
Horizontal Distance																	
d	**153.85**	**152.72**	**147.43**	**146.36**	**141.84**	**139.05**	**136.65**	**135.13**	**134.05**	**133.40**	**133.18**	**133.16**	**134.16**	**136.19**	**138.26**	**138.29**	**138.05**
View Angle and Acute Angle																	
Distances																	
NA	318.9	297.7	279.8	258.8	239.2	210.6	184.4	172.7	148.5	140.0	134.2	133.2	138.7	154.9	190.0	228.8	271.3
NB	297.7	279.8	258.8	239.2	210.6	184.4	172.7	148.5	140.0	134.2	133.2	138.7	154.9	190.0	228.8	271.3	303.3
AB	24.4	21.1	25.0	24.2	37.0	37.0	18.1	46.0	23.7	28.0	15.7	41.4	42.0	58.8	52.0	51.1	36.5
>90?																	
ANB	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
NAB	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE	TRUE	TRUE	TRUE
NBA	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
Angles																	
View Angle	**2.3**	**2.2**	**2.9**	**3.3**	**6.0**	**7.6**	**4.5**	**14.0**	**8.8**	**11.5**	**6.7**	**17.4**	**15.2**	**15.8**	**9.5**	**6.5**	**3.5**
NAB	28.8	30.9	31.8	34.4	36.4	41.3	47.8	51.5	64.5	72.4	83.1	89.0	104.8	118.4	133.3	142.8	149.4
NBA	148.9	146.9	145.3	142.3	137.7	131.0	127.7	114.5	106.7	96.1	90.2	73.7	60.0	45.8	37.2	30.6	27.1
Acute Angle	**30.0**	**32.0**	**33.3**	**36.1**	**39.4**	**45.1**	**50.1**	**58.5**	**68.9**	**78.1**	**86.4**	**82.4**	**67.6**	**53.7**	**41.9**	**33.9**	**28.8**

NA	BNA	0	0	0	0	0	0	0	0	0	0	0	0	BNA	BNA	BNA	BNA	NA
EB18	**WB01**	**WB02**	**WB03**	**WB04**	**WB05**	**WB06**	**WB07**	**WB08**	**WB09**	**WB10**	**WB11**	**WB12**	**WB13**	**WB14**	**WB15**	**WB16**	**WB17**	**WB18**
Far	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**
81.9	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**
25.0	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**
35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80
7.10	7.10	7.10	7.10	7.10	7.00	6.80	6.80	6.80	6.80	6.90	6.90	6.90	7.00	7.00	7.00	7.00	7.00	6.90
0.00	0.00	12.00	12.00	11.90	11.90	11.80	11.80	11.90	12.00	12.00	11.90	11.80	11.90	0.00	0.00	0.00	0.00	0.00
0.00	0.00	836234.61	836254.17	836277.22	836300.52	836335.23	836368.90	836386.14	836428.15	836449.73	836474.67	836489.14	836525.24	0.00	0.00	0.00	0.00	0.00
0.00	0.00	833837.82	833831.74	833822.15	833815.68	833803.00	833788.02	833782.69	833764.42	833754.80	833742.93	833736.04	833717.69	0.00	0.00	0.00	0.00	0.00
0.00	0.00	836254.17	836277.79	836299.94	836335.23	836369.52	836385.48	836428.15	836449.73	836474.67	836489.14	836525.24	836562.56	0.00	0.00	0.00	0.00	0.00
0.00	0.00	833831.74	833823.76	833814.10	833803.00	833789.64	833781.10	833764.42	833754.80	833742.93	833736.04	833717.69	833697.64	0.00	0.00	0.00	0.00	0.00
NA	NA	293.41	275.83	253.75	234.67	205.54	177.58	166.84	141.56	132.69	126.49	125.57	131.18	NA	NA	NA	NA	NA
NA	NA	20.48	24.93	24.10	36.96	36.81	17.96	45.81	23.63	27.61	16.03	40.49	42.37	NA	NA	NA	NA	NA
NA	NA	275.83	254.66	233.71	205.54	178.85	165.52	141.56	132.69	126.49	125.57	131.18	148.27	NA	NA	NA	NA	NA
NA	NA	1.06	1.42	1.57	2.97	3.79	2.23	7.14	4.58	5.96	3.64	8.99	7.99	NA	NA	NA	NA	NA
NA	NA	29.83	30.50	32.20	35.12	39.85	45.66	49.66	63.43	71.15	83.07	88.87	105.55	NA	NA	NA	NA	NA
NA	NA	10.56	12.96	12.55	19.70	19.68	9.30	24.78	12.20	14.14	8.05	19.80	19.89	NA	NA	NA	NA	NA
NA	NA	836244.70	836266.45	836289.05	836319.02	836353.57	836377.48	836408.87	836439.29	836462.50	836481.93	836506.79	836542.76	NA	NA	NA	NA	NA
NA	NA	833834.69	833827.59	833817.96	833808.92	833795.85	833784.44	833772.80	833759.45	833748.72	833739.47	833727.06	833708.28	NA	NA	NA	NA	NA
NA	NA	836477.91	836479.30	836479.48	836480.81	836482.38	836483.55	836484.96	836486.48	836487.96	836489.34	836491.15	836494.40	NA	NA	NA	NA	NA
NA	NA	833761.54	833755.63	833750.98	833749.77	833745.45	833739.91	833739.95	833738.13	833736.75	833735.87	833734.98	833734.32	NA	NA	NA	NA	NA
NA	NA	3.73	3.71	5.44	3.78	3.75	5.44	3.77	3.76	3.77	3.77	3.73	3.75	NA	NA	NA	NA	NA
NA	**151.0**	**148.9**	**143.7**	**141.1**	**138.8**	**135.2**	**132.2**	**131.2**	**130.1**	**129.5**	**129.3**	**129.3**	**130.2**	**132.3**	**134.5**	**134.8**	**134.5**	**NA**
NA	**2.4**	**2.2**	**2.9**	**3.2**	**6.0**	**7.6**	**4.4**	**14.2**	**9.0**	**11.6**	**7.1**	**17.5**	**15.7**	**16.0**	**9.4**	**6.4**	**3.5**	**NA**
NA	**29.5**	**31.3**	**32.6**	**35.0**	**38.9**	**44.4**	**49.0**	**57.7**	**68.3**	**77.7**	**86.3**	**82.3**	**67.1**	**52.8**	**41.0**	**33.2**	**28.2**	**NA**
NA	0.0	6.2	6.1	7.3	6.2	6.3	7.4	6.3	6.4	6.3	6.3	6.2	6.2	0.0	0.0	0.0	0.0	NA
NA	0.0	147.1	142.0	137.8	137.1	133.7	129.1	129.6	128.6	127.9	127.8	127.8	128.7	0.0	0.0	0.0	0.0	NA
NA	153.7	151.7	146.6	144.0	141.7	138.3	135.4	134.3	133.3	132.7	132.5	132.4	133.3	135.4	137.5	137.8	137.5	NA
NA	0.0	1.6	1.6	1.0	1.5	1.6	1.1	1.6	1.7	1.6	1.6	1.5	1.5	0.0	0.0	0.0	0.0	NA
NA	NA	72.7	72.8	65.4	72.4	72.4	65.3	72.4	72.6	72.6	72.4	72.4	72.5	NA	NA	NA	NA	NA
NA	0.0	10.9	11.3	11.5	11.7	12.1	12.4	12.5	12.6	12.6	12.6	12.6	12.5	0.0	0.0	0.0	0.0	NA
NA	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	NA
NA	**-7.9**	**-7.8**	**-7.7**	**-7.6**	**-7.5**	**-7.4**	**-7.3**	**-7.3**	**-7.3**	**-7.2**	**-7.2**	**-7.2**	**-7.3**	**-7.3**	**-7.4**	**-7.4**	**-7.4**	**NA**
NA	**-21.8**	**-21.8**	**-20.3**	**-19.3**	**-15.8**	**-13.9**	**-15.5**	**-9.5**	**-10.7**	**-9.1**	**-11.1**	**-7.3**	**-8.3**	**-9.5**	**-13.5**	**-16.7**	**-20.7**	**NA**
NA	**0.0**	**-19.6**	**-19.5**	**-18.0**	**-19.4**	**-19.5**	**-18.2**	**-19.6**	**-19.7**	**-19.6**	**-19.4**	**-19.3**	**-19.3**	**0.0**	**0.0**	**0.0**	**0.0**	**NA**
NA	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**-21.4**	**NA**
NA	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**3.0**	**NA**
NA	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**NA**
NA	**-1.0**	**-1.0**	**-1.0**	**-1.0**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**-0.9**	**NA**
NA	**33.7**	**14.2**	**16.0**	**18.6**	**20.8**	**22.8**	**22.6**	**27.2**	**26.0**	**27.7**	**25.9**	**29.8**	**28.7**	**46.8**	**42.7**	**39.4**	**35.5**	**NA**
0.00	2356.15	26.55	39.38	72.02	119.07	188.94	180.63	524.14	395.77	587.10	386.04	957.46	736.86	47459.20	18672.14	8770.41	3560.91	0.00

EB18	**WB01**	**WB02**	**WB03**	**WB04**	**WB05**	**WB06**	**WB07**	**WB08**	**WB09**	**WB10**	**WB11**	**WB12**	**WB13**	**WB14**	**WB15**	**WB16**	**WB17**	**WB18**
836737.1	836209.7	836235.2	836255.4	836279.0	836301.8	836336.6	836370.9	836387.6	836429.7	836451.3	836476.3	836490.8	836526.9	836564.4	836615.8	836660.4	836703.7	836735.1
833603.5	833849.3	833841.6	833835.2	833827.3	833819.2	833806.5	833793.1	833786.1	833767.9	833758.2	833746.4	833739.4	833721.0	833700.9	833671.3	833644.7	833618.7	833600.0
7.1	7.1	7.1	7.1	7.1	7.0	6.8	6.8	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	6.9
836765.8	836235.2	836255.4	836279.0	836301.8	836336.6	836370.9	836387.6	836429.7	836451.3	836476.3	836490.8	836526.9	836564.4	836615.8	836660.4	836703.7	836735.1	836766.6
833586.7	833841.6	833835.2	833827.3	833819.2	833806.5	833793.1	833786.1	833767.9	833758.2	833746.4	833739.4	833721.0	833700.9	833671.3	833644.7	833618.7	833600.0	833581.3
7.1	7.1	7.1	7.1	7.1	7.0	6.8	6.8	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	6.9
836737.1	836209.7	836235.2	836255.4	836279.0	836301.8	836336.6	836370.9	836387.6	836429.7	836451.3	836476.3	836490.8	836526.9	836564.4	836615.8	836660.4	836703.7	836735.1
833603.5	833849.3	833841.6	833835.2	833827.3	833819.2	833806.5	833793.1	833786.1	833767.9	833758.2	833746.4	833739.4	833721.0	833700.9	833671.3	833644.7	833618.7	833600.0
7.1	7.1	7.1	7.1	7.1	7.0	6.8	6.8	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	6.9
836765.8	836235.2	836255.4	836279.0	836301.8	836336.6	836370.9	836387.6	836429.7	836451.3	836476.3	836490.8	836526.9	836564.4	836615.8	836660.4	836703.7	836735.1	836766.6
833586.7	833841.6	833835.2	833827.3	833819.2	833806.5	833793.1	833786.1	833767.9	833758.2	833746.4	833739.4	833721.0	833700.9	833671.3	833644.7	833618.7	833600.0	833581.3
7.1	7.1	7.1	7.1	7.1	7.0	6.8	6.8	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	6.9
-0.588	-0.305	-0.314	-0.338	-0.352	-0.366	-0.391	-0.420	-0.432	-0.452	-0.470	-0.486	-0.506	-0.538	-0.575	-0.597	-0.600	-0.598	-0.592
836503.8	836478.5	836479.0	836480.5	836481.3	836482.1	836483.7	836485.7	836486.5	836488.0	836489.6	836491.0	836492.8	836496.2	836500.4	836503.4	836503.8	836503.4	836502.4
833740.8	833767.4	833765.1	833759.1	833756.1	833753.3	833748.9	833744.9	833743.4	833741.6	833740.2	833739.3	833738.3	833737.6	833737.7	833738.5	833738.6	833738.4	833737.7
136.71	**151.01**	**148.94**	**143.72**	**141.11**	**138.77**	**135.25**	**132.24**	**131.16**	**130.10**	**129.47**	**129.27**	**129.25**	**130.18**	**132.28**	**134.48**	**134.79**	**134.47**	**133.36**
303.3	319.0	295.8	277.7	256.7	236.9	208.0	181.6	169.7	145.0	136.2	130.3	129.3	134.8	151.5	187.7	227.0	269.3	301.5
333.3	295.8	277.7	256.7	236.9	208.0	181.6	169.7	145.0	136.2	130.3	129.3	134.8	151.5	187.7	227.0	269.3	301.5	334.8
33.2	26.6	21.1	24.9	24.2	37.0	36.9	18.0	45.9	23.7	27.6	16.1	40.6	42.5	59.4	52.0	50.4	36.5	36.7
FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
FALSE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
2.6	**2.4**	**2.2**	**2.9**	**3.2**	**6.0**	**7.6**	**4.4**	**14.2**	**9.0**	**11.6**	**7.1**	**17.5**	**15.7**	**16.0**	**9.4**	**6.4**	**3.5**	**2.8**
153.2	28.3	30.2	31.2	33.3	35.9	40.6	46.7	50.6	63.8	71.9	82.8	89.0	105.0	119.2	134.2	143.6	150.0	153.7
24.2	149.3	147.6	146.0	143.4	138.2	131.8	128.8	115.2	107.2	96.5	90.1	73.5	59.3	44.8	36.3	30.0	26.5	23.5
25.5	**29.5**	**31.3**	**32.6**	**35.0**	**38.9**	**44.4**	**49.0**	**57.7**	**68.3**	**77.7**	**86.3**	**82.3**	**67.1**	**52.8**	**41.0**	**33.2**	**28.2**	**24.9**



Appendix: 4.4a

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB01)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

Drawn by:	MK
Checked by:	CC
Rev.:	1.0
Date:	Jan 2024

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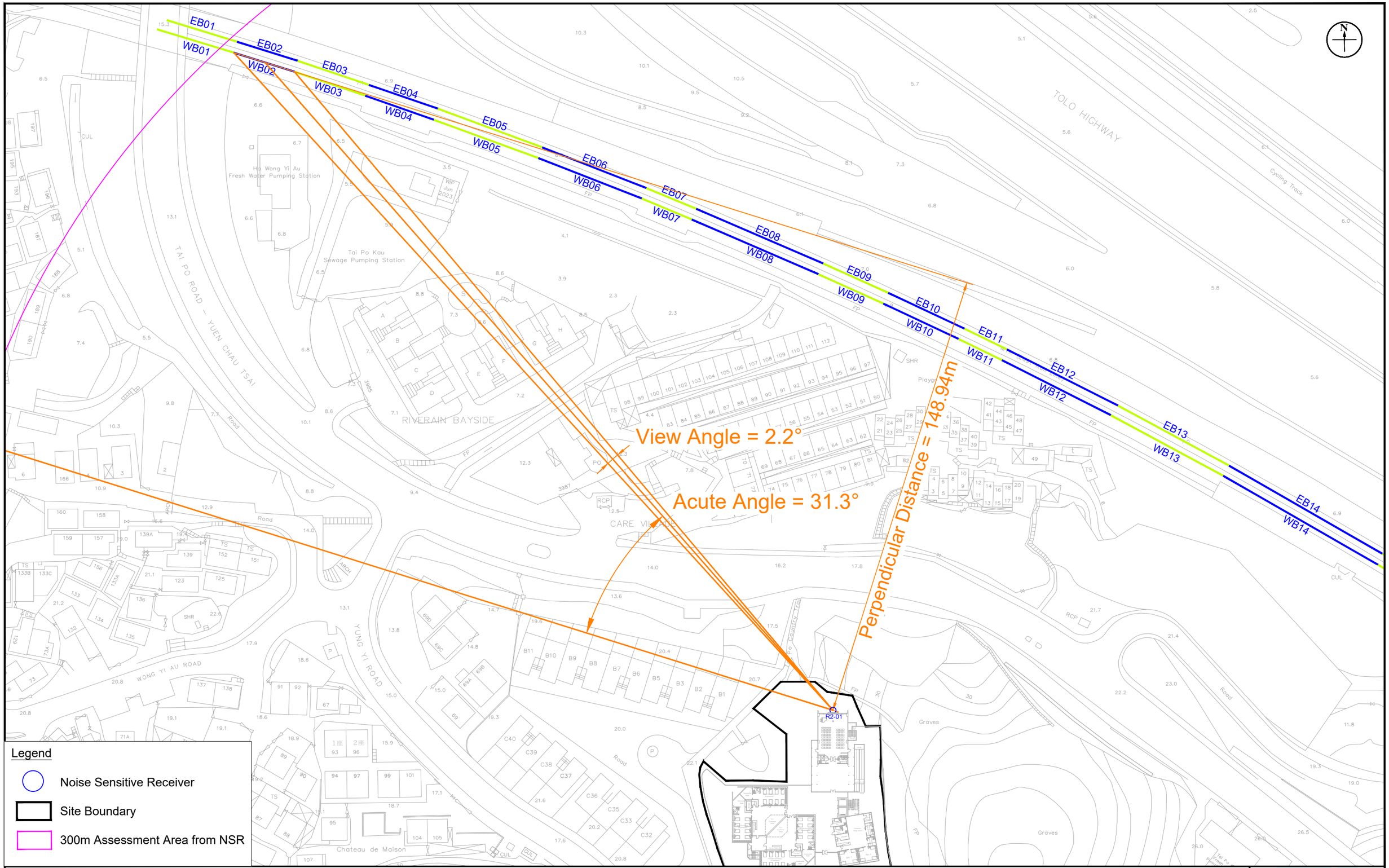

Appendix: 4.4b

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB02)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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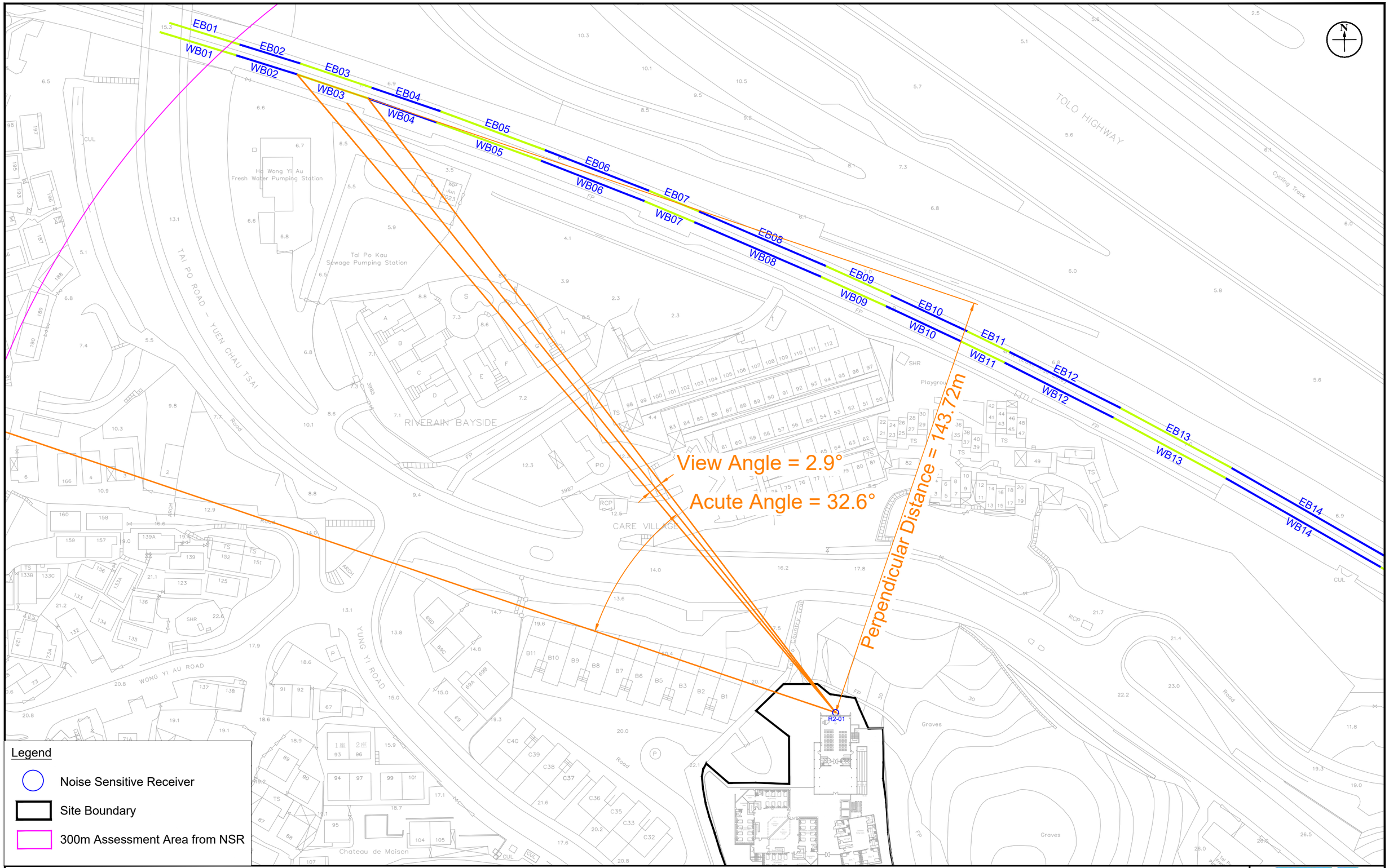

Appendix: 4.4c

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB03)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

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Date:	Jan 2024

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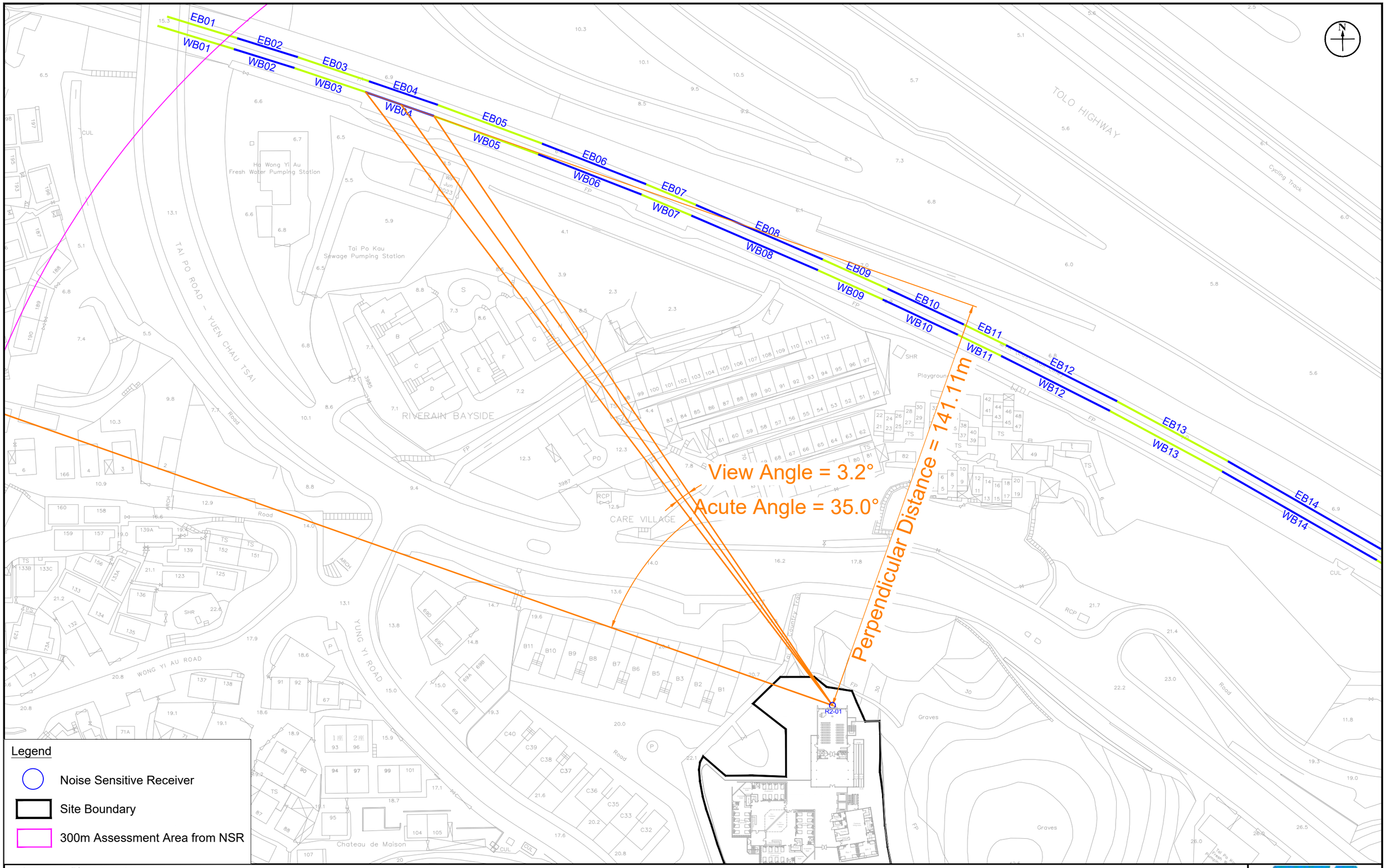

Appendix: 4.4d

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB04)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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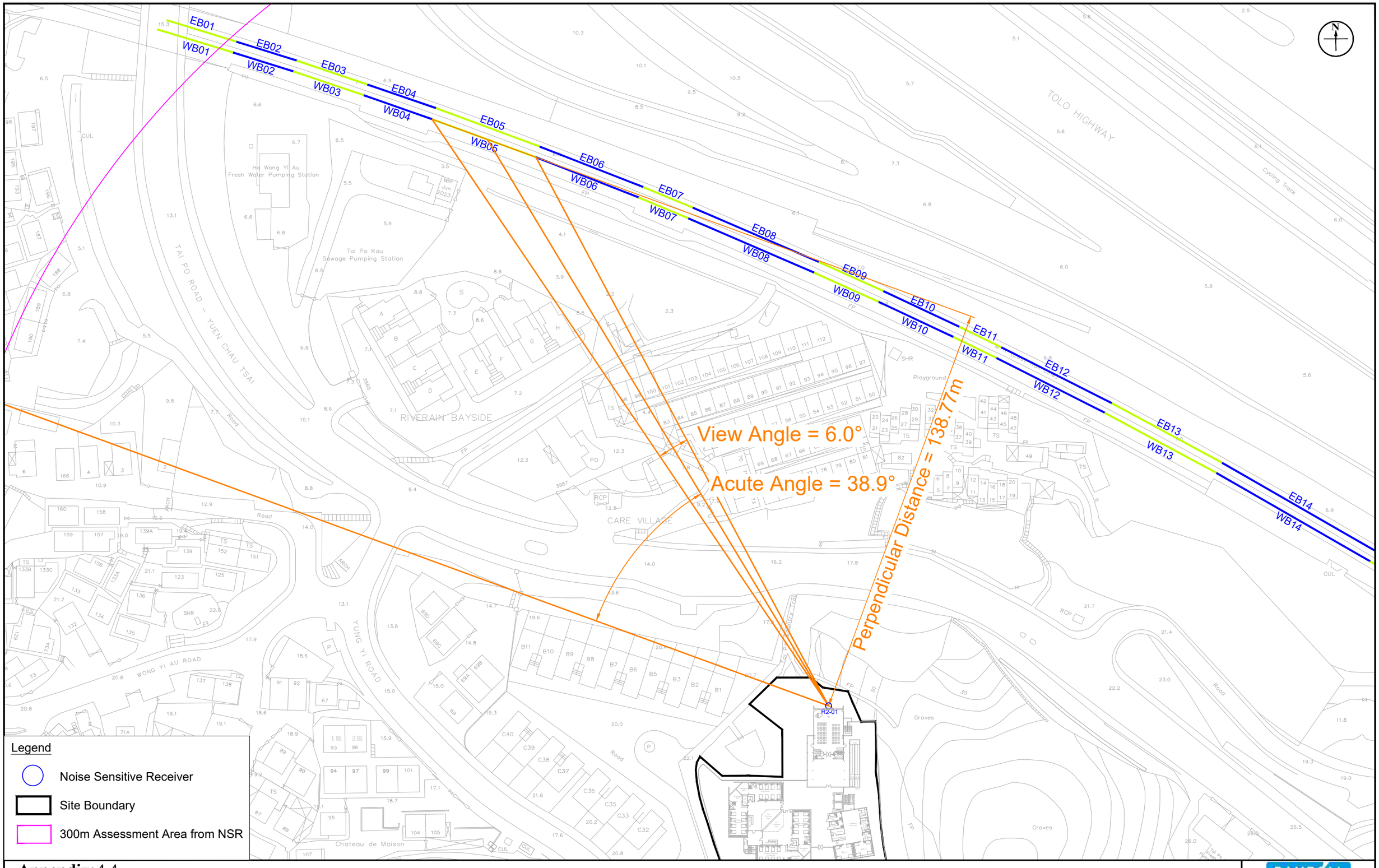

Appendix: 4.4e

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB05)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

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Rev.:	1.0
Date:	Jan 2024

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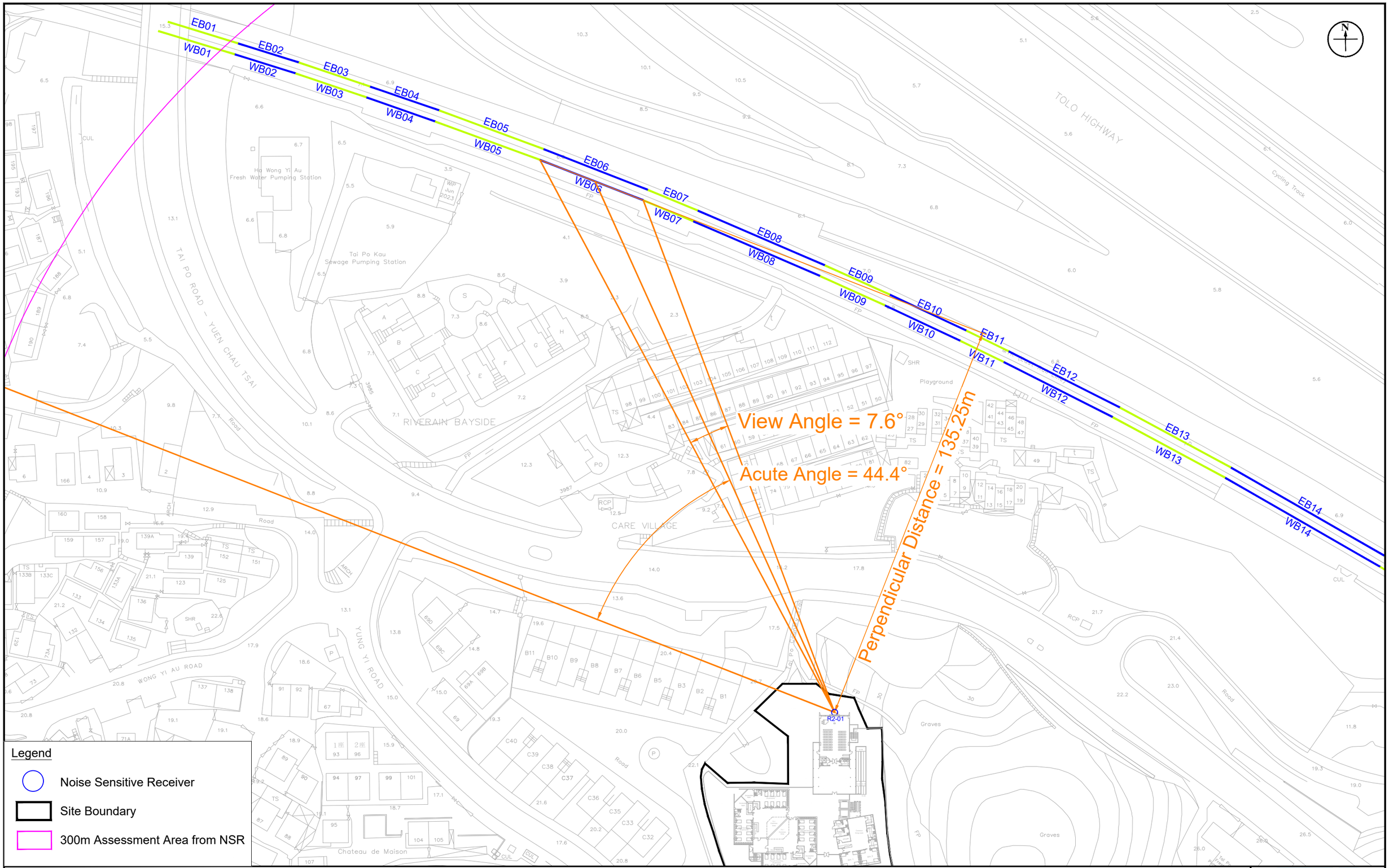

Appendix: 4.4f

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB06)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Rev.:	1.0
Date:	Jan 2024

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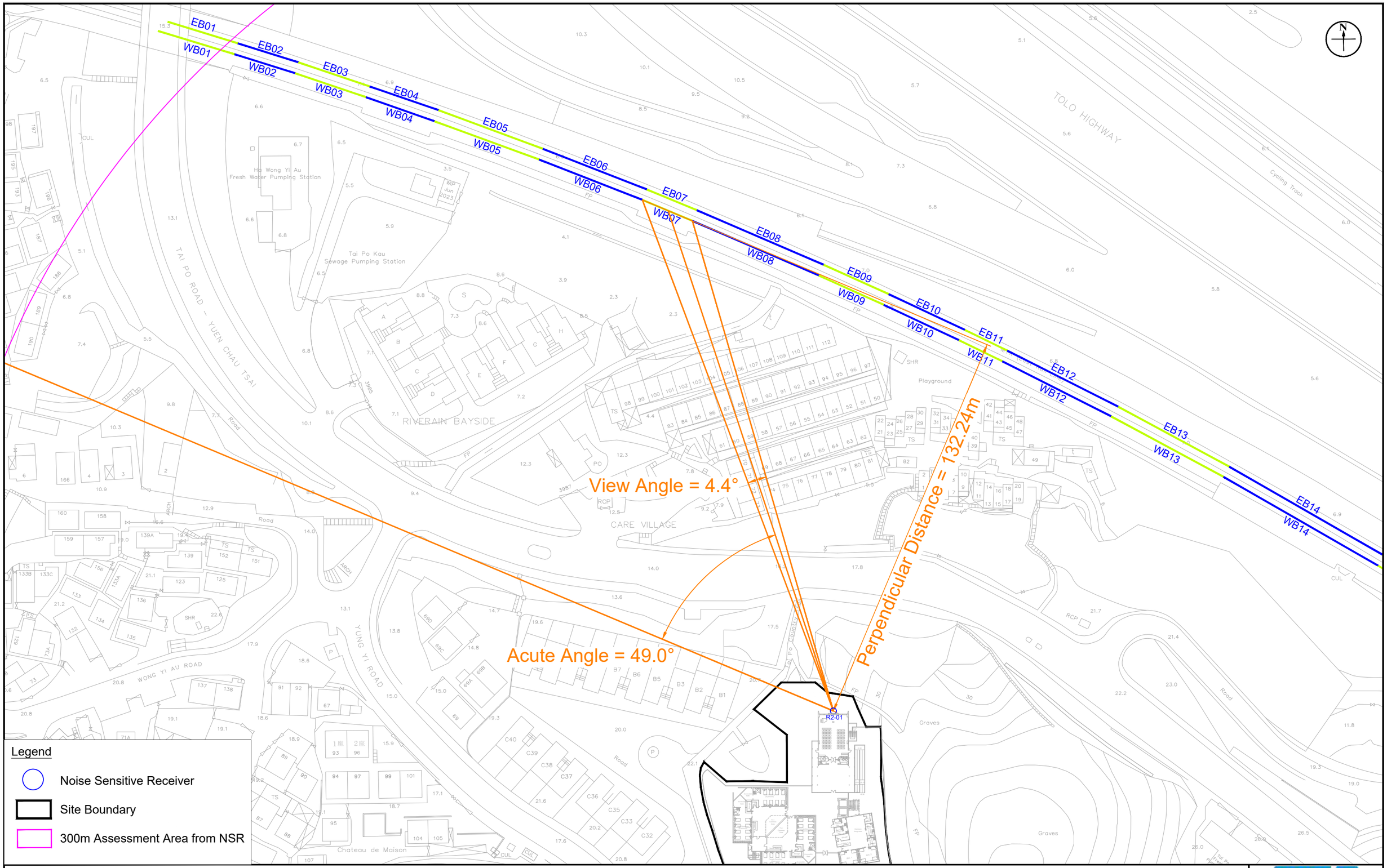

Appendix: 4.4g

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB07)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Date:	Jan 2024

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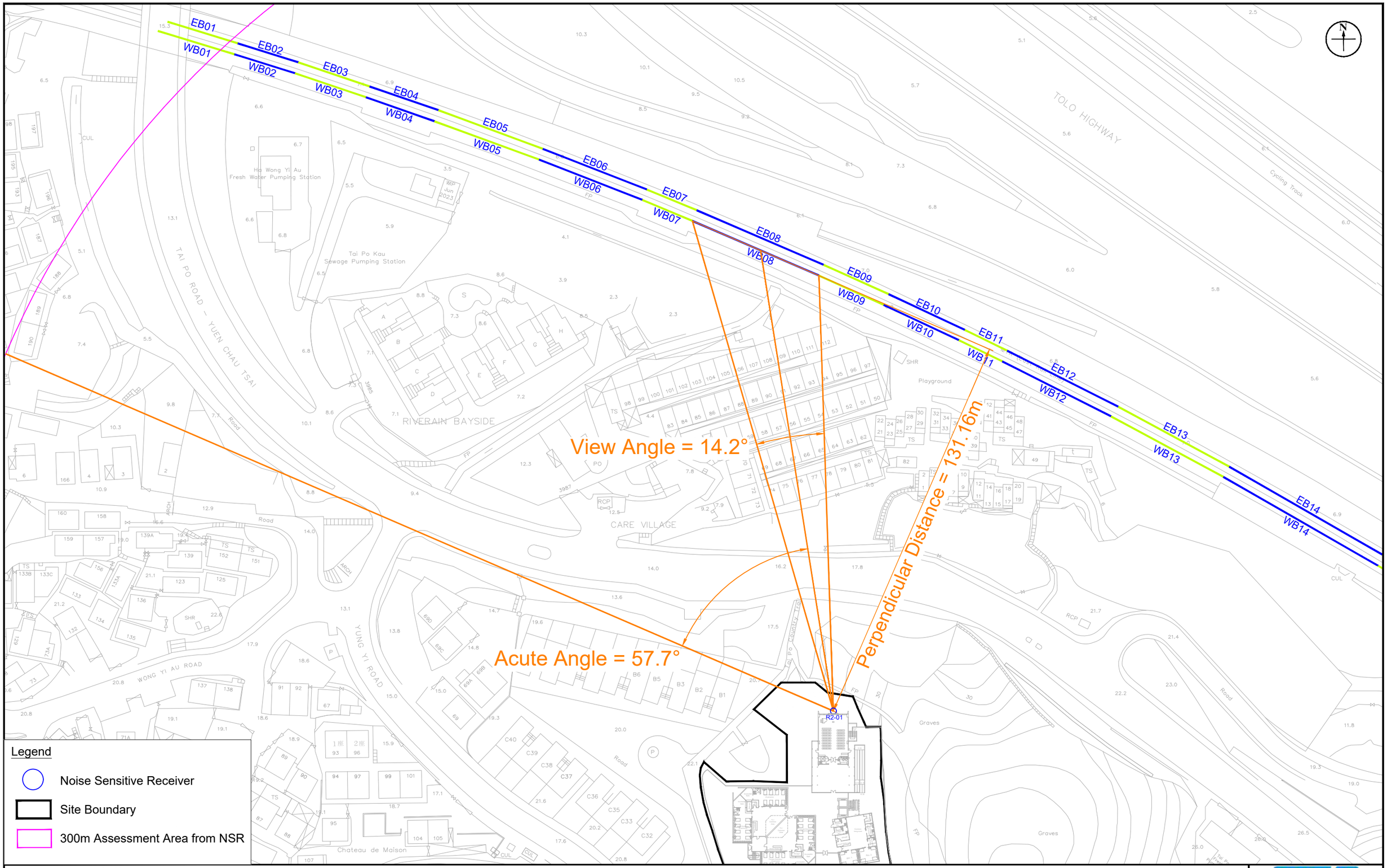

Appendix: 4.4h

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB08)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Rev.:	1.0
Date:	Jan 2024

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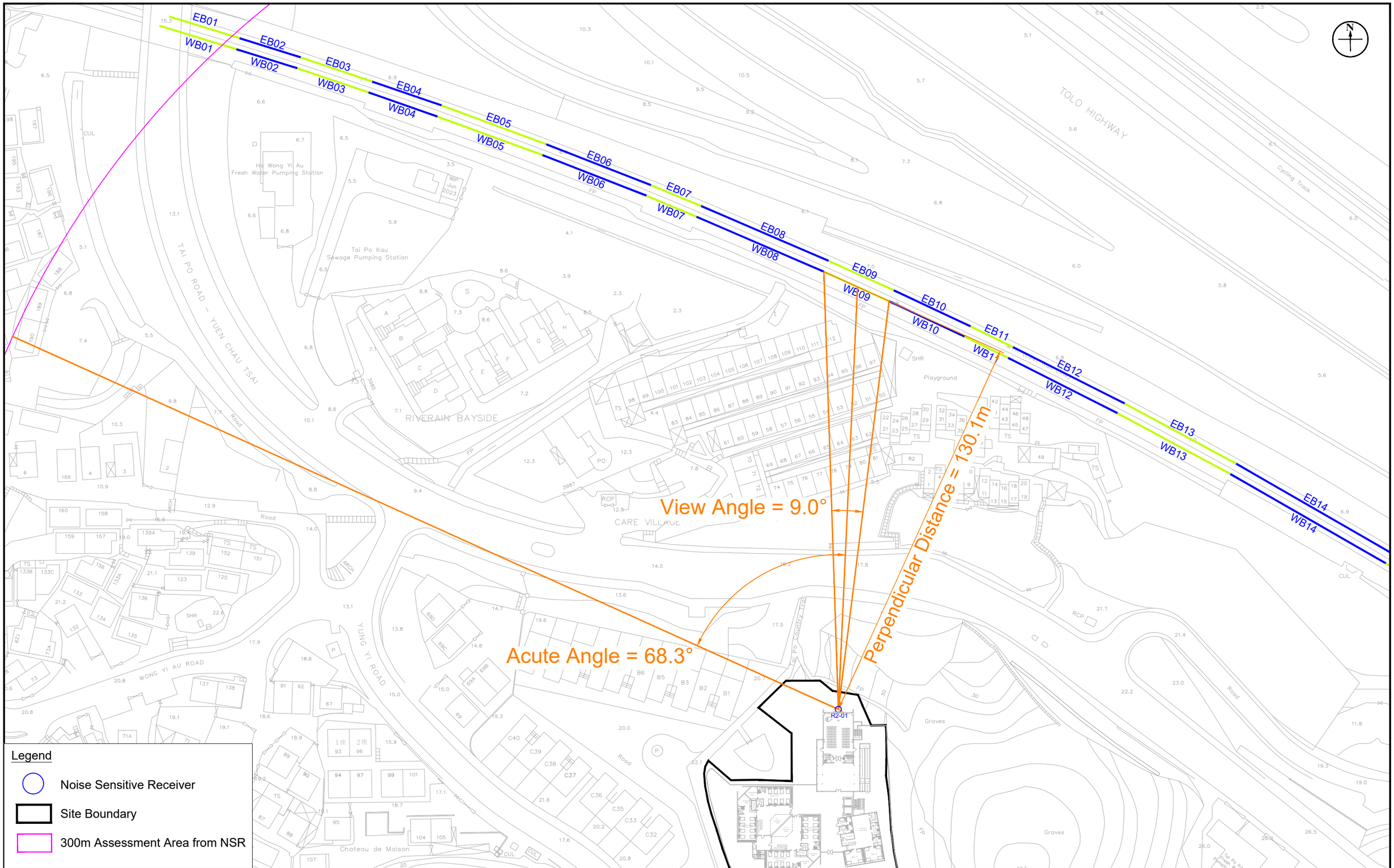

Appendix: 4.4i

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB09)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Date:	Jan 2024

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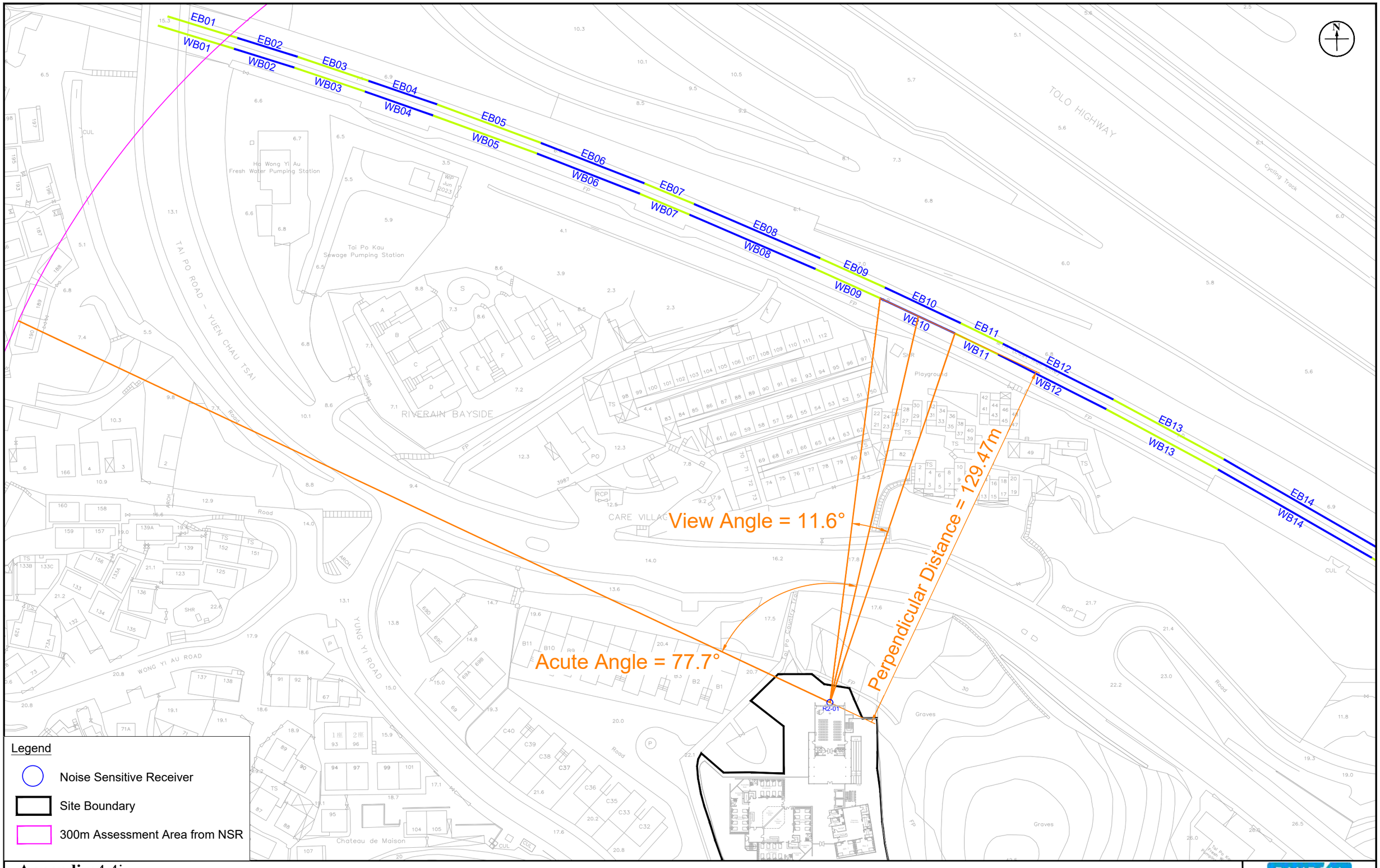

Appendix: 4.4j

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB10)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

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Rev.:	1.0
Date:	Jan 2024

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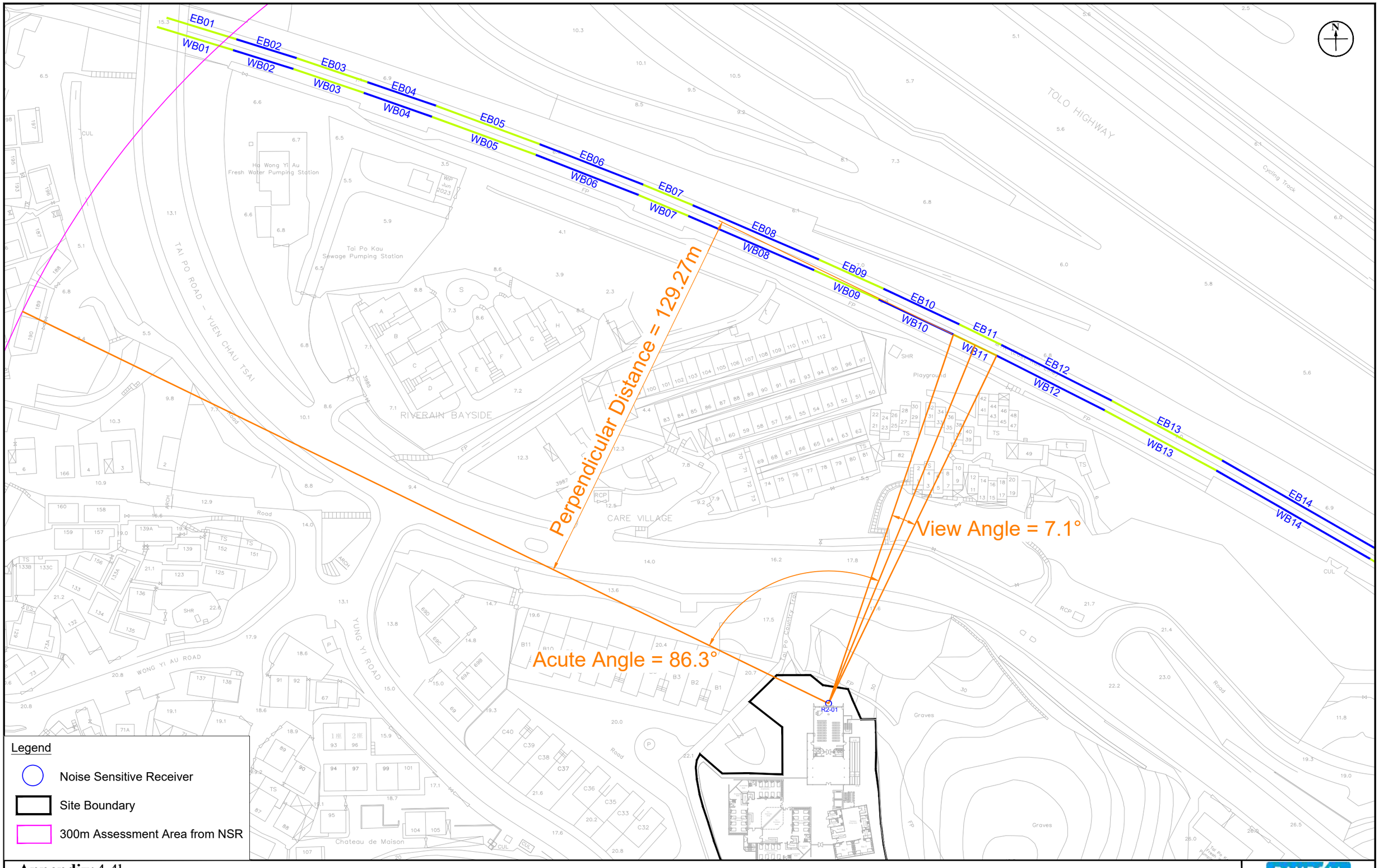

Appendix: 4.4k

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB11)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

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Rev.:	1.0
Date:	Jan 2024

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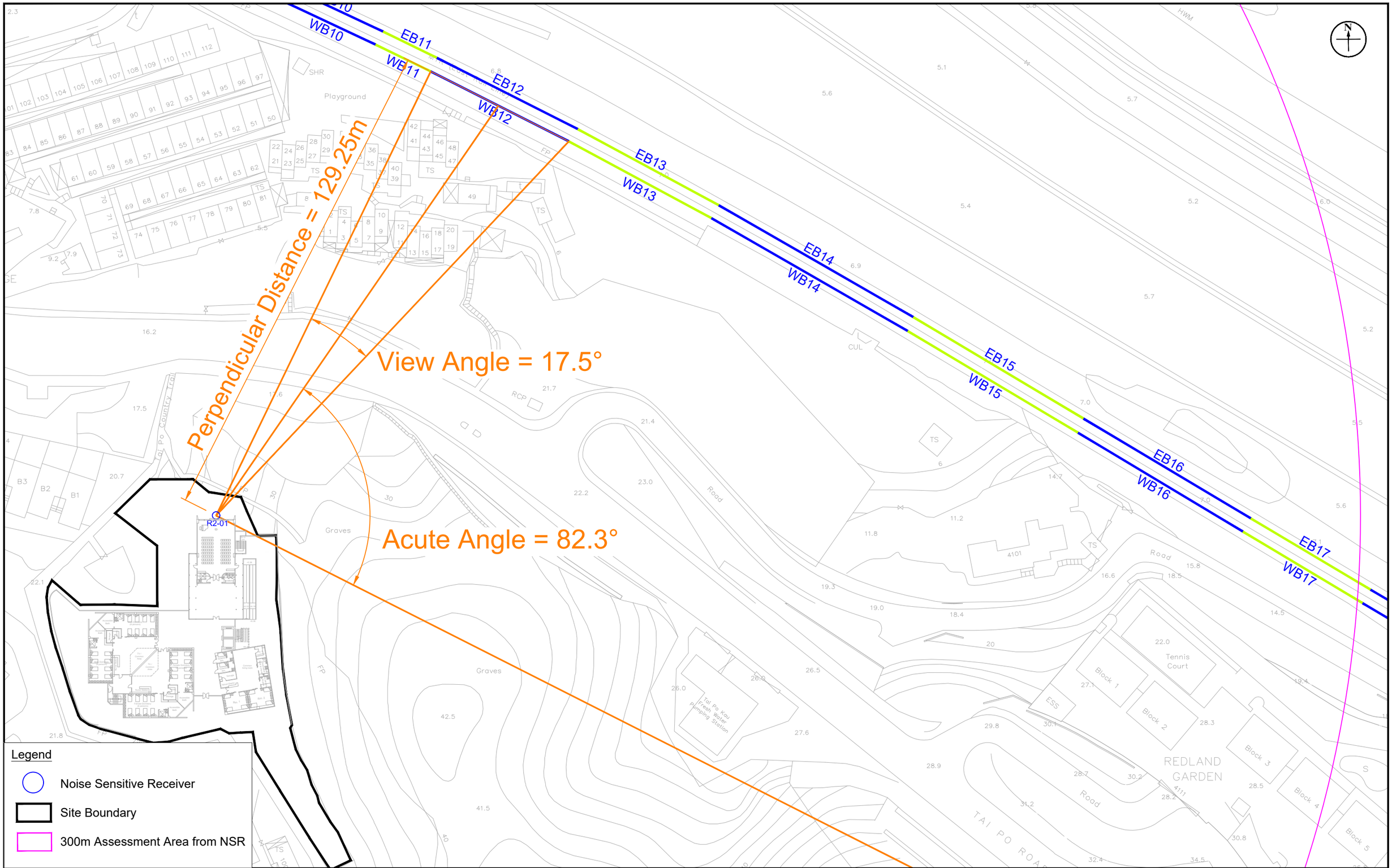

Appendix: 4.4l

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB12)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Rev.:	1.0
Date:	Jan 2024

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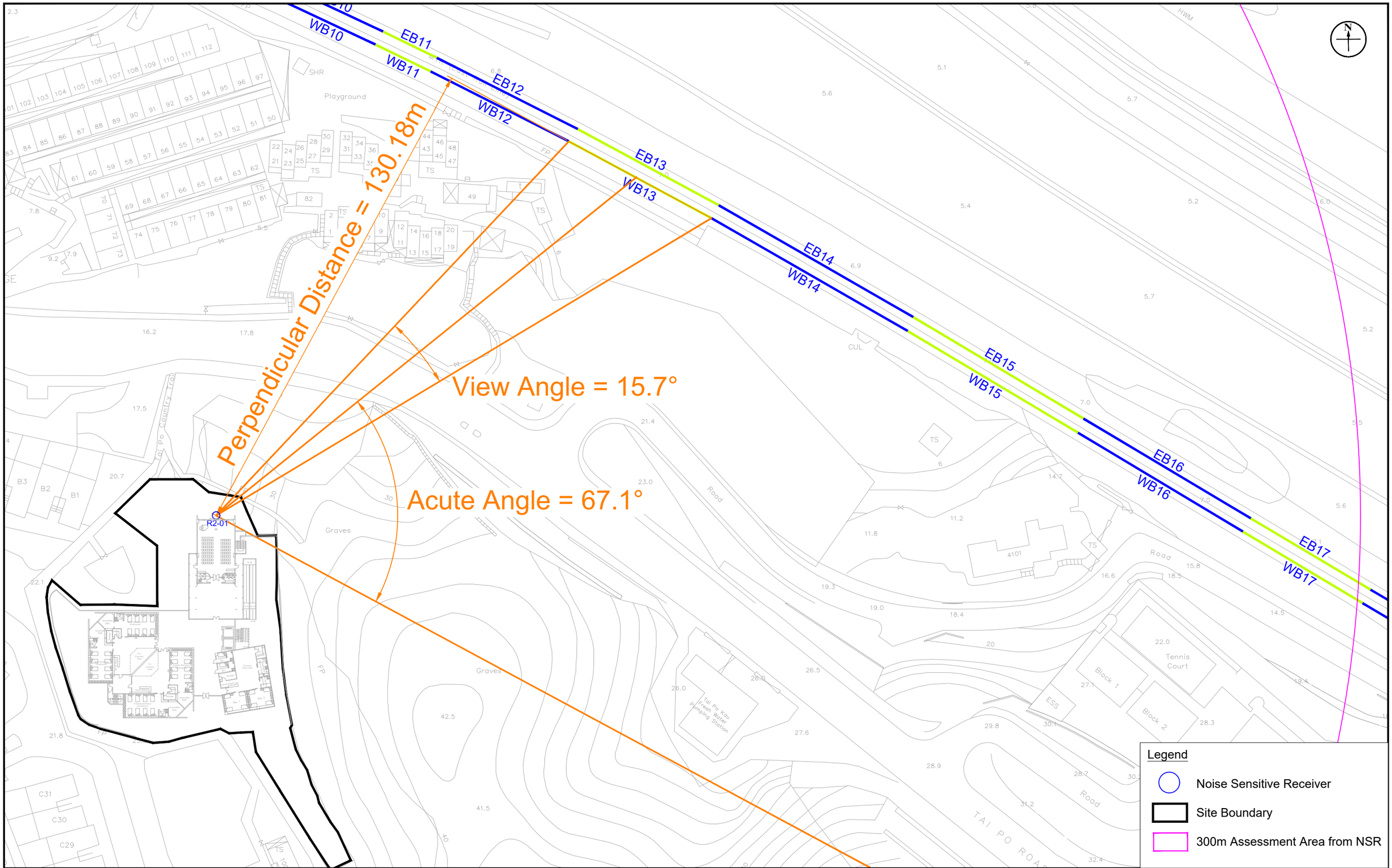

Appendix: 4.4m

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB13)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Checked by:	CC
Rev.:	1.0
Date:	Jan 2024

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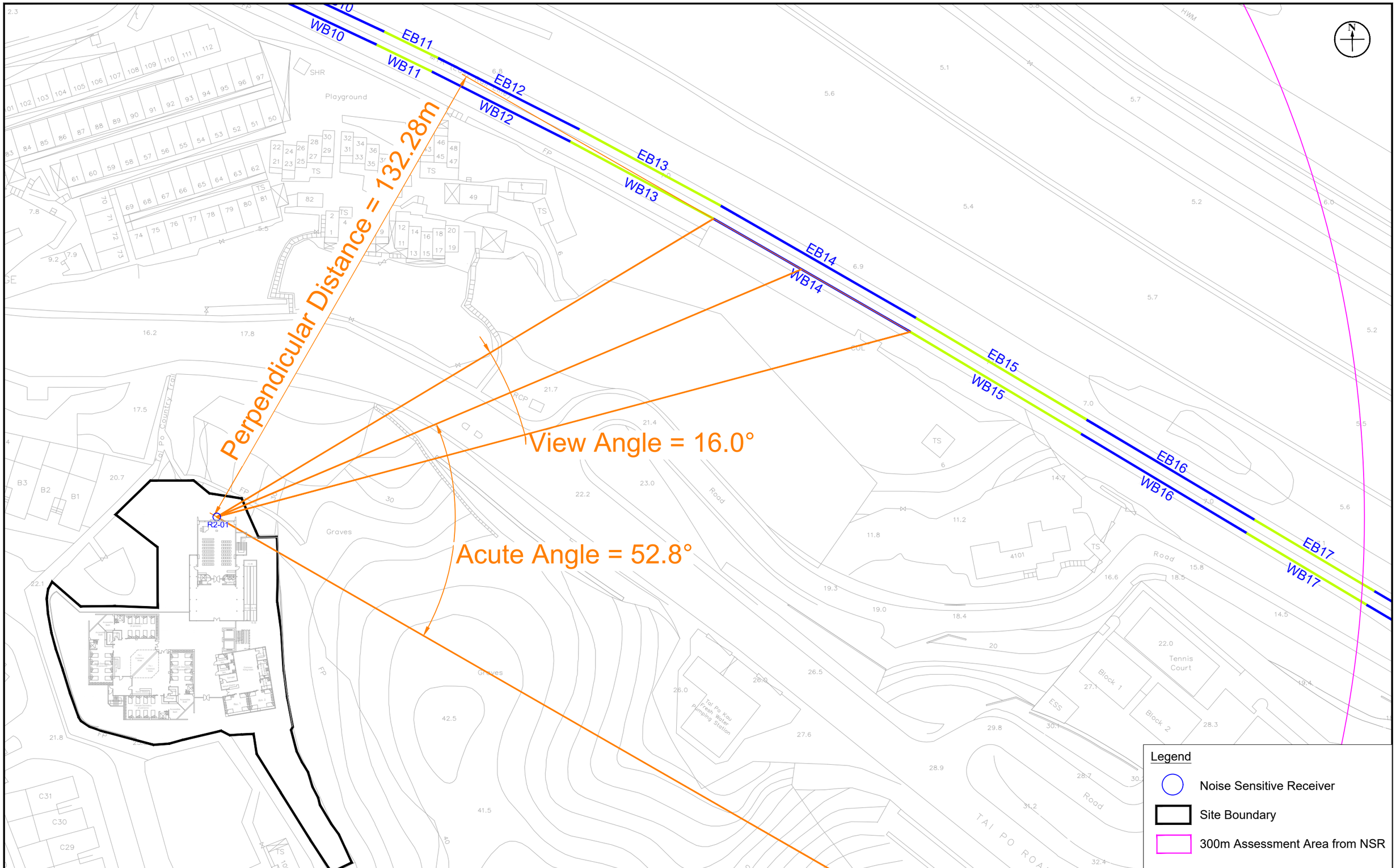

Appendix: 4.4n

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB14)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Date:	Jan 2024

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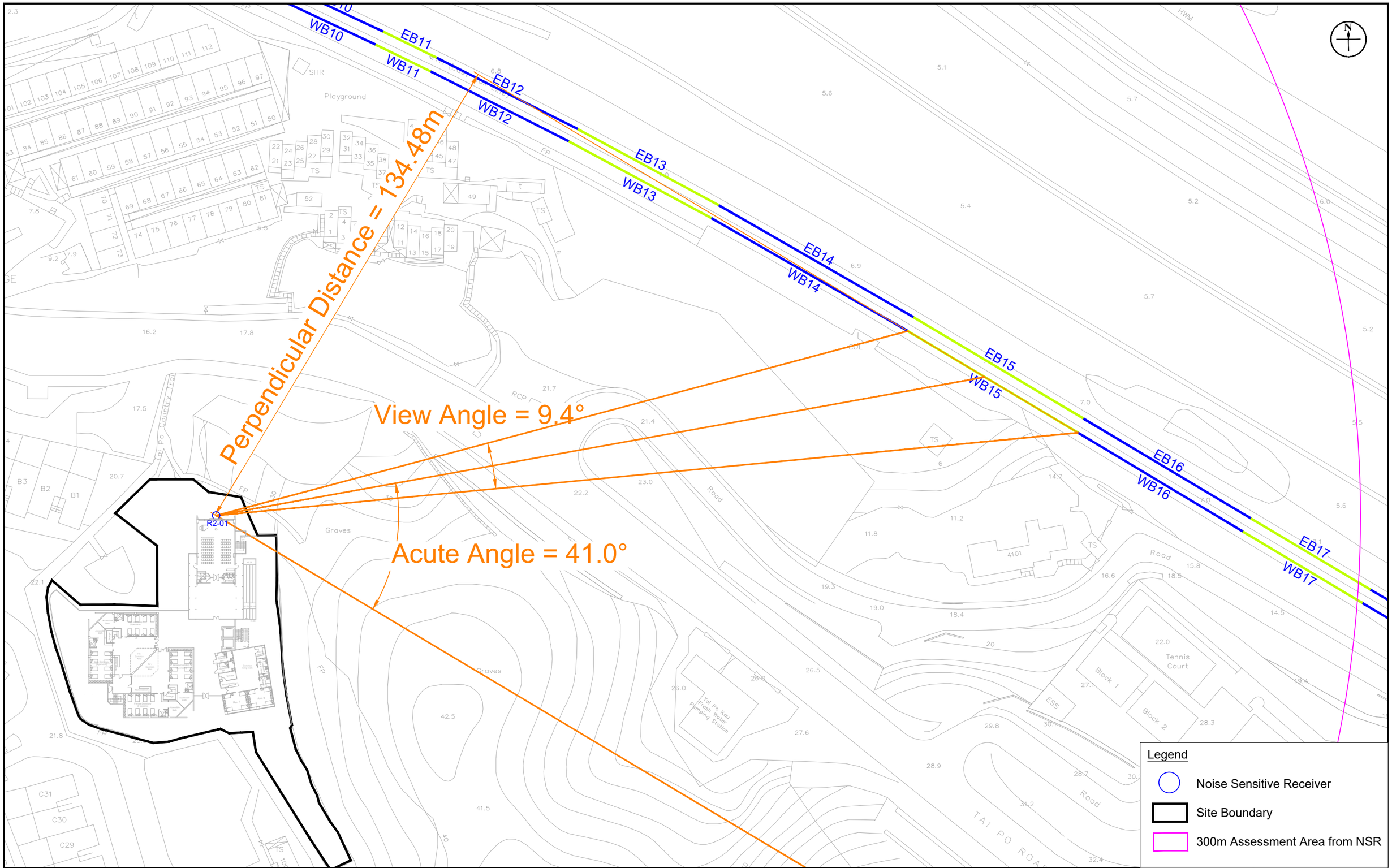

Appendix: 4.4o

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB15)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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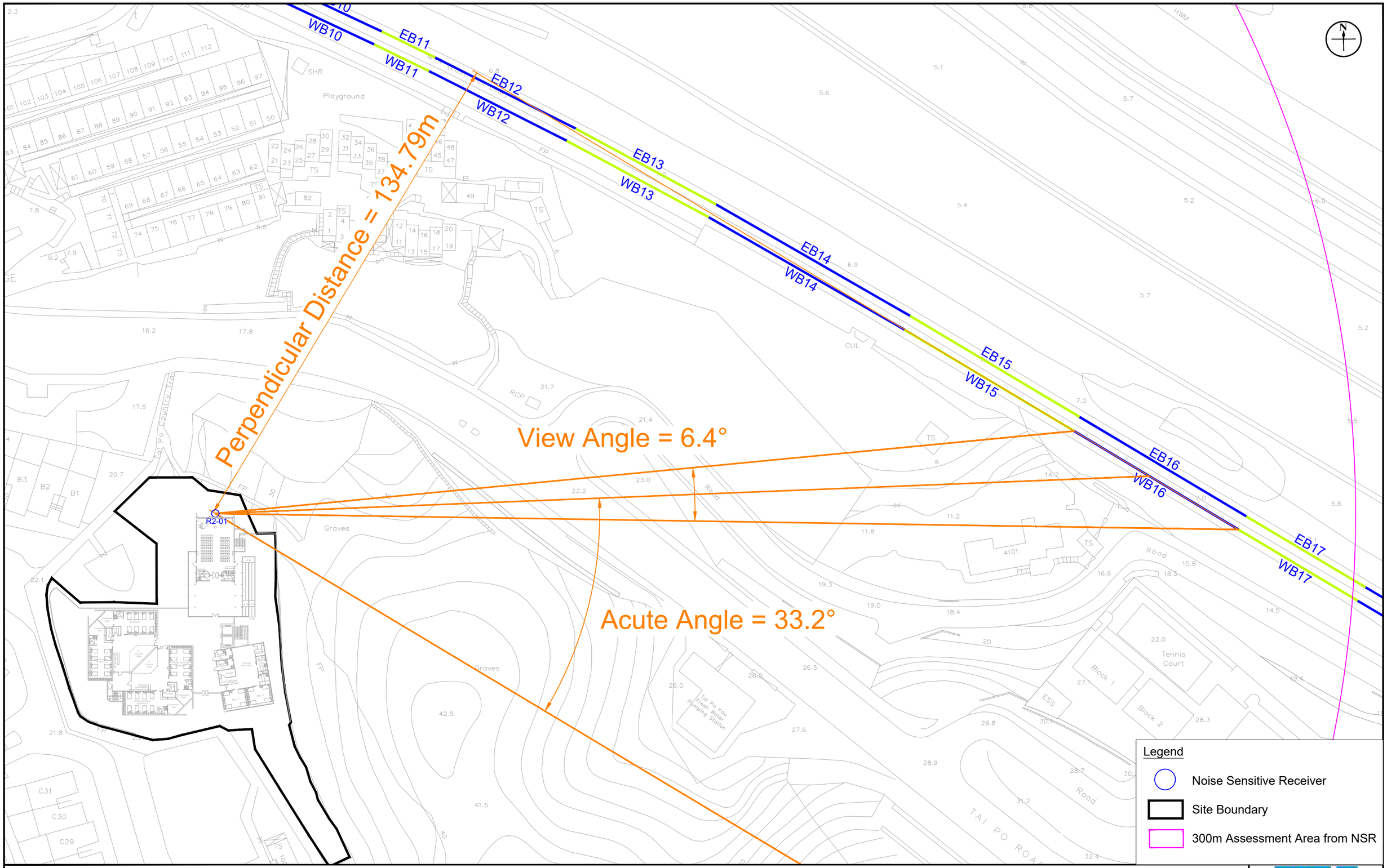

Appendix: 4.4p

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB16)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Rev.:	1.0
Date:	Jan 2024

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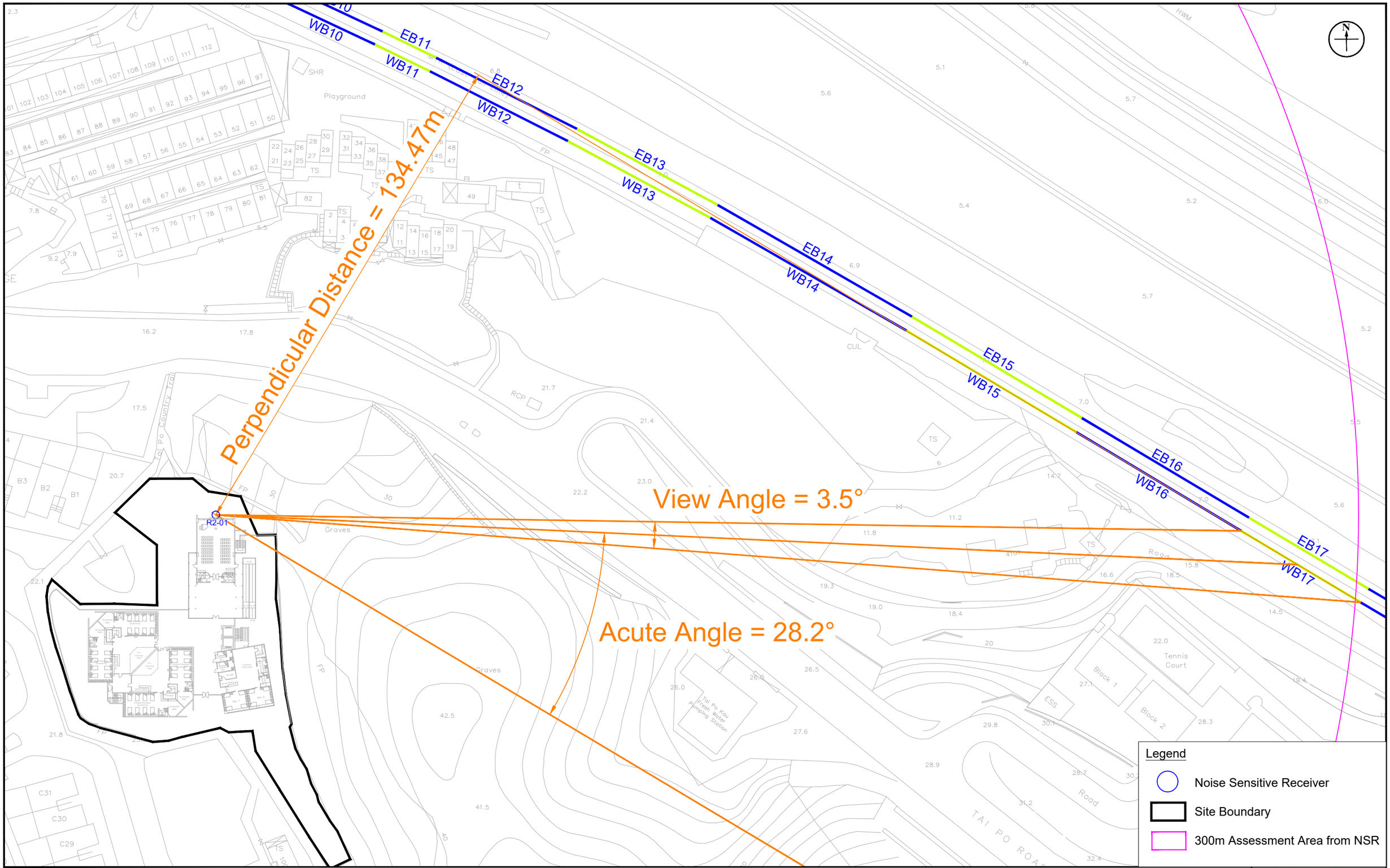

Appendix: 4.4q

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-01 (WB17)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Checked by:	CC
Rev.:	1.0
Date:	Jan 2024

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Appendix 5.1 Copies of Letter of Request for Information of AC units

Ref.: KTAHOLF-EI00_0_0002L.23.docx

By Email

20 October 2023

Management Office
China Light Power Hong Kong

Dear Sir/Madam,

Section 16 Planning Application for Proposed Development at Wong Yi Au, Tai Po – Request for Information of the Chillers, Cooling Towers and VRVs at China Light Power System Control Centre (Strafford House), Tai Po Kau

We are the appointed environmental consultant to conduct environmental studies for the captioned project. The location plan of the Proposed Development with 300m noise impact study area is attached for your reference.

According to desktop review, several fixed noise sources (e.g. chillers, cooling towers and VRVs) are identified at the rooftop of the Ching Light Power System Control Centre (Strafford House) at Tai Po Kau. In order to assess the potential noise impact to the Proposed Development, it would be grateful if you could provide the following information as available for the study:

- Inventory of equipment (e.g. Chillers, Cooling Tower, VRVs);
- The operation parameters of equipment:
  - Quantity (e.g. 4 nos + 2 nos standby)
  - Operating Hour or Schedule (e.g. 9am to 6pm, Monday to Friday)
  - Location (layout / room layout plan)
  - Particulars (e.g. catalogue, brand and model, power rating, sound emission data as available)
  - Acoustic / sound insulation measures adopted (e.g. acoustic silencers / noise enclosures)

In addition, it would be grateful if we could have your permission in carrying out on-site noise measurement at the rooftop of the building. Due to the tight programme of this project, your prompt response on or before 10 November 2023 would be very much appreciated.

Should you have any questions on this submission, please do not hesitate to contact the undersigned at 3465 2871 (email: mikekwan@ramboll.com) or our Mr. Peter Leung at 3465 2831 (email: peterleung@ramboll.com).

