Form No. S12A
表格第 S12A 號

APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP.131)

根據《城市規劃條例》(第131章)第12A條遞交的修訂圖則申請

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.info.gov.hk/tpb/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.info.gov.hk/tpb/tc/plan_application/apply.html

2021年11月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 01 NOV 2021
The Town Planning Board will formally acknowledge the date of receipt of the application only upon receipt of all the required information and documents.

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

For Official Use Only 請勿填寫此欄	Application No. 申請編號	Y/ST/53
	Date Received 收到日期	- 1 NOV 2021

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.info.gov.hk/tpb/. 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.info.gov.hk/tpb/)，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)

Top Century Group Holdings Limited 百年控股有限公司

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)

Aikon Development Consultancy Limited 毅勤發展顧問有限公司

3. Application Site 申請地點

(a)	Whether the application directly relates to any specific site? 申請是否直接與某地點有關？	Yes 是 ☑ No 否 ☐ (Please proceed to Part 6 請繼續填寫第 6 部分)
(b)	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）	Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories
(c)	Site Area 申請地點面積	189.64 sq.m 平方米 ☑ About 約

(d) Area of Government land included (if any) 所包括的政府土地面積 (倘有)	46.19 sq.m 平方米 ☑About 約
(e) Current use(s) 現時用途	Columbarium use (If there are any Government, institution or community facilities, please illustrate on plan and specify the use and gross floor area) (如有任何政府、機構或社區設施，請在圖則上顯示，並註明用途及總樓面面積)

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

The applicant 申請人 –

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

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

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

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

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

(a) According to the record(s) of the Land Registry as at 28/09/2021 (DD/MM/YYYY), this application involves a total of 2 "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 1 "current land owner(s)"#
已通知 1 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)
1	Lots No. 504 and 505 in D.D. 42	28/09/2021

(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. Plan Proposed to be Amended 擬議修訂的圖則	
(a) Name and number of the related statutory plan(s) 有關法定圖則的名稱及編號	Approved Sha Tin Outline Zoning Plan No. S/ST/34
(b) Land use zone(s) involved (if applicable) 涉及的土地用途地帶(如適用)	"Green Belt"

7. Proposed Amendments 擬議修訂

(a) Propose to rezone the application site to the following zone(s)/use(s)
(May insert more than one 「✓」) (Please illustrate the details on plan)
建議將申請地點的用途地帶改劃作下列地帶 / 用途
(可在多於一個方格內加上「✓」號) (請在圖則顯示詳情)

☐ Comprehensive Development Area [ ]
綜合發展區 [ ]

☐ Residential (Group ☐A/☐B/☐C/☐D/☐E) [ ]
住宅 (☐甲類 / ☐乙類 / ☐丙類 / ☐丁類 / ☐戊類) [ ]

☐ Agriculture [ ] 農業 [ ]

☐ Industrial (Group D) [ ] 工業 (丁類) [ ]

☐ Government, Institution or Community [ ]
政府、機構或社區 [ ]

☐ Recreation [ ] 康樂 [ ]

☐ Country Park [ ] 郊野公園 [ ]

☐ Conservation Area [ ] 自然保育區 [ ]

☐ Commercial [ ] 商業 [ ]

☐ Village Type Development [ ]
鄉村式發展 [ ]

☐ Industrial [ ] 工業 [ ]

☐ Open Storage [ ] 露天貯物 [ ]

☐ Open Space [ ] 休憩用地 [ ]

☐ Green Belt [ ] 綠化地帶 [ ]

☐ Coastal Protection Area [ ]
海岸保護區 [ ]

☐ Site of Special Scientific Interest [ ]
具特殊科學價值地點 [ ]

☑ Other Specified Uses (☐Business/☐Industrial Estate/☐Mixed Use/☐Rural Use/☐Petrol Filling Station/
☑Others (please specify "Columbarium(1)")) [ ]
其他指定用途 (☐商貿 / ☐工業邨 / ☐混合用途 / ☐鄉郊用途 / ☐加油站 /
☐ 其他 (請註明：_____)) [ ]