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Mike Kwan
Assistant Environmental Consultant

Enclosure: Location Plan of the Proposed Development

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Ramboll Hong Kong Limited 英環香港有限公司
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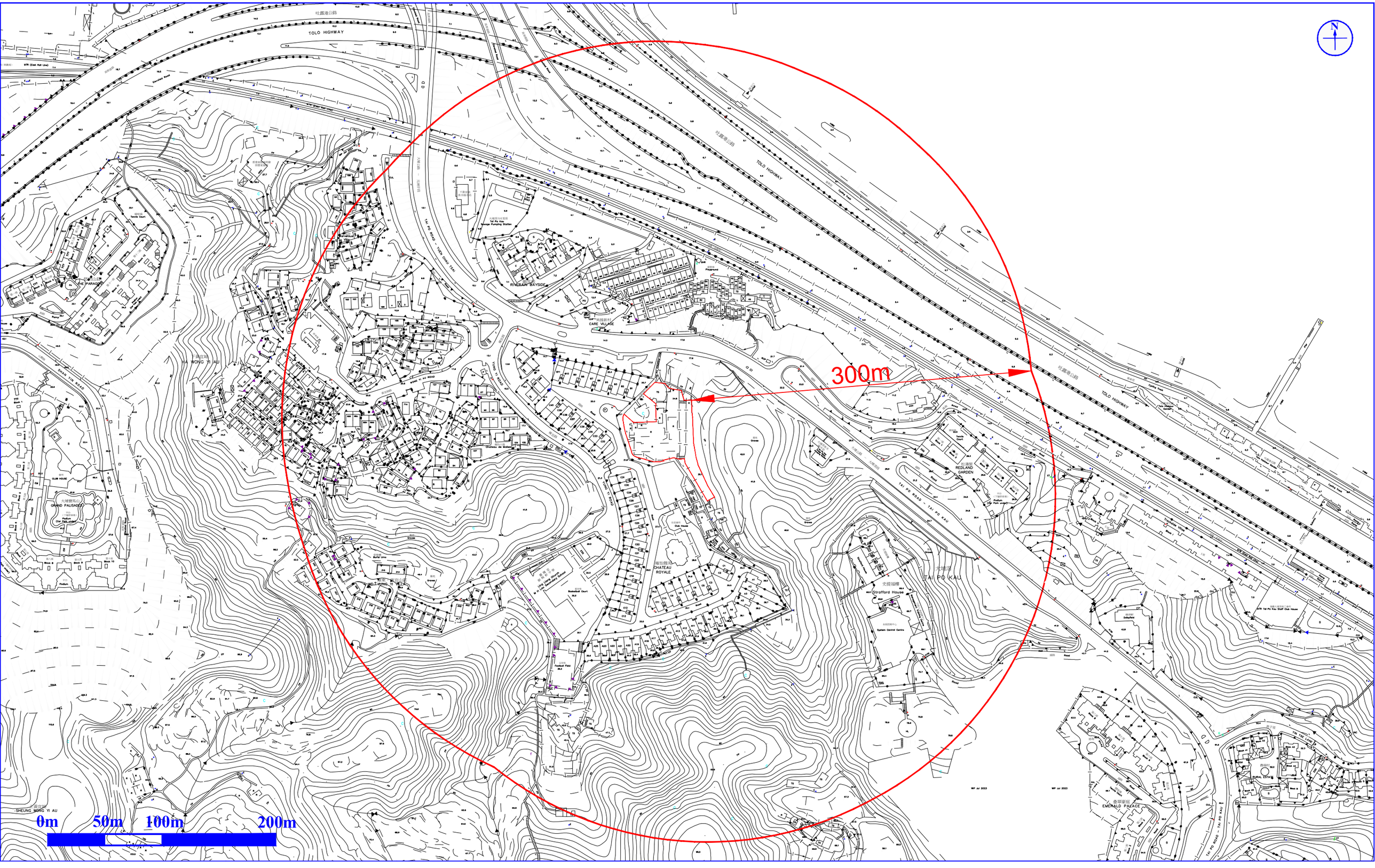

TOLO HIGHWAY
TAI PO ROAD - TAI PO KAU
TAI PO KAU
300m
0m
50m
100m
200m
N

Appendix 5.2 Backward Calculation for NSR at Riverain Bayside and Redland Garden

Backward Calculations for BF-01 at Riverain Bayside, Tai Po Kau, Tai Po

Noise Sensitive Receiver (NSR)	NSR (x)	NSR (y)	Noise Source (NS)	Description	Noise Source (x)	Noise Source (y)	Daytime SWL, dB(A)	Nighttime SWL, dB(A)	Horizontal Distance from Noise Source to Receiver(m) (NSR)	Distance Correction, dB(A)	Barrier Correction, dB(A)	Tonality Correction, dB(A)	Façade Correction, dB(A)	Daytime SPL, dB(A), $L_{eq\ (30\ min)}$	Nighttime SPL, dB(A), $L_{eq\ (30\ min)}$
BF-01	836283.7	833758.9	P02	Tai Po Kau Sewage Pumping Station	836297.7	833797.1	99.5	89.5	40.7	-40.2	0	6	3	68.3	58.3
ASR	**C**		P03	Ha Wong Yi Au Fresh Water Pumping Station	836248.7	833800.5	99.5	89.5	54.3	-42.7	0	6	3	65.8	55.8
Day Time ANL	**70**												**Total**	**70.2**	**60.2**
NightTime ANL	**60**														

Note:

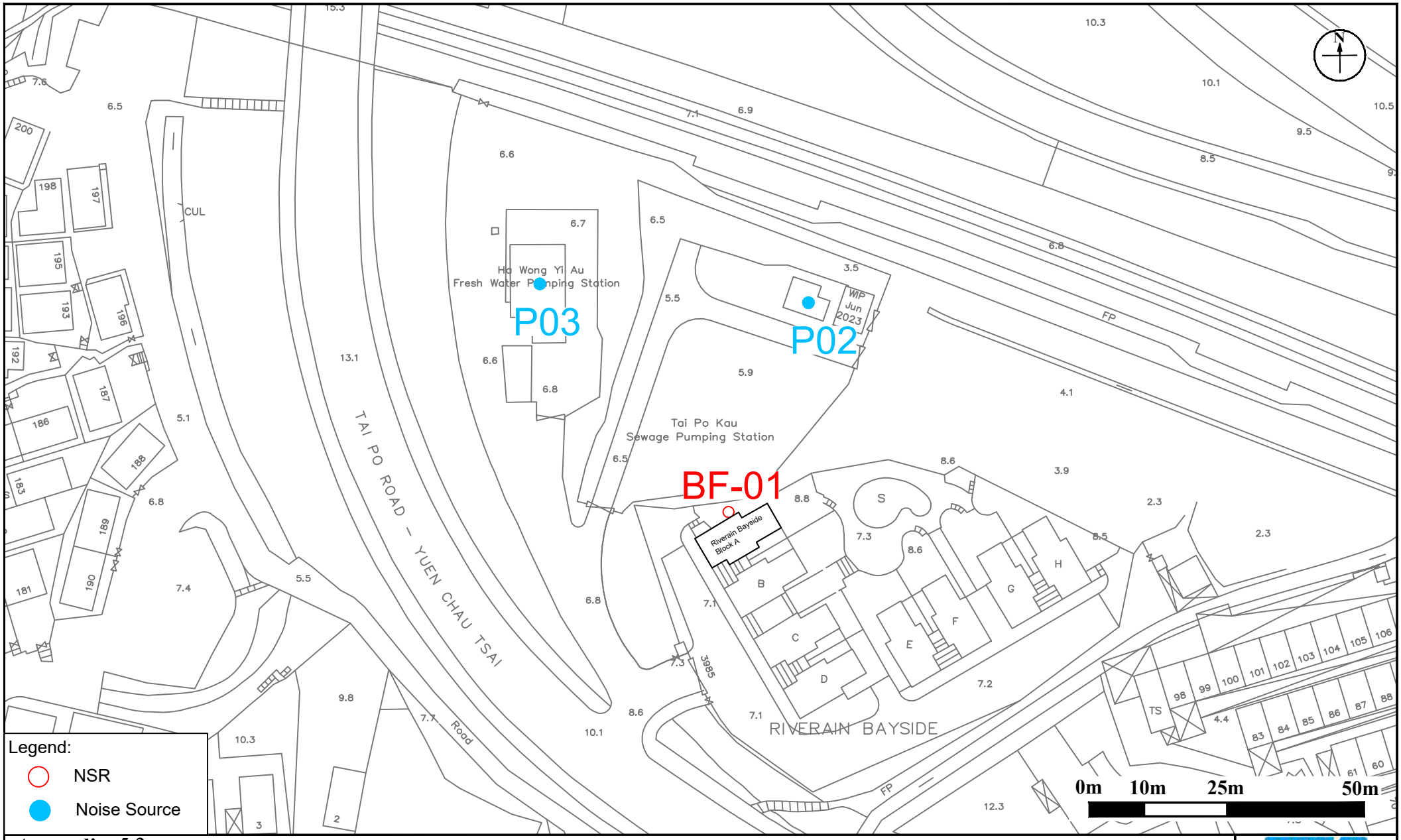
* It is assumed the nighttime SWL will be 10dB(A) lower than daytime

Backward Calculations for BF-02 at Redland Garden, Tai Po Kau, Tai Po

Noise Sensitive Receiver (NSR)	NSR (x)	NSR (y)	Noise Source (NS)	Description	Noise Source (x)	Noise Source (y)	Daytime SWL, dB(A)	Nighttime SWL, dB(A)	Horizontal Distance from Noise Source to Receiver(m) (NSR)	Distance Correction, dB(A)	Barrier Correction, dB(A)	Tonality Correction, dB(A)	Façade Correction, dB(A)	Daytime SPL, dB(A), $L_{eq\ (30\ min)}$	Nighttime SPL, dB(A), $L_{eq\ (30\ min)}$
BF-02	836678.2	833565.6	C01	China Light Power	836616.6	833421.1	93.0	83.0	157.1	-51.9	0	6	3	50.1	40.1
ASR	**A**		C02	China Light Power	836618.9	833411.8	93.0	83.0	164.8	-52.3	0	6	3	49.7	39.7
Day Time ANL	**60**		C03	China Light Power	836620.3	833399.6	93.0	83.0	175.9	-52.9	0	6	3	49.1	39.1
NightTime ANL	**50**		C04	China Light Power	836655.8	833421.3	98.0	88.0	146.0	-51.3	0	6	3	55.7	45.7
			C05	China Light Power	836656.7	833419.0	98.0	88.0	148.2	-51.4	0	6	3	55.6	45.6
			V01	China Light Power	836608.3	833423.9	71.0	71.0	158.0	-52.0	0	6	3	28.0	28.0
			V02	China Light Power	836609.1	833421.8	71.0	71.0	159.6	-52.1	0	6	3	27.9	27.9
			V03	China Light Power	836610.0	833419.6	71.0	71.0	161.2	-52.1	0	6	3	27.9	27.9
			V04	China Light Power	836610.8	833417.4	71.0	71.0	162.8	-52.2	0	6	3	27.8	27.8
			V05	China Light Power	836611.6	833415.3	71.0	71.0	164.4	-52.3	0	6	3	27.7	27.7
			V06	China Light Power	836612.5	833413.1	71.0	71.0	166.1	-52.4	0	6	3	27.6	27.6
			V07	China Light Power	836614.5	833398.8	71.0	71.0	178.6	-53.0	0	6	3	27.0	27.0
			V08	China Light Power	836615.3	833396.6	71.0	71.0	180.4	-53.1	0	6	3	26.9	26.9
			V09	China Light Power	836616.1	833394.4	71.0	71.0	182.1	-53.2	0	6	3	26.8	26.8
			V10	China Light Power	836617.0	833392.3	71.0	71.0	183.8	-53.3	0	6	3	26.7	26.7
			V11	China Light Power	836617.8	833390.1	71.0	71.0	185.6	-53.4	0	6	3	26.6	26.6
			V12	China Light Power	836618.7	833388.0	71.0	71.0	187.4	-53.5	0	6	3	26.5	26.5
													Total	**60.1**	**50.3**

Note:

* It is assumed the nighttime SWL for C01 to C05 will be 10dB(A) lower than daytime



Appendix: 5.2a

Title: Backward Calculation for NSR BF-01 at Riverain Bayside

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

Drawn by:	MK
Checked by:	CC
Rev.:	1.1
Date:	Feb 2024

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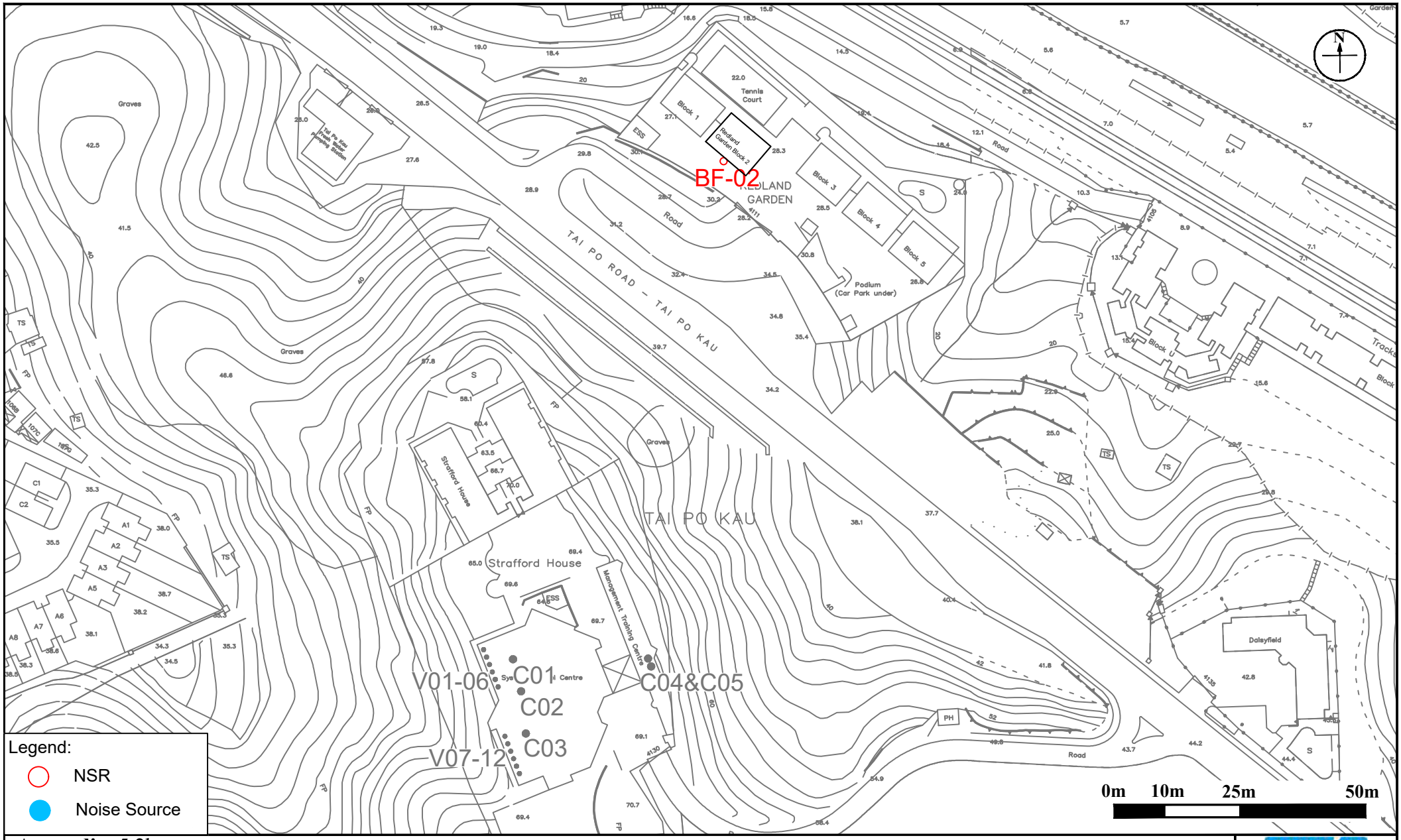

Appendix: 5.2b

Title: Backward Calculation for NSR BF-02 at Redland Garden

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

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Drawn by:	MK
Checked by:	CC
Rev.:	1.1
Date:	Feb 2024

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Appendix 5.3 Catalogue of the Fixed Noise Sources

Air cooled screw chiller

High ambient

Standard sound

› **High ambient**
› Stepless single-screw compressor
› Large operation range (ambient temperature down to -18°C)
› MicroTech III controller with superior control logic and easy interface

EWAD-D-HS MicroTech III

EWAD-D-HS-510:
C04 and C05

Cooling only				EWAD-D-HS	200	210	230	260	270	290	310	340	380	420	450	480	510	550	590
Cooling capacity	Nom.			kW	194	208	233	255	272	288	305	334	379	413	446	476	512	545	585
Power input	Cooling	Nom.		kW	77.9	76.0	83.9	92.1	98.9	105	114	122	129	143	152	164	177	185	194
Capacity control	Method				Stepless														
	Minimum capacity			%	12.5														
EER					2.49	2.73	2.77		2.75	2.73	2.68	2.75	2.93	2.90	2.93	2.90	2.89	2.95	3.02
ESEER					3.02	3.16	3.24	3.11	3.20	3.18	3.17	3.15	3.46	3.50	3.57		3.55	3.60	3.68
Dimensions	Unit	Height		mm	2,223														
		Width		mm	2,234														
		Depth		mm	2,239		3,339					4,040				4,940			
Weight	Unit			kg	2,475	2,470	2,865		2,870			3,185		3,277	3,942	4,356	4,361		4,366
	Operation weight			kg	2,500		2,960					3,300		3,447	4,112		4,526		
Water heat exchanger	Type				Plate heat exchanger		Single pass shell & tube												
	Water volume			l	25	30	95		90			115			170		165		160
	Water flow rate	Cooling	Nom.	l/s	9.3	9.9	11.1	12.2	13.1	13.8	14.6	16.0	18.2	19.8	21.4	22.8	24.5	26.1	28.0
	Water pressure drop	Cooling	Nom.	kPa	32	24	46	52	54	59	64	58	70	46	53	58	51	56	53
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler														
Compressor	Type				Single screw compressor										Asymmetric single screw compressor				
	Quantity				2														
Fan	Type				Direct propeller														
	Quantity				4		6					8				10			
	Air flow rate	Nom.		l/s	21,848	21,153	32,772		32,251		31,729		43,696		42,306		54,620		
	Speed	Cooling	Nom.	rpm	890														
Sound power level	Cooling	Nom.		dBA	96							97	99	97		98		99	100
Sound pressure level	Cooling	Nom.		dBA	77								79	77		78		79	80
Operation range	Water side	Cooling	Min.~Max.	°CDB	-15~15														
	Air side	Cooling	Min.~Max.	°CDB	-18~48														
Refrigerant	Type / GWP				R-134a / 1,430														
	Circuits	Quantity			2														
Refrigerant charge	Per circuit			kg/TCO$_2$Eq	18.0 / 25.7	21.0 / 30.0	22.0 / 31.5	26.0 / 37.2	28.0 / 40.0	31.0 / 44.3		28.0 / 40.0		34.0 / 48.6	30.0 / 42.9	45.0 / 64.3	47.5 / 67.9	46.0 / 65.8	47.0 / 67.2
Piping connections	Evaporator water inlet/outlet (OD)				3"		4"								5"				
Unit	Maximum starting current			A	222		239		283	291	303	307	312	423	468	489		498	
	Nominal running current (RLA)	Cooling		A	134	131	145	157	169	180	191	204	214	239	258	275	295	306	320
	Maximum running current			A	172		197	213	224	234	249	272	283	320	338	367	388	399	410
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400														

Air cooled screw chiller

Standard efficiency

Reduced sound

EWAD-C-SS/SL/SR MicroTech III

EWAD-C-SR-920:
C01, C02 and C03

Cooling only				EWAD-C-SR	620	720	790	880	920	C10	C11	C12	H14	C13	C14	C15	C16	C17	C18	C19
Cooling capacity	Nom.			kW	616	712	786	872	918	1,016	1,107	1,266	1,316	1,363	1,465	1,550	1,616	1,710	1,790	1,828
Power input	Cooling	Nom.		kW	226	276	317	334	373	398	422	461	499	522	582	609	654	706	722	762
Capacity control	Method				Stepless															
	Minimum capacity			%	12.5									7.0						
EER					2.74	2.59	2.48	2.61	2.46	2.55	2.63	2.75	2.63	2.61	2.52	2.54	2.47	2.42	2.48	2.40
ESEER					3.91	3.78	3.81	3.79	3.98	3.76	3.95	3.92	3.81	3.78	3.70	3.72	3.66	3.70	3.71	3.66
Dimensions	Unit	Height		mm	2,540															
		Width		mm	2,285															
		Depth		mm	6,285					8,185	8,085	8,985		10,285		11,185			12,085	
Weight	Unit			kg	5,920	6,030	6,050	6,570	6,850	7,300	7,570	8,190		10,750	10,770	11,150	11,210	11,680	12,040	
	Operation weight			kg	6,200	6,280	6,300	6,820	7,100	7,540	7,810	8,570		11,170		11,550	11,700	12,560	12,920	
Water heat exchanger	Type				Single pass shell & tube															
	Water flow rate	Cooling	Nom.	l/s	29.5	34.1	37.6	41.8	44.0	48.7	53.1	60.6	63.0	65.2	70.2	74.2	77.3	81.8	85.6	87.5
	Water pressure drop	Cooling	Nom.	kPa	43	50	48	58	63	60	69	50	54	45	57	63	46	33	36	37
	Water volume			l	266			251		243		386		421	408		474	850		
Air heat exchanger	Type				High efficiency fin and tube type															
Compressor	Type				Asymmetric single screw compressor															
	Quantity				2									3						
Fan	Type				Direct propeller															
	Quantity				10			12		14	16	18		20		22			24	
	Air flow rate	Nom.		l/s	41,007			49,208		57,410	65,611	73,812		82,014		90,215			98,417	
	Speed			rpm	700															
Sound power level	Cooling	Nom.		dBA	92			93		94				95				96		
Sound pressure level	Cooling	Nom.		dBA	71	72				73								74		
Operation range	Air side	Cooling	Min.~Max.	°CDB	-18~46															
	Water side	Cooling	Min.~Max.	°CDB	-8~15															
Refrigerant	Type / GWP				R-134a / 1,430															
	Circuits	Quantity			2									3						
Refrigerant charge	Per circuit			kg/TCO$_2$Eq	64.0 / 91.5			76.5 / 109.4	80.0 / 114.4	90.0 / 130.1	94.0 / 134.4	110.0 / 157.3		86.7 / 123.9				91.7 / 131.1	101.7 / 145.4	
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm					219.1mm								273mm		
Unit	Starting current	Max		A	597	642		906	953	1,007	1,010	1,055	1,068	1,241	1,292	1,344	1,346	1,389	1,434	1,447
	Running current	Cooling	Nom.	A	371	450	518	548	609	654	694	755	811	857	954	1,002	1,075	1,158	1,179	1,238
		Max		A	462	531	575	639	698	767	837	895	949	1,052	1,116	1,186	1,250	1,303	1,362	1,415
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400															

室外机阵容

室外机																						
型号			RUXYQ8BB	RUXYQ10BB	RUXYQ12BB	RUXYQ14BB	RUXYQ16BB	RUXYQ18BB	RUXYQ20BB	RUXYQ22BB	RUXYQ24BB	RUXYQ26BB	RUXYQ28BB	RUXYQ30BB	RUXYQ32BB	RUXYQ34BB	RUXYQ36BB	RUXYQ38BB	RUXYQ40BB	RUXYQ42BB	RUXYQ44BB	RUXYQ46BB	RUXYQ48BB
匹数		HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48
组合方式			——	——	——	——	——	——	——	——	RUXYQ10BB RUXYQ14BB	RUXYQ12BB RUXYQ14BB	RUXYQ8BB RUXYQ20BB	RUXYQ8BB RUXYQ22BB	RUXYQ10BB RUXYQ22BB	RUXYQ12BB RUXYQ22BB	RUXYQ14BB RUXYQ22BB	RUXYQ18BB RUXYQ20BB	RUXYQ18BB RUXYQ22BB	RUXYQ20BB RUXYQ22BB	RUXYQ22BB RUXYQ22BB	RUXYQ10BB RUXYQ14BB RUXYQ22BB	RUXYQ12BB RUXYQ14BB RUXYQ22BB
电源			三相 380V 50Hz														三相 380V 50Hz					三相 380V 50Hz	
额定制冷容量*1		kW	22.4	28.0	33.5	40.0	45.0	50.4	56.5	61.5	68.0	73.5	78.9	83.9	89.5	95.0	101.5	106.9	111.9	118.0	123.0	129.5	135.0
额定制热容量*2		kW	25.0	31.5	37.5	45.0	50.0	56.5	63.0	69.0	76.5	82.5	88.0	94.0	100.5	106.5	114.0	119.5	125.5	132.0	138.0	145.5	151.5
额定耗电量	制冷	kW	4.70	6.71	8.10	9.88	11.80	12.80	14.70	17.30	16.6	18.0	19.4	22.0	24.0	25.4	27.2	27.5	30.1	32.0	34.6	33.9	35.3
	制热	kW	5.24	6.72	8.48	10.50	12.10	13.30	15.30	17.00	17.2	19.0	20.5	22.2	23.7	25.5	27.5	28.6	30.3	32.3	34.0	34.2	36.0
风扇风量		m³/min	162	175	185	223	280	271	271	271	175+223	185+223	162+271	162+271	175+271	185+271	223+271	271+271	271+271	271+271	271+271	175+223+271	185+223+271
机器尺寸(H×W×D)		mm	1657×930×765			1657×1240×765					1657×930×765+1657×1240×765						1657×1240×765+1657×1240×765					1657×930×765 + 1657×1240×765 + 1657×1240×765	
运转音*3	正面运转音	dB(A)	53	54	56		57	58	59	60	58	59	60	61		62				63		62	63
	四面运转音	dB(A)	56	57	59		60	61	62	63	61	62	63	64		65				66		65	66
夜间静音运转		dB(A)	40													43						45	
室内/外机配管连接口管径*4	液管	mm	Φ9.5	Φ9.5	Φ12.7 ☆	Φ12.7	Φ12.7	Φ15.9 ☆	Φ15.9 ☆	Φ15.9 ☆	Φ15.9	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1
	气管	mm	Φ19.1	Φ22.2 ☆	Φ25.4	Φ25.4	Φ28.6 ☆	Φ28.6	Φ28.6	Φ28.6	Φ28.6	Φ31.8	Φ31.8	Φ31.8	Φ31.8	Φ31.8	Φ38.1	Φ38.1	Φ38.1	Φ38.1	Φ38.1	Φ38.1	Φ38.1
室外机配管连接口管径*4	液管	mm	Φ9.5	Φ9.5	Φ9.5 ☆	Φ12.7	Φ12.7	Φ12.7 ☆	Φ12.7 ☆	Φ12.7 ☆							——					——	
	气管	mm	Φ19.1	Φ25.4 ☆	Φ25.4	Φ25.4	Φ25.4 ☆	Φ28.6	Φ28.6	Φ28.6							——					——	
重量		kg	189	196	196	250	280	300	300	300	446	446	489	489	496	496	550	600	600	600	600	746	746
冷媒	名称		R410A														R410A					R410A	
	自带填充量	kg	8.4	8.6	8.7	11.1	11.1	15.6	15.6	15.6	8.6+11.1	8.7+11.1	8.4+15.6	8.4+15.6	8.6+15.6	8.7+15.6	11.1+15.6	15.6+15.6				8.6+11.1+15.6	8.7+11.1+15.6
运转范围	制冷	℃DB	-15 ~ 54 ℃DB														-15~54℃DB					-15~54℃DB	
	制热	℃DB	-25 ~ 27 ℃DB														-25~27℃DB					-25~27℃DB	
最小线路电流*6	MCA	A	16.1	18.0	20.1	24.4	26	34.8	39.6	43.6	40.2	44	46.1	59.7	61.6	63.7	68	69.6	78.4	83.2	87.2	85.7	87.6
最大熔丝电流*6	MFA	A	20	20	25	32	32	40	50	50	50	50	63	80	80	80	80	80	100	100	100	100	100

RUXYQ66BB: V01 - V04

室外机																						
型号			RUXYQ50BB	RUXYQ52BB	RUXYQ54BB	RUXYQ56BB	RUXYQ58BB	RUXYQ60BB	RUXYQ62BB	RUXYQ64BB	RUXYQ66BB	RUXYQ68BB	RUXYQ70BB	RUXYQ72BB	RUXYQ74BB	RUXYQ76BB	RUXYQ78BB	RUXYQ80BB	RUXYQ82BB	RUXYQ84BB	RUXYQ86BB	RUXYQ88BB
匹数		HP	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88
组合方式			RUXYQ8BB RUXYQ20BB RUXYQ22BB	RUXYQ10BB RUXYQ20BB RUXYQ22BB	RUXYQ10BB RUXYQ22BB RUXYQ22BB	RUXYQ12BB RUXYQ22BB RUXYQ22BB	RUXYQ14BB RUXYQ22BB RUXYQ22BB	RUXYQ20BB RUXYQ20BB RUXYQ20BB	RUXYQ18BB RUXYQ22BB RUXYQ22BB	RUXYQ20BB RUXYQ22BB RUXYQ22BB	RUXYQ22BB RUXYQ22BB RUXYQ22BB	RUXYQ12BB RUXYQ12BB RUXYQ22BB RUXYQ22BB	RUXYQ12BB RUXYQ14BB RUXYQ22BB RUXYQ22BB	RUXYQ12BB RUXYQ16BB RUXYQ22BB RUXYQ22BB	RUXYQ12BB RUXYQ18BB RUXYQ22BB RUXYQ22BB	RUXYQ10BB RUXYQ22BB RUXYQ22BB RUXYQ22BB	RUXYQ12BB RUXYQ22BB RUXYQ22BB RUXYQ22BB	RUXYQ14BB RUXYQ22BB RUXYQ22BB RUXYQ22BB	RUXYQ16BB RUXYQ22BB RUXYQ22BB RUXYQ22BB	RUXYQ18BB RUXYQ22BB RUXYQ22BB RUXYQ22BB	RUXYQ20BB RUXYQ22BB RUXYQ22BB RUXYQ22BB	RUXYQ22BB RUXYQ22BB RUXYQ22BB RUXYQ22BB
电源			三相 380V 50Hz														三相 380V 50Hz						
额定制冷容量*1		kW	140.4	146.0	151.0	156.5	163.0	169.5	173.4	179.5	184.5	190.0	196.5	201.5	206.9	212.5	218.0	224.5	229.5	234.9	241.0	246.0
额定制热容量*2		kW	157.0	163.5	169.5	175.5	183.0	189.0	194.5	201.0	207.0	213.0	220.5	225.5	232.0	238.5	244.5	252.0	257.0	263.5	270.0	276.0
额定耗电量	制冷	kW	36.7	38.7	41.3	42.7	44.5	44.1	47.4	49.3	51.9	50.8	52.6	54.5	55.5	58.6	60.0	61.8	63.7	64.7	66.6	69.2
	制热	kW	37.5	39.0	40.7	42.5	44.5	45.9	47.3	49.3	51.0	51.0	53.0	54.6	55.8	57.7	59.5	61.5	63.1	64.3	66.3	68.0
风扇风量		m³/min	162+271+271	175+271+271	175+271+271	185+271+271	223+271+271	271+271+271	271+271+271	271+271+271	271+271+271	85+185+271+271	185+223+271+271	185+280+271+271	185+271+271+271	175+271+271+271	185+271+271+271	223+271+271+271	280+271+271+271	271+271+271+271	271+271+271+271	271+271+271+271
机器尺寸(H×W×D)		mm	1657×930×765 + 1657×1240×765 + 1657×1240×765				1657×1240×765 + 1657×1240×765 + 1657×1240×765					1657×930×765 + 1657×930×765 + 657×1240×765 + 657×1240×765	1657×930×765 + 1657×1240×765 + 1657×1240×765 + 1657×1240×765					1657×1240×765 + 1657×1240×765 + 1657×1240×765 + 1657×1240×765				
运转音*3	正面运转音	dB(A)	63			64				65	66	65			66		65	66				
	四面运转音	dB(A)	66			67				68	69	68			69		68	69				
夜间静音运转		dB(A)	45									46										
室内/外机配管连接口管径*4	液管	mm	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ19.1	Φ22.2	Φ22.2	Φ22.2	Φ22.2	Φ22.2
	气管	mm	Φ38.1	Φ38.1	Φ38.1	Φ41.3	Φ41.3	Φ41.3	Φ41.3	Φ41.3	Φ41.3	Φ44.5	Φ44.5	Φ44.5	Φ44.5	Φ44.5	Φ44.5	Φ44.5	Φ44.5	Φ44.5	Φ44.5	Φ44.5
室外机配管连接口管径*4	液管	mm	——									——										
	气管	mm	——									——										
重量		kg	789	796	796	796	850	900	900	900	900	992	1046	1076	1096	1096	1096	1150	1180	1200	1200	1200
冷媒	名称		R410A									R410A										
	自带填充量	kg	8.4+15.6+15.6	8.6+15.6+15.6	8.6+15.6+15.6	8.7+15.6+15.6	11.1+15.6+15.6	15.6+15.6+15.6				8.7+8.7+15.6+15.6	8.7+11.1+15.6+15.6		8.7+15.6+15.6+15.6	8.6+15.6+15.6+15.6	8.7+15.6+15.6+15.6	11.1+15.6+15.6+15.6		15.6+15.6+15.6+15.6		
运转范围	制冷	℃DB	-15~54℃DB									-15~54℃DB										
	制热	℃DB	-25~27℃DB									-25~27℃DB										
最小线路电流*6	MCA	A	89.7	101.2	105.2	107.3	111.6	113.2	122	126.8	130.8	127.4	131.7	133.3	142.1	148.8	150.9	155.2	156.8	165.6	170.4	174.4
最大熔丝电流*6	MFA	A	100	125	125	125	125	125	140	140	160	160	160	160	160	200	200	200	200	200	200	200

备注:
*1 室内温度: 27℃DB, 19℃WB / 室外温度: 35℃DB
*2 室内温度: 20℃DB / 室外温度: 7℃DB, 6℃WB
*3 四面运转音是按照 GB18837 要求进行四点测试得到的值，正面运转音为公司内部测量值，在实际安装状态下，因为周围噪音及反射的原因，一般高于样本登载值
*4 室内/外机配管连接口管径与室外机配管连接口管径不同时 (☆标识处)，要进行变径处理，以室内/外机配管连接口管径为主
*5 在-15 ~ -5℃DB进行制冷运转时，需满足以下条件
a. 室内机连接率不超过100%
b.根据室内/室外温度的不同，必须开启的室内机最小额定制冷量如右表所示
*6 根据MCA来选择电气配管线规格，根据MFA来选择熔丝或空气开关

室外干球温度 A	室内湿球温度 B	最小开启室内机的额定制冷量 C
-15° CDB≤A< -5° CDB	17° CWB≤B	C > 2.2kW
	14° CWB≤B< 17° CWB	C > 2.8kW
	11° CWB≤B< 14° CWB	C > 3.6kW
	8° CWB≤B< 11° CWB	C > 5.6kW

Appendix 5.4 Detailed Calculation of Fixed Source Noise Impact Assessment

Source ID	Sources	Description	Coordinates		Daytime SWL, dB(A)	Nighttime SWL, dB(A)
			X	Y		
C01	China Light Power	Chiller	836616.6	833421.1	93.0	83.0
C02	China Light Power	Chiller	836618.9	833411.8	93.0	83.0
C03	China Light Power	Chiller	836620.3	833399.6	93.0	83.0
C04	China Light Power	Chiller	836655.8	833421.3	98.0	88.0
C05	China Light Power	Chiller	836656.7	833419.0	98.0	88.0
P02	Tai Po Kau Sewage Pumping Station	Pumping Station	836297.7	833797.1	99.5	89.5
P03	Ha Wong Yi Au Fresh Water Pumping Station	Pumping Station	836248.7	833800.5	99.5	89.5
V01	China Light Power	VRV	836608.3	833423.9	71.0	71.0
V02	China Light Power	VRV	836609.1	833421.8	71.0	71.0
V03	China Light Power	VRV	836610.0	833419.6	71.0	71.0
V04	China Light Power	VRV	836610.8	833417.4	71.0	71.0
V05	China Light Power	VRV	836611.6	833415.3	71.0	71.0
V06	China Light Power	VRV	836612.5	833413.1	71.0	71.0
V07	China Light Power	VRV	836614.5	833398.8	71.0	71.0
V08	China Light Power	VRV	836615.3	833396.6	71.0	71.0
V09	China Light Power	VRV	836616.1	833394.4	71.0	71.0
V10	China Light Power	VRV	836617.0	833392.3	71.0	71.0
V11	China Light Power	VRV	836617.8	833390.1	71.0	71.0
V12	China Light Power	VRV	836618.7	833388.0	71.0	71.0

Detailed Calculations for Fixed Noise Impact Assessment for the Proposed Development at Wong Yi Au, Tai Po

Noise Sensitive Receiver (NSR)	NSR (x)	NSR (y)	Noise Source (NS)	Description	Noise Source (x)	Noise Source (y)	Daytime SWL, dB(A)	Nighttime SWL, dB(A)	Horizontal Distance from Noise Source to Receiver(m) (NSR)	Distance Correction, dB(A)	Barrier Correction, dB(A)	Tonality Correction, dB(A)	Façade Correction, dB(A)	Daytime SPL, dB(A), $L_{eq\ (30\ min)}$	Nighttime SPL, dB(A), $L_{eq\ (30\ min)}$
F1-11	836440.6	833570.4	C01	China Light Power	836616.6	833421.1	93.0	83.0	230.8	-55.3	0	6	3	46.7	36.7
ASR	**B**		C02	China Light Power	836618.9	833411.8	93.0	83.0	238.6	-55.6	0	6	3	46.4	36.4
Day Time ANL	**65**		C03	China Light Power	836620.3	833399.6	93.0	83.0	248.0	-55.9	0	6	3	46.1	36.1
NightTime ANL	**55**		C04	China Light Power	836655.8	833421.3	98.0	88.0	261.8	-56.4	0	6	3	50.6	40.6
			C05	China Light Power	836656.7	833419.0	98.0	88.0	263.8	-56.4	0	6	3	50.6	40.6
			P02	Tai Po Kau Sewage Pumping Station	836297.7	833797.1	99.5	89.5	268.0	-56.6	0	6	3	51.9	41.9
			P03	Ha Wong Yi Au Fresh Water Pumping Station	836248.7	833800.5	99.5	89.5	299.6	-57.5	0	6	3	51.0	41.0
			V01	China Light Power	836608.3	833423.9	71.0	71.0	222.7	-55.0	0	6	3	25.0	25.0
			V02	China Light Power	836609.1	833421.8	71.0	71.0	224.7	-55.0	0	6	3	25.0	25.0
			V03	China Light Power	836610.0	833419.6	71.0	71.0	226.8	-55.1	0	6	3	24.9	24.9
			V04	China Light Power	836610.8	833417.4	71.0	71.0	228.8	-55.2	0	6	3	24.8	24.8
			V05	China Light Power	836611.6	833415.3	71.0	71.0	230.9	-55.3	0	6	3	24.7	24.7
			V06	China Light Power	836612.5	833413.1	71.0	71.0	233.0	-55.3	0	6	3	24.7	24.7
			V07	China Light Power	836614.5	833398.8	71.0	71.0	244.3	-55.8	0	6	3	24.2	24.2
			V08	China Light Power	836615.3	833396.6	71.0	71.0	246.4	-55.8	0	6	3	24.2	24.2
			V09	China Light Power	836616.1	833394.4	71.0	71.0	248.6	-55.9	0	6	3	24.1	24.1
			V10	China Light Power	836617.0	833392.3	71.0	71.0	250.7	-56.0	0	6	3	24.0	24.0
			V11	China Light Power	836617.8	833390.1	71.0	71.0	252.8	-56.1	0	6	3	23.9	23.9
			V12	China Light Power	836618.7	833388.0	71.0	71.0	254.9	-56.1	0	6	3	23.9	23.9
													Total	**58.1**	**48.3**

Detailed Calculations for Fixed Noise Impact Assessment for the Proposed Development at Wong Yi Au, Tai Po

Noise Sensitive Receiver (NSR)	NSR (x)	NSR (y)	Noise Source (NS)	Description	Noise Source (x)	Noise Source (y)	Daytime SWL, dB(A)	Nighttime SWL, dB(A)	Horizontal Distance from Noise Source to Receiver(m) (NSR)	Distance Correction, dB(A)	Barrier Correction, dB(A)	Tonality Correction, dB(A)	Façade Correction, dB(A)	Daytime SPL, dB(A), $L_{eq\ (30\ min)}$	Nighttime SPL, dB(A), $L_{eq\ (30\ min)}$
F1-12	836446.7	833571.4	C01	China Light Power	836616.6	833421.1	93.0	83.0	226.8	-55.1	0	6	3	46.9	36.9
ASR	**B**		C02	China Light Power	836618.9	833411.8	93.0	83.0	234.8	-55.4	0	6	3	46.6	36.6
Day Time ANL	**65**		C03	China Light Power	836620.3	833399.6	93.0	83.0	244.3	-55.8	0	6	3	46.2	36.2
NightTime ANL	**55**		C04	China Light Power	836655.8	833421.3	98.0	88.0	257.4	-56.2	0	6	3	50.8	40.8
			C05	China Light Power	836656.7	833419.0	98.0	88.0	259.4	-56.3	0	6	3	50.7	40.7
			P02	Tai Po Kau Sewage Pumping Station	836297.7	833797.1	99.5	89.5	270.4	-56.6	0	6	3	51.9	41.9
			P03	Ha Wong Yi Au Fresh Water Pumping Station	836248.7	833800.5	99.5	89.5	302.8	-57.6	0	6	3	0.0	0.0
			V01	China Light Power	836608.3	833423.9	71.0	71.0	218.8	-54.8	0	6	3	25.2	25.2
			V02	China Light Power	836609.1	833421.8	71.0	71.0	220.8	-54.9	0	6	3	25.1	25.1
			V03	China Light Power	836610.0	833419.6	71.0	71.0	222.9	-55.0	0	6	3	25.0	25.0
			V04	China Light Power	836610.8	833417.4	71.0	71.0	225.0	-55.0	0	6	3	25.0	25.0
			V05	China Light Power	836611.6	833415.3	71.0	71.0	227.1	-55.1	0	6	3	24.9	24.9
			V06	China Light Power	836612.5	833413.1	71.0	71.0	229.2	-55.2	0	6	3	24.8	24.8
			V07	China Light Power	836614.5	833398.8	71.0	71.0	240.7	-55.6	0	6	3	24.4	24.4
			V08	China Light Power	836615.3	833396.6	71.0	71.0	242.8	-55.7	0	6	3	24.3	24.3
			V09	China Light Power	836616.1	833394.4	71.0	71.0	245.0	-55.8	0	6	3	24.2	24.2
			V10	China Light Power	836617.0	833392.3	71.0	71.0	247.1	-55.9	0	6	3	24.1	24.1
			V11	China Light Power	836617.8	833390.1	71.0	71.0	249.3	-55.9	0	6	3	24.1	24.1
			V12	China Light Power	836618.7	833388.0	71.0	71.0	251.4	-56.0	0	6	3	24.0	24.0
													Total	**57.3**	**47.5**

Appendix 5.5 Correspondence with WSD and DSD regarding Pumping Station

DSD

Mike Kwan

From: Mike Kwan
Sent: Monday, February 19, 2024 9:38 AM
To: ttyan@dsd.gov.hk
Cc: Calvin Chiu; ccchang@epd.gov.hk
Subject: Section 16 Planning Application for Proposed Development at Wong Yi Au, Tai Po – Request for Operation Information of the Tai Po Kau Sewage Pumping Station
Attachments: HOLF_comments_extract.pdf; Location Plan_Tai Po Kau Sewage Pumping Stations.pdf

Dear Ms. Yan,

We are the appointed environmental consultant to conduct environmental studies for the captioned project. The location plan of the Application Site with 300m noise impact study area is attached for your reference.

According to desktop review and site survey, Tai Po Kau Sewage Pumping Station is considered as a potential fixed noise source in the vicinity.

In order to address EPD's comment (see attached "HOLF_comments_extract.pdf") on the fixed noise impact assessment, it would be grateful if you could provide the following information as available for the study:

- Inventory of equipment (e.g. ventilation fan, deodorization unit, pump, transformer)
- The operation parameters of equipment:
  - Quantity (e.g. 4 nos + 2 nos standby)
  - Operating Hour or Schedule
  - Location (layout / room layout plan)
  - Particulars (e.g. catalogue, brand and model, power rating, sound emission data as available)
  - Acoustic / sound insulation measures adopted (e.g. acoustic silencers / noise enclosures)

The information will be used solely for this project. Due to tight timeline of the project, we would be much appreciated if you could provide the requested information by **01 March 2024**.

Should you have any questions, please do not hesitate to contact the undersigned or our Mr. Calvin Chiu at 3465 2811 (email: cchiu@ramboll.com).

Kind regards
Mike Kwan

Assistant Environmental Consultant

D +852 3465 2871
mikekwan@ramboll.com

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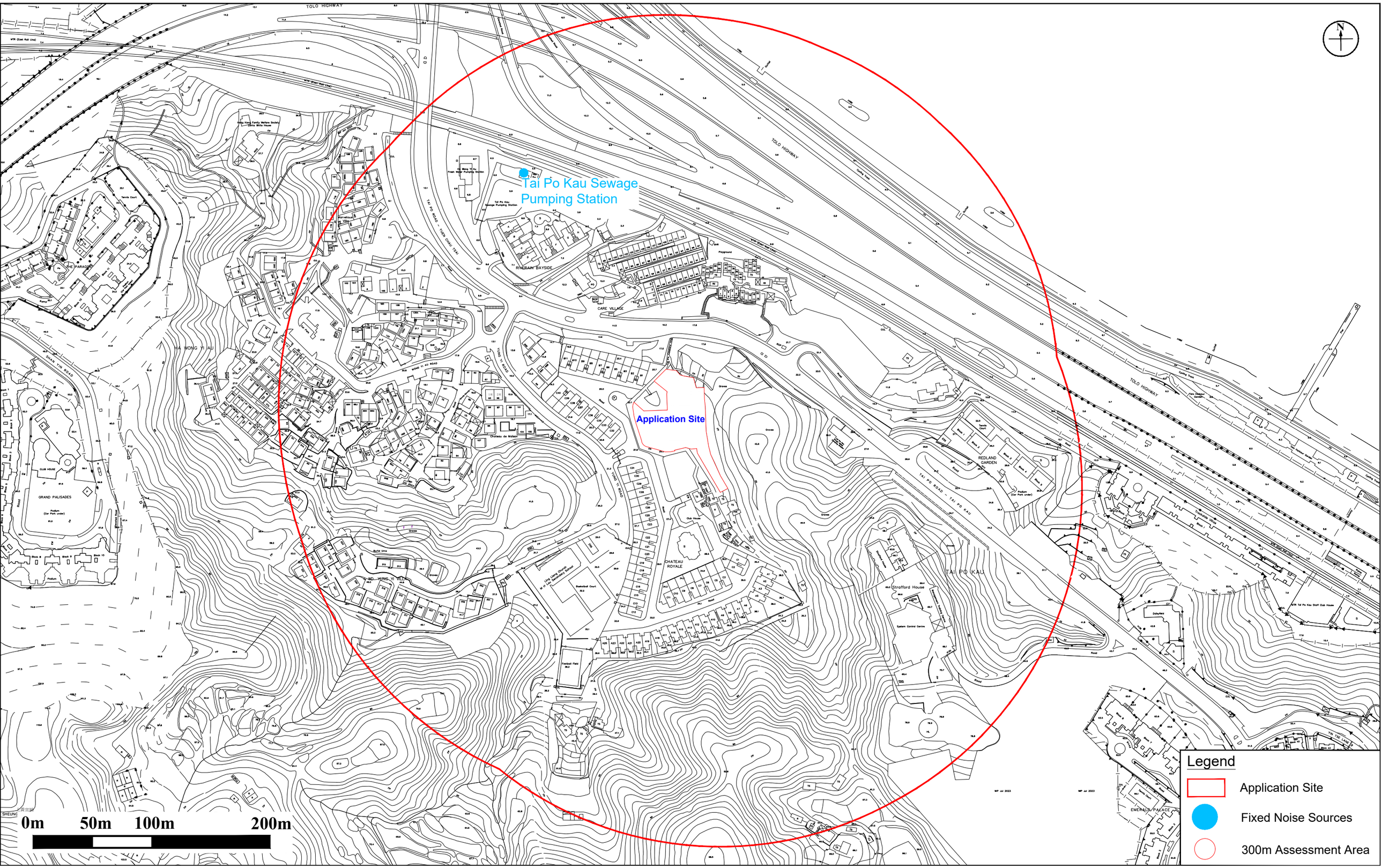

Tai Po Kau Sewage Pumping Station
Application Site
TOLO HIGHWAY
TAI PO ROAD – TAI PO KAU
TAI PO KAU
HA WONG YI AU
WO YUNG YI AU
RIVERAIN BAYSIDE
CARE VILLAGE
THE PARAGON
GRAND PALISADES
CHATEAU ROYALE
REDLAND GARDEN
Strafford House
EMERALD PALACE
0m
50m
100m
200m
Legend
Application Site
Fixed Noise Sources
300m Assessment Area

WSD

Mike Kwan

From: Mike Kwan
Sent: Friday, February 16, 2024 5:59 PM
To: emily_cy_lee@wsd.gov.hk
Cc: Calvin Chiu; ccchang@epd.gov.hk
Subject: Section 16 Planning Application for Proposed Development at Wong Yi Au, Tai Po – Request for Operation Information of Fresh Water Pumping Stations
Attachments: Location Plan_Fresh Water Pump Station.pdf; HOLF_comments_extract.pdf

Dear Ms. Lee,

We are the appointed environmental consultant to conduct environmental studies for the captioned project. The location plan of the Application Site with 300m noise impact study area is attached for your reference.

According to desktop review and site survey, Ha Wong Yi Au Fresh Water Pumping Station and Tai Po Kau Fresh Water Pumping Station are considered as a potential fixed noise source in the vicinity.

In order to address EPD's comment (see attached "HOLF_comments_extract.pdf") on the fixed noise impact assessment, it would be grateful if you could provide the following information as available for the study:

- Inventory of equipment (e.g. ventilation fan, pump, transformer)
- The operation parameters of equipment:
  - Quantity (e.g. 4 nos + 2 nos standby)
  - Operating Hour or Schedule
  - Location (layout / room layout plan)
  - Particulars (e.g. catalogue, brand and model, power rating, sound emission data as available)
  - Acoustic / sound insulation measures adopted (e.g. acoustic silencers / noise enclosures)

The information will be used solely for this project. Due to tight timeline of the project, we would be much appreciated if you could provide the requested information by **01 March 2024**.

Should you have any questions, please do not hesitate to contact the undersigned or our Mr. Calvin Chiu at 3465 2811 (email: cchiu@ramboll.com).

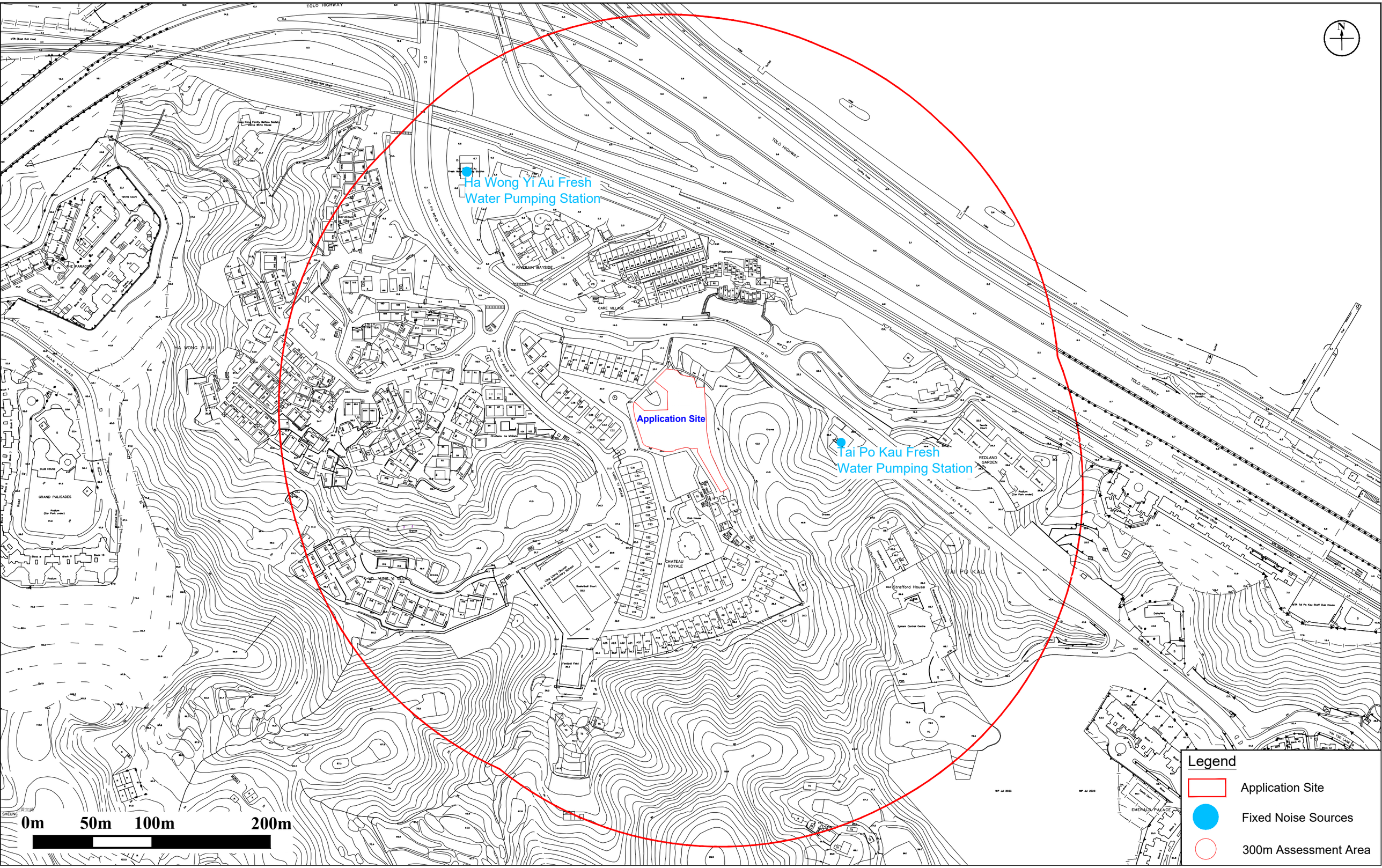
Kind regards
Mike Kwan

Assistant Environmental Consultant

D +852 3465 2871
mikekwan@ramboll.com

Ramboll
21st Floor
BEA Harbour View Centre
56 Gloucester Road
Wan Chai
Hong Kong
https://ramboll.com

Ramboll Hong Kong Limited


Ha Wong Yi Au Fresh
Water Pumping Station
Application Site
Tai Po Kau Fresh
Water Pumping Station
TOLO HIGHWAY
TAI PO ROAD - TAI PO KAU
HA WONG YI AU
WONG YI AU ROAD
TUNG YI ROAD
RIVERAIN BAYSIDE
CARE VILLAGE
THE PARAGON
GRAND PALISADES
CHATEAU ROYALE
REDLAND GARDEN
EMERALD PALACE
Strafford House
TAI PO KAU
N
0m
50m
100m
200m
Legend
Application Site
Fixed Noise Sources
300m Assessment Area

Mike Kwan

From: ttyan@dsd.gov.hk
Sent: Monday, February 19, 2024 10:01 AM
To: Mike Kwan
Cc: ccchang@epd.gov.hk; Calvin Chiu; kcyiu@dsd.gov.hk; cyng04@dsd.gov.hk
Subject: Re: [Internet]Section 16 Planning Application for Proposed Development at Wong Yi Au, Tai Po – Request for Operation Information of the Tai Po Kau Sewage Pumping Station
Attachments: HOLF_comments_extract.pdf; Location Plan_Tai Po Kau Sewage Pumping Stations.pdf

You don't often get email from ttyan@dsd.gov.hk. Learn why this is important

Dear Mike,

Please be informed that Tai Po Kau SPS is currently under upgrading works and targeted to be commissioned in 2024.
The existing arrangement might not be desirable for your proposed development.

Should you have any queries, please approach me.
Thank you very much.

Regards,
Hidy Yan
EME/ST1/1/1
Tel: 2684 1120 / 6827 0089

From: Mike Kwan <MIKEKWAN@ramboll.com>
To: "ttyan@dsd.gov.hk" <ttyan@dsd.gov.hk>
Cc: Calvin Chiu <cchiu@ramboll.com>, "ccchang@epd.gov.hk" <ccchang@epd.gov.hk>
Date: 19/02/2024 09:42
Subject: [Internet]Section 16 Planning Application for Proposed Development at Wong Yi Au, Tai Po – Request for Operation Information of the Tai Po Kau Sewage Pumping Station
Serial No.:

==========
This email was delivered via the Internet, which may not be trustworthy as it
You are advised not to click the URLs or open the attachment unless you know i

This email has been verified against its claimed domain and passed. The identi
email domain may be true, but it doesn't mean it is from the claimed sender ar
==========

Dear Ms. Yan,

We are the appointed environmental consultant to conduct environmental studies for the captioned project. The location plan of the Application Site with 300m noise impact study area is attached for your reference.

According to desktop review and site survey, Tai Po Kau Sewage Pumping Station is considered as a potential fixed noise source in the vicinity.

In order to address EPD's comment (see attached "HOLF_comments_extract.pdf") on the fixed noise impact assessment, it would be grateful if you could provide the following information as available for the study:

- Inventory of equipment (e.g. ventilation fan, deodorization unit, pump, transformer)
- The operation parameters of equipment:
    - Quantity (e.g. 4 nos + 2 nos standby)
    - Operating Hour or Schedule
    - Location (layout / room layout plan)
    - Particulars (e.g. catalogue, brand and model, power rating, sound emission data as available)
    - Acoustic / sound insulation measures adopted (e.g. acoustic silencers / noise enclosures)

The information will be used solely for this project. Due to tight timeline of the project, we would be much appreciated if you could provide the requested information by **01 March 2024**.

Should you have any questions, please do not hesitate to contact the undersigned or our Mr. Calvin Chiu at 3465 2811 (email: cchiu@ramboll.com).

Kind regards

Mike Kwan

Assistant Environmental Consultant

D +852 3465 2871

mikekwan@ramboll.com

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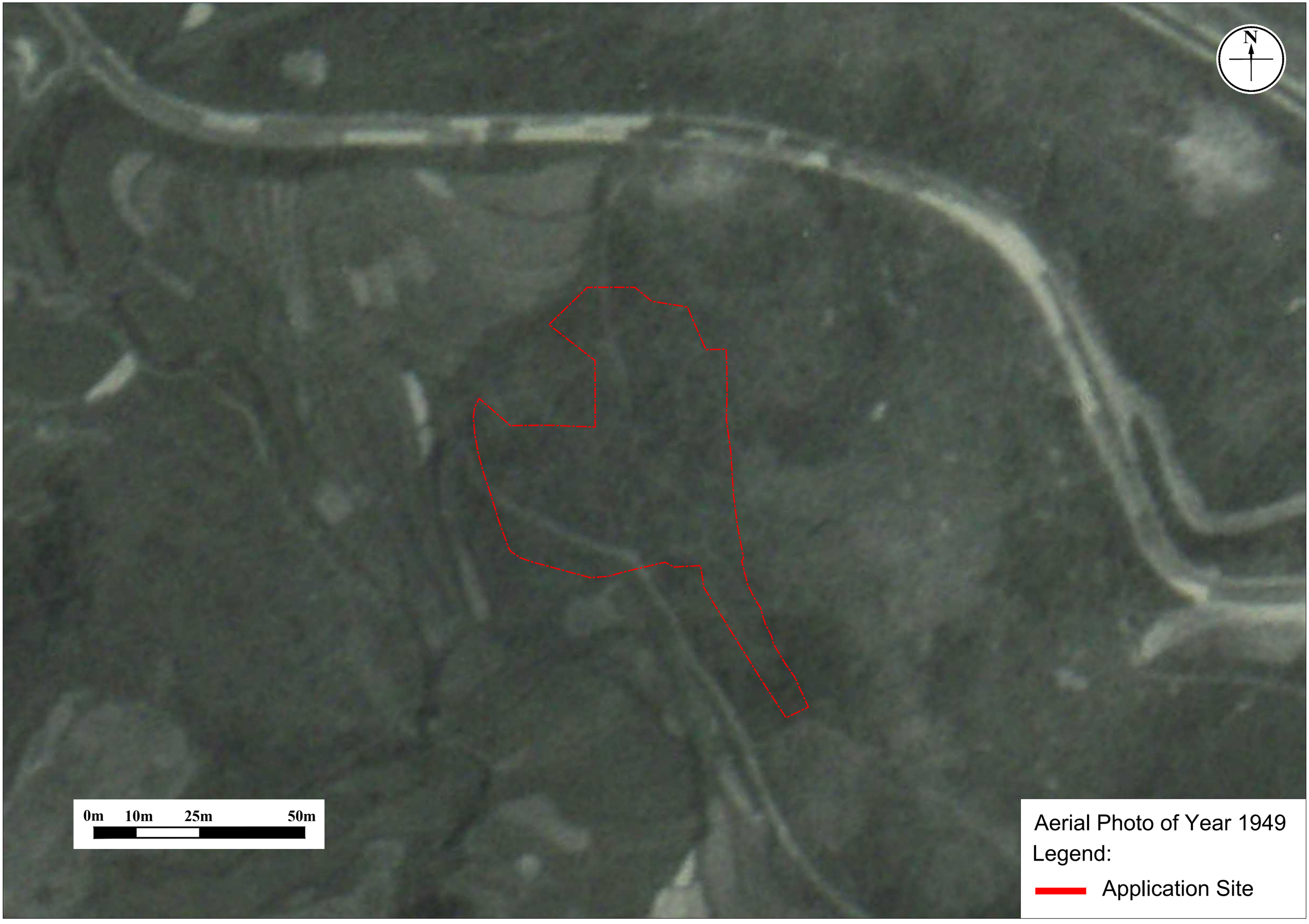
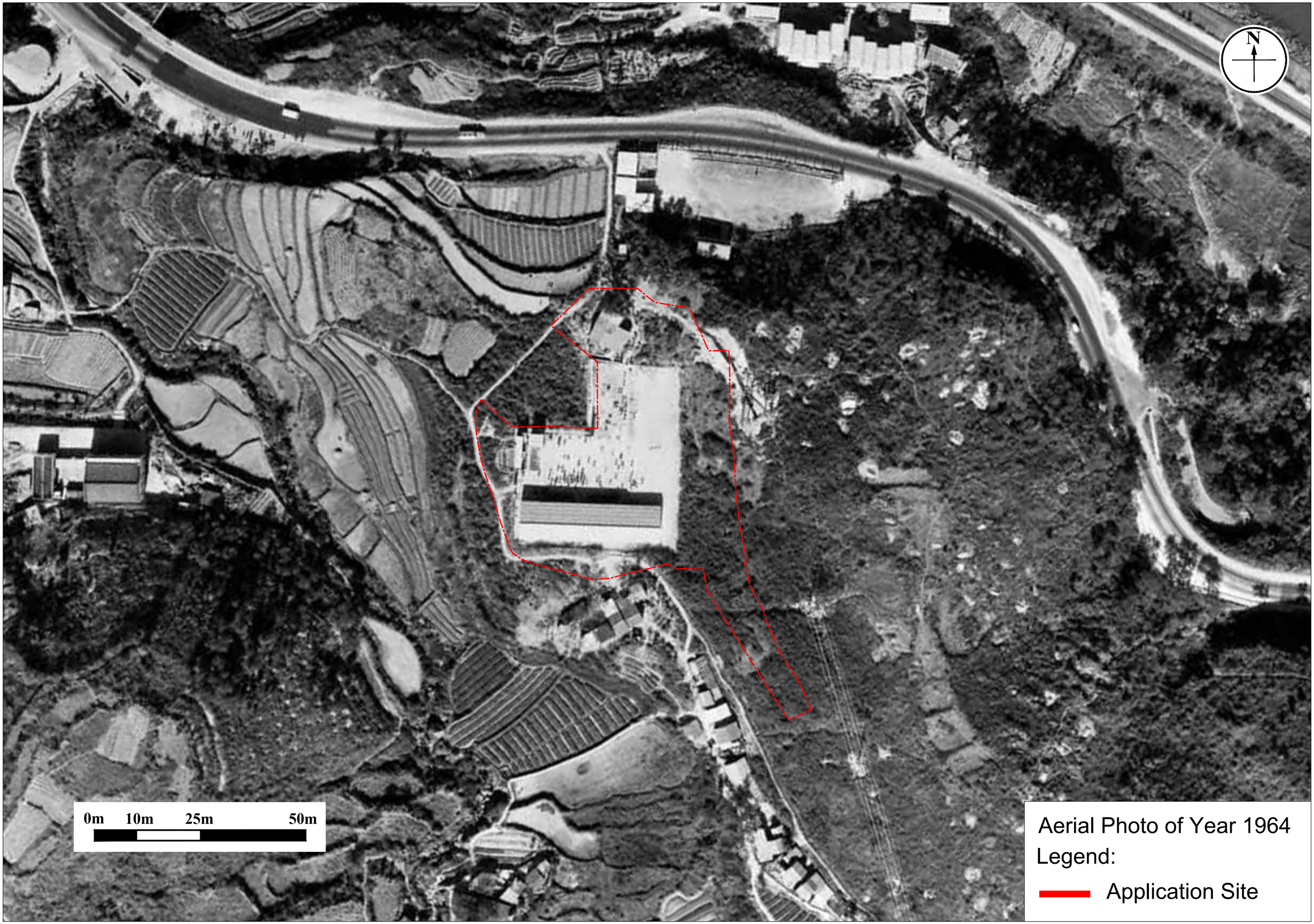
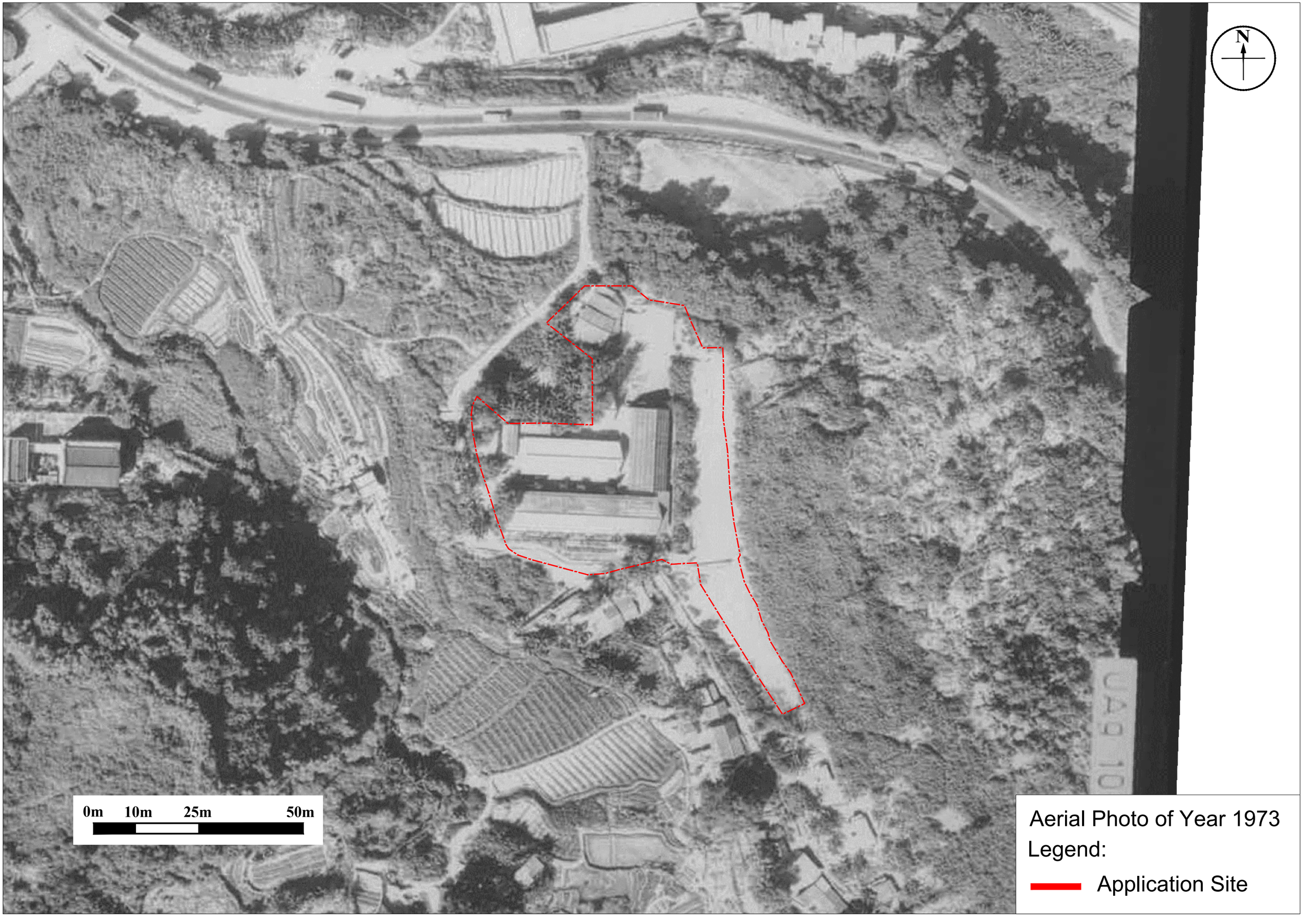
21st Floor
BEA Harbour View Centre
56 Gloucester Road
Wan Chai
Hong Kong
https://ramboll.com

Appendix 6.1 Historic Aerial Photos


N
0m 10m 25m 50m
Aerial Photo of Year 1949
Legend:
Application Site


N
0m 10m 25m 50m
Aerial Photo of Year 1964
Legend:
Application Site


N
0m 10m 25m 50m
Aerial Photo of Year 1973
Legend:
Application Site

N
0m 10m 25m 50m
Aerial Photo of Year 1998
Legend:
Application Site

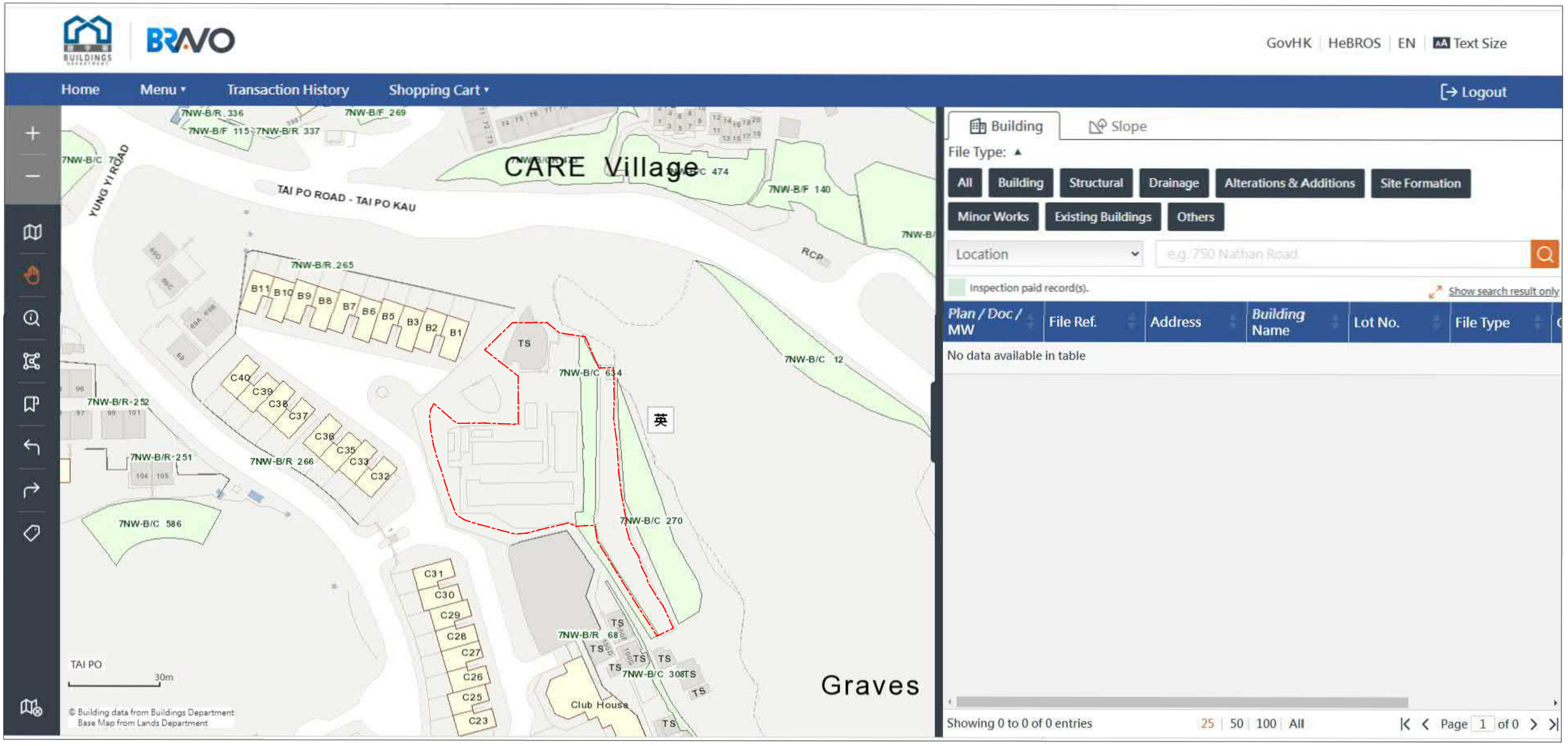
N
0m 10m 25m 50m
Aerial Photo of Year 2004
Legend:
Application Site

N
0m 10m 25m 50m
Aerial Photo of Year 2010
Legend:
Application Site

N
0m 10m 25m 50m
Aerial Photo of Year 2014
Legend:
Application Site

N
0m 10m 25m 50m
Aerial Photo of Year 2021
Legend:
Application Site

Appendix 6.2 BRAVO Record



Legend

Application Site

Appendix: 6.2

Title: BRAVO Record

Project: Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facilities (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization (FMO) Tai Po Primary School, Wong Yi Au, Tai Po

RAMBOLL

Drawn by:	MW
Checked by:	CC
Rev.:	1.0
Date:	Jan 2024

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Appendix 6.3 Walkover Checklist

Site Walkover Checklist

GENERAL SITE DETAILS

SITE OWNER/CLIENT _____

PROPERTY ADDRESS Former Fish Marketing Organization (FMO) Tai Po Primary School, Wong Yi Au, Tai Po

PERSON CONDUCTING THE QUESTIONNAIRE

NAME Mike Kwan

POSITION Assistant Environmental Consultant (Ramboll Hong Kong Limited)

AUTHORIZED OWNER/CLIENT REPRESENTATIVE (IF APPLICABLE)

NAME _____

POSITION _____

TELEPHONE _____

SITE ACTIVITIES

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. Obtain a flow schematic if possible.

Number of employees:	Full-time:	-
	Part-time:	-
	Temporary/Seasonal:	-
Maximum no. of people on site at any time:		-
Typical hours of operation:		-
Number of shifts:		-
Days per week:		-
Weeks per year:		-
Scheduled plant shut-down:		-

Detail the main sources of energy at the site:

Gas	~~Yes~~/No
Electricity	~~Yes~~/No
Coal	~~Yes~~/No
Oil	~~Yes~~/No
Other	~~Yes~~/No

SITE DESCRIPTION

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: Approximately 3,275m^2

What area of the site is covered by buildings (%): 25.9%

Please list all current and previous owners/occupiers if possible.
Previous Occupiers: N/A
Current Occupiers: Government

Is a site plan available? If yes, please attach. Yes/~~No~~ (Please refer to the attached site plan)

Are there any other parties on site as tenants or sub-tenants? ~~Yes~~/No

If yes, identify those parties:

Describe surrounding land use (residential, industrial, rural, etc.) and identify neighbouring facilities and types of industry.

North: Residential: Care Village
Traffic Road: Tai Po Road – Tai Po Kau

South: Residential: Chateau Royale
School: Ling Liang Church MH Lau Secondary School

East: WSD's facilities: Tai Po Kau Fresh Water Pumping Station

West: Residential: Chateau Royale

Site Walkover Checklist

Describe the topography of the area (flat terrain, rolling hills, mountains, by a large body of water, vegetation, etc.).

Generally flat with village house developments and low rise residential developments nearby. Large area of vegetation from southeast to southwest from the Application Site.

State the size and location of the nearest residential communities.

Care Village (village house development), Chateau Royale (low-rise residential development)

Are there any sensitive habitats nearby, such as nature reserves, parks, wetlands or sites of special scientific interest?

No

Questionnaire with Existing/Previous Site Owner or Occupier

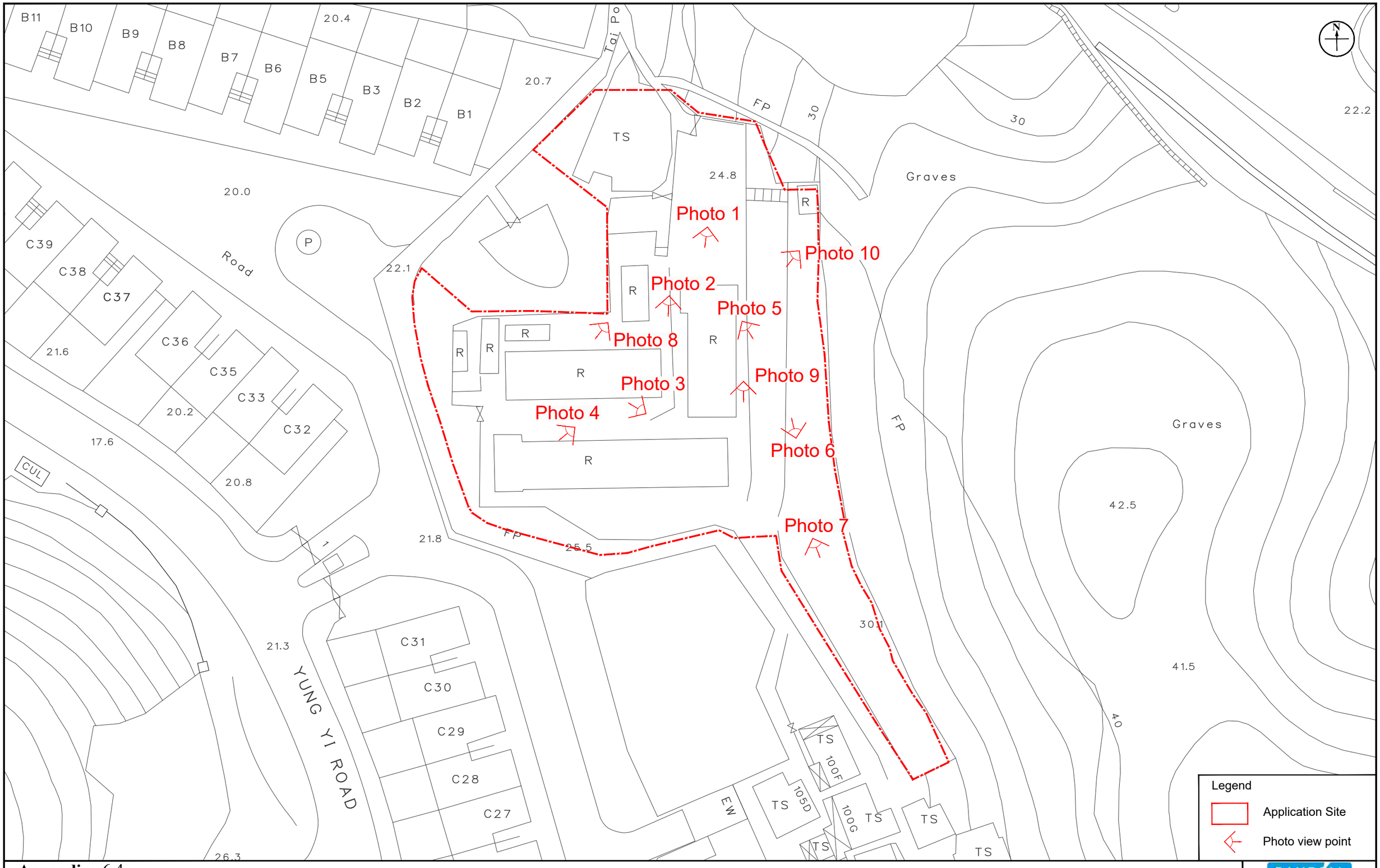
Ref.		Yes/No	Notes
1.	What are the main activities/operations at the above address?	-	Abandoned school site. Currently not in use.
2.	How long have you been occupying the site?	-	-
3.	Were you the first occupant on site? (If yes, what was the usage of the site prior to occupancy?)	-	-
4.	Prior to your occupancy, who occupied the site?	-	-
5.	What were the main activities/operations during their occupancy?	-	School use.
6.	Have there been any major changes in operations carried out at the site in the last 10 years?	No	The school was abandoned after 1998 till now.
7.	Have any polluting activities been carried out in the vicinity of the site in the past?	No	-
8.	To the best of your knowledge, has the site ever been used as a petrol filling station/car service garage?	No	-
9.	Are there any boreholes/wells or natural springs either on the site or in the surrounding area?	-	-
10	Do you have any registered hazardous installations as defined under relevant ordinances? (If yes, please provide details.)	-	-
11.	Are any chemicals used in your daily operations? (If yes, please provide details.)	No	-
	• Where do you store these chemicals?	-	-
12.	Material inventory lists, including quantities and locations available? (If yes, how often are these inventories updated?)	-	-
13.	Has the facility produced a separate hazardous substance inventory?	-	-
14.	Have there ever been any incidents or accidents (e.g. spills, fires, injuries, etc.) involving any of these materials? (If yes, please provide details.)	No	-

Ref.		Yes/No	Notes
15.	How are materials received (e.g. rail, truck, etc.) and stored on site (e.g. drums, tanks, carboys, bags, silos, cisterns, vaults and cylinders)?	-	-
16.	Do you have any underground storage tanks? (If yes, please provide details.)	No	-
	▪ How many underground storage tanks do you have on site?	-	-
	▪ What are the tanks constructed of?	-	-
	▪ What are the contents of these tanks?	-	-
	▪ Are the pipelines above or below ground?	-	-
	▪ If the pipelines are below ground, has any leak and integrity testing been performed?	-	-
	▪ Have there been any spills associated with these tanks?	-	-
17.	Are there any disused underground storage tanks?	No	-
18.	Do you have regular check for any spillage and monitoring of chemicals handled? (If yes, please provide details.)	-	-
19.	How are the wastes disposed of?	-	-
20.	Have you ever received any notices of violation of environmental regulations or received public complaints? (If yes, please provide details.)	-	-
21.	Have any spills occurred on site? (If yes, please provide details.)	-	-
	• When did the spill occur?	-	-
	• What were the substances spilled?	-	-
	• What was the quantity of material spilled?	-	-
	• Did you notify the relevant departments of the spill?	-	-
	• What were the actions taken to clean up the spill?	-	-
	• What were the areas affected?	-	-
22.	Do you have any records of major renovation of your site or rearrangement of underground utilities, pipe work/underground tanks (If yes, please provide details.)	-	-
23.	Have disused underground tanks been removed or otherwise secured (e.g. concrete, sand, etc.)?	-	-
24.	Are there any known contaminations on site? (If yes, please provide details.)	No	-
25.	Has the site ever been remediated? (If yes, please provide details.)	No	-

Observations

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	-	No chemical observed onsite.
2.	What are the conditions of the bund walls and floors?	-	-
3.	Are any surface water drains located near to drum storage and unloading areas?	-	No storage nor unloading area observed onsite.
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	-
5.	Is there a storage site for the wastes?	No	-
6.	Is there an on-site landfill?	No	-
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	-
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	-
9.	Are there any potential off-site sources of contamination?	No	-
10.	Does the site have any equipment which might contain polychlorinated biphenyls (PCBs)?	No	-
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	-
12.	Any noticeable odours during site walkover?	No	-
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	-

Appendix 6.4 Site Visit Photo Record



Appendix: 6.4

Title: Site Visit Photo Record

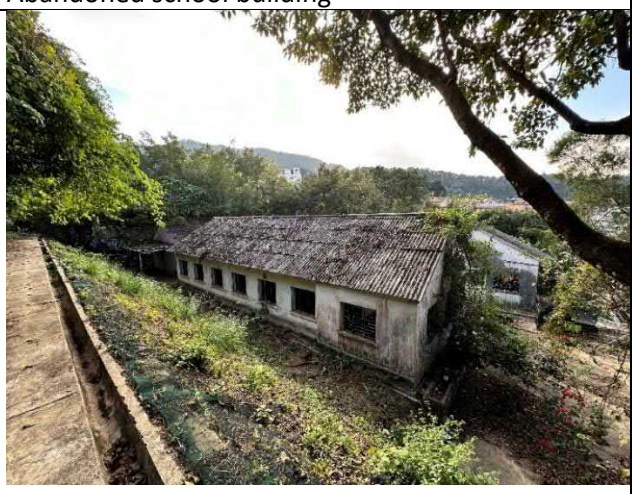
Project: Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facilities (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization (FMO) Tai Po Primary School, Wong Yi Au, Tai Po

RAMBOLL

Drawn by:	MW
Checked by:	CC
Rev.:	1.0
Date:	Jan 2024

Q:\Projects\KTAHOLF-EI00\05 Assessments\06 Waste\20231219_v1.0\Location Plan.dwg

Photo 1 Vacant land in front of the abandoned school	Photo 2 Abandoned school building
Photo 3 Vacant land inside the abandoned school building	Photo 4 Vacant land inside the abandoned school building
Photo 5 Slope within the site	Photo 6 Paved access road within the site

Photo 7 Paved area with plants	Photo 8 Abandoned school building
	
Photo Slope and vacant land within the site	Photo 10 Abandoned school building

Appendix 6.5 Correspondence with Various Departments

Ref.: KTAHOLF-EI00_0_0005L.23

14 December 2023

Planning Department,
District Planning Branch,
Metro District Planning Division,
Sha Tin, Tai Po and North District Planning Office,
13/F, Sha Tin Government Offices,
1 Sheung Wo Cha Road,
Sha Tin, New Territories

By Fax (2691 2806) & Post

Dear Sir / Madam,

Re: Permitted Social Welfare Facilities at the Former FMO Tai Po Primary School, Wong Yi Au, Tai Po
Enquiry for Land Contamination Information

We are conducting a Land Contamination Assessment Study for a site at Tai Po. As required by the "Practice Guide for Investigation and Remediation of Contaminated Land" published by the Environmental Protection Department of the Government of HKSAR (EPD), information pertaining to the change of land uses/past activities/incidents/accidents at the subject site are required as part of the vetting process.

To prepare the assessment, we need information on the previous and current potential land contaminating land uses and events that happened at the works areas. As such, we would like to request the following information on the works areas, if any and available, to facilitate our assessment:

1. Any change on the land use; and
2. Future land use.

A location plan for the project is enclosed for your reference. Due to the tight timeline of the project, we would be much appreciated if you could provide the requested information by **29 December 2023**.

Should you have any query, please do not hesitate to contact the undersigned at 3465 2811 (email: cchiu@ramboll.com). We sincerely seek your feedback on this matter.

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Calvin Chiu
Senior Manager
Enclosure: Location Plan of the Application Site

Q:\Projects\KTAHOLF-EI00\02 Project Management\02 Corr\KTAHOLF-EI00_0_0005L.23.docx

Ramboll Hong Kong Limited 英環香港有限公司
21/F, BEA Harbour View Centre, 56 Gloucester Road, Wan Chai, Hong Kong Tel: 852.3465 2888 Fax: 852.3465 2899
www.ramboll.com

規 劃 署

沙田、大埔及北區規劃處
香港新界沙田上禾輋路一號
沙田政府合署
十三樓 1301-1314 室

Planning Department

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

RECEIVED
2 DEC 2023
BY:----------

來函檔號 Your Reference KTAHOLF-E100_0_0005L23

本署檔號 Our Reference

電話號碼 Tel. No. : 2158 6381

傳真機號碼 Fax No. : 2691 2806

Ramboll Hong Kong Ltd.

Project: KTAHOLF-E100_0_0010L23

Maconomy no.:

Circulation:		Read	Action
CC		✓	
MK		✓	

Yes No

Document Scan

Ramboll Hong Kong Limited
21/F, BEA Harbour View Centre
56 Gloucester Road
Wan Chai, Hong Kong
(Attn.: Mr. Calvin CHIU)

By Post
(2 pages)

20 December 2023

Dear Sir,

Enquiry for Land Contamination Information
for Permitted Social Welfare Facilities at the Former FMO Tai Po Primary School
Wong Yi Au, Tai Po

I refer to your letter dated 14.12.2023 and received by this office on the same date seeking our advice on changes on the land use and future land use in relation to the captioned site.

The captioned site shown in the location plan enclosed in your letter largely falls within an area zoned "Government, Institution or Community" ("G/IC") and partly "Green Belt" ("GB") on the approved Tai Po Outline Zoning Plan (OZP) No. S/TP/30. The site generally falls on an area which was rezoned from "GB" to "G/IC" on the draft Tai Po OZP No. S/TP/7 which was exhibited on 11.11.1994. The Site was occupied by the Fish Marketing Organization (FMO) Tai Po Primary School site of which the registration of the school has been cancelled in 1997. The Site is currently occupied by abandoned school buildings and being one of the Vacant School Premises with long term "G/IC" uses to meet the needs of the local community reviewed under the Central Clearing House Mechanism by Planning Department. It is noted that the northern portion of the site is subject to a Short Term Tenancy (STT) No. 443. You may wish to consult Lands Department on the status of the STT.

Regarding your enquiry on future land use, the Site is zoned "G/IC" which is intended primarily for the provision of GIC facilities serving the needs of the local residents and/or a wider district, region or the territory; and to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institutional establishments.

Should you have any queries, please contact the undersigned.

Yours faithfully,

(Ms. Sandy WU)
for District Planning Office/
Sha Tin, Tai Po & North,
Planning Department

c.c.
DLO/TP, LandsD (Attn.: Ms. LEUNG Man Chi, Algie) (Fax: 2650 9896)

Internal
Site Record
KL/SW/sw

Ref.: KTAHOLF-EI00_0_0008L.23

14 December 2023

Environmental Protection Department
Environmental Compliance Division
Regional Office (North) Tai Po
10th floor, Sha Tin Government Office,
No.1 Sheung Wo Che Road,
Sha Tin, New Territories

By Fax (2685 1155) & Post

Dear Sir / Madam,

Re: Permitted Social Welfare Facilities at the Former FMO Tai Po Primary School, Wong Yi Au, Tai Po
Enquiry for Land Contamination Information

We are conducting a Land Contamination Assessment Study for a site at Tai Po. As required by the "Practice Guide for Investigation and Remediation of Contaminated Land" published by the Environmental Protection Department of the Government of HKSAR (EPD), information pertaining to the change of land uses/past activities/incidents/accidents at the subject site are required as part of the vetting process.

To prepare the assessment, we need information on the previous and current potential land contaminating land uses and events that happened at the works areas. A location plan for the project is enclosed for your reference. As such, we would like to request the following information on the works areas, if any and available, to facilitate our assessment:

1. Current and past registration of registered chemical waste producers;
2. Historical records of chemical spillage/ leakage;
3. Waste disposal records; and
4. Any submission relating to land contamination assessment.

A location plan for the project is enclosed for your reference. Due to the tight timeline of the project, we would be much appreciated if you could provide the requested information by **29 December 2023**.

Should you have any queries, please do not hesitate to contact the undersigned at 3465 2811 (email: cchiu@ramboll.com). We sincerely seek your feedback on this matter.

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Calvin Chiu
Senior Manager
Enclosure: Location Plan of the Application Site.

Q:\Projects\KTAHOLF-EI00\02 Project Management\02 Corr\KTAHOLF-EI00_0_0008L.23.docx

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21/F, BEA Harbour View Centre, 56 Gloucester Road, Wan Chai, Hong Kong Tel: 852.3465 2888 Fax: 852.3465 2899
www.ramboll.com

本署檔案
OUR REF:( ) in EP550/W2/4
來函檔案
YOUR REF: KTAHOLF-EI00_0_0008L.23
電　話
TEL. NO.: 2158 5801
圖文傳真
FAX NO.: 2650 6033
網　址
HOMEPAGE: http://www.epd.gov.hk/

Environmental Protection Department
Environmental Compliance Division
Regional Office (North)
10/F., Shatin Governmental Offices,
1 Sheung Wo Che Road,
Sha Tin, New Territories,
Hong Kong

環境保護署
環保法規管理科
區域辦事處 (北)
香港新界沙田
上禾輋路一號
沙田政府合署 10 樓

By Mail & Email: cchiu@ramboll.com

29 December 2023

Ramboll Hong Kong Limited
21/F., BEA Harbour View Centre, 56 Gloucester Road,
Wan Chai, Hong Kong
(Attn.: Mr Calvin CHIU)

Dear Mr. CHIU,

Re: Permitted Social Welfare Facilities at the Former FMO Tai Po Primary School
Wong Yi Au, Tai Po
Enquiry for Land Contamination Information

I refer to your letter dated 14 December 2023 on the captioned subject.

According to the records in this office, there are no record of chemical spillage accident and submission relating to land contamination assessment at the subject site in the past 3 years.

As regards registered Chemical Waste Producer(s) at the location concerned, we found 1 record of Chemical Waste Producers Registration, located in the Site near Chong San Road and a registry of chemical waste producers is available in the Territorial Control Office of this department. Please contact our Chief Environmental Protection Inspector (Territorial Control)5, Mr. TSANG Ching Kau at 2835 1017 for making an appointment to view the records.

While we have made a reasonable effort to ensure the completeness and accuracy of the information provided, you should comprehend that the information is provided as is and EPD is not responsible or liable for any claim, loss or damage resulting from the use of this information.

Yours sincerely,

(Maverick AU) / Regional Office (North)
for Director of Environmental Protection

c.c. TCO/EPD (Attn.: Mr. TSANG Ching Kau) Fax: 2305 0453

RAMBOLL

Ref.: KTAHOLF-EI00_0_0006L.23

14 December 2023

Fire Services Department / Management Group
9/F, Fire Services Headquarters Building
1 Hong Chong Road,
Tsim Sha Tsui East,
Kowloon,
Hong Kong

By Fax (2739 5879) & Post

Dear Sir / Madam,

Re: Permitted Social Welfare Facilities at the Former FMO Tai Po Primary School, Wong Yi Au, Tai Po
Enquiry for Land Contamination Information

We are conducting a Land Contamination Assessment Study for a site at Tai Po. As required by the "Practice Guide for Investigation and Remediation of Contaminated Land" published by the Environmental Protection Department of the Government of HKSAR (EPD), information pertaining to the change of land uses/past activities/incidents/accidents at the subject site are required as part of the vetting process.

To prepare the assessment, we need information on the previous and current potential land contaminating land uses and events that happened at the works areas. A location plan of the project is enclosed for your reference. As such, we would like to request the following information on the works areas, if any and available, to facilitate our assessment:

(1) Applied / possessed dangerous goods licence record; and
(2) Spill and incident record (including records of fire).