☐ Road 道路

☐ Others (please specify_____)
其他 (請註明：_____)

Please insert subzone in [ ] as appropriate.
請於[ ]內註明支區，如適用。

☑ Proposed Notes of Schedule of Uses of the zone attached
已夾附對土地用途地帶的《註釋》的擬議修訂

(b) Propose to amend the Notes of the Plan(s) 建議修訂圖則的《註釋》

☐ Covering Notes 《註釋》說明頁

☑ Notes of the zone applicable to the Site 適用於申請地點土地用途地帶的《註釋》

Details of the proposed amendment(s) to the Notes of the Plan, where appropriate, are as follows:
(Please use separate sheets if the space below is insufficient)
建議修訂圖則的《註釋》的詳情，如適用：
(如下列空間不足，請另頁說明)

Please refer to the attached Planning Statement.

8. Details of Proposed Amendment (if any) 擬議修訂詳情 (倘有)

☑ Particulars of development are included in the **Appendix**.
附錄包括一個擬議發展的細節。

☐ No specific development proposal is included in this application.
這宗申請並不包括任何指定的擬議發展計劃。

9. 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 attached Planning Statement.

10. 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 an application to the Board 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

Grace CHEUNG
Name in Block Letters 姓名（請以正楷填寫）

Assistant Town Planner
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 .....

on behalf of 代表 Aikon Development Consultancy Limited

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

Date 日期 30/09/2021 ..... (DD/MM/YYYY 日/月/年)

Remark 備註

The materials submitted in an application to the Board 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。

APPLICATION FOR AMENDMENT OF PLAN UNDER SECTION 12A OF THE TOWN PLANNING ORDINANCE (CAP. 131)
根據城市規劃條例(第 131 章)第 12A 條遞交的修訂圖則申請

Development Proposal (only for indicative purpose)
擬議發展的發展計劃（只作指示用途）

1. Development Proposal 擬議發展計劃

☑ Proposed Gross floor area (GFA) 擬議總樓面面積	119.76 sq.m. 平方米	☑ About 約
☑ Proposed plot ratio 擬議地積比率	0.63	☑ About 約
☑ Proposed site coverage 擬議上蓋面積	27.7 %	☑ About 約
☑ Proposed number of blocks 擬議座數	1	
☑ Proposed number 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	7.62 m 米	☑ About 約
	mPD 米(主水平基準上)	☐ About 約
☐ Domestic part 住用部分		
GFA 總樓面面積	sq.m. 平方米	☐ About 約
number of units 單位數目		
average unit size 單位平均面積	sq.m. 平方米	☐ About 約
estimated number of residents 估計住客數目		
	GFA 總樓面面積	
☑ Non-domestic part 非住用部分	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/eating place 商店及服務行業/食肆	sq.m.平方米	☐ About 約
☐ Government, institution or community facilities 政府、機構或社區設施	(please specify the use(s) and concerned land area(s)/GFA(s)) (請註明用途及有關的地面面積/總樓面面積)	
☑ other(s)其他	(please specify the use(s) and concerned land area(s)/GFA(s)) (請註明用途及有關的地面面積/總樓面面積) Columbarium: 119.76 sq.m.	
☐ Open space 休憩用地	(please specify land area(s)) (請註明面積)	
☐ private open space 私人休憩用地	sq.m.平方米	☐ Not less than 不少於
☐ public open space 公共休憩用地	sq.m.平方米	☐ Not less than 不少於

☐ Transport-related facilities 與運輸有關的設施

☐ parking spaces 停車位 (please specify type(s) and number(s)) (請註明種類及數目)

Private Car Parking Spaces 私家車車位 .....
Motorcycle Parking Spaces 電單車車位 .....
Light Goods Vehicle Parking Spaces 輕型貨車泊車位 .....
Medium Goods Vehicle Parking Spaces 中型貨車泊車位 .....
Heavy Goods Vehicle Parking Spaces 重型貨車泊車位 .....
Others (Please Specify) 其他 (請列明) .....
.....