A location plan for the project is enclosed for your reference. Due to the tight timeline of the project, we would be much appreciated if you could provide the requested information by **29 December 2023**.

Should you have any queries, please do not hesitate to contact the undersigned at 3465 2811 (email: cchiu@ramboll.com). We sincerely seek your feedback on this matter.

Yours faithfully,
For and on behalf of
Ramboll Hong Kong Limited

Calvin Chiu
Senior Manager
Enclosure: Location Plan of the Application Site

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Ramboll Hong Kong Limited 英環香港有限公司
21/F, BEA Harbour View Centre, 56 Gloucester Road, Wan Chai, Hong Kong Tel: 852.3465 2888 Fax: 852.3465 2899
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香港九龍尖沙咀東部康莊道 1 號
消防處總部大廈

FIRE SERVICES DEPARTMENT
FIRE SERVICES HEADQUARTERS BUILDING,
No.1 Hong Chong Road,
Tsim Sha Tsui East, Kowloon,
Hong Kong.

RECEIVED
29 JAN 2024
BY:

本處檔號 **OUR REF.** : (85) in FSD GR 6-5/4 R Pt. 51
來函檔號 **YOUR REF.** : KTAHOLF-EI00_0_0005L.23
電子郵件 **E-mail** : hkfsdenq@hkfsd.gov.hk
圖文傳真 **FAX NO.** : 2988 1196
電 話 **TEL NO.** : 2733 7570

23 January 2024

Ramboll Hong Kong Limited
21/F, BEA Harbour View Centre,
56 Gloucester Road,
Wanchai, Hong Kong.
(Attn: Ms. Miko WAN, Assistant Environment Consultant)

Dear Ms. WAN,

Land Contamination Assessment Study
Redevelopment of the Former FMO Tai Po Primary School, Wong Yi Au, Tai Po
Request for Information of Dangerous Goods & Incident Records

I refer to your email of 2.1.2024 regarding the captioned request and reply below in response to your questions:-

Please be advised that neither records of dangerous goods license, fire incidents nor incidents of spillage / leakage of dangerous goods were found in connection with the given conditions of your request at the subject location.

If you have further questions, please feel free to contact the undersigned.

Yours sincerely,

(LAI Kin-man)
for Director of Fire Services

Ramboll Hong Kong
Project: KTAHOLF-EI00_0_0014L.24
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Appendix 6

Drainage and Sewerage Impact Assessment

Prepared for

Home of Loving Faithfulness

Prepared by

Ramboll Hong Kong Limited

PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO

DRAINAGE AND SEWERAGE IMPACT ASSESSMENT

Date	**February 2024**
Prepared by	**Miko Wan** **Assistant Environmental Consultant**
Signed	
Approved by	**Calvin Chiu** **Senior Manager**
Signed	
Project Reference	**KTAHOLF-EI00**
Document No.	**R9281_v1.1**

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Appendix 1.1 Master Layout Plan (MLP)
Appendix 2.1 Detailed Drainage Impact Assessment Calculations
Appendix 2.2 Topographic Survey
Appendix 3.1 Detailed Sewerage Impact Assessment Calculation

1. INTRODUCTION

1.1 Project Background

1.1.1 A social welfare facility (the Proposed Development) has been proposed at the former Fish Marketing Organisation (FMO) Tai Po Primary School, Wong Yi Au, Tai Po (the Application Site). Most of the Application Site is currently zoned as "Government, Institution or Community" (G/IC) with small portion area falling within "Green Belt" (GB) zone under the Approved Tai Po Outline Zoning Plan (OZP) No. S/TP/30.

1.1.2 The Applicant intends to apply for proposed minor relaxation of building height restriction for residential care homes for persons with disabilities.

1.1.3 Ramboll Hong Kong Limited is commissioned by the Applicant to conduct this Drainage and Sewerage Impact Assessment (DSIA) based on the Proposed Development. The design parameters and other technical information are provided by the project architect (AGC Design Ltd).

1.2 Application Site and its Environs

1.2.1 The Application Site is approximately 3,275m^2. It is located at Tai Po Road – Tai Po Kau. To the immediate west of the Application Site is Chateau Royale. To the north on opposite side of Tai Po Road – Tai Po Kau is Care Village. Tolo Highway is situated to its further north. Some other residential uses are scattered mainly on east, north and west sides. The area is characterised by low-rise residential developments.

1.2.2 The Application Site was previously occupied by Fish Marketing Organization (FMO) Tai Po Primary School and it is currently vacant. The location of the Application Site and its surrounding environs are shown in **Figure 1.1**.

1.3 Proposed Development

1.3.1 The Proposed Development is a residential care home for persons with disabilities, mainly consisting of dormitories and other ancillary facilities. The Proposed Development consists of 3 storeys (G/F to 2/F, no basement). There are altogether 60 bedspaces provided. It is estimated that there would be maximum of 50 workers. There would be a hydrotherapy pool with capacity of about 10,200 litres. A chapel is also proposed at the northern portion of the Application Site.

1.3.2 The tentative completion year is 2026.

1.3.3 The MLP of the Proposed Development is included in **Appendix 1.1.**

2. DRAINAGE IMPACT ASSESSMENT

2.1 Appraisal of Drainage Impact

2.1.1 The Application Site is served by existing public drainage system. There is a Ø300mm drainage pipe (SWD1012467) at immediate north along Tai Po Road – Tai Po Kau to receive runoff from the Application Site. According to the existing flow regime (see topographic survey in **Appendix 2.2**), the surface runoff would flow from south to north and collected by the public drainage system along Tai Po Road -Tai Po Kau (**Figure 2.3**). Based on the site visit conducted on 21 Dec 2023, the Application Site was approximately 81% paved. **Figure 2.1** shows the site photo record.

2.1.2 The estimated surface runoff under the existing and future conditions of the Application Site is shown in **Appendix 2.1**. As advised by the project landscape designer, more than 20% greenery coverage would be provided for the Proposed Development. The peak 1 in 50-year runoff from the site is expected to decrease from 0.169m^3/s to approximately 0.167m^3/s. In other words, there will be a reduction of surface runoff when compared with the existing condition due to increased greenery. The surface runoff generated from the Application Site will be collected and connected to the aforementioned drainage pipe tentatively so that there is no change of flow regime.

2.1.3 Tentatively, peripheral channels within the Application Site are proposed and will be connected to the existing dia. 300mm drainage pipe to the north of the site.

2.1.4 As the total paved area and in turn the surface runoff is expected to decrease after development, it is anticipated that there is no adverse impact on the existing drainage pipe receiving runoff from the site. **Figure 2.2** shows the proposed stormwater discharge connection. The proposed drainage pipes would be made of polyethylene.

2.1.5 It is expected that the Proposed Development (with reduced surface runoff and same flow regime) would not result in worsened drainage impact. Drainage submission including assessment, if necessary, will be submitted in detailed design stage.

2.2 Temporary Drainage Impact and Mitigation Measures During Construction Stage

2.2.1 During the construction period, sediments and building debris may be mixed with the surface runoff and block the entering location of existing stormwater drains.

2.2.2 For the permanent post-construction case, the surface channels within the subject site may be blocked by debris or illegal dumping. This could lead to flooding of the local area in the development site. The owner should take up the routine maintenance of surface channels and underground drainage pipes within the estate. Desilting the terminal manholes should also be carried out routinely.

2.2.3 The following summarizes the rating of potential impacts and mitigation measures.

Table 2.1 Potential Drainage Impacts and Mitigation Measures

Potential Impacts	Description	Rating of Impacts (H=High, M=Medium, L=Low)	Proposed Mitigation Measures
Flooding within development site and adjacent areas	Flooding may occur during severe rainstorm.	L	- Formation levels shall have adequate gradients for gravitational discharge runoff. - Regular inspection of drainage facilities e.g.: U-channels, catchpits, underground drainage pipes and manholes.
Obstruction of sediment and debris during the construction period	Generating the sedimentation materials during the construction period and/or debris wash-off from stockpiled materials which may cause obstruction to the downstream drainage system.	M	- Regular inspection of drainage system. - Catchpits with desilting traps shall be constructed in the drainage system.
Obstruction of sediments and debris post-construction and during operation	Blockage of U-channels within the subject site due to runoff debris and illegal dumping.	M	- Routine maintenance of the drainage system. - Desilting of the drainage facilities, e.g.: surface channels, underground drainage pipes and manholes routinely. - Petrol interceptors and catchpits should be provided in the drainage system. - Petrol interceptors will be located within the lot and maintained by the lot owners.

Mitigation Measures

Sediment deposition during the construction period

2.2.4 Blockage of U-channels within the subject site due to runoff debris and illegal dumping is a common problem during operation and post-construction. Routine maintenance of the drainage system and desilting the drainage facilities, such as surface channels, underground drainage pipes and manholes, frequently, is recommended. Petrol interceptors and catchpits should be provided in the drainage system to ensure that the drainage facilities function properly without obstruction especially in the wet season.

Sediment deposition post-construction and during operation

2.2.5 When the proposed pipes are under construction, the flow direction of the surface runoff follows the natural drain path or the temporary surface channels from the site formation drainage plan. All of the surface runoffs will pass through catchpits and terminal manholes with desilting traps where the sediment is screened before being discharged into the existing DSD drainage network system. Routine inspection of existing and temporary drainage works is recommended to be carried out during the construction period to ensure that the drainage facilities function properly without obstruction especially during the wet season.

3. SEWERAGE IMPACT ASSESSMENT

3.1 Scope of Work

3.1.1 The aim of this SIA is to assess whether the capacity of the existing sewerage network serving the Application Site is sufficient to cope with the sewage flow from the proposed development. Drainage Record Plans from Drainage Services Department (DSD) were obtained for the purposes of this SIA.

3.2 Assessment Criteria and Methodology

3.2.1 Environmental Protection Department's (EPD's) Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning, Version 1 (GESF) has been referred to for the purposes of estimating the quantity of the sewage generated from the proposed development and the existing catchment area. Sewage flow parameters and peaking factors in this document have been adopted for this SIA.

3.2.2 Based on the building types in the area, the following unit flow factors are used in the SIA calculation:

- Residents: 0.27 m^3/person/day (R2)
- Residents: 0.37 m^3/person/day (R3)
- Institutional and Special Class: 0.19 m^3/person/day
- G/IC Staff: 0.28 m^3/day (J11 – Community, Social & Personal Services)
- Student: 0.04 m^3/day (School Student)
- F&B employee: 1.58 m^3/day (J10 Restaurants & Hotels)
- Office employee: 0.08 m^3/day (J12 Public Administration)

3.2.3 Catchment Inflow Factor (P_{CIF}) of Tai Po (1.00) has been applied in the assessment.

3.3 Existing and Future Sewerage System

3.3.1 According to the Drainage Record Plans obtained from DSD, the Application Site is not currently served by the public sewerage system. The nearest public sewer is at Tai Po Road – Tai Po Kau about 40m to the north. The nearest manhole no. is FMH1005813. The downstream sewer immediate to it is Ø375 mm. The sewer is eventually enlarged to Ø440 mm at manhole no. FMH1068053.

3.3.2 The existing sewers in the vicinity of the Application Site are shown in **Figure 3.1**.

3.3.3 A new sewer pipeline made of polyethylene will be constructed to connect the Application Site to manhole no. FMH1005813 (S1) as shown in **Figure 3.1**.

3.4 Wastewater Generated by the Proposed Development

3.4.1 Wastewater arising from the Proposed Development will primarily be contributed by residents and staff.

3.4.2 Detailed calculation for the Proposed Development is given in **Table 3.1** below and **Appendix 3.1**.

Table 3.1 Estimated Peak Flow

Development Parameters	Proposed Development				
	Dormitory	**Staff Living on Site (House mother)**	**Staff Living off Site (Therapist, Caretaker)**	**Office**	**Canteen**
Number of Population	60	11	20	11	8
Design Flow (m^3/person/day)	0.19(1)	0.19(1) + 0.28(2)	0.28(2)	0.28(2)	1.58(4)
Flow Rate (m^3/day)	**11.4**	**5.2**	**5.6**	**3.1**	**12.5**
Total Flow Rate with P_{CIF} (m^3/day)	**37.8**				
Peak Flow (L/s)	**3.5**				
Peak Flow with backwash from Hydrotherapy Pool(L/s)	**3.9**				

(1) Refer to Table T-1 of GESF – Institutional and Special Class
(2) Refer to Table T-2 of GESF – J11 Community, Social & Personal Services
(3) Refer to Table T-2 of GESF – J10 Restaurants & Hotels

3.5 Discussion

3.5.1 The potential sewerage impact due to the proposed development has been quantitatively addressed. Sewage generation rate from the proposed development is estimated to be 37.8 m^3/day (i.e. peak flow 3.9 litre/sec with backwash from hydrotherapy pool).

3.5.2 According to Table 4a of **Appendix 3.1** shows the existing sewage from the proposed development and surrounding areas (**Figure 3.2**). The result showed that there would be spillage for one section of sewer (S6 to S7). However, according to Table 5a and 5b of **Appendix 3.1**, it is found that existing sewerage system has adequate capacity under surcharge condition and has sufficient freeboard. Therefore, the sewerage generated from the Proposed Development would not have adverse impact on the existing sewerage system.

4. OVERALL CONCLUSION

4.1.1 A social welfare facility is proposed at the Former Fish Marketing Organization (FMO) Tai Po Primary School, Wong Yi Au, Tai Po. The potential drainage and sewerage impact have been qualitatively or quantitatively addressed.

4.1.2 The Application Site is currently served by public drainage system. The Proposed Development would result in reduced surface runoff and follow the same flow regime as per existing condition. It would not result in worsened drainage impact. Drainage submission including assessment where required will be provided in detailed design stage.

4.1.3 A new sewer will be constructed to connect from the Subject Site to existing manhole no.: FMH1005813 (S1). Based on the sewerage impact assessment results, the new sewer will have adequate capacity to cater for the sewage generation from the Proposed Development and nearby catchment areas. Other existing sewers will have sufficient freeboard under surcharge condition.

4.1.4 With the proposed sewerage pipeline in place, this SIA confirms the feasibility of the proposed development in terms of impacts to the public sewerage system.

Figures

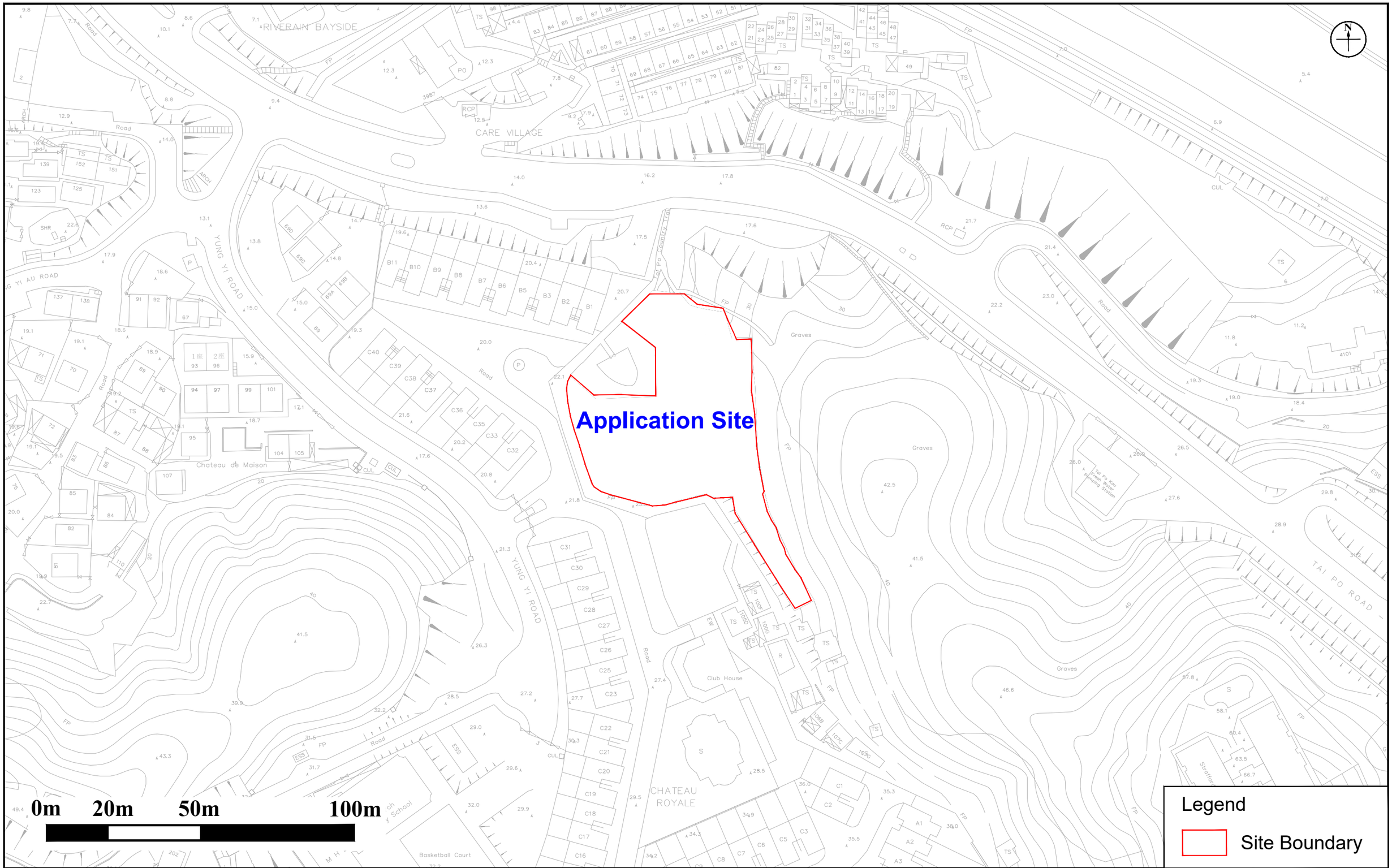

Figure: 1.1	RAMBOLL
Title: Location of the Application Site and its Environs	Drawn by: MK Checked by: CC
Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po	Rev.: 1.0 Date: Jan 2024

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Site area: 3275m^2
Greenery area: 620.8m^2(~19%)

Legend
- Application Site
- Photo view point
- Existing Greenery Area

Figure:	2.1
Title:	Site Photo Record
Project:	Proposed Minor Relaxation of Building Height Restriction for Permitted Social Welfare Facilities (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization (FMO) Tai Po Primary School, Wong Yi Au, Tai Po

RAMBOLL

Drawn by:	MW
Checked by:	CC
Rev.:	1.1
Date:	Feb 2024

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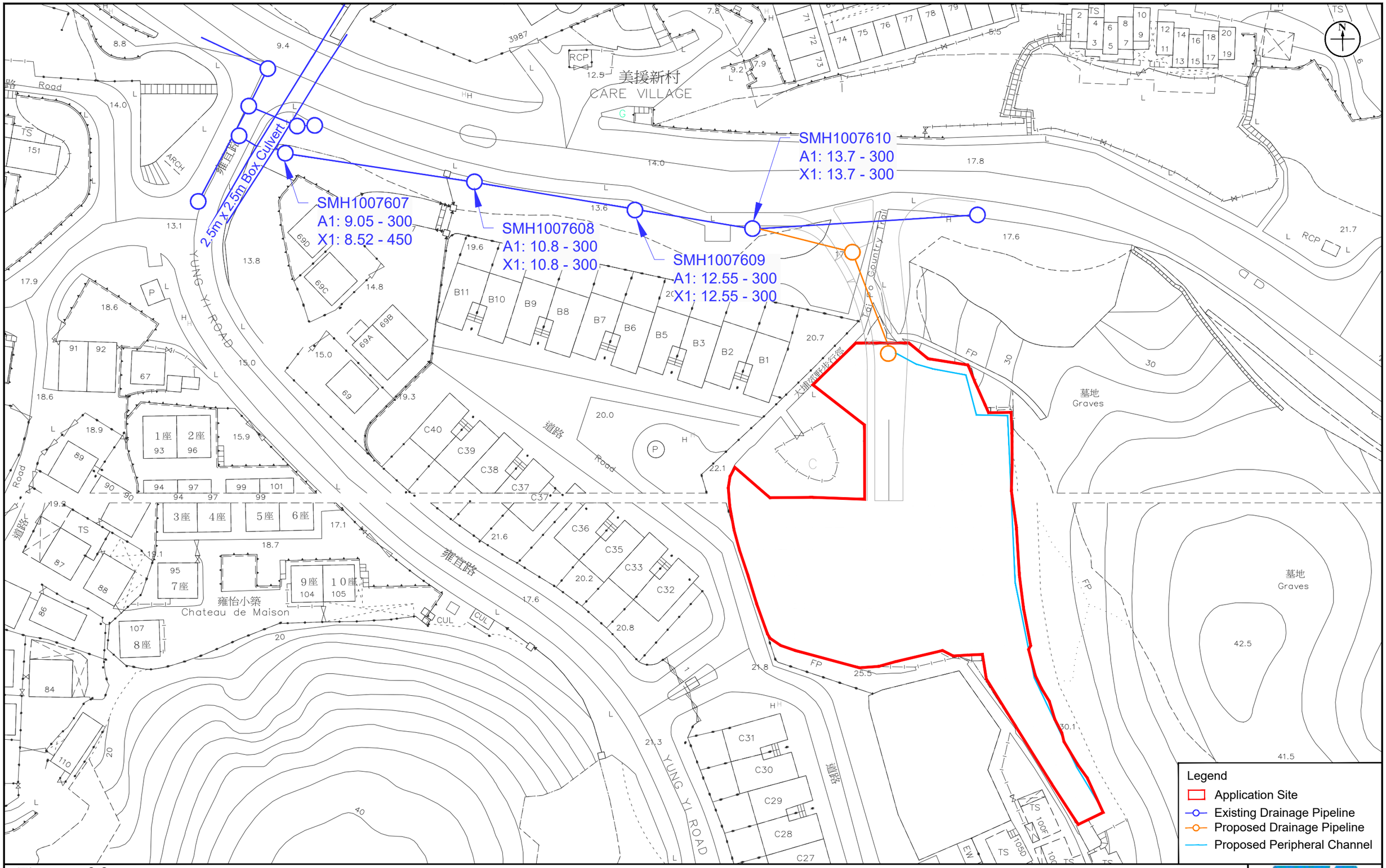

Figure: 2.2

Title: Existing Drainage System in the Vicinity of the Application Site and Proposed Drain Connection

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School, Wong Yi Au, Tai Po

RAMBOLL

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Checked by:	CC
Rev.:	1.1
Date:	Feb 2024

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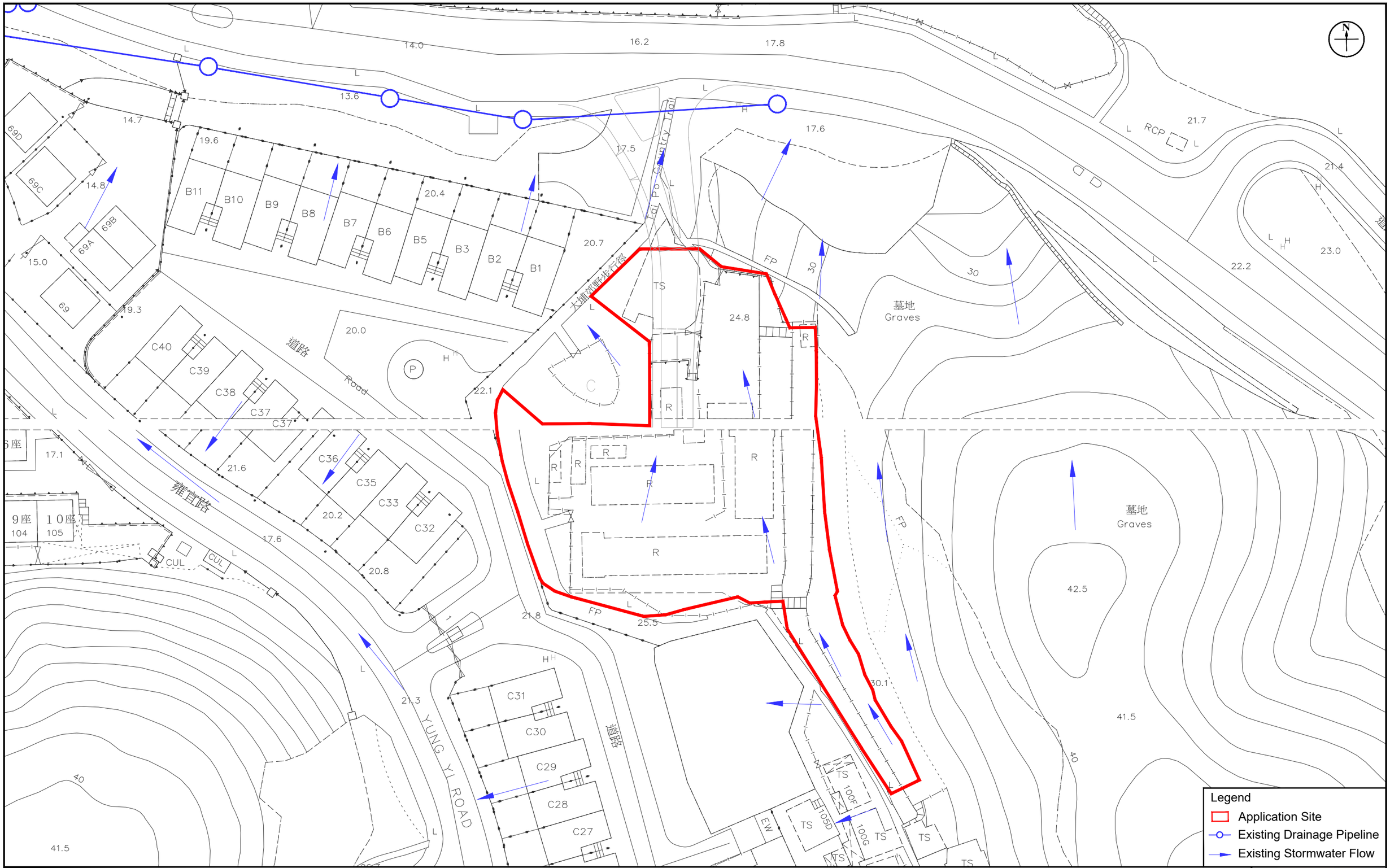

Figure: 2.3

Title: Existing Stormwater Flow of the Application Site and the Surrounding

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School, Wong Yi Au, Tai Po

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Rev.:	1.1
Date:	Feb 2024

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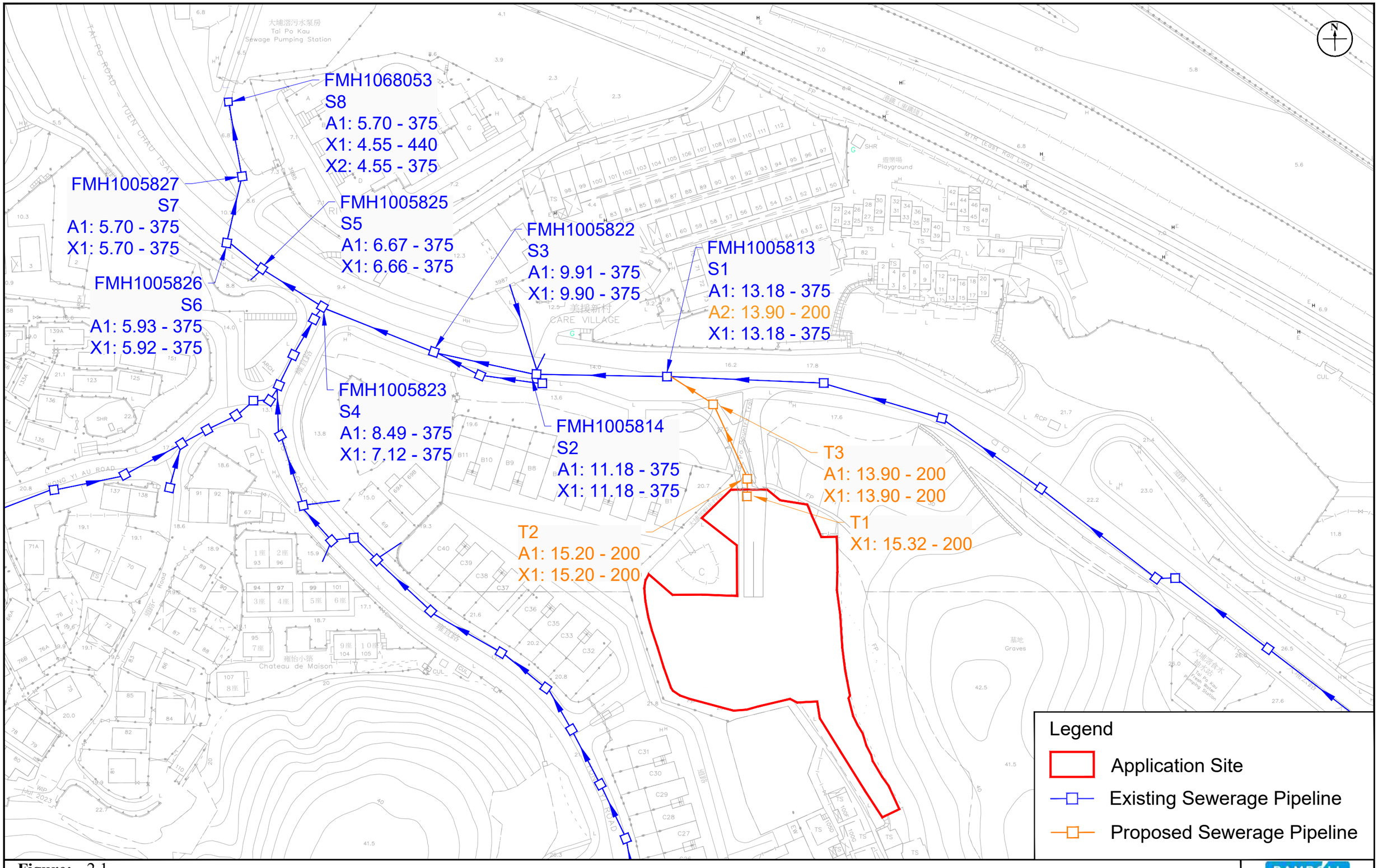

Figure: 2.1

Title: Existing and Proposed Sewerage System in the Vicinity of the Application Site

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

Drawn by:	MK
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Rev.:	1.1
Date:	Feb 2024

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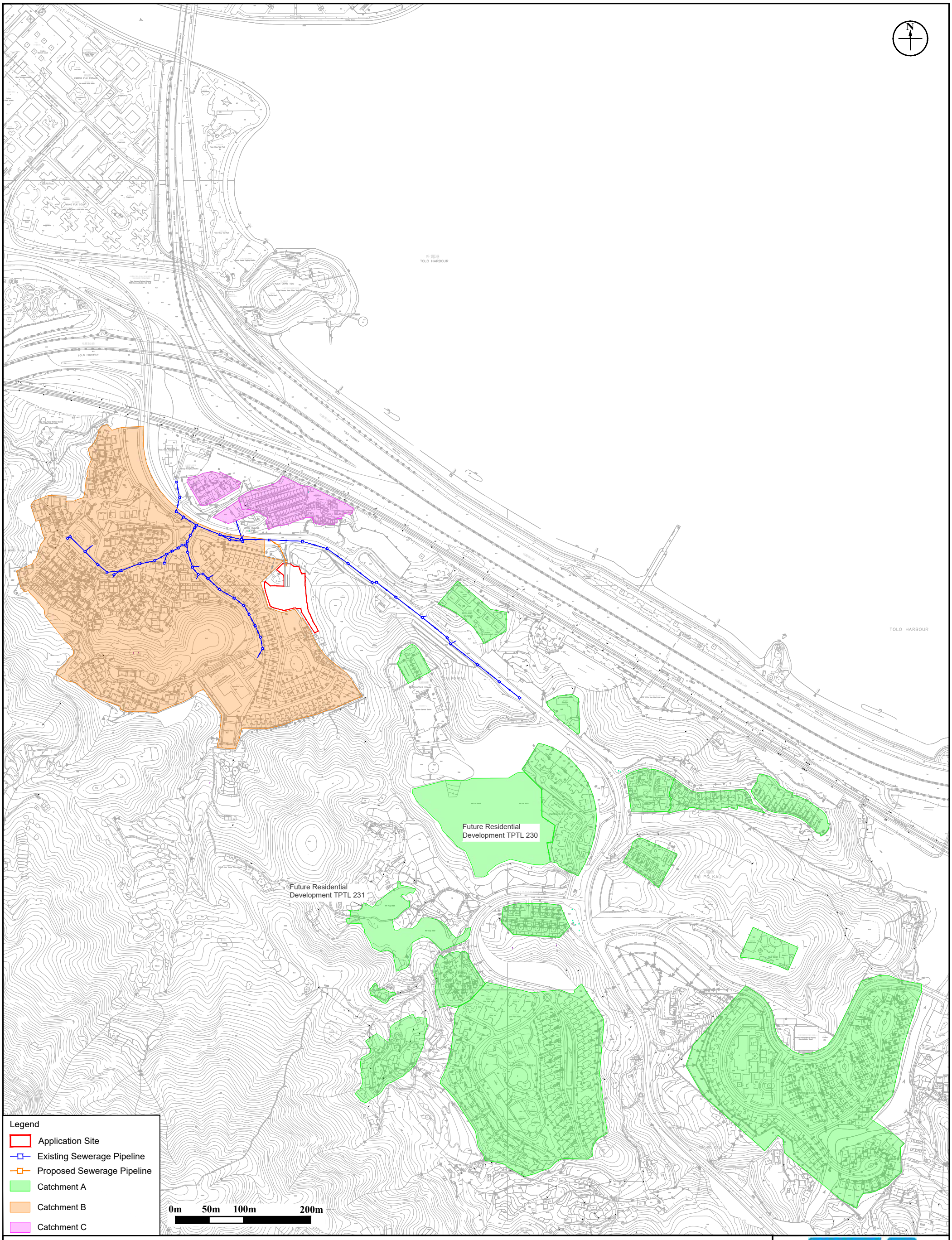


Figure: 2.2

Title: Catchment Areas in the Vicinity of the Application Site

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

Drawn by: MK

Checked by: CC

Rev.: 1.1

Date: Feb 2023

Appendix 1.1 Master Layout Plan (MLP)

Master Layout Plan Scale 1 : 600 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD architecture urban design interior

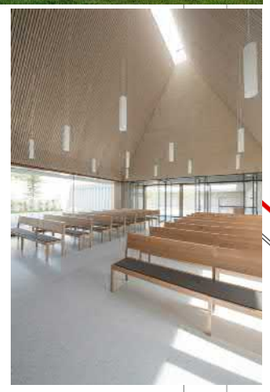
Schematic Design

GROUND FLOOR Plan Scale 1 : 500 (A3)

GROUND FLOOR Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD architecture urban design interior



Healing / Sensory Garden

Sun Deck & Healing Garden

Chapel

Dormitory Type C (8 bed places)

Dormitory Type A (32 bed places)

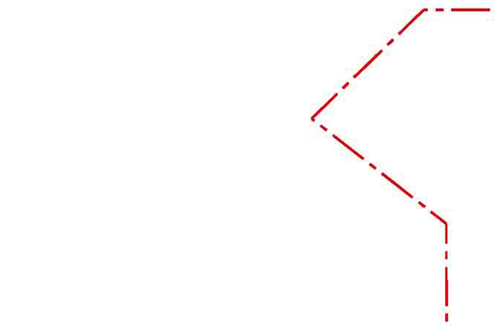
Schematic Design

FIRST FLOOR Plan Scale 1 : 500 (A3)

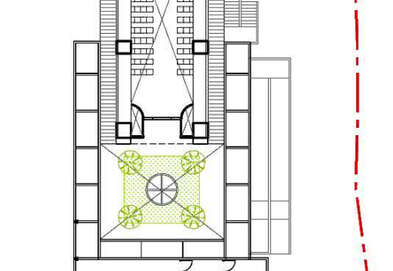
FIRST FLOOR Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD architecture urban design interior



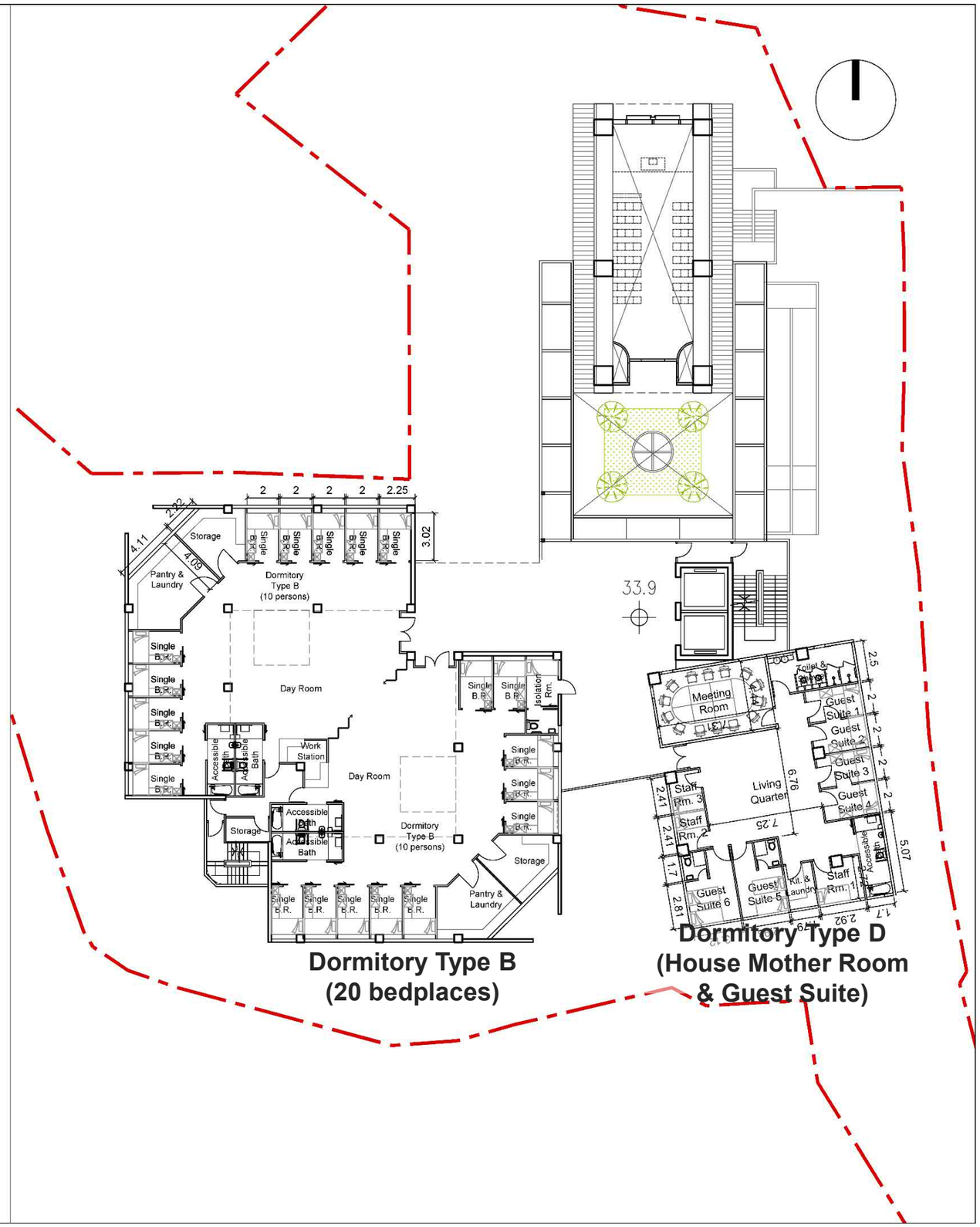
Homey Living Space



Green Picture Frame

Schematic Design

SECOND FLOOR Plan Scale 1 : 500 (A3)



SECOND FLOOR Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

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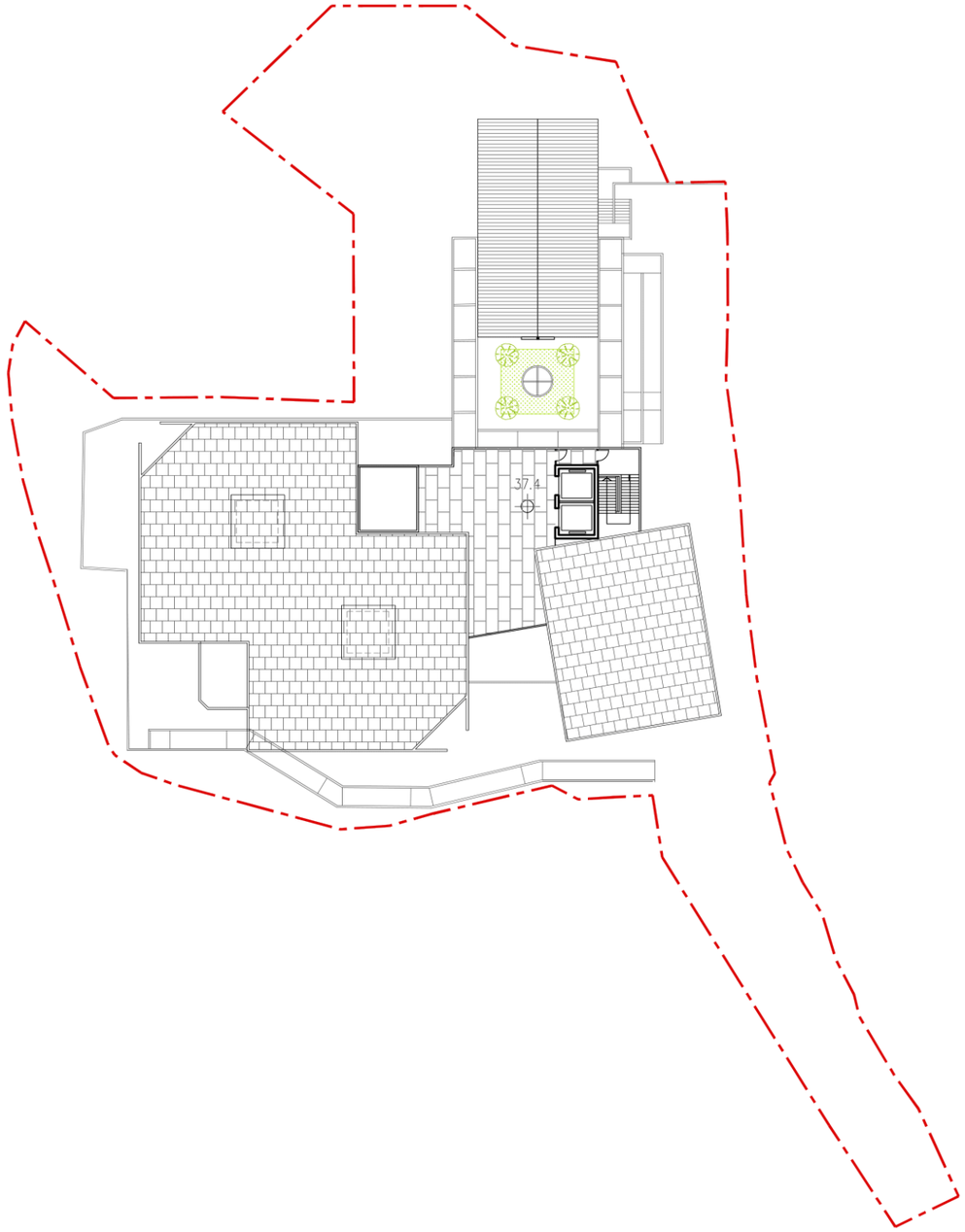
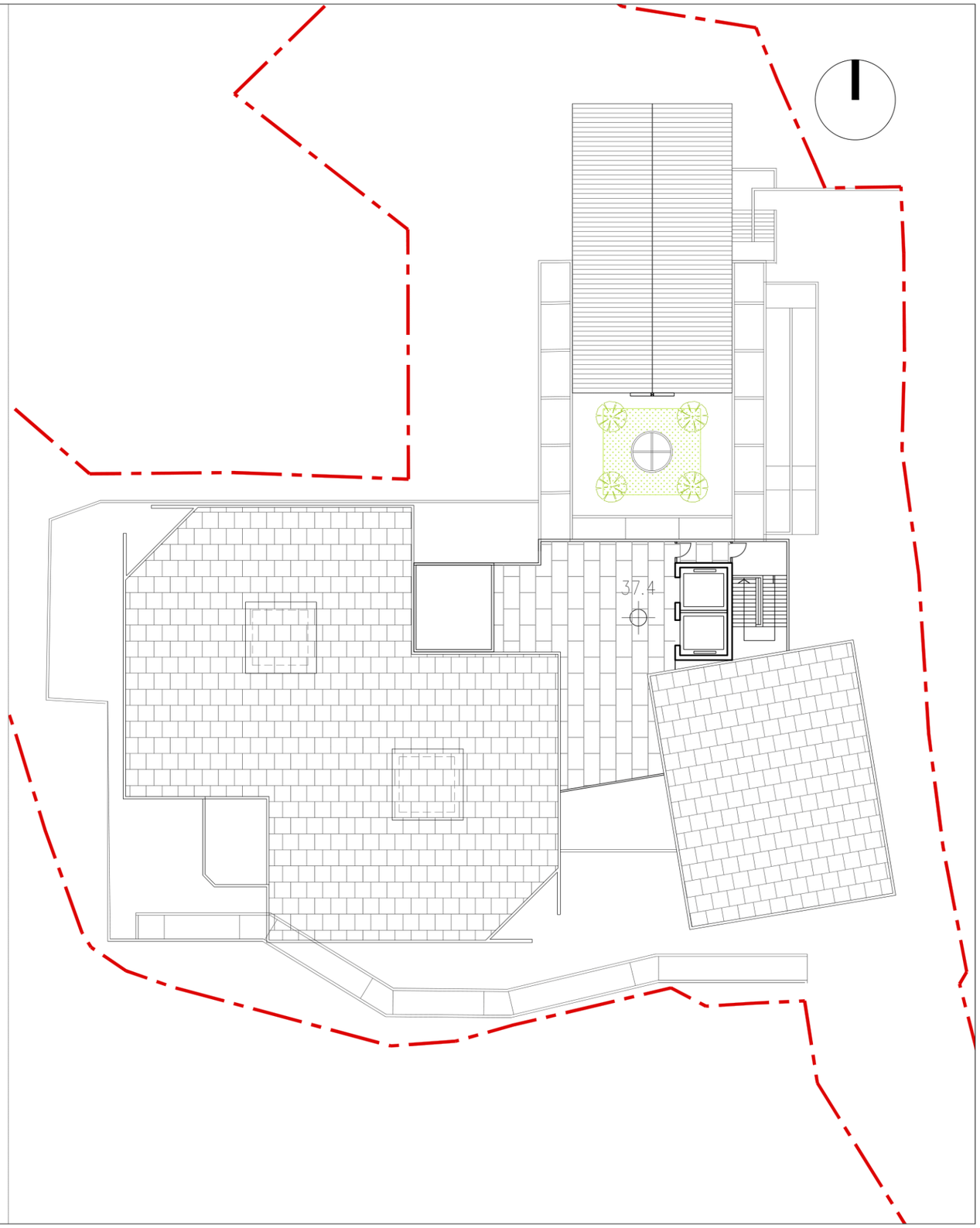
urban design
interior



ROOF Plan Scale 1 : 500 (A3)



ROOF Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

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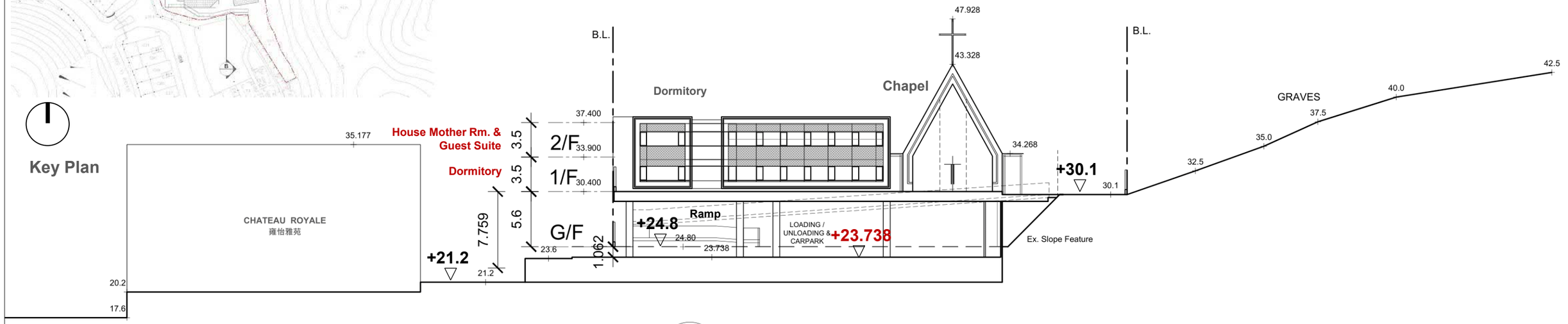
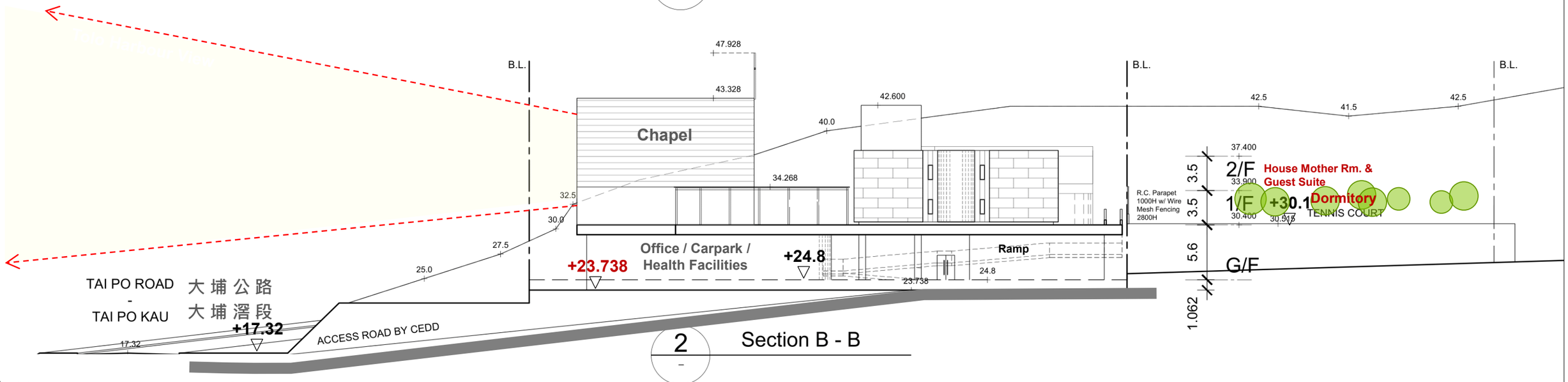
urban design
interior

Key Plan



1 Section A - A



2 Section B - B

Schematic Design

Schematic Sections Scale 1 : 400 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD
architecture
urban design
interior

Appendix 2.1 Detailed Drainage Impact Assessment Calculations

Table 1 - Existing and Proposed Catchment Areas and Run-off (1 in 50 year)

$$Q_p = 0.278\ C\ i\ A$$

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

Notes:

Site Area 3275 m^2

Catchments are small, so Rational Method is appropriate

1 in 50-year (according to Table 3 of DSD Manual)

a= 451.3

b= 2.46

c= 0.337

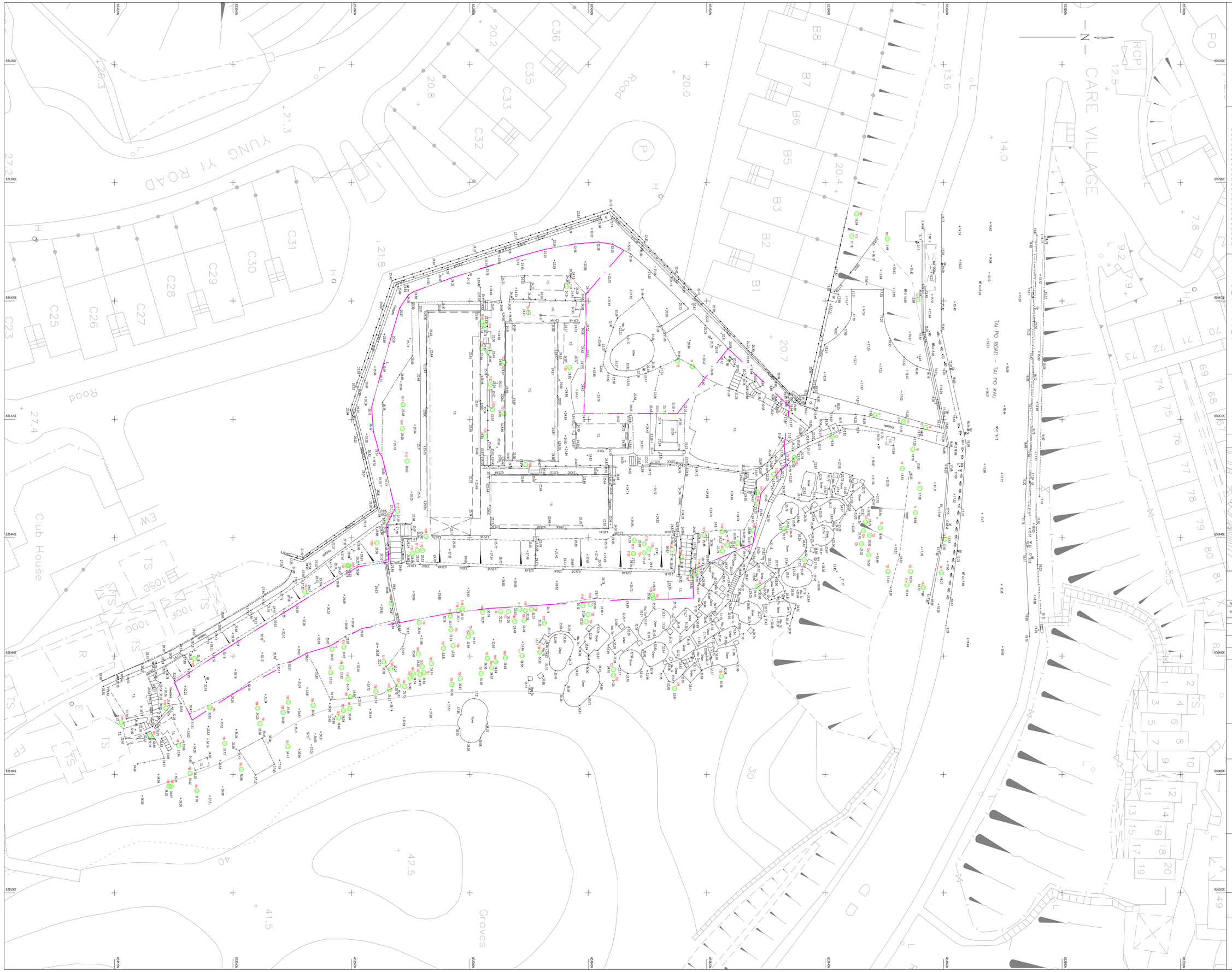
Surface Characteristics	*Runoff coefficient, C**
Asphalt	0.70 - 0.95
Concrete	0.80 - 0.95
Brick	0.70 - 0.85
Grassland (heavy soil**)	
Flat	0.13 - 0.25
Steep	0.25 - 0.35
Grassland (sandy soil)	
Flat	0.05 - 0.15
Steep	0.15 - 0.20

	Catchment	Paved	Unpaved	Area (m^2)	t_0 (min)	Total t_f [1] (min)	Total t_c [2] (min)	Intensity (mm/h)	Weighted Runoff Coefficient	Run-off (m^3/s)
Existing	**Application Site**									
	S1	81%	19%	3,275	5.0	0.00	5.00	229	0.81	0.169
Future	**Application Site**									
	S1	80%	20%	3,275	5.0	0.00	5.00	229	0.80	0.167

Remarks:

1. Assumed Time of Concentration through stream flow
2. Assumed Time of Concentration

Appendix 2.2 Topographic Survey



NOTES:

1. Hong Kong Geodetic Grid Datum 1980
2. All levels refer to Principal Datum Hong Kong
3. All units are in Metres
4. All spot level positions are indicated by the decimal point or a cross.
5. The Proposed STT boundary is shown herewith for reference only

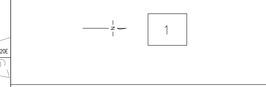
ABBREVIATIONS :-

BB	SIGN BOARD	ME	MANHOLE (ELECTRIC)
BD	BOULDER	MF	MANHOLE (FOUL WATER)
BH	BORE HOLE	MH	MANHOLE
BO	BOLLARD	MP	METER POST
CB	CONCRETE BLOCK	MS	MANHOLE (STORM WATER)
CL	COVER LEVEL	MT	MANHOLE (TELEPHONE)
CO	COLUMN	RCP	REFUSE COLLECTION POINT
CP	CATCHPIT	SC	STEP CHANNEL
CUL	CULVERT	SHR	SHRINE
DP	DRAW PIT	SP	SIGN POLE
EB	ELECTRIC BOX	ST	STOOL
EP	ELECTRICITY POST	TC	TELEPHONE CHAMBER
ESS	ELECTRIC SUB-STATION	TL	TRAFFIC LIGHT
ET	ELECTRIC TRANSFORMER	TP	TELEPHONE POLE
FB	FLOWER BED	TS	TEMPORARY STRUCTURE
FH	FIRE HYDRANT	TV	MANHOLE (CABLE TV CO)
FIG	FEEDS INTO GROUND	UC	U CHANNEL
FP	FOOTPATH	V	VALVE
GA	GRATING	VF	VALVE FIRE
GU	GULLY	VG	VALVE GAS
IC	INSPECTION COVER	VT	VENT
IL	INVERT LEVEL	VW	VALVE–WATER WORKS
LB	LETTER BOX	WT	WATER TANK
L	LAMP POST	WP	WATER POINT

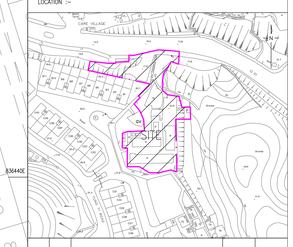
SYMBOLS :-

- ARTIFICIAL SLOPE
- BARRIER
- BOUNDARY LINE
- CANOPY
- CONTOUR (5m)
- CONTOUR (1m)
- DRAIN
- FENCE/RAILING
- FREE STANDING WALL
- GATE
- HOARDING
- SLOPE TOP / BOTTOM
- STEPS
- TREE WITH NO.
- U-CHANNEL WITH FLOW & SIZE
- VERTICAL CUTTING

SHEET INDEX :-



LOCATION :-



No.	Date	Descriptions	Checked	Approved

REVISION

	Name	Initial	Date
Surveyed	M K Cheung		27/11/2023
Drawn	C H Yan		06/12/2023
Checked	Adrian Tam		12/12/2023

Approved

CHAN YUEN KI
ALS, MHKSI, MRICS, RPS(LS)
Date: December 13, 2023

Client

AGC Design Ltd.

Contract

Topographical Survey of
Former FMO Tai Po Primary School
Tai Po Road – Tai Po Kau
Tai Po

Drawing Title

TOPOGRAPHIC SURVEY

Drawing No.	Scale
HPL3291/TS/01	1:200(A0)

Surveyed By:

Helen Chan Professional Land Survey Ltd.
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Appendix 3.1 Detailed Sewerage Impact Assessment Calculation

Table 1 Calculation for Sewage Generation Rate of the Proposed Development at the Application Site

1. Residential Care Home for Persons with Disabilities

Dormitory

1a. Total number of persons	=	60	beds -- (Provided by Project Applicant)
1b. Design flow	=	0.19	m^3/person/day -- (Institutional and special class in Table T-1 of GESF)
1c. Sewage Generation rate	=	**11.4**	m^3/day

Staff Living on Site(e.g. House Mother)

1d. Total number of staff	=	11	beds -- (Provide by Project Applicant)
1e. Design flow (Domestic)	=	0.19	m^3/person/day -- (Institutional and special class in Table T-1 of GESF)
1f. Design flow (Commercial Activity)	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
1g. Sewage Generation rate	=	**5.2**	m^3/day

Staff Living off Site(e.g. Therapist, Care Taker)

1h. Total number of staffs	=	20	staffs -- (Provide by Project Applicant)
1i. Design flow	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
1j. Sewage Generation rate	=	**5.6**	m^3/day

2. Office

2a. Total number of staffs	=	11	staffs -- (Provide by Project Applicant)
2b. Design flow	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
2c. Sewage Generation rate	=	**3.1**	m^3/day

3. Canteen

3a. Assumed Area	=	156	m^2
3b. Assumed floor area per employee	=	19.6	m^2 per worker -- (refer to Table 8 of CIFSUS - Restaurants)
3c. Total number of employees	=	8	employees
3d. Design flow	=	1.58	m^3/employee/day -- (refer to Table T-2 of GESF - J10)
3e. Sewage Generation rate	=	**12.5**	m^3/day

4. Hydrothearpy Pool (Indoor)

4a. Volume of Hydrothearpy Pool	=	10.20	m^3 -- (Provide by Project Applicant)
4b. Turnover Rate	=	4	hr
4c. Required Surface Loading Rate of Filter	=	3	m^3/m^2/hr
4d. Filter Areas required	=	1.0	m^2
4e. Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
4f. Adopted Filter Area	=	0.1	m^2
4g. Backwash Duration	=	3	min/d
4h. Backwash flow rate	=	30	m^3/m^2/hr
4i. Design flow for Hydrothearpy Pool Backwashing	=	0.1	m^3/day
4j. Design flow for Hydrothearpy Pool Backwashing	=	**0.4**	litre/sec

Total Flow from Proposed Development

Flow Rate (without Catchmnet Inflow Factor)	=	37.8	m^3/day
Catchment Inflow Factor	=	1.00	Catchment Inflow Factor for Tai Po in Table T-4 of GEFS
Flow Rate (with Catchment Inflow Factor)	=	**37.8**	m^3/day
Contributing Population	=	140	people
Peaking factor	=	8	Refer to Table T-5 of GESF for population <1,000 incl. stormwater allowance
Peak Flow	=	**3.5**	litre/sec
Peak Flow with Backwash from Hydrothearpy Pool	=	**3.9**	litre/sec

Table 2a Hydraulic Capacity of Existing Sewers at Tai Po Kau, Tai Po

Segment	Manhole Reference	Manhole Reference	Pipe Dia.	Pipe Length	Invert Level 1	Invert Level 2	g	k_s	s	v	V	Area	Q	Estimated Capacity
			mm	m	mPD	mPD	m/s^2	m		m^2/s	m/s	m^2	m^3/s	L/s
S1-S2	FMH1005813	FMH1005814	375	39.0	13.18	11.18	9.81	0.00060	0.051	0.000001	4.12	0.11	0.45	455
S2-S3	FMH1005814	FMH1005822	375	30.8	11.18	9.91	9.81	0.00060	0.041	0.000001	3.70	0.11	0.41	408
S3-S4	FMH1005822	FMH1005823	375	35.7	9.90	8.49	9.81	0.00060	0.039	0.000001	3.61	0.11	0.40	399
S4-S5	FMH1005823	FMH1005825	375	20.5	7.12	6.67	9.81	0.00060	0.022	0.000001	2.69	0.11	0.30	297
S5-S6	FMH1005825	FMH1005826	375	11.6	6.66	5.93	9.81	0.00060	0.063	0.000001	4.56	0.11	0.50	504
S6-S7	FMH1005826	FMH1005827	375	19.6	5.92	5.70	9.81	0.00060	0.011	0.000001	1.92	0.11	0.21	212
S7-S8	FMH1005827	FMH1068053	375	22.5	5.70	4.55	9.81	0.00060	0.051	0.000001	4.11	0.11	0.45	454

Table 2b Hydraulic Capacity of Proposed Sewers from the Terminal Manhole of the Proposed Development for Sewage generated from the Proposed Development

Segment	Manhole Reference	Manhole Reference	Pipe Dia.	Pipe Length	Invert Level 1	Invert Level 2	g	k_s	s	v	V	Area	Q	Estimated Capacity
			mm	m	mPD	mPD	m/s^2	m		m^2/s	m/s	m^2	m^3/s	L/s
T1-T2	-	-	200	2.4	15.32	15.20	9.81	0.00030	0.049	0.000001	2.96	0.03	0.09	93
T2-T3	-	-	200	25.9	15.20	13.90	9.81	0.00030	0.050	0.000001	2.98	0.03	0.09	94
T3-S1	-	FMH1005813	200	14.7	13.90	13.18	9.81	0.00030	0.049	0.000001	2.94	0.03	0.09	92

Remarks: (1) g=gravitational acceleration; k_s=equivalent sand roughness; s=gradient; v=kinematic viscosity of water; V=mean velocity

(2) Table 2a: The value of k_s = 0.6mm is used for the calculation of slimed clayware sewer, poor condition (based on Table 5: Recommended roughness values in Sewerage Manual)

(3) Table 2c: The value of k_s = 0.3mm is used for the calculation of slimed polyethylene for the proposed sewers, poor condition (based on Table 5: Recommended roughness values in Sewerage Manual)

(4) The value of velocity (V) is referred to the Tables for the hydraulic design of pipes, sewers and channels (8th edition)

(5) Equation used: $$V = -\sqrt{(8gDs)}\log\left(\frac{k_s}{3.7D} + \frac{2.51v}{D\sqrt{(2gDs)}}\right)$$

Table 3 Calculation for Sewage Generation Rate of the Existing Surrounding Building

Catchment A

Constellation Cove

Total number of units	=	286	units
Total number of residents	=	887	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**239.4**	m^3/day

Clubhouse

Assumed Area	=	760	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	25	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**7.0**	m^3/day

Swimming Pools (Outdoor)

Assumed Area of Swimming Pool	=	1133.1	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	1416.4	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	236	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	4.7	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	**7.1**	m^3/day
Design flow for Swimming Pool Backwashing	=	**39.3**	litre/sec

Savanna Garden

Total number of units	=	284	units
Total number of residents	=	880	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**237.7**	m^3/day

Clubhouse

Assumed Area	=	1086	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	36	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**10.0**	m^3/day

Swimming Pools (Outdoor)

Assumed Area of Swimming Pool	=	465.6	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	582.0	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	97	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	1.9	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	**2.9**	m^3/day
Design flow for Swimming Pool Backwashing	=	**16.2**	litre/sec

L'Utopie

Total number of units	=	16	units
Total number of residents	=	50	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.37	m^3/person/day -- (Private R3 in Table T-1 of GESF)
Sewage Generation rate	=	**18.4**	m^3/day

Swimming Pools (Outdoor)

Assumed Area of Swimming Pool	=	698.3	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	872.9	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	145	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	2.9	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	**4.4**	m^3/day
Design flow for Swimming Pool Backwashing	=	**24.2**	litre/sec

Village House near L'Utopie and Savanna Garden

Total number of units	=	10	units
Total number of residents	=	31	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.37	m^3/person/day -- (Private R4 in Table T-1 of GESF)
Sewage Generation rate	=	**11.5**	m^3/day

Future Residential Development at TPTL 231

Sewage Generation rate	=	**36.0**	m^3/day -- (from DSD)

Tolo Ridge

Total number of units	=	24	units
Total number of residents	=	74	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.37	m^3/person/day -- (Private R3 in Table T-1 of GESF)
Sewage Generation rate	=	**27.5**	m^3/day

Swimming Pools (Outdoor)

Assumed Area of Swimming Pool	=	166.8	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	208.5	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	35	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	0.7	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	**1.0**	m^3/day
Design flow for Swimming Pool Backwashing	=	**5.8**	litre/sec

Hampstead

Total number of units	=	13	units
Total number of residents	=	40	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.37	m^3/person/day -- (Private R3 in Table T-1 of GESF)
Sewage Generation rate	=	**14.9**	m^3/day

Swimming Pools (Outdoor)

Assumed Area of Swimming Pool	=	528.0	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	660.0	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	110	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	2.2	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	**3.3**	m^3/day
Design flow for Swimming Pool Backwashing	=	**18.3**	litre/sec

Southview Villas

Total number of units	=	6	units
Total number of residents	=	19	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.37	m^3/person/day -- (Private R3 in Table T-1 of GESF)
Sewage Generation rate	=	**6.9**	m^3/day

Swimming Pools (Outdoor)

Assumed Area of Swimming Pool	=	148.9	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	186.1	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	31	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	0.6	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	**0.9**	m^3/day
Design flow for Swimming Pool Backwashing	=	**5.2**	litre/sec

Emerald Palace

Total number of units	=	42	units
Total number of residents	=	130	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.37	m^3/person/day -- (Private R3 in Table T-1 of GESF)
Sewage Generation rate	=	**48.2**	m^3/day

Clubhouse

Assumed Area	=	250	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	8	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11)
Sewage Generation rate	=	**2.3**	m^3/day

Swimming Pools (Outdoor)

Assumed Area of Swimming Pool	=	223.2	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	278.9	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	46	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	0.9	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	**1.4**	m^3/day
Design flow for Swimming Pool Backwashing	=	**7.7**	litre/sec

Future Residential Development at TPTL 230

Sewage Generation rate	=	**190.0**	m^3/day -- (from DSD)

Seaview Villas

Total number of units	=	18	units
Total number of residents	=	56	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.37	m^3/person/day -- (Private R3 in Table T-1 of GESF)
Sewage Generation rate	=	**20.6**	m^3/day

Swimming Pools (Outdoor)

Assumed Area of Swimming Pool	=	63.3	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	79.1	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	13	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	0.3	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	**0.4**	m^3/day
Design flow for Swimming Pool Backwashing	=	**2.2**	litre/sec

Rural Estate

Total number of units	=	6	units
Total number of residents	=	19	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.37	m^3/person/day -- (Private R3 in Table T-1 of GESF)
Sewage Generation rate	=	**6.9**	m^3/day

Swimming Pools (Outdoor)

Assumed Area of Swimming Pool	=	103.2	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	129.0	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	22	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	0.4	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	**0.6**	m^3/day
Design flow for Swimming Pool Backwashing	=	**3.6**	litre/sec

Diasyfield

Total number of units	=	6	units
Total number of residents	=	19	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.37	m^3/person/day -- (Private R3 in Table T-1 of GESF)
Sewage Generation rate	=	**6.9**	m^3/day

Swimming Pools (Outdoor)

Assumed Area of Swimming Pool	=	122.4	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	153.0	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	25	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	0.5	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	**0.8**	m^3/day
Design flow for Swimming Pool Backwashing	=	**4.2**	litre/sec

Redland Garden

Total number of units	=	60	units
Total number of residents	=	186	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.27	m^3/person/day -- (Private R2 in Table T-1 of GESF)
Sewage Generation rate	=	**50.2**	m^3/day

Swimming Pools (Outdoor)

Assumed Area of Swimming Pool	=	76.4	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	95.5	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	16	m^3/m^2/hr
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	m^3/m^2/hr
Adopted Filter Area	=	0.3	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	m^3/m^2/hr
Design flow for Swimming Pool Backwashing	=	**0.5**	m^3/day
Design flow for Swimming Pool Backwashing	=	**2.7**	litre/sec

China Light Power (CLP) Strafford House

Staff Quarters

Total number of units	=	6	units
Total number of residents	=	19	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.37	m^3/person/day -- (Private R3 in Table T-1 of GESF)
Sewage Generation rate	=	**6.9**	m^3/day

Swimming Pools (Outdoor)

Assumed Area of Swimming Pool	=	100.9	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	126.1	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	21	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	0.4	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	**0.6**	m^3/day
Design flow for Swimming Pool Backwashing	=	**3.5**	litre/sec

System Control Centre and Management Training Centre

Assumed Area	=	1673.6	m^2
Assumed floor area per employee	=	18.2	m^2 per employee -- (refer to Table 8 of CIFSUS - Finanical, Insurance, Real Estate & Business Services)
Total number of employees	=	93	employees
Design flow for commercial employee	=	0.33	m^3/employee/day -- (refer to Table T-2 of GESF - J2 Electricity Gas & Water)
Sewage Generation rate	=	**30.7**	m^3/day

Overall Catchment A

Estimated Flow Rate (with Catchment Inflow Factor (PCIF) = 1.0	=	**972.0**	m^3/day (Catchment Inflow Factor for Tai Po in Table T-4 of GESF)

Catchment B

Small Subunit Group 729/28-29

Total number of residents	=	1734	people -- (2021 Population Census: Population in Subunit 729/28-29)
Design flow	=	0.37	m^3/person/day -- (Private R3 in Table T-1 of GESF)
Sewage Generation rate	=	**641.6**	m^3/day

Clubhouse of Chateau Royale

Assumed Area	=	672	m^2
Assumed floor area per employee	=	30.3	m^2 per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services)
Total number of employees	=	22	employees
Design flow for commercial activities	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - J11 - Community)
Sewage Generation rate	=	**6.2**	m^3/day

Swimming Pools of Chateau Royale

Assumed Area of Swimming Pool	=	323.405	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	404.3	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	67	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	1.3	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	**2.0**	m^3/day
Design flow for Swimming Pool Backwashing	=	**11.2**	litre/sec

Ling Liang Church M H Lau Secondary School

Total number of teachers & staff	=	72	teachers & staff (from the website of Ling Liang Church M H Lau Secondary School)
Design flow for teachers & staff	=	0.28	m^3/employee/day -- (refer to Table T-2 of GESF - General - territorial average)
Total number of students	=	647	students (from the website of Ling Liang Church M H Lau Secondary School))
Design flow for students	=	0.04	m^3/person/day (refer to Table T-2, School Student)
Sewage Generation rate	=	**46.0**	m^3/day

Overall Catchment B

Estimated Flow Rate (with Catchment Inflow Factor (PCIF) = 1.0	=	**693.8**	m^3/day (Catchment Inflow Factor for Tai Po in Table T-4 of GESF)

Catchment C

CARE Village

Total number of units	=	111	units (from website)
Total number of residents	=	344	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.37	m^3/person/day -- (Private R4 in Table T-1 of GESF)
Sewage Generation rate	=	**127.317**	m^3/day

Care Village West Public Toilet

Discharge Unit (DU) from WC (Qty * DU)	=	9	litre/sec
Discharge Unit (DU) from Single Urinal with Cistern (Qty * DU)	=	0.8	litre/sec
Discharge Unit (DU) from Basin (Qty * DU)	=	0.6	litre/sec
Sum of DUs	=	10.4	litre/sec
Wastewater Flow Rate ($K\sqrt{\sum DU}$)	=	**3.2**	litre/sec

Remarks

1. Discharge Unit (DU) of WC = 1.8 L/s; DU of Basin = 0.3 L/s; DU of Single Urinal with Cistern = 0.4L/s, extracted from Table 5 of PESDG.
2. By refering to the site visit, total number of WC = 5; total number of Single Urinal with Cistern = 2; Total number of Basin = 2.
3. Frequency of use, K = 1, extracted from Table 6 of PESDG.

Care Village East Public Toilet

Discharge Unit (DU) from WC (Qty * DU)	=	9	litre/sec
Discharge Unit (DU) from Single Urinal with Cistern (Qty * DU)	=	0.8	litre/sec
Discharge Unit (DU) from Basin (Qty * DU)	=	0.6	litre/sec
Sum of DUs	=	10.4	litre/sec
Wastewater Flow Rate ($K\sqrt{\sum DU}$)	=	**3.2**	litre/sec

Remarks

1. Discharge Unit (DU) of WC = 1.8 L/s; DU of Basin = 0.3 L/s; DU of Single Urinal with Cistern = 0.4L/s, extracted from Table 5 of PESDG.
2. By refering to the site visit, total number of WC = 5; total number of Single Urinal with Cistern = 2; Total number of Basin = 2.
3. Frequency of use, K = 1, extracted from Table 6 of PESDG.

Riverain Bayside

Total number of units	=	8	units
Total number of residents	=	25	people -- (2021 Population Census: Average Household Size of 3.1 in Tai Po Kau)
Design flow	=	0.37	m^3/person/day -- (Private R3 in Table T-1 of GESF)
Sewage Generation rate	=	**9.2**	m^3/day

Swimming Pools of Riverain Bayside

Assumed Area of Swimming Pool	=	88.6	m^2
Average Depth of Water	=	1.25	m (ordinary assumption)
Volume of Swimming Pool (Ordinary Assumption)	=	110.7	m^3
Turnover Rate	=	6	hr
Required Surface Loading Rate of Filter	=	18	$m^3/m^2/hr$
Filter Areas required	=	1.0	m^2
Adopted Surface Loading Rate of Filter	=	50	$m^3/m^2/hr$
Adopted Filter Area	=	0.4	m^2
Backwash Duration	=	3	min/d
Backwash flow rate	=	30	$m^3/m^2/hr$
Design flow for Swimming Pool Backwashing	=	**0.6**	m^3/day
Design flow for Swimming Pool Backwashing	=	**3.1**	litre/sec

Private House TPTL 180

Total number of units	=	1	units
Total number of residents	=	6	people -- (Assumed)
Design flow	=	0.37	m^3/person/day -- (Private R3 in Table T-1 of GESF)
Sewage Generation rate	=	**2.2**	m^3/day

Overall Catchment C

Estimated Flow Rate (with Catchment Inflow Factor (PCIF) = 1.0	=	**138.7**	m^3/day (Catchment Inflow Factor for Tai Po in Table T-4 of GESF)

Table 4a Comparision of the Hydraulic Capacity of Existing Sewers for Sewerage generated from the Proposed Development and Surrounding Catchment Areas

Segment	Pipe Dia. (mm)	Pipe Length (m)	Gradient	Estimated Capacity (L/s)	ADWF (m^3/day)	Contributing Population	Peaking Factor	Swimming Pool/Public Toilet/Hydrothearpy Pool (L/s)	Peak Flow from the Proposed Development and Catchment Areas (L/s)	Contribution from the Proposed Development and the Surrounding Catchment Areas (%)	Status
S1-S2	375	39.0	0.051	455	1009.8	3740	6	133.4	203.5	44.7%	OK
S2-S3	375	30.8	0.041	408	1148.5	4254	6	142.9	222.7	54.6%	OK
S3-S4	375	35.7	0.039	399	1148.5	4254	6	142.9	222.7	55.8%	OK
S4-S5	375	20.5	0.022	297	1842.3	6823	5	154.2	260.8	87.7%	OK
S5-S6	375	11.6	0.063	504	1842.3	6823	5	154.2	260.8	51.7%	OK
S6-S7	375	19.6	0.011	212	1842.3	6823	5	154.2	260.8	122.9%	Spill
S7-S8	375	22.5	0.051	454	1842.3	6823	5	154.2	260.8	57.4%	OK

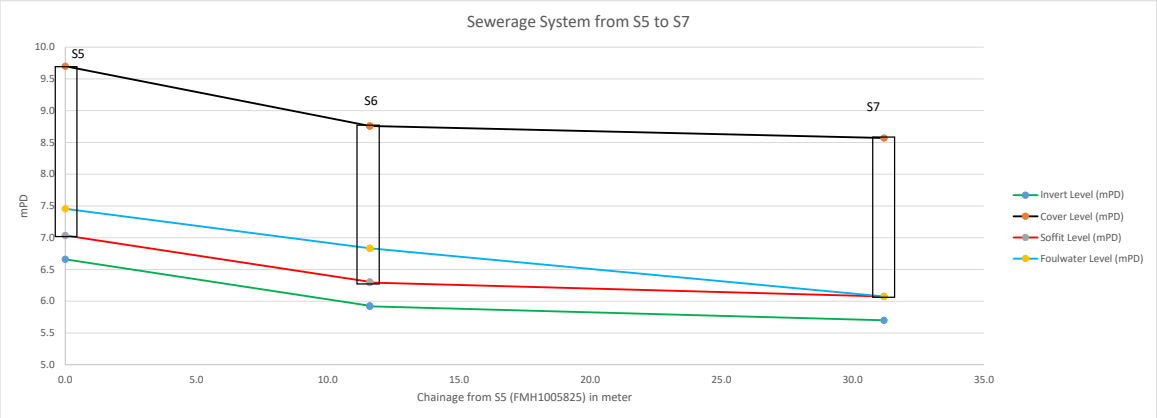
Table 4b Comparision of the Hydraulic Capacity of Proposed Sewers from the Terminal Manhole of the Proposed Development for Sewage generated from the Proposed Development

Segment	Pipe Dia. (mm)	Pipe Length (m)	Gradient	Estimated Capacity (L/s)	ADWF (m^3/day)	Contributing Population	Peaking Factor	Swimming Pool/Public Toilet/Hydrothearpy Pool (L/s)	Peak Flow from the Proposed Development and Catchment Areas (L/s)	Contribution from the Proposed Development and the Surrounding Catchment Areas (%)	Status
T1-T2	200	2.4	0.049	93	37.8	140	8	0.4	3.9	4.2%	OK
T2-T3	200	25.9	0.050	94	37.8	140	8	0.4	3.9	4.2%	OK
T3-S1	200	14.7	0.049	92	37.8	140	8	0.4	3.9	4.2%	OK

Remarks: (1) The value of peaking factor = 8 is used for population <1,000 incl. stormwater allowance (refers to Table T-5 of GESF)
(2) The value of peaking factor = 6 is used for population 1,000-5,000 incl. stormwater allowance (refers to Table T-5 of GESF)
(3) The value of peaking factor = 5 is used for population 5,000-10,000 incl. stormwater allowance (refers to Table T-5 of GESF)

Table 5a Hydraulic Capacity of Existing Sewers at Tai Po Road - Tai Po Kau - surcharge condition

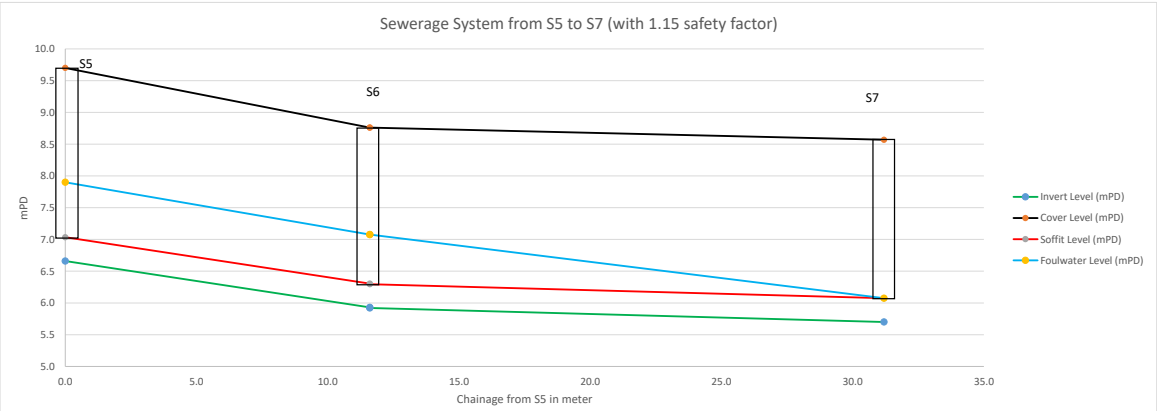
Segment	Manhole Reference	Manhole Reference	Pipe Dia.	Pipe Length	Invert Level 1	Invert Level 2	Foulwater Level 1	Foulwater Level 2	Cover Level 1	Cover Level 2	Freeboard 1	Freeboard 2	Friction Loss	Entry and Exit Loss	g	k_s	Required $s_{hydraulic}$	v	V	Area	Q	Delivered Flow rate
			mm	m	mPD	mPD	mPD	mPD	mPD	mPD	m	m	m	m	m/s^2	m		m^2/s	m/s	m^2	m^3/s	L/s
S5-S6	FMH1005825	FMH1005826	375	11.6	6.66	5.9	7.46	6.83	9.70	8.76	2.24	1.93	0.20	0.43	9.81	0.0006	0.0169	0.000001	2.36	0.11	0.26	260.8
S6-S7	FMH1005826	FMH1005827	375	19.59	5.92	5.7	6.83	6.08	8.76	8.57	1.93	2.50	0.33	0.43	9.81	0.0006	0.0169	0.000001	2.36	0.11	0.26	260.8
S7-S8	FMH1005827	FMH1068053	375	22.51	5.70		6.08															



Note: 1. The invert level of sewers significantly drops at manhole S7,Sufficient freeboard is expected downstream S7. Therefore,Backwater calculation is conducted upstream manhole S7. Foulwater level at S7 is assumed to be: 5.70 (IL) + 0.375 (pipe dia.) = 6.08mPD as a conservative approach
2. For this assessment, the Colebrook-White Equation has been used to calculate the friction loss. (Sewerage Mannual section 5.2.1)
3. According to DSD'sSewerage Manual (Part 1) section 5.2.2, Local losses are usually small in realtion to the pipeline head losses and are not normally considered. However, as a conservative approach, further allowances have been included for local losses at pipe entry (K=0.5) and exit (K = 1), with a total local loss coefficient of 1.5
4. Comparing the Cover levels and foulwater levels at each manhole, the freeboards are found sufficient (>1m). Therefore, no unacceptable adverse sewerage impacts are identified.
5. Friction loss is deduced by required hydraulic gradient x pipe length, while the local loss is deduced by the equation: $h_f = K\frac{V^2}{2g}$

Table 5b Hydraulic Capacity of Existing Sewers at alley between Wai Yip Street and Hoi Bun Road - surcharge condition with 1.15 safety factor

Segment	Manhole Reference	Manhole Reference	Pipe Dia.	Pipe Length	Invert Level 1	Invert Level 2	Foulwater Level 1	Foulwater Level 2	Cover Level 1	Cover Level 2	Freeboard 1	Freeboard 2	Friction Loss	Entry and Exit Loss	g	k_s	Required $s_{hydraulic}$	v	V	Area	Q	Required Peak Flow
			mm	m	mPD	mPD	mPD	mPD	mPD	mPD	m	m	m	m	m/s^2	m		m^2/s	m/s	m^2	m^3/s	L/s
S5-S6	FMH1005825	FMH1005826	375	11.6	6.66	5.93	7.90	7.08	9.70	8.76	1.80	1.68	0.26	0.56	9.81	0.0006	0.0224	0.000001	2.72	0.11	0.30	299.9
S6-S7	FMH1005826	FMH1005827	375	19.6	5.92	5.70	7.08	6.08	8.76	8.57	1.68	2.50	0.44	0.56	9.81	0.0006	0.0224	0.000001	2.72	0.11	0.30	299.9
S7-S8	FMH1005827	FMH1068053	375	22.5	5.70		6.08															



Note: 1. The invert level of sewers significantly drops at manhole S7,Sufficient freeboard is expected downstream S7. Therefore,Backwater calculation is conducted upstream manhole S7. Foulwater level at S7 is assumed to be: 5.70 (IL) + 0.375 (pipe dia.) = 6.08mPD as a conservative approach
2. For this assessment, the Colebrook-White Equation has been used to calculate the friction loss. (Sewerage Mannual section 5.2.1)
3. According to DSD'sSewerage Manual (Part 1) section 5.2.2, Local losses are usually small in realtion to the pipeline head losses and are not normally considered. However, as a conservative approach, further allowances have been included for local losses at pipe entry (K=0.5) and exit (K = 1), with a total local loss coefficient of 1.5
4. Comparing the Cover levels and foulwater levels at each manhole, no overflowing is found (freeboard >0m). Therefore, no unacceptable adverse sewerage impacts are identified.
5. Friction loss is deduced by required hydraulic gradient x pipe length, while the local loss is deduced by the equation: $h_f = K\frac{V^2}{2g}$

Remarks: (1) g=gravitational acceleration; k_s=equivalent sand roughness; s=gradient; v=kinematic viscosity of water; V=mean velocity
(2) Table 1a: The value of ks = 0.6mm is used for the calculation of slimed clayware sewer, poor condition (based on Table 5: Recommended roughness values in Sewerage Manual)
(3) The value of velocity (V) is referred to the Tables for the hydraulic design of pipes, sewers and channels (8th edition)
(4) Equation used: $V=-\sqrt{(8gDs)}\log\left(\frac{k_s}{3.7D}+\frac{2.51v}{D\sqrt{(2gDs)}}\right)$

Appendix 7

Geotechnical Planning Review Report

PROJECT NO. P2581

GEOTECHNICAL PLANNING REVIEW REPORT (GPRR)
FOR
PROPOSED SOCIAL WELFARE FACILITY
(RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES)
AT
FROMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL
WONG YI AU, TAI PO

GREG WONG & ASSOCIATES LTD.

Report Prepared by : Jack Chan
Checked by : Felix Cheng
Approved by : Kevin Tang
Date : December 2023

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8. CONCLUSION

Appendix

Appendix A	Site Location Plan
Appendix B	Information of Existing Slopes/Retaining Walls
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1. INTRODUCTION

This report presents the geotechnical planning review for the proposed development based on the available ground information in supplementary to the master layout plans.

Greg Wong & Associates Ltd. (GWAL) was appointed as the structural and geotechnical consultant for the proposed development at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po, New Territories.

The development involved the construction of 3-storey residential Care Home for Persons with Disabilities without basement.

The geotechnical review is prepared by the geotechnical consultant in accordance with the requirement set out in PNAP-APP25 (PNAP 78). This report contains the following as listed.

- Impact and proposed investigation to the adjoining premises
- Conclusion and recommendation

2. SITE LOCATION AND DESCRIPTION

2.1 Site Location

The captioned site is in irregular shape surrounded by the Permitted Burial Ground Site No. TP/S14 to the east, low-rise residential development, namely Chateau Royal, to the west. There are some existing vacant 1-storey structures of reinforced concrete of the former primary school at the captioned site. The total area of the site is about 3,256 m2. The elevation of the site is about +20 to +31mPD. A site location plan is attached in Appendix A.

2.2 Existing Features

According to the Slope Information System, there are five existing features (slope or retaining wall) located within or in close proximity to the site. The feature is listed as follow:

Feature No.	Type	Location	Responsibility	Height	Angle	Length
7NW-B/C 270	Cut Slope	East	Lands Department	3m	65	88m
7NW-B/C 308	Cut Slope	South	Lands Department	3m	80	86m
7NW-B/R 265	Retaining Wall	North-West	/	6m	90	155m
7NW-B/R 68	Retaining Wall	South	/	5.8m	90	100m
7NW-B/C 634	Cut Slope	East	Lands Department	4.7m	45	106m

Location plan & detail information of the features are attached in Appendix B. The available information indicates that the slope shall be in good condition.

Natural terrain shall likely to be an issue and it is subject to detail assessment.

2.3 Existing Buildings & Structures in Vicinity

The existing 1-storey building structures are made of reinforced concrete, which may be in footing or pile.

There is no sensitive historical building close to the site.

3. THE PROPOSED DEVELOPMENT

The development involved the construction of 3-storey Residential Care Home for Persons with Disabilities without basement. The schematic master layout plan and typical section of the proposed new building are attached in Appendix C.

EXISTING INFORMATION

4.1 Ground Investigation Information

There are four GI information adjacent to the site area, which is shown in the plan of Appendix D. It was carried out by The Boring Engineering LTD in May-1992. The hole is terminated at around 8-20m deep below the existing ground. SPT were also carried out and Mazier samples were taken in the boreholes.

Location and detailed information of boreholes is attached in Appendix D.

According to the response test and the monitoring records of the piezometers installed in the previous GI, the highest measured groundwater table is located at +14.80mPD. The summary of measured groundwater table is tabulated in the table below:

Borehole	Ground Level (mPD)	Installation Depth (m)	Tip level (mPD)	Measured Water Depth (m)	Measured GWL (mPD)
BH27	+20.85	8.60	+12.25	6.05	14.80

Table 4.1 – Summary of Measured Groundwater Record
Note: Measured GWL: Highest Measured Groundwater Level

Based on the closest borehole log, the concerned site might be covered by a layer of Fill / Colluvium of 2m thickness. Underneath the Fill / Colluvium there might be a layer of C.D.V. Medium grained Volcanic or better grade of Volcanic might be found at a depth of 3m to 8.6m below existing ground level. Highest water table may be at about 6.05m below existing ground level.

4.2 Layout of Existing Utilities

Enquiries shall be made to various utility companies for the layout of existing utilities adjacent to the site. The details of available information of the utilities shall be enclosed in Appendix E.

4.3 Layout of Existing Building Structure

There is some existing residential buildings or existing structures are 2 to 3-storey reinforced concrete building in the lot and the adjacent lot. However, no information could be retrieved from Buildings Department.

4.4 Schedule Area

The site is checked to be outside the Schedule Area 1 and Scheduled Area (MTR-AP-1638). Plan of the closest Schedule Areas are attached in Appendix F.

4. GROUND CONDITIONS

5.1 Topography

The captioned site is enclosed by Access road from Tai Po Road at the east and Yung Yi Road at the west. There is some existing residential buildings or existing structures are 2 to 3-storey reinforced concrete building in the lot and the adjacent lot. The total area of the site is about 3234 m^2. The elevation of the site is about +20-31mPD.

5.2 Geology

According to the 1:20000 scale geological map published by the Geotechnical Engineering Office (Sheet 7: HGM20 Series: Edition II - 2008), the site is underlain by Colluvium. Part print of geological map is enclosed in Appendix G.

The available information indicates that the concerned site might be covered by a layer of Fill / Colluvium of 2m thickness. Underneath the Fill / Colluvium there might be a layer of C.D.V. Medium grained Volcanic or better grade of Volcanic might be found at a depth of 3m to 8.6m below existing ground level.

Soil Properties

FILL

Fill generally consists of loose, yellowish brown, reddish brown clayey sandy slit.

COLLUVIUM

Colluvium generally consists of medium dense, yellowish brown & white clayey sandy with fine gravels.

CDV

CDV generally consists of medium or loose dense, reddish & yellowish brown slightly clayey sandy silt.

Volcanic

Moderately weak to strong, grey, dark grey & greyish brown moderately to highly weathered medium to fine grained with closely spaced stained inclined joints.

5.3 Groundwater Condition

Based on the available ground investigation information, highest water table may be at about 6.05m below existing ground level.

6. PROPOSED WORKS

6.1 Proposed Ground Investigation Works

The proposed Ground Investigation works for the site area adjacent to D.D. 32 lot 44, Tai Po Road, New Territories for the proposed development include drilling of 10 vertical drillholes with installation of 4 standpipe / piezometer inside the site. Sampling of soil / rock material and testing will be proposed to determine the soil / rock properties. The proposed GI plan is attached in Appendix H.

6.2 Proposed Works on Existing Features

There are 5 existing features located within or in close proximity to the site. It is anticipated there is proposed works on the features as the proposed site formation, foundation & buildings works shall be within the site and would be design as have no adverse impact to the features. Monitoring on the features shall be carried out throughout the construction period.

Feature No.	*Proposed Works*
7NW-B/R 265	No proposed works. No adverse impact is anticipated. Monitoring shall be carried out during construction.
7NW B/C 270	
7NW B/R 68	
7NW B/R 264	
7NW-B/C 634	Proposed slab installation Monitoring shall be carried out during construction. Stability assessment will be carried out and slope upgrading works will be carried out if found necessary during desk study

Nevertheless, stability of existing feature within or close to the site (including any unregistered features) affecting or being affected by the development during construction works shall be assessed. Monitoring works shall be carried out during the whole construction period. Remedial or upgrading works shall be proposed and carried out if found necessary.

6.3 Proposed Works on Natural Terrain

There is one natural terrain overlooking the development site.

6.4 Proposed Foundation Works

The proposed development comprises 3 storey residential building without basement. The available ground investigation information indicates that the rockhead level, defined as weathering grade III or better rock with total core recovery greater than 85%, or a firm stratum such as grade IV rock, may be encountered on average at a level about 8m below the existing ground. As the loading from the building is comparatively general, mini pile or pre-boring socket H-piles are considered to be feasible foundation options for the proposed building. In case the rock head level is shallow or the bearing capacity is checked to the adequate, footing foundation shall be an alternative. The proposed foundation scheme for the development shall have minimal effect or impact to

the stability of all slopes (man-made & natural terrains), retaining walls and existing building or structures within or in vicinity to the lot. Detailed foundation design will be submitted separately when the proposed ground investigation works are completed. Stability of all existing slopes (man-made & natural terrains) and retaining walls (including unregistered features) within or in vicinity to the lot affecting or being affected by the development during demolition & construction shall be assessed & remedial works shall be carried out if found necessary. A preliminary layout of proposed foundation (i.e. pile) is attached in Appendix I.

6.5 Proposed Site Formation, Excavation and Lateral Support Works

Since the proposed building platform is similar to existing ground level of the site, site formation works are considered to be minimal. For the construction of footing / pile cap, open excavation, sheet pile / pipe pile / soldier pile wall with walings and struts are considered to be feasible scheme to retain excavation depth. The choice of scheme of temporary support shall be subject to detail assessment. A preliminary layout of proposed site formation and ELS works is attached in Appendix I. Stability of all existing slopes (man-made & natural terrains) and retaining walls (including unregistered features) within or in vicinity to the lot affecting or being affected by the development during demolition & construction shall be assessed & remedial works shall be carried out if found necessary. The detailed design of the works will be submitted separately.

6.6 Construction Method & Sequence

All monitoring point shall be installed & initial reading shall be recorded prior commencement of any works. Remedial works on existing slopes & retaining walls being affected shall be carried out prior commencement of site formation, ELS, foundation & superstructure. Pre-boring shall be carried out prior H-pile installation. Obstruction during pipe pile installation for temporary ELS shall be overcome by pre-boring. Strut of the ELS shall not be dismantled until completion of the permanent screen wall support the level difference. All temporary cut slope and back filling shall be backfilled by proper material with proper compaction. Groundwater shall be controlled during the excavation. Excessive groundwater drawdown at the adjacent ground shall not be allowed.

7. IMPACTS ON ADJACENT PREMISES/ GEOTECHNICAL FEATURES

As the existing registered retaining walls & slope is in close proximity to the captioned site, consideration shall be taken in the design of the proposed works. Also, vibration caused by the installation of the pipe piles / socket H-pile and the ground settlement caused by the wall deflection and dewatering in the excavated areas may cause adverse effects to the adjacent utilities and structures. Therefore, it is necessary to limit the amount of vibration and ground settlement by adoption suitable lateral support works design and construction method. Pre-boring shall be carried out prior installation of piling for foundation and ELS. In all case, stability of existing geotechnical features within or in vicinity to the lot affecting or being affected by the development shall be assessed & remedial works shall be carried out if found necessary.

Groundwater control during the excavation is also critical for the design since the groundwater level is quite high. Excessive groundwater drawdown at the adjacent ground is not allowed because ground settlement will be induced and damage will be

caused to the adjacent structures and utilities. Detail assessment and design will be included in the foundation, site formation and ELS submission.

In addition, in order to ensure the adjacent premises will not be damaged by the proposed works, settlement monitoring stations, titling check points and building settlement pins will be proposed to be installed around the site. The movement of the adjacent premises will be monitored at these stations continuously throughout the work period. The noise from proposed works shall be kept within acceptable limit to minimize the disturbance to the environment. The detailed assessment and discussion on these aspects will be presented in the separate submission for ELS works.

8. CONCLUSION

On the basis of the available geotechnical information, the following conclusions and recommendations are drawn:

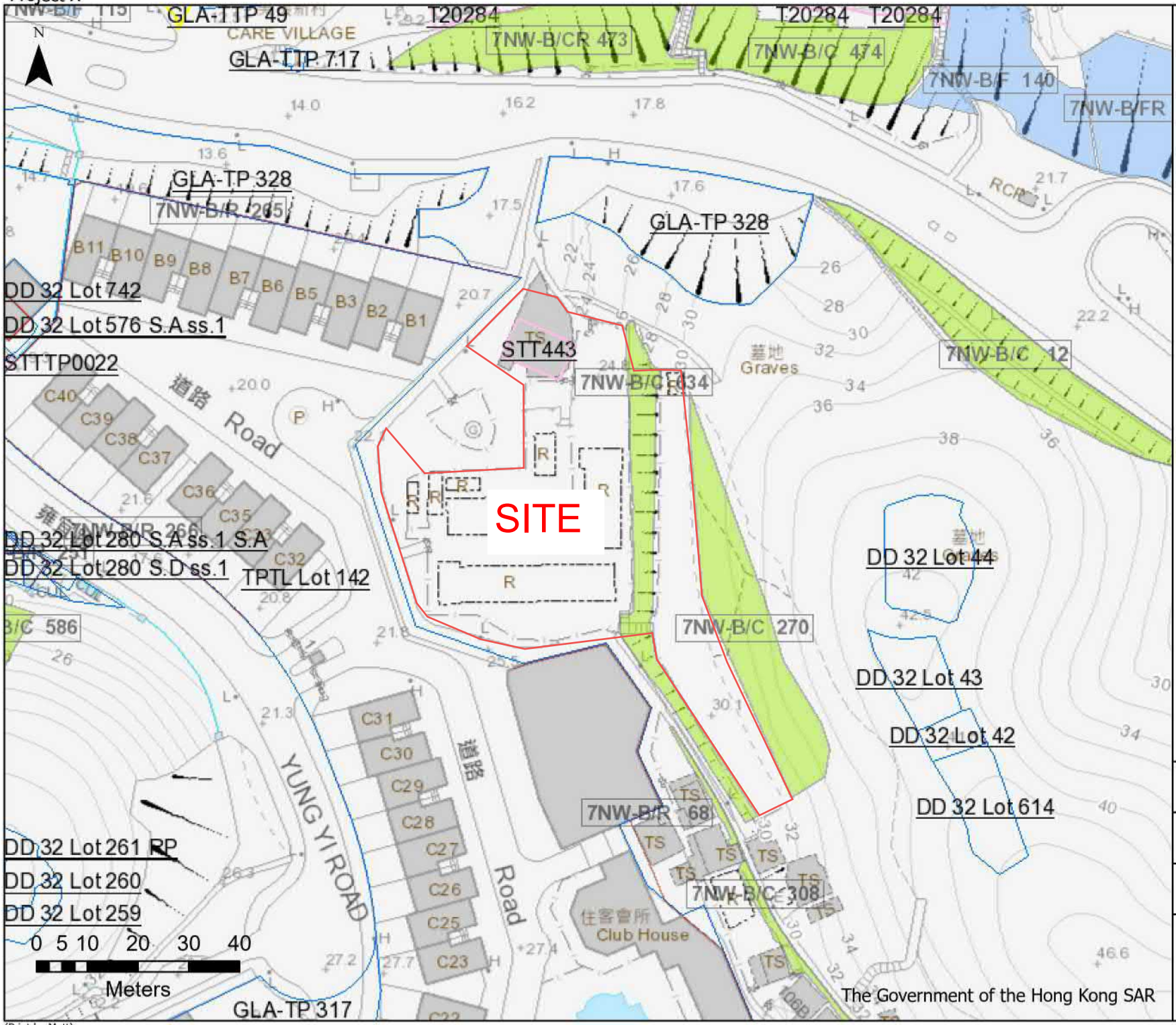
- The proposed redevelopment as presented in the preliminary Master Layout Plan is considered as a geotechnical feasible scheme.
- Ground investigation works will be carried out within the proposed development site.
- Mini pile or socket H pile with pre-boring is considered to be feasible foundation options for the proposed development. Footing may be an alternative if the soil stratum at shallow level provides adequate bearing capacity.
- The site formation works for the proposed development shall be minimal.
- Suitable groundwater control scheme shall be considered in design to avoid excessive groundwater drawdown at the adjacent area.
- Proper excavation and lateral support works design and construction method have to be adopted to minimise the adverse effect on the existing utilities and structures. The detailed discussion will be presented the separate submission for excavation and lateral support works.
- Stability of all slopes (man-made & natural terrains) and retaining walls (including unregistered features) within or in vicinity to the lot affecting or being affected by the development during demolition & construction works shall be assessed & remedial works shall be carried out if found necessary
- Stability of the natural terrain affecting or being affected by the development permanently or temporarily during demolition & construction works shall be assessed & monitored. Mitigation works shall be proposed and carried out as necessary.

It is noteworthy to note that the works/proposal mentioned in this report are preliminary only at the planning stage and will be subjected to detailed study in the detail design stage under separate cover. Based on the current assessment, the proposed development is considered geotechnical feasible.

APPENDIX A

SITE LOCATION & SURVEY PLAN

Project X



Man-made Features

- Cut slopes
- Disturbed terrain
- Fill slopes
- NT defence measures
- NT stabilisation measures
- Retaining walls

Slope Features

- BuildingLicence
- ConditionPolygon
- DepositAreaAndVestingO
- GLA
- LAOPropertyManagemen
- LicenceAndPermitLine
- LicenceAndPermitPoly
- Lot
- MICA
- TenancyLine
- TenancyPoly
- Waiver

Division	Development
Scale	1:1000
Date	13/12/2023

GEOTECHNICAL ENGINEERING OFFICE
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

The Government of the Hong Kong SAR

(Print by Mott)

APPENDIX B

INFORMATION OF EXISTING SLOPES/RETAINING WALLS

Slope Maintenance Responsibility Report (7NW-B/C270)	ESTATE MANAGEMENT SECTION LANDS DEPARTMENT

List of Slope Maintenance Responsibility Area(s)

1	**7NW-B/C270**		**Sub-Division**	Not Applicable
	Location	PARTLY IN GL & PARTLY IN T13854 NEAR SPOT LEVEL 42.5		
	Responsible Lot/Party	Lands Department	**Maintenance Agent**	Lands Department
	Remarks	For enquiries about the maintenance of this slope / sub-division of the slope, please contact the Maintenance Agent directly.		

- End of Report -

Notes:

(i) The location plan in Annex is for identification purposes of slope(s) only.

(ii) The slope(s) as listed in the Slope Maintenance Responsibility Report may not be shown on the location plan in Annex.

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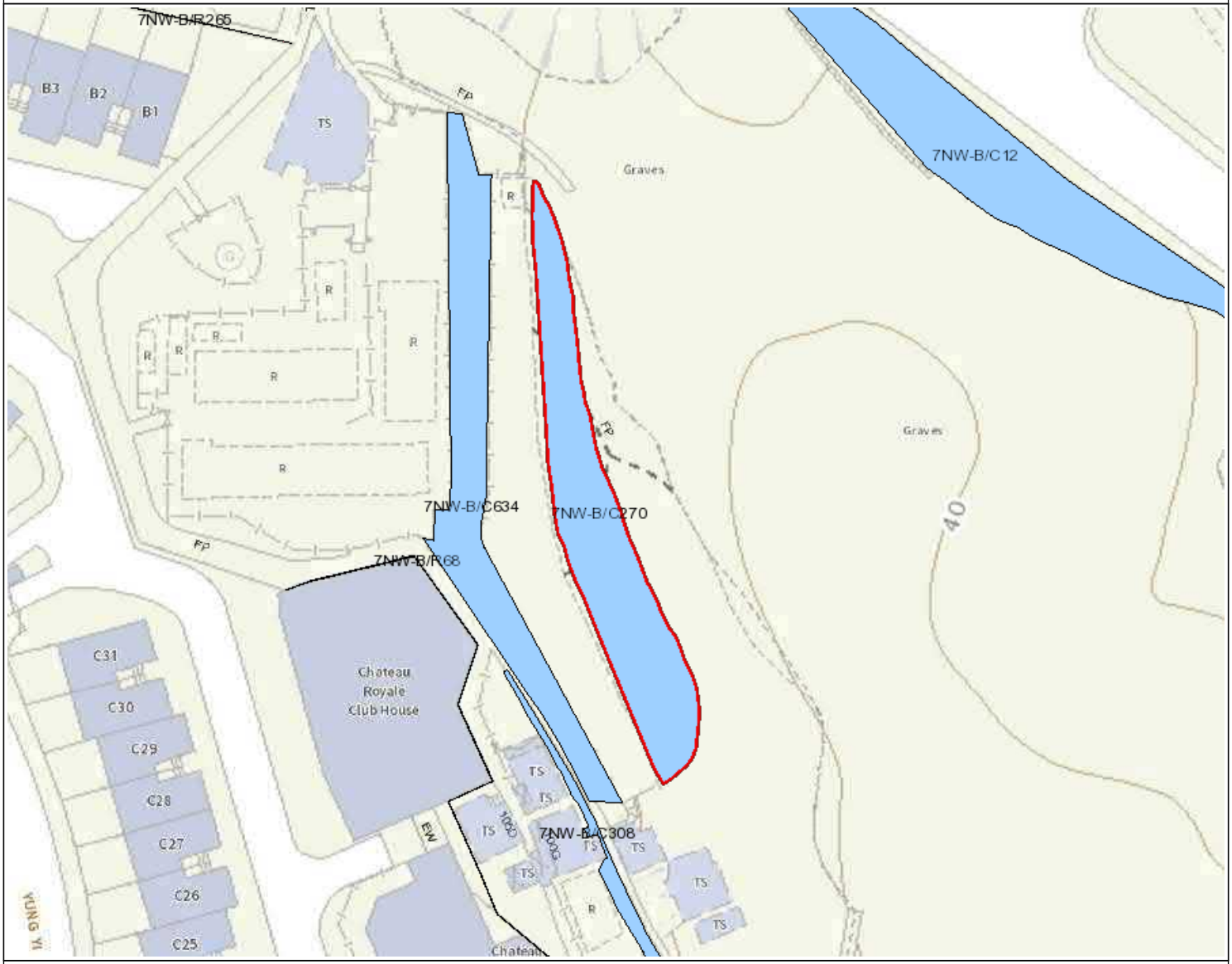
Location Plan



Legend

- Slope Area(s)
- Search Location
- Slope(s) Maintained by Government
- Slope(s) Maintained by Private Party/Parties
- Slope(s) Maintained by Government and Private Party/Parties

ESTATE MANAGEMENT SECTION
LANDS DEPARTMENT

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BASIC INFORMATION

Location:	East of Dis-used school & South of Tai Po Road, Tai Po
Registration Date:	24-10-1998
Ranking Score (NPRS):	0 (EI)
Date of Formation:	pre-1977
Date of Construction/ Modification:	
Data Source:	EI(Lands D)
Approximate Coordinates:	Easting : 836464 Northing : 833567

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest:	Undeveloped green belt
Distance of Facility from Crest (m):	0
Facility at Toe:	Remote area or abandoned facilities
Distance of Facility from Toe (m):	0
Consequence-to-life Category:	3
Remarks:	N/A

SLOPE PART

(1) Max. Height (m): 3 Length (m): 88 Average Angle (deg): 65

WALL PART

N/A

MAINTENANCE RESPONSIBILITY

(1) Sub Div.: 0 Government Feature Party: Lands D Agent: Lands D Land Cat.: 1,5b(vi),7 Reason Code: 5,62 MR Endorsement Date: 07-04-1999

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection:	12-04-2002
Data Source:	EI(Lands D)
Slope Part Drainage:	N/A
Wall Part Drainage:	N/A

SLOPE PART

Slope Part (1)
Surface Protection (%): Bare: 0 Vegetated: 100 Chunam: 0 Shotcrete: 0 Other Cover: 0
Material Description: Material type: Soil Geology: Decomposed volcanic
Berm: No. of Berms: N/A Min. Berm Width (m): N/A
Weepholes: Size (mm): N/A Spacing (m): N/A

WALL PART

N/A

SERVICES

N/A

CHECKING STATUS INFORMATION

N/A

BACKGROUND INFORMATION

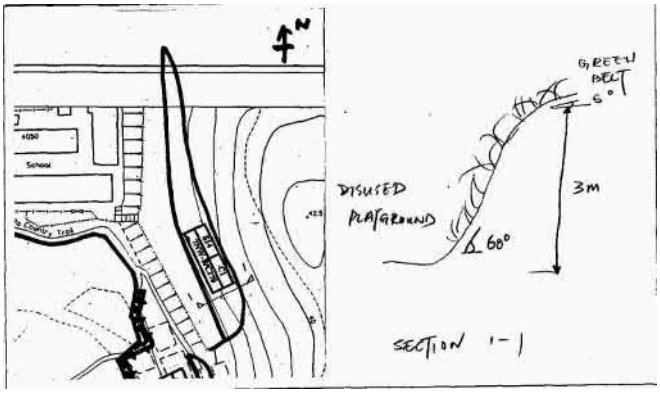
GIU Cell Ref.:	7NW15A2
Map Sheet Reference (1:1000):	7NW-15A
Aerial Photos:	CN4628 (1993), CN4629 (1993)
Nearest Rainguage Station (Station Number):	Tai Po Kau Country Park Management Centre(N41)
Data Collected On:	12-04-2002
Date of Construction, Subsequent Modification and Demolition:	Modification: Constructed Before: 1974 After: 1963
Related Reports/Files or Documents:	N/A
Remarks:	N/A
Follow Up Actions:	N/A
DH-Order (To Be Confirmed with Buildings Department):	None
Advisory Letter (To Be Confirmed with Buildings Department):	None
LPMIS:	None

ENHANCED MAINTENANCE INFORMATION

From Maintenance Department: (Last Updated Date: 25/09/2023)

STAGE 1 STUDY REPORT

Inspected On:	14-07-1998
Weather:	Mainly Fine
District:	ME



Section No:	1-1
Height(m):	H1 : 3 , H2 : 0
Type of Toe Facility:	Remote area or abandoned facilities
Distance from Toe(m):	0
Type of Crest Facility:	Undeveloped green belt
Distance from Crest(m):	0
Consequence Category:	3
Engineering Judgement:	P
Section No:	2-2
Type of Toe Facility:	N/A
Distance from Toe(m):	0
Type of Crest Facility:	N/A
Distance from Crest(m):	0
Consequence Category:	3
Engineering Judgement:	P
Sign of Seepage:	Slope : No signs of seepage Wall : N/A
Criterion A satisfied:	N
Sign of Distress:	Slope : Reasonable (near crest, mid-portion, at toe) Wall : N/A
Criterion D satisfied:	N
Non-routine maintenance required:	N
Note:	N/A
Masonry wall/Masonry facing:	N
Note:	N/A
Consequence category (for critical section):	3
Observations:	N/A
Emergency Action Required:	N
Action By:	N/A

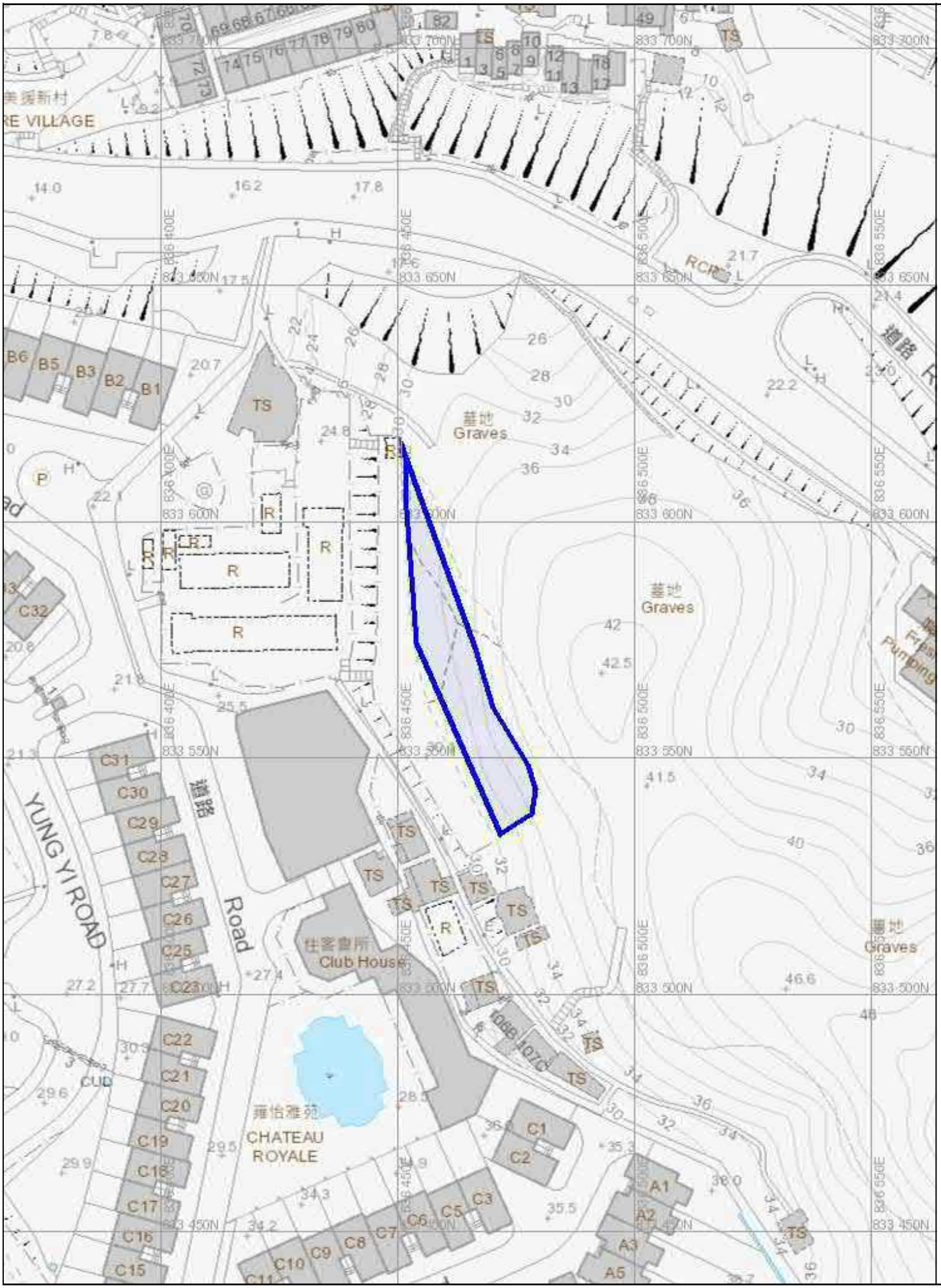
ACTION TO INITIATE PREVENTIVE WORKS

Criterion A/Criterion D:	N/A
Action By:	N/A
Further Study:	Y
Action By:	Mixed

OTHER EXTERNAL ACTION

Check / repair Services:	N
Action By:	N/A
Non-routine Maintenance:	N
Action By:	N/A

PHOTO


YUNG YI ROAD
Road
CHATEAU ROYALE
Club House
Graves
TS
R
C1
C2
C3
C5
C6
C7
C8
C9
C10
C15
C16
C17
C18
C19
C20
C21
C22
C23
C25
C26
C27
C28
C29
C30
C31
C32
A1
A2
A3
A5
B1
B2
B3
B5
B6

Slope Maintenance Responsibility Report (7NW-B/C308)	ESTATE MANAGEMENT SECTION LANDS DEPARTMENT

List of Slope Maintenance Responsibility Area(s)

1	**7NW-B/C308**		**Sub-Division**	Not Applicable
	Location	On unallocated Government land to the east of TPTL 142		
	Responsible Lot/Party	Lands Department	**Maintenance Agent**	Lands Department
	Remarks	For enquiries about the maintenance of this slope / sub-division of the slope, please contact the Maintenance Agent directly.		

- End of Report -

Notes:

(i) The location plan in Annex is for identification purposes of slope(s) only.

(ii) The slope(s) as listed in the Slope Maintenance Responsibility Report may not be shown on the location plan in Annex.

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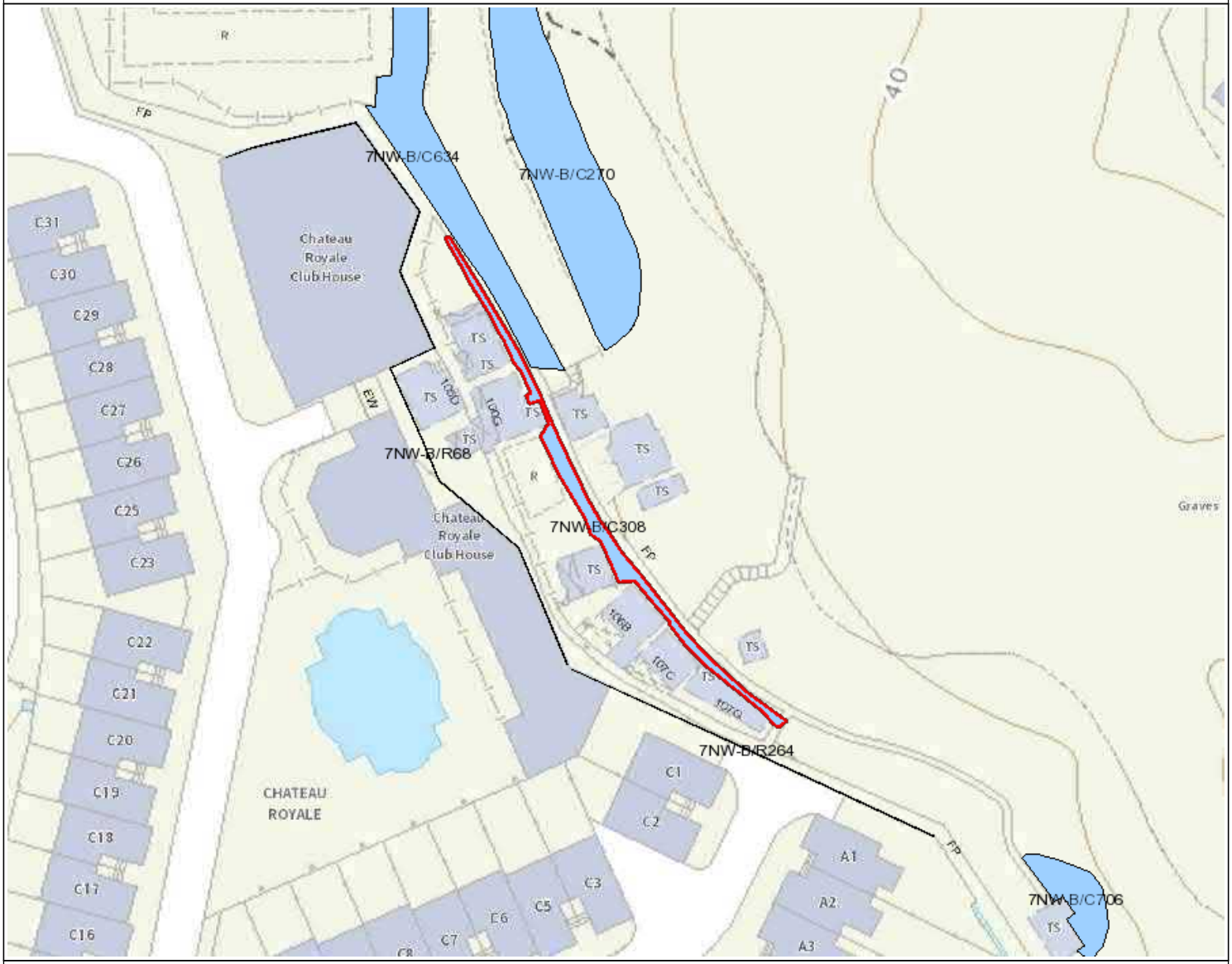
Location Plan



Legend

- Slope Area(s)
- Search Location
- Slope(s) Maintained by Government
- Slope(s) Maintained by Private Party/Parties
- Slope(s) Maintained by Government and Private Party/Parties

ESTATE MANAGEMENT SECTION
LANDS DEPARTMENT

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BASIC INFORMATION

Location:	East of Private Lot No. TPTL 142, Wong Yi Au, Tai Po
Registration Date:	24-10-1998
Ranking Score (NPRS):	0 (LPMit)
Date of Formation:	pre-1977
Date of Construction/ Modification:	30-06-2016
Data Source:	LPM
Approximate Coordinates:	Easting : 836472 Northing : 833502

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest:	Cottage, licensed and squatter area
Distance of Facility from Crest (m):	1.4
Facility at Toe:	Cottage, licensed and squatter area
Distance of Facility from Toe (m):	0
Consequence-to-life Category:	1
Remarks:	N/A

SLOPE PART

(1) Max. Height (m): 3 Length (m): 86 Average Angle (deg): 80

WALL PART

N/A

MAINTENANCE RESPONSIBILITY

(1) Sub Div.: 0 Government Feature Party: Lands D Agent: Lands D Land Cat.: 5b(vi) Reason Code: 62 MR Endorsement Date: 13-03-2018

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection:	18-07-2018
Data Source:	LPM
Slope Part Drainage:	N/A
Wall Part Drainage:	N/A

SLOPE PART

Slope Part (1)
Surface Protection (%): Bare: 0 Vegetated: 0 Chunam: 0 Shotcrete: 100 Other Cover: 0
Material Description: Material type: Soil Geology: N/A
Berm: No. of Berms: N/A Min. Berm Width (m): N/A
Weepholes: Size (mm): 50 Spacing (m): 1.5

WALL PART

N/A

SERVICES

(1) Utilities Type: Water Main Size(mm): 20 Location: On slope Remark: N/A

CHECKING STATUS INFORMATION

N/A

BACKGROUND INFORMATION

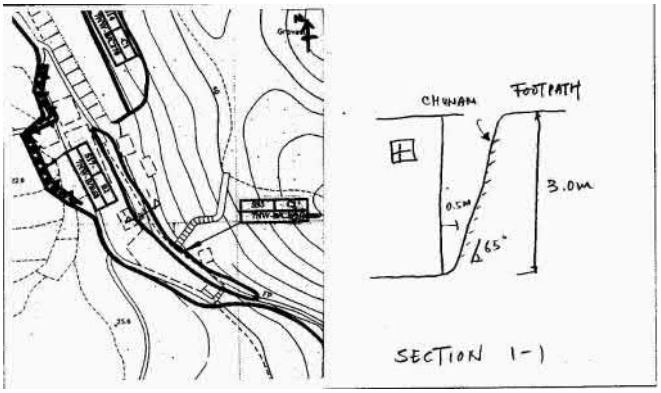
GIU Cell Ref.:	7NW15A2
Map Sheet Reference (1:1000):	7NW-15A
Aerial Photos:	Y9564 (1963), Y9565 (1963)
Nearest Rainguage Station (Station Number):	Tai Po Kau Country Park Management Centre(N41)
Data Collected On:	18-07-2018
Date of Construction, Subsequent Modification and Demolition:	Modification: Constructed Before: 1963 After: N/A
Related Reports/Files or Documents:	N/A
Remarks:	N/A
Follow Up Actions:	N/A
DH-Order (To Be Confirmed with Buildings Department):	None
Advisory Letter (To Be Confirmed with Buildings Department):	None
LPMIS:	None

ENHANCED MAINTENANCE INFORMATION

From Maintenance Department: (Last Updated Date: 25/09/2023)
Upgraded by:
Prescriptive Design Using GEO Report No. 56: Yes
Non-prescriptive Design Including Conventional Design: N/A
Improved by:
Type 1 / Type 2 Prescriptive Measures: N/A
Type 3 Prescriptive Measures (not up to upgrading standard): N/A
Actual Completion Date: 30-09-2016

STAGE 1 STUDY REPORT

Inspected On:	14-07-1998
Weather:	Mainly Fine
District:	ME



Section No:	1-1
Height(m):	H1 : 3 , H2 : 0
Type of Toe Facility:	Cottage, licensed and squatter area
Distance from Toe(m):	0
Type of Crest Facility:	Cottage, licensed and squatter area
Distance from Crest(m):	1.4
Consequence Category:	1
Engineering Judgement:	P
Section No:	2-2
Type of Toe Facility:	N/A
Distance from Toe(m):	0
Type of Crest Facility:	N/A
Distance from Crest(m):	0
Consequence Category:	1
Engineering Judgement:	P
Sign of Seepage:	Slope : No signs of seepage Wall : N/A
Criterion A satisfied:	N
Sign of Distress:	Slope : Reasonable (near crest, mid-portion, at toe) Wall : N/A
Criterion D satisfied:	N
Non-routine maintenance required:	N

Note:	N/A
Masonry wall/Masonry facing:	N
Note:	N/A
Consequence category (for critical section):	1
Observations:	N/A
Emergency Action Required:	N
Action By:	N/A

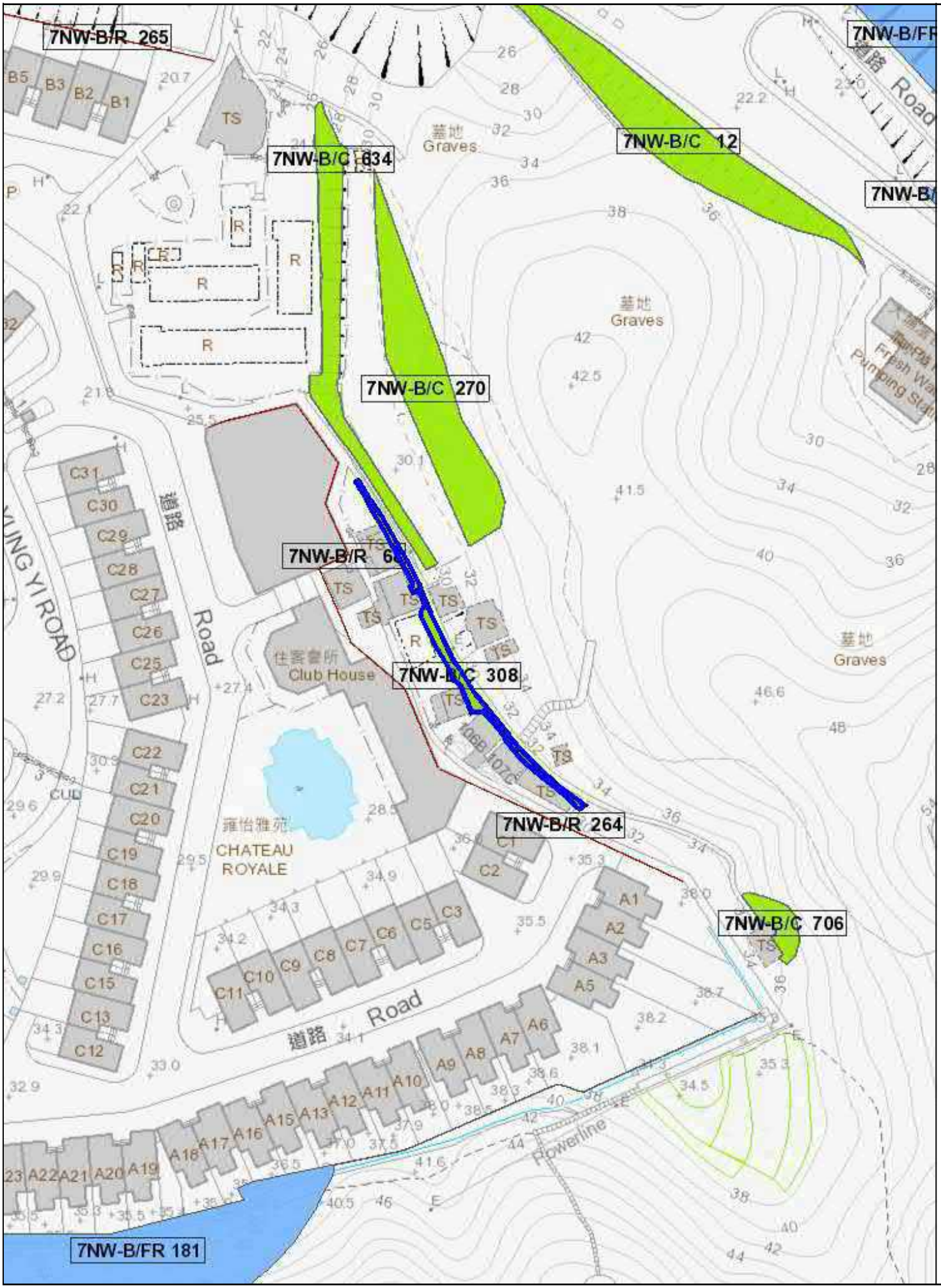
ACTION TO INITIATE PREVENTIVE WORKS

Criterion A/Criterion D:	N/A
Action By:	N/A
Further Study:	Y
Action By:	Mixed

OTHER EXTERNAL ACTION

Check / repair Services:	N
Action By:	N/A
Non-routine Maintenance:	N
Action By:	N/A

PHOTO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7NW-B/C 634
7NW-B/C 12
7NW-B/C 270
7NW-B/R 6
7NW-B/C 308
7NW-B/R 264
7NW-B/C 706
7NW-B/FR 181
Graves
Club House
CHATEAU ROYALE
Road
Powerline

Slope Maintenance Responsibility Report (7NW-B/R265)	ESTATE MANAGEMENT SECTION LANDS DEPARTMENT

List of Slope Maintenance Responsibility Area(s)

1	**7NW-B/R265**		**Sub-Division**	Not Applicable
	Location	WITHIN AND ALONG BOUNDARY OF TPTL142		
	Responsible Lot/Party	TPTL142	**Maintenance Agent**	Not Applicable
	Remarks	Slope information being reviewed.		

- End of Report -

Notes:

(i) The location plan in Annex is for identification purposes of slope(s) only.

(ii) The slope(s) as listed in the Slope Maintenance Responsibility Report may not be shown on the location plan in Annex.

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Location Plan

Legend

- Slope Area(s)
- Search Location
- Slope(s) Maintained by Government
- Slope(s) Maintained by Private Party/Parties
- Slope(s) Maintained by Government and Private Party/Parties

ESTATE MANAGEMENT SECTION
LANDS DEPARTMENT

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BASIC INFORMATION

Location:	TPTL 142 IN DD32 WONG YI AU YUNG YI ROAD, TAI PO
Registration Date:	01-08-2000
Ranking Score (NPRS):	1 (LPMit)
Date of Formation:	post-1977
Date of Construction/ Modification:	
Data Source:	SIRST
Approximate Coordinates:	Easting : 836357 Northing : 833650

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest:	Residential building
Distance of Facility from Crest (m):	0
Facility at Toe:	Road/footpath with very heavy traffic density
Distance of Facility from Toe (m):	5
Consequence-to-life Category:	1
Remarks:	N/A

SLOPE PART

N/A

WALL PART

(1) Max. Height (m): 6 Length (m): 155 Face Angle (deg): 90

MAINTENANCE RESPONSIBILITY

(1) Sub Div.: 0 Private Feature Party: TPTL142 Agent: N/A Land Cat.: 1 Reason Code: 1 MR Endorsement Date: 19-02-2008

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection:	20-09-2000
Data Source:	SIRST
Slope Part Drainage:	N/A
Wall Part Drainage:	(1) Position: Toe Size(mm): 325

SLOPE PART

N/A

WALL PART

Wall Part (1)
Type of Wall: Wall Material: Concrete Wall Location: Wall at toe
Berm: No. of Berms: N/A Min. Berm Width (m): N/A
Weepholes: Size (mm): 95 Spacing (m): 1.2

SERVICES

N/A

CHECKING STATUS INFORMATION

N/A

BACKGROUND INFORMATION

GIU Cell Ref.:	3SW23C6
Map Sheet Reference (1:1000):	7NW-10C
Aerial Photos:	N/A
Nearest Rainguage Station (Station Number):	Booster Pumping Station, Hong Lok Yuen(N35)
Data Collected On:	20-09-2000
Date of Construction, Subsequent Modification and Demolition:	N/A
Related Reports/Files or Documents:	File/Report: DLC/BC Ref. No.: 4/1C/2-5 PT11/15/6 f5-7/11,13,14,10 File/Report: DLC/BC Ref. No.: 4/1C/2-5 PT11/15/6 f5-7/11,13,14,10 File/Report: Development Ref. No.: GCME 3/5/6/9327/92 File/Report: Development Ref. No.: GCME 3/5/6/9327/92 File/Report: LA Ref. No.: GCME 5/3/7 PT11/12/13 case19/1/23 File/Report: LA Ref. No.: GCME 5/3/7 PT11/12/13 case19/1/23 File/Report: LA Ref. No.: GCME 5/5/7 pt6 case18 File/Report: LA Ref. No.: GCME 5/5/7 pt6 case18 File/Report: LWC Ref. No.: GC4/1/2-3 f(19)PTVI File/Report: LWC Ref. No.: GC4/1/2-3 f(19)PTVI File/Report: Other Ref. No.: AREA FILE 2/E1/7NW-B pt2 case17 File/Report: Other Ref. No.: AREA FILE 2/E1/7NW-B pt2 case17 File/Report: Other Ref. No.: CHECKED BY GEO GCME3/5/6/9327/92 File/Report: Other Ref. No.: CHECKED BY GEO GCME3/5/6/9327/92
Remarks:	N/A
Follow Up Actions:	N/A
DH-Order (To Be Confirmed with Buildings Department):	None

Advisory Letter (To Be Confirmed with Buildings Department):	None
LPMIS:	None

ENHANCED MAINTENANCE INFORMATION

From Maintenance Department: (Last Updated Date: 25/09/2023)

STAGE 1 STUDY REPORT

Inspected On:	
Weather:	
District:	ME
Section No:	1-1
Height(m):	
Type of Toe Facility:	Road/footpath with very heavy traffic density
Distance from Toe(m):	5
Type of Crest Facility:	Residential building
Distance from Crest(m):	0
Consequence Category:	
Engineering Judgement:	
Section No:	2-2
Type of Toe Facility:	
Distance from Toe(m):	
Type of Crest Facility:	
Distance from Crest(m):	
Consequence Category:	
Engineering Judgement:	
Sign of Seepage:	
Criterion A satisfied:	
Sign of Distress:	
Criterion D satisfied:	
Non-routine maintenance required:	
Note:	
Masonry wall/Masonry facing:	
Note:	
Consequence category (for critical section):	
Observations:	N/A
Emergency Action Required:	
Action By:	N/A

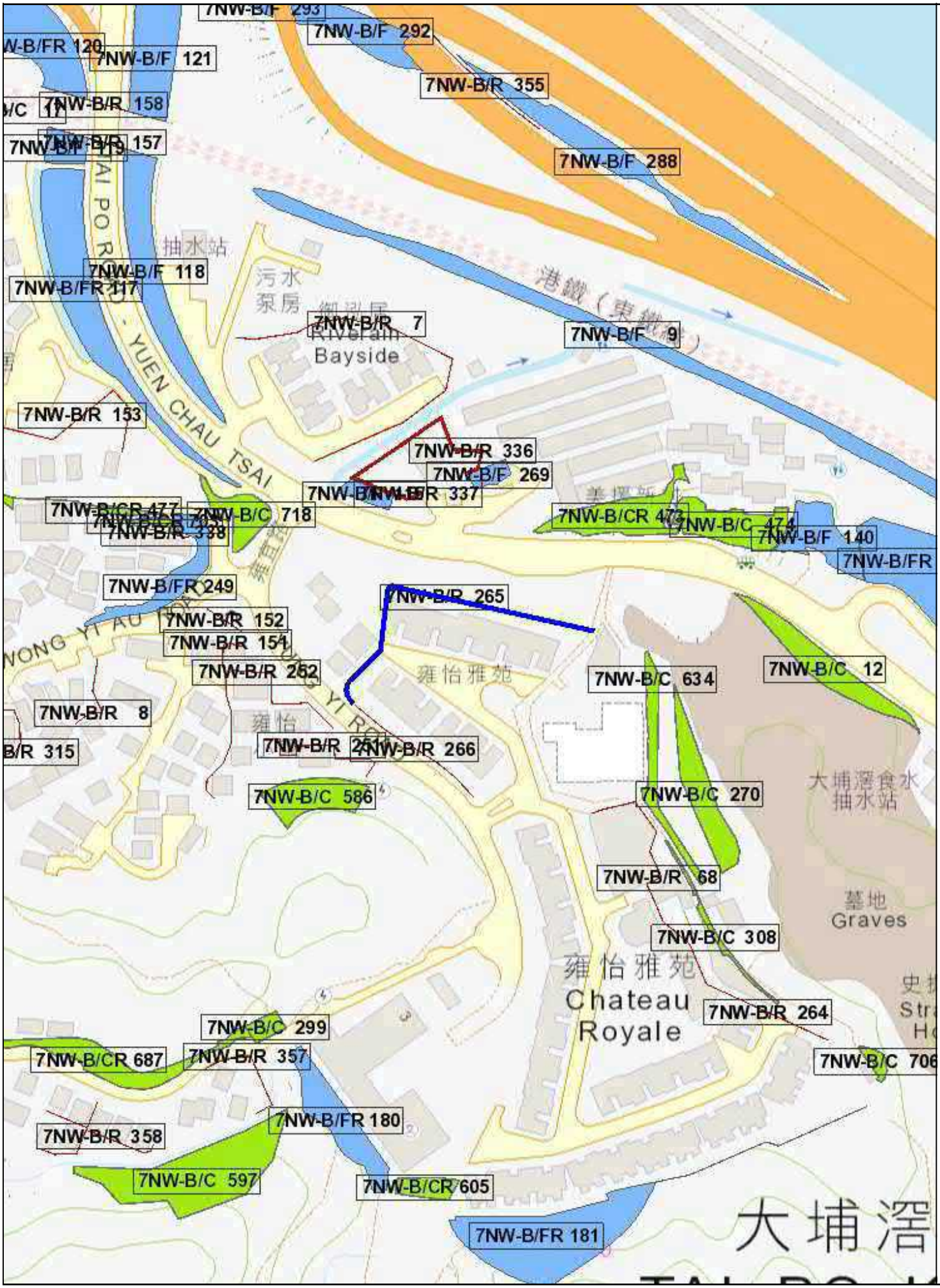
ACTION TO INITIATE PREVENTIVE WORKS

Criterion A/Criterion D: N/A
Action By: N/A
Further Study:
Action By: N/A

OTHER EXTERNAL ACTION

Check / repair Services:
Action By: N/A
Non-routine Maintenance:
Action By: N/A

PHOTO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7NW-B/R 158
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7NW-B/FR 117
7NW-B/R 7
7NW-B/F 9
Riverain
Bayside
7NW-B/R 153
7NW-B/R 336
7NW-B/F 269
7NW-B/R 337
7NW-B/C 718
7NW-B/CR 473
7NW-B/C 474
7NW-B/F 140
7NW-B/FR 249
7NW-B/R 265
7NW-B/R 152
7NW-B/R 151
7NW-B/R 252
7NW-B/C 634
7NW-B/C 12
7NW-B/R 8
7NW-B/R 266
7NW-B/C 586
7NW-B/C 270
7NW-B/R 68
7NW-B/C 308
Chateau
Royale
7NW-B/R 264
7NW-B/C 706
7NW-B/C 299
7NW-B/CR 687
7NW-B/R 357
7NW-B/FR 180
7NW-B/R 358
7NW-B/C 597
7NW-B/CR 605
7NW-B/FR 181
YUEN CHAU TSAI
Graves

Slope Maintenance Responsibility Report (7NW-B/R68)	ESTATE MANAGEMENT SECTION LANDS DEPARTMENT

List of Slope Maintenance Responsibility Area(s)

1	**7NW-B/R68**		**Sub-Division**	Not Applicable
	Location	WITHIN TPTL142		
	Responsible Lot/Party	TPTL142	**Maintenance Agent**	Not Applicable
	Remarks	Not Applicable		

- End of Report -

Notes:

(i) The location plan in Annex is for identification purposes of slope(s) only.

(ii) The slope(s) as listed in the Slope Maintenance Responsibility Report may not be shown on the location plan in Annex.

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Location Plan

Legend

- Slope Area(s)
- Search Location
- Slope(s) Maintained by Government
- Slope(s) Maintained by Private Party/Parties
- Slope(s) Maintained by Government and Private Party/Parties

ESTATE MANAGEMENT SECTION
LANDS DEPARTMENT

This Plan is **NOT TO SCALE** and intended for **IDENTIFICATION** only. All information shown on this plan **MUST** be verified by field survey.

Printed on: 11/12/2023

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BASIC INFORMATION

Location:	TPTL 142, DD32, WONG YI AU
Registration Date:	17-02-1998
Ranking Score (NPRS):	0 (LPMit)
Date of Formation:	post-1977
Date of Construction/ Modification:	
Data Source:	EI
Approximate Coordinates:	Easting : 836446 Northing : 833532

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest:	Road/footpath with moderate traffic density
Distance of Facility from Crest (m):	0
Facility at Toe:	District open space
Distance of Facility from Toe (m):	0
Consequence-to-life Category:	2
Remarks:	N/A

SLOPE PART

N/A

WALL PART

(1) Max. Height (m): 5.8 Length (m): 100 Face Angle (deg): 90

MAINTENANCE RESPONSIBILITY

(1) Sub Div.: 0 Private Feature Party: TPTL142 Agent: N/A Land Cat.: 1 Reason Code: 1 MR Endorsement Date: 08-05-2001

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection:	14-08-1998
Data Source:	EI
Slope Part Drainage:	N/A
Wall Part Drainage:	(1) Position: Crest Size(mm): 325

SLOPE PART

N/A

WALL PART

Wall Part (1)
Type of Wall: Wall Material: N/A Wall Location: Retaining wall with level platform
Berm: No. of Berms: N/A Min. Berm Width (m): N/A
Weepholes: Size (mm): 95 Spacing (m): 1.2

SERVICES

N/A

CHECKING STATUS INFORMATION

N/A

BACKGROUND INFORMATION

GIU Cell Ref.:	7NW15A2
Map Sheet Reference (1:1000):	7NW-15A
Aerial Photos:	CN10269 (1995), CN10270 (1995)
Nearest Rainguage Station (Station Number):	Tai Po Kau Country Park Management Centre(N41)
Data Collected On:	14-08-1998
Date of Construction, Subsequent Modification and Demolition:	Modification: Constructed Before: 1995 After: 1993
Related Reports/Files or Documents:	File/Report: DLC/BC Ref. No.: GCME 4/1C/2-5 pt.11/15/16 f (5-7/11,13/4/10,11) File/Report: DLC/BC Ref. No.: GCME 4/1C/2-5 pt.11/15/16 f (5-7/11,13/4/10,11)
Remarks:	N/A
Follow Up Actions:	N/A
DH-Order (To Be Confirmed with Buildings Department):	None
Advisory Letter (To Be Confirmed with Buildings Department):	None
LPMIS:	None

ENHANCED MAINTENANCE INFORMATION

From Maintenance Department: (Last Updated Date: 25/09/2023)

STAGE 1 STUDY REPORT

Inspected On:	
Weather:	
District:	ME
Section No:	1-1
Height(m):	
Type of Toe Facility:	District open space
Distance from Toe(m):	0
Type of Crest Facility:	Road/footpath with moderate traffic density
Distance from Crest(m):	0
Consequence Category:	
Engineering Judgement:	
Section No:	2-2
Type of Toe Facility:	
Distance from Toe(m):	
Type of Crest Facility:	
Distance from Crest(m):	
Consequence Category:	
Engineering Judgement:	
Sign of Seepage:	
Criterion A satisfied:	
Sign of Distress:	
Criterion D satisfied:	
Non-routine maintenance required:	
Note:	
Masonry wall/Masonry facing:	
Note:	
Consequence category (for critical section):	
Observations:	N/A
Emergency Action Required:	
Action By:	N/A

ACTION TO INITIATE PREVENTIVE WORKS

Criterion A/Criterion D:	N/A
Action By:	N/A
Further Study:	
Action By:	N/A

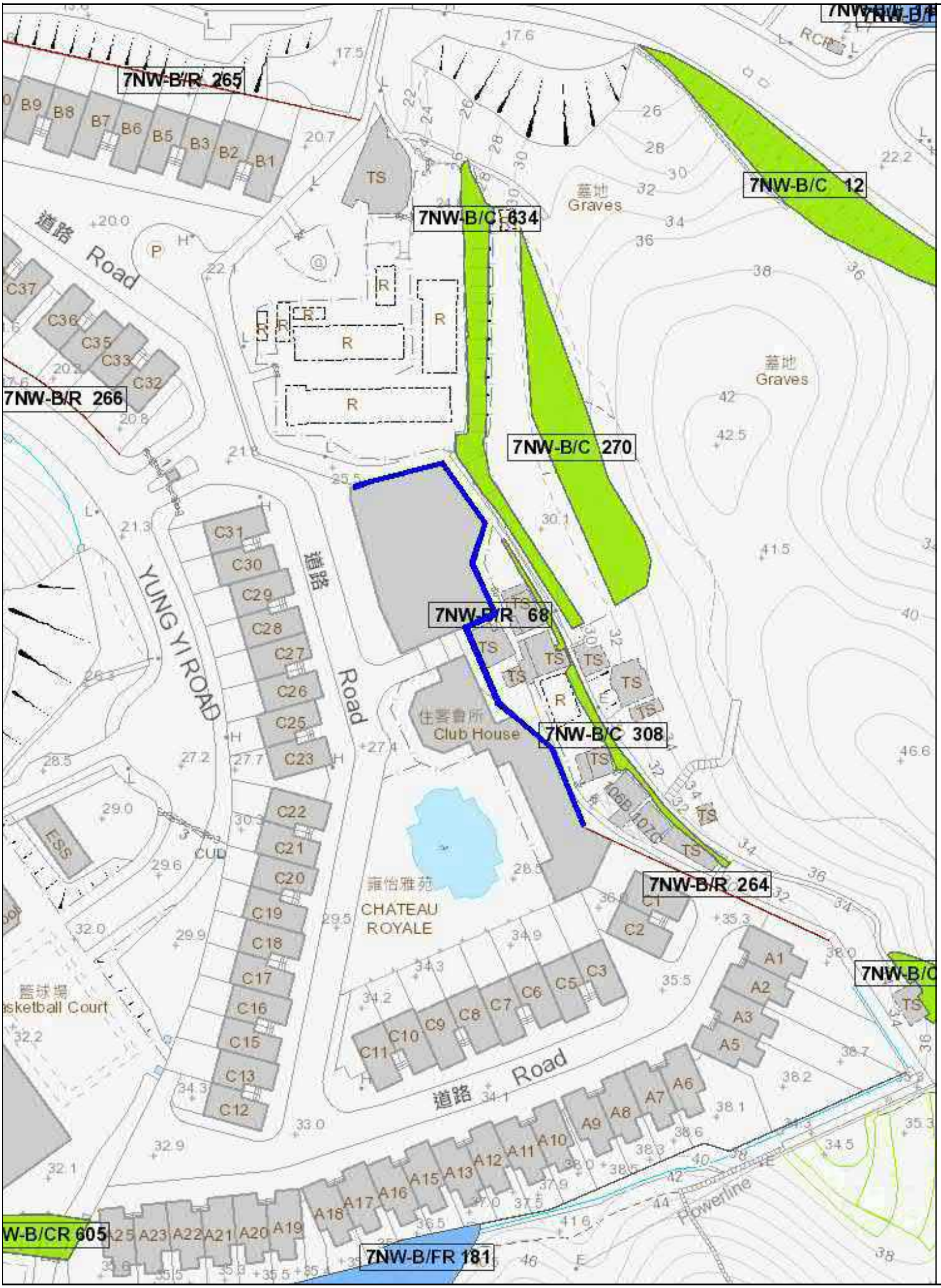
OTHER EXTERNAL ACTION

Check / repair Services:	
Action By:	N/A

Non-routine Maintenance:

Action By: N/A

PHOTO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7NW-B/C 634
7NW-B/C 12
7NW-B/R 266
7NW-B/C 270
7NW-B/R 68
7NW-B/C 308
7NW-B/R 264
7NW-B/CR 605
7NW-B/FR 181
道路 Road
YUNG YI ROAD
Road
蓋地 Graves
會所 Club House
CHATEAU ROYALE
Powerline
TS
R
ESS
CUD

Slope Maintenance Responsibility Report (7NW-B/C634)	ESTATE MANAGEMENT SECTION LANDS DEPARTMENT

List of Slope Maintenance Responsibility Area(s)

1	**7NW-B/C634**		**Sub-Division**	Not Applicable
	Location	TO THE EAST OF TPTL 142		
	Responsible Lot/Party	Lands Department	**Maintenance Agent**	Lands Department
	Remarks	1. Slope information being reviewed. 2. For enquiries about the maintenance of this slope / sub-division of the slope, please contact the Maintenance Agent directly.		

- End of Report -

Notes:

(i) The location plan in Annex is for identification purposes of slope(s) only.

(ii) The slope(s) as listed in the Slope Maintenance Responsibility Report may not be shown on the location plan in Annex.

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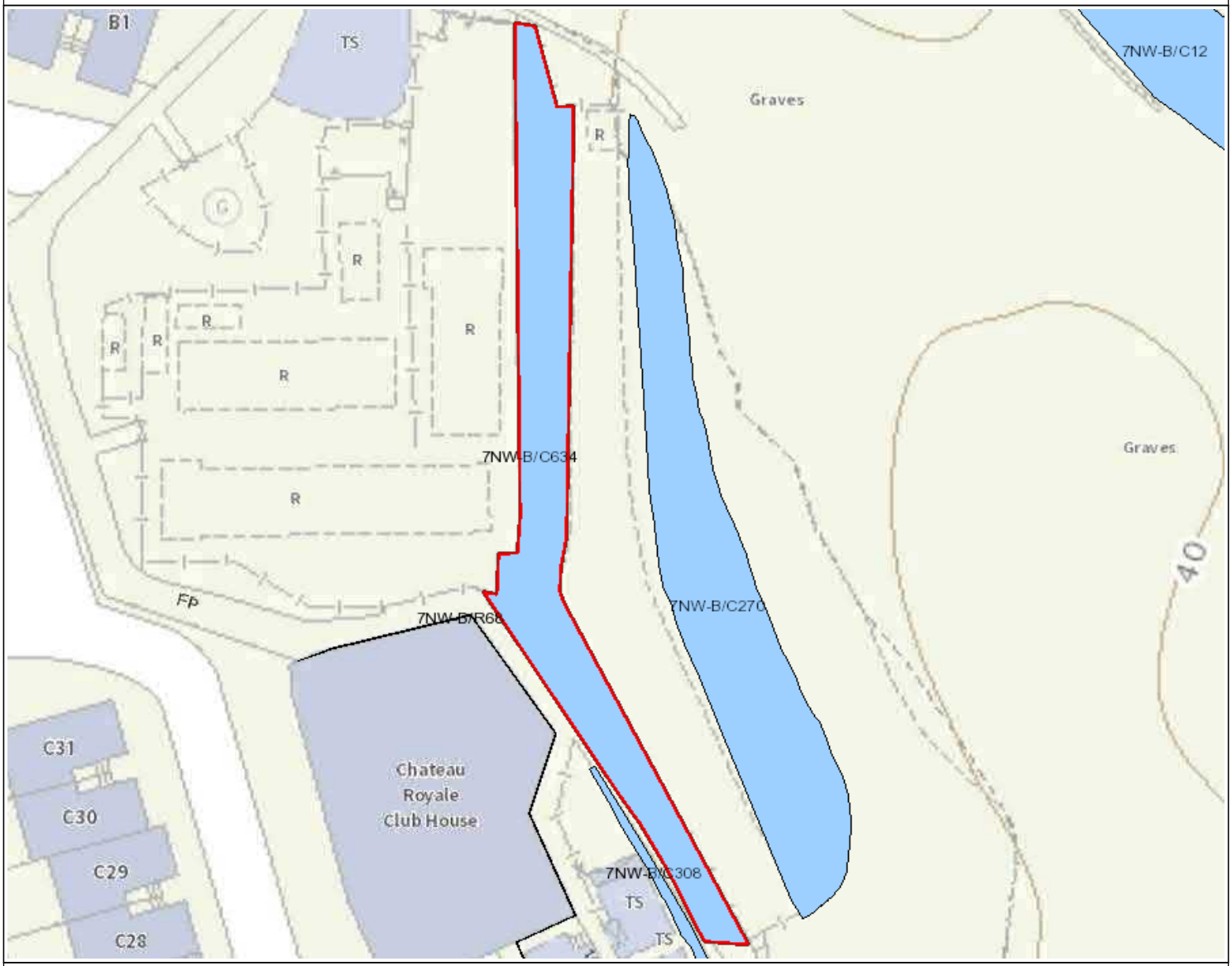
Location Plan



Legend

- Slope Area(s)
- Search Location
- Slope(s) Maintained by Government
- Slope(s) Maintained by Private Party/Parties
- Slope(s) Maintained by Government and Private Party/Parties

ESTATE MANAGEMENT SECTION
LANDS DEPARTMENT

This Plan is **NOT TO SCALE** and intended for **IDENTIFICATION** only. All information shown on this plan **MUST** be verified by field survey.

Printed on: 09/02/2024

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BASIC INFORMATION

Location: Ex-FMO Tai Po Primary School, Ha Wong Yi Au, Tai Po

Date of Formation: pre-1977

Date of Construction/ Modification: 09-04-2020

Approximate Coordinates: Easting : 836451 Northing : 833549

CONSEQUENCE-TO-LIFE CATEGORY

Facility at Crest: District open space

Distance of Facility from Crest (m): 0

Facility at Toe: School

Distance of Facility from Toe (m): 2.3

Consequence-to-life Category: 1

Remarks: N/A

SLOPE PART

(1) Max. Height (m): 4.7 Length (m): 106 Average Angle (deg): 45

WALL PART

N/A

MAINTENANCE RESPONSIBILITY

Government Feature Party: Lands D Agent: Lands D

DETAILS OF SLOPE / RETAINING WALL

Date of Inspection: 26-08-2020

Data Source: Project Office

Slope Part Drainage: (1) Position: Crest Size(mm): 250
(2) Position: On slope Size(mm): 250
(3) Position: Toe Size(mm): 600

Wall Part Drainage: N/A

SLOPE PART

Slope Part (1)
Surface Protection (%): Bare: 0 Vegetated: 95 Chunam: 0 Shotcrete: 5 Other Cover: 0
Material Description: Material type: Soil Geology: N/A
Berm: No. of Berms: N/A Min. Berm Width (m): N/A
Weepholes: Size (mm): N/A Spacing (m): N/A

WALL PART

N/A

SERVICES

(1) Utilities Type: Electricity Size(mm): 25 Location: On slope Remark: N/A

STAGE 1 STUDY REPORT

Inspected On:
Weather:
District: N/A

Section No: 1-1
Height(m):
Type of Toe Facility: School

Distance from Toe(m): 2.3
Type of Crest Facility: District open space

Distance from Crest(m): 0
Consequence Category:
Engineering Judgement:

Section No: 2-2
Type of Toe Facility:

Distance from Toe(m):
Type of Crest Facility:

Distance from Crest(m):
Consequence Category:
Engineering Judgement:

Sign of Seepage:

Criterion A satisfied:

Sign of Distress:

Criterion D satisfied:

Non-routine maintenance required:

Note:

Masonry wall/Masonry facing:

Note:

Consequence category (for critical section):

Observations: N/A

Emergency Action Required:

Action By: N/A

ACTION TO INITIATE PREVENTIVE WORKS

Criterion A/Criterion D: N/A

Action By: N/A

Further Study:

Action By: N/A

OTHER EXTERNAL ACTION

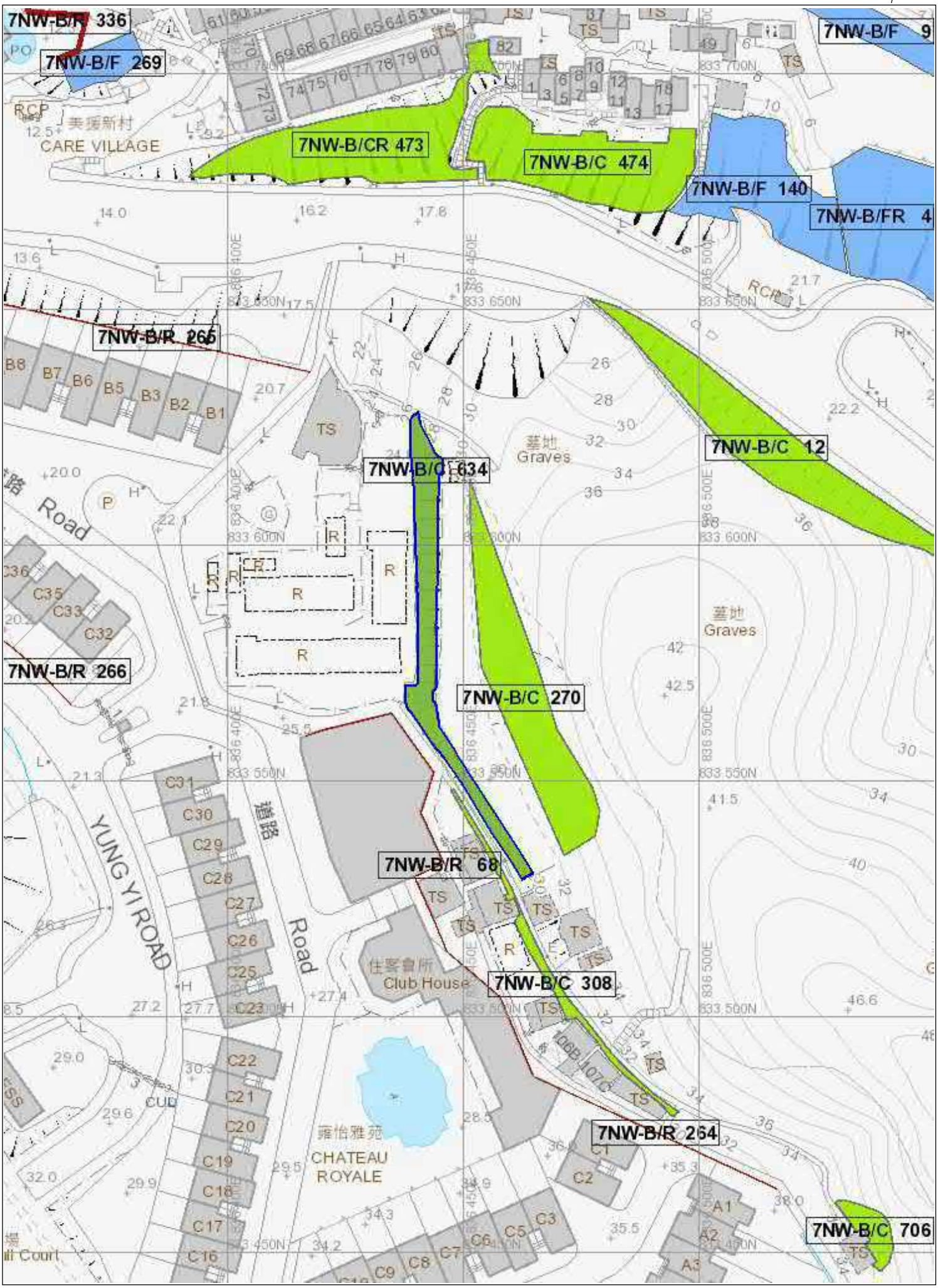
Check / repair Services:

Action By: N/A

Non-routine Maintenance:

Action By: N/A

PHOTO


7NW-B/F 336
7NW-B/F 269
7NW-B/F 9
7NW-B/CR 473
7NW-B/C 474
7NW-B/F 140
7NW-B/FR 4
7NW-B/R 265
7NW-B/C 12
7NW-B/C 634
7NW-B/R 266
7NW-B/C 270
7NW-B/R 68
7NW-B/C 308
7NW-B/R 264
7NW-B/C 706
CARE VILLAGE
Graves
Road
YUNG YI ROAD
Club House
CHATEAU ROYALE

APPENDIX C

PROPOSED DEVELOPMENT PLAN

Master Layout Plan Scale 1 : 600 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD architecture urban design interior

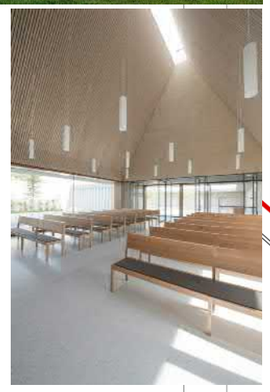
Schematic Design

GROUND FLOOR Plan Scale 1 : 500 (A3)

GROUND FLOOR Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD architecture urban design interior



Healing / Sensory Garden

Sun Deck & Healing Garden

Chapel

Dormitory Type C (8 bed places)

Dormitory Type A (32 bed places)

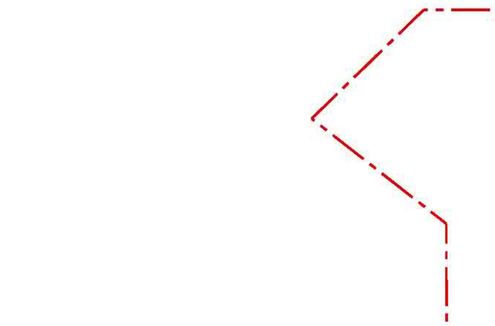
Schematic Design

FIRST FLOOR Plan Scale 1 : 500 (A3)

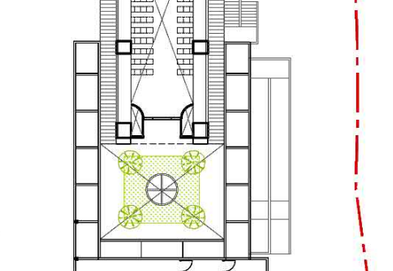
FIRST FLOOR Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD architecture urban design interior



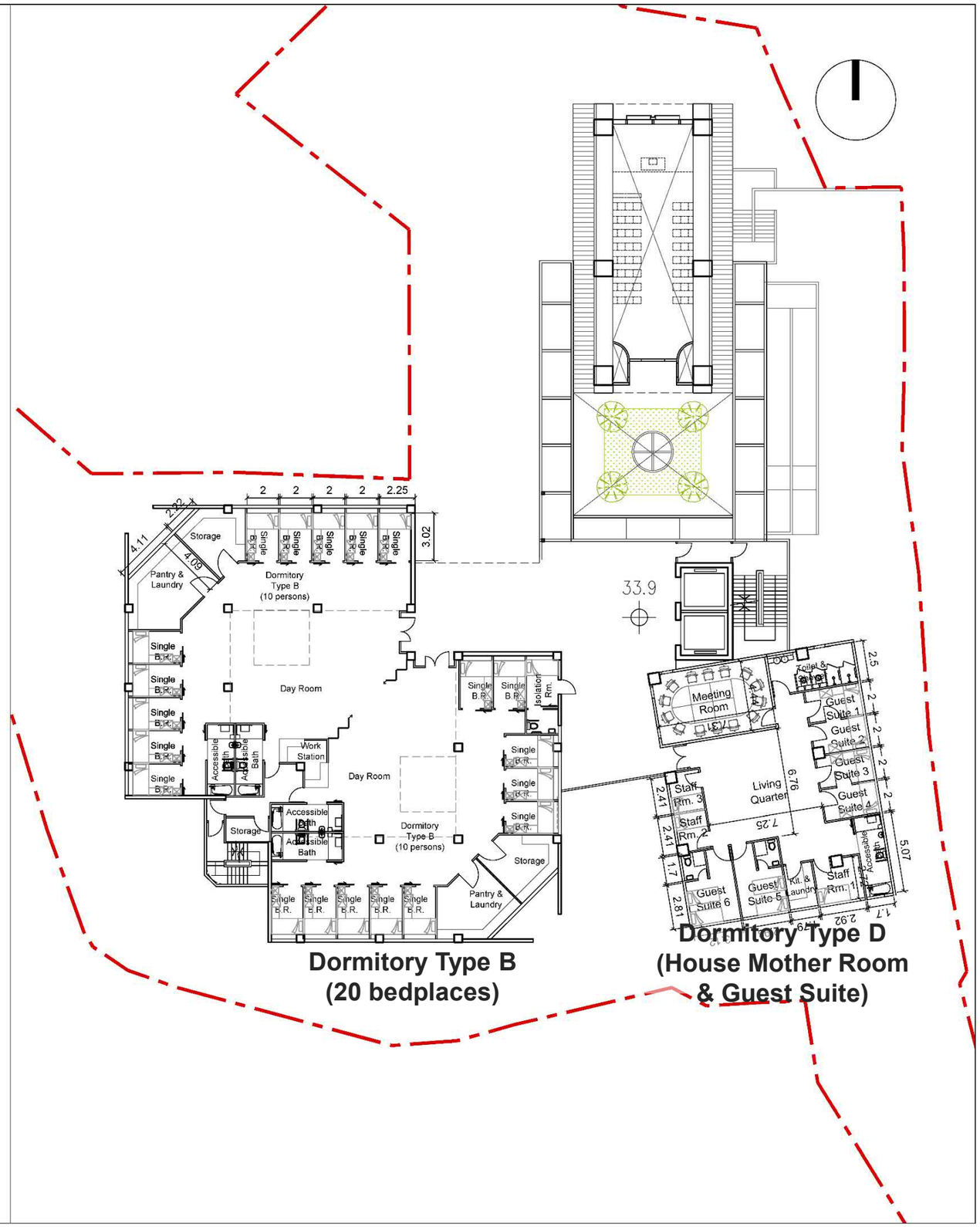
Homey Living Space



Green Picture Frame

Schematic Design

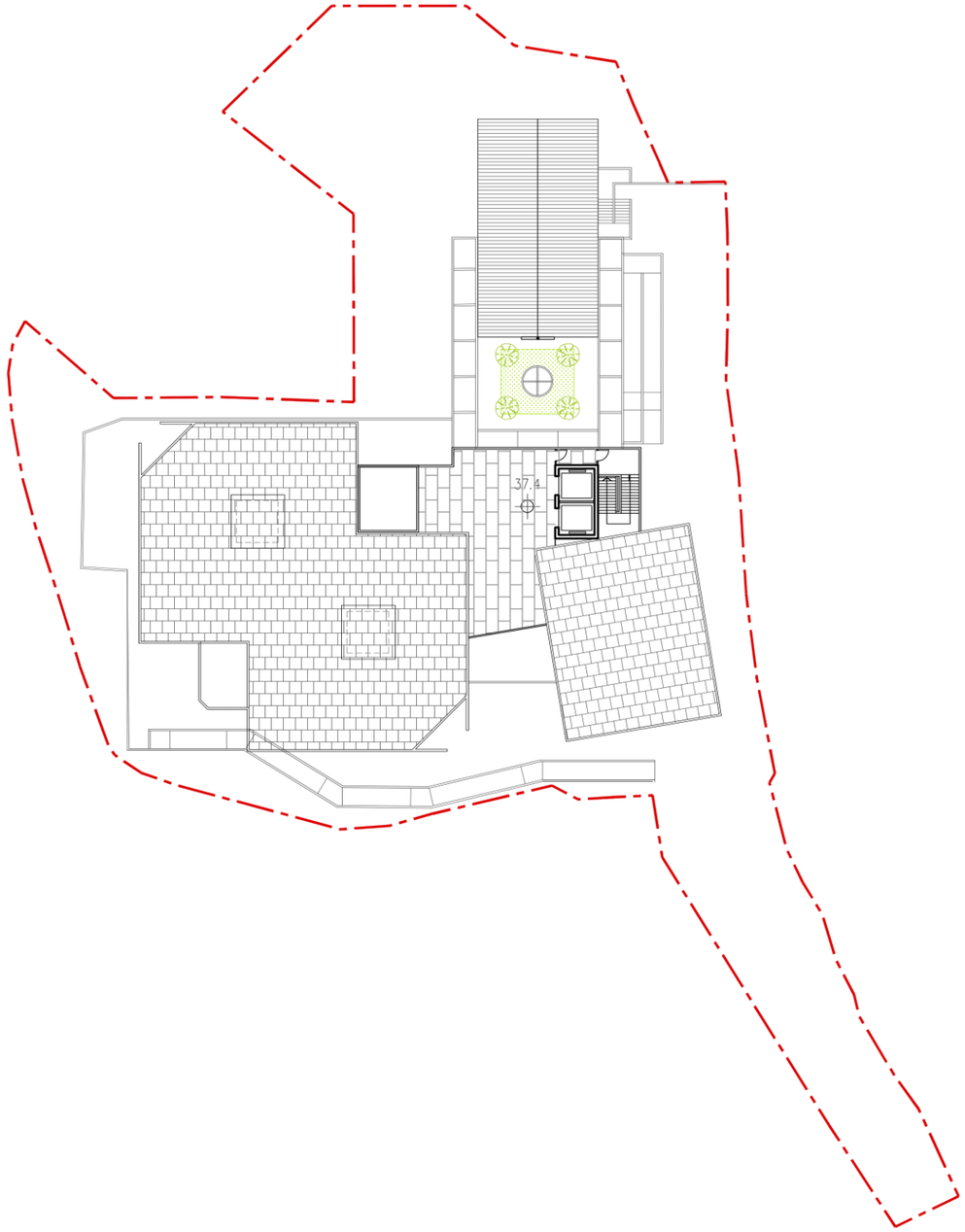
SECOND FLOOR Plan Scale 1 : 500 (A3)



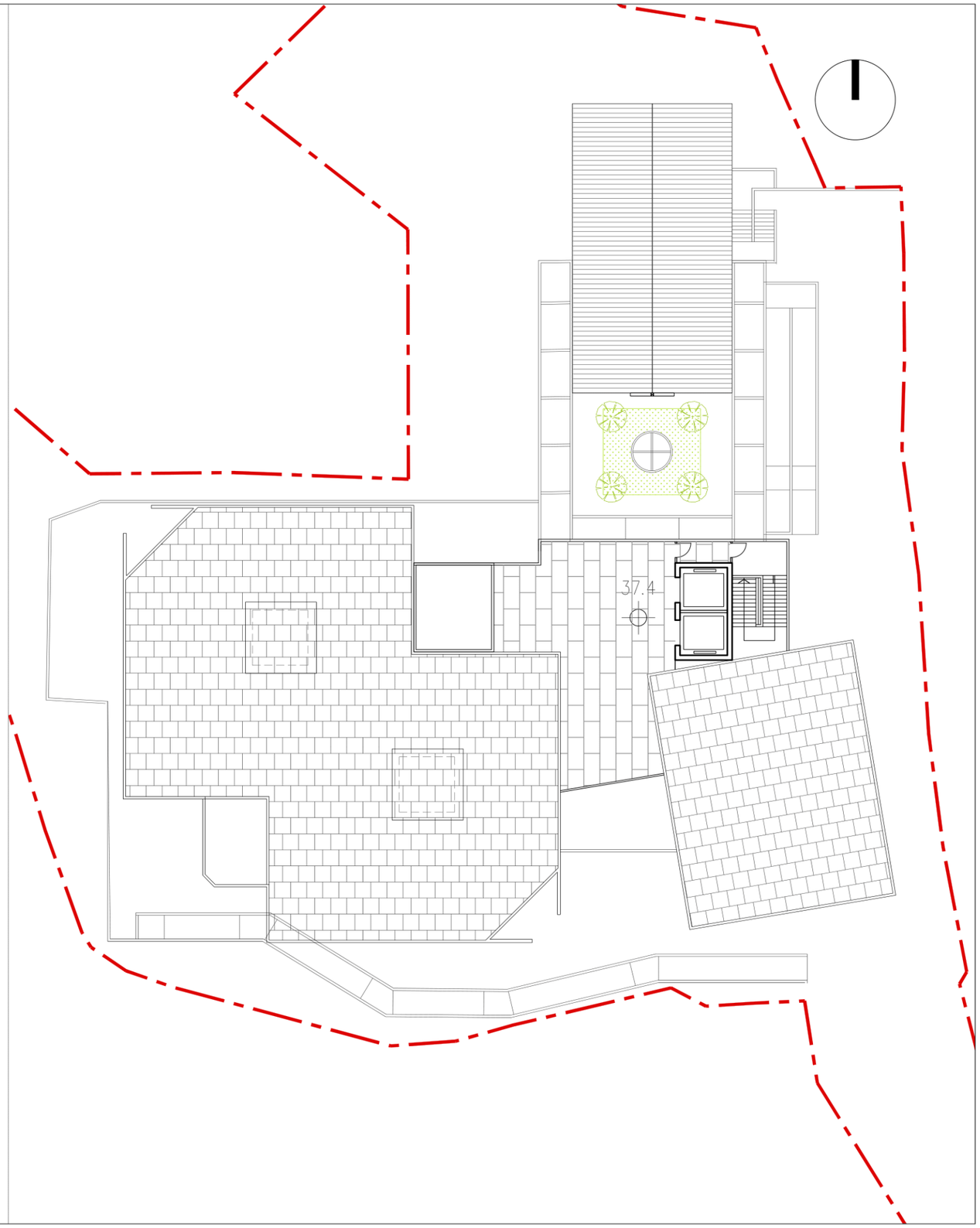
SECOND FLOOR Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD
architecture
urban design
interior



ROOF Plan Scale 1 : 500 (A3)

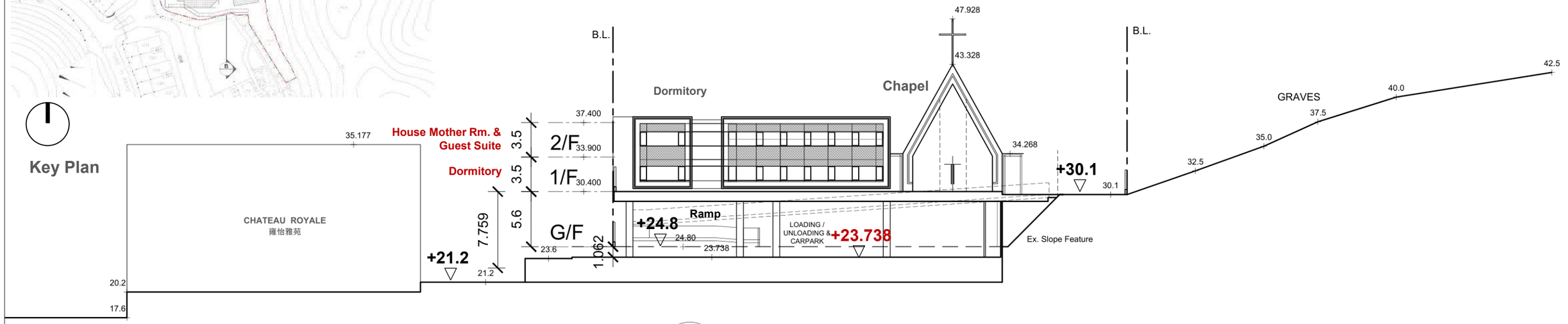


ROOF Plan Scale 1 : 300 (A3)

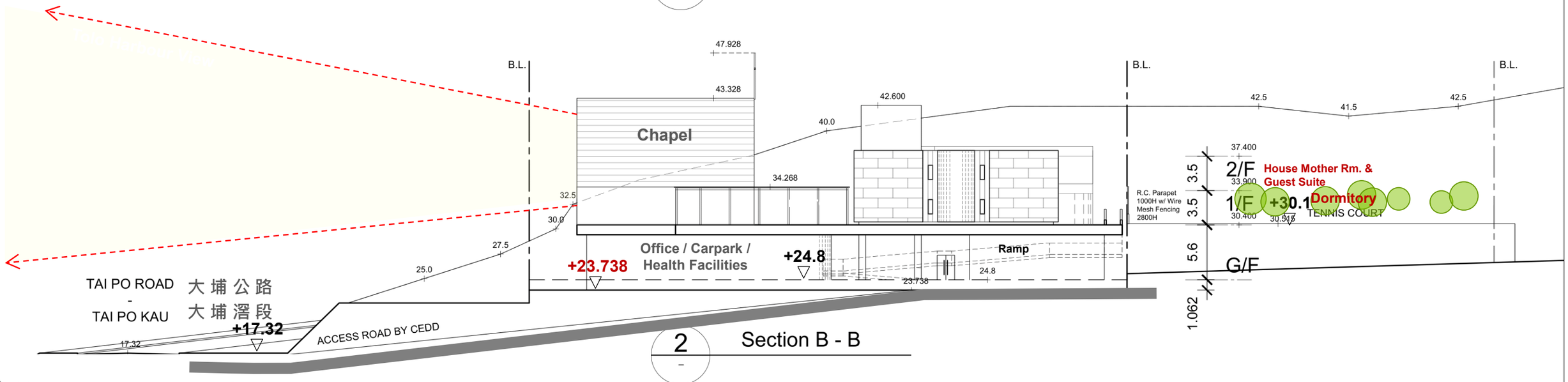
Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD
architecture
urban design
interior

Key Plan



1 Section A - A



2 Section B - B

Schematic Design

Schematic Sections Scale 1 : 400 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD
architecture
urban design
interior

APPENDIX D

PREVIOUS G.I. INFORMATION IN VICINITY

THE BORING ENGINEERING LTD.