☐ loading/unloading spaces 上落客貨車位 (please specify type(s) and number(s)) (請註明種類及數目)

Taxi Spaces 的士車位 .....
Coach Spaces 旅遊巴車位 .....
Light Goods Vehicle Spaces 輕型貨車車位 .....
Medium Goods Vehicle Spaces 中型貨車車位 .....
Heavy Goods Vehicle Spaces 重型貨車車位 .....
Others (Please Specify) 其他 (請列明) .....
.....

☐ other transport-related facilities 其他與運輸有關的設施 (please specify type(s) and number(s)) (請註明種類及數目) .....
.....

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	Columbarium and ancillary staircase
	1/F	Columbarium and ancillary staircase
	2/F	Columbarium and ancillary staircase

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

Any vehicular access to the site? 是否有車路通往地盤?

Yes 是 ☑ There is an existing access. (please indicate the street name, where appropriate)
有一條現有車路。(請註明道路名稱(如適用))
Tai Po Road (Ma Liu Shui)

☐ 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 ☐

For Development involving columbarium use, please complete the table in the Annex to this Appendix.
如發展涉及靈灰安置所用途，請填妥於此附件後附錄的表格。

2. 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，請另頁表示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 ....
	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?	Yes 是	☐ (Please indicate on site plan the boundary of concerned land/pond(s), and particulars of stream diversion, the extent of filling of land/pond(s) and/or excavation of land) (請用地盤平面圖顯示有關土地／池塘界線，以及河道改道、填塘、填土及／或挖土的細節及/或範圍) ☐ Diversion of stream 河道改道 ☐ Filling of pond 填塘 Area of filling 填塘面積 ..... sq.m 平方米 ☐About 約 Depth of filling 填塘深度 ..... m 米 ☐About 約 ☐ Filling of land 填土 Area of filling 填土面積 ..... sq.m 平方米 ☐About 約 Depth of filling 填土厚度 ..... m 米 ☐About 約 ☐ Excavation of land 挖土 Area of excavation 挖土面積..... sq.m 平方米 ☐About 約 Depth of excavation 挖土深度 .....m 米 ☐About 約
	No 否	☑

Would the development proposal cause any adverse impacts? 擬議發展計劃會否造成不良影響？	On environment 對環境	Yes 會 ☐	No 不會 ☑
	On traffic 對交通	Yes 會 ☐	No 不會 ☑
	On water supply 對供水	Yes 會 ☐	No 不會 ☑
	On drainage 對排水	Yes 會 ☐	No 不會 ☑
	On slopes 對斜坡	Yes 會 ☐	No 不會 ☑
	Affected by slopes 受斜坡影響	Yes 會 ☐	No 不會 ☑
	Landscape Impact 構成景觀影響	Yes 會 ☐	No 不會 ☑
	Tree Felling 砍伐樹木	Yes 會 ☐	No 不會 ☑
	Visual Impact 構成視覺影響	Yes 會 ☐	No 不會 ☑
	Others (Please Specify) 其他 (請列明)	Yes 會 ☐	No 不會 ☑
	_____		
	_____		

Please state measure(s) to minimise the impact(s). For tree felling, please state the number, diameter at breast height and species of the affected trees (if possible)
請註明盡量減少影響的措施。如涉及砍伐樹木，請說明受影響樹木的數目、及胸高度的樹幹直徑及品種(倘可)

Please refer to the attached Planning Statement.