EXPLORATORY HOLE LOG

Sheet 1 of 2

Hole No.: BH-18

Location: D.D.32, Wong Yi Au Development, Tai Po, N.T.

Coordinates: E 836424.71 N 833535.50

Ground level: +21.51 m.P.D. Inclination: Vertical

Method: Rotary drill Rig type & no.: Toho D-24 Operator: Lam

Drilling progress	Casing depth, size	Water level	Water recovery %	Tests & samples	Blow counts	Depth & diameter	Core recovery %	R. Q. D.%	Fracture index	Reduced level	Legend	Description	Grade
						0.00				+21.51		← SPT Bar	
	HX				2,4,4, N=8	1.50 1.95						Loose to dense, reddish & yellowish brown clayey sandy SILT.(C.D.V.)	V
					4,4,6, N=10	3.50 3.95							
					6,10,25, N=35	5.50 5.95							
					200/100mm	7.50 7.60						← Top of Soil	
	TNW					8.20		93	13	+13.31		Moderately strong, grey & greyish brown moderately weathered medium grained VOLCANIC with closely spaced stained inclined joints.	III
						9.75 10		96	48	+11.76			

Date started 5-8-1992 Logged by Ma

Date finished 5-8-1992 Checked by

Date 25-8-1992

Remarks: -Cont'd-

Legend :

- Small disturbed
- Large disturbed
- SPT liner sample
- U76 undisturbed
- U100 undisturbed
- Mazier sample
- Water sample
- Water table
- Standard penetration test
- Permeability test
- Piezometer tip
- In-situ vane shear test

THE BORING ENGINEERING LTD.

EXPLORATORY HOLE LOG

Sheet 2 of 2

Hole No.: BH-18

Location: D.D.32, Wong Yi Au Development, Tai Po, N.T.

Ground level: +21.51 m.P.D. Inclination: Vertical Coordinates: E 836424.71 N 833535.50

Method: Rotary drill Rig type & no.: Toho D-24 Operator: Lam

Drilling progress	Casing depth, size	Water level	Water recovery %	Tests & samples	Blow counts	Depth & diameter	Core recovery %	R.Q.D.%	Fracture index	Reduced level	Legend	Description	Grade
						10.00	96	48		+11.51			
				TNW		11.20	100	43		+10.31		Moderately strong, grey & greyish brown moderately weathered medium grained VOLCANIC with closely spaced stained inclined joints.	III
		2.50				12.70	100	59		+ 8.81			
						13.80				+ 7.71		Bottom of borehole No.BH-18	

Jty.
ca

Date started 5-8-1992 Logged by Ma

Date finished 5-8-1992 Checked by

Date 25-8-1992

Remarks:

Legend :

- Small disturbed
- Large disturbed
- SPT liner sample
- U76 undisturbed
- U100 undisturbed
- Mazier sample
- Water sample
- Water table
- Standard penetration test
- Permeability test
- Piezometer tip
- In-situ vane shear test

PROJECT: DD 32 WONG YI AU DEVELOPMENT TAI PO N.T.
CONSULTANTENGINEER:
ORCLIENT:
CONTRACTOR: THE BORING ENGG LTD.
DRILLHOLENO: BH-17 DEPTH: 0.00m TO 9.90
COREBOXNO: 1 OF 1 DATE:

PROJECT: DD 32 WONG YI AU DEVELOPMENT TAI PO N.T.
CONSULTANTENGINEER:
ORCLIENT:
CONTRACTOR: THE BORING ENGG LTD.
DRILLHOLENO: BH-18 DEPTH: 0.00m TO 13.80
COREBOXNO: 1 OF 1 DATE:

THE BORING ENGINEERING LTD.

EXPLORATORY HOLE LOG

Sheet 1 of 2

Hole No.: BH-20

Location: D.D.32, Wong Yi Au Development, Tai Po, N.T.

Ground level: +22.73 m.P.D. Inclination: Vertical Coordinates: E 836390.73 N 833563.48

Method: Rotary drill Rig type & no.: Toho D-24 Operator: Lam

Drilling progress	Casing depth, size	Water level	Water recovery %	Tests & samples	Blow counts	Depth & diameter	Core recovery %	R.Q.D.%	Fracture index	Reduced level	Legend	Description	Grade
	HX					0.00				+22.73		Loose, yellowish brown clayey sandy SILT.(Fill)	
					2,4,5, N=9	1.50							
						1.95				+20.73			
						2.00							
					6,10,12, N=22	3.50							
						3.95						Medium dense to dense, reddish & yellowish brown slightly clayey sandy SILT. (C.D.V.)	
					7,12,16, N=28	5.50							
						5.95							
					10,15,24, N=39	7.50							
						7.95							
				NMLC		9.10		81	14	+13.63		See sheet 2 of 2	
						10							

Date started 4-8-1992 Logged by Ma

Date finished 4-8-1992 Checked by

Date 25-8-1992

Remarks: -Cont'd-

Legend :

- Small disturbed
- Large disturbed
- SPT liner sample
- U76 undisturbed
- U100 undisturbed
- Mazier sample
- Water sample
- Water table
- Standard penetration test
- Permeability test
- Piezometer tip
- In-situ vane shear test

THE BORING ENGINEERING LTD.

EXPLORATORY HOLE LOG

Sheet 2 of 2

Hole No.: BH-20

Location: D.D.32, Wong Yi Au Development, Tai Po, N.T.

Coordinates: E 836390.73 N 833563.48

Ground level: +22.73 m.P.D. Inclination: Vertical

Method: Rotary drill Rig type & no.: Toho D-24 Operator: Lam

Drilling progress	Casing depth, size	Water level	Water recovery %	Tests & samples	Blow counts	Depth & diameter	Core recovery %	R.Q.D.%	Fracture index	Reduced level	Legend	Description	Grade
						10.00				+12.73		Moderately weak to moderately strong, greyish brown moderately to highly weathered medium grained VOLCANIC with closely spaced stained inclined joints. (Partly fractured)	III/IV
						10.50	81	14		+12.23			
							95	51					
				TNW		12.05	90	27		+10.68			
						12.60	91	68		+10.13		Moderately strong, greyish brown moderately weathered medium grained VOLCANIC with closely spaced stained inclined joints.	III
						14.05	93	68		+ 8.68			
						14.85	100	80		+ 7.88			
		2.50				16.15				+ 6.58		Bottom of borehole No.BH-20	

Date started 4-8-1992 Logged by Ma

Date finished 4-8-1992 Checked by

Date 25-8-1992

Remarks:

Legend :

- Small disturbed
- Large disturbed
- SPT liner sample
- U76 undisturbed
- U100 undisturbed
- Mazier sample
- Water sample
- Water table
- Standard penetration test
- Permeability test
- Piezometer tip
- In-situ vane shear test

PROJECT: DD 32 WAIHI
CONSULTANT ENGINEER:
OR CLIENT:
CONTRACTOR: THE BORING ENABLE LTD
DRILLHOLE NO:
DEPTH: 0.00m TO
COREBOX NO: 1 OF 1 DATE:

PROJECT: DD 32 WAIHI
CONSULTANT ENGINEER:
OR CLIENT:
CONTRACTOR: THE BORING ENABLE LTD
DRILLHOLE NO:
DEPTH: 0.00m TO
COREBOX NO: 1 OF 2 DATE:

PROJECT: DD 32 WONG YI AU DEVELOPMENT TAI PO N.T.
CONSULTANTENGINEER:
ORCLIENT:
CONTRACTOR: THE BORING ENGG LTD.
DRILLHOLENO: BH 10 DEPTH: 14.85 TO 16.15
COREBOXNO: 2 OF 2 DATE:

PROJECT: DD 32 WONG YI AU DEVELOPMENT TAI PO N.T.
CONSULTANTENGINEER:
ORCLIENT:
CONTRACTOR: THE BORING ENGG LTD
DRILLHOLENO: BH 11 DEPTH: 0.00m TO 12.67
COREBOXNO: 1 OF 1 DATE:

THE BORING ENGINEERING LTD.

EXPLORATORY HOLE LOG

Sheet 1 of 1

Hole No.: BH-23

Location: D.D.32, Wong Yi Au Development, Tai Po, N.T.

Coordinates: E 836378.68 N 833605.90

Ground level: +20.68 m.P.D. Inclination: Vertical

Method: Rotary drill Rig type & no.: Toho D-24 Operator: Lam

Drilling progress	Casing depth, size	Water level	Water recovery %	Tests & samples	Blow counts	Depth & diameter	Core recovery %	R.Q.D.%	Fracture index	Reduced level	Legend	Description	Grade
	HX				6,8,21, N=29	0.00				+20.68		Medium dense, yellowish brown & white clayey sandy with fine gravels. (Colluvium)	
						1.50							
						1.95							
						2.00				+18.68		Volcanic rock fragment.	
						2.80	91	NIL		+17.88			
						3.00				+17.68		No sample.(C.D.V.)	
							87	32				Moderately strong, greyish brown moderately weathered medium grained VOLCANIC with closely spaced stained inclined joints.	
						4.40				+16.28			
							100	95					
				TNW		5.70				+14.98		Moderately strong to strong, grey & greyish pink moderately to slightly weathered fine to medium grained VOLCANIC with closely spaced stained inclined joints.	
							100	90					
						7.20				+13.48			
							98	63					
		4.00				8.40				+12.28			
												Bottom of borehole No.BH-23	

Date started 1-8-1992 Logged by Ma

Date finished 1-8-1992 Checked by

Date 25-8-1992

Remarks:

Legend:

- Small disturbed
- Large disturbed
- SPT liner sample
- U76 undisturbed
- U100 undisturbed
- Mazier sample
- Water sample
- Water table
- Standard penetration test
- Permeability test
- Piezometer tip
- In-situ vane shear test

PROJECT: DD 32 WONG YI AU DEVELOPMENT TAI PO N.T.
CONSULTANTENGINEER:
ORCLIENT:
CONTRACTOR: THE BORING ENGG LTD
DRILLHOLENO: BH 32 DEPTH: 0.00m TO 7.03
COREBOXNO: 1 OF 1 DATE:

CONSULTANTENGINEER:
ORCLIENT:
CONTRACTOR: THE BORING ENGG LTD
DRILLHOLENO: BH 33 DEPTH: 0.00m TO 9.49
COREBOXNO: 1 OF 1 DATE:

THE BORING ENGINEERING LTD.

EXPLORATORY HOLE LOG

Sheet 1 of 2

Hole No.: BH-27

Location: D.D.32, Wong Yi Au Development, Tai Po, N.T.

Coordinates: E 836374.49, N 833631.42

Ground level: +20.85 m.P.D. Inclination: Vertical

Method: Rotary drill Rig type & no.: Toho D-24 Operator: Lam

Drilling progress	Casing depth, size	Water level	Water recovery %	Tests & samples	Blow counts	Depth & diameter	Core recovery %	R.Q.D.%	Fracture index	Reduced level	Legend	Description	Grade
	HX					0.00				+20.85			
					3,4,4, N=8	1.50						Loose, reddish brown slightly clayey sandy SILT.(Fill)	
				U-76		1.95 2.00 2.45						SS2 Pene = Fill Base	
					4,5,6, N=11	3.50				+17.35			
				U-76		3.95 4.00 4.45						Medium dense, reddish & yellowish brown slightly clayey SILT.(C.D.V.)	V
					5,6,6, N=12	5 5.50 5.95 6.00						Top Cobble	
				(100%)		7.00							
					5,6,7, N=13	7.50 7.95							
	TNW					8.60	100	100		+12.25		Strong, dark grey slightly weathered fine grained VOLCANIC with closely to medium spaced stained inclined joints.	H
						10							

Date started 30-7-1992 Logged by Ma

Date finished 30-7-1992 Checked by

Date 28-8-1992

Remarks: -Cont'd-

Legend :

- Small disturbed
- Large disturbed
- SPT liner sample
- U76 undisturbed
- U100 undisturbed
- Mazier sample
- Water sample
- Water table
- Standard penetration test
- Permeability test
- Piezometer tip
- In-situ vane shear test

THE BORING ENGINEERING LTD.

EXPLORATORY HOLE LOG

Sheet 2 of 2

Hole No.: BH-27

Location: D.D.32, Wong Yi Au Development, Tai Po, N.T.

Coordinates: E 836374.49 N 833631.42

Ground level: +20.85 m.P.D. Inclination: Vertical

Method: Rotary drill Rig type & no.: Toho D-24 Operator: Lam

Drilling progress	Casing depth, size	Water level	Water recovery %	Tests & samples	Blow counts	Depth & diameter	Core recovery %	R.Q.D.%	Fracture index	Reduced level	Legend	Description	Grade
						10.00	100	100		+10.85			
						10.10				+10.75			
				TNW			96	93				Strong, dark grey slightly weathered fine grained VOLCANIC with closely to medium spaced stained inclined joints.	II
						11.66				+ 9.25			
							99	99					
						12.61				+ 8.24			
							100	99					
		6.00				13.70				+ 7.15		Bottom of borehole No.B-27	

Jty
ca

Date started 30-7-1992 Logged by Ma

Date finished 30-7-1992 Checked by

Date 28-8-1992

Remarks: Piezometer installed down to the depth of 8.60m.

Legend :

- Small disturbed
- Large disturbed
- SPT liner sample
- U76 undisturbed
- U100 undisturbed
- Mazier sample
- Water sample
- Water table
- Standard penetration test
- Permeability test
- Piezometer tip
- In-situ vane shear test

PROJECT: DD 32 WONG YI AU DEVELOPMENT TAI PO N.T
CONSULTANTENGINEER:
ORCLIENT:
CONTRACTOR: THE BORING ENGG LTD
DRILLHOLENO: BH-26 DEPTH: 0.00m TO 13.11
COREBOXNO: 1 OF 1 DATE:
0.00
7.65
9.10
10.20
11.60
12.37
13.11

CONSULTANTENGINEER:
ORCLIENT:
CONTRACTOR: THE BORING ENGG LTD
DRILLHOLENO: DEPTH: 0.00m TO 13.70
COREBOXNO: OF 1 DATE:
9.40
10.70
12.11
13.70

Project X

R GIU Report

GI with AGS

GI Location

<all other values>

Slope striping

Cone Penetration Test

GCO Probe

Grab Samples

Impression Packer Test

Trial pit

PR

Rock joint survey

Trial trench

Man-made Features

Cut slopes

Disturbed terrain

Fill slopes

NT defence measures

NT stabilisation measures

Retaining walls

GI

Division	Development
Scale	1:500
Date	14/12/2023

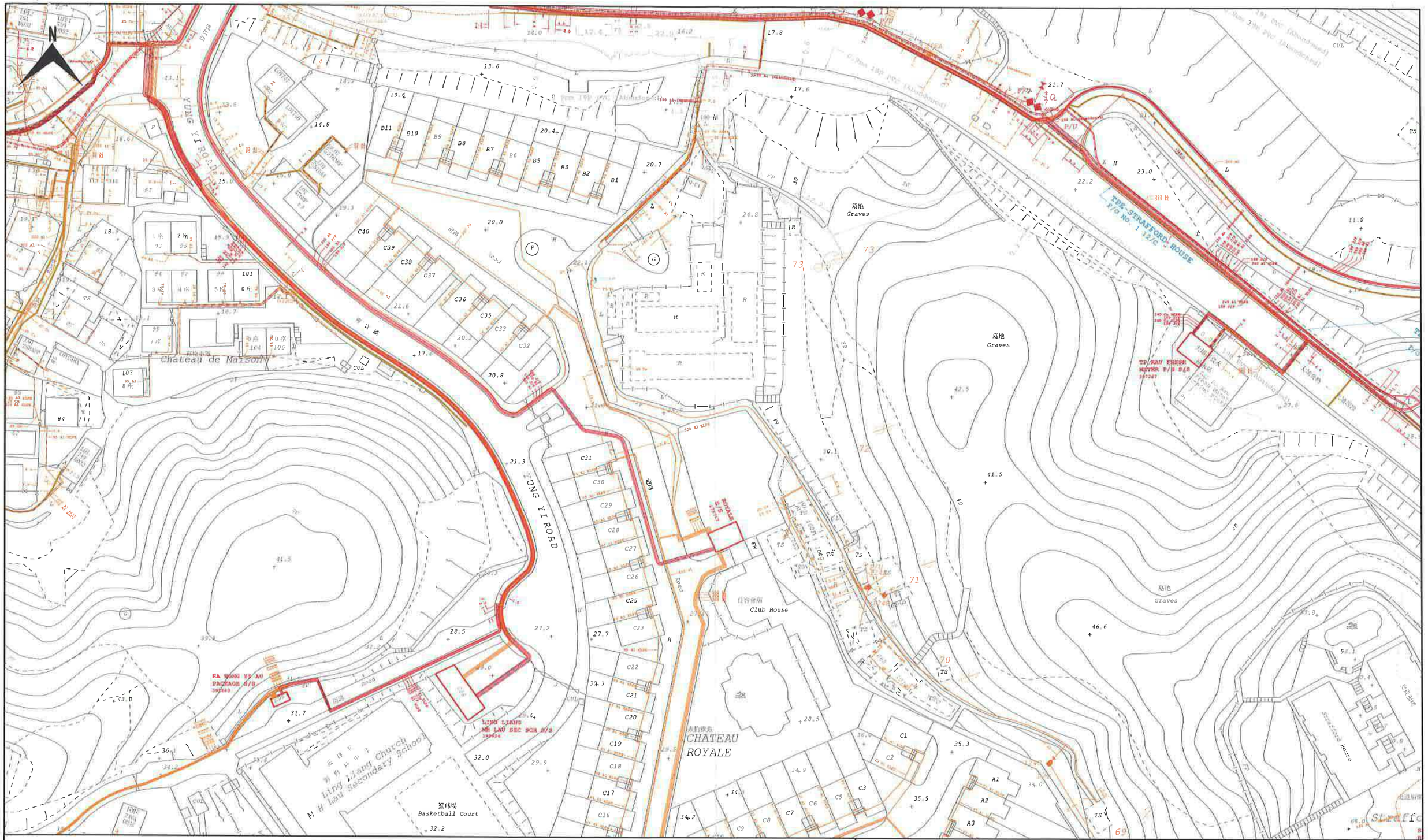
GEOTECHNICAL ENGINEERING OFFICE

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

(Print by Mott)

APPENDIX E

RECORDS OF EXISTING UTILITIES



Legend

- 400kV CABLE/SUBMARINE CABLE/OHL
- THROUGH DUCT 400kV CABLE
- AS BUILT 400kV CABLE
- 400kV OVERHEAD LINE TOWER
- 132kV CABLE/SUBMARINE CABLE/OHL
- THROUGH DUCT 132kV CABLE
- AS BUILT 132kV CABLE
- 132kV OVERHEAD LINE TOWER
- 132kV TERMINAL OHL POLE
- 132kV DOUBLE OHL POLE
- 132kV SINGLE OHL POLE
- ABANDONED TRANSMISSION CABLE
- 33kV CABLE
- THROUGH DUCT 33kV CABLE
- AS BUILT 33kV CABLE
- SUB 33kV SUBMARINE CABLE
- 033 33kV OVERHEAD LINE
- 33kV STEEL POLE
- 33kV WOOD POLE
- 11kV CABLE
- THROUGH DUCT 11kV CABLE
- AS BUILT / ABANDONED 11kV CABLE
- SUB SUBMARINE 11kV CABLE
- 011 11kV OVERHEAD LINE
- 11kV STEEL POLE
- 11kV WOOD POLE
- POLE MOUNT TRANSFORMER
- L.V. CABLE
- THROUGH DUCT L.V. CABLE
- AS BUILT / ABANDONED L.V. CABLE
- L.V. OVERHEAD LINE (1 PHASE)
- L.V. OVERHEAD LINE (3 PHASE)
- L.V. OVERHEAD LINE (ABC)
- P L.V. OVERHEAD LINE (PVC)
- W L.V. OVERHEAD LINE (Wall Mounted)
- L.V. STEEL POLE
- L.V. WOOD POLE
- L.V. PILLAR
- PILOT CABLE
- THROUGH DUCT PILOT CABLE
- AS BUILT / ABANDONED PILOT CABLE
- FIBRE OPTIC
- THROUGH DUCT FIBRE OPTIC
- AS BUILT FIBRE OPTIC
- TEMPERATURE SENSING CABLE (DTS)
- AERIAL EARTH WIRE (AEW)
- O OVERHEAD LINE FIBRE OPTIC
- W OVERHEAD LINE FIBRE OPTIC
- SHALLOW COVER INSTALLATION
- CLP 400/132/66kV SUBSTATION
- CLP 33kV SUBSTATION
- CLP 11kV SUBSTATION
- 400kV CABLE JOINT BAY
- 132kV CABLE JOINT BAY
- DUCT LINE

ALL LOCATIONS, MEASUREMENTS, DIMENSIONS AND DISTANCES ARE FOR CLP POWER INTERNAL USE ONLY. THEY SHOULD NOT BE SCALED AND ASSUMED ACCURATE. CLP POWER ACCEPTS NO RESPONSIBILITY IN THE EVENT OF ANY INACCURACY. EXTREME CARE MUST BE EXERCISED WHEN WORKING IN CLOSE PROXIMITY TO OUR EQUIPMENT. PLEASE CONTACT OUR REGIONAL OFFICE AS SOON AS YOU ARE READY TO COMMENCE WORK.

CLP 中電

MAP NO: CLP Facility Records Map
07NW15A
07NW10C

SCALE: 1:1000

PRINTED ON: 30-01-2024

Reference no. : N-2024-0151-001

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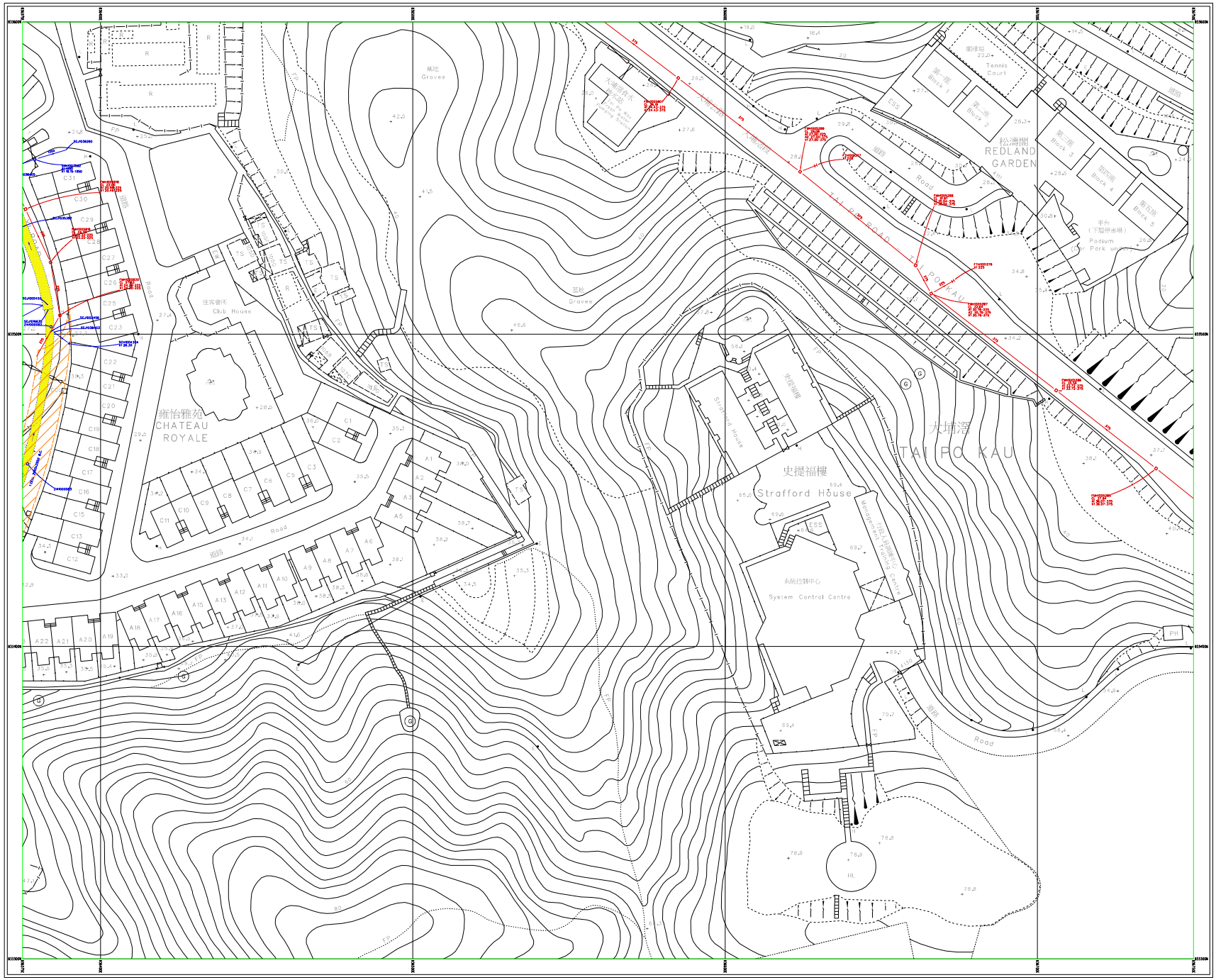

Please note that drainage information is now available in the GeoInfo Map services of the Lands Department (https://www.map.gov.hk/gm/?lg=en). Please refer to the Quick Reference Guide of the system for the operation.

For legend of drainage record plans, please refer to the following URL: (https://www.dsd.gov.hk/EN/Files/Legend_BW.pdf)

Metres 20 10 0 SCALE 1 : 500 20 40 60 80 100 Metres

Mainland North Division
Drainage Services Department

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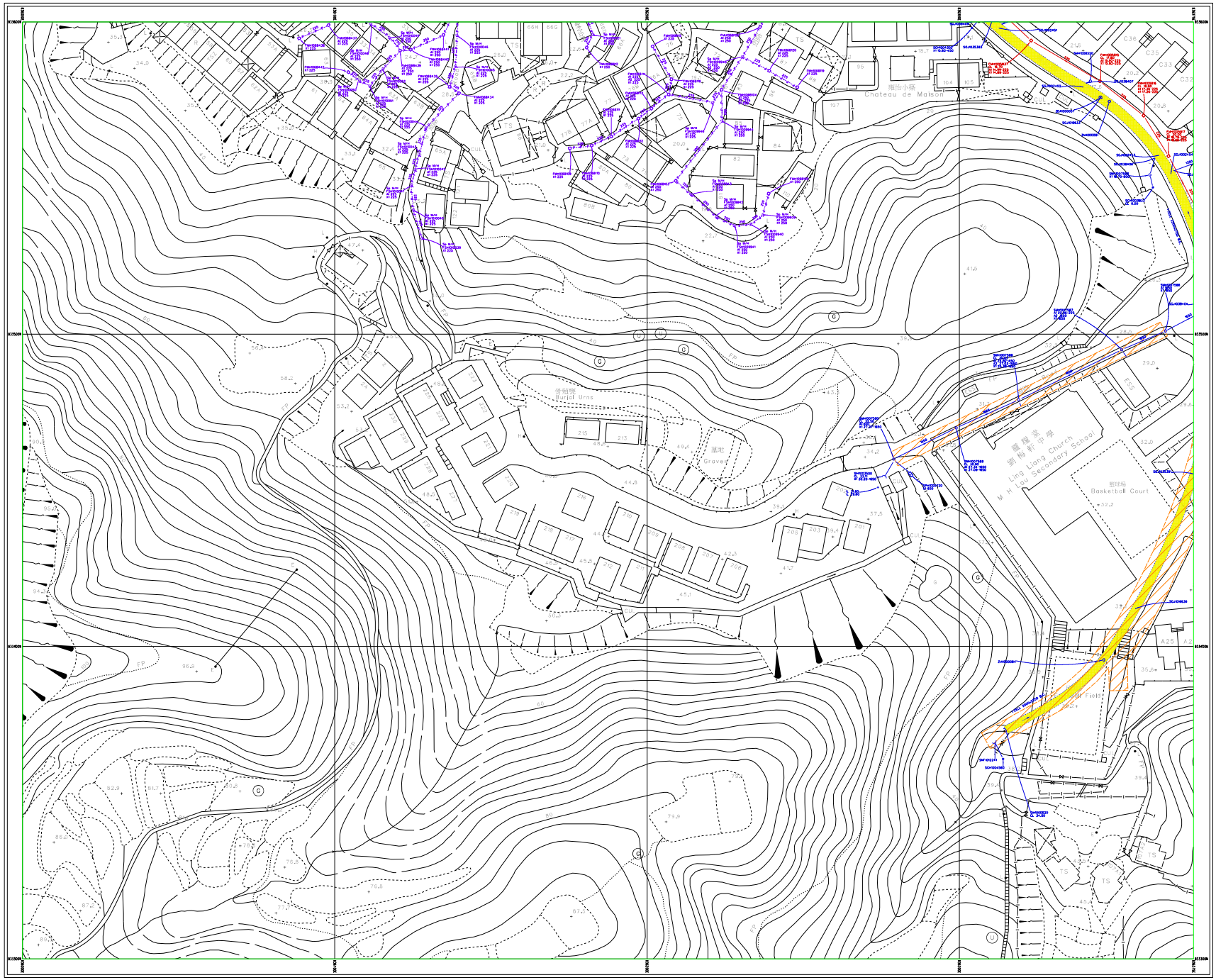
Drainage Record Sheet Number

7-NW-15A-2

Last Updating : 21/9/2023

Map data renewed on February 2023



Please note that drainage information is now available in the GeoInfo Map services of the Lands Department (https://www.map.gov.hk/gm/?lg=en). Please refer to the Quick Reference Guide of the system for the operation.

For legend of drainage record plans, please refer to the following URL: (https://www.dsd.gov.hk/EN/Files/Legend_BW.pdf)

Metres SCALE 1 : 500 Metres

20 10 0 20 40 60 80 100

Mainland North Division
Drainage Services Department

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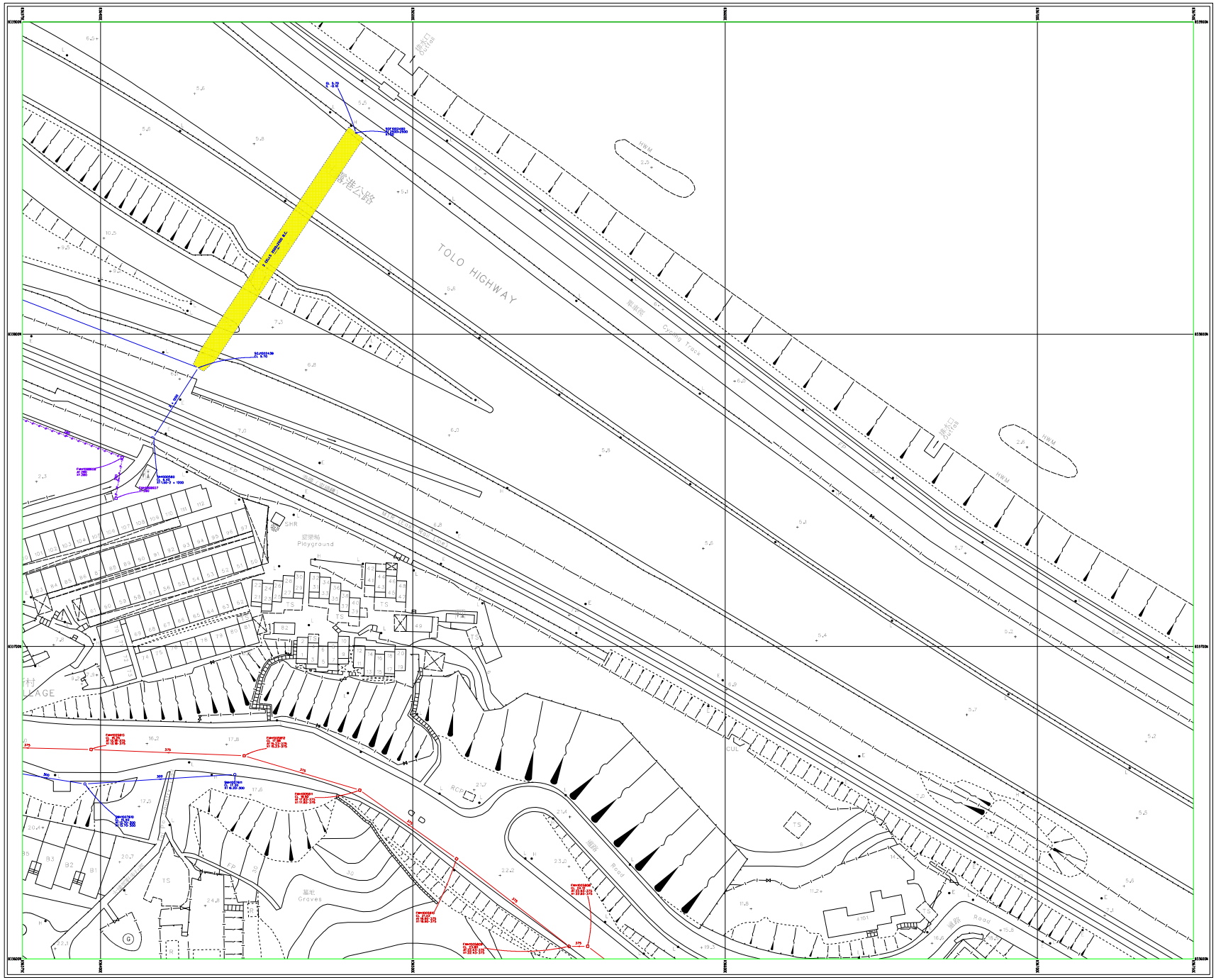
Drainage Record Sheet Number

7-NW-15A-1

Last Updating : 21/9/2023

Map data renewed on February 2023



7-NW-10C-3

7-NW-10D-3

7-NW-15A-2

Please note that drainage information is now available in the GeoInfo Map services of the Lands Department (https://www.map.gov.hk/gm/?lg=en). Please refer to the Quick Reference Guide of the system for the operation.

For legend of drainage record plans, please refer to the following URL: (https://www.dsd.gov.hk/EN/Files/Legend_BW.pdf)

Metres SCALE 1 : 500 Metres

20 10 0 20 40 60 80 100

Mainland North Division
Drainage Services Department

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Drainage Record Sheet Number

7-NW-10C-4

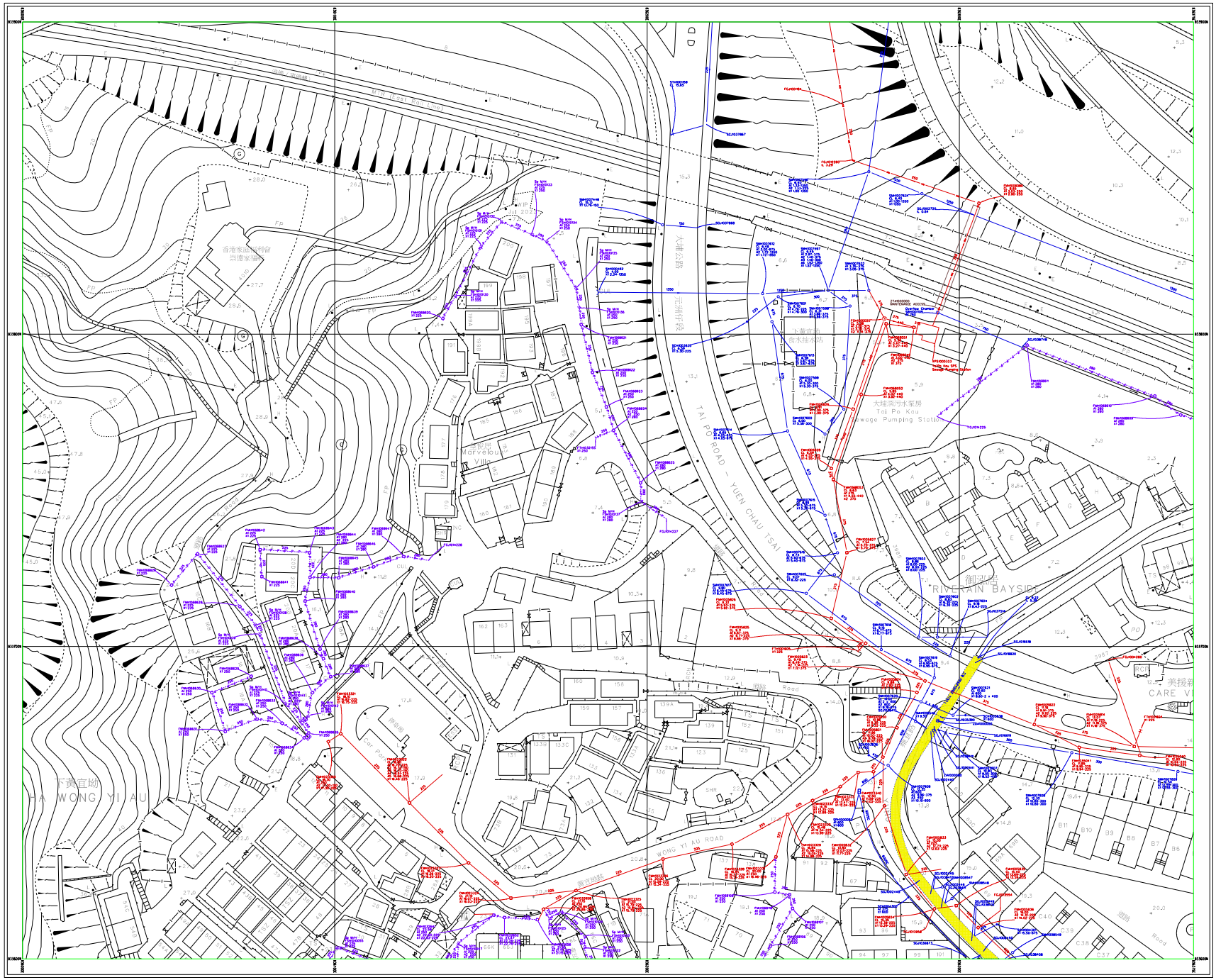
Last Updating : 21/9/2023

Map data renewed on February 2023

7-NW-10C-1

7-NW-9D-4

7-NW-10C-4



7-NW-15A-1

Please note that drainage information is now available in the GeoInfo Map services of the Lands Department (https://www.map.gov.hk/gm/?lg=en). Please refer to the Quick Reference Guide of the system for the operation.

For legend of drainage record plans, please refer to the following URL: (https://www.dsd.gov.hk/EN/Files/Legend_BW.pdf)

Metres SCALE 1 : 500 Metres

20 10 0 20 40 60 80 100

Mainland North Division
Drainage Services Department

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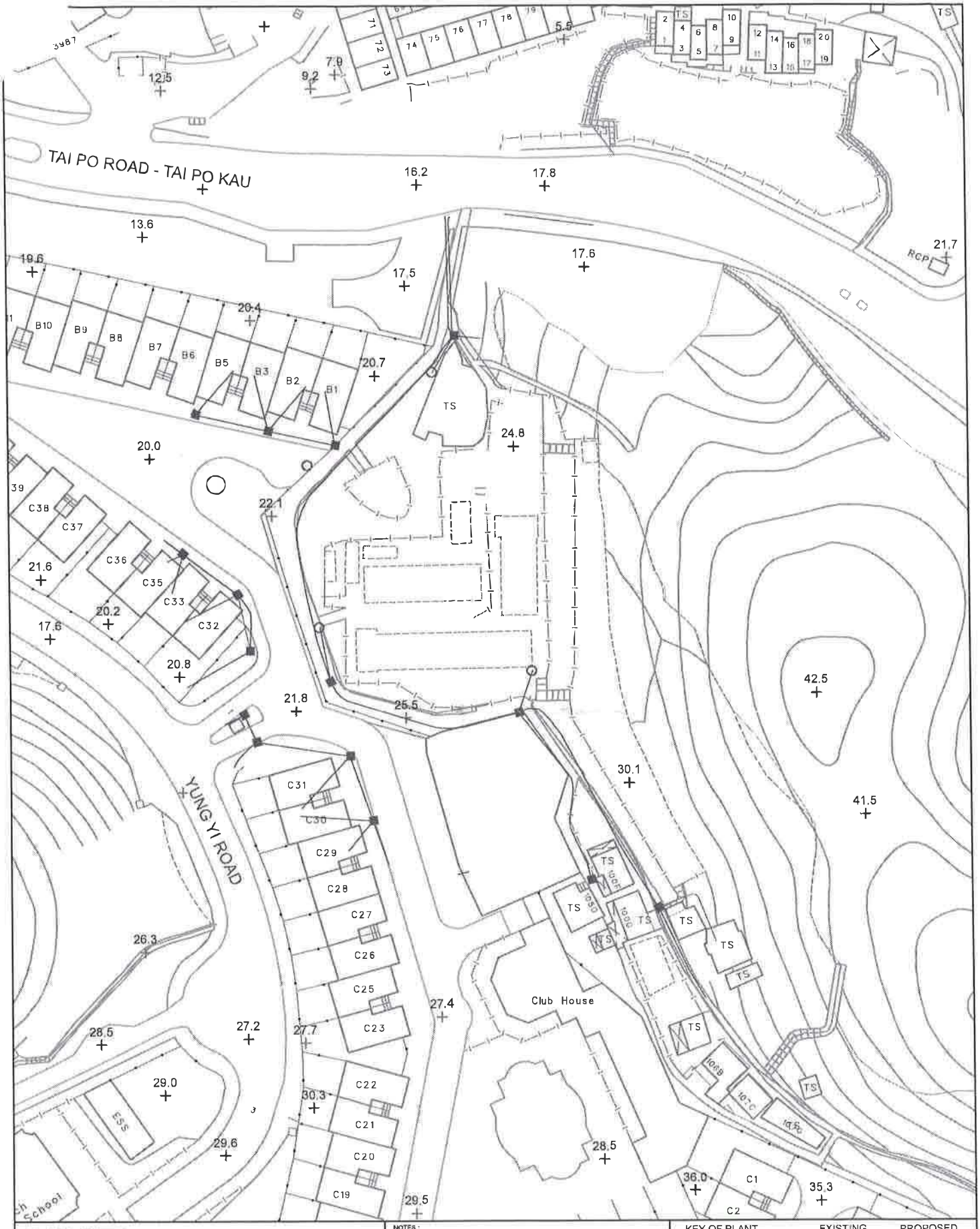
Drainage Record Sheet Number

7-NW-10C-3

Last Updating : 21/9/2023

Map data renewed on February 2023



HKT

OUTSIDE PLANT SERVICES		
EXCH. AREA : TPO		
SURVEY MAP No. 07NW10C,07NW15A		
UU REF. No. P2581-1 B		
PREP. EMPC	SCALE	1:1000
CKD. Chim, Andrew WL	DATE	19/12/2023
DWG. No. HKT-20231219-0040-R-HKT		

NOTES :

1. EXCEPT FOR YOUR PROSPECTIVE CONTRACTORS/EMPLOYEES, THIS DRAWING MUST NOT BE RELEASED TO THIRD PARTY WITHOUT HK TELEPHONE'S WRITTEN APPROVAL.
2. THIS INFORMATION IS ACCURATE AT THE DATE BELOW, BUT FURTHER ALTERATIONS/AUGMENTATION MAY TAKE PLACE IN THE FUTURE.
3. THE FEATURES AND POSITION OF OUR PLANT INDICATED ON THIS DRAWING IS APPROXIMATELY ONLY.
   THERE ARE 10 *TELECOMMUNICATION LINES / CABLES WITHIN THE SPECIFIC AREA.
   THE COLOUR OF UPVC HKT DUCTS IS GREY AND THE DEPTH AT LEAST 900MM FOR CARRIAGEWAY AND 450MM FOR NON-CARRIAGEWAY.
   ACTUAL DEPTH AND POSITION OF PLAN MUST BE ESTABLISHED BEFORE COMMENCEMENT OF WORK AS VARIATIONS DEPTH AND LINE MAY OCCUR.
   ALL TELECOMMUNICATIONS LINES ARE DETECTABLE. FOR ANY QUERIES, PLEASE CONTACT THE PERSON AT THE RETURN LETTER TO THE MARK PLANT REQUEST.
4. REACH NETWORKS HONG KONG LIMITED'S PLANT INCLUDED.

*FOR EMERGENCY REQUEST, YOU MAY CALL 2888 9889 For DETAILS.

KEY OF PLANT	EXISTING	PROPOSED
MANHOLE	■	▨
JOINT BOX	■	▨
DUCT	———	- - -
CABLE	———	- - -
POLE	○	◌
CABINET	⊠	⊡
BURIED COUPLING	×	

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APPENDIX F

SCHEDULE AREA

LEGEND:

RAILWAY PROTECTION BOUNDARY

Site

MATCH LINE
SEE DRAWING NO. MTR/AP/1639

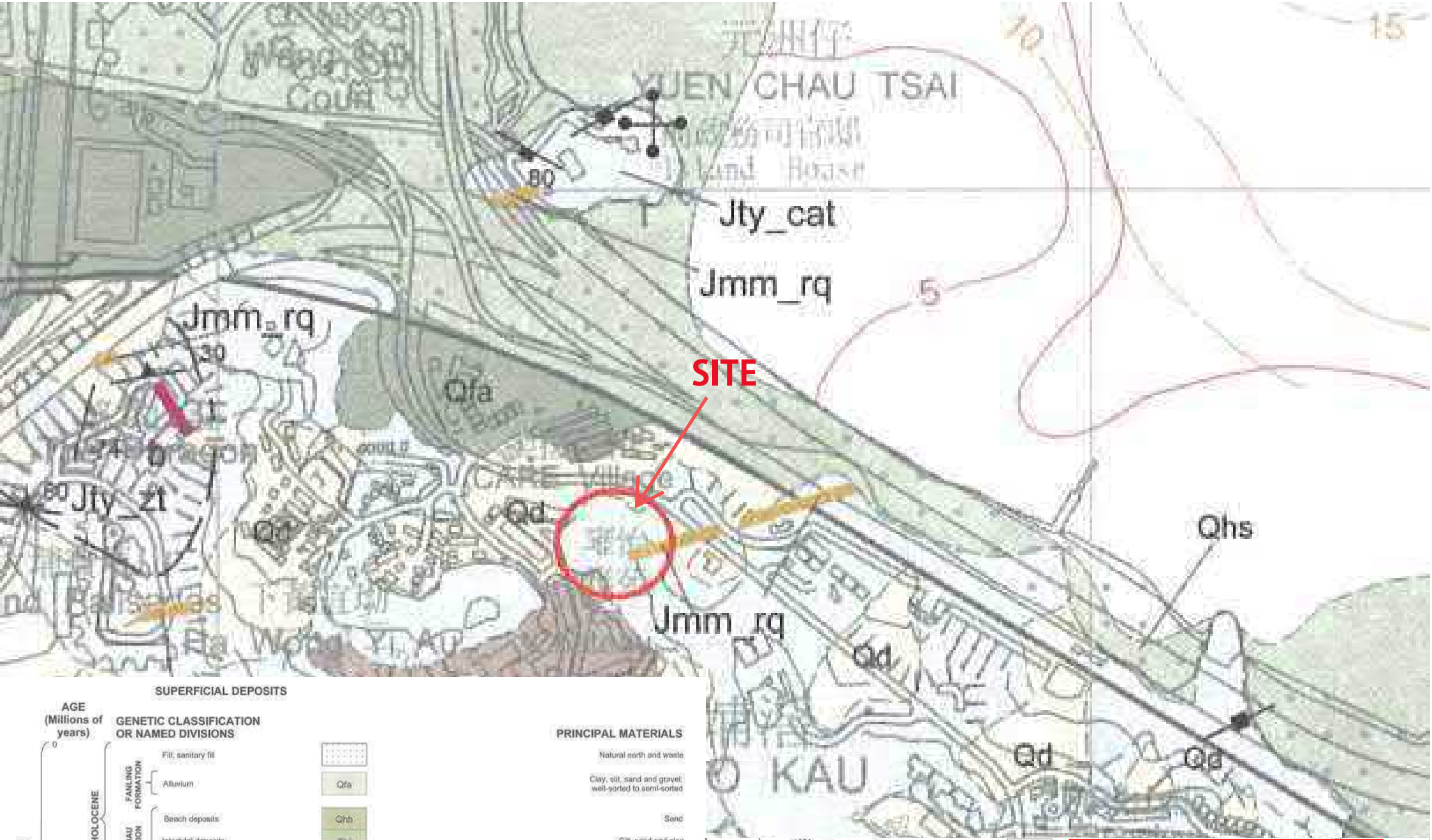
MATCH LINE
SEE DRAWING NO. MTR/AP/1637

MTR CORPORATION
RAILWAY PROTECTION AREA PLAN
UNIVERSITY TO TAI PO MARKET

SCALE 1 : 1000 @ A2 (0 10 20)	DRAWING NO. MTR/AP/1638	REV A
DATE SEP 2010	MTRC CAD REFERENCE NO. AP_1638.dgn	

APPENDIX G

PART PRINT OF THE GEOLOGICAL SURVEY MAP



SUPERFICIAL DEPOSITS

AGE (Millions of years)		GENETIC CLASSIFICATION OR NAMED DIVISIONS			PRINCIPAL MATERIALS
0	QUATERNARY	HOLOCENE	FANLING FORMATION	Fill; sanitary fill	Natural earth and waste
				Alluvium — Qfa	Clay, silt, sand and gravel; well-sorted to semi-sorted
			HANG HAU FORMATION	Beach deposits — Qhb	Sand
				Intertidal deposits — Qhi	Silt, sand and clay
				Marine mud — Qhm	Soft to very soft mud; some sand
				Marine sand — Qhs	Sand; some gravel and sand
		PLEISTOCENE AND HOLOCENE	UNDIFFERENTIATED	Colluvium — Qd	Silt, sand and gravel with boulders
		PLEISTOCENE	CHEK LAP KOK FORMATION	Alluvium — Qca	Silt, sand, gravel and boulders
				Colluvium — Qcd	Sand, gravel, cobbles and boulders in silt matrix
1.8					

MINOR INTRUSIVE ROCKS

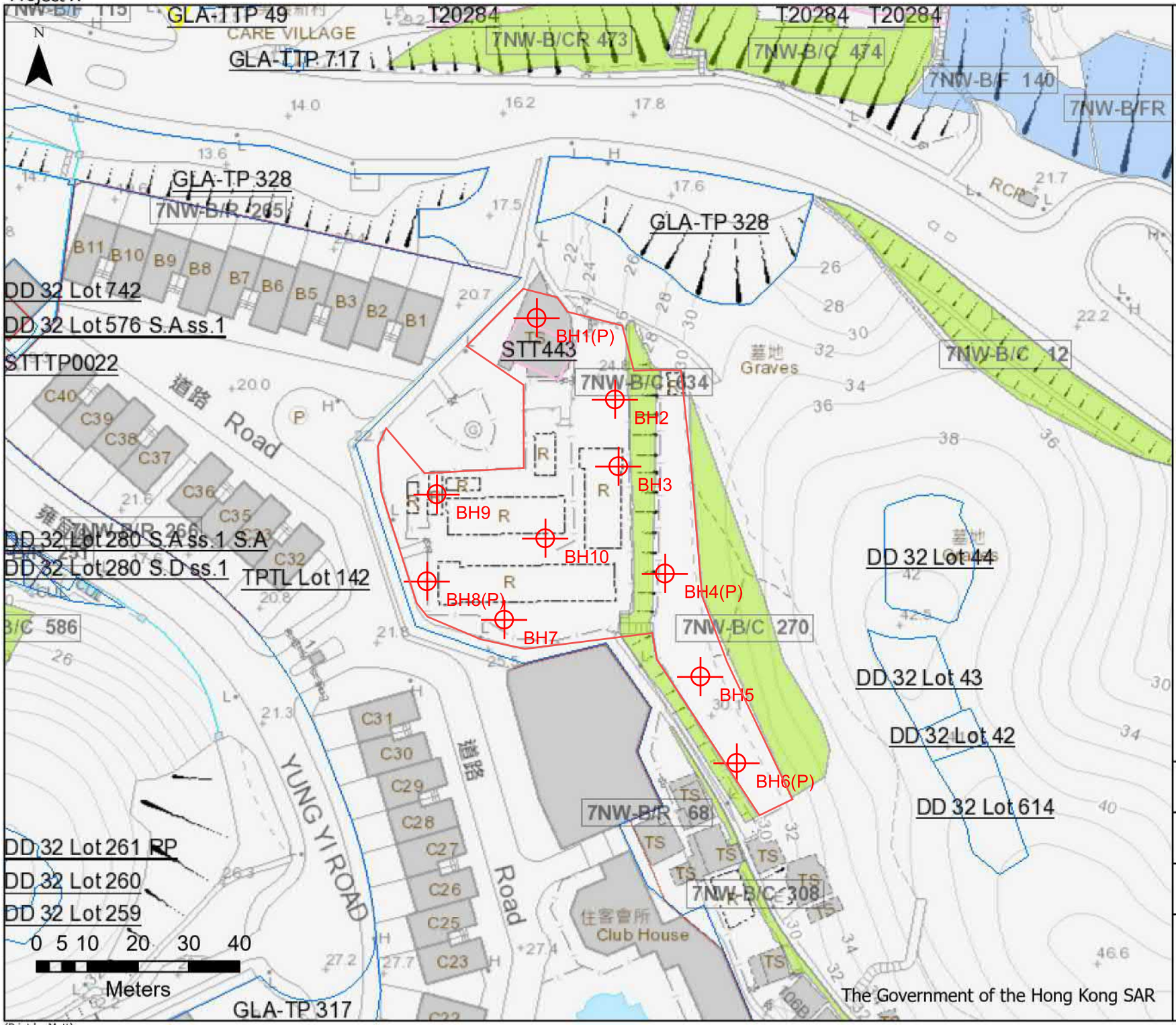
AGE (Millions of years)		GENETIC CLASSIFICATION OR NAMED DIVISIONS			PRINCIPAL MATERIALS
164	JURASSIC	MIDDLE	TAI MO SHAN FORMATION	Fine ash vitric tuff — Jtm_fvt	
				Lapilli lithic-bearing coarse ash crystal tuff — Jtm_cat	
				Tuffaceous siltstone — Jtm_zt	
			SHING MUN FORMATION	Lapilli lithic-bearing coarse ash crystal tuff — Jts_cat	
				Tuff breccia — Jts_bt	
				Tuffite — Jts_tt	
				Tuffaceous sandstone — Jts_st	

Jmm_rq	Quartzphyric rhyolite dykes	CHEK MUN RHYOLITE	LAMMA SUITE
Jmt_rf	Feldsparphyric rhyolite dykes	TAI PO GRANODIORITE	
Jmt_gd	Porphyritic medium- and fine-grained granodiorite		

APPENDIX H

PROPOSED GROUND INVESTIGATION

Project X



Man-made Features

- Cut slopes
- Disturbed terrain
- Fill slopes
- NT defence measures
- NT stabilisation measures
- Retaining walls

Slope Features

- BuildingLicence
- ConditionPolygon
- DepositAreaAndVestingO
- GLA
- LAOPropertyManagemen
- LicenceAndPermitLine
- LicenceAndPermitPoly
- Lot
- MICA
- TenancyLine
- TenancyPoly
- Waiver

Division	Development
Scale	1:1000
Date	13/12/2023

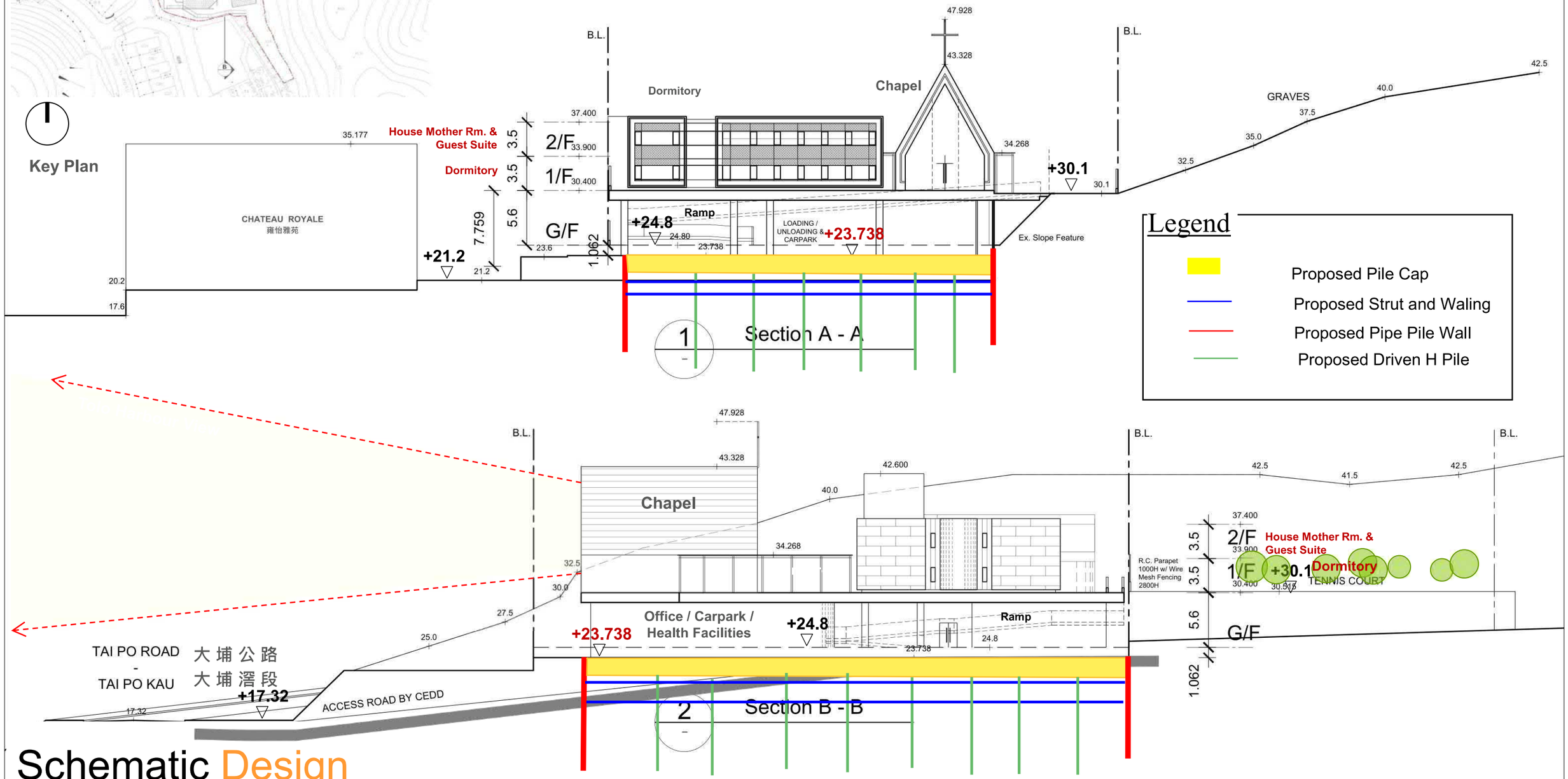
GEOTECHNICAL ENGINEERING OFFICE
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

(Print by Mott)

APPENDIX I

PRELIMINARILY PROPOSED FOUNDATION & SITE FORMATION WORKS

Key Plan



Legend

- Proposed Pile Cap
- Proposed Strut and Waling
- Proposed Pipe Pile Wall
- Proposed Driven H Pile

Schematic Design

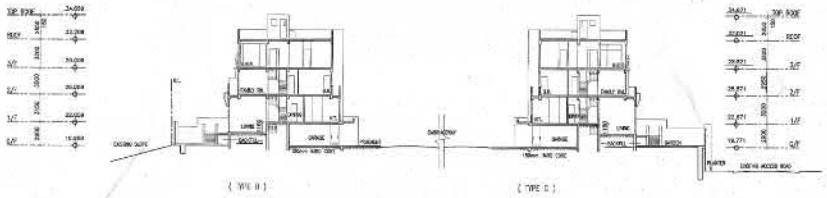
Schematic Sections Scale 1 : 400 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

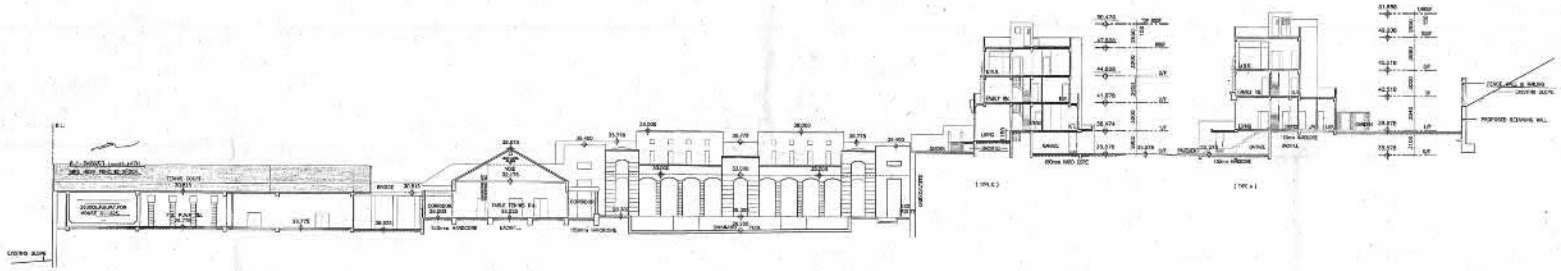
AGC DESIGN LTD
architecture
urban design
interior

APPENDIX J

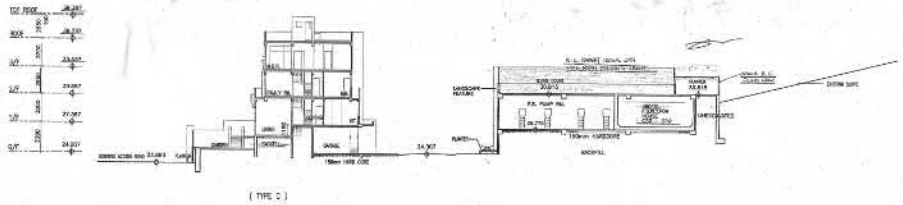
AS BUILT DRAWING



SECTION A – A



SECTION B – B



SECTION C – C

COPY
NO Knowledge
10 JAN 2024

Plan Approved
Chief Building Surveyor
for BUILDING AUTHORITY
26 FEB 2024

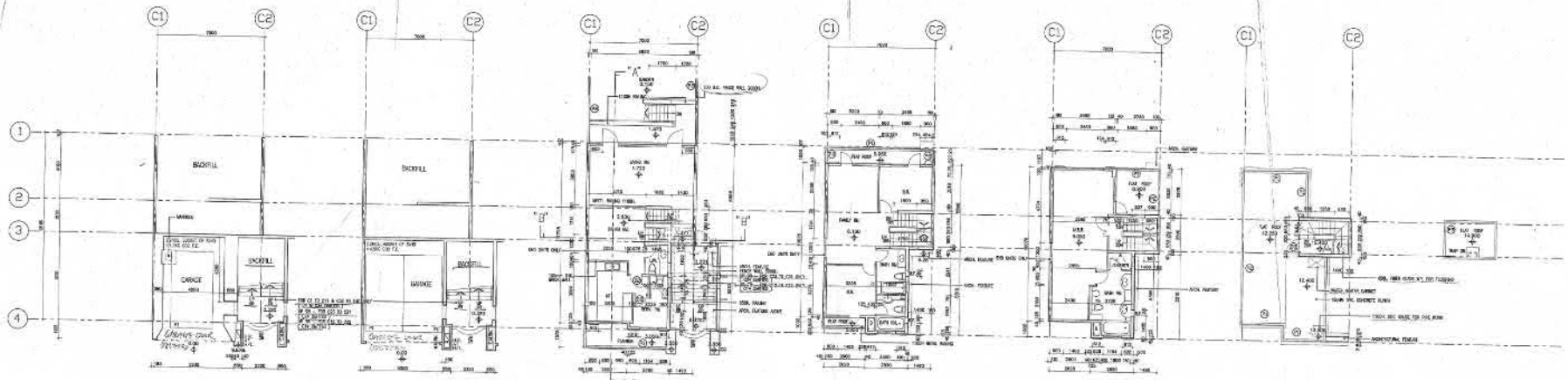
FOR APPROVAL UNDER
BUILDINGS ORDINANCE

LEUNG & CHOW
ARCHITECTS PLANNERS (LTD)

Project:
RESIDENTIAL DEVELOPMENT
47 WING YI AU TAI PO
T.P.T.L. 148

Drawing Title:
SECTION A, B, C

Drawing No.
B-14



GROUND FLOOR PLAN
(SINGLE GARAGE TYPE)

FOR HOUSE C13, C15, C18, C20, C22, C25, C27, C29, C31, C33, C35, & C39
NOTES: C4, C14, C24, & C34 OMITTED

NOTES: ALL LEVELS IN THIS DRAWING ARE RELATIVE LEVELS TO THE ROAD LEVELS MARKED ON DRAWING B-02.DWG
IMPOSED LOAD : 2.5 K.P.A.

GROUND FLOOR PLAN
(DOUBLE GARAGE TYPE)

FOR HOUSE C1 TO C3, C5 TO C11, C12, C16, C17, C19, C21, C23, C26, C28, C30, & C32 TO C40

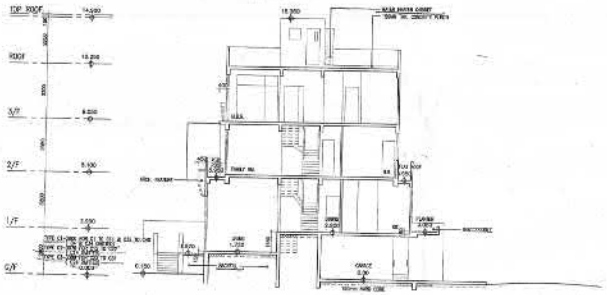
FIRST FLOOR PLAN
75.885 s.m.

SECOND FLOOR PLAN
61.824 s.m.

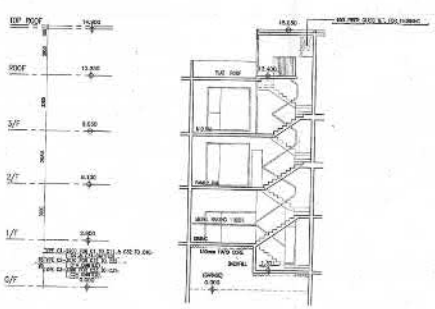
THIRD FLOOR PLAN
57.087 s.m.

ROOF

TOP ROOF



SECTION A – A



SECTION B – B

① 6.820 x 3.852 = 26.271 s.m.
② 1.430 x 1.133 = 1.619
③ 3.710 x 2.330 = 8.644
④ 3.830 x 1.230 = 4.709
⑤ 0.975 x 0.870 = 0.853
⑥ 0.850 x 0.30 = 0.19
⑦ 2.325 x 1.535 = 3.570
⑧ 2.435 x 0.230 = 0.560

TOTAL = 46.283 s.m.

KITCHEN
(1.525 x 1.430) + (1.515 x 1.830) + (1.515 x 1.530) = 7.435 s.m.

TOTAL G/FA FOR TYPE A = 46.283 + 53.410 + 32.561 = 132.254 s.m.

132.254 + 7.435 (KIT.) = 139.689 s.m.

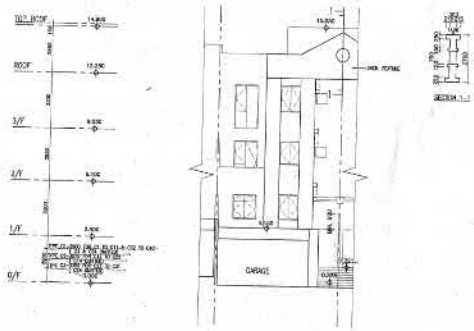
132.254 x 25 (UNITS) = 4805.744 s.m. (EXCL. KIT.)
139.189 x 25 (UNITS) = 4972.464 s.m. (INCL. KIT.)

① 3.353 x 3.333 = 9.978 s.m.
② 3.455 x 3.853 = 8.857
③ 6.133 x 3.456 = 13.963
④ 3.225 x 1.285 = 4.144
⑤ 3.225 x 3.239 = 10.572

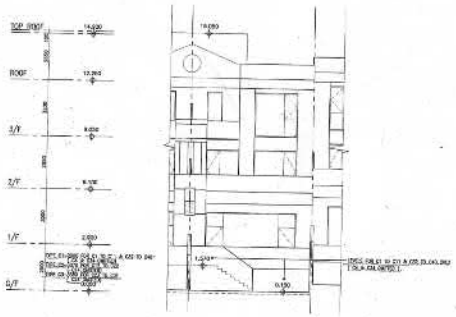
TOTAL = 43.410 s.m.

① 3.845 x 3.420 = 1.653 s.m.
② 3.083 x 3.433 = 8.647
③ 3.583 x 3.578 = 12.963
④ 3.855 x 1.960 = 3.026
⑤ 3.40 x 3.256 = 3.412

TOTAL = 32.561 s.m.



FRONT ELEVATION



REAR ELEVATION

COPY
HO Kwan-ching
10 JAN 2019
A public officer authorized by the Building Authority in writing for the purpose of Section 34(1)(a) of the Buildings Ordinance

For Approval
Chief Building Surveyor
for BUILDING AUTHORITY
26 FEB 2019

FOR APPROVAL UNDER BUILDINGS ORDINANCE

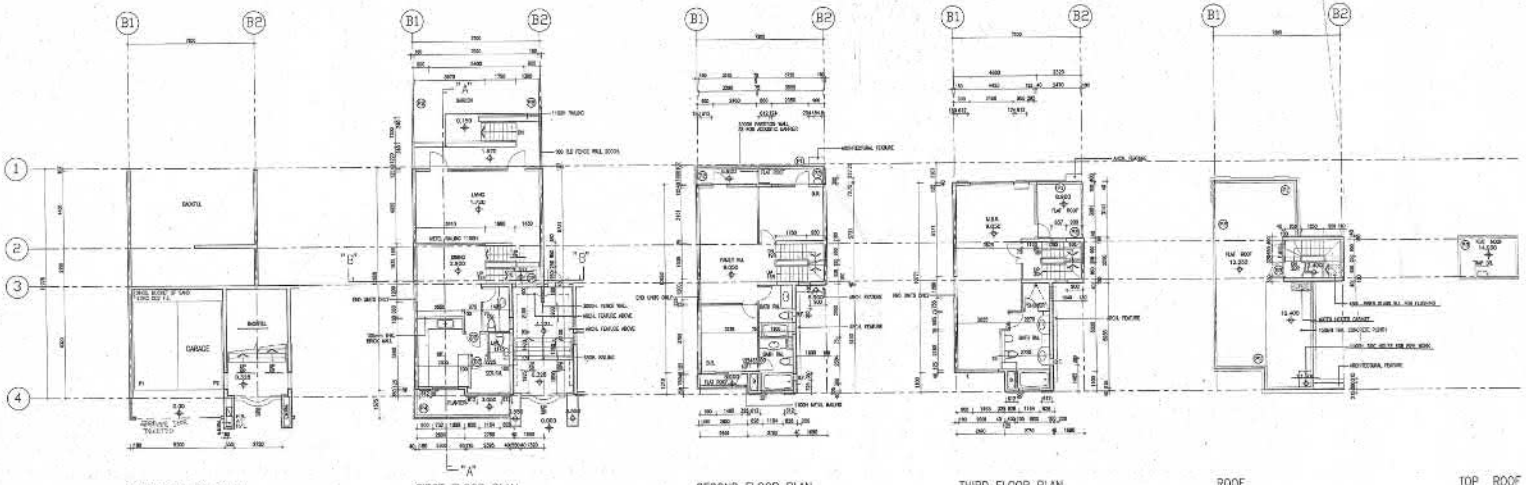
Project:
RESIDENTIAL DEVELOPMENT AT NOS 19 AU TAU PO T.P.T.L. 1468

(TYPICAL TYPE C) (C4, C14, C24, & C34 OMITTED)

Drawing title:
G/F, 1/F, 2/F, 3/F, SECTION A-A, SECTION B-B FRONT ELE., REAR ELE., & G.F.A. CALCULATION

Drawing No.
B-10

LEUNG & CHOW
ARCHITECTS PLANNERS LTD



GROUND FLOOR PLAN
(HOUSE TYPE B)

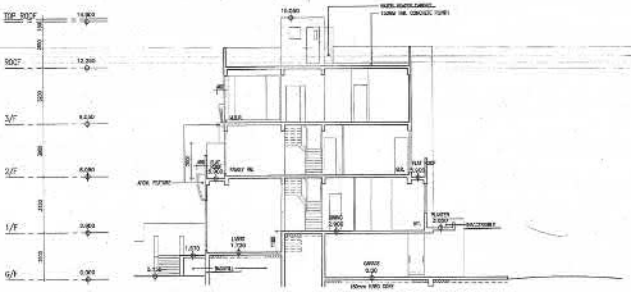
FIRST FLOOR PLAN

SECOND FLOOR PLAN

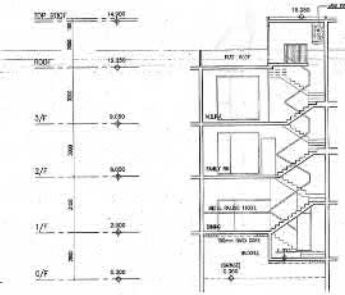
THIRD FLOOR PLAN

ROOF

TOP ROOF



SECTION A – A



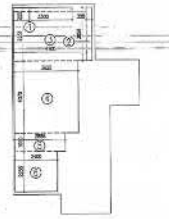
SECTION B – B

①	7.830 x 4.058	= 31.773 s.m.
②	1.430 x 1.132	= 1.618
③	5.690 x 2.332	= 13.270
④	5.955 x 1.845	= 10.986
⑤	3.915 x 5.720	= 22.394
⑥	1.215 x 1.635	= 1.987
⑦	3.350 x 1.515	= 5.075
⑧	2.435 x 0.230	= 0.560

TOTAL = 87.661 s.m.

①	3.290 x 3.234	= 10.640 s.m.
②	3.855 x 3.958	= 15.260
③	4.320 x 2.700	= 11.664
④	3.225 x 1.211	= 3.905
⑤	3.225 x 3.705	= 11.945

TOTAL = 53.414 s.m.

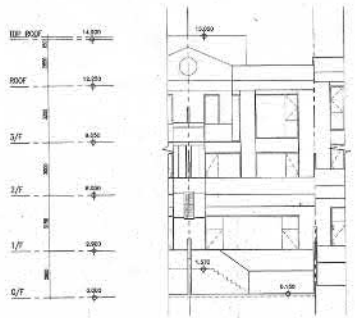


①	3.30 x 0.225	= 0.743 s.m.
②	3.225 x 3.656	= 11.792
③	4.70 x 3.631	= 17.066
④	2.620 x 4.010	= 10.506
⑤	2.855 x 1.090	= 3.112
⑥	2.45 x 2.230	= 5.464

TOTAL = 48.683 s.m.

1/F	3.050
G/F	0.000

FRONT ELEVATION



REAR ELEVATION

COPY
HO Kwan-ching
13 JAN 2026
A public officer authorized by the Building Authority in writing for the purpose of Section 30(1) of the Building Ordinance

Plan Approved
for BUILDING AUTHORITY
26 FEB 1999

FOR APPROVAL UNDER BUILDING ORDINANCE

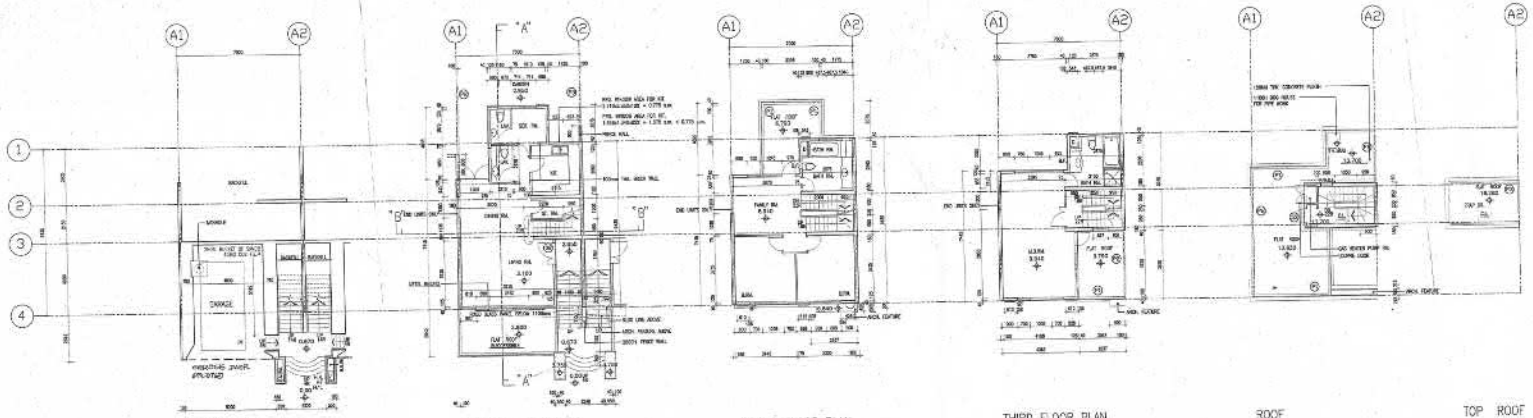
RESIDENTIAL DEVELOPMENT AT NOS 31 AND 33 PEVEL 163

(HOUSE TYPE B) (SEA OBSTER)

Drawing Title
G/F, 1/F, 2/F, 3/F, SECTION A-A, SECTION B-B FRONT ELE., REAR ELE., & G.F.A. CALCULATION

Drawing No.
D-02

LEUNG & CHOW
ARCHITECTS PLANNERS LTD



GROUND FLOOR PLAN

FIRST FLOOR PLAN

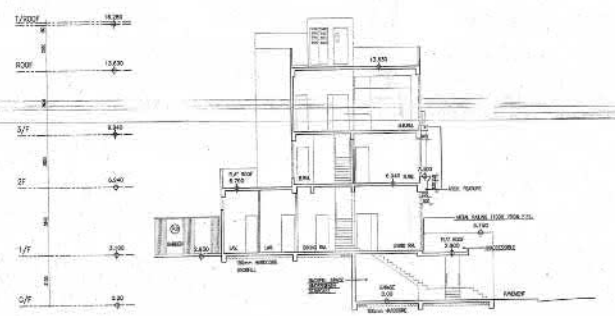
SECOND FLOOR PLAN

THIRD FLOOR PLAN

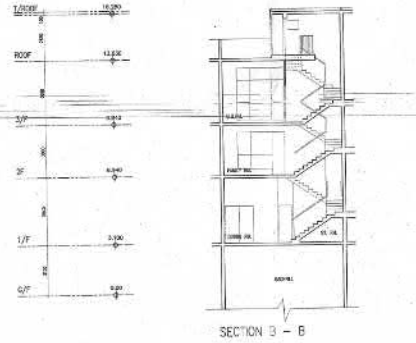
ROOF

TOP ROOF

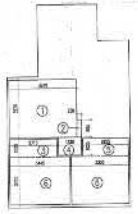
(HOUSE TYPE A)

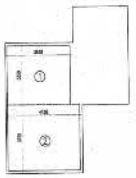


SECTION A – A



SECTION B – B





①	1.368 x 1.875	= 5.674 s.m.
②	0.90 x 3.595	= 3.021
③	0.89 x 1.830	= 1.306
④	1.10 x 0.150	= 0.206
⑤	4.010 x 5.630	= 22.808
⑥	1.208 x 3.735	= 4.527

TOTAL = 38.215 s.m.