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	4 urns
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	N/A
Total number of niches 龕位總數	1,716 niches
Total number of single niches 單人龕位總數	0 niche
Number of single niches (sold and occupied) 單人龕位數目 (已售並佔用)	N/A
Number of single niches (sold but unoccupied) 單人龕位數目 (已售但未佔用)	N/A
Number of single niches (residual for sale) 單人龕位數目 (待售)	N/A
Total number of double niches 雙人龕位總數	1614 niches
Number of double niches (sold and fully occupied) 雙人龕位數目 (已售並全部佔用)	0 niches
Number of double niches (sold and partially occupied) 雙人龕位數目 (已售並部分佔用)	3 niches
Number of double niches (sold but unoccupied) 雙人龕位數目 (已售但未佔用)	328 niches
Number of double niches (residual for sale) 雙人龕位數目 (待售)	1283 niches
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)	102 four-urn niches
Number. of niches (sold and fully occupied) 龕位數目 (已售並全部佔用)	0 niches
Number of niches (sold and partially occupied) 龕位數目 (已售並部分佔用)	0 niches
Number of niches (sold but unoccupied) 龕位數目 (已售但未佔用)	5 niches
Number of niches (residual for sale) 龕位數目 (待售)	97 niches
Proposed operating hours 擬議營運時間	From 10:00 a.m. to 5:00 p.m. for normal days From 9:00 a.m. to 6:00 p.m. for Ching Ming and Chung Yeung Festival periods

@ 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 deposited 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存放於規劃署規劃資料查詢處以供一般參閱。)

Application No. 申請編號	(For Official Use Only) (請勿填寫此欄)
Location/address 位置／地址	Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories 新界沙田馬料水大埔公路赤泥坪村110號丈量約份第42約地段第499號A分段餘段(部分)、第500號A分段餘段(部分)、第503號、第504號(部分)、第505號(部分)及第506號(部分)和毗連政府土地
Site area 地盤面積	189.64 sq. m 平方米 ☑About 約 (includes Government land of 包括政府土地 46.19 sq. m 平方米 ☑About 約)
Plan 圖則	Approved Sha Tin Outline Zoning Plan No. S/ST/34 沙田分區計劃大綱核准圖編號 S/ST/34
Zoning 地帶	"Green Belt" 「綠化地帶」
Proposed Amendment(s) 擬議修訂	☐ Amend the Covering Notes of the Plan 修訂圖則《註釋》的說明頁 ☐ Amend the Notes of the zone applicable to the site 修訂適用於申請地點土地用途地帶的《註釋》 ☑ Rezone the application site from "GB" to "OU(Columbarium(1))" 把申請地點由「綠化」地帶改劃為「其他指定用途（靈灰安置所）（1）」

Development Parameters (for indicative purpose only) 發展參數(只作指示用途)

		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	119.76 ☑ About 約 ☐ Not more than 不多於	0.63 ☑About 約 ☐Not more than 不多於
(ii) No. of block 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	7.62 m 米 ☑ (Not more than 不多於)
			mPD 米(主水平基準上) ☐ (Not more than 不多於)
			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	27.7 % ☑ About 約	
(v)	No. of units 單位數目		
(vi)	Open space 休憩用地	Private 私人	sq.m 平方米 ☐ Not less than 不少於
		Public 公眾	sq.m 平方米 ☐ Not less than 不少於