①	3.630 x 3.775	= 13.674 s.m.
②	0.250 x 0.830	= 0.241
③	2.715 x 1.630	= 3.782
④	1.230 x 1.020	= 1.353
⑤	1.625 x 1.225	= 2.681
⑥	3.445 x 3.710	= 9.326
⑦	1.30 x 2.710	= 0.943

TOTAL = 35.031 s.m.

①	2.565 x 3.230	= 12.845
②	4.108 x 3.725	= 15.345

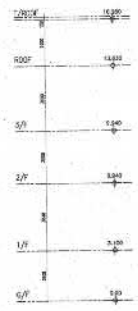
TOTAL = 27.190 s.m.

KITCHEN
(2.710 x 1.880) + (1.225 x 0.80) = 4.295 s.m.

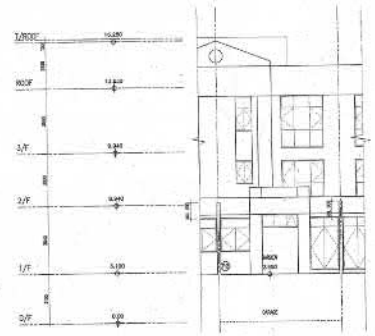
TOTAL U.F.A. FOR TYPE A = 38.215 + 35.031 + 27.190 + 103.632 s.m.

103.632 x 4.288 (ft²) = 107.030 s.m.

102.551 x 22 BLOCKS = 2275.004 s.m. (INCL. ST.)
107.030 x 22 BLOCKS = 2354.660 s.m. (INCL. ST.)



FRONT ELEVATION



REAR ELEVATION

COPY
SIU Kwan-chung
16 JAN 2001
A public officer authorized by the Building Authority to verify the contents of this plan (BD(C) of B.D. Building Certificate)

Plan Approved
TSUI Ho
Chief Building Surveyor
for BUILDING AUTHORITY
25 FEB 2000

FOR APPROVAL UNDER BUILDING ORDINANCE

Project
RESIDENTIAL DEVELOPMENT AT WANG YU AU TAI PO T.P.T.L. 162

(HOUSE TYPE A)
1st, 4th & 22A (WITH)

Drawing Title
G/F, 1/F, 2/F, 3/F, SECTION A-A, SECTION B-B FRONT ELE., REAR ELE., & U.F.A. CALCULATION

Drawing No.
H-00

LEUNG & CHOW
ARCHITECTS PLANNERS LTD

TAI PO ROAD

TAI PO KAU

YELLOW AREA
AS PER LEASE PLAN

YELLOW AREA
AS PER LEASE PLAN

TAI PO COUNTRY TRAIL

TAI PO COUNTRY TRAIL

ROOF PLAN

EGRESS

INGRESS

GREEN AREA

PROPOSED CARPARK

PROPOSED CARPARK RUN-IN/OUT

576A

576R.P.

591

G.L.

G.L.

F.P.

LANDSCAPED AREA
(DETAIL TO BE SUBMITTED LATER)

LANDSCAPE AREA
DETAIL TO BE SUBMITTED LATER

PROPOSED NEW ACCESS ROAD
ACCESS ROAD DETAIL TO BE SUBMITTED UPON SEPARATE COVER

EXCESS ROAD AND SITE FORMATION DETAILS FOR STREAM DIVERSION WORKS SEPARATE AREA TO BE SUBMITTED

NOTE :-
ALL STREAM DIVERSION WORKS FOR DRIVEWAY NOT LESS THAN 3000.
FENCE WALL OF 2000H TO BE PROVIDED ALONG BOUNDARY.
ALL VEHICULAR DRIVEWAY TO BE 6000H UNLESS MARKED OTHERWISE
ALL THE PROPOSED WORKS ARE NOT WITHIN S.A. AND G.C.
PLEASE REFER TO B(A) 408 - 8 TO 10
LANDSCAPE DETAIL TO BE SUBMITTED LATER
ACCESS ROAD AND SITE FORMATION DETAILS FOR STREAM DIVERSION ARE SUBMITTED UNDER SEPARATE COVER
HANDRAILS (DHA) TO WITHSTAND 2D TONNES TO BE PROVIDED
REVISED (JAN) 1 (MAY) A

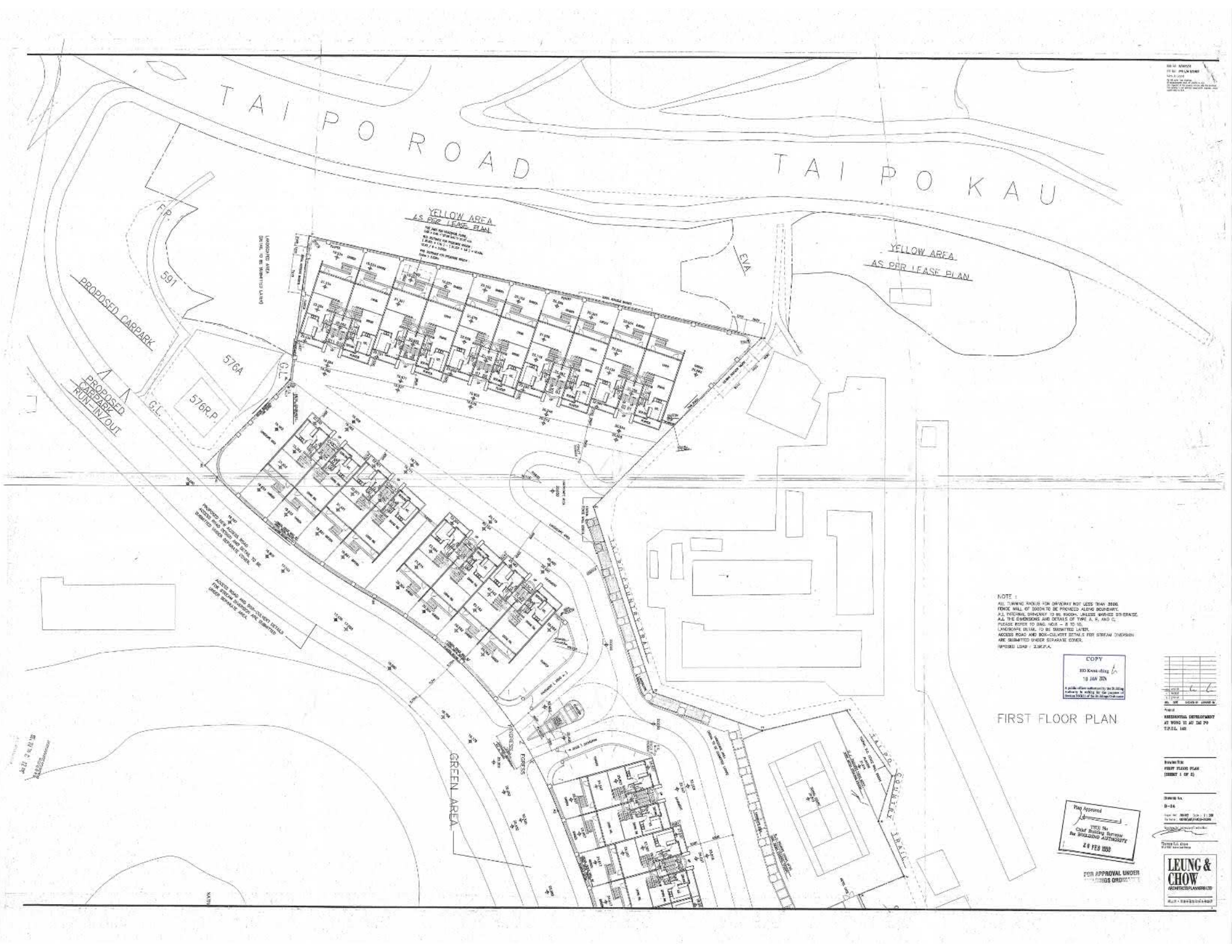
COPY
Submitting A.
11 JAN 12

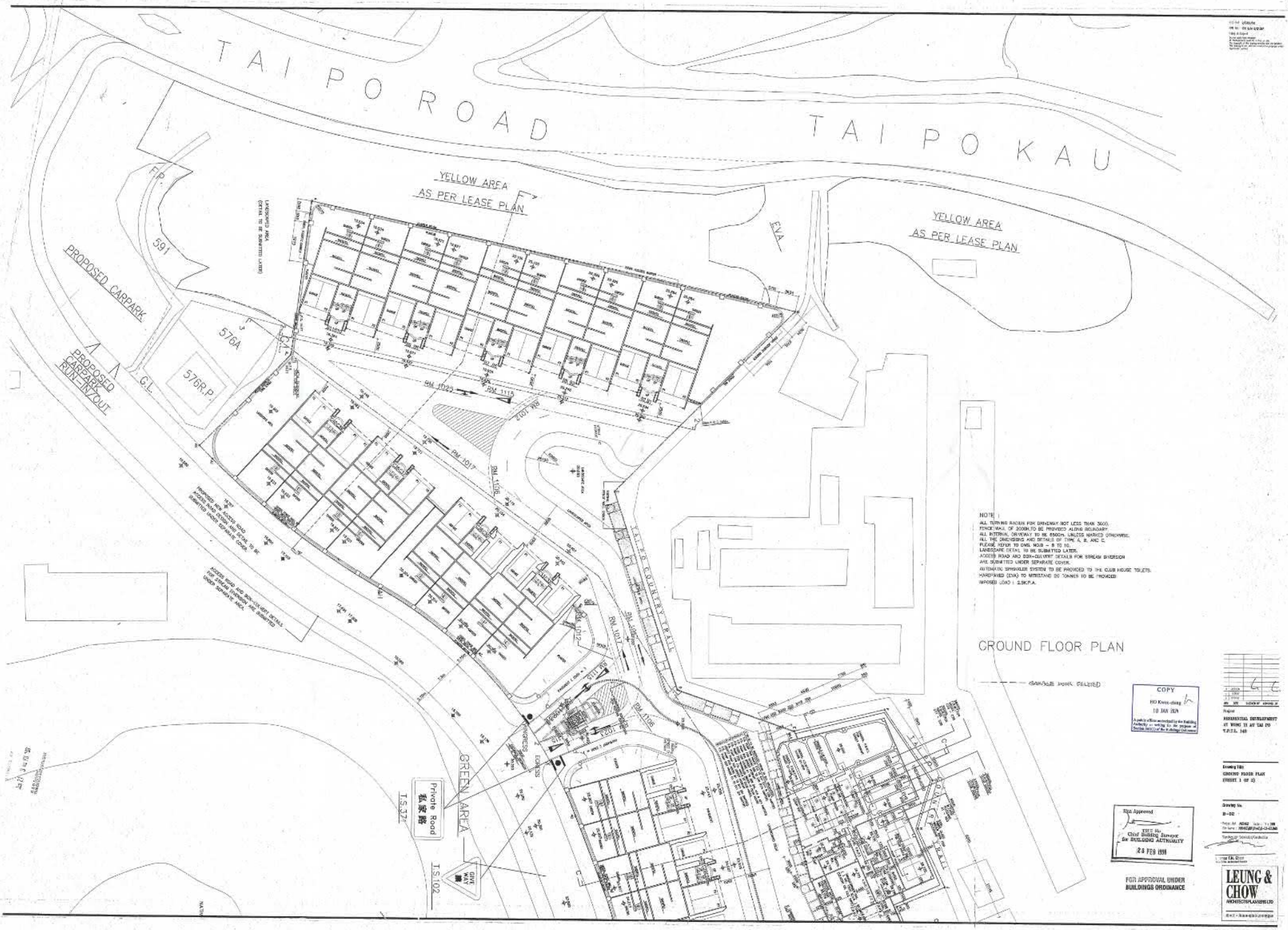
Received
2011 DEC 29
Buildings Department

26 FEB 2010

FOR APPROVAL UNDER
BUILDING ORDINANCE

LEUNG & CHOW
ARCHITECTS & ENGINEERS LTD


TAI PO ROAD
TAI PO KAU
YELLOW AREA
AS PER LEASE PLAN
YELLOW AREA
AS PER LEASE PLAN
EVA
F.P.
591
PROPOSED CARPARK
576A
576
576R.P.
G.L.
PROPOSED CARPARK RUN-IN/OUT
LANDSCAPED AREA (DETAIL TO BE SUBMITTED LATER)
PROPOSED 3m2 ACCESS ROAD ACROSS STREAM, AND DETAIL TO BE SUBMITTED UNDER SEPARATE COVER.
ACCESS ROAD AND BOX-CULVERT DETAILS ACROSS STREAM DIVERSION, ARE SUBMITTED UNDER SEPARATE COVER.
TAI PO COUNTRY TRAIL
TAI PO COUNTRY TRAIL
GREEN AREA
FORFSS
NOTE :
ALL TURNING RADIUS FOR DRIVEWAY NOT LESS THAN 3500.
FENCE WALL OF 3000H TO BE PROVIDED ALONG BOUNDARY.
ALL INTERNAL DRIVEWAY TO BE 5500m. UNLESS MARKED OTHERWISE.
ALL THE DIMENSIONS AND DETAILS OF TYPE A, B, AND C,
PLEASE REFER TO DWG. NOS. – A TO M.
LANDSCAPE DETAIL TO BE SUBMITTED LATER.
ACCESS ROAD AND BOX-CULVERT DETAILS FOR STREAM DIVERSION ARE SUBMITTED UNDER SEPARATE COVER.
IMPOSED LOAD : 2.5KP.A.
COPY
HO Kwok-ching
10 JAN 2020
A public officer authorized by the Secretary for the Environment in writing for the purpose of Section 50(1) of the Buildings Ordinance
FIRST FLOOR PLAN
Plan Approved
Chief Building Surveyor
for BUILDING AUTHORITY
26 FEB 1999
FOR APPROVAL UNDER
BUILDINGS ORDI
RESIDENTIAL DEVELOPMENT
AT WING YI AU TAI PO
T.P.T.L. 168
FIRST FLOOR PLAN
(SHEET 1 OF 2)
B-04
LEUNG & CHOW
ARCHITECTS & PLANNERS LTD


TAI PO ROAD
TAI PO KAU
YELLOW AREA
AS PER LEASE PLAN
YELLOW AREA
AS PER LEASE PLAN
F.P. 591
PROPOSED CARPARK
PROPOSED CARPARK RUN-IN/OUT
576A
576R.P.
G.L.
EVA
RM 1025
RM 1019
RM 1017
RM 1015
RM 1013
RM 1011
RM 1009
RM 1007
RM 1005
RM 1003
RM 1001
EXISTING 1.0M FOOTPATH
PROPOSED NEW ACCESS ROAD AND BOX-CULVERT DETAILS FOR STREAM DIVERSION ARE SUBMITTED UNDER SEPARATE COVER.
ACCESS ROAD AND BOX-CULVERT DETAILS FOR STREAM DIVERSION ARE SUBMITTED UNDER SEPARATE COVER.
EXISTING 1.0M FOOTPATH
EXISTING 1.0M FOOTPATH
EXISTING 1.0M FOOTPATH

GENERAL NOTES

01. ALL DIMENSIONS GIVEN ON ALL DRAWINGS ARE STRUCTURAL AND IN MM UNLESS OTHERWISE STATED.
02. ALL LEVELS SHOWN SHALL BE FINISHED LEVELS AND IN METERS ABOVE P.D. UNLESS OTHERWISE STATED.
03. FIRE SERVICES DEPARTMENT REQUIREMENTS TO BE FULLY COMPLIED WITH.
04. WATER AUTHORITY REQUIREMENTS TO BE FULLY COMPLIED WITH.

NOTES FOR B.O.O.

01. ALL BRICK WORKS AND MASONRY TO BE BUILT IN 1:3 CEMENT MORTAR.
02. ALL R.C.C. WORKS TO BE BUILT IN 1:2:4 MIXTURE UNLESS OTHERWISE DENOTED.
03. ALL R.C.C. DETAILS AND CALCULATIONS TO BE SUBMITTED LATER.
04. DRAINAGE PLANS AND TYPICAL DETAILS TO BE SUBMITTED LATER.
05. ALL PARAPETS OR railings TO BE 1100MM HIGH MINIMUM ABOVE FINISHED FLOOR LEVEL.
06. CLEAR DISTANCE BETWEEN FINISHED FLOOR LEVEL TO UNDERSIDE OF BEAM TO BE 2300MM MINIMUM.
07. CLEAR DISTANCE BETWEEN FINISHED FLOOR LEVEL TO CEILING TO BE 2300MM MINIMUM.
08. CLEAR DISTANCE BETWEEN FINISHED FLOOR LEVEL TO UNDERSIDE OF BEAM OF STAIRCASE TO BE 2000MM MINIMUM.
09. ALL LAVATORIES TO BE PROVIDED WITH CEMENT OR GLAZED PAVED OR MOSAIC TILE FLOORING.

NOTES FOR F.S.D.

(A) HOUSES (LOW RISE OVER THREE STOREYS IN HEIGHT)

01. PORTABLE FIRE EXTINGUISHERS SHALL BE OF THE TYPE AND CAPACITY TO BE PROVIDED AT POSITIONS AS INDICATED ON PLANS.
02. NO STORAGE OF DANGEROUS GOODS WITHOUT THE AUTHORITY OF THE DIRECTOR OF FIRE SERVICES.
03. ALL LININGS FOR ACOUSTIC AND THERMAL INSULATION PURPOSES IN ELECTRICAL AND CONCEALED LOCATIONS SHALL BE OF CLASS 1 OR 2 RATE OF SURFACE SPREAD OF FLAME AS PER BRITISH STANDARD 476 : PART 7 OR ITS INTERNATIONAL EQUIVALENT, OR BE BROUGHT UP TO THAT STANDARD BY USE OF AN APPROVED FIRE RETARDANT PRODUCT.
ALL LININGS FOR ACOUSTIC, THERMAL INSULATION AND DECORATIVE PURPOSES
04. WITH PROTECTED MEANS OF ESCAPE SHALL BE OF CLASS 1 OR 2 RATE OF SURFACE SPREAD OF FLAME AS PER BRITISH STANDARD 476 : PART 7 OR ITS INTERNATIONAL EQUIVALENT, OR BE BROUGHT UP TO THAT STANDARD BY USE OF AN APPROVED FIRE RETARDANT PRODUCT.
05. A MANUAL FIRE ALARM SYSTEM TO BE PROVIDED FOR EACH GROUP OF HOUSES AND TO BE INCORPORATED IN THE ASSOCIATED INSTALLATION.
06. A 28,000L F.S. WATER TANK WILL BE PROVIDED FOR EACH GROUP OF HOUSES TO SUPPLY THE ASSOCIATED INSTALLATION. A PAIR OF 100MM F.S. WATER MAINS WILL BE LOCATED AT THE OUTER HOUSES TO SUPPLY HOSEREELS AT HOUSES (GROUPS A, B, C, D AND E).
07. F.S. INLETS C/W A NON-RETURN VALVE AND HOSEREELS TO BE PROVIDED AT POSITIONS INDICATED ON PLANS.
08. THE FIXED FIRE PUMP SHALL BE CAPABLE TO PROVIDE 6M JET LENGTH FROM THE MOST REMOTE HOSEREEL AT EACH HOUSE GROUP.

(B) CLUB HOUSE (LOW RISE)

01. PORTABLE FIRE EXTINGUISHERS SHALL BE OF THE TYPE AND CAPACITY TO BE PROVIDED AT POSITIONS AS INDICATED ON PLANS.
02. F.S. INLETS C/W A NON-RETURN VALVE TO BE PROVIDED AT POSITIONS INDICATED ON PLANS.
03. HOSE REEL INSTALLATIONS TO BE INSTALLED AT POSITIONS INDICATED ON PLANS.
04. THE FIXED FIRE PUMPS SHALL BE ABLE TO PROVIDE 6M HOSEREEL JET LENGTH.
05. NO STORAGE OF DANGEROUS GOODS WITHOUT THE AUTHORITY OF THE DIRECTOR OF FIRE SERVICES.
06. ALL LININGS FOR ACOUSTIC AND THERMAL INSULATION PURPOSES IN ELECTRICAL AND CONCEALED LOCATIONS SHALL BE OF CLASS 1 OR 2 RATE OF SURFACE SPREAD OF FLAME AS PER BRITISH STANDARD 476 : PART 7 : 1971 (REVISED 1987) OR ITS INTERNATIONAL EQUIVALENT, OR BE BROUGHT UP TO THAT STANDARD BY USE OF AN APPROVED FIRE RETARDANT PRODUCT.
ALL LININGS FOR ACOUSTIC, THERMAL INSULATION AND DECORATIVE PURPOSES
07. WITH PROTECTED MEANS OF ESCAPE SHALL BE OF CLASS 1 OR 2 RATE OF SURFACE SPREAD OF FLAME AS PER BRITISH STANDARD 476 : PART 7 : 1971 (REVISED 1987) OR ITS INTERNATIONAL EQUIVALENT, OR BE BROUGHT UP TO THAT STANDARD BY USE OF AN APPROVED FIRE RETARDANT PRODUCT.
07. ALL ELECTRICAL CIRCUITS WILL BE PROTECTED BY MINIATURE CIRCUIT BREAKERS.
08. SPRINKLER SYSTEM TO BE PROVIDED TO COVER ALL PARTS OF THE BUILDING INCLUDING CAR-PARKS AND COMMON CORRIDORS EXCEPT FOR M/E PLANT ROOMS AND SERVICES DUCTS.
09. THE ANNUNCIATOR PANELS OF ALL FIRE PROTECTION SYSTEMS OF THE LOT TO TERMINATE IN THE F.S. CONTROL ROOM ON G/F OF RECREATION FACILITIES AS INDICATED ON PLAN.
10. A MANUAL FIRE ALARM SYSTEM TO BE PROVIDED THROUGHOUT THE BUILDING AND TO BE INCORPORATED IN THE F.S. INSTALLATION.
11. A 28,000L F.S. WATER TANK WILL BE PROVIDED TO SUPPLY THE F.S. SYSTEM.
12. STANDARD REQUIREMENTS FOR CONSUMER SUBSTATIONS WHERE APPLICABLE AND SWITCH ROOM IN BUILDING TO BE COMPLIED WITH.
13. NO COMPARTMENT WILL EXCESS 2000M².
14. SMOKE/HEAT DETECTORS TO BE PROVIDED FOR ELECTRICAL/MECHANICAL PLANT ROOMS AND AREAS NOT COVERED BY SPRINKLERS EXCEPT FOR M/E SERVICES DUCT.
15. THE MANUAL FIRE ALARM SYSTEM SHALL BE LINKED TO AUTOMATIC FIRE ALARM SYSTEM AND CONNECTED TO C.S.D.D. THROUGH DIRECT TELEPHONE LINE FOR THE LOT FROM THE F.S. CONTROL ROOM AS INDICATED ON PLAN.
16. VENTILATION/AIR CONDITIONING CONTROL SYSTEM SHALL BE PROVIDED WHERE APPROPRIATE.
17. A 57,000L SPRINKLER WATER TANK WILL BE PROVIDED TO SUPPLY THE SPRINKLER SYSTEM. SPRINKLER ALARM SHALL BE CONNECTED TO C.S.D.D. THROUGH DIRECT LINE FOR THE LOT. SPRINKLER MAIN WILL BE SUPPLIED BY SINGLE ONE INCH WATER MAIN. A SPRINKLER INLET C/W A NON-RETURN VALVE SHALL BE CONNECTED TO SPRINKLER CONTROL VALVE.
18. THE SPRINKLER INSTALLATION SHALL COMPLY WITH THE F.S.D. RULES 2ST EDITION FOR CAR PARKING.
19. EMERGENCY LIGHTING SHALL BE PROVIDED THROUGHOUT THE ENTIRE BUILDING AND ALL EXIT ROUTES LEADING TO GROUND LEVEL.
20. SUFFICIENT DIRECTIONAL AND EXIT SIGNS WILL BE PROVIDED.
21. AUDIO/VISUAL WARNING SYSTEM IS NOT REQUIRED SINCE NO PART OF THIS BUILDING AT ANY ONE FLOOR WILL EXCEED 2,000 SQM.

(C) OTHER AREAS OF THE LOT EXCLUDING A & B ABOVE

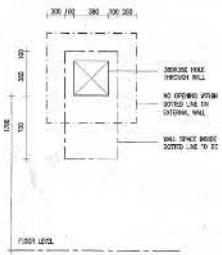
01. PORTABLE FIRE EXTINGUISHERS SHALL BE OF THE TYPE AND CAPACITY TO BE PROVIDED AT POSITIONS AS INDICATED ON PLANS.
02. SMOKE/HEAT DETECTORS TO BE PROVIDED FOR ELECTRICAL/MECHANICAL PLANT ROOMS.
03. THE ANNUNCIATOR PANELS OF ALL FIRE PROTECTION SYSTEMS OF THE LOT TO TERMINATE IN THE F.S. CONTROL ROOM ON G/F OF RECREATION FACILITIES.
04. AUTOMATIC FIRE ALARM SYSTEM FOR M/E PLANT ROOMS SHALL BE CONNECTED TO C.S.D.D. THROUGH DIRECT TELEPHONE LINE FOR THE LOT AT THE FIRE CONTROL ROOM OF CLUB HOUSE.
05. A 100MM DIA. STREET FIRE HYDRANT WATER TANK WILL BE PROVIDED TO SUPPLY THE STREET FIRE HYDRANT SYSTEM. THE INITIAL RATE OF WATER SUPPLY FOR THE STREET FIRE HYDRANT WATER TANK SHALL BE NOT LESS THAN 2000 L/MIN.

CALCULATION OF INFILL RATE : $\frac{(4000 \times 0.8) - 1200(0.1)(60)}{60} = 2003$ L/MIN

06. STREET FIRE HYDRANT SHALL BE PROVIDED AT SPACING NOT MORE THAN 180 METRES.
07. THE MINIMUM OUTPUT AND PRESSURE AVAILABLE FROM TWO 65MM OUTLETS OF A STREET FIRE HYDRANT DELIVERING AT THE SAME TIME SHALL BE AT AN ADEQUATE FLOW OF NOT LESS THAN 4000 L/MIN. WITH A MINIMUM RESIDUAL PRESSURE OF 700KPA AT THE OUTLET.
08. EMERGENCY LIGHTING SHALL BE PROVIDED FOR ELECTRICAL/MECHANICAL PLANT ROOMS.
09. NO STORAGE OF DANGEROUS GOODS WITHOUT THE AUTHORITY OF THE DIRECTOR OF FIRE SERVICES.
10. STANDARD REQUIREMENT FOR CONSUMER SUBSTATIONS AND SWITCH ROOM TO BE COMPLIED WITH.

(D) MISCELLANEOUS

01. EMPLOYED ELECTRIC POWER, GAS OR WATER AND ONE OF SEVERAL SHALL BE PROVIDED FOR PILAR SYSTEM, SPRINKLER SYSTEM AND STREET FIRE HYDRANT SYSTEM.



DETAIL OF FLUE APERTURE

BLOCK PLAN 1:500

SYMBOLS & LEGENDS

R.C.C. WORKS
BRICK WORKS
TIMBER WORKS
METAL WORKS
SOLID CONCRETE BLOCK
HARDCORE
GLAZING WORKS
60MM HOLLOW CORE DOOR
HARD WOOD SELF CLOSING DOOR WITH WIRE GLASS UPPER PANEL HAVING 1 HR. F.R.P.
HARD WOOD SELF CLOSING DOOR HAVING 1 HR. F.R.P.
2 HR. F.R.P. SELF CLOSING DOOR WITH VISION PANEL
FRENCH DOOR
HARD WOOD SELF CLOSING DOOR WITH WIRE GLASS UPPER PANEL HAVING 1/2 HR. F.R.P.
HARD WOOD SELF CLOSING DOOR HAVING 1/2 HR. F.R.P.
HARD WOOD DOOR WITH PLAIN GLASS UPPER PANEL HAVING 1/2 HR. F.R.P.
HARD WOOD DOOR WITH PANIC BOLT HAVING 1/2 HR. F.R.P.
40mm HOLLOW CORE SELF CLOSING DOOR
HARD WOOD SELF CLOSING INSPECTION DOOR HAVING 1/2 HR. F.R.P.

NOTE :
TEST CERTIFICATES OF DOORS IN ACCORDANCE W/ B.S. 476 PARTS 20 & 22 1987 TO SUBMITTED LATER.

WG	WIRED GLASS	PG	PLAIN GLASS
FWD.	WIRED WIRE GLASS LOUVRE	DW	DAY WINDOW
CD	CABLE DUCT	PD	PIPE DUCT
HR	HOSE REEL	FH	FIRE HYDRANT
FE	FIRE EXTINGUISHER	SB	SAND BUCKET
FB	FIRE BLANKET	EXIT	EXIT SIGN
	EVA	A.L.M.V.	ARTIFICIAL LIGHT & MECHANICAL VENTILATION

(P1) 100THK. R.C. PARAPET WALL 1100H.
(P2) 100THK. R.C. PARAPET WALL 2300H.
(P3) 100THK. R.C. CURB 150H.
(P4) 100THK. R.C. PARAPET WALL 500H.
(P5) METAL RAILING 1100H. FROM GARDEN LEVEL
(R) FLAT ROOF

COPY
NG Kwok-cheung
16 JAN 2004
A public officer appointed by the Building Authority in writing for the purpose of Section 9(2)(c) of the Buildings Ordinance

Plan Approved
Chief Building Surveyor for BUILDING AUTHORITY
26 APR 1995

FOR APPROVAL UNDER BUILDINGS ORDINANCE

Project
RESIDENTIAL DEVELOPMENT AT YEUNG YI AU TAU PO T.P.S.L.A. 140

Drawing Title
BLOCK PLAN & NOTES

Drawing No.
B-01

LEUNG & CHOW
ARCHITECTS/PLANNERS LTD

PLANNING LIMITED
規劃顧問有限公司

UNIT K, 16/F, MG TOWER
133 HOI BUN ROAD, KWUN TONG
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By Hand

Our Ref: S3107/HOLF/24/003Lg

29 April 2024

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

Dear Sir/ Madam,

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones, Government Land at "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po
(Planning Application No. A/TP/694)
- Further Information No.1 -

Reference is made to the captioned Application submitted to the Town Planning Board ("TPB") on 1 March 2024 and the departmental and public comments conveyed via Sha Tin, Tai Po and North District Planning Office in March and April 2024.

In response to the departmental comments, we hereby submit this Further Information ("FI") No.1 for the TPB's consideration. This FI submission consists of:

1) A Response-to-Comment Table
2) Annex 1 – Replacement Pages of the Supporting Planning Statement
3) Annex 2 – Replacement Pages of the Architectural Drawings
4) Annex 3 – Replacement Pages of the Tree Preservation and Landscape Proposal
5) Annex 4 – Supplementary Information of the Traffic Impact Assessment
6) Annex 5 – Replacement Pages of the Environmental Assessment

We would also like to clarify the function of the isolation rooms located on the first and second floor of the Residential Care Home for Persons with Disabilities (RCHD). According to the *Code of Practice for Residential Care Homes (Persons with Disabilities)* issued by Social Welfare Department, isolation facility/room is one of the basic facilities of an RCHD. The isolation rooms are used as an infection control measure for residents in need (including those who are sick or infected / suspected of being infected with communicable diseases) to prevent the spread of such diseases and protect the other persons in the same RCHD. The isolation rooms will not induce additional bed places to the RCHD and will not be used for medical treatment.

Should you have any queries in relation to the attached, please do not hesitate to contact the undersigned, Ms. Camille LAM at 3426 8841 or Mr. Benjamin TUNG at 3426 8402.

Thank you for your kind attention.

bsi ISO 9001 Quality Management Systems CERTIFIED
FS 579819

PLANNING LIMITED
規劃顧問有限公司

Our Ref: S3107/HOLF/24/003Lg
Date: 29 April 2024

Yours faithfully
For and on behalf of
KTA PLANNING LIMITED

Pauline LAM

Encl. (4 hard copies)

cc. the Applicant & Team

KT/PL/BT/vy

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones, Government Land at Former Fish Marketing Organization Tai Po Primary School, Wong Yi Au, Tai Po
S.16 Planning Application No. A/TP/694
Further Information No.1

Departmental Comments Conveyed via Sha Tin, Tai Po and North District Planning Office

Items	Comments	Responses
1	**Comments from STN DPO, PlanD received on 19 March 2024 (Contact Person: Ms. Sandy WU; Tel: 2158 6381)**	
1.1	***Supplementary Planning Statement*** 1. Para. 2.3.1 – "(Error! Reference source not found. refers)" is shown in the paragraph.	Noted and revised in **Para. 2.3.1** of the Supporting Planning Statement (SPS) (**Annex 1** of this Further Information (FI) refers).
1.2	2. 3rd bullet of para. 2.4.1 – suggest to revise from "…low-rise domestic structures of Ha Wong Yi Au Village zoned "GB" to "… temporary structures zoned "GB"".	Noted and revised in **Para. 2.4.1** of the SPS.
1.3	3. General comment – suggest to provide photos of existing HOLF external appearance and internal conditions of the RCHD for reference.	Noted. **Figures 3.2 and 3.3** were supplemented in the SPS.
1.4	4. It is noted that the proposed no. of beds (60) is more than the provision at the existing HOLF (33). Please provide justifications/support for the proposed increase.	Being a charitable institution, Home of Loving Faithfulness has the will to serve more individuals with intellectual and physical disabilities. Phase 2 expansion of the current HOLF in Kwu Tung has been planned since 1990s. As stated in **Para. 3.2.1** of the SPS, the maximum number of persons that the existing HOLF is capable of accommodating under the current RCHD license is 95. Since the existing HOLF has to be relocated due to the development of Kwu Tung North New Development Area and will involve building a new RCHD, to fully utilise the site and the ancillary infrastructure built by the government authorities, the Applicant would like to take this opportunity to increase the no. of beds to 60 to serve more persons with special needs, which is not exceeding the current license restriction.
1.5	***Appendix 1*** 5. G/F Plan – please clarify the proposed use next to the meeting room at the northeast of the development.	The proposed use of the subject space is the office of the RCHD. The Ground Floor Plan of the Architectural Drawings of the Proposed Scheme has been revised (**Annex 2** of this FI refers).

Items	Comments	Responses
1.6	***Appendix 2*** 6. Para. 4.9 – the no. of trees that cannot be retained in-situ do not tally with the proposed no. of trees to be felled in Table 2.0. Please clarify.	Noted. **Para. 4.9** of the Tree Preservation and Landscape Proposal (TPLP) has been reviewed and revised accordingly (**Annex 3** of this FI refers).
1.7	7. Table 3.0 – there is a typo under "Required Greenery at Primary Zone". Please rectify.	Noted. **Table 3.0** of the TPLP has been reviewed and revised accordingly.
1.8	8. Para. 6.4 and 6.5 – it is mentioned that there are 33 heavy standard trees for compensation while the quantity of compensatory trees is 44. Please clarify.	To clarify, there are total 48 heavy standard trees for compensation of the loss of 31 existing trees. **Paras. 6.4 and 6.5** have revised accordingly. Please also refer to the revised planting schedule of the TPLP.
1.9	9. Appendix C Planting Plans – the no. of compensatory trees does not tally with those as shown on the plans. Please check.	To clarify, there are total 48 heavy standard trees for compensation of the loss of 31 existing trees. Please also refer to the revised planting schedule of the TPLP.
2	**Comments from NDO, CEDD received on 25 March 2024 (Contact Person: Ms. MAK Pui-yan; Tel: 3797 5098))**	
2.1	Referring to applicant response to item 15.2, LandsD's attention shall be drawn that the current boundary do not include the sloping ground associated to the footpath (hatched yellow in Annex I), and applicant's response suggested that this sloping ground will not be managed by the applicant but the government, i.e. LandsD. Please also note that this sloping ground is less than 15 degrees and will not be a registered slope under GEO.	Noted.
2.2	Moreover, the applicant has assumed the section of public road between the access gate and Tai Po Road will be taken up by HyD, however the M&M status is still being discussed and not yet agreed.	Noted.
3	**Comments from UD&L (Landscape Unit), PlanD received on 25 March 2024 (Contact Person: Mr. Ivan WONG; Tel: 3565 3947))**	
3.1	<u>Landscape Observations and Comments</u> 1. Based on the aerial photo of 2023, the site is situated in an area of residential urban fringe landscape character surrounded by villages, existing low-rise residential buildings, burial ground, roads and dense woodland. Significant impact on the landscape character arising from the proposed development is not anticipated.	Noted with thanks.
3.2	2. According to the Supporting Planning Statement (PS), the site is occupied by abandoned school buildings. With reference to the Appendix 2 - Tree Preservation and Landscape Proposal (TPLP), 36 trees of common species are identified within the application boundary	Noted with thanks. To clarify, please note that there are total 48 heavy standard trees for compensation of the loss of 31 existing trees.

Items	Comments	Responses
	and no Registered Old and Valuable Tree (OVT) is identified. 31 trees are in direct conflict with the proposed development and are proposed to be felled. Mitigation measures including 44 heavy standard trees within application boundary and periphery planting strips are proposed. Landscape treatments, such as sensory garden, organic farm, outdoor sitting courtyard, etc. are proposed. Moreover, more than 20% greenery coverage will be provided and approx. 110 sq.m of open space provision for an estimated population of 60 residents in accordance with the requirements of the HKPSG is proposed. Significant adverse landscape impact on the existing landscape resource arising from the proposed use is not anticipated. We have **no objection** to the application from landscape planning perspective.	
3.3	Detailed/Advisory Comments 3. PS:- Some "error" text is observed in para 2.3.1.	Noted and revised in **Para. 2.3.1** of the SPS (**Annex 1** of this FI refers).
3.4	4. According to para. 5.7.2 of the PS and para 4.10 of the TPLP, 33 existing trees are proposed to be removed, which do not tally with the Response to Comment Table and other sections of the submission (i.e. 31 nos.).	To clarify, there are total 48 heavy standard trees for compensation of the loss of 31 existing trees. **Para 5.7.2** of the SPS and **Para 4.9** of the TPLP have been revised accordingly. Please also refer to the revised planting schedule of the TPLP (**Annex 3** of this FI refers).
3.5	5. The number of proposed new trees is different in para 6.4, Appendix B and C and other sections of the submission. The applicant should review all drawings and relevant paragraphs and ensure the consistency.	To clarify, there are total 48 heavy standard trees for compensation of the loss of 31 existing trees. **Paras 4.4.1** and **5.7.2** of the SPS and **Paras 6.4** and **6.5** of the TPLP have been revised accordingly. Please also refer to the revised planting schedule of the TPLP.
3.6	Advisory Comments to the Applicant 6. The applicant should be advised that approval of the application does not imply approval of the site coverage of greenery requirements under PNAP APP-152. The site coverage of greenery calculation should be submitted separately to Building Department (BD) for approval. Similarly for any proposed tree preservation/ removal scheme, the applicant is reminded to approach relevant authority/ government department(s) direct to obtain necessary approval.	Noted.
4	**Comments from UD&L (Urban Design Unit), PlanD received on 25 March 2024 (Contact Person: Mr. Jeff LEUNG; Tel: 3565 3936)**	
4.1	***Urban Design & Visual:*** 1. Being situated in the southeastern fringe of the Tai Po New Town, the Site is located at a foothill area overlooking Tolo Harbour. Its locality mainly comprises low-rise residential developments and village	Noted with thanks.

<table>
<tr><th>Items</th><th>Comments</th><th>Responses</th></tr>
<tr><td></td><td>houses with existing BHs ranging from about 1 to 4 storeys / 7.6mPD to 50mPD to the north, west and south, and it is flanked by higher vegetated slopes to the east. Given that the proposed development is low-rise in nature, it is considered not incompatible with the surrounding context.</td><td></td></tr>
<tr><td>4.2</td><td>2. According to the submission (e.g. Section 4.5 & 3), design measures including setbacks from the site boundary and periphery planting are proposed, and no significant adverse visual impact is anticipated</td><td>Noted with thanks.</td></tr>
<tr><td>5</td><td colspan="2">Comments from STN DPO, PlanD received on 25 March 2024
(Contact Person: Ms. Sandy WU; Tel: 2158 6381)</td></tr>
<tr><td>5.1</td><td>In addition, as observed from architectural drawings, it is not clear if Sections A-A and B-B are showing section and/or elevation. In this case, the proposed Chapel should not be fully visible in Section A-A according to the section line in the Master Layout Plan. You may wish to review as appropriate for the sake of clear presentation.</td><td>For better presentation, Schematic Sections have been revised. Schematic Elevations are supplemented for information (Annex 2 of this FI refers).</td></tr>
<tr><td>6</td><td colspan="2">Comments from TD received on 27 March 2024
(Contact Person: Ms. Yanny LI; Tel: 2399 6936)</td></tr>
<tr><td>6.1</td><td>Please find our comments on the TIA Report and the Response-to-Comment Table below for consideration.
i. R-to-C #9.1 and Ch.5: Please provide assessment on the proposed footpath of the development.</td><td>The Level-of-service (LOS) of the footpath with the Proposed RCHD is shown in Table R1.

TABLE R1 LOS OF THE PROPOSED FOOTPATH
<table>
<tr><th rowspan="2">Location</th><th rowspan="2">Footpath Width (m)</th><th rowspan="2">Effective Width (m)</th><th rowspan="2">Peak Period</th><th colspan="3">Year 2031 with the Proposed RCHD</th></tr>
<tr><th>Ped/hr</th><th>Ped/min/m</th><th>LOS</th></tr>
<tr><td rowspan="2">Proposed Footpath</td><td rowspan="2">1.6</td><td rowspan="2">0.6</td><td>AM</td><td>15</td><td>0.4</td><td>A</td></tr>
<tr><td>PM</td><td>10</td><td>0.3</td><td>A</td></tr>
</table>
Table R1 shows that the footpath operates with LOS A, which is <u>acceptable</u>.</td></tr>
<tr><td>6.2</td><td>ii. R-to-C #9.5: Please advise the anticipated number of construction vehicles, operation hours, scale and type of works (i.e. bulk excavation, concreting, etc.) to assess the construction traffic impact.</td><td>During the peak construction activity, which is concreting, it is expected that there will be 6 concrete delivery trucks, or equivalent to 15 pcu/hour during the AM and PM peak hours respectively.</td></tr>
</table>

<table>
<tr><th>Items</th><th>Comments</th><th>Responses</th></tr>
<tr><td></td><td></td><td>Since the construction programme is not yet available at this stage, to be conservative, the construction traffic impact assessment year of 2031 is adopted. The 2031 peak hour traffic flows with the construction vehicles are shown in Figure R1 of Annex 4 of this FI.

The year 2031 junction capacity for the case with the construction vehicles is summarised in Table R2 and detailed calculation are found in Annex 4 of this FI.

TABLE R2 2031 JUNCTION PERFORMACE WITH CONSTRUCTION VEHICLES
<table>
<tr><th rowspan="2">Ref</th><th rowspan="2">Junction</th><th rowspan="2">Type of Junction / Parameter(1)</th><th colspan="2">Without the Construction Vehicle</th><th colspan="2">With the Construction Vehicle</th></tr>
<tr><th>AM Peak</th><th>PM Peak</th><th>AM Peak</th><th>PM Peak</th></tr>
<tr><td>J1</td><td>Tai Po Road – Tai Po Kau / Access road to Redland Garden</td><td>Priority / DFC</td><td>0.032</td><td>0.023</td><td>0.032</td><td>0.023</td></tr>
<tr><td>J2</td><td>Tai Po Road – Tai Po Kau / Access road to Trackside Villas</td><td>Priority / DFC</td><td>0.088</td><td>0.046</td><td>0.088</td><td>0.046</td></tr>
<tr><td>J3</td><td>Tai Po Road near Yung Yi Road</td><td>Signalised / RC</td><td>29%</td><td>>100%</td><td>27%</td><td>>100%</td></tr>
<tr><td>J4</td><td>Tai Po Road – Yuen Chau Tsai / Yung Yi Road</td><td>Priority / DFC</td><td>0.448</td><td>0.220</td><td>0.453</td><td>0.222</td></tr>
<tr><td>J5</td><td>Tai Po Road – Yuen Chau Tsai / slip road to Tolo Highway Northbound</td><td>Priority / DFC</td><td>0.741</td><td>0.683</td><td>0.799</td><td>0.698</td></tr>
</table>
Notes: (1) RC – reserve capacity DFC – Design flow / capacity ratio

Table R2 shows that the construction traffic has minimal impact to the junctions assessed.</td></tr>
<tr><td>6.3</td><td>iii. R-to-C #9.6 and #9.7: Please advise if any measure to be implemented for managing the usage of the car parking spaces and L/UL lay-by.</td><td>The car parking spaces provided are for staff use and this provision is more than the expected demand. Nevertheless, the use of these car parking spaces is regulated and only permitted for those with permission to use. As for the multi-use bay, users are required to pre-book before use.</td></tr>
<tr><td>6.4</td><td>v. Para. 3.4 – L/UL Bay: Please clarify if any taxi will be allowed for pickup/drop off activity at the proposed lay-by. If affirmative, please ensure the current L/UL facilities provision is sufficient.</td><td>Taxis are to conduct pick-up / drop-off near the entrance lobby, as shown in Figure R2 in Annex 4 of this FI.</td></tr>
</table>

Items	Comments	Responses
6.5	vi. Appendix 2: Please clarify the length of vehicle adopted for LGV and light bus for swept path analysis.	Please note that the length of LGV adopted is 7m and light bus is 8m.
6.6	vii. Further to comment #vi above, we noted from the designer of the proposed access road that vehicle with length over 10m is prohibited from entering the site. Please clarify with them and confirm the proposed prohibition.	It is confirmed that vehicles over 10m in length are prohibited to enter Proposed RCHD from Tai Po Road – Tai Po Kau via the proposed access road.
6.7	viii. It is noted that the existing bus lay-by at Tai Po Road will be modified. Please coordinate with the designer of the proposed access road and advise the impact on the public transport facilities including but not limited to the queuing area of pedestrian, maneuvering of vehicles, sightline of road users, etc.	It is confirmed that the road design adopted in the TIA, which is dated 10 January 2024, is the latest. Modification of Chateau Royale Westbound (towards Tai Po) Bus Stop (the "existing bus lay-by") is not included. In addition, the traffic generated by the Proposed RCHD is only 4 and 2 pcu/hour during the AM and PM peak hours which is **negligible** to the existing bus lay-by. It was observed that the peak usage of existing bus lay-by queuing area during AM and PM peak hours is 12 and 8 passengers waiting for the bus at the existing bus lay-by. When there is only 4 and 6 passengers/hour generated by the Proposed RCHD and wait for bus during AM and PM peak hours, the remaining queuing area (i.e., about 40m^2) is **sufficient** to cater the passengers waiting for the bus. It should be noted that the distance between the entrance gate and Tai Po Road – Yuen Chau Tsai is some 30m, which if required, could allow for queuing of 5 cars when 1 car is manoeuvring within the Proposed RCHD. Hence, it is concluded that the Proposed RCHD will result in **no adverse impact** to the surrounding road network and existing bus lay-by.
7	**Comments from LandsD received on 28 March 2024 (Contact Person: Ms. Algie LEUNG; Tel: 2654 1187)**	
7.1	1. The application site is adjacent to the Permitted Burial Ground (TP/S14) and Ha Wong Yi Au village. As such, the applicant should be reminded to avoid any encroachment to the access/footpath to the said burial ground and village area and impact to the existing graves and urns.	Noted.

Items	Comments	Responses
7.2	2. According to para. 5.9.4 of the Supporting Planning Statement, the applicant advised that they would construct a new sewer to connect the application site and the manhole no.: FMH1005813 (S1) as shown in Figure 2.1 in Appendix 6 thereto. The applicant is required to apply for permission for the purposes of construction, use and maintenance of the said private sewer on Government land if this is not covered by the proposed STT.	Noted.
7.3	3. The applicant is advised to liaise with CEDD about the tree preservation and removal proposal at the application site and surrounding area in connection with the access road project carried out by CEDD.	Noted.
8	**Comments from EPD received on 1 March 2024 (Contact Person: Ms. Maureen CHANG; Tel: 2835 1867)**	
8.1	***EA in Appendix 5 of the Planning Statement*** For S6.6.8 to S6.6.10, as required under Cap. 311 APCO, the owner of premises shall give not less than 28 days' written notice to the Authority before the commencement of asbestos abatement work. Please include it into the paragraph. Additionally, please be reminded to follow the requirements under APCO on the asbestos control.	Noted and **Section 6.6.10** of the EA has been included. (**Annex 5** of this FI refers)
9	**Comments from EPD received on 5 April 2024 (Contact Person: Ms. Maureen CHANG; Tel: 2835 1867)**	
9.1	<u>Comments on Appendix 5 Environmental Assessment</u> *General* 1. Section 1.2.3: Please clarify whether it is an upgrade to the existing access road or construction of an access road. Please advise the road type of the access road.	It is clarified that the access road is a newly constructed road. As advised by the Project Traffic Consultant, the access road only serves the Application Site and therefore considered as local distributor. **Section 1.2.3** of the EA has been supplemented.
9.2	2. Please be reminded to follow the requirements under Air Pollution Control Ordinance (Cap. 311) on asbestos control when asbestos containing material is identified.	Noted and **Section 6.6.10** of the EA has been included. (**Annex 5** of this FI refers)
9.3	*Air Quality* 1. Section 2.2: Please also discuss the following legislations, technical circulars and guidelines: • Hong Kong's Air Quality Objectives	**Section 2.2** of the EA have been updated to include the discussion of the mentioned legislations, technical circulars and guidelines.

Items	Comments	Responses
	• Air Pollution Control (Construction Dust) Regulation • Air Pollution Control (Fuel Restriction) Regulations (i.e. using liquid fuel with a sulphur content of less than 0.005% by weight) • Recommended Pollution Control Clauses for Construction Contracts	
9.4	2. Section 2.3.2: Please note that the new PATH 3.0 is now available. Please update the data according to the latest PATH.	Given that the tentative completion year for the Proposed Development is year 2026, year 2025 is therefore selected as the worst representative year for background air quality. It is confirmed that the PATH data for Year 2025 provided in **Table 2.2** of the EA is the latest data available from SAMP v1.1.
9.5	3. Table 2.2: Please underline and bold the values which exceed AQOs.	**Table 2.2** of the EA has been updated.
9.6	4. Figure 6.1: Please show the 500m assessment area.	**Figure 6.1** of the EA has been revised.
9.7	5. The following comment has not been properly addressed. Please revise the report accordingly: "Figure 6.1: The ASRs should be represented by the nearest points to the proposed development instead of blocks. Please revise."	**Figure 6.1** of the EA has been revised.
9.8	*Noise* 1. Item 11.13 of the RtC: Please provide the TD's endorsement on the traffic data in the EA report before finalizing the EA report.	TD's endorsement has been appended to **Appendix 3.1** of the EA.
9.9	2. Item 11.16 of the RtC: According to the result of the previous road traffic noise model, the noise contribution from the Tolo Highway is not significantly higher than that from the other roads at the NSRs facing the Tolo Highway, i.e. T1-01 to 02 and T2-01 to 05. Therefore, the noise from the Tolo Highway should not be a dominant feature of the noise climate of the NSR and the affected NSRs are not considered to be directly affected by the Tolo Highway.	It is understood that the selected RNIA and FNIA NAPs represent the worst affected location within the Proposed Development and these NAPs are most affected by Tolo Highway in terms of road traffic noise impact. Nevertheless, ASR "B" now is adopted for all NSRs of the Proposed Development including the selected NAPs as a conservative assessment approach. **Sections 4.2.3 and 5.2.2**, **Tables 4.2 and 5.1** and **Appendix 4.4** of the EA have been updated.
9.10	3. Item 11.19 of the RtC: Please also mention whether there are any planned fixed noise sources within the proposed development and evaluate its noise impact to the existing and planned NSRs as appropriate.	While the project is in early planning stage, it is anticipated there will be potentially noisy installation such as ventilation fan/system for plant rooms and air conditioning system in future subject to detailed design. The future contractor shall ensure that the future fixed noise sources would be designed and installed to meet the HKPSG noise standard. **Section 5.3.5** of the EA has been supplemented to reflect the above.

Items	Comments	Responses
9.11	4. Item 11.24 of the RtC: Our comment on the noise model is reserved upon receipt of the revised noise	Noted.
9.12	*Water Quality* 1. Section 1.4.7: It is noted that there would be organic farm and sensory garden proposed for the Project. Please assess the associated water quality impacts and propose mitigation measures for application of fertilizers and pesticides, if any	Mitigation measures for application of agrochemicals have been included in **Section 1.4.8** of the EA.
9.13	*Waste Management Implications and Land Contamination* No further comments	Noted with thanks.
9.14	***Comments on Appendix 6 Sewerage Impact Assessment*** 1. It is noted the hydraulic assessment is extended further downstream in accordance to RtoC item 5.8. According to Section 3.5.2, it is found that there would be spillage for S6-S7 (FMH1005826 to FMH1005827) and further checking in Table 5a and 5b of Appendix 3.1 shows that the sewerage system would have sufficient freeboard for the surcharge condition. DSD's agreement should be sought on this finding.	Noted.
10	**Comments from EPD received on 17 April 2024** **(Contact Person: Ms. Maureen CHANG; Tel: 2835 1867)**	
10.1	*General* 1. For the 3rd sentence of S6.6.10: Please check whether it should be read as "An Asbestos Investigation report, an Asbestos Abatement Plan (AAP) (if required) and a notification of commencement of asbestos abatement works commenced should be provided afterwards...."	Noted and deleted.
10.2	*Air Quality* No further comment from air quality perspective.	Noted with thanks.
10.3	*Noise* 1. Item 10.9 of the RtC: The ASR rating "A" should be assigned if the proposed development is not affected by the IF and the assessment is considered as conservative approach. In addition, instead of mentioning the results of the noise models, the consultant should evaluate the noise environment, i.e. whether the proposed development is indirectly affected by the IF based on the observation	According to the site survey conducted in December 2023, it was observed that the Application Site is predominantly affected by the road traffic noise from Tolo Highway. It is also understood that for some facades, they are mostly affected by the IF (i.e. noise contribution from IF is higher than noise contribution from remaining carriageways). For conservative assessment approach, however, it is

Items	Comments	Responses
	in the site survey. Therefore, please revise the discussion for ASR rating accordingly.	assumed that the NSRs are not affected by IF and ASR “A” is assigned for the entire Proposed Development.
10.4	*Water Quality* No further comment from water quality perspective.	Noted with thanks.
11	**Comments from EPD received on 26 April 2024** **(Contact Person: Ms. Maureen CHANG; Tel: 2835 1867)**	
11.1	1. Having reviewed the submission, we note that our previous comments have been addressed in general. Subject to the incorporation of the following textual comment, we have no objection to the application from environmental planning perspective: *Noise* Table 4.2: Please revise as ASR "A" and its relevant noise criteria, i.e. 60 dB(A) in Day and Evening Time, 50 dB(A) in night time.	Noted with thanks. **Table 4.2** of the EA has been revised.
11.2	2. The consultant please submit a finalized Environmental Assessment Report for EPD’s retention.	Noted.

Major Public Comments Received during the Public Inspection Period

Items	Comments	Responses
1	**Land Use of the Former FMO Tai Po Primary School**	
1.1	Objection to the construction of residential homes or alteration of building to other uses on the Government Land sat by the former FMO Tai Po Primary School due to the concerns that their operations will seriously affect the daily life and tranquillity of Chateau Royale.	The Applicant, Home of Loving Faithfulness (HOLF), has been operating residential care home for persons with disabilities (RCHD) since 1965 in Kwu Tung. Due to the implementation program of the development of Kwu Tung New Development Area (NDA), the concerned parcel of land will be resumed and reverted to the Government, and this Vacant School Premises Site (i.e. the Application Site at Tai Po Kau) is selected and considered as the most suitable relocation site for the proposed development. The majority portion of the Application Site falls within an area zoned "Government, Institution or Community" ("G/IC") on the Approved Tai Po Outline Zoning Plan No. S/TP/30. The Proposed Social Welfare Facility is in line with the planning intention of the "G/IC" zone in which the facility serves the needs of the local residents and a wider district, region or the territory. As the Proposed RCHD is not excessive (with not exceeding 60 bedspaces for Persons with Disabilities) and no adverse traffic impact is anticipated, it is considered that the approval of this Application will not seriously affect the daily life and tranquillity of Chateau Royale. There has been no record of complaints received during the operation of the HOLF since 1965 in Kwu Tung.
2	**Landscape and Visual Impact to the Surroundings**	
2.1	The site formation works of the Government Land at former FMO Tai Po Primary School has begun and some trees in front of the burial ground have been felled. The exposure of graves poses psychological burden to the nearby residents.	The site formation works and road access leading to the Proposed RCHD is conducted by CEDD. While the location of the felled trees is not within the Application Site, the Applicant will liaise closely with CEDD to reduce the landscape and visual impact caused by the site formation and road access work.
3	**Provision of Committed Facilities and Services**	
3.1	The Application Site which is Government Land presumably will be granted to the Applicant for a nominal fee, TPB should ensure that committed facilities and services under the proposed development will be provided.	The Applicant has been operating the RCHD since 1965 and has a strong will to continue its operation despite the land resumption of the existing RCHD due to the development of KTN NDA. The Proposed Development will only be used for reprovisioning of the existing RCHD in Kwu Tung.

Encl.
Annex 1 – Replacement Pages of Supporting Planning Statement
Annex 2 – Replacement Pages of Architectural Drawings
Annex 3 – Replacement Pages of Tree Preservation and Landscape Proposal
Annex 4 – Supplementary Information of Traffic Impact Assessment
Annex 5 – Replacement Pages of Environmental Assessment

Complied by: KTA Planning Limited
Date: 29 April 2024
File Ref: 20240429_S3107_R-to-C

Annex 1

Replacement Pages of Supporting Planning Statement

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Figure 2.3 Surrounding Context
Figure 2.4 Indicative Access Road and Public Transport Nearby
Figure 2.5 Surrounding Building Height Profile (No. of Storey)
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2.2 Land Status

2.2.1 The land included in the Application Site is solely Government Land. The former school site is under the Vacant School Premises Sites. Application for short-term uses of the site for the Proposed Development has been submitted to Lands Department.

2.3 Statutory Planning Context

2.3.1 The majority portion of the Site (about 3,105m^2, 95%) falls within an area zoned "Government, Institution or Community" ("G/IC") on the Approved Tai Po Outline Zoning Plan No. S/TP/30 ("the OZP"), while a minor portion of it (about 170m^2, 5%) falls within an area zoned "Green Belt" ("GB") on the OZP (**Figure 2.2** refers).

"G/IC" Zone

2.3.2 According to the Statutory Notes of the OZP, the planning intention of "G/IC" zone is as follows:

"This zone is intended primarily for the provision of Government, institution or community facilities serving the needs of the local residents and/or a wider district, region or the territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institution establishments."

2.3.3 Under the Schedule of Use of "G/IC" zone, 'Social Welfare Facility' use is a Column 1 use which is always permitted. Residential Care Home for Persons with Disabilities (RCHD) which is subsumed under "Social Welfare Facility" according to the Definition of Terms in town planning. Such a use is always permitted in the prevailing "G/IC" zone.

2.3.4 Nevertheless, as stipulated on the OZP, development in the prevailing "G/IC" zone is subject to a maximum BH of 1 storey excluding basement(s).

2.3.5 As stated in Remark (c) of the "G/IC" zone under the Statutory Notes of the Approved OZP, *"[b]ased on the individual merits of a development or a redevelopment proposal, minor relaxation of the building height restriction stated in paragraphs (a) and (b) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance"*. Therefore, minor relaxation of building height restriction from 1 storey to 3 storeys to enable the proposed RCHD in the prevailing "G/IC" zone requires planning permission from TPB.

"Green Belt" Zone

2.3.6 According to the Statutory Notes of the OZP, the planning intention of "GB" zone is as follows:

2.4 Surrounding Context

2.4.1 The Site is surrounded mainly by low-rise residential developments and burial ground (**Figure 2.3** refers):

- To the immediate northwest is a grave. To the further north and northeast across Tai Po Road – Tai Po Kau are mainly residential dwellings of CARE Village zoned "Residential (Group D)" ("R(D)"). To the further northwest is a low-rise residential development (i.e. Riverain Bayside) zoned "Residential (Group C)1";

- To the east is a vegetated small hill containing Permitted Burial Ground Site (No. TP/S14) primarily zoned "GB". To the further east is Tai Po Kau Water Fresh Water Pumping Station;

- To the immediate south are temporary structures zoned "GB". To the further southwest across Yung Yi Road is a secondary school, namely Ling Liang Church M H Lau Secondary School, zoned "G/IC"; and

- To the immediate south and west is a low-rise residential development, namely Chateau Royale, zoned "Residential (Group C)" ("R(C)"). To the further west are low-rise village settlements of Ha Wong Yi Au Village zoned "Village Type Development" ("V").

3.2.3 For the outdoor facilities, a playground is provided in the middle embraced by the building blocks. There is also a sensory garden outside Blocks B and C. A large parking and open space are located at the west and southwest of the current site (**Figure 3.1** refers).

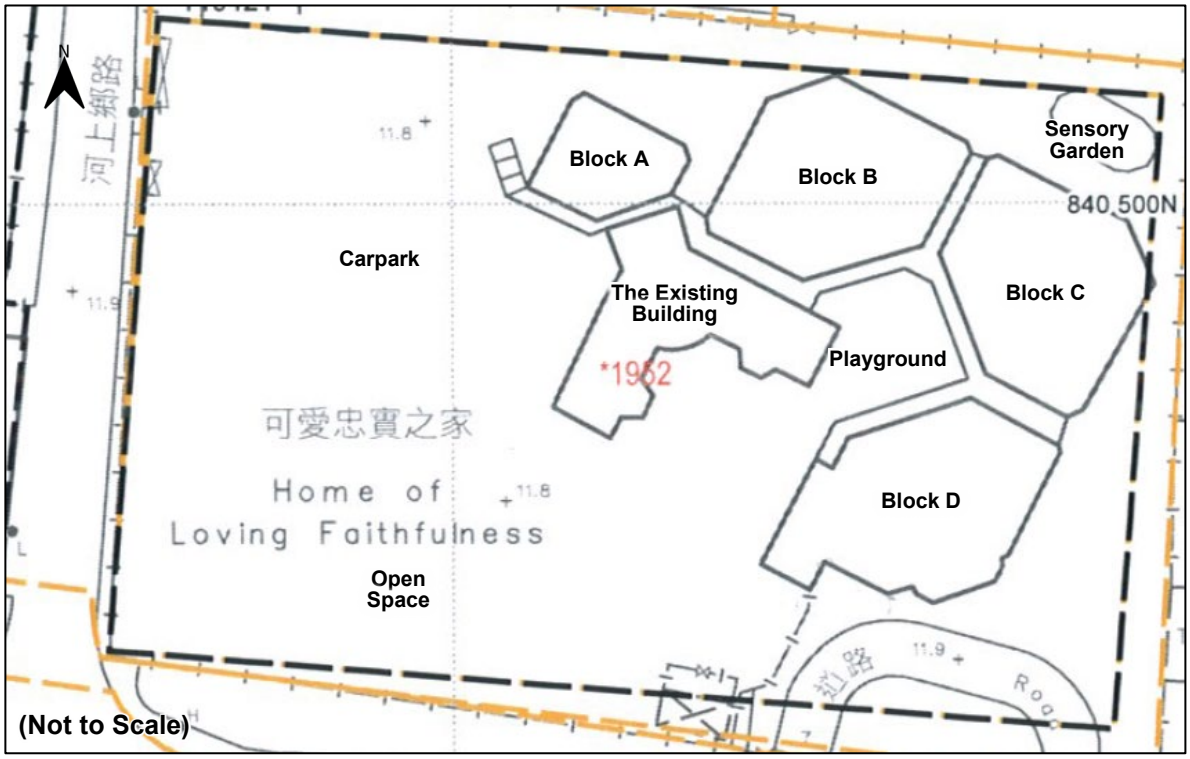


Figure 3.1 Blocking Layout of the Current HOLF in Kwu Tung

Figure 3.2 External Apperance of the Current HOLF in Kwu Tung

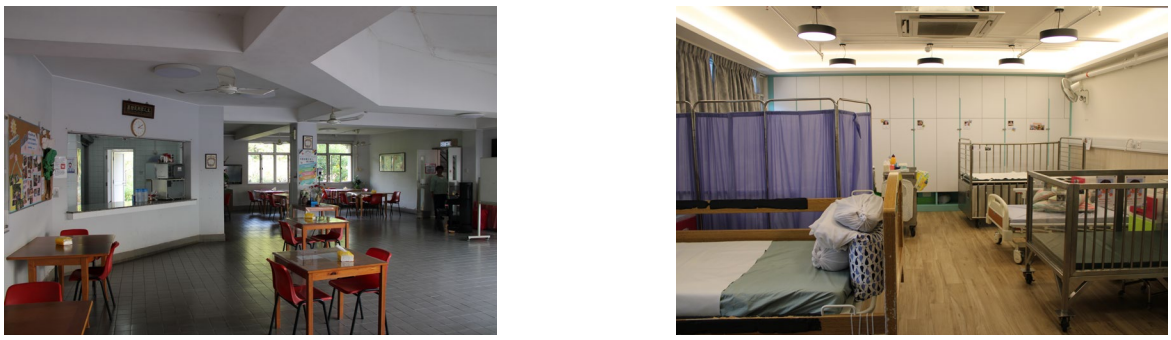


Figure 3.3 Internal Condition of the Current HOLF in Kwu Tung

3.3 Implementation of Kwu Tung North New Development Area

3.3.1 As announced in the 2007-08 Policy Address, the development of the New Development Areas (NDAs) including Kwu Tung North (KTN) are one of the ten major infrastructure projects for economic growth. The Northeast New Territories NDAs Planning and Engineering Study commissioned in June 2008 formulated a planning and development framework for the implementation of the KTN NDA. Based on the prevailing Approved Kwu Tung North OZP No. S/KTN/4, the Planning Scheme Area of the Kwu Tung North NDA is about 447 hectare and will accommodate additional population of 131,600 and provide 38,700 job opportunities upon full development.

3.3.2 The current HOLF site (Lot 1952 in D.D. 95) is located within the KTN NDA and falls within the Remaining Phase Development of Kwu Tung North and Fanling North NDA. The current HOLF premises together with its land lot will eventually be acquired by the Government in accordance with the Land Resumption Ordinance and Road (Works, Use and Compensation) Ordinance. Please refer to **Figure 3.4** showing the current HOLF site onto the prevailing KTN OZP.

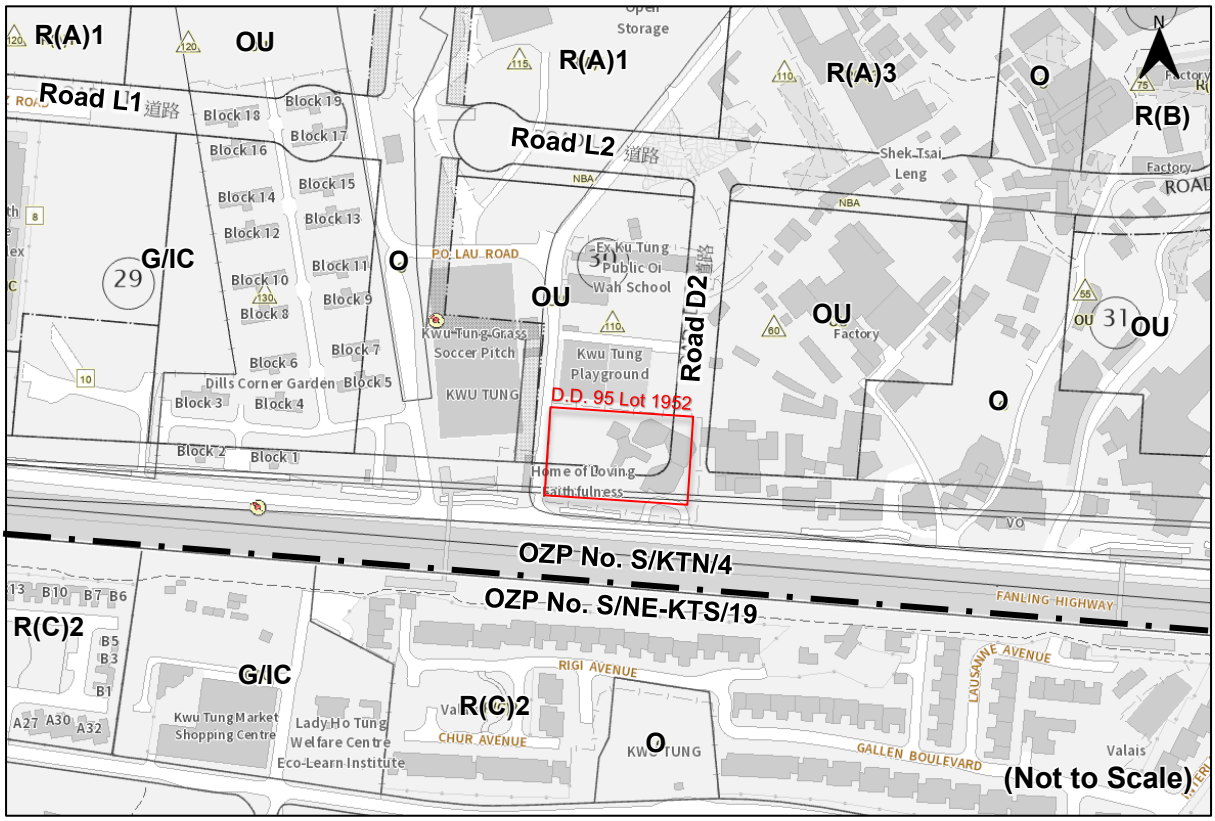


Figure 3.4 Land Use Zoning Plan Base on the Prevailing Approved Kwu Tung North OZP No. S/KTN/4 and Draft Kwu Tung South OZP No. S/NE-KTS/19

3.4 Site Requirements on Relocation

3.4.1 In order to relocate the current HOLF, the new site should fulfil a list of key basic requirements. Firstly, the new site should have similar land area as the current Kwu Tung site to provide adequate floor space area. Secondly, the new site is expected to

be in New Territories North or East to maintain the established connection to the schools, social welfare and medical facilities in nearby areas. Thirdly, the new site should be accessible by wheelchair accessible light buses to transport residents with disabilities from HOLF to the abovementioned supporting facilities. Last but not least, a site with less noise impact is preferred to provide a tranquil environment for the residents.

3.4.2 The Applicant has made all-out effort to acquire a suitable relocation site. Taking into account time and financial implication of various options, available Vacant School Premises (VSP) Sites which could satisfy the above requirements are examined piece by piece, in order to continue the operation of HOLF.

3.5 Initial Works of Relocation

3.5.1 After an extensive search for alternate sites and over years of liaison with the Government, the Applicant decided to relocate its premises to the Site in Wong Yi Au, Tai Po. As stated in **Section 2.1**, the Site is occupied by abandoned school buildings. There is no vehicular access to the Site currently and has only two pedestrian accesses via Tai Po Country Trail. As such, CEDD will be responsible for the design and construction of vehicular access and demolition works of the school building. The latest layout of the access road (subject to the Authorities' final endorsement) is shown in **Figure 2.4**.

3.5.2 Furthermore, since the Applicant is a charitable institution or trust of a public character exempt from tax under section 88 of the Inland Revenue Ordinance (Cap. 112) and the Site is a VSP Site. "Funding Scheme to Support the Use of Vacant Government Sites by Non-government Organisations" will be applied in order to subsidise the necessary expenses incurred from the relocation.

4.3 Efforts to Minimise Building Height

4.3.1 In formulating the development scheme of the Proposed Development, the Project Team has made every attempt to minimise the number of storeys as far as practicable. Due to the need to provide the required facilities in support of the RCHD catering 60 residents and about 50 staffs, the BH of the Proposed Development would require minor relaxation from 1 storey to 3 storeys.

4.3.2 Apart from the reserved space for access road, traffic facilities and slope of the Site, the Project Team has extended the building profile of the podium to the site boundary. Floor space at G/F are maximised to cater the most supporting and ancillary facilities of the RCHD, so as to reduce the building bulk on top of the podium.

4.3.3 The dormitories are distributed to 1/F and 2/F of the building. Serving as the main living space of the residents, open and covered areas have to be provided around and between dormitories for the well-being of the residents. Cramping all dormitories onto one floor would be undesirable. In addition to reducing the building height, such spatial arrangement has taken into account that the residents with restricted mobility are less accessible to high levels. The design of the chapel is iconic but small in scale and strengthens the Christianity setting of the care home.

4.4 Tree Preservation and Landscape Proposal

Tree Preservation Proposal

4.4.1 As revealed in the Tree Preservation and Landscape Proposal (**Appendix 2**), there are in total 36 nos. of existing trees within the Site, in which 31 nos. will be felled due to the Proposed Development and 5 nos. will be retained. No Old and Valuable Tree (OVT) or protected species has been identified. As stated in the Landscape Proposal, 48 nos. of new trees will be planted.

Open Space Provision

4.4.2 For persons with moderate to severe disabilities who are mainly in wheelchairs or have limited movement, provision of adequate and quality open space/outdoor open space within the care home highly improves their quality of lives. It is expected that there will be about 110 users including 60 residents and 50 staffs while the proposed area of the communal open spaces under the Application shall be not less than 110 m^2. Hence, the provision of the communal open space can meet the requirement set out in HKPSG, i.e. 1 m^2 per person.

4.4.3 Fountain garden and entrance courtyard are provided at G/F while larger outdoor open spaces, including gathering courtyard, organic farm, sensory garden and sitting courtyards, are provided at 1/F. Outdoor furniture, recreational facilities and planting are provided at these gardens for the enjoyment of the residents and visitors as well

5.5 Strong Need for Building Height Relaxation due to Site Constraint

5.5.1 In view of the space occupied by access road and slope, the available site area for sitting of the Care Home Building is limited. Floor area has to be stacked up in order to cater the main facilities of the existing HOLF. On the other hand, the current BH restriction of 1 storey imposed on the Site is solely for reflecting the former use of the Site. There is no strong justification for maintaining such stringent BH restriction.

5.6 Scale of Proposed Development is Not Excessive

5.6.1 The Proposed Development is of 3 storeys, which is still low-rise in nature. The total PR of the Proposed Development is a mere 1.22 with a site coverage of about 60% allowing a generous provision of open space. Efforts have been made to minimise the BH of the Proposed Development. As compared with the nearby 8-storey secondary school and the surrounding 4-storey residential development, the Proposed Development is small in scale and not excessive.

5.7 No Adverse Landscape and Negligible Visual Impact to the Surroundings

5.7.1 The landscape proposal is aimed at providing a quality landscape scheme by responding to site conditions, building form and function of the proposed development (Landscape Proposal in **Appendix 3** refers). Out of the total site area 3,275m^2, there will be not less than 20% greenery provision (not less than 655m^2) in the Site. Not less than 110m^2 of open space are provided on the G/F and 1/F of the new building, sufficient to serve the residents and caretakers of the new HOLF.

5.7.2 A total of 36 trees were recorded within the Site. Considering the direct conflict with the Proposed Development, it is proposed to remove 31 existing trees within the Site while 5 existing trees will be retained. 48 heavy standard trees will be planted for compensation. Overall, it is considered that there is no adverse landscape impact due to the proposed development.

5.7.3 The immediate surroundings of the Site have low building height profile of 4 or less than 4 storeys. Within 150m, an 8-storey secondary school could be found. The introduction of a 3-storey building in the Site is fully compatible to surrounding visual context under the planning perspective. The photomontages in **Appendix 3** show the images as viewed from the surroundings.

5.7.4 Overall, the visual impact is considered negligible. The proposed 3-storey new building in the Site will be blended well with the surroundings from various angles. To further enhance the visual quality, more sensitive design measures are incorporated.

5.8 No Adverse Traffic Impact

5.8.1 In the TIA in **Appendix 4**, junction analysis at 5 key junctions have been conducted. It is revealed that the junctions analysed are expected to operate with capacities during

Annex 2

Replacement Pages of Architectural Drawings

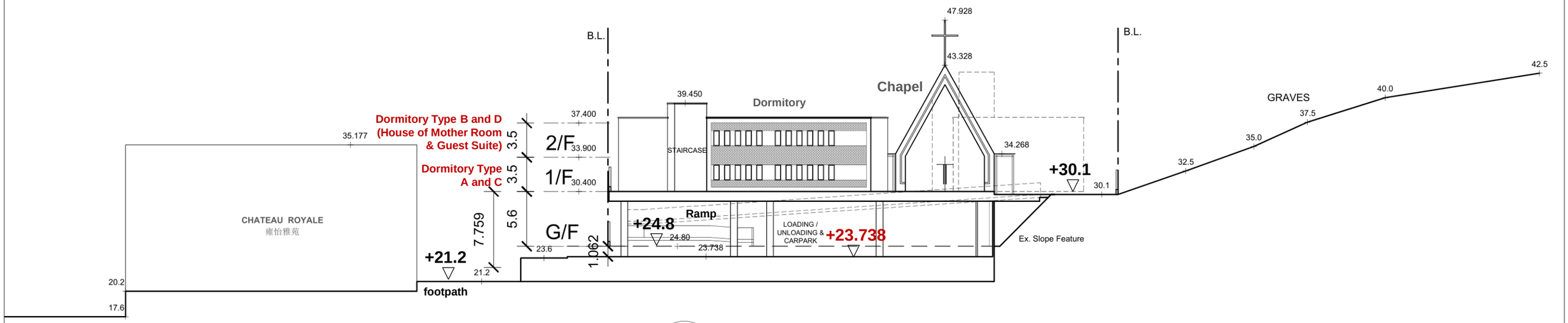
Schematic Design

GROUND FLOOR Plan Scale 1 : 500 (A3)

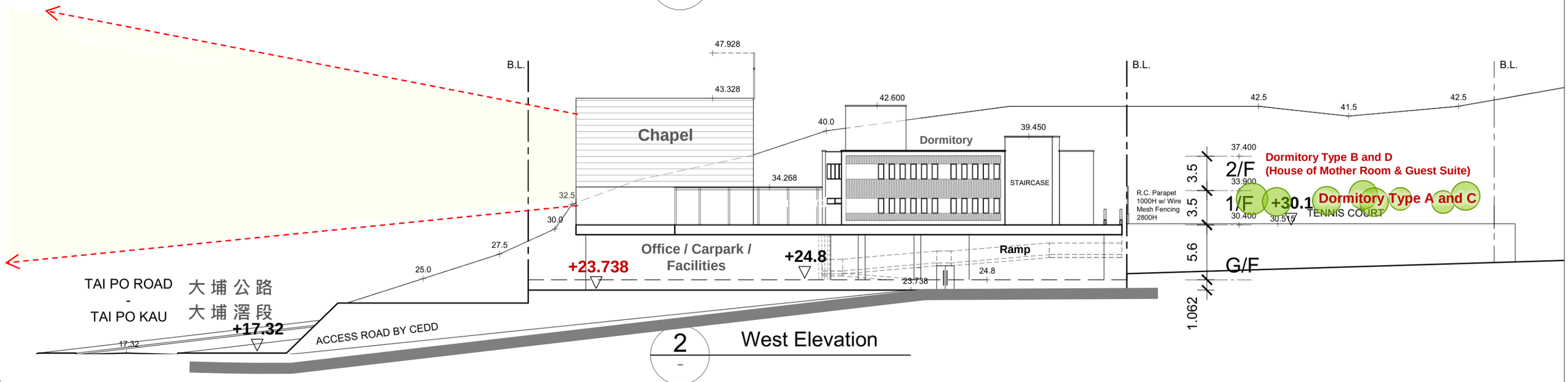
GROUND FLOOR Plan Scale 1 : 300 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD architecture urban design interior



1 South Elevation



2 West Elevation

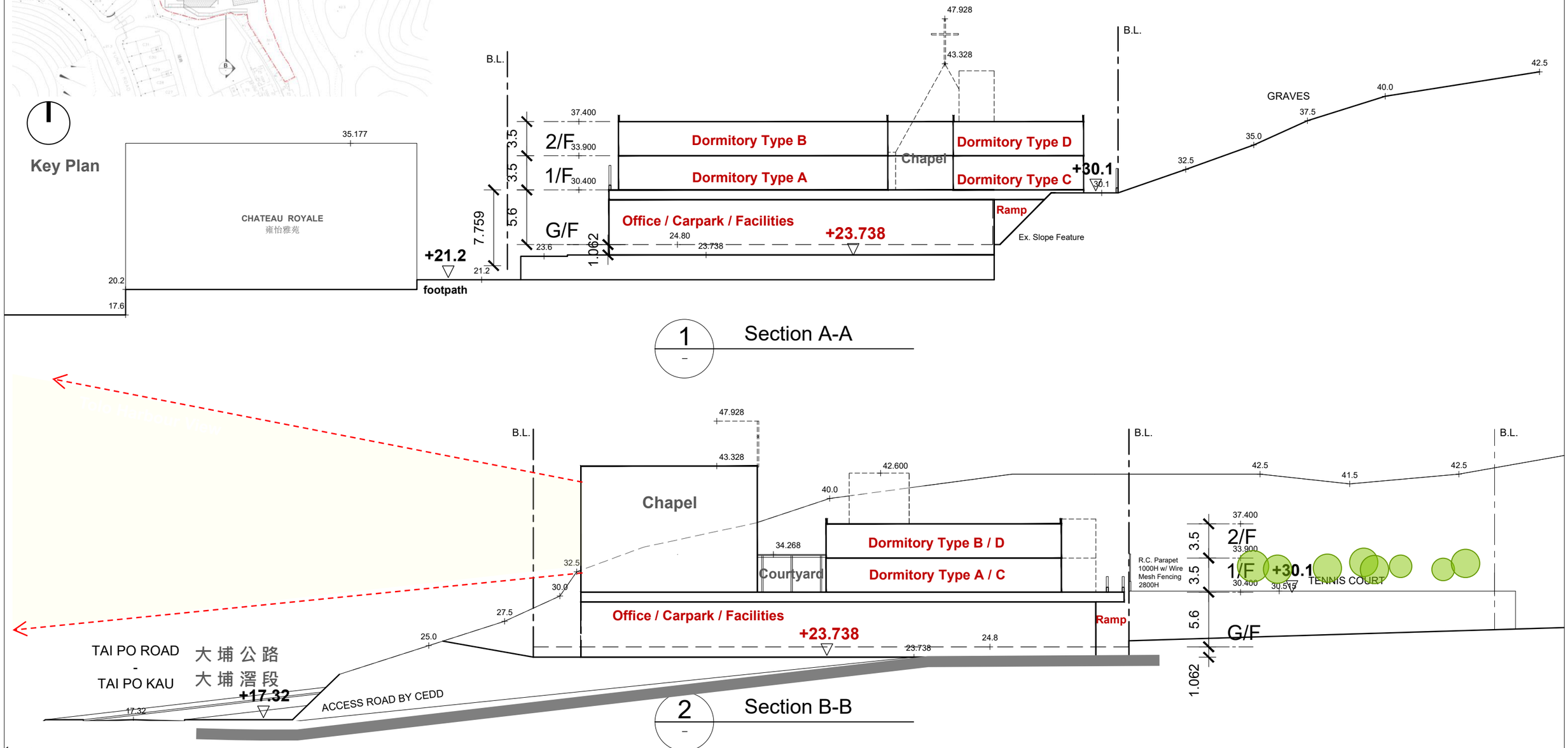
Schematic Design

Schematic Elevations Scale 1 : 400 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD
architecture
urban design
interior

Key Plan



Schematic Design

Schematic Sections Scale 1 : 400 (A3)

Architectural Consultancy & AP Services for Former FMO Tai Po Primary School

AGC DESIGN LTD
architecture
urban design
interior

Annex 3

Replacement Pages of Tree Preservation and Landscape Proposal

Retention of Trees

4.6 In this proposal, **5** existing trees, i.e. **T020** – *Cletis sinensis*, **T021** – *Ligustrum sinense* and **T022**, **T023**, **T024** – *Ficus mircocarpa* within Application Site will be unaffected by the Proposed Development. Careful construction arrangement and tree protection measures in accordance with Section 25 - Landscape Work in the General Specification for Building (2012) and "Guidelines on Tree Preservation during Development" by DEVB will be conducted to avoid any disturbance on the trees during construction.

4.7 Some retained trees, i.e. **T020**, **T023** and **T024** are growing in close proximity to the proposed building and pruning works are proposed to be carried out on them. All pruning works will be carried out in accordance with the fact sheet and leaflet of "Do's & Don'ts in Pruning" and "General Guidelines on Tree Pruning" such that the part of the branch pruned at all times shall not have a diameter of greater than 100mm or 15% of the diameter of the DBH, whichever is greater. Besides, the pruning shall not adversely affect the structure and form of the trees. All pruning works will be carried out by competent workers under the supervision of a Competent Person as defined in LAO PN No. 6/2023.

Felling and Transplantation of Trees

4.8 For trees that will be in conflict with the proposed works shall be proposed to be transplanted if they fulfil all the criteria below:

a. Trees have high amenity value;
b. Trees with good form and health;
c. Suitable access;
d. Tree species able to be transplanted easily;
e. Trees have suitable size and;
f. Trees are young to semi-mature.

4.9 In this project, **31** existing trees within the Site Boundary are in direct conflict with the proposed works and cannot be retained in situ. None of the disturbed trees fulfil the above criteria and is recommended for transplantation.

4.10 **19** affected trees including **T035** – *Acacia confusa*, **T032, T036, T049** – *Alangium chinense,* **T025, T031, T033, T034, T040, T043, T046, T055, T088, T090** – *Ficus hispida***, T037, T047, T089** – *Ficus variegata,* **T049A** – *Litsea monopetala,* **T051** – *Macaranga tanarius var. tomentosa* are common hillside species in Hong Kong. As they are propagated from the adjacent hillside, their root systems are very susceptible to environmental change. This renders them a relatively low survival rate after transplantation. Hence, all of these trees are also proposed to be felled.