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

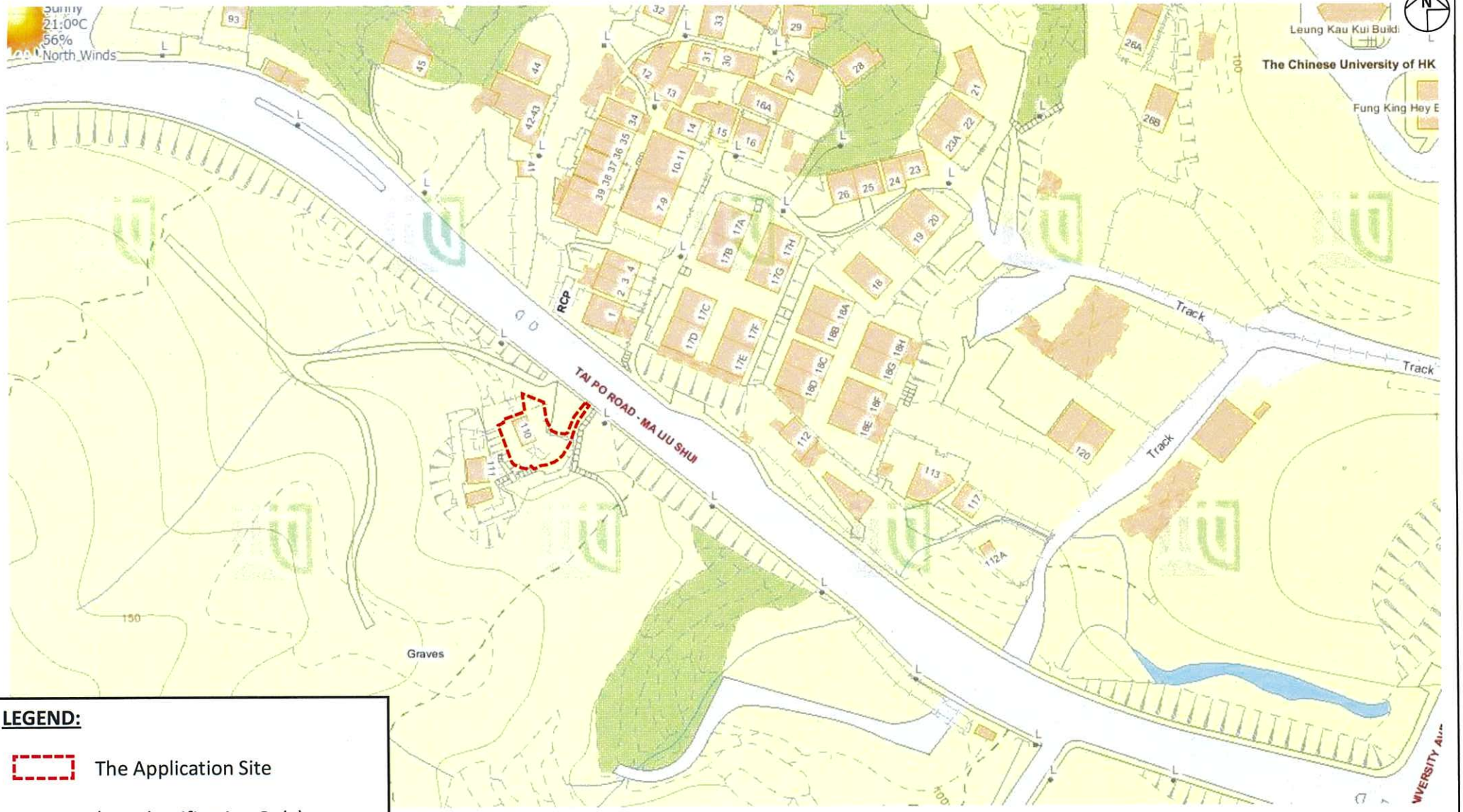
Submitted Plans, Drawings and Documents 提交的圖則、繪圖及文件

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

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

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

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



Project: Section 12A Rezoning Application from "Green Belt" Zone to "Other Specified Uses" annotated "Columbarium (1)" Zone for Columbarium Development under Approved Sha Tin Outline Zoning Plan No. S/ST/34 at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories	**Title:** The Location Plan *Ref.: ADCL/PLG-10191-R002/F001*	**Figure:** 1 **Scale:** Not to scale **Date:** Sep 2021	AikoN AIKON DEVELOPMENT CONSULTANCY LTD.

Ref.: ADCL/PLG-10191/R002

Section 12A Planning Application

Request for Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/34 from "Green Belt" Zone to "Other Specified Uses" Zone annotated "Columbarium (1)"

Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories

Planning Statement

Address:
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Prepared by
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In Association with
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Axon Consultancy Ltd.