4.10 **1** fruit tree, i.e. **T026** – *Artocarpus heterophyllus* is in conflict with the proposed works. Due to the nature of fruit tree species, its anticipated survival rate after transplantation is generally low. Therefore, it is proposed to be felled, instead of transplanted.

4.11 Another **10** disturbed trees, i.e. **T042** – *Bridelia tomentosa*, **T027, T045** – *Celtis sinensis*, **T044, T050, T052, T053, T054** – *Ficus microcarpa*, **T030** – *Michelia x alba* and **T048** – *Schefflera heptaphylla* exhibited either poor tree form or health conditions. The transplantation of them would require substantial deformation of the trees and this would lead to irrecoverable tree form after transplantation. It is proposed to fell them and compensated by quality trees.

4.12 Apart from the above, **1** dead tree, i.e. **T041** is found within the Application Site. Its presence may pose potential danger to the occupants in future. It will be removed, for sake of public safety.

5.1.5 A sensory garden is proposed on the landscape deck at southeastern corner of the Site in order to promote the emotional and physical health of the users. The design of the garden has considered the enjoyment of the users in five senses including visual, hearing, touching, smelling and taste. For instance, the selection of plants has introduced the seasonal color changes in planting beds which create interesting focal points in garden. Besides, plants that appeal to birds and butterflies are proposed with respect to the adjacent natural context. This garden will be a cozy and relaxing place for users to reflect, mediate, contemplate and talk.

Planting Design

5.1.6 Due to the building configuration, bamboo planting is proposed at planting strips along building edges shall be used to create a landscape and visual buffer to the new building. This will also provide segregation between the building and public environment. Species should be selected which are pollution and drought tolerant and which provide a good visual buffer.

5.1.7 Where practicable and feasible, heavy standard trees, medium shrubs and foliage plants are proposed. These soft landscape measures will enable to soften the hard lines of the Proposed Development. The use of planting heavy standard sized vegetation would offer a more instant greening effect. Planting Plans shall refer to **Appendix C**.

5.1.8 In order to enhance the local biodiversity, local species or broad-leaf species will be selected for tree planting.

5.2 Site Coverage of Greenery

5.2.1 The landscape proposal aims to strengthen the local greenery within the Site. The common greenery calculation is based on BD PNAP-APP 152 – Sustainable Building Design Guidelines the present scheme is shown in the schedule below, and drawing showing the greenery calculation shall refer to dwg. No. GC01 in **Appendix E**.

Table 3.0 Greenery Calculation

Site Area:	3,275.0 m^2
Required Total Greenery	3,275.0 m^2 x 20% = 655.0 m^2
Required Greenery at Primary Zone	3,275.0 m^2 x 10% = 327.5 m^2
Allowable Greenery Features:	655.0 m^2 x 30% = 196.5 m^2
Provided Greenery:	
Uncovered Planting Area at G/F:	297.0 m^2
Uncovered Planting Area at 1/F:	493.70 m^2
Greenery at Primary Zone:	(297.0+493.70) m^2 = 772.70 m^2 (>325.60 m^2)
Greenery at Other Areas	0 m^2
Total Greenery:	772.70 m^2 (>655.0 m^2)
Greenery Ratio	772.7/3,275.0 x 100% **= 23.59%**

BAMBOO		**Height x Spread (mm)**	
Phyllostachys aurea	羅漢竹	2500x500	500
GRASS			
Zoysia japonica	朝鮮草	-	-

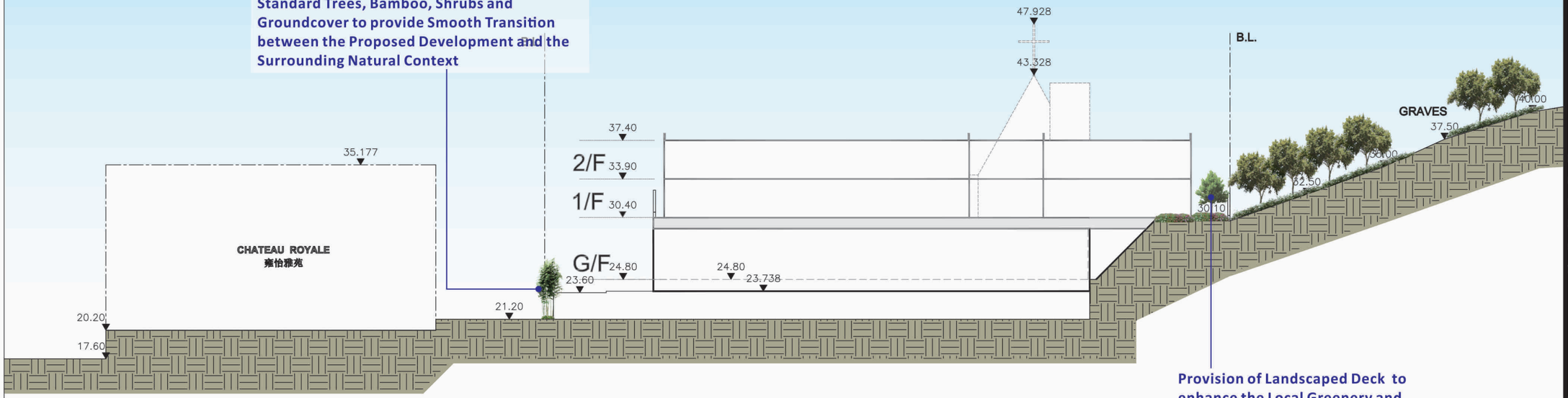
6.3 In this study area, a total of **36** trees within the Application Site Boundary were recorded. **5** trees will be retained in-situ while the **31** trees inside the Site will be felled due to in conflict with the Proposed Development and the associated works.

6.4 **48** heavy standard trees with average DBH approx. **80**mm are proposed to be planted to compensate the loss of the **31** existing trees. They will be planted at the common landscape areas, peripherical planting strips and roadside planting verge within the site boundary. All these new trees within the lot boundary will all be maintained by the future management office and the individual Lot owners of the Proposed Development.

6.5 Upon the above, the compensation ratio in terms of quantity is shown as follows:

Quantity of loss of trees: 31 nos.
Quantity of compensatory trees: 48 nos.
Quantity compensation ratio: 1: 1.55

KEY PLAN



PROJECT :

PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITIES(RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO

DRAWING TITLE :

LANDSCAPE SECTION

PROJECT No. C2335

DRAWING No. LD101

SCALE : 1:400

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-LD101

REV	DESCRIPTION	DATE

DESIGN BY : TEL

DRAWN BY : CAD

CHECKED BY : TEL

APPROVED BY : TEL

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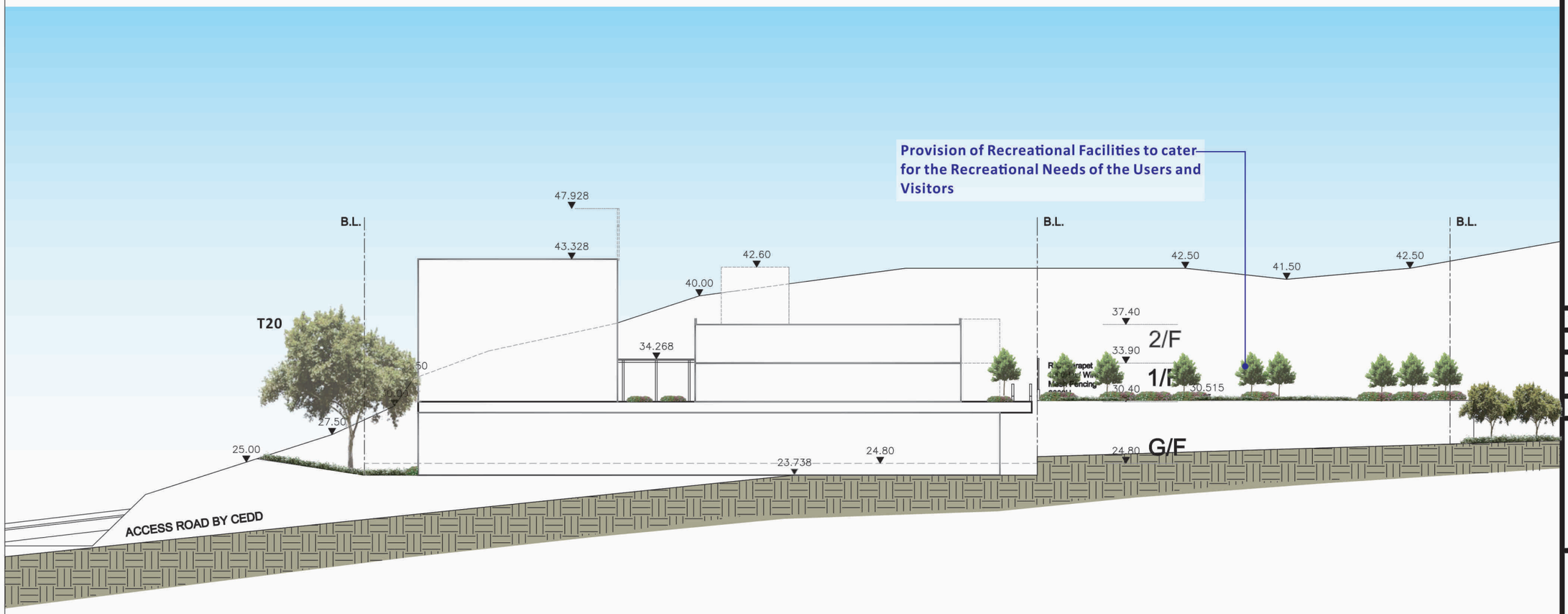
KEY PLAN



PROJECT :

PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITIES(RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO

DRAWING TITLE :

LANDSCAPE SECTION

PROJECT No. C2335

DRAWING No. LD102

SCALE : 1:400

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-LD102

REV	DESCRIPTION	DATE

DESIGN BY : TEL

DRAWN BY : CAD

CHECKED BY : TEL

APPROVED BY : TEL

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Quantity	Code	Chinese Name	Botanical Name	Height (mm)	Spread (mm)	DBH (mm)	Spacing (mm)	Remark
HEAVY STANDARD TREES								
3	GS	菲島福木	*Garcinia Subelliptica*	6000	1500	80	4000	Straight trunk, balanced form
13	MI	樂昌含笑	*Michelia chapensis**	4000	2000	80	4000	Straight trunk, balanced form
7	SD	山烏桕	*Sapium dicolor**	5500	2000	80	4000	Straight trunk, balanced form
10	SL	假蘋婆	*Sterculia lanceolata**	4500	2000	80	4000	Straight trunk, balanced form
15	TM	細葉欖仁	*Terminalia mantaly*	6500	2000	80	4000	Straight trunk, balanced form
* Native Species								
SHRUBS								
-	Cam	福建茶	*Carmona microphylla*	450	400	-	400	Abundance of Foliage, Balanced form
-	Cov	黃洒金	*Codiaeum variegatum*	350	300	-	300	Abundance of Foliage, Balanced form
-	Cvm	洒金榕	*Codiaeum variegatum 'mixed'*	600	500	-	450	upright form, small stem exposure, consistent foliage color
-	Ite	鳶尾	*Iris tectorum*	500	350	-	200	upright form
-	Jch	龍柏	*Juniperus chinensis*	1200	600	-	As shown	Abundance of Foliage, Balanced form
-	Mj	非洲茉莉	*Madagascar jasmine stephanotis floribumda*	500	500	-	400	Abundance of Foliage, Balanced form
-	Mpa	九里香	*Murraya paniculata*	600	500	-	450	Abundance of Foliage, Balanced form
-	Rhe	小葉棕竹	*Rhapis excelsa*	1200	600	-	600	at least 5 shoots per plant
-	Rue	翠蘆莉	*Ruellia coerulea*	400	400	-	350	Balanced form
-	Sch	黃金鵝掌藤	*Schefflera arboricola "Trinette"*	500	500	-	450	Abundance of Foliage, Balanced form
GROUNDCOVERS								-
-	Lmo	小葉馬纓丹	*Lantana montevidensis*	300	300	-	250	Abundance of Foliage
-	Nau	腎蕨	*Nephrolepis auriculata*	250	150	-	150	Abundance of Foliage
-	Opb	沿階草	*Ophiopogon bodinieri*	250	250	-	200	Abundance of Foliage
-	Pmy	錫蘭葉下珠	*Phyllanthus myrtifolius*	200	300	-	300	Abundance of Foliage
BAMBOO								
-	Pha	羅漢竹	*Phyllostachys aurea*	2500	500	-	500	Balanced form, abundance of foliage
LAWN								
-	Zja	朝鮮草	*Zoysia japonica*	-	-	-	-	-

PROJECT :

PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITIES(RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUITION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO

DRAWING TITLE :

PLANTING SCHEDULE

PROJECT No. C2335

DRAWING No. PS01

SCALE : N.T.S.

DATE OF ISSUE : DEC 2023

CAD FILENAME : C2335-PS01

REV	DESCRIPTION	DATE

DESIGN BY : TEL

DRAWN BY : CAD

CHECKED BY : TEL

APPROVED BY : TEL

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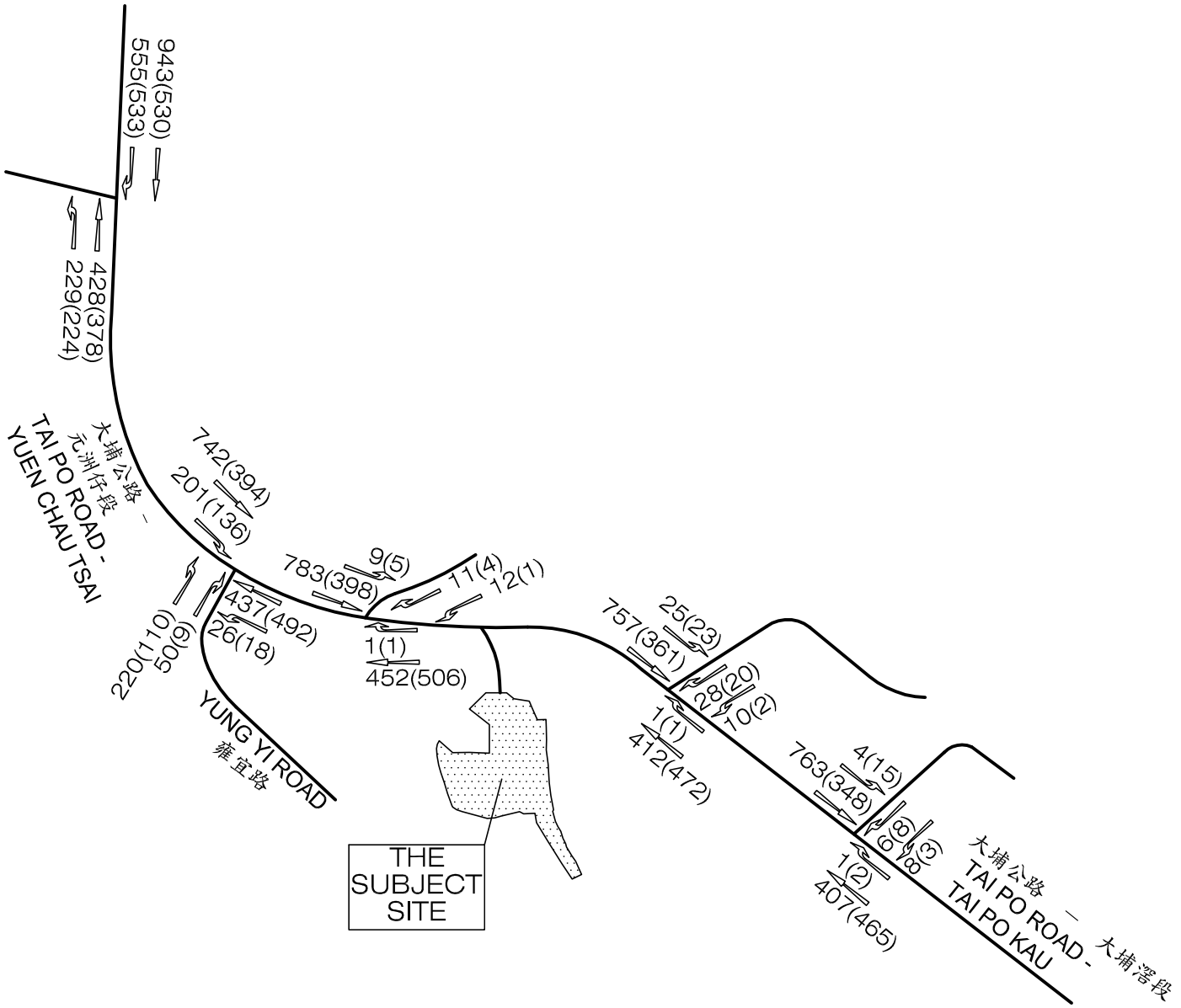
Annex 4

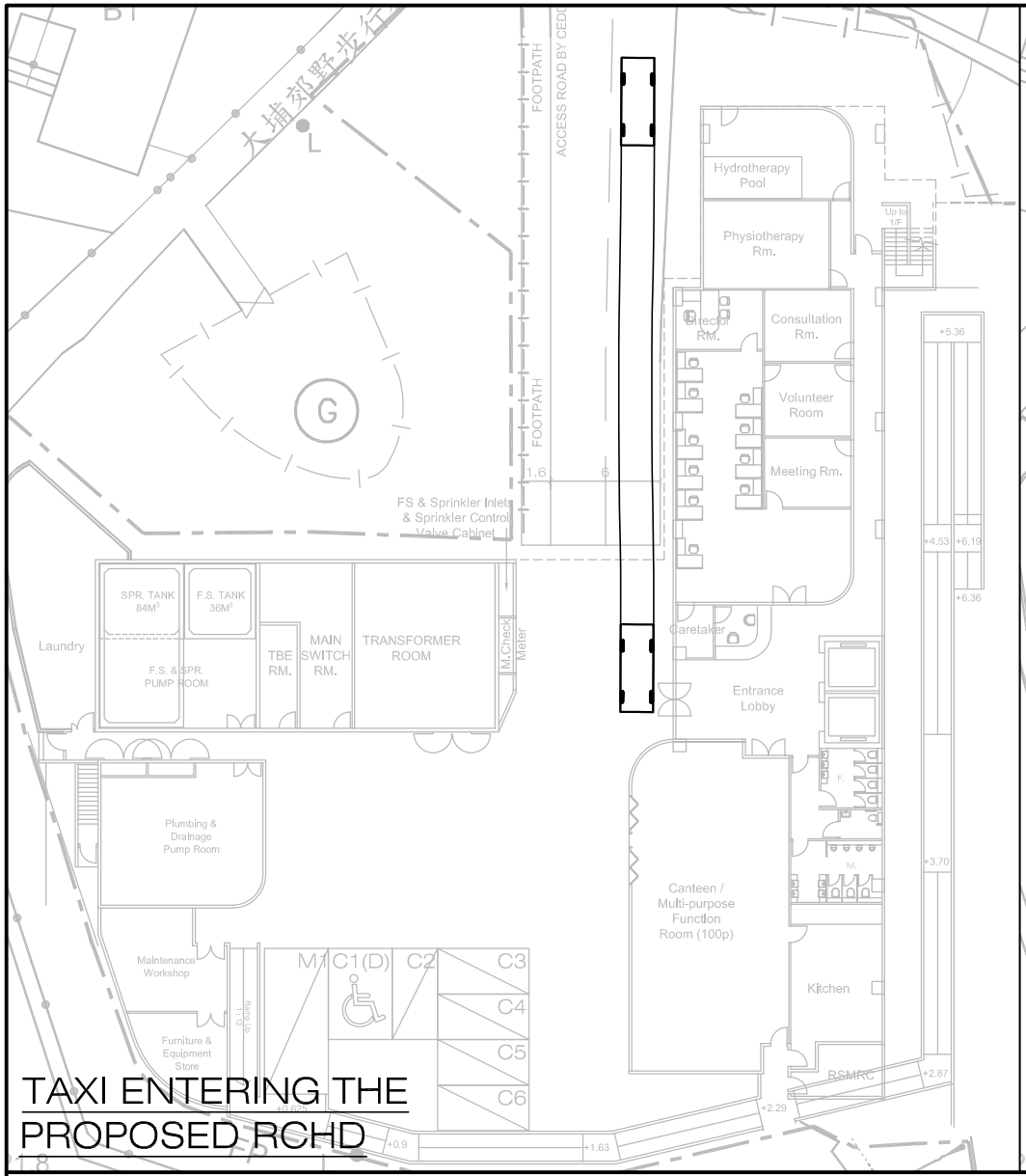
Supplementary Information of Traffic Impact Assessment



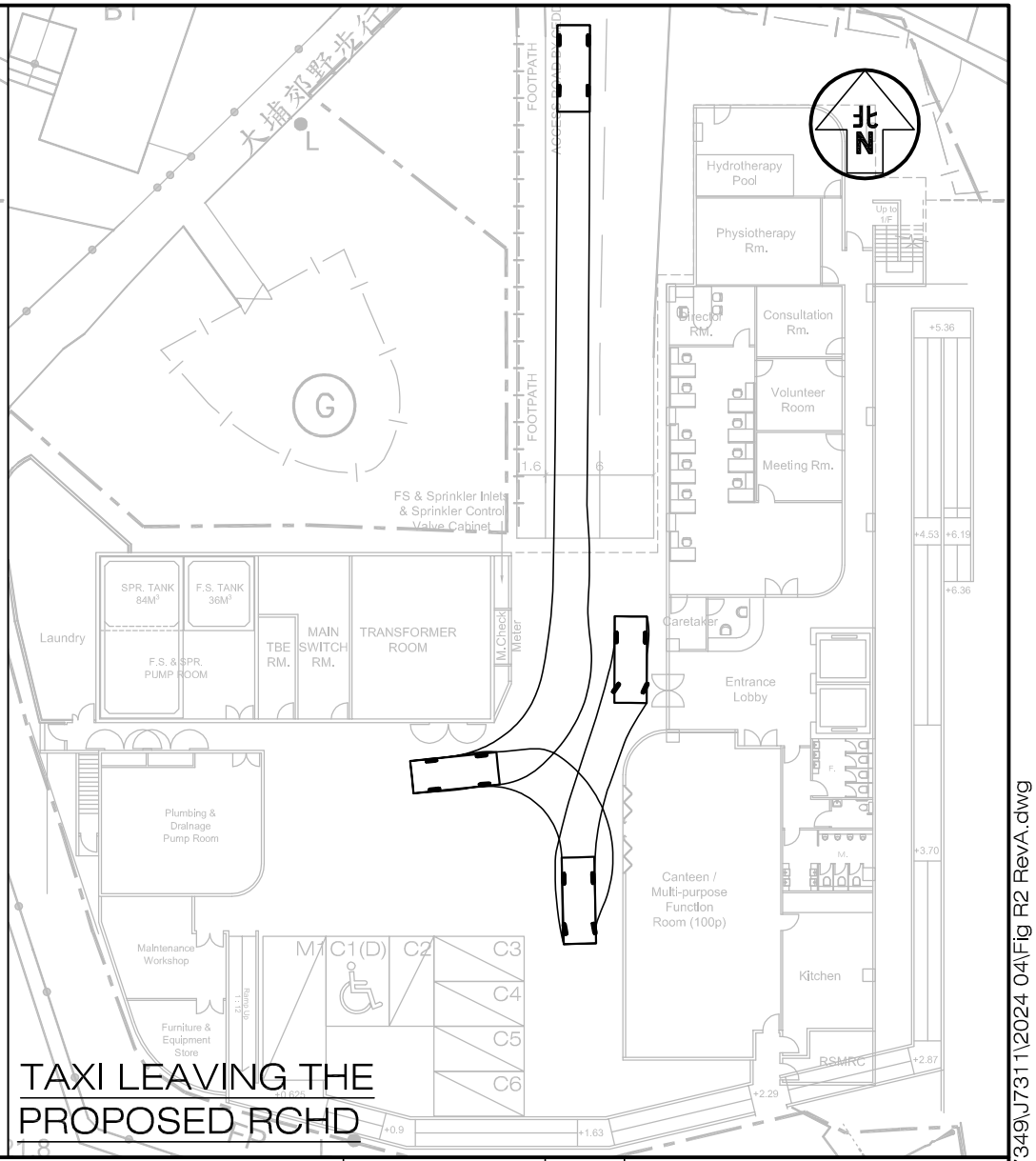
Project Title	PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO	J7311	Figure No. R1 / Revision A
Figure Title	YEAR 2031 PEAK HOUR TRAFFIC FLOWS WITH THE CONSTRUCTION VEHICLE	Designed by L C H / Drawn by N C M / Checked by K C	Scale in A4 N.T.S. / Date 03 APR 2024

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\J7300-J7349\J7311\2024 04\Fig R1 RevA.dwg



TAXI ENTERING THE PROPOSED RCHD



TAXI LEAVING THE PROPOSED RCHD

Project Title	PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO	J7311	Figure No. R2 / Revision A
Figure Title	SWEPT PATH OF TAXI ENTERING AND LEAVING THE PROPOSED RCHD	Designed by L C H / Drawn by N C M / Checked by K C	Scale in A4 1 : 400 / Date 03 APR 2024

CKM Asia Limited
Traffic and Transportation Planning Consultants
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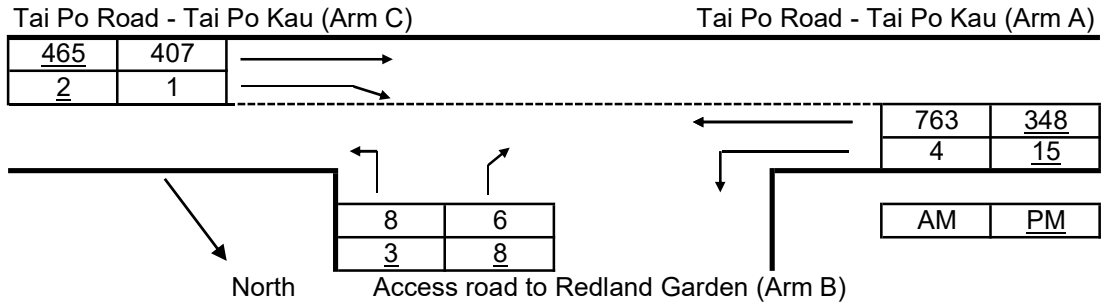
Priority Junction Analysis

Junction:	Tai Po Road - Tai Po Kau / Access road to Redland Garden				
Design Year:	2031	Job Number:	J7311	Date:	3 April 2024
Scenario:	With the Construction Vehicle				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	10.20	V-rBA	30	w-BA	4.30	D	0.9049
	W-CR	0.00	V-lBA	30	w-BC	4.30	E	0.9752
			V-rBC	30	w-CB	2.20	F	0.9259
			V-rCB	200			Y	0.6481

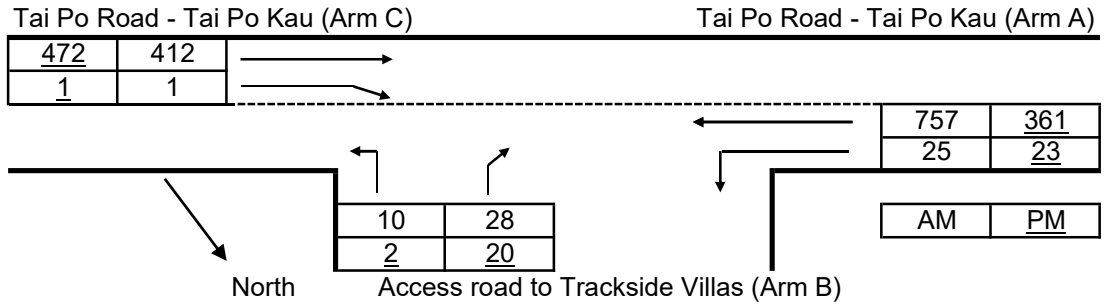
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	407	465	Q-BA	349	429
q-CB	1	2	Q-BC	551	645
q-AB	4	15	Q-CB	522	610
q-AC	763	348	Q-BAC	441	472
q-BA	6	8			
q-BC	8	3			
f	0.571	0.273			

Design Flow/Capacity Ratio	AM	PM	
C-B	0.002	0.003	
B-AC	0.032	0.023	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Tai Po Road - Tai Po Kau / Access road to Trackside Villas				
Design Year:	2031	Job Number:	J7311	Date:	3 April 2024
Scenario:	With the Construction Vehicle				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	12.10	V-rBA	130	w-BA	3.90	D	0.9584
	W-CR	0.00	V-lBA	30	w-BC	3.90	E	1.0327
			V-rBC	130	w-CB	2.20	F	0.8365
			V-rCB	85			Y	0.5826

Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	412	472	Q-BA	392	465
q-CB	1	1	Q-BC	601	688
q-AB	25	23	Q-CB	484	555
q-AC	757	361	Q-BAC	432	479
q-BA	28	20			
q-BC	10	2			
f	0.263	0.091			

Design Flow/Capacity Ratio	AM	PM	
C-B	0.002	0.002	
B-AC	0.088	0.046	(for shared lane BA, BC)

Signal Junction Analysis

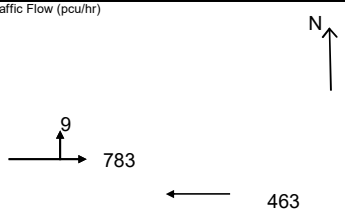
Junction: Tai Po Road near Yung Yi Road — Job Number: J7311

Scenario: With the Construction Vehicle — Page 9

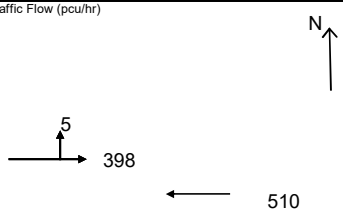
Design Year: 2031 — Designed By: — Checked By: — Date: 3 April 2024

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
Tai Po Road EB	LT+SA	A1	1	4.00	6.0		1	2009	792	0.394	0.394	1	2009	403	0.201	
Tai Po Road WB	SA	A2	1	4.80				2095	463	0.221			2095	510	0.243	0.243
pedestrian phase		B	2		min crossing time =		5	sec GM +		10	sec FGM =		15	sec		

AM Traffic Flow (pcu/hr)



PM Traffic Flow (pcu/hr)

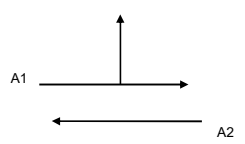


S = 1940 + 100 (W-3.25) S = 2080 + 100 (W-3.25)

S_M = S / (1 + 1.5 f/r) S_M = (S - 230) / (1 + 1.5 f/r)

	AM Peak 1	AM Peak	PM Peak 1	PM Peak
Sum y	0.394		0.243	
L (s)	23		23	
C (s)	52		52	
practical y	0.502		0.502	
R.C. (%)	27%		106%	

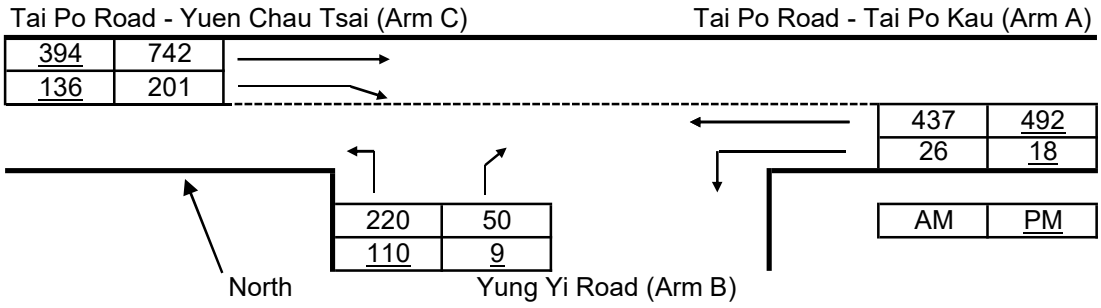
Note:



AM	G =	I/G = 5	G = 15	I/G = 4	G =	I/G =	G =	I/G =	G =
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =
PM	G =	I/G = 5	G = 15	I/G = 4	G =	I/G =	G =	I/G =	G =
	G =	I/G =	G =	I/G =	G =	I/G =	G =	I/G =	G =

Priority Junction Analysis

Junction:	Tai Po Road - Yuen Chau Tsai / Yung Yi Road				
Design Year:	2031	Job Number:	J7311	Date:	3 April 2024
Scenario:	With the Construction Vehicle				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	7.90	V-rBA	200	w-BA	3.90	D	1.0774
	W-CR	2.90	V-lBA	120	w-BC	3.90	E	1.0972
			V-rBC	200	w-CB	2.90	F	1.0048
			V-rCB	210			Y	0.7275

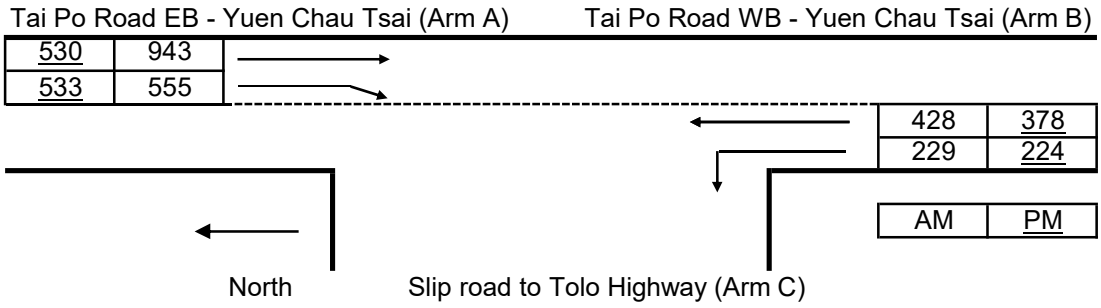
Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	742	394	Q-BA	377	451
q-CB	201	136	Q-BC	687	672
q-AB	26	18	Q-CB	625	613
q-AC	437	492	Q-BAC	596	648
q-BA	50	9			
q-BC	220	110			
f	0.815	0.924			

Design Flow/Capacity Ratio	AM	PM	
C-B	0.321	0.222	
B-AC	0.453	0.184	(for shared lane BA, BC)

Priority Junction Analysis

Junction:	Tai Po Road - Yuen Chau Tsai / Slip road to Tolo Highway				
Design Year:	2031	Job Number:	J7311	Date:	3 April 2024
Scenario:	With the Construction Vehicle				P. 15



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	8.00	V-rBA	80	w-BA	4.50	D	1.0410
	W-CR	2.40	V-lBA	150	w-BC	6.30	E	1.2041
			V-rBC	80	w-CB	0.00	F	0.5860
			V-rCB	0			Y	0.7240

Analysis :

Traffic Flows, pcu/hr	AM	PM	Capacity, pcu/hr	AM	PM
q-CA	0	0	Q-BA	535	541
q-CB	0	0	Q-BC	721	728
q-AB	0	0	Q-CB	351	354
q-AC	555	533	Q-BAC	588	599
q-BA	428	378			
q-BC	229	224			
f	0.349	0.372			

Design Flow/Capacity Ratio	AM	PM
B-A	0.799	0.698
B-C	0.318	0.308
C-B	0.000	0.000

Annex 5

Replacement Pages of Environmental Assessment

1. INTRODUCTION

1.1 Background

1.1.1 A social welfare facility (the Proposed Development) has been proposed at the former Fish Marketing Organisation (FMO) Tai Po Primary School, Wong Yi Au, Tai Po (the Application Site). Most of the Application Site is currently zoned as "Government, Institution or Community" (G/IC) with small portion area falling within "Green Belt" (GB) zone under the Approved Tai Po Outline Zoning Plan (OZP) No. S/TP/30.

1.1.2 The Applicant intends to develop the Application Site for proposed minor relaxation of building height restriction for residential care homes for persons with disabilities.

1.1.3 Ramboll Hong Kong Limited is commissioned by the Applicant to provide environmental consultancy service to prepare the Environmental Assessment (EA) based on the latest development scheme. This EA is prepared as a technical supporting document to demonstrate that the Proposed Development is environmentally acceptable by addressing potential environmental noise and air quality impact on the proposed development while other environmental issues are generally discussed.

1.1.4 The design of master layout plan (MLP) and other technical information on the Proposed Development are provided by the Project Architect (AGC Design Ltd.) whereas the traffic forecast is provided by the Project Traffic Consultant (CKM Limited).

1.2 The Application Site and Its Environs

1.2.1 The Application Site is approximately 3,275m^2. It is located at Tai Po Road – Tai Po Kau. To the immediate west of the Application Site is Chateau Royale. To the north on opposite side of Tai Po Road – Tai Po Kau is Care Village. Tolo Highway is situated to its further north. Some other residential uses are scatted mainly on east, north and west sides. The area is characterised by low-rise residential developments.

1.2.2 The Application Site was previously occupied by Fish Marketing Organization (FMO) Tai Po Primary School. The primary school was closed in year 1996 and has been vacant since then. **Figure 1.1** shows the location of the Application Site and its environment.

1.2.3 The Application Site is currently accessible from Tai Po Road – Tai Po Kau via a footpath only. A new access road will be constructed by the Civil Engineering and Development Department (CEDD) from Tai Po Road – Tai Po Kau to the Application Site. Relevant roadworks design has been submitted to relevant government departments for approval. The management party of the section of the road outside the access gate is regarded as public road and thus should be managed by Highways Department (HyD), while the section of the road within the Application Site would be managed by the Applicant. The access road only serves the Application Site. As advised by the Project Traffic Consultant, it is considered as equivalent to local distributor or below.

1.3 The Proposed Development

1.3.1 It is proposed to demolish the abandoned FMO Tai Po Primary School and to construct a residential care home for persons with disabilities (RCHD), mainly consisting of dormitories and other ancillary facilities. The Proposed Development consists of 3 storeys (G/F to 2/F, no basement). There are altogether 60 bedspaces provided. It is estimated that there would be maximum 50 number of workers. A chapel is also proposed at the northern portion of the Application Site. As advised by Project Architect, only the dormitories of the Proposed Development will be provided with operable window for natural ventilation purpose. Other uses including but not limited

to office and therapy area (e.g. physiotherapy room and hydrotherapy room) would not rely on openable window for ventilation purpose.

1.3.2 The tentative completion year is 2026.

1.3.3 The MLP of the Proposed Development is included in **Appendix 1.1**.

1.4 Appraisal of Environmental Impacts

Air Quality

1.4.1 Site survey was conducted on 21 December 2023 to identify any environmental nuisance and focus on area within 200m from the Application Site. The potential industrial and vehicular emission impact has been addressed in this context (detailed in **Section 2**).

Road Traffic Noise Impact

1.4.2 The major road traffic noise source with respect to the Application Site is arising from road carriageways to the east (i.e. Tai Po Road – Tai Po Kau and Tolo Highway). As observed in the survey on 21 December 2023, the noise environment is dominated by road traffic noise. Road traffic noise impact assessment has been conducted to address the potential road traffic noise impact with necessary noise mitigation measures proposed (detailed in **Section 3**).

Railway Noise Impact

1.4.3 The existing East Rail Line (EAL) (in the form of open track) is aligned on the northern side at around 130m away from the Application Site. Railway noise impact assessment has been conducted and detailed in **Section 4**.

Fixed Noise Impact

1.4.4 Site survey was conducted on 21 December 2023 to identify any environmental nuisance. Various fixed noise sources are identified within 300m from the Application Site, including chillers and VRVs. They have been taken into account in the fixed noise impact assessment detailed in **Section 5**.

Other Environmental Impact

Water Quality Impact

1.4.5 There are existing drainage and sewerage pipes situated at the immediate north of the Application Site along Tai Po Road – Tai Po Kau, which would convey the discharge towards west.

1.4.6 A separate Drainage and Sewerage Impact Assessment (DSIA) has been prepared to address potential drainage and sewerage impact during operation of the Proposed Development. Please refer to the separate DSIA report under this application for details.

1.4.7 The Proposed Development will be connected to public drainage and sewerage system for proper discharge of treated surface runoff and effluent. ProPECC PN 1/23 will be referenced and followed. All surface runoff originated from the Application Site will be properly collected and drained via systems such as sand trap, oil interceptor, grease trap for treatment. The treated surface runoff will be discharged to the public drainage system. On the other hand, all wastewater generated onsite will be discharged to public sewerage system.

1.4.8 Organic farm and sensory garden are proposed for the Proposed Development. It is recommended that the agrochemicals (e.g. pesticides, insecticides and chemical

fertilizers), if any, would only be applied on needed basis and should be avoided during major rainy season. Should organic fertilizers be used for encouraging the growth of planted vegetation, over dosage should also be avoided. Other proper measures in "Good Agricultural Practices for Crop Production" shall be implemented for the use of fertilizers, pesticide and agrochemicals.

1.4.9 No adverse water quality impact during operation of the project is anticipated.

Construction Phase Environmental Impact

1.4.10 The major air quality impact during construction should be fugitive dust impact in relation to dusty activity and emission from dusty materials. Best management practice and practical mitigation measures will be adopted where appropriate.

1.4.11 Construction noise is usually generated by using powered mechanical equipment. It will be controlled with reference to relevant technical memorandum. Best Management practice will be adopted where appropriate to suppress the impact.

1.4.12 For water quality aspect, during construction of the Proposed Development, water pollution is likely due to sediments, construction runoff and drainage, sewage effluent and liquid spillage if not mitigated. Best management practice will be adopted. No sewage effluent discharge will be allowed. ProPECC PN2/23 on construction site drainage will be observed and followed.

1.4.13 Waste generation during construction will be sorted and handled in compliance with the Waste Disposal Ordinance and regulations.

1.4.14 With adequate mitigation measures incorporated during construction of the project, no significant construction phase environmental impact is anticipated. Further discussion on construction phase environmental impact is also included in **Section 6**.

1.5 Organization of this Report

1.5.1 The report is structured as follows: -

- **Section 2** is an air quality impact assessment;
- **Section 3** is a road traffic noise impact assessment;
- **Section 4** is a railway noise impact assessment;
- **Section 5** is a fixed noise impact assessment;
- **Section 6** includes discussion of construction phase fugitive dust, noise, water quality and waste management issues; and
- **Section 7** is a concluding summary.

Air Pollution Control Ordinance (Cap.311)

2.2.2 The Hong Kong Government has set out Hong Kong's Air Quality Objectives (AQOs) in the Air Pollution Ordinance (Cap. 311), and is required to review the AQOs at least once every five years and submit a report of the review to the Advisory Council on the Environment. The standard of AQOs for relevant pollutants are listed in **Table 2.2**.

Air Pollution Control (Construction Dust) Regulation

2.2.3 Notifiable and regulatory works are under the control of Air Pollution Control (Construction Dust) Regulation. Notifiable works include site formation, reclamation, demolition, foundation and superstructure construction for buildings and road construction. Regulatory works include building renovation, road opening and resurfacing, slope stabilisation, and other activities including stockpiling, dusty material handling, excavation, concrete production, etc. The Project is notifiable works (site formation, demolition, foundation and superstructure construction) and regulatory works (dusty material handling and excavation). Contractors and site agents are required to inform Environmental Protection Department (EPD) and adopt dust reduction measures to minimize dust emissions, while carrying out construction works, to the acceptable level.

Air Pollution Control (Fuel Restriction) Regulation

2.2.4 The Air Pollution Control (Fuel Restriction) Regulation was enacted in 1990 to impose legal control on the type of fuels allowed for use and their sulphur contents in commercial and industrial processes to reduce sulphur dioxide (SO_2) emissions. In June 2008, the Regulation was amended to tighten the control requirements of liquid fuels. The Regulation does not apply to any fuel-using equipment that is used or operated in premises used or operated in premises used solely as a dwelling or is used or operated in or on a vessel, motor vehicle, railway locomotive or aircraft. Gaseous fuel, conventional solid fuel with a sulphur content not exceeding 1% by weight or liquid fuel with a sulphur content not exceeding 0.005% by weight and a viscosity not more than 6 centistokes at 40°C, such as Ultra Low Sulphur Diesel (ULSD) are permitted to be used in commercial and industrial processes.

Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation

2.2.5 The Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation comes into operation on 1 June 2015. Under the Regulation, Non-road mobile machinery (NRMMs), except those exempted, are required to comply with the prescribed emission standards. From 1 September 2015, all regulated machines sold or leased for use in Hong Kong must be approved or exempted with a proper label in a prescribed format issued by EPD. Starting from 1 December 2015, only approved or exempted NRMMs with a proper label are allowed to be used in specified activities and locations including construction sites. The Contractor is required to ensure the adopted machines or non-road vehicle under the Project could meet the prescribed emission standards and requirement.

Recommended Pollution Control Clauses for Construction Contracts

2.2.6 The Recommended Pollution Control Clauses (RPCC) are generally good engineering practice to minimize inconvenience and environmental nuisance to nearby residents and other sensitive receivers. The Contractor shall undertake environmental protection measures to reduce the environmental impacts arising from the execution of the Works and to minimize the effects on the air, noise, water quality as well as nuisance of waste within and outside the Site, on transport routes and at the loading, dredging and dumping areas.

2.3 Existing Air Quality at the Application Site

2.3.1 The nearest air quality monitoring station (AQMS) to the Proposed Development is the Tai Po AQMS. The five most recent years of air quality monitoring data, 2018 to 2022, from this station are summarized in **Table 2.2** below.

2.3.2 The tentative year of completion of the Proposed Development is 2026. As the data of the PATH for Year 2026 is not available, the data for Year 2025 was selected as the worst representative year for background air quality. Year 2025 data was extracted from SAMP v1.1 developed and released by EPD (Grid: 40,47; Grid: 41,47; Grid: 41,46) and summarized in **Table 2.2**.

2.4 Air Sensitive Receivers during Operation Phase

2.4.1 The sleeping room (including isolation room), dormitories and associated common area, office and meeting rooms, therapy rooms, canteen and chapel are identified as air sensitive receivers (ASRs) during operation phase.

2.5 Industrial Emission Impact

2.5.1 The Application Site is mainly surrounded by low density residential developments, village type developments, green belt, and rural landscape. Site survey was conducted on 21 December 2023 to identify any environmental nuisance and focus on area within 200m from the Application Site.

2.5.2 There is no industrial use identified within 200m from the Application Site. There is no emission source such as chimney stack or any other emission like fluff, odour, smoke, identified within same study area.

2.5.3 Regarding the Proposed Development is a RCHD with ancillary facilities (i.e. office and chapel), it is not considered environmental polluting in nature. There will be no chimney from the Proposed Development.

2.6 Vehicular Emission Impact

2.6.1 Tai Po Road – Tai Po Kau is situated to the immediate north of the Application Site, while Tolo Highway is situated to its further north. Tolo Highway is considered as expressway according to Annual Traffic Census 2022. Thus, 20m buffer distance from Tolo Highway should be provided. Another road carriageway, Yung Yi Road is to the west of the Application Site separated by an existing development (Chateau Royale).

2.6.2 Tai Po Road – Tai Po Kau and Yung Yi Road are not classified in the Annual Traffic Census 2022. Considering that the roads in the vicinity in the Annual Traffic Census 2022 (i.e. Yau King Lane and Tai Po Road – Ma Liu Shui) are either rural road or local distributor, Tai Po Road – Tai Po Kau and Yung Yi Road is considered as equivalent to local or at most district distributor. To be prudent, a 10m buffer distance from Tai Po Road – Tai Po Kau and Yung Yi Road is assumed to be provided.

2.6.3 **Figure 2.1** shows the separation distance provided. The Application Site is outside the buffer zone from Tolo Highway and Yung Yi Road. Only the access road to the Application Site is within buffer zone from Tai Po Road – Tai Po Kau. There is no air sensitive use within the buffer zone. Therefore, no significant vehicular emission impact is anticipated.

Table 2.2 Background Air Quality data from Tai Po AQMS (2018-2022) and Latest Version of PATH (Year 2025)

Pollutant	Averaging time	Parameter	AQO ($\mu g/m^3$)	Concentration ($\mu g/m^3$)							
				2018	2019	2020	2021	2022	PATH Grid (40, 47)	PATH Grid (41, 47)	PATH Grid (41, 46)
RSP(PM_{10})	24-hour	10th highest	100	69	65	58	60	48	64.56	64.08	64.33
	Annual	Maximum	50	31	31	24	26	21	27.13	27	26.67
FSP($PM_{2.5}$)	24-hour	19th highest	50	38	41	33	32	30	33.23	34.58	33.42
	24-hour	36th highest	50	33	35	28	27	25	22.75	22.74	22.3
	Annual	Maximum	25	19	20	15	16	NA	14.98	14.69	14.72
NO_2	1-hour	19th highest	200	125	142	106	115	93	91.08	79.05	69.91
	Annual	Maximum	40	36	36	30	32	27	15.98	14.33	14.46
SO_2	10-minute	4th highest	500	24	20	19	15	12	65.37	68.48	66.17
	24-hour	4th highest	50	8	10	7	8	5	9.92	9.83	9.9
O_3	8-hour	10th highest	160	**167**	**197**	**165**	**168**	**188**	**198.71**	**195.1**	**191.47**
CO	1-hour	1st highest	30,000	NA	NA	NA	NA	NA	859.63	853.67	876.65
	8-hour	1st highest	10,000	NA	NA	NA	NA	NA	774.92	774.45	776.44

Notes:

[i] All measurement 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 293 Kelvin and a reference pressure of 101.325 kilopascal.

[ii] Respirable suspended particulates means suspended particles in air with a nominal aerodynamic diameter of 10m or less.

[iii] Fine suspended particulates means suspended particles in air with a nominal aerodynamic diameter of 2.5 m or less.

[iv] Bolded and underlined values indicate exceedance under relevant AQO.

3. ROAD TRAFFIC NOISE IMPACT ASSESSMENT

3.1 Introduction

3.1.1 This road traffic noise impact assessment is prepared to address potential road traffic noise impact on the noise sensitive uses of the Proposed Development and to recommend mitigation measures where practicable to attenuate the impact.

3.2 Assessment Criteria

3.2.1 Noise standards are recommended in the Hong Kong Planning Standards and Guidelines (HKPSG) for planning against noise impact from sources such as road traffic, railway and aircraft. The Proposed Development comprises car park, plant room, office, dormitory and chapel. Office area and chapel will be air conditioned and will not rely on open window for ventilation, which is not considered as noise sensitive in nature. Under the HKPSG, the criterion for road traffic noise impact on domestic premises (habitable rooms) is $L_{10(1\text{-hour})}$ 70dB(A).

3.3 Assessment Methodology

3.3.1 In the assessment, the potential noise impact arising from nearby road carriageways on the development has been assessed.

3.3.2 It involved the prediction of future noise impacts on Noise Sensitive Receivers (NSRs) arising from traffic flows along existing and future road carriageways situated within the vicinity of the Application Site. Calculation of predicted road traffic noise was based on the worst case peak hour traffic flows projected within a 15-year period from the tentative completion date (Year 2026) of the Proposed Development. For worst-case scenario evaluation, the assessment year was chosen to be Year 2041, which has the maximum forecasted traffic flow within the 15-year period. The year 2041 traffic forecast data is attached in **Appendix 3.1**. Endorsement from Transport Department (TD) on the methodology of the traffic forecast and confirmation from Project Traffic Consultant strictly following the endorsed methodology are also included in the same appendix.

3.3.3 The U.K. Department of Transport's procedure "Calculation of Road Traffic Noise" (CRTN) was used to predict the hourly $L_{10(1\text{-hour})}$ noise levels generated from road traffic at selected representative NSRs. Practicable environmental mitigation measures have been recommended, where necessary. The predicted noise levels were compared with the relevant HKPSG noise standards (i.e. $L_{10(1\text{-hour})}$ 70dB(A)).

3.3.4 In this assessment, all roads are assumed of impervious surface. The correspondence from HyD is attached in **Appendix 3.4**. Speed limit of 50km/hr is assumed for most of the roads. It is assumed 70km/hr for Road ID 20 and 24 and 100km/hr for Road ID 21, 22, 23, 26, 27 and 28 (Road ID indicated in **Appendix 3.1**).

3.4 Noise Sensitive Receivers

3.4.1 As discussed under **S1.3**, only the dormitories (and other sleeping rooms) will be provided with window for natural ventilation while other uses will be provided with air conditioning. A number of Noise Sensitive Receivers (NSRs) representing window opening of dormitories, which are likely to be subject to adverse traffic noise impacts, were selected for the assessment. All assessment points were taken at 1.2m above the floor and 1m away from the façade of openable windows (which would be for ventilation purpose) of rooms of sensitive use. **Figure 3.1** illustrates the locations of the selected representative NSRs for road traffic noise impact assessment.

4. RAILWAY NOISE IMPACT ASSESSMENT

4.1 Introduction

4.1.1 This railway noise impact assessment is prepared to assess airborne railway noise impact on the noise sensitive uses of the Proposed Development due to the operation of East Rail Line (EAL) nearby and recommend noise mitigation measures where practicable to attenuate the impact.

4.2 Assessment Criteria

4.2.1 Operation of the EAL would be subject to control under the Noise Control Ordinance (NCO) by the "*Technical Memorandum for the Assessment of Noise from Places Other Than Domestic Premises, Public Spaces or Construction Sites*" (IND-TM). The airborne noise shall comply with the Acceptable Noise Level (ANL), which depends on the Area Sensitivity Rating (ASR).

4.2.2 According to the IND-TM, four (4) types of areas are defined and including: Rural Area, Low Density Residential Area, Urban Area and Area Other Than Those Above. The Application Site is located in Tai Po Kau area and surrounded by various low-rise residential developments of low density. It is therefore considered as Low Density Residential Area.

4.2.3 It is noted that Tolo Highway is situated at about 150m to the north of the Application Site on the same side of EAL. It has an Annual Average Daily Traffic (AADT) of 147,630 with reference to the Annual Traffic Census 2022 published by the Transport Department, and acts as an Influencing Factor (IF). According to the site survey conducted in December 2023, it was observed that the Application Site is predominantly affected by road traffic noise from Tolo Highway. It is also understood that for some facades, they are most affected by the IF (i.e. noise contribution from IF is higher than noise contribution from remaining carriageways). For conservative assessment approach, however, it is assumed that the NSRs are not affected by IF and ASR "A" is assigned for the entire Proposed Development. The ASR and ANLs according to IND-TM are tabulated below.

Table 4.1 Area Sensitivity Rating

Type of Area Containing NSR		Degree to which NSR is affected by Influencing Factors (IFs)		
		Not Affected	Indirectly Affected	Directly Affected
i.	Rural area, including country parks, or village type development	A	B	B
ii.	Low density residential area consisting of low-rise or isolated high-rise developments	A	B	C
iii.	Urban Area	B	C	C
iv.	Area other than those above	B	B	C

Table 4.2 Acceptable Noise Levels for Railway Noise Impact Assessment

Time Period	ANL for ASR "A", Leq(30min), dB(A)
Day & Evening (0700 to 2300 hours)	60
Night (2300 to 0700 hours)	50

4.2.4 Noise standards are also recommended in Chapter 9 of HKPSG for planning against potential noise impact. The relevant railway noise standard is tabulated below:

Table 4.3 Relevant Noise Standard under HKPSG

Description	Standard, dB(A)
Lmax (2300-0700)	85
Leq (24-hour)	65

Remark: The above standards apply to uses which rely on opened windows for ventilation

4.3 Existing and Future Condition of East Rail Line

4.3.1 EAL lies along to the north and northeast of the Application Site. Vertical trackside barrier has been implemented between the EAL tracks and the Application Site to mitigate the operational airborne noise from the at-grade open track on existing developments nearby the Application Site. As advised by MTRC, the vertical barrier has approximate length of 350m near Care Village and Riverain Bayside. The Consultant has visited MTRC's office to observe relevant barrier drawings and adopt the same in this railway noise impact assessment. Correspondence with MTRC has been provided in **Appendix 4.1**.

4.4 Assessment Methodology

Operational Parameters

4.4.1 The current peak frequency at the section between Tai Po Market Station and University Station has been compared with the latest Variation of Environmental Permit for the *Shatin to Central Link – Mong Kok East to Hung Hom Sectio*n (VEP-510/2016, hereafter referred as "SCL-VEP") (i.e. future train frequency, see **Appendix 4.2**). It is observed that the scenario under the SCL-VEP is more frequent than the existing scenario. Therefore, the SCL-VEP train frequency is adopted for this assessment.

4.4.2 The EAL maximum operating train frequency during the period of 0700-2300 would be 30 trains per hour in each direction, while there would be 24 trains per hour per direction during 0600-0700.

4.4.3 The current maximum permitted train speed is about 120kph for both directions within the vicinity of the Application Site. There are currently 9 cars per train for the operating condition of the EAL.

Sound Exposure Level and Lmax

4.4.4 On-site railway noise measurement was conducted at the access road near Trackside Villas to determines reference sound exposure level (SEL) from the East Rail. The measured SELs at 25m are 81.9dB(A) and 80.4dB(A) for near track and far track respectively. The measured Lmax at 25m are 75.5dB(A) and 77.2dB(A) for near track and far track respectively. **Appendix 4.3** shows the measurement details.

4.5 Noise Assessment Point

4.5.1 Representative assessment points have been selected for this study, which are nearest to and having larger angle of view to EAL rail tracks. The assessment points are located at northern façade of the dormitory (NAP R2-05) and the southern façade of the living quarter (NAP R2-23). Should the predicted railway noise level for these worst affected locations be within the acceptable criterion, no unacceptable railway noise impact on remaining sensitive uses is anticipated.

4.5.2 The assessment points are taken at 1m away from the façade and 1.2m above the corresponding floor slab. **Figure 4.2** showed the location of the representative NAPs.

4.6 Railway Noise Impact Assessment Result (Base Case)

Leq (30min) Noise Level during Day & Evening and Night Time

4.6.1 The predicted day & evening time and nighttime maximum noise level are 50.3dB(A) and 49.4dB(A) respectively, which comply with relevant standard.

Leq (24-hour) and Lmax Noise Level

4.6.2 The predicted Leq (24-hour) and Lmax maximum noise levels are 50.1dB(A) and 64.9dB(A) respectively. No exceedance is found.

4.6.3 It is understood that the selected NAPs are considered to be the worst affected locations from railway noise point of view. Therefore, all other not-selected NAPs within the Proposed Development will also meet their relevant standard.

4.7 Conclusion

4.7.1 Railway noise impact assessment has been carried out for the Proposed Development.

4.7.2 The worst affected NAPs due to the operation of EAL have been selected for this assessment. According to the assessment result, no exceedance is found at the selected NAP. Therefore, no adverse railway noise impact shall be expected at the remaining noise sensitive uses of the Proposed Development.

5. FIXED NOISE IMPACT ASSESSMENT

5.1 Introduction

5.1.1 The aim of this study is to assess potential noise impact arising from nearby fixed noise source within 300m assessment area of the Proposed Development. Practical noise mitigation measures would be recommended, where necessary.

5.2 Assessment Criteria

5.2.1 According to the IND-TM issued under the NCO, the airborne noise shall comply with the ANL, which depends on the ASR as described in **Table 4.1**.

5.2.2 Same as railway noise impact assessment in previous chapter, ASR "A" is assigned to the entire Proposed Development.

5.2.3 **Table 5.1** below presents the fixed noise impact assessment criteria for Daytime & Evening time and Nighttime Periods adopted in this assessment.

Table 5.1 Acceptable Noise Levels for Fixed Noise Impact Assessment

Time Period	ANL for ASR "A", Leq(30min), dB(A)
Day & Evening (0700 to 2300 hours)	60
Night (2300 to 0700 hours)	50

5.3 Fixed Noise Sources

5.3.1 Desktop review and site investigations have been carried out to identify potential fixed noise sources in the vicinity of the Application Site. Site visits were conducted on 21 December 2023 during daytime periods in an attempt to identify fixed noise sources in the vicinity and determine their operating hours.

5.3.2 Details of identified fixed noise sources are listed as follows:

(a) China Light Power (CLP) System Control Centre

China Light Power (CLP) System Control Centre is located to the southeast of the Application Site, with approximately 130m of separation from the nearest site boundary. Five chillers (Source ID: C01 to C05) are identified and placed at roof of CLP System Control Centre. Twelve VRVs (Source ID: V01 to V12) are also identified at the roof.

Noticeable noise from these AC units is not observed from the site survey during December 2023 at accessible location near to CLP System Control Centre. It is advised by the guard of CLP System Control Centre that the AC units would be under operation for 24 hours. The facility is not accessible. Request was made to CLP System Control Centre to collect information of the identified AC units (e.g. equipment model, noise data) and to request for access to conduct onsite measurement. The copies of letters of request are shown in **Appendix 5.1**. Since CLP had not responded and on-site noise measurement cannot be conducted without permission from CLP. By observing the scale of the equipment, reference equipment catalogue model of a similar scale is adopted (see **Appendix 5.3**).

(b) WSD Tai Po Kau Fresh Water Pumping Station

The pumping station is situated at about 100m apart to the east of the Application Site along Tai Po Road – Tai Po Kau (Source ID: P01). The station is fenced off and it is not accessible by public. During the site survey conducted on 21 December 2023, the pumping station was in operation but there was no noticeable noise. Thus, the noise source would not be considered in the fixed noise impact assessment.

(c) WSD Ha Wong Yi Au Fresh Water Pumping Station and DSD Tai Po Kau Sewage Pumping Station

The two stations (Source ID: P02 & P03) are located at the northwest of the Application Site and at immediate south of the East Rail Line track. Both stations are currently under construction and coordinated by ATAL Engineering Ltd. and Kuly Construction & Engineering Co. Ltd respectively. No significant noise is observed from the pumping station during the site survey on 21 December 2023.

As advised by DSD, the Tai Po Kau Sewage Pumping Station (SPS) is currently under upgrading works and noise inventory is not available at the moment (see **Appendix 5.5**). On the other hand, there is no reply from WSD. Nevertheless, the pumping stations should be designed to meet HKPSG requirement so that no exceedance of NCO standard is anticipated.

5.3.3 The noise strength of the identified fixed noise sources mentioned above at different time of a day has been derived based on backward calculation. To illustrate, the existing Riverain Bayside and Redland Garden are taken as the existing NSRs. The most exposed NSRs (i.e. BF-01 for Riverain Bayside and BF-02 for Redland Garden) have been selected for the calculation. As a conservative approach, it is assumed that these NSRs can marginally comply with statutory fixed noise standard only (ASR "C" for BF-01 and ASR "A" for BF-02). Backward calculation is then conducted to estimate the sound power level of the identified noise sources (see **Appendix 5.2**).

5.3.4 According to desktop review and site survey, it is observed that there is a planned residential development (i.e. TPTL 230) situated at approximately 270m to the southeast of the Proposed Development. It is observed that the residential development is low-rise or house development in nature. Clubhouse may be included, where MVAC units may be installed. However, given that there is a long separation distance between the nearest NSR of the Proposed Development and the site boundary of TPTL 230 (i.e. ~295m), the possible MVAC equipment or building service systems for communal use of TPTL 230, if any, would unlikely have any significant adverse contribution to the overall fixed noise impact.

5.3.5 While the project is in early planning stage, it is anticipated there will be potentially noisy installation such as ventilation fan/system for plant rooms and air conditioning system in future subject to detailed design. The future contractor shall ensure that the equipment which are considered fixed noise sources would be designed and installed to meet the HKPSG noise standard (i.e. Table 4.1 of Chapter 9 of HKPSG).

5.3.6 Locations of the fixed noise sources are indicated in **Figure 5.1**. Summary of SWLs applied in this fixed noise impact assessment is included in **Appendix 5.4**.

5.4 Representative Noise Sensitive Receivers

5.4.1 Representative NSRs which have direct line of sight and shortest horizontal distance with the identified fixed nose sources have been selected for the assessment. The concerned NSRs (F1-11 & F1-12) at the southern façade of 1/F Dormitory Room 1 and

5.4 Representative Noise Sensitive Receivers

5.4.1 Representative NSRs which have direct line of sight and shortest horizontal distance with the identified fixed nose sources have been selected for the assessment. The concerned NSRs (F1-11, F1-12 and F2-05) at the southern façade of 1/F Dormitory and the northern façade of 2/F Dormitory (assumed not affected by IF and have most stringent assessment criteria, i.e. ASR "A") are selected to represent the worst impacted location due to the identified fixed noise sources. Should the predicted fixed noise levels for the concern NSRs comply with the nighttime noise standard, no adverse fixed noise impact on remaining façade of the Proposed Development is anticipated.

5.4.2 The location of the representative NSRs is presented in **Figure 5.2**.

5.5 Assessment Methodology

5.5.1 Standard acoustic principles were adopted for prediction of cumulative fixed noise impact. In accordance with the IND-TM, a barrier correction of -10dB(A) is applied where the line of sight from the representative NSR would be completely blocked by building structure or barriers. A façade correction of +3dB(A) is also adopted. Tonality of 6dB(A) is also assumed for all fixed noise sources as a conservative assessment approach.

5.5.2 Prediction of the fixed noise level can be represented by the formula below:

$$SPL_{NSR} = SWL_{source} + Corr_{dist} + Corr_{bar} + Corr_{fac} + Corr_{ton}$$

where

SPL_{NSR} = Predicted Noise Level at Selected Representative NSR

SWL_{source} = Derived Sound Power Level of the Fixed Noise Source

$Corr_{dist}$ = Distance Correction (20 x Log (Horizontal Distance between NSR and Source))

$Corr_{bar}$ = Barrier Correction (-10dB(A) when line of sight is totally blocked)

$Corr_{fac}$ = Façade Correction (+3dB(A))

$Corr_{ton}$ = Tonality Correction (+6dB(A), where applicable)

5.6 Assessment Result

5.6.1 A summary of predicted fixed noise levels at representative NSRs is tabulated in **Table 5.2**. The maximum predicted fixed noise levels Leq(30mins) for daytime & evening period is up to 58dB(A), whilst for night-time period is 48dB(A). Therefore, the above results show that the predicted noise level is in compliance with the assessment criteria of 60dB(A) and 50dB(A) for daytime & evening and night-time periods respectively.

Table 5.2 Predicted Fixed Noise Level

Selected Representative NSRs	Predicted Fixed Noise Level, ($L_{eq\ (30mins)}$, dB(A))	
	Day and Evening Time (07:00-23:00)	Night-time (23:00-07:00)
F1-11	58	48
F1-12	57	48
F2-05	56	46

6. CONSTRUCTION PHASE IMPACTS

6.1 Introduction

6.1.1 During the construction phase of the Proposed Development, there may be potential dust, noise and water quality impacts upon the nearby sensitive receivers such as villages. Waste generation (including possible land contamination) is another consideration. Practicable environmental mitigation measures are recommended to reduce these impacts to acceptable ranges.

6.2 Fugitive Dust Emission

6.2.1 The major air quality impact of concern during the construction phase will be the potential fugitive dust emission. The major dust emission sources during the construction phase of the Proposed Development are expected to arise from construction activities during site formation stage such as:

- Excavation resulting in exposed ground vulnerable to air erosion;
- Earth moving, loading and unloading of excavated material;
- Wind effect on material stockpiling; and
- Vehicle movements on haul roads and over the construction site.

6.2.2 There will be potential impacts from the criteria pollutants (e.g. nitrogen oxides (NOx), sulphur dioxide (SO_2), and carbon monoxide (CO)). Emission from diesel trucks for the haulage of materials and construction plants will contain high percentage of smoke particulate and unburned hydrocarbons in comparison with petrol driven vehicles. Ultra-low sulphur diesel (ULSD) with sulphur content not exceeding 0.005% by weight will be used as fuel to minimize SO_2 emission. In all circumstances, the contractor will be required to observe all relevant regulations and maintain all equipment in good condition to avoid any excessive emission. Under the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation, only approved or exempted non-road mobile machineries (including mobile generator, air compressor, excavator, crawler crane, bulldozer and etc.) with a proper label are allowed to be used in the construction site. In addition, availability of electricity supply during construction of the project will be explored and such requirement will be specified in future contract. In all circumstances, contractor should maximise use of electricity and with least reliance of diesel fuelled equipment (e.g. for electricity powered stationary equipment such as pump instead of using generator).

6.2.3 There are some residential uses situated in the vicinity from the Application Site and considered as Air Sensitive Receivers (ASRs). **Figure 6.1** shows the separation distance between the Application Site and the nearby ASRs.

Table 6.1 Summary of Representative Air Sensitive Receivers

ASR	Description	Type	Building Height, mPD	Approximate Horizontal Distance to the Proposed Development
ASR01	Chateau Royale & Clubhouse	Residential	~30	~3m to the south, west and northwest
ASR02	Care Village	Residential	~12	~55m to the north
ASR03	Redland Garden	Residential	~47	~182m to the east
ASR04	Strafford House	Residential	~75	~111m to the southeast

Construction Waste Disposal Measures

6.6.4 On-site sorting of construction wastes will be recommended. On-site sorting can be achieved by avoiding the generation of "mixed waste" through good site control.

6.6.5 Waste generated by construction activities should be sorted into inert C&D materials and non-inert C&D materials. The inert C&D materials which comprise soil, rock, concrete, brick, cement plaster/mortar, inert building debris, aggregates and asphalt shall be reused in earth filling, reclamation or site formation works. The non-inert C&D materials which comprises metal, timber, paper, glass, junk and general garbage shall be reused or recycled and, as the last resort, disposal of at landfills.

6.6.6 It is estimated that about 9250m^3 of inert C&D material and 3720m^3 of non-inert C&D material will be generated during the course of construction (including demolition). Adequate areas for sorting and storage of segregated materials should be provided onsite. Construction wastes shall be sorted, with the inert C&D materials broken up into small pieces for disposal at public fill reception facility, and the non-inert C&D materials should be disposed of at landfill.

6.6.7 Chemical and oily wastes generated from the construction activities, vehicle and plant maintenance and oil interceptors should be disposed of as chemical waste in strict compliance with the Waste Disposal (Chemical Waste) (General) Regulation.

6.6.8 Asbestos was widely used in the construction industry prior to the early 1980s for fireproofing, thermal and electrical insulation as well as in sound absorption materials. However, asbestos is currently recognized as hazardous materials, due to its etiological effects on human respiratory system.

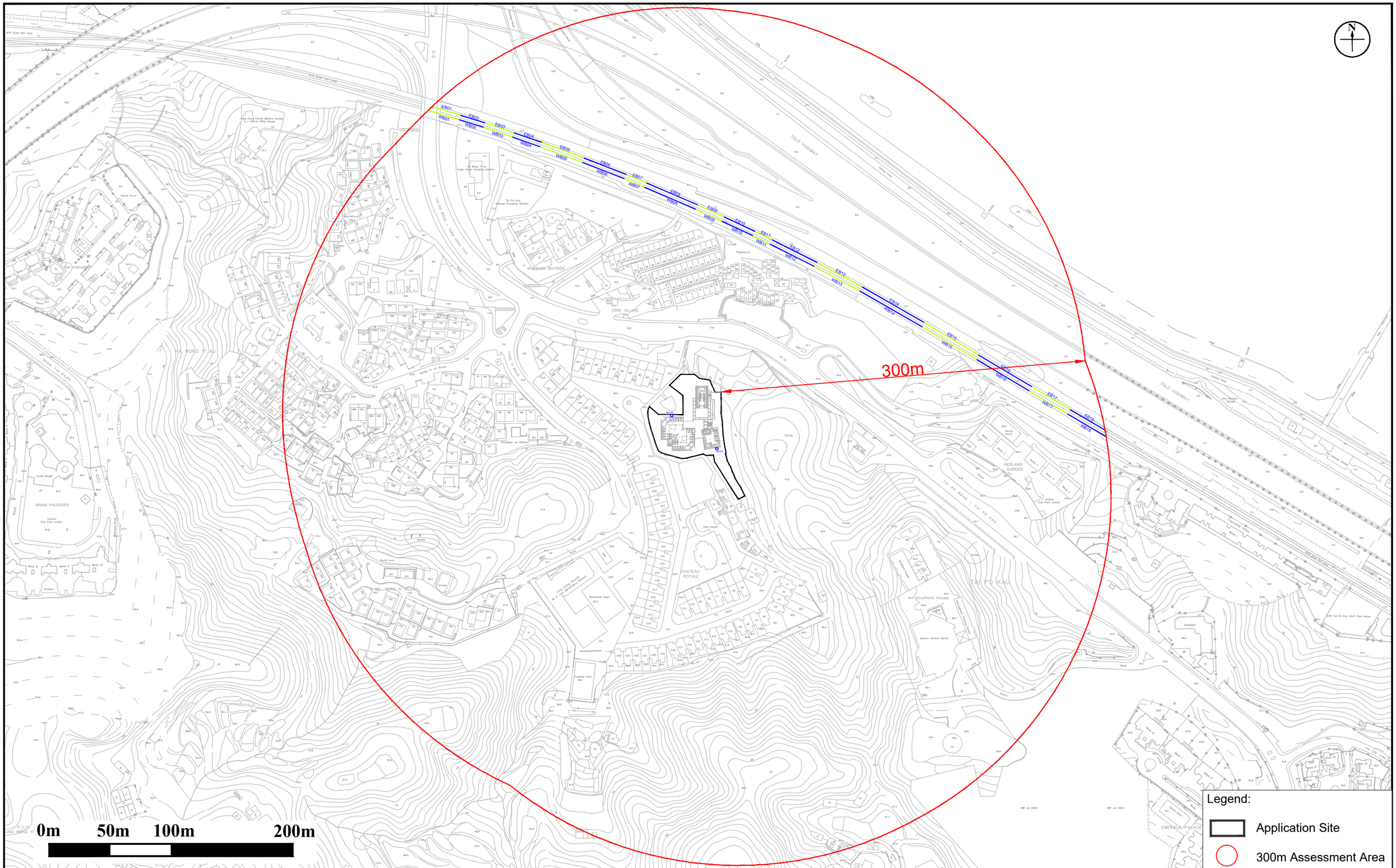
6.6.9 Asbestos containing material (ACM) may be present in the buildings within the Application Site. Thus, ACM which may be disturbed during demolition activities, should be removed and disposed of in a proper manner prior to the demolition work, so as to avoid the release of harmful asbestos fibres to environment and minimise potential hazard.

6.6.10 All ACM if confirmed to be present within the existing premises must be removed and disposed of in accordance with the Air Pollution Control Ordinance (APCO) and WDO prior to the demolition works. A Registered Asbestos Consultant and Registered Asbestos Laboratory shall be engaged to conduct investigation for the presence of ACM. An Asbestos Investigation report, an Asbestos Abatement Plan (AAP) (if required) and a notification of commencement of asbestos abatement works should be provided afterwards. As required under Cap. 311 APCO, the owner of premises shall give not less than 28 days' written notice to the Authority before the commencement of asbestos abatement work. Also, the removal of ACM should be carried out by a Registered Asbestos Contractor according to the approved AAP under the supervision of a Registered Asbestos Consultant. Asbestos control in accordance with the requirement under APCO will be followed. The asbestos waste generated shall be disposed by a licenced collector in compliance with the WDO.

6.6.11 Waste disposal from construction site is subject to control under the Waste Disposal Ordinance.

6.6.12 To estimate the general refuse generated during construction phase, an assumption of 30 workers per day with 0.65kg per worker per day has been made.

6.6.13 **Table 6.4** presents the estimation of waste generated during construction phase.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TAI PO ROAD - TAI PO KAU
WONG YI AU ROAD
SHAN TIN ROAD
RIVERAIN BAYSIDE
CARE VILLAGE
THE PARAGON
GRAND PALISADES
CHATEAU ROYALE
REDLAND GARDEN
EMERALD PALACE
Strafford House
Hong Kong Family Welfare Society Elim Wife House
Wong Yi Au Fresh Water Pumping Station
Tsi Po Kau Sewage Pumping Station
Chateau de Mollerie
Tennis Court
Playground
Football Field
Basketball Court
Club House
Grave
Burial Urns
Columbarium
Pavilion (Car Park under)
Podium
Block 1
Block 2
Block 3
Block 4
Block 5
Block 6
Block 7
Block 8
Block 9
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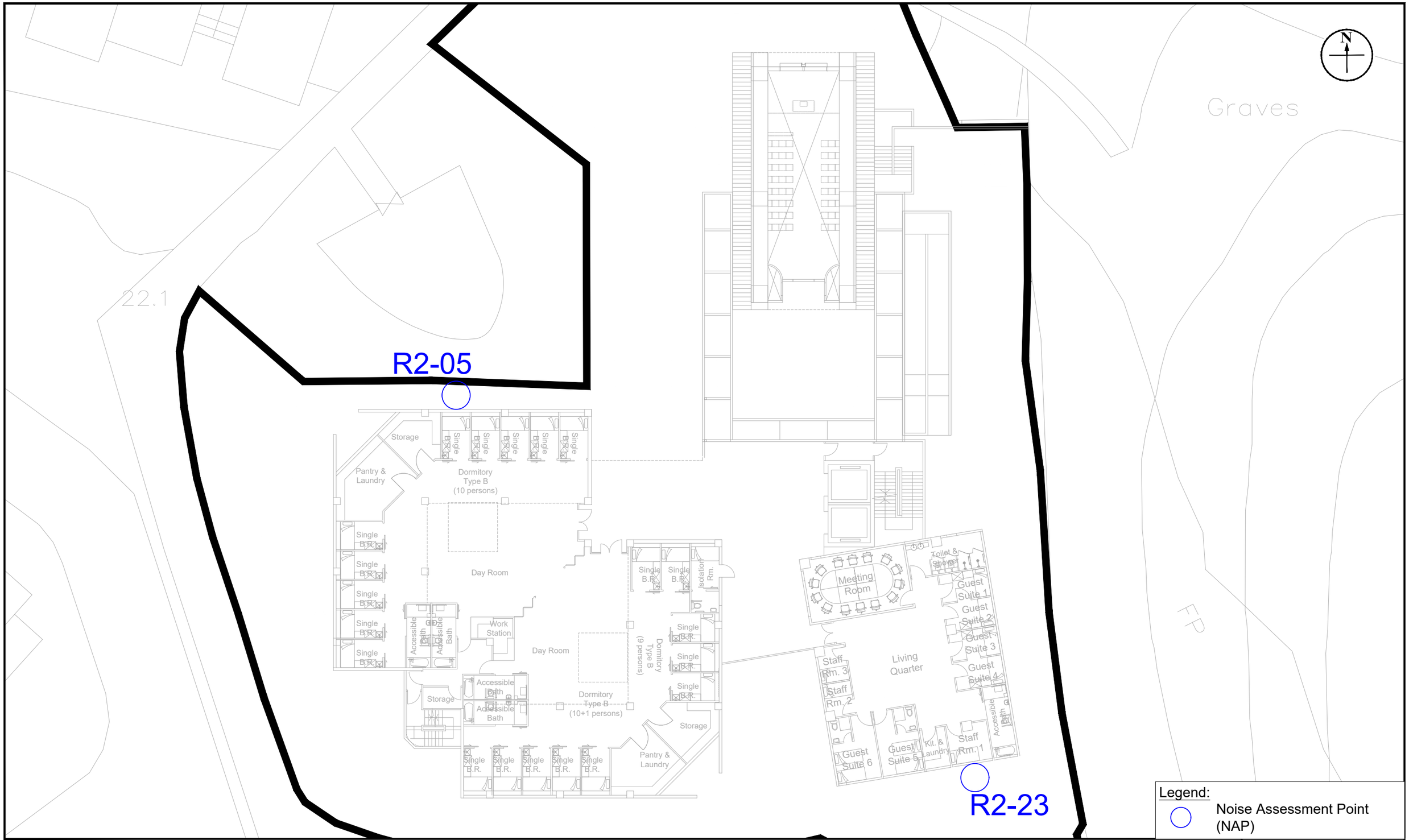

Figure: 4.2	RAMBOLL
Title: Location of Selected Noise Assessment Point for Railway Noise Impact Assessment	Drawn by: MK Checked by: CC
Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po	Rev.: 1.2 Date: Apr 2024

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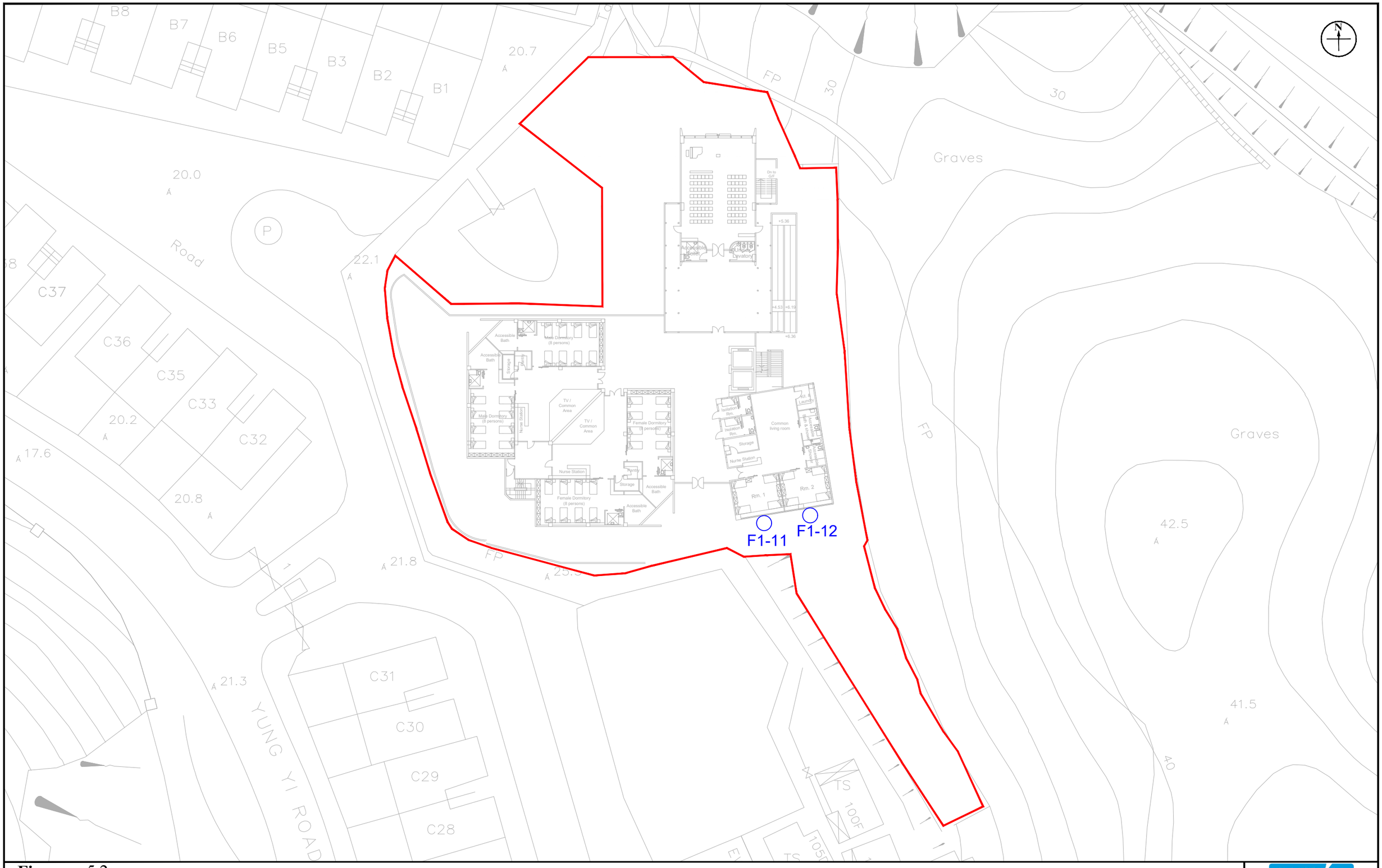

Figure: 5.2a	RAMBOLL
Title: Locations of Selected Noise Sensitive Receivers for Fixed Noise Impact Assessment (1/F)	Drawn by: MK Checked by: CC
Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po	Rev.: 1.1 Date: Feb 2024

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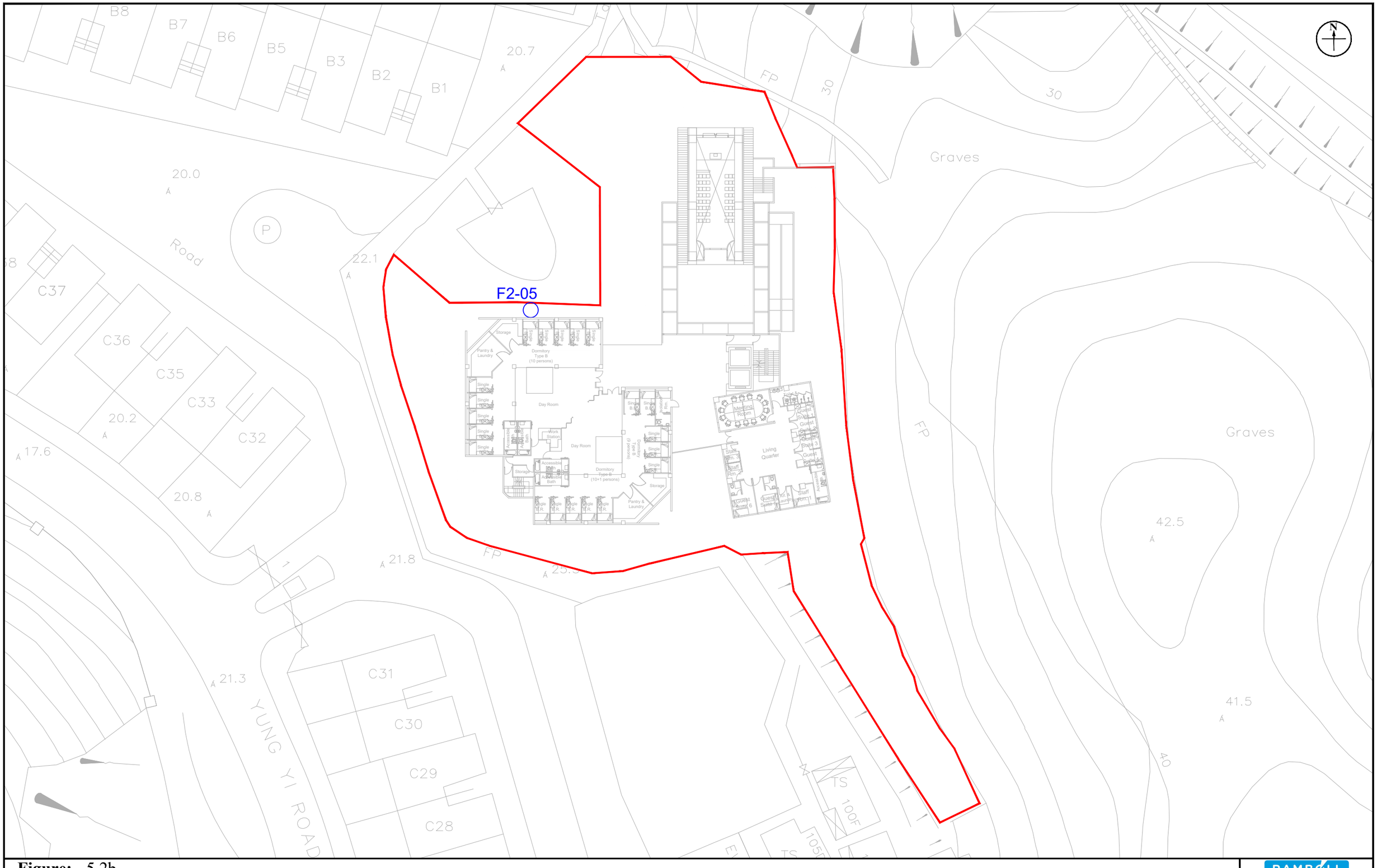
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Graves
C37
C36
C35
C33
C32
20.2
17.6
20.8
21.8
21.3
C31
C30
C29
C28
YUNG YI ROAD
Storage
Pantry & Laundry
Dormitory Type B (10 persons)
Day Room
Work Station
Accessible Bath
Dormitory Type B (10+1 persons)
Medical Room
Living Quarter
Guest Suite
Staff Rm
Guest Suite 6
Guest Suite 2
Kit.
Staff Rm 1
Guest Room 3
Guest Room 4
Guest Room 5
Guest Room 6
Guest Room 7
Guest Room 8
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Guest Room 13
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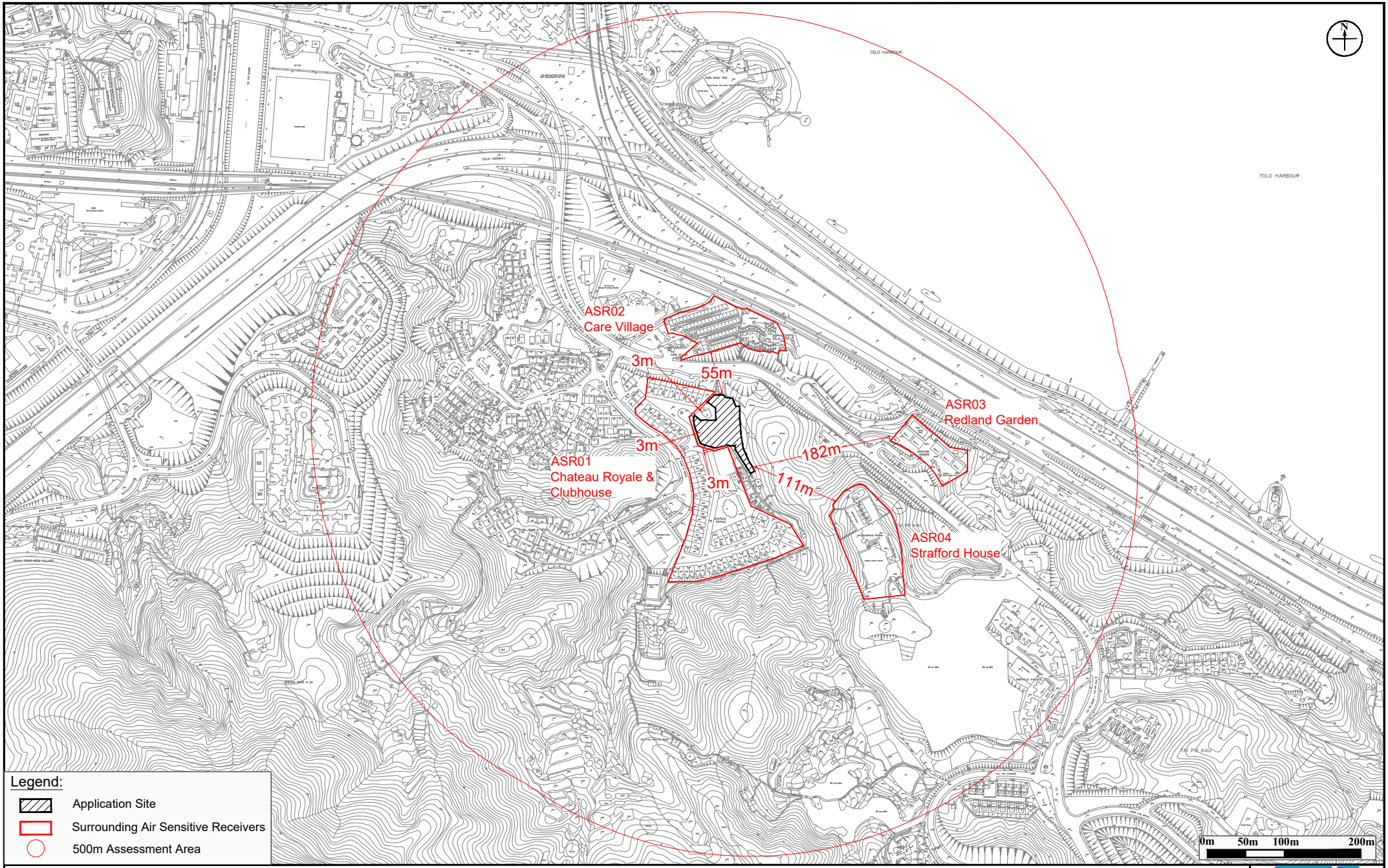

Figure: 6.1

Title: Location of Representative Air Sensitive Receivers for Construction Phase

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

Drawn by:	AL
Checked by:	CC
Rev.:	1.2
Date:	Apr 2024

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Appendix 3.1 Traffic Forecast for Year 2041

CKM ASIA LIMITED 陳錦敏亞洲有限公司

Traffic and Transportation Planning Consultants 交通及運輸策劃顧問

Our Ref: J7311/4

11 April 2024

Ramboll Hong Kong Limited
21/F, BEA Harbour View Centre
56 Gloucester Road
Wan Chai, Hong Kong

Attn: Mr CHIU Ka Fai, Calvin

Dear Mr Chiu,

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

Traffic Forecast for Noise Impact Assessment (NIA)

We refer to the following correspondences pertaining to the traffic forecast in support of NIA for the captioned project:

i. Letter dated 27th February 2024 to Transport Department [CKM ref.: J7311/3] with the traffic forecasting methodology and traffic forecast; and
ii. Letter dated 8th April 2024 from Transport Department [TD ref.: (NQBBY) in TD NR146/194-T20] with ***"no objection in principle"*** to the methodology of the traffic forecast for NIA.