September 2021

EXECUTIVE SUMMARY

(In case of discrepancy between English and Chinese versions, English shall prevail)

This *Planning Statement* is submitted to the Town Planning Board ("the Board") under Section 12A of the Town Planning Ordinance to rezone the site at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories (hereinafter referred to as "the application site") from "Green Belt" ("GB") zone to "Other Specified Uses" zone annotated "Columbarium (1)" ("OU(Columbarium)(1)") (hereinafter referred to as "the proposed plan amendment") on the Approved Sha Tin Outline Zoning Plan No. S/ST/34 (hereinafter referred to as "the current OZP") for **regularising the current columbarium use** (hereinafter referred to as "the proposed development") .

In respect of the application for a private columbarium licence and a temporary suspension of liability (TSOL) under the Private Columbarium Ordinance (PCO), the rezoning request is for complying with the statutory planning requirements of in order to continue the operation of the current columbarium use. Considering that it is in line with the Government's policy, and that no adverse environmental, traffic or infrastructural impacts are anticipated, the proposed development is expected to contribute to community gains and enhance locality by optimizing the potential of the application site.

As detailed in this Planning Statement, the proposed plan amendment and development is well justified on the grounds that: -

(a) It is in line with the visions of territorial planning strategy "Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030", revealing the Government's recognition of the need to provide more land for columbaria uses to cope with the increasing demand for such needs. The proposed plan amendment is a timely response to the Government's findings by contributing to provide more than a thousand of niche spaces for the community;

(b) It is for regularising the current columbarium use and is in line with the requirements of the PCO. The proposed plan amendment would allow the current columbarium services provided in the application site to comply with relevant town planning and Government requirements so that the application site would be able to continue serving the community in a legal and organized manner subject to the supervision by the concerned Government departments;

(c) It timely responds to the soaring demand for columbaria in Hong Kong since there is a substantial increase in the number of cremations from 7,300 in 1975 to 36,500 in 2009 and the cumulative number of cremations is estimated to be 1.2 million in year 2038. While the number of deaths is also anticipated to experience continual rise, the rise is expected to surpass the increase in number of cremations, reflecting the growing public demand for columbarium niches. Considering that the subject application site has been housing more than a thousand niches, the current columbarium use at the application site could respond to the foreseeable rising territorial demand for niche spaces and provide well-managed columbarium services for the community;

(d) The site profile and its characteristics show the application site is suitable for columbarium development. Since all niches of the proposed development are placed inside a 3-storey block,

with the existing tall trees and vegetation around the application site, it provides a screening effect to shield the view from public roads and the proposed development is unable to be viewed from the surroundings. The application site is accessible by existing vehicular road and it is in close proximity to public transport facilities. The site profile provides suitable conditions for visitors to commemorate their ancestors in a convenient and peaceful environment;

(e) The proposed columbarium at the application site is compatible with the surrounding land uses where numerous indigenous graves and hillside burials and the designated area of Permitted Burial Ground Site are located at the adjoining areas of the application site. Given their close proximity and the same nature of use, the proposed development is in full harmony with surrounding graves and burial uses;

(f) The application site has a long history of sub-urban character and was hard paved before the gazette of first OZP. When the statutory planning control started to take effect in 1988, the Board has taken a broad brush approach to zone the land of the application site and its surroundings to "GB" on the first approved Sha Tin OZP. Yet, the application site has not functioned as "GB" use since then, hence, the proposed plan amendment could rationalize the existing land use profile with proper control and regularize the current columbarium use;

(g) It serves as effective use of land resources and stimulates local environment. Owing to the columbarium use of longstanding nature and to the fact that the application site has long been paved and bounded by a slopping of "GB" land largely with indigenous graves, it is highly and unlikely that the strip of land constituting the application site would be suitable for proper "GB" uses. The proposed development is also expected to stimulate improvement of the local amenity and environment, the upgrade and enhancement of locality will be beneficial to the community;

(h) The Applicant has strong commitment to safeguard the interest of community and enhance social benefits to locality. He is willing to provide social services to the community and to secure the interests and wellbeing of the niches-owners and the community by ensuring the columbarium service provided fits the prevailing laws and requirements;

(i) It will create no adverse impact in terms of drainage, sewage, environmental and traffic aspects on the surrounding area as proven in the technical reports; and

(j) It will not set an undesirable precedent for similar applications in view of its planning background, site suitability, scale and new policy initiatives.

In view of the above and the list of detailed planning justifications in this Planning Statement, the Board is respectfully requested to give favorable consideration to the proposed plan amendment.

行政摘要

(如內文與其英文版本有差異，則以英文版本為準)

申請人根據《城市規劃條例》第 12A 條向城市規劃委員會（「城規會」）遞交是次修訂規劃地帶的規劃申請。是次規劃申請建議位於《沙田分區計劃大綱草圖編號 S/ST/34》已劃作「綠化地帶」的新界丈量約份第 42 號第 499 號 A 分段餘段（部分）、第 500 號 A 分段餘段（部分）、第 503 號、第 504 號（部分）、第 505 號（部分）、第 506 號（部分）和毗連政府土地（以下簡稱「申請地點」）修訂為「其他指定用途（靈灰安置所）（1）」地帶（以下簡稱「擬議修訂圖則」），促使規管現存的靈灰安置所用途（以下簡稱「擬議發展」）。

擬議修訂圖則旨在符合根據《私營骨灰安置所條例》下申請「私營骨灰安置所牌照」及「暫免法律責任書」所須的法定規劃要求，以讓申請人可合法地繼續營運現時位於申請地點的靈灰安置所。有鑒於擬議發展符合政府政策方向，而且不會對周遭環境、交通或基建帶來負面影響，擬議發展通過善用申請地點的土地，將能對附近社區帶來正面效益。

此規劃報告書提供規劃理據，詳列如下：

(一) 與「跨越 2030 年的規劃願景與策略」一致，特別是政府提出需要提供更多土地作骨灰安置所用途以滿足日漸增長的社會需要。擬議修訂圖則擬為社區帶來超過 1,000 個骨灰龕位，適時回應政府的政策；

(二) 與《私營骨灰安置所條例》一致，規範現存私營骨灰安置所用途。擬議修訂圖則能使現時於申請地點營運的靈灰安置所用途符合《私營骨灰安置所條例》的規定，以及符合相關城市規劃和政府的要求，使申請地點能夠在相關政府部門的規管下，合法及有條理地繼續服務附近社區；

(三) 適時回應社會對靈灰安置所的強烈需求。香港的每年火葬人數由 1975 年的 7,300 人大幅上升至 2009 年的 36,500 人，所需的骨灰龕位總數預計會於 2038 年達到 120 萬。每年的死亡人數也預計會持續上升，並會超越骨灰龕位的提升數量和供應量，反映公眾未來對骨灰龕位的強烈需求。申請地點現時提供超過 1,000 個骨灰龕位，擬議修訂圖則能為本地提供適時的骨灰龕位供應，同時提供管理得宜的服務，惠及社區；

(四) 申請地點的地理環境適宜作為私營骨灰安置所用途。擬議發展的所有骨灰龕位都會被存放在 3 層高的樓宇中，樓宇被現存的樹木和植物包圍，對附近公路和構成理想的緩衝作用，使擬議發展無法從附近環境顯而易見。此外，申請地點連接現有公路且鄰近公共交通設施，申請地點因此能提供一個方便而寧靜的環境讓訪客祭祀先人；

(五) 申請地點擬設立的骨灰安置所能兼容周邊地段的土地用途，如原居民的祖墳以及認可殯葬區。基于兩者用途性質相符，是次申請定必能與周邊的墳墓用途互相協調；

(六) 自 1980 年代起申請地點已鋪上水泥，而申請地點於 1988 年正式被納入法定規劃管制，城規會以概括方式將申請地點以及周邊土地用途由第一張沙田分區計劃大綱圖起劃為「綠化地帶」。可惜申請地點一直未能以「綠化地帶」之功能運作，藉著是次修訂申請，旨在令現有骨灰安置所的土地使用合理化并合法化并受到適當規限；

(七) 是次申請有助更有效使用土地資源且促進地區環境。由於申請地點本身亦已鋪上水泥及被列為「綠化地帶」的斜坡包圍，附近亦有大量原居民的山墳再加上骨灰安置所的長期運作因素，申請地點以及附近地帶極大機會不適合用作「綠化地帶」。骨灰安置所之修訂申請有助改善地區公共設施及環境，加強地區凝聚力，對社區具有益處；

(八) 申請人對捍衛社區利益有著堅定的承諾。他願意提供社會服務予社區并保障所有骨灰龕位擁有人的利益和福祉，並確保其提供的骨灰安置服務符合法理要求；

(九) 各項專業研究報告證明此申請并不會對附近排水，排污，環境和交通造成不良影響；及

(十) 基于其規劃背景，位置適合程度，規模以及政府政策宗旨，此申請不會對其他類似申請造成不良先例。

基於擬議發展附合所有的規劃考量因素，申請人懇請城規會委員給予考慮並批准是次規劃申請。

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1. INTRODUCTION

1.1 Purpose

1.1.1 This *Planning Statement* is submitted to the Town Planning Board ("the Board") under Section 12A of the Town Planning Ordinance to rezone the site at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories (hereinafter referred to as "the application site") from "Green Belt" ("GB") zone to "Other Specified Uses" zone annotated "Columbarium (1)" ("OU(Columbarium)(1)") (hereinafter referred to as "the proposed plan amendment") on the Approved Sha Tin Outline Zoning Plan No. S/ST/34 gazetted on 29.05.2018 (hereinafter referred to as "the current OZP") for **regularising the current columbarium use** (hereinafter referred to as "the proposed development"). The application site has a total area of approximately 189.64m^2 (including Government land of about 46.19m^2). It covers a 3-storey non-domestic block with a total floor area of about 119.76m^2, currently being used for a columbarium facility with a total of 1,716 niches (336 sold niches and 1,380 niches available for sale before 30.6.2017). Its location is shown on **Figure 1** whilst **Figure 2** indicates relevant private lots and Government land that the application site involves.

1.2 Background

1.2.1 The application site, has been operated as a columbarium facility named **Sha Tin Ching Yuen (沙田靜苑)** since 2009. The Private Columbarium Ordinance (PCO), which came into effect on 30.6.2017, aims to ensure private columbaria's compliance with the statutory and Government requirements, enhance protection of consumer interests and foster the adoption of a sustainable mode of operation by private columbaria. PCO provides the legal framework for a licensing regime for private columbaria with a view to dealing with the historical legacy of private columbaria. The Private Columbaria Licensing Board (PCLB), authorized under PCO, is responsible for regulating the operation and management of private columbaria through specified instruments (i.e. a licence, an exemption or a temporary suspension of liability (TSOL).

1.2.2 Top Century Group Holdings Limited, being the registered owner and current operator of the Sha Tin Ching Yuen (hereinafter referred to as "the Applicant"), has applied a private columbarium licence and a TSOL to the PCLB on 27.3.2018 (refer to **Appendix I**). Under the PCO, the Applicant is required to comply with all statutory and Government requirements, including town planning requirements, and hence, the current application is submitted for complying with Town Planning Ordinance.

1.2.3 The application site currently falls within an area zoned "GB" on the current OZP (refer to **Figure 3**). Whilst the proposed use is neither Column 1 nor Column 2 use for "GB", the current application is for the rezoning of the application site from "GB" to "OU(Columbarium)(1)" zone for regularizing the current columbarium use. The details of proposed plan amendment are listed in **Chapter 4**.

1.2.4 Aikon Development