We would like to confirm that the traffic forecast for NIA enclosed in our Letters [CKM ref.: J7311/3] is produced strictly in accordance to the traffic forecasting methodology agreed by Transport Department.

Thank you for your attention.

Yours sincerely

Tommy Law
Senior Traffic Engineer

Encl. 2 attachments

KIM\LCH

21st Floor, Methodist House, 36 Hennessy Road, Wanchai, Hong Kong
香港灣仔軒尼詩道36號循道衛理大廈21樓

Tel 電話: (852) 2520 5990 Fax 傳真: (852) 2528 6343
Email 電郵: mail@ckmasia.com.hk Website 網址: http://www.ckmasia.com.hk

Item i –
Letter dated 27th February 2024
to Transport Department

CKM ASIA LIMITED 陳錦敏亞洲有限公司

Traffic and Transportation Planning Consultants 交通及運輸策劃顧問

Our Ref: J7311/3

27 February 2024

Transport Department
NT Regional Office
Traffic Engineering (NTE) Division
Project & Tai Po Section
9/F, Mongkok Government Offices,
30 Luen Wan Street, Mongkok, Kowloon.

Attn: Mr. LEUNG Hung Hay (Engr/Tai Po 1)
(BY POST & EMAIL: hunghayleung@td.gov.hk)

Dear Mr. Leung,

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

Traffic Forecast for Noise Impact Assessment (NIA)

CKM Asia Limited, a traffic and transportation planning consultancy firm, has been commissioned to produce the year 2041 traffic data for the purpose of conducting the Noise Impact Assessment ("NIA") by the project Environmental Consultant.

We refer to the comment (13) from Environmental Protection Department dated 14 February 2024 (see **Appendix 1**), *"Section 3.3.2: The endorsement of the traffic data by the TD should be provided before finalizing the EA report."*.

Hence, we write to seek your agreement on the year 2041 traffic data we have produced for the NIA. Please find below the Traffic Forecasting Methodology and year 2041 traffic data.

Traffic Forecasting Methodology

The 2041 traffic data for the NIA are produced for the followings:

(a) the road sections located within 300m of the Proposed Residential Care Home for Persons with Disabilities – please refer to **Figure EIA1**; and
(b) Traffic data for 2 vehicle classes, i.e.
    i. Light Vehicles ("LV"): motorcycles, private cars and taxis; and
    ii. Heavy Vehicles ("HV"): light / medium / heavy goods vehicles, public / private light buses, non-franchised buses and franchised buses.

The Study Area is located within the NTE1 Base District Traffic Model ("BDTM"). The BDTM has traffic forecast up to year 2031, and to produce the traffic data for year 2041, the traffic flows are estimated with reference to the followings:

21st Floor, Methodist House, 36 Hennessy Road, Wanchai, Hong Kong
香港灣仔軒尼詩道36號循道衛理大廈21樓
Tel 電話: (852) 2520 5990 Fax 傳真: (852) 2528 6343
Email 電郵: mail@ckmasia.com.hk Website 網址: http://www.ckmasia.com.hk

i. 2031 peak hour traffic flows from the BDTM;
ii. traffic growth rate from 2031 to 2041, which is estimated "Hong Kong Population Projection 2022 – 2046" published by Census and Statistic Department; and
iii. traffic generation associated with the Proposed Development, which is estimated using the trip generation rates found in the Transport Planning and Design Manual.

Year 2041 Traffic Data

After applying the derived traffic growths to the trip ends of the 2031 BDTM, updated 2041 matrices are produced for the traffic model assignment. The output from the traffic model assignment, i.e., the year 2041 traffic data, is presented in the attached **Table A**.

It is much appreciated if your department could comment on the year 2041 traffic data produced, which is used for the NIA at your earliest convenience.

Should you have any queries, please do not hesitate to contact the undersigned.

Thank you for your attention.

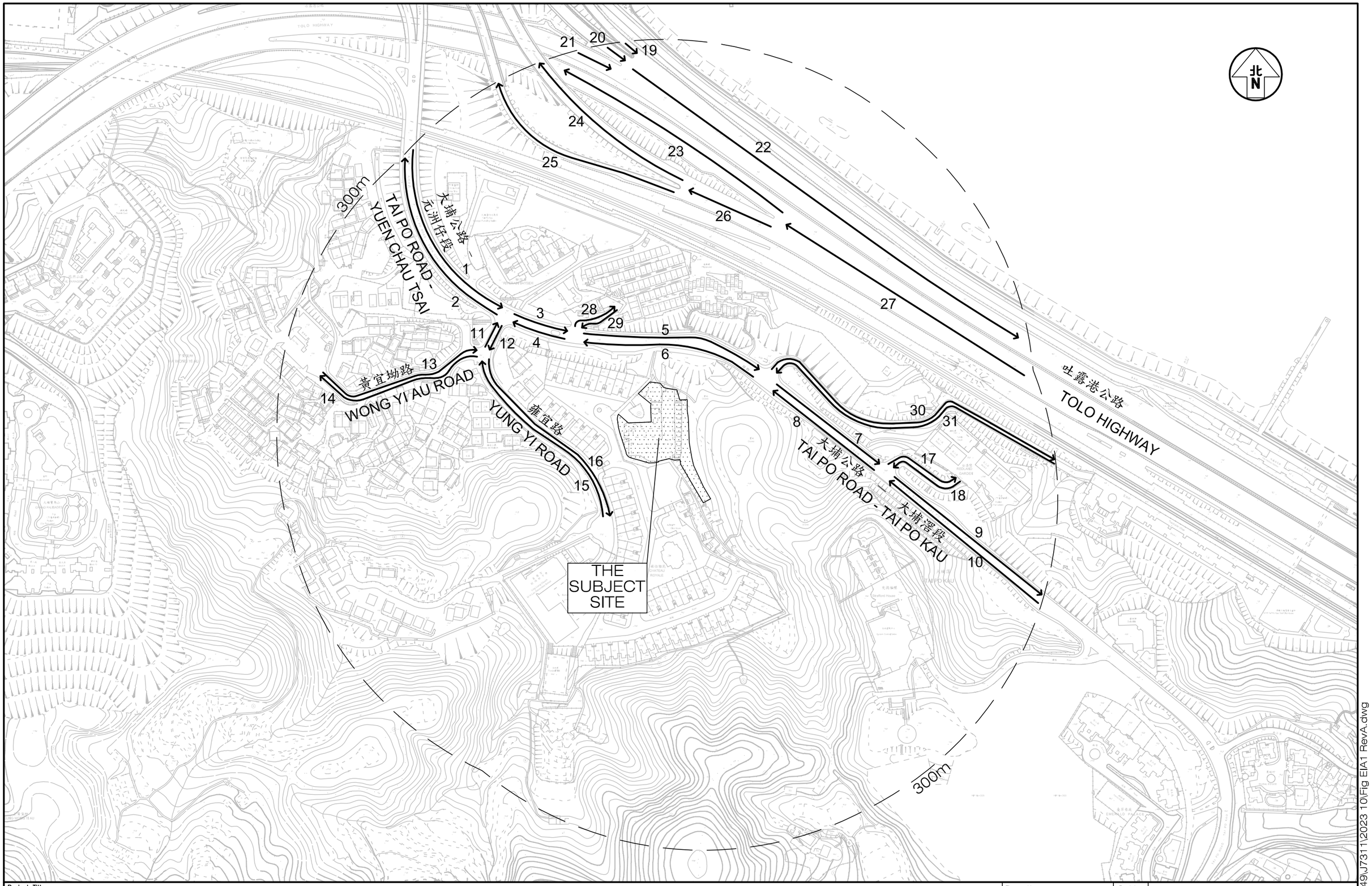
Yours sincerely

CHIN Kim Meng
Director

Encl. Figure EIA1
Table A
1 Appendix

KIM\LCH\CYY

Figure



Project Title	PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PERMITTED SOCIAL WELFARE FACILITIES (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) IN "GOVERNMENT, INSTITUTION OR COMMUNITY" AND "GREEN BELT" ZONES AT THE "FORMER FISH MARKETING ORGANIZATION (FMO) TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO	J7311	Figure No. EIA1 / Revision A
Figure Title	LOCATION OF TRAFFIC DATA	Designed by A Y T / Drawn by N C M / Checked by K C	Scale in A3 1 : 3000 / Date 10 JAN 2024

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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Appendix 1
Comments from EPD
Dated 14 February 2024

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (RCHD) at FMO Primary School, Tai Po
Pre-submission for s16 Application

Comments from TD (Officer: Mr. Peter AU; Te1: 2399 2442)

The consultant should advise the estimated public transport demand arising from the proposed development, whether existing public transport services can cater for the demand (and if not, service enhancement should be suggested) and whether there is sufficient queuing area at the existing public transport facilities.

Comments from EPD (Officer: Ms. Maureen CHANG; Te1: 2835 1867)

General Comments

1. Our comments on Appendix 5 and Appendix 6 on the environmental assessment and sewerage impact assessment are provided below for the applicant to follow up.

2. Please include the scope of works for the proposed RCHD. e.g. demolition of the former Fishing Marketing Organization Tai Po Primary School, construction of the RCHD, etc.

3. Section 1.2.2: Please clarify whether the primary school is still at the site.

4. Please advise the access to the site. Whether a new access road is required? And please advise the construction and management party of the access road.

Appendix 5 Environmental Assessment

Chapter 2 Air Quality Impact Assessment

1. Please supplement the following information:
    - Background AQ data from AQMS
    - Background AQ data from PATH
    - Discussion of the relevant legislations, technical circulars and guidelines e.g. buffer distance requirements for different emission sources in HKPSG
    - Identification of ASRs of the proposed development during operation phase

2. Section 2.2.2: Please be reminded that it is the responsibility of the applicant and their consultants to ensure the validity of the chimney data by their own site surveys.

Should the information of industrial chimneys be subsequently found to be incorrect, the assessment result presented in the planning application would be invalid.

3. Section 2.2.3: Please confirm there is no chimney emission from the proposed development.

4. Section 2.4.3 - Please revise as follows: It is considered that no significant adverse air quality impact on the proposed development is anticipated.

5. Section 6: Please confirm whether there are any concurrent projects in the surrounding area and if positive, their cumulative air quality impact shall be addressed.

6. Section 6.2.3: Please provide the names, assessment heights, uses and the distances to the project boundary of the ASRs in a table form in the main text.

7. In view of the proximity of the ASRs (<10m) to the proposed development, please consider the following mitigation measures:

- Adopt site hoarding at sufficient height close to those concerned ASRs;
- Locate the haul road away from those concerned ASRs;
- Avoid dusty works or placing stockpiles near to those concerned ASRs;
- Minimization of unpaved, exposed earth by immediate covering/ permanent paving as soon as the works have been completed.

8. Figure 6.1: The ASRs should be represented by the nearest points to the proposed development instead of blocks. Please revise.

Chapters 3 to 5 on Noise

1. Section 3.3.2: The endorsement of the traffic data by the TD should be provided before finalizing the EA report.

2. Section 3.4.1: It is noted that there are no noise assessment points assigned at Guest Suites facing west. Please confirm that all openable window for ventilation with accommodation use were assigned with noise assessment points.

3. Section 3.3.4: Instead of referring the data in the CED, the consultant should make reference to the HyD guideline in determining the road surface material for high speed road.

4. Sections 4.2.3 and 5.2.2: Given a long separation distance between the proposed development and the Tolo Highway, the proposed development may be directly affected by the Tai Po Road - Tai Po Kau instead of the Tolo Highway. Therefore, please review the degree to which NSR is affected by the IF and its relevant ASR rating.

5. Sections 4.5, 4.6 and 4.7: The selected location for railway noise impact assessment is actually not a noise sensitive receiver which relies on opened window for ventilation. Please revise the relevant wording "Noise Sensitive Receivers" or "NSR" as "Noise Assessment Point".

6. Section 4.6: Please also provide the assessment results for Leq (24 hours) and Lmax to confirm the compliance of the requirements under the HKPSG.

7. Section 5.3: Please also evaluate any planned fixed noise sources, such as MVAC equipment and building services systems, are and its noise impact to the existing and planned NSRs nearby.

8. Section 5.3.2(a):
   (i) Please explain why the twelve VRVs identified are grouped to 4 fixed noise sources and how to determine their noise levels in the assessment.
   (ii) Please explain how to determine the noise levels of the identified AC units based on the catalogue of the reference AC units.

9. Section 5.3.2(b): Please confirm the fixed noise sources in the WSD Tai Po Kau Fresh Water Pumping Station are in operation during the site survey.

10. Section 5.3.2(c): The fixed noise sources are likely not be in operation when the pumping stations are under construction. Please confirm the fixed noise sources in the pumping stations are in operation during the site survey. Alternatively, please obtain the operation data from the operator / relevant departments and review whether they need to be included in the assessment.

11. Section 5.5.1: Please explain why a correction for tonality of +3dB(A) is applied without any measurement data as the maximum correction for tonality is +6 dB(A) in the IND-TM.

12. Comment on the noise models (see attached).

Chapter 6 Construction Phase Impact

1. Section 6.7.7: FSD's reply is still pending. We will provide comments if there are findings of potential contamination as revealed by the FSD.

2. Section 6.5.3: Please tabulate the WSRs, the table shall include the WSR ID, description, type (natural watercourse, modified watercourse, channelized, pond etc.), status (active, inactive) and estimated distance to the site. And, please indicate the WSR ID in Figure 6.2.

3. Section 6.5.4, B: 4th bullet: suggest revised as "...paved with backfill to reduce vehicle tracking..."

Appendix 6 Sewerage Impact Assessment

1. Section 2.4.2 Table 2.1 & Appendix 2.1 Table 1: The UFF type of office should be J10 Community, Social & Personal Services instead of J12 Public Administration.

2. Figure 2.1: For manhole FMH1005813, the incoming pipe A2 from manhole T3 should be indicated in the figure.

3. Appendix 2.1 Table 3: For Riverain Bayside, please include the sewage flow of swimming pool.

4. Appendix 2.1 Table 4a: Please review if the sewerage generated from the public toilets in catchment C should be flowed to segment S2- S3 instead of S3- S4.

Comments from PlanD (Officer: Ms. Sandy WU; Te1: 2158 6381)

For Section 4.3 and Table 4.1 of the TIA regarding the planning parameters for the major planned/ committed developments in the vicinity of the proposed RCHD development, please find the unit number based on the latest approved building plans/ s.12A application below for your information.

Site	**Location**	**Use**
3	Tai Po Town Lot No. 234	Residential use with ~~170~~ **163** flats
4	Tai Po Town Lot No. 241*	Residential use with ~~60~~ **116** flats

5	Various lots in D.D. 34 and 36 and adjoining Government Land^	Residential use with ~~2,250~~ **2,198** flats
6	Tai Po Town Lot Nos. 244 (Silicon Hill and University Hill)	Residential use with ~~1,870~~ **1,871** flats
7	Proposed Sports Centre, Social Welfare Facilities and PVP in Area 6	Sports Centre, Social Welfare Facilities and Public Vehicle Park
8	Tai Po Town Lot No. 243 (Ma Wo Road)	Residential use with ~~1,500~~ **1,650** flats
9	Proposed Public Housing Development at To Yuen Tung, Ma Wo Road	Residential use with 2,400 flats

*based on latest building plan which is subject to change.

^based on a s.12A application No. Y/TP/28 agreed by the Rural and New Town Planning Committee of the Town Planning Board on 11.6.2021.

14.2.2024

Table A
Year 2041 Traffic Data

TABLE A – PEAK HOUR TRAFFIC FLOW AND VEHICLE COMPOSITION

YEAR 2041 TRAFFIC FORECAST

Date: 27 February 2024 **Job No.: J7311**

Link ID	Road Section	From Road	To Road	AM Peak Hour		
				Traffic Flows (veh/hr)	Vehicle Composition	
					LV	HV
L001	Tai Po Road - Yuen Chau Tsai (EB)	Tolo Highway	Yung Yi Road	900	83.2%	16.8%
L002	Tai Po Road - Yuen Chau Tsai (WB)	Yung Yi Road	Tolo Highway	600	82.3%	17.7%
L003	Tai Po Road - Tai Po Kau (EB)	Yung Yi Road	Access road to Care Village	750	82.1%	17.9%
L004	Tai Po Road - Tai Po Kau (WB)	Access road to Care Village	Yung Yi Road	400	77.6%	22.4%
L005	Tai Po Road - Tai Po Kau (EB)	Access road to Care Village	Access road to Trackside Villas	750	81.6%	18.4%
L006	Tai Po Road - Tai Po Kau (WB)	Access road to Trackside Villas	Access road to Care Village	400	77.9%	22.1%
L007	Tai Po Road - Tai Po Kau (EB)	Access road to Trackside Villas	Access road to Redland Garden	750	81.2%	18.8%
L008	Tai Po Road - Tai Po Kau (WB)	Access road to Redland Garden	Access road to Trackside Villas	400	78.1%	21.9%
L009	Tai Po Road - Tai Po Kau (EB)	Access road to Redland Garden	Daisyfield	750	81.1%	18.9%
L010	Tai Po Road - Tai Po Kau (WB)	Daisyfield	Access road to Redland Garden	400	77.5%	22.5%
L011	Yung Yi Road (NB)	Wong Yi Au Road	Tai Po Road -Yuen Chau Tsai	300	88.7%	11.3%
L012	Yung Yi Road (SB)	Tai Po Road -Yuen Chau Tsai	Wong Yi Au Road	250	85.4%	14.6%
L013	Wong Yi Au Road (EB)	Wong Yi Au Village	Yung Yi Road	100	86.2%	13.8%
L014	Wong Yi Au Road (WB)	Yung Yi Road	Wong Yi Au Village	50	83.0%	17.0%
L015	Yung Yi Road (NB)	Access road to WD. Yung Yi Villa	Wong Yi Au Road	200	90.1%	9.9%
L016	Yung Yi Road (SB)	Wong Yi Au Road	Access road to WD. Yung Yi Villa	200	87.0%	13.0%
L017	Access road to Redland Garden (EB)	Tai Po Road - Tai Po Kau	Redland Garden	50	75.0%	25.0%
L018	Access road to Redland Garden (WB)	Redland Garden	Tai Po Road - Tai Po Kau	50	84.6%	15.4%
L019	Tolo Highway slip road (EB)	Tai Po Road - Yuen Chau Tsai	Tolo Highway	650	61.8%	38.2%
L020	Yuen Shin Road (SB)	Tai Po Tai Wo Road	Tolo Highway	1,750	72.6%	27.4%
L021	Tolo Highway (SB)	Tolo Highway	Tolo Highway	5,050	71.3%	28.7%
L022	Tolo Highway (SB)	Yuen Shin Road	Tolo Highway slip road (SB)	7,550	70.7%	29.3%
L023	Tolo Highway (NB)	Tolo Highway	Tolo Highway	4,200	74.1%	25.9%
L024	Yuen Shin Road (NB)	Tolo Highway	Yuen Shin Road	1,550	78.5%	21.5%
L025	Tolo Highway slip road (WB)	Tolo Highway	Tai Po Road - Yuen Chau Tsai	650	70.1%	29.9%
L026	Tolo Highway slip road (WB)	Tolo Highway	Yuen Shin Road	2,150	76.2%	23.8%
L027	Tolo Highway (NB)	Tolo Highway	Tolo Highway	6,300	74.7%	25.3%
L028	Access Road to Care Village (EB)	Tai Po Road - Tai Po Kau	Care Village	50	75.0%	25.0%
L029	Access Road to Care Village (WB)	Care Village	Tai Po Road - Tai Po Kau	50	52.6%	47.4%
L030	Access Road to Trackside Villas (EB)	Tai Po Road - Tai Po Kau	Trackside Villas	50	72.7%	27.3%
L031	Access Road to Trackside Villas (WB)	Trackside Villas	Tai Po Road - Tai Po Kau	50	64.5%	35.5%

Note: "LV" includes motorcycle, private car and taxi
"HV" includes light / medium / heavy goods vehicle, public / private light bus, non-franchised bus and franchised bus

TABLE A – PEAK HOUR TRAFFIC FLOW AND VEHICLE COMPOSITION

YEAR 2041 TRAFFIC FORECAST

Date: 27 February 2024 **Job No.: J7311**

Link ID	Road Section	From Road	To Road	PM Peak Hour		
				Traffic Flows (veh/hr)	Vehicle Composition	
					LV	HV
L001	Tai Po Road - Yuen Chau Tsai (EB)	Tolo Highway	Yung Yi Road	500	85.7%	14.3%
L002	Tai Po Road - Yuen Chau Tsai (WB)	Yung Yi Road	Tolo Highway	600	82.6%	17.4%
L003	Tai Po Road - Tai Po Kau (EB)	Yung Yi Road	Access road to Care Village	400	84.9%	15.1%
L004	Tai Po Road - Tai Po Kau (WB)	Access road to Care Village	Yung Yi Road	500	82.6%	17.4%
L005	Tai Po Road - Tai Po Kau (EB)	Access road to Care Village	Access road to Trackside Villas	400	84.9%	15.1%
L006	Tai Po Road - Tai Po Kau (WB)	Access road to Trackside Villas	Access road to Care Village	500	82.7%	17.3%
L007	Tai Po Road - Tai Po Kau (EB)	Access road to Trackside Villas	Access road to Redland Garden	350	85.6%	14.4%
L008	Tai Po Road - Tai Po Kau (WB)	Access road to Redland Garden	Access road to Trackside Villas	500	83.1%	16.9%
L009	Tai Po Road - Tai Po Kau (EB)	Access road to Redland Garden	Daisyfield	350	84.7%	15.3%
L010	Tai Po Road - Tai Po Kau (WB)	Daisyfield	Access road to Redland Garden	450	82.4%	17.6%
L011	Yung Yi Road (NB)	Wong Yi Au Road	Tai Po Road -Yuen Chau Tsai	150	79.8%	20.2%
L012	Yung Yi Road (SB)	Tai Po Road -Yuen Chau Tsai	Wong Yi Au Road	200	84.9%	15.1%
L013	Wong Yi Au Road (EB)	Wong Yi Au Village	Yung Yi Road	50	79.2%	20.8%
L014	Wong Yi Au Road (WB)	Yung Yi Road	Wong Yi Au Village	100	89.6%	10.4%
L015	Yung Yi Road (NB)	Access road to WD. Yung Yi Villa	Wong Yi Au Road	100	80.9%	19.1%
L016	Yung Yi Road (SB)	Wong Yi Au Road	Access road to WD. Yung Yi Villa	100	79.3%	20.7%
L017	Access road to Redland Garden (EB)	Tai Po Road - Tai Po Kau	Redland Garden	50	88.2%	11.8%
L018	Access road to Redland Garden (WB)	Redland Garden	Tai Po Road - Tai Po Kau	50	90.9%	9.1%
L019	Tolo Highway slip road (EB)	Tai Po Road - Yuen Chau Tsai	Tolo Highway	650	72.4%	27.6%
L020	Yuen Shin Road (SB)	Tai Po Tai Wo Road	Tolo Highway	1,650	80.7%	19.3%
L021	Tolo Highway (SB)	Tolo Highway	Tolo Highway	5,050	77.5%	22.5%
L022	Tolo Highway (SB)	Yuen Shin Road	Tolo Highway slip road (SB)	7,250	77.6%	22.4%
L023	Tolo Highway (NB)	Tolo Highway	Tolo Highway	4,400	77.5%	22.5%
L024	Yuen Shin Road (NB)	Tolo Highway	Yuen Shin Road	1,700	76.4%	23.6%
L025	Tolo Highway slip road (WB)	Tolo Highway	Tai Po Road - Yuen Chau Tsai	900	70.3%	29.7%
L026	Tolo Highway slip road (WB)	Tolo Highway	Yuen Shin Road	2,600	74.2%	25.8%
L027	Tolo Highway (NB)	Tolo Highway	Tolo Highway	6,950	76.2%	23.8%
L028	Access Road to Care Village (EB)	Tai Po Road - Tai Po Kau	Care Village	50	83.3%	16.7%
L029	Access Road to Care Village (WB)	Care Village	Tai Po Road - Tai Po Kau	50	80.0%	20.0%
L030	Access Road to Trackside Villas (EB)	Tai Po Road - Tai Po Kau	Trackside Villas	50	76.2%	23.8%
L031	Access Road to Trackside Villas (WB)	Trackside Villas	Tai Po Road - Tai Po Kau	50	72.2%	27.8%

Note: "LV" includes motorcycle, private car and taxi
"HV" includes light / medium / heavy goods vehicle, public / private light bus, non-franchised bus and franchised bus

Item ii –
Letter dated 8th April 2024
from Transport Department

NQBBW

By Fax
2528 6343

運輸署
Transport Department

本署檔案 Our Ref. : (NQBBY) in TD NR146/194-T20
來函檔號 Your Ref. : J7311/3
電 話 Tel. : 2399 2563
圖文傳真 Fax : 2381 3799
電 郵 Email : hunghayleung@td.gov.hk

8 April 2024

CKM Asia Limited
21st Floor, Methodist House,
36 Hennessy Road,
Wanchai,
Hong Kong
(Attn: Mr. CHIN Kim Meng)

Dear Sir,

Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fish Market Organization Tai Po Primary School, Wong Yi Au, Tai Po

Traffic Forecast for Noise Impact Assessment (NIA)

I refer to your above quoted letter dated 27 February 2024 and received by us on 1 March 2024 regarding the captioned.

Please note that the Noise Impact Assessment is not under our purview. We are not in a position to provide comments on the traffic figures tailor-made for the environmental assessment purposes.

Notwithstanding the above, please note that we would have no objection in principle to the methodology for traffic forecast if it is the same as that adopted in the traffic impact assessment for the captioned project and the base year observed traffic data and road descriptions tally with those for traffic impact assessment.

Should there be any discrepancy in the traffic data and the methodology for traffic forecast between traffic impact assessment and the subject assessment, please highlight for our consideration.

Yours faithfully,

(LEUNG Hung-hay)
for Commissioner for Transport

新界分區辦事處
NT Regional Office
九龍聯運街三十號旺角政府合署七樓
7th Floor, Mong Kok Government Offices, 30 Luen Wan Street, Kowloon.
圖文傳真 Fax No.: 2381 3799 (新界區) (NTRO)
網址 Web Site: http://www.td.gov.hk

Appendix 4.4 Sample Calculation of Railway Noise Impact Assessment

Project	HOLF
NSR ID	R2-23
NSR (x)	836446.7
NSR (y)	833571.4
NSR (z)	35.80
Receptor Type	RCHD
Noise Criterion, dB(A)	50

DETAILED CALCULATIONS

NA/BNA/0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BNA	BNA	BNA	BNA
Track ID	**EB01**	**EB02**	**EB03**	**EB04**	**EB05**	**EB06**	**EB07**	**EB08**	**EB09**	**EB10**	**EB11**	**EB12**	**EB13**	**EB14**	**EB15**	**EB16**	**EB17**	**EB18**
Near Track / Far Track	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**	**Far**
Railway Noise																		
SEL [a]	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**	**81.9**
Corrected Measurement Distance, m	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**
Height of Receiver, mPD	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80
Height of Notional Noise Source, mPD	7.00	7.00	7.00	6.90	6.90	6.80	6.80	6.90	7.00	7.00	6.90	6.80	6.90	7.00	6.90	7.00	7.10	7.10
Solid Parapet/ Noise Barrier Height, mPD	0.00	12.00	12.00	11.9	11.90	11.80	11.80	11.90	12.00	12.00	11.90	11.80	11.90	0.00	0.00	0.00	0.00	0.00
Barrier Start Point (x)	0.00	836234.61	836254.17	836277.22	836300.52	836335.23	836368.90	836386.14	836428.15	836449.73	836474.67	836489.14	836525.24	0.00	0.00	0.00	0.00	0.00
Barrier Start Point (y)	0.00	833837.82	833831.74	833822.15	833815.68	833803.00	833788.02	833782.69	833764.42	833754.80	833742.93	833736.04	833717.69	0.00	0.00	0.00	0.00	0.00
Barrier End Point (x)	0.00	836254.17	836277.79	836299.94	836335.23	836369.52	836385.48	836428.15	836449.73	836474.67	836489.14	836525.24	836562.56	0.00	0.00	0.00	0.00	0.00
Barrier End Point (y)	0.00	833831.74	833823.76	833814.10	833803.00	833789.64	833781.10	833764.42	833754.80	833742.93	833736.04	833717.69	833697.64	0.00	0.00	0.00	0.00	0.00
Horizontal Distance Between Receiver and Barrier Start Point (B1R), m	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Horizontal Distance Between Barrier Start Point and Barrier End Point (B1B2), m	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Horizontal Distance Between Receiver and Barrier End Point (B2R), m	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bisected View Angle of Barrier	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Angle RB1B2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Length of Bisected Barrier, m	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Angle Bisected Barrier point O (x)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Angle Bisected Barrier point O (y)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barrier Projection Point (x)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barrier Projection Point (y)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Horizontal Distance Between Notional Noise Source and Solid Parapet/Noise Barrier, m	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Horizontal Distance Between Notional Noise Source and NSR, m	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**176.4**	**176.4**	**176.2**	**173.4**
View angle, degree	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**6.1**	**8.6**	**4.8**	**1.1**
Acute angle, degree	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**53.6**	**46.2**	**39.5**	**35.9**
Slant Distance Between Notional Noise Source and Noise Barrier (SB), m	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0
Slant Distance Between Solid Parapet/NoiseBarrier and Receiver (BR), m	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0
Slant Distance Between Source and Receiver (SR) (d'), m	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	178.7	178.7	178.5	175.8
Path Length Difference (P.L.D.), m	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0
Angle SB, degree	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Angle SR, degree	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0
Shadow Zone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	TRUE	TRUE	TRUE	TRUE
Distance Correction, dB(A) [c]	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**-8.5**	**-8.5**	**-8.5**	**-8.5**
View Angle Correction (CRN), dB(A) [d]	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**-13.6**	**-13.1**	**-16.7**	**-23.9**
Barrier Correction (CRN), dB(A) [e]	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**0.0**	**0.0**	**0.0**	**0.0**
Time Correction (30min), dB(A) [g]	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**-21.4**	**-21.4**	**-21.4**	**-21.4**
Track Deterioration Correction, dB(A) [h]	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3.0**	**3.0**	**3.0**	**3.0**
Façade Correction, dB(A) [j]	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**2.5**	**2.5**	**2.5**	**2.5**
Air Absorption Correction, dB(A) [l]	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**-1.2**	**-1.2**	**-1.2**	**-1.2**
L_{Aeq} ([a] + [c] + [d] + [e] + [g] + [h] + [j] + [l])	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**42.6**	**43.1**	**39.5**	**32.4**
Intensity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18304.38	20641.83	8941.54	1753.40
Railway Noise Overall L_{Aeq}	**49.4**	**49.4 at 26mPD**																

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Track	**EB01**	**EB02**	**EB03**	**EB04**	**EB05**	**EB06**	**EB07**	**EB08**	**EB09**	**EB10**	**EB11**	**EB12**	**EB13**	**EB14**	**EB15**	**EB16**	**EB17**	**EB18**
Preset Track Start Point (x)	836213.0	836236.3	836256.5	836280.2	836303.1	836337.8	836372.3	836389.1	836431.3	836452.9	836478.3	836492.4	836529.3	836566.3	836617.3	836661.9	836705.7	836737.1
Preset Track Start Point (y)	833852.4	833845.2	833838.9	833830.8	833823.0	833810.1	833796.6	833789.7	833771.5	833761.7	833749.8	833742.9	833724.2	833704.3	833675.0	833648.4	833622.2	833603.5
Preset Track Start Point (z)	7.0	7.0	7.0	6.9	6.9	6.8	6.8	6.9	7.0	7.0	6.9	6.8	6.9	7.0	6.9	7.0	7.1	7.1
Preset Track End Point (x)	836236.3	836256.5	836280.2	836303.1	836337.8	836372.3	836389.1	836431.3	836452.9	836478.3	836492.4	836529.3	836566.3	836617.3	836661.9	836705.7	836737.1	836765.8
Preset Track End Point (y)	833845.2	833838.9	833830.8	833823.0	833810.1	833796.6	833789.7	833771.5	833761.7	833749.8	833742.9	833724.2	833704.3	833675.0	833648.4	833622.2	833603.5	833586.7
Preset Track End Point (z)	7.0	7.0	7.0	6.9	6.9	6.8	6.8	6.9	7.0	7.0	6.9	6.8	6.9	7.0	6.9	7.0	7.1	7.1
Track Start Point (x)	836213.0	836236.3	836256.5	836280.2	836303.1	836337.8	836372.3	836389.1	836431.3	836452.9	836478.3	836492.4	836529.3	836566.3	**836636.8**	836661.9	836705.7	836737.1
Track Start Point (y)	833852.4	833845.2	833838.9	833830.8	833823.0	833810.1	833796.6	833789.7	833771.5	833761.7	833749.8	833742.9	833724.2	833704.3	**833663.3**	833648.4	833622.2	833603.5
Track Start Point (z)	7.0	7.0	7.0	6.9	6.9	6.8	6.8	6.9	7.0	7.0	6.9	6.8	6.9	7.0	6.9	7.0	7.1	7.1
Track End Point (x)	836236.3	836256.5	836280.2	836303.1	836337.8	836372.3	836389.1	836431.3	836452.9	836478.3	836492.4	836529.3	836566.3	836617.3	836661.9	836705.7	836737.1	**836745.4**
Track End Point (y)	833845.2	833838.9	833830.8	833823.0	833810.1	833796.6	833789.7	833771.5	833761.7	833749.8	833742.9	833724.2	833704.3	833675.0	833648.4	833622.2	833603.5	**833598.7**
Track End Point (z)	7.0	7.0	7.0	6.9	6.9	6.8	6.8	6.9	7.0	7.0	6.9	6.8	6.9	7.0	6.9	7.0	7.1	7.1
Track Slope (s)	-0.309	-0.314	-0.338	-0.344	-0.371	-0.391	-0.414	-0.431	-0.451	-0.470	-0.488	-0.506	-0.540	-0.575	-0.596	-0.596	-0.595	-0.579
Projection Point																		
Projection Point (x)	836505.5	836506.0	836508.3	836508.9	836511.3	836513.2	836515.4	836516.9	836519.1	836521.1	836523.1	836525.0	836529.2	836533.8	836537.0	836537.0	836536.7	836533.6
Projection Point (y)	833762.1	833760.6	833753.6	833752.2	833745.8	833741.5	833737.4	833734.6	833731.9	833729.7	833728.0	833726.4	833724.3	833723.0	833722.9	833722.9	833722.8	833721.4
Horizontal Distance																		
d	**199.55**	**198.31**	**192.39**	**191.19**	**185.98**	**182.67**	**179.66**	**177.70**	**176.07**	**174.91**	**174.21**	**173.71**	**173.77**	**174.84**	**176.35**	**176.36**	**176.16**	**173.41**
View Angle and Acute Angle																		
Distances																		
NA	365.5	345.3	328.2	308.3	289.6	262.3	237.1	225.7	200.7	190.4	181.2	177.5	173.8	178.8	211.2	228.6	264.0	292.3
NB	345.3	328.2	308.3	289.6	262.3	237.1	225.7	200.7	190.4	181.2	177.5	173.8	178.8	199.6	228.6	264.0	292.3	300.0
AB	24.4	21.1	25.0	24.2	37.0	37.0	18.1	46.0	23.7	28.0	15.7	41.4	42.0	58.8	29.2	51.1	36.5	9.6
>90?																		
ANB	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
NAB	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
NBA	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
Angles																		
View Angle	**2.2**	**2.1**	**2.7**	**3.0**	**5.2**	**6.2**	**3.5**	**10.4**	**6.3**	**8.2**	**4.9**	**13.5**	**13.6**	**16.7**	**6.1**	**8.6**	**4.8**	**1.1**
NAB	33.1	35.1	35.9	38.3	39.9	44.1	49.3	51.9	61.3	66.7	74.0	78.1	90.0	102.1	123.4	129.5	138.1	143.6
NBA	144.7	142.8	141.4	138.7	134.8	129.6	127.3	117.7	112.4	105.1	101.1	88.4	76.4	61.2	50.5	41.9	37.1	35.3
Acute Angle	**34.2**	**36.1**	**37.3**	**39.8**	**42.6**	**47.3**	**51.0**	**57.1**	**64.5**	**70.8**	**76.5**	**84.8**	**83.2**	**69.5**	**53.6**	**46.2**	**39.5**	**35.9**

NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BNA	BNA	BNA	BNA
WB01	**WB02**	**WB03**	**WB04**	**WB05**	**WB06**	**WB07**	**WB08**	**WB09**	**WB10**	**WB11**	**WB12**	**WB13**	**WB14**	**WB15**	**WB16**	**WB17**	**WB18**
Near	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**	**Near**
80.4	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**	**80.4**
25.0	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**	**25.0**
35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80	35.80
7.10	7.10	7.10	7.10	7.00	6.80	6.80	6.80	6.80	6.90	6.90	6.90	7.00	7.00	7.00	7.00	7.00	6.90
0.00	12.00	12.00	11.90	11.90	11.80	11.80	11.90	12.00	12.00	11.90	11.80	11.90	0.00	0.00	0.00	0.00	0.00
0.00	836234.61	836254.17	836277.22	836300.52	836335.23	836368.90	836386.14	836428.15	836449.73	836474.67	836489.14	836525.24	0.00	0.00	0.00	0.00	0.00
0.00	833837.82	833831.74	833822.15	833815.68	833803.00	833788.02	833782.69	833764.42	833754.80	833742.93	833736.04	833717.69	0.00	0.00	0.00	0.00	0.00
0.00	836254.17	836277.79	836299.94	836335.23	836369.52	836385.48	836428.15	836449.73	836474.67	836489.14	836525.24	836562.56	0.00	0.00	0.00	0.00	0.00
0.00	833831.74	833823.76	833814.10	833803.00	833789.64	833781.10	833764.42	833754.80	833742.93	833736.04	833717.69	833697.64	0.00	0.00	0.00	0.00	0.00
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**172.5**	**172.8**	**172.5**	**171.5**
NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**6.9**	**8.5**	**4.8**	**1.4**
NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**53.2**	**45.6**	**38.9**	**35.6**
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.9	175.2	174.9	174.0
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	0.0
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	TRUE	TRUE	TRUE	TRUE
NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**-8.4**	**-8.5**	**-8.4**	**-8.4**
NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**-13.1**	**-13.2**	**-16.8**	**-22.8**
NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**0.0**	**0.0**	**0.0**	**0.0**
NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**-21.4**	**-21.4**	**-21.4**	**-21.4**
NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**3.0**	**3.0**	**3.0**	**3.0**
NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**2.5**	**2.5**	**2.5**	**2.5**
NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**-1.2**	**-1.2**	**-1.2**	**-1.2**
NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**41.7**	**41.6**	**38.0**	**32.1**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14854.59	14540.70	6340.35	1625.46

WB01	**WB02**	**WB03**	**WB04**	**WB05**	**WB06**	**WB07**	**WB08**	**WB09**	**WB10**	**WB11**	**WB12**	**WB13**	**WB14**	**WB15**	**WB16**	**WB17**	**WB18**
836209.7	836235.2	836255.4	836279.0	836301.8	836336.6	836370.9	836387.6	836429.7	836451.3	836476.3	836490.8	836526.9	836564.4	836615.8	836660.4	836703.7	836735.1
833849.3	833841.6	833835.2	833827.3	833819.2	833806.5	833793.1	833786.1	833767.9	833758.2	833746.4	833739.4	833721.0	833700.9	833671.3	833644.7	833618.7	833600.0
7.1	7.1	7.1	7.1	7.0	6.8	6.8	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	6.9
836235.2	836255.4	836279.0	836301.8	836336.6	836370.9	836387.6	836429.7	836451.3	836476.3	836490.8	836526.9	836564.4	836615.8	836660.4	836703.7	836735.1	836766.6
833841.6	833835.2	833827.3	833819.2	833806.5	833793.1	833786.1	833767.9	833758.2	833746.4	833739.4	833721.0	833700.9	833671.3	833644.7	833618.7	833600.0	833581.3
7.1	7.1	7.1	7.1	7.0	6.8	6.8	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	6.9
836209.7	836235.2	836255.4	836279.0	836301.8	836336.6	836370.9	836387.6	836429.7	836451.3	836476.3	836490.8	836526.9	836564.4	**836632.6**	836660.4	836703.7	836735.1
833849.3	833841.6	833835.2	833827.3	833819.2	833806.5	833793.1	833786.1	833767.9	833758.2	833746.4	833739.4	833721.0	833700.9	**833661.3**	833644.7	833618.7	833600.0
7.1	7.1	7.1	7.1	7.0	6.8	6.8	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	6.9
836235.2	836255.4	836279.0	836301.8	836336.6	836370.9	836387.6	836429.7	836451.3	836476.3	836490.8	836526.9	836564.4	836615.8	836660.4	836703.7	836735.1	**836745.8**
833841.6	833835.2	833827.3	833819.2	833806.5	833793.1	833786.1	833767.9	833758.2	833746.4	833739.4	833721.0	833700.9	833671.3	833644.7	833618.7	833600.0	**833593.6**
7.1	7.1	7.1	7.1	7.0	6.8	6.8	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	6.9
-0.305	-0.314	-0.338	-0.352	-0.366	-0.391	-0.420	-0.432	-0.452	-0.470	-0.486	-0.506	-0.538	-0.575	-0.597	-0.600	-0.598	-0.592
836504.0	836504.9	836507.1	836508.3	836509.5	836511.8	836514.4	836515.5	836517.5	836519.4	836521.1	836523.3	836527.2	836531.9	836535.1	836535.5	836535.2	836534.0
833759.7	833757.0	833750.1	833746.6	833743.3	833737.9	833732.8	833730.9	833728.2	833726.1	833724.6	833722.9	833720.9	833719.6	833719.5	833719.6	833719.5	833719.0
196.82	**194.53**	**188.69**	**185.74**	**183.05**	**178.85**	**175.09**	**173.69**	**172.10**	**170.97**	**170.35**	**169.78**	**169.83**	**170.94**	**172.53**	**172.78**	**172.50**	**171.53**
365.2	343.1	325.9	305.9	287.1	259.6	234.3	222.7	197.3	186.8	177.5	173.7	169.8	175.0	206.5	226.0	261.3	289.8
343.1	325.9	305.9	287.1	259.6	234.3	222.7	197.3	186.8	177.5	173.7	169.8	175.0	196.5	226.0	261.3	289.8	300.0
26.6	21.1	24.9	24.2	37.0	36.9	18.0	45.9	23.7	27.6	16.1	40.6	42.5	59.4	32.5	50.4	36.5	12.5
FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE	TRUE	TRUE	TRUE
TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
2.4	**2.1**	**2.7**	**2.9**	**5.2**	**6.2**	**3.5**	**10.5**	**6.4**	**8.2**	**5.1**	**13.5**	**14.0**	**17.2**	**6.9**	**8.5**	**4.8**	**1.4**
32.6	34.5	35.4	37.4	39.6	43.5	48.4	51.3	60.8	66.2	73.7	77.9	89.9	102.4	123.3	130.1	138.7	143.7
145.0	143.4	141.9	139.7	135.2	130.2	128.2	118.3	112.9	105.6	101.2	88.6	76.0	60.5	49.8	41.4	36.5	34.9
33.8	**35.6**	**36.7**	**38.8**	**42.2**	**46.7**	**50.1**	**56.5**	**63.9**	**70.3**	**76.2**	**84.6**	**83.1**	**69.0**	**53.2**	**45.6**	**38.9**	**35.6**

WB10
EB11
WB11
EB12
WB12
EB13
WB13
EB14
WB14
EB15
WB15
EB16
WB16
EB17
WB17

Perpendicular Distance = 172.53m

View Angle = 6.9°

Acute Angle = 53.2°

R2-23

Playground

Tennis Court

Block 1

Block 2

Legend

- Noise Sensitive Receiver
- Site Boundary
- 300m Assessment Area from NSR

Appendix: 4.4a

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-23 (WB15)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

Drawn by:	MK
Checked by:	CC
Rev.:	1.2
Date:	Apr 2024

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WB10
EB11
WB11
EB12
WB12
EB13
WB13
EB14
WB14
EB15
WB15
EB16
WB16
EB17
WB17

Perpendicular Distance = 172.78m

View Angle = 8.5°

Acute Angle = 45.6°

R2-05

R2-23

Playground

SHR

Tennis Court

Block 1

Block 2

ESS

Tai Po Kau Fresh Water Pumping Station

Tai Po Country Trail

TAI PO ROAD

Legend

- Noise Sensitive Receiver
- Site Boundary
- 300m Assessment Area from NSR

Appendix: 4.4b

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-23 (WB16)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

Drawn by:	MK
Checked by:	CC
Rev.:	1.2
Date:	Apr 2024

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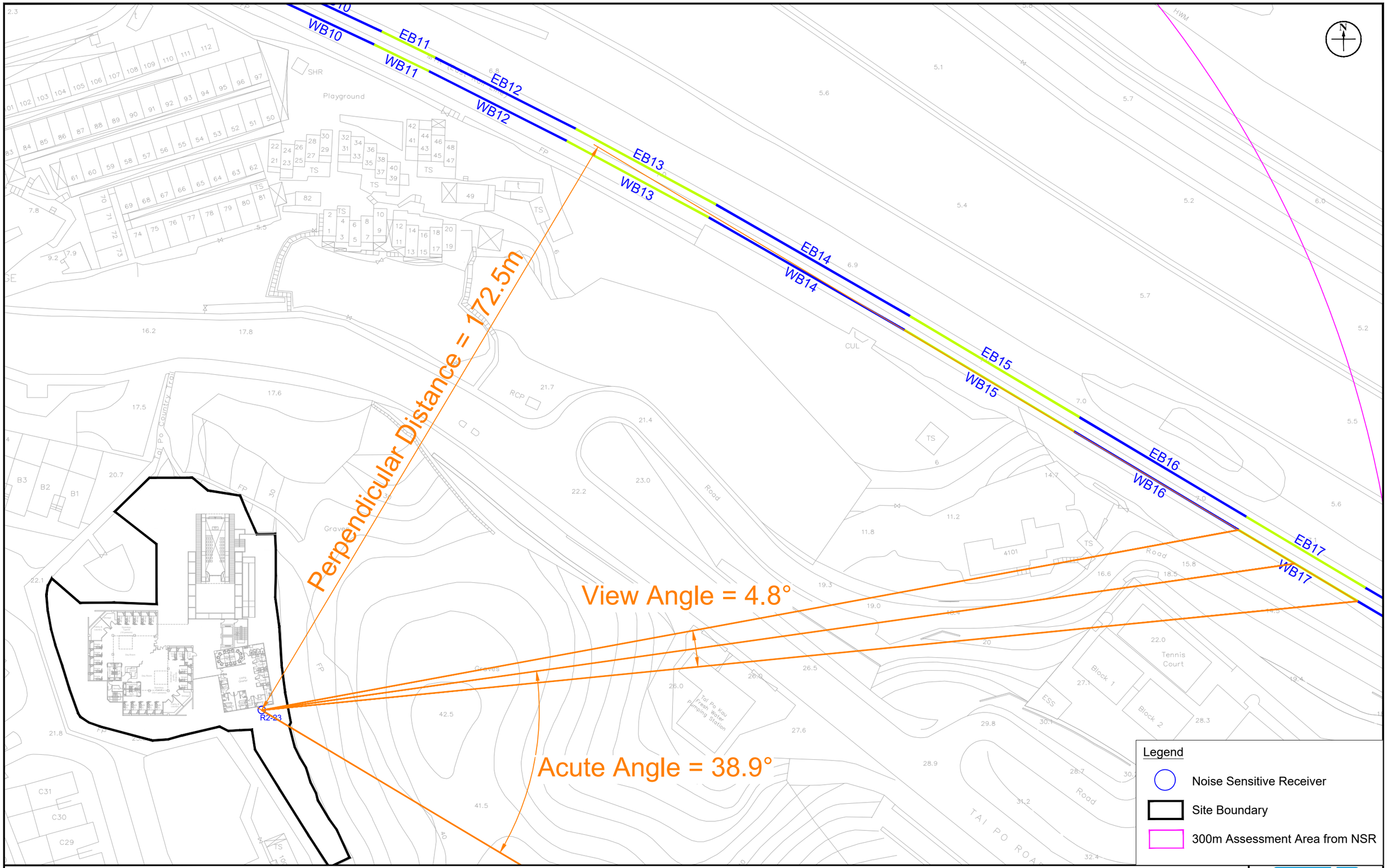

Appendix: 4.4c

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-23 (WB17)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

Drawn by:	MK
Checked by:	CC
Rev.:	1.2
Date:	Apr 2024

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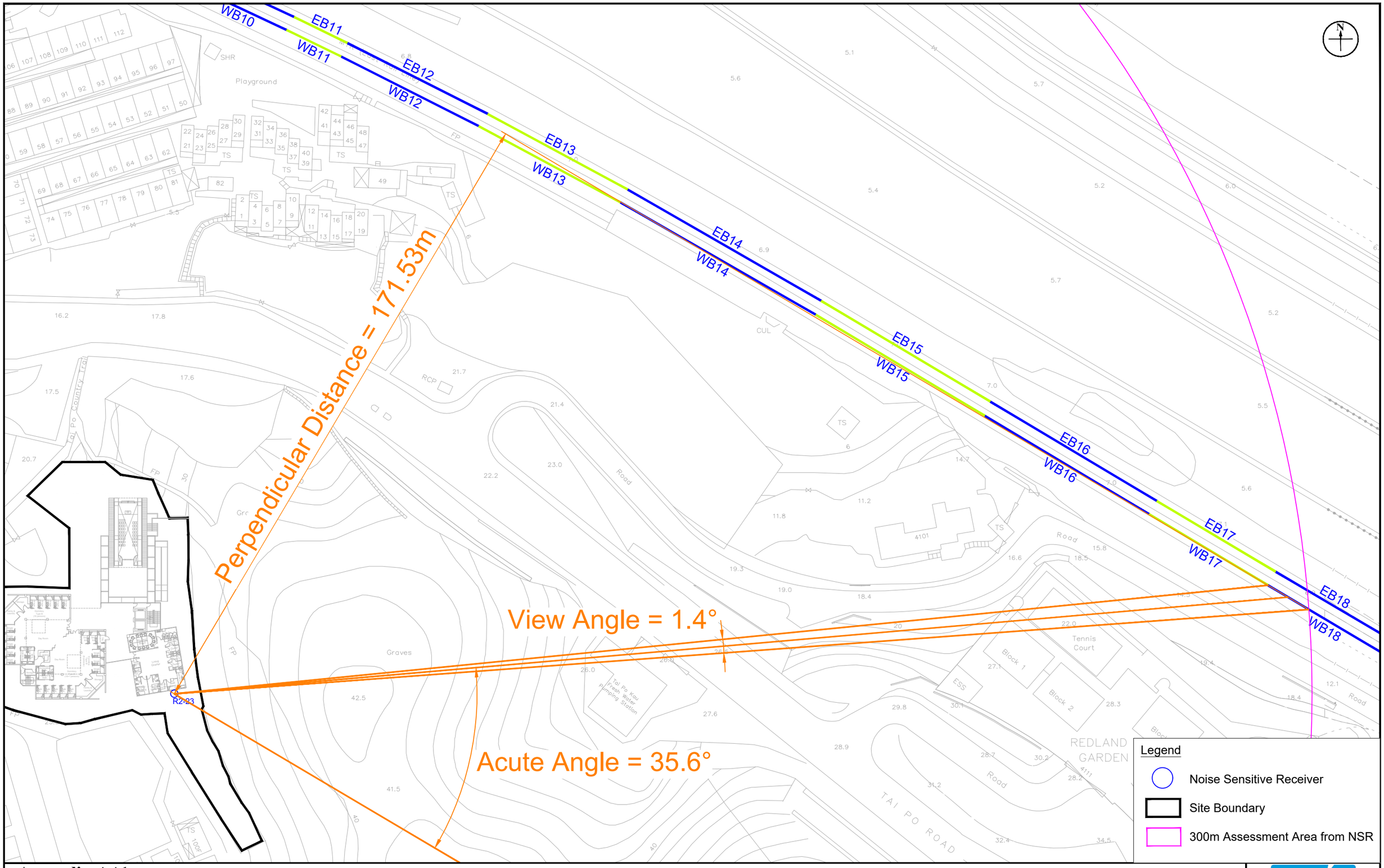

Appendix: 4.4d

Title: Determination of View Angle, Acute Angle and Perpendicular Distance for R2-23 (WB18)

Project: Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Homes for Persons with Disabilities) in "Government, Institution or Community" and "Green Belt" Zones at the "Former Fishing Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po

RAMBOLL

Drawn by:	MK
Checked by:	CC
Rev.:	1.2
Date:	Apr 2024

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Appendix 5.4 Detailed Calculation of Fixed Source Noise Impact Assessment

Source ID	Sources	Description	Coordinates		Daytime SWL, dB(A)	Nighttime SWL, dB(A)
			X	Y		
C01	China Light Power	Chiller	836616.6	833421.1	93.0	83.0
C02	China Light Power	Chiller	836618.9	833411.8	93.0	83.0
C03	China Light Power	Chiller	836620.3	833399.6	93.0	83.0
C04	China Light Power	Chiller	836655.8	833421.3	98.0	88.0
C05	China Light Power	Chiller	836656.7	833419.0	98.0	88.0
P02	Tai Po Kau Sewage Pumping Station	Pumping Station	836297.7	833797.1	99.5	89.5
P03	Ha Wong Yi Au Fresh Water Pumping Station	Pumping Station	836248.7	833800.5	99.5	89.5
V01	China Light Power	VRV	836608.3	833423.9	71.0	71.0
V02	China Light Power	VRV	836609.1	833421.8	71.0	71.0
V03	China Light Power	VRV	836610.0	833419.6	71.0	71.0
V04	China Light Power	VRV	836610.8	833417.4	71.0	71.0
V05	China Light Power	VRV	836611.6	833415.3	71.0	71.0
V06	China Light Power	VRV	836612.5	833413.1	71.0	71.0
V07	China Light Power	VRV	836614.5	833398.8	71.0	71.0
V08	China Light Power	VRV	836615.3	833396.6	71.0	71.0
V09	China Light Power	VRV	836616.1	833394.4	71.0	71.0
V10	China Light Power	VRV	836617.0	833392.3	71.0	71.0
V11	China Light Power	VRV	836617.8	833390.1	71.0	71.0
V12	China Light Power	VRV	836618.7	833388.0	71.0	71.0

Detailed Calculations for Fixed Noise Impact Assessment for the Proposed Development at Wong Yi Au, Tai Po

Noise Sensitive Receiver (NSR)	NSR (x)	NSR (y)	Noise Source (NS)	Description	Noise Source (x)	Noise Source (y)	Daytime SWL, dB(A)	Nighttime SWL, dB(A)	Horizontal Distance from Noise Source to Receiver(m) (NSR)	Distance Correction, dB(A)	Barrier Correction, dB(A)	Tonality Correction, dB(A)	Façade Correction, dB(A)	Daytime SPL, dB(A), $L_{eq\ (30\ min)}$	Nighttime SPL, dB(A), $L_{eq\ (30\ min)}$
F1-11	836440.6	833570.4	C01	China Light Power	836616.6	833421.1	93.0	83.0	230.8	-55.3	0	6	3	46.7	36.7
ASR	**A**		C02	China Light Power	836618.9	833411.8	93.0	83.0	238.6	-55.6	0	6	3	46.4	36.4
Day Time ANL	**60**		C03	China Light Power	836620.3	833399.6	93.0	83.0	248.0	-55.9	0	6	3	46.1	36.1
NightTime ANL	**50**		C04	China Light Power	836655.8	833421.3	98.0	88.0	261.8	-56.4	0	6	3	50.6	40.6
			C05	China Light Power	836656.7	833419.0	98.0	88.0	263.8	-56.4	0	6	3	50.6	40.6
			P02	Tai Po Kau Sewage Pumping Station	836297.7	833797.1	99.5	89.5	268.0	-56.6	0	6	3	51.9	41.9
			P03	Ha Wong Yi Au Fresh Water Pumping Station	836248.7	833800.5	99.5	89.5	299.6	-57.5	0	6	3	51.0	41.0
			V01	China Light Power	836608.3	833423.9	71.0	71.0	222.7	-55.0	0	6	3	25.0	25.0
			V02	China Light Power	836609.1	833421.8	71.0	71.0	224.7	-55.0	0	6	3	25.0	25.0
			V03	China Light Power	836610.0	833419.6	71.0	71.0	226.8	-55.1	0	6	3	24.9	24.9
			V04	China Light Power	836610.8	833417.4	71.0	71.0	228.8	-55.2	0	6	3	24.8	24.8
			V05	China Light Power	836611.6	833415.3	71.0	71.0	230.9	-55.3	0	6	3	24.7	24.7
			V06	China Light Power	836612.5	833413.1	71.0	71.0	233.0	-55.3	0	6	3	24.7	24.7
			V07	China Light Power	836614.5	833398.8	71.0	71.0	244.3	-55.8	0	6	3	24.2	24.2
			V08	China Light Power	836615.3	833396.6	71.0	71.0	246.4	-55.8	0	6	3	24.2	24.2
			V09	China Light Power	836616.1	833394.4	71.0	71.0	248.6	-55.9	0	6	3	24.1	24.1
			V10	China Light Power	836617.0	833392.3	71.0	71.0	250.7	-56.0	0	6	3	24.0	24.0
			V11	China Light Power	836617.8	833390.1	71.0	71.0	252.8	-56.1	0	6	3	23.9	23.9
			V12	China Light Power	836618.7	833388.0	71.0	71.0	254.9	-56.1	0	6	3	23.9	23.9
													Total	**58.1**	**48.3**

Detailed Calculations for Fixed Noise Impact Assessment for the Proposed Development at Wong Yi Au, Tai Po

Noise Sensitive Receiver (NSR)	NSR (x)	NSR (y)	Noise Source (NS)	Description	Noise Source (x)	Noise Source (y)	Daytime SWL, dB(A)	Nighttime SWL, dB(A)	Horizontal Distance from Noise Source to Receiver(m) (NSR)	Distance Correction, dB(A)	Barrier Correction, dB(A)	Tonality Correction, dB(A)	Façade Correction, dB(A)	Daytime SPL, dB(A), $L_{eq\ (30\ min)}$	Nighttime SPL, dB(A), $L_{eq\ (30\ min)}$
F1-12	836446.7	833571.4	C01	China Light Power	836616.6	833421.1	93.0	83.0	226.8	-55.1	0	6	3	46.9	36.9
ASR	**A**		C02	China Light Power	836618.9	833411.8	93.0	83.0	234.8	-55.4	0	6	3	46.6	36.6
Day Time ANL	**60**		C03	China Light Power	836620.3	833399.6	93.0	83.0	244.3	-55.8	0	6	3	46.2	36.2
NightTime ANL	**50**		C04	China Light Power	836655.8	833421.3	98.0	88.0	257.4	-56.2	0	6	3	50.8	40.8
			C05	China Light Power	836656.7	833419.0	98.0	88.0	259.4	-56.3	0	6	3	50.7	40.7
			P02	Tai Po Kau Sewage Pumping Station	836297.7	833797.1	99.5	89.5	270.4	-56.6	0	6	3	51.9	41.9
			P03	Ha Wong Yi Au Fresh Water Pumping Station	836248.7	833800.5	99.5	89.5	302.8	-57.6	0	6	3	0.0	0.0
			V01	China Light Power	836608.3	833423.9	71.0	71.0	218.8	-54.8	0	6	3	25.2	25.2
			V02	China Light Power	836609.1	833421.8	71.0	71.0	220.8	-54.9	0	6	3	25.1	25.1
			V03	China Light Power	836610.0	833419.6	71.0	71.0	222.9	-55.0	0	6	3	25.0	25.0
			V04	China Light Power	836610.8	833417.4	71.0	71.0	225.0	-55.0	0	6	3	25.0	25.0
			V05	China Light Power	836611.6	833415.3	71.0	71.0	227.1	-55.1	0	6	3	24.9	24.9
			V06	China Light Power	836612.5	833413.1	71.0	71.0	229.2	-55.2	0	6	3	24.8	24.8
			V07	China Light Power	836614.5	833398.8	71.0	71.0	240.7	-55.6	0	6	3	24.4	24.4
			V08	China Light Power	836615.3	833396.6	71.0	71.0	242.8	-55.7	0	6	3	24.3	24.3
			V09	China Light Power	836616.1	833394.4	71.0	71.0	245.0	-55.8	0	6	3	24.2	24.2
			V10	China Light Power	836617.0	833392.3	71.0	71.0	247.1	-55.9	0	6	3	24.1	24.1
			V11	China Light Power	836617.8	833390.1	71.0	71.0	249.3	-55.9	0	6	3	24.1	24.1
			V12	China Light Power	836618.7	833388.0	71.0	71.0	251.4	-56.0	0	6	3	24.0	24.0
													Total	**57.3**	**47.5**

Detailed Calculations for Fixed Noise Impact Assessment for the Proposed Development at Wong Yi Au, Tai Po

Noise Sensitive Receiver (NSR)	NSR (x)	NSR (y)	Noise Source (NS)	Description	Noise Source (x)	Noise Source (y)	Daytime SWL, dB(A)	Nighttime SWL, dB(A)	Horizontal Distance from Noise Source to Receiver(m) (NSR)	Distance Correction, dB(A)	Barrier Correction, dB(A)	Tonality Correction, dB(A)	Façade Correction, dB(A)	Daytime SPL, dB(A), $L_{eq\ (30\ min)}$	Nighttime SPL, dB(A), $L_{eq\ (30\ min)}$
F2-05	836409.7	833598.6	C01	China Light Power	836616.6	833421.1	93.0	83.0	272.6	-56.7	-10	6	3	35.3	25.3
ASR	**A**		C02	China Light Power	836618.9	833411.8	93.0	83.0	280.4	-57.0	-10	6	3	35.0	25.0
Day Time ANL	**60**		C03	China Light Power	836620.3	833399.6	93.0	83.0	289.8	-57.2	-10	6	3	34.8	24.8
NightTime ANL	**50**		C04	China Light Power	836655.8	833421.3	98.0	88.0	303.3	-57.6	-10	6	3	0.0	0.0
			C05	China Light Power	836656.7	833419.0	98.0	88.0	305.3	-57.7	-10	6	3	0.0	0.0
			P02	Tai Po Kau Sewage Pumping Station	836297.7	833797.1	99.5	89.5	227.9	-55.2	0	6	3	53.3	43.3
			P03	Ha Wong Yi Au Fresh Water Pumping Station	836248.7	833800.5	99.5	89.5	258.2	-56.2	0	6	3	52.3	42.3
			V01	China Light Power	836608.3	833423.9	71.0	71.0	264.5	-56.4	-10	6	3	13.6	13.6
			V02	China Light Power	836609.1	833421.8	71.0	71.0	266.5	-56.5	-10	6	3	13.5	13.5
			V03	China Light Power	836610.0	833419.6	71.0	71.0	268.6	-56.6	-10	6	3	13.4	13.4
			V04	China Light Power	836610.8	833417.4	71.0	71.0	270.7	-56.6	-10	6	3	13.4	13.4
			V05	China Light Power	836611.6	833415.3	71.0	71.0	272.7	-56.7	-10	6	3	13.3	13.3
			V06	China Light Power	836612.5	833413.1	71.0	71.0	274.8	-56.8	-10	6	3	13.2	13.2
			V07	China Light Power	836614.5	833398.8	71.0	71.0	286.1	-57.1	-10	6	3	12.9	12.9
			V08	China Light Power	836615.3	833396.6	71.0	71.0	288.2	-57.2	-10	6	3	12.8	12.8
			V09	China Light Power	836616.1	833394.4	71.0	71.0	290.3	-57.3	-10	6	3	12.7	12.7
			V10	China Light Power	836617.0	833392.3	71.0	71.0	292.4	-57.3	-10	6	3	12.7	12.7
			V11	China Light Power	836617.8	833390.1	71.0	71.0	294.6	-57.4	-10	6	3	12.6	12.6
			V12	China Light Power	836618.7	833388.0	71.0	71.0	296.7	-57.4	-10	6	3	12.6	12.6
													Total	**56.0**	**46.0**

2024年 3月 1 1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 11 MAR 2024. 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

2400589 4/3/2024 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/TP/694
	Date Received 收到日期	11 MAR 2024

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。

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)

Home of Loving Faithfulness

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)

KTA Planning 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）	Government Land at "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po
(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 3,275 sq.m 平方米 ☑About 約 ☑Gross floor area 總樓面面積 3,978 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）	3,275 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 Tai Po Outline Zoning Plan No. S/TP/30
(e)	Land use zone(s) involved 涉及的土地用途地帶	"Government, Institution or Community" and "Green Belt"
(f)	Current use(s) 現時用途	Vacant (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) 第(i)類	Change of use within existing building or part thereof 更改現有建築物或其部分內的用途
☐	Type (ii) 第(ii)類	Diversion of stream / excavation of land / filling of land / filling of pond as required under Notes of Statutory Plan(s) 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) 第(iii)類	Public utility installation / Utility installation for private project 公用事業設施裝置/私人發展計劃的公用設施裝置
☑	Type (iv) 第(iv)類	Minor relaxation of stated development restriction(s) as provided under Notes of Statutory Plan(s) 略為放寬於法定圖則《註釋》內列明的發展限制
☑	Type (v) 第(v)類	Use / development other than (i) to (iii) above 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 ..... to 至 .....
☐	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 ..... mPD 米 (主水平基準上) to 至 .....mPD 米 (主水平基準上) From 由 .....1..... storey 層 to 至 .....3..... 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 Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) (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	.....3,978..... sq.m 平方米	☑About 約
Proposed plot ratio 擬議地積比率	.....1.22.....	☑About 約
Proposed site coverage 擬議上蓋面積	.....60..... %	☑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	.....3..... storeys 層 ☐ include 包括_____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	.....+37.4*... mPD 米(主水平基準上) .....13.662#..... m 米	☑About 約 ☑About 約

* Chapel pitched roof top level at about +43.4 mPD; # measured from mean site formation level +23.738mPD

☐ 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)

Residential Care Home for Persons with Disabilities: Gross Floor Area 3,978m²

.....

☐ 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)

.....

.....

.....

☑ 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	.....110..... 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	G/F	Office, Consultation Room, Physiotherapy Room, Hydrotherapy Pool, Canteen, Kitchen, Laundry, E&M Facilities, Carpark, Loading/Unloading Area
	1/F	Chapel, Dormitory Type A and Type C, Isolation Room
	2/F	Dormitory Type B and Type D (House Mother Room & Guest Suite), Isolation Room

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

G/F: Fountain Garden, Entrance Garden; 1/F: Gathering Courtyard, Organic Farm, Sensory Garden and Sitting Courtyard

.....

.....

.....

.....

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)

To be completed by the end of 2026 tentatively

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)) ..... ☑ 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^ 6 Motorcycle Parking Spaces 電單車車位 0 Light Goods Vehicle Parking Spaces 輕型貨車泊車位 0 Medium Goods Vehicle Parking Spaces 中型貨車泊車位 0 Heavy Goods Vehicle Parking Spaces 重型貨車泊車位 0 Others (Please Specify) 其他 (請列明) 0
	No 否	☐ ^including 1 parking space for persons with disabilities
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 0 Coach Spaces 旅遊巴車位 0 Light Goods Vehicle Spaces 輕型貨車車位 0 Medium Goods Vehicle Spaces 中型貨車車位 0 Heavy Goods Vehicle Spaces 重型貨車車位 0 Others (Please Specify) 其他 (請列明) 1 Multi-use Bay (LGV and Light Bus) [8m (L) x 3.5m (W)]
	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 abandoned school building will be conducted by CEDD, which will be completed by the end of 2024.
	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 2,125 sq.m 平方米 ☑About 約 Depth of excavation 挖土深度 2.5 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)

Please refer to Appendix B Tree Preservation and Landscape Proposal of the Supporting Planning Statement.

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 Supporting Planning Statement.

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

PAULINE LAM — Name in Block Letters 姓名（請以正楷填寫）

Deputy Managing Director — 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
Others 其他 RTPI, RUP (PRC)

on behalf of 代表 KTA Planning Limited

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

Date 日期 1.3.2024 (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	Government Land at "Former Fish Marketing Organization Tai Po Primary School", Wong Yi Au, Tai Po 大埔黃宜坳前魚類統營處大埔小學的政府土地
Site area 地盤面積	3,275 sq. m 平方米 ☑ About 約 (includes Government land of 包括政府土地 3,275 sq. m 平方米 ☑ About 約)
Plan 圖則	Approved Tai Po Outline Zoning Plan No. S/TP/30 大埔分區計劃大綱核准圖編號 S/TP/30
Zoning 地帶	"Government, Institution or Community" and "Green Belt" 「政府、機構或社區」及「綠化地帶」
Applied use/ development 申請用途/發展	Proposed Minor Relaxation of Building Height Restriction for Proposed Social Welfare Facility (Residential Care Home for Persons with Disabilities) 擬議略為放寬建築物高度限制作擬議社會福利設施（殘疾院舍）

		sq.m 平方米	Plot Ratio 地積比率
(i) Gross floor area and/or plot ratio 總樓面面積及／或地積比率	Domestic 住用	☐ About 約 ☐ Not more than 不多於	☐About 約 ☐Not more than 不多於
	Non-domestic 非住用	☑ About 約 3,978 ☐ Not more than 不多於	☑About 約 1.22 ☐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	About 約 13.662#	m 米 ☐ (Not more than 不多於) # measured from mean site formation level +23.738mPD 由主水平其準上 23.738米的平均地盤平整水平計算
		About 約 +37.4*	mPD 米(主水平基準上) ☐ (Not more than 不多於) * Chapel pitched roof top level at about +43.4 mPD 小教堂斜頂樓頂水平約為主水平基準上43.4米
		3	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)*
	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		60	% ☑ About 約
(v) No. of units 單位數目			
(vi) Open space 休憩用地	Private 私人	110	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	6
	Private Car Parking Spaces^ 私家車車位^	6
	Motorcycle Parking Spaces 電單車車位	0
	Light Goods Vehicle Parking Spaces 輕型貨車泊車位	0
	Medium Goods Vehicle Parking Spaces 中型貨車泊車位	0
	Heavy Goods Vehicle Parking Spaces 重型貨車泊車位	0
	Others (Please Specify) 其他 (請列明)	0
	^including 1 parking space for persons with disabilities 包括一個殘疾人士專用車位	
	Total no. of vehicle loading/unloading bays/lay-bys 上落客貨車位／停車處總數	1
	Taxi Spaces 的士車位	0
	Coach Spaces 旅遊巴車位	0
	Light Goods Vehicle Spaces 輕型貨車車位	0
	Medium Goods Vehicle Spaces 中型貨車位	0
	Heavy Goods Vehicle Spaces 重型貨車車位	0
	Others (Please Specify) 其他 (請列明) Multi-use Bay (LGV and Light Bus) [8m (L) x 3.5m (W)] 多用途車位（輕型貨車及小型巴士）	1

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） Location Plan 位置圖, Site Plan 地盤平面圖	☐	☑
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 Appraisal 視覺評估	☐	☑
Landscape Proposal 園景方案	☐	☑
Tree Survey 樹木調查	☐	☑
Geotechnical Planning Review Report 土力規劃檢討報告	☐	☑
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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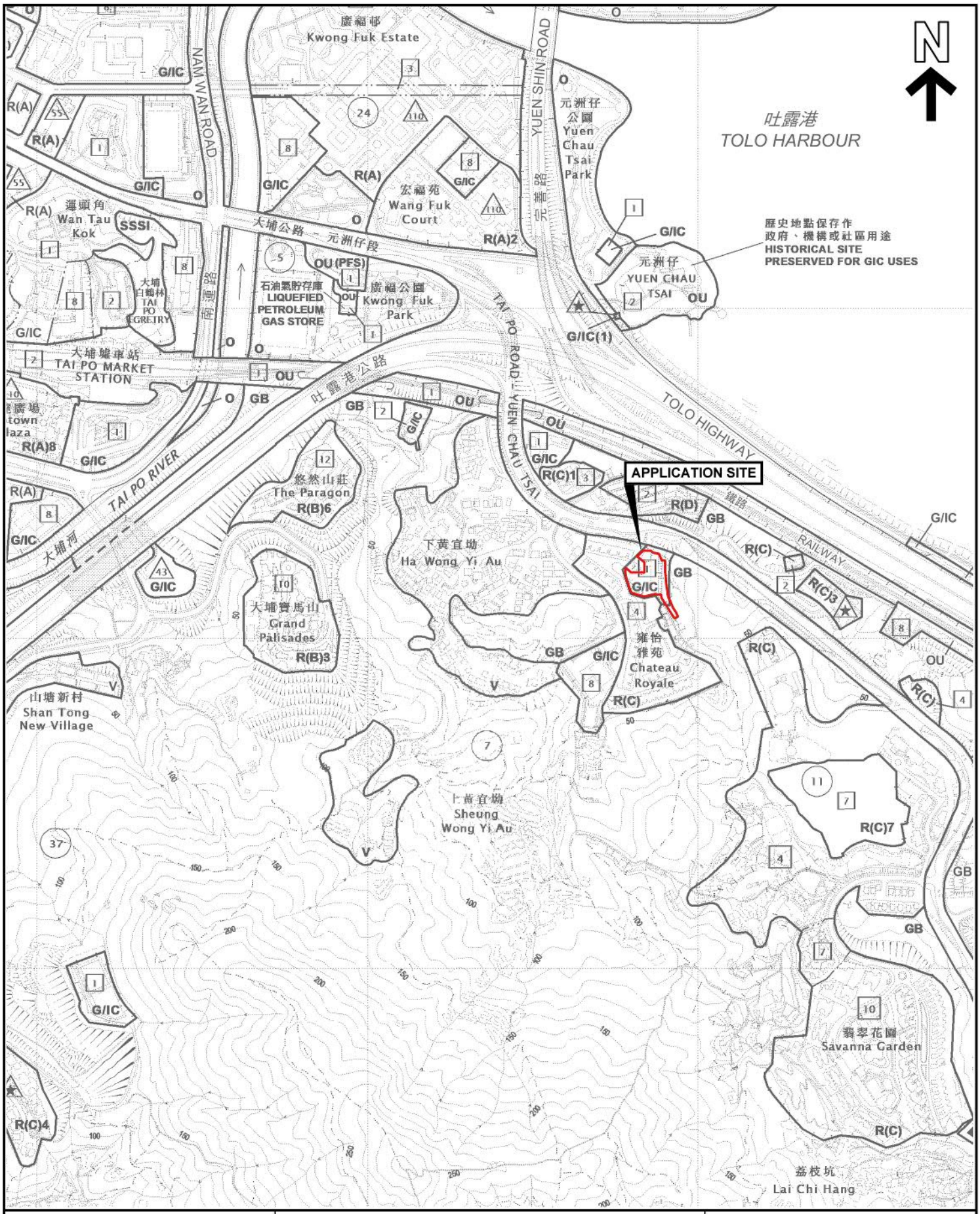

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LOCATION PLAN

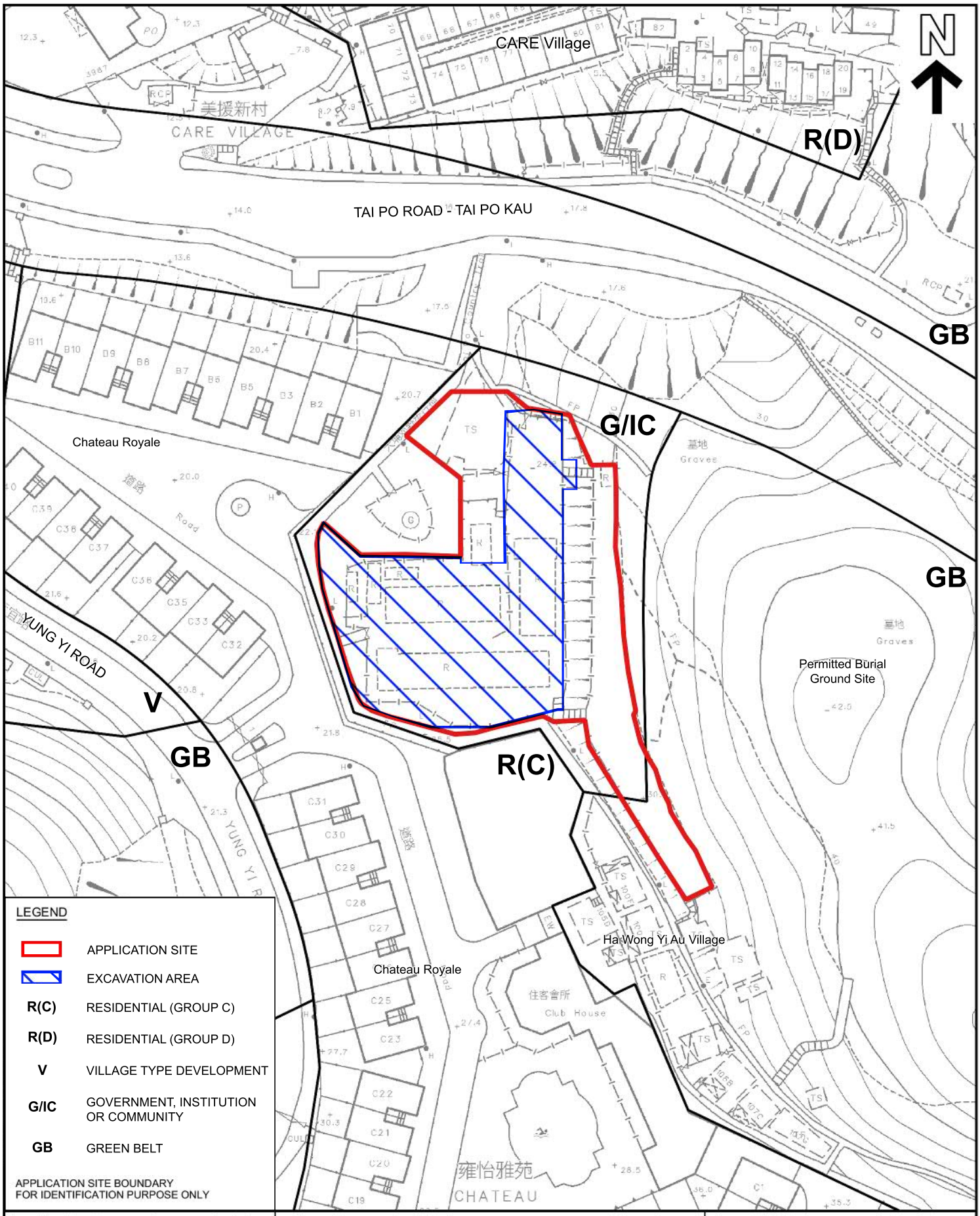
PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) GOVERNMENT LAND AT "FORMER FISH MARKETING ORGANIZATION TAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO

SCALE 1 : 7 500

PLAN 1

EXTRACT PLAN BASED ON
TAI PO OUTLINE ZONING PLAN
NO. S/TP/30 APPROVED ON 14.6.2022

DATE: 1.3.2024



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SITE PLAN

PROPOSED MINOR RELAXATION OF BUILDING HEIGHT RESTRICTION FOR PROPOSED SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME FOR PERSONS WITH DISABILITIES) GOVERNMENT LAND AT "FORMER FISH MARKETING ORGANIZATIONTAI PO PRIMARY SCHOOL", WONG YI AU, TAI PO

SCALE 1 : 1 500

PLAN 2

EXTRACT PLAN BASED ON SURVEY SHEETS No. 7-NW-10C & 15A

DATE: 1.3.2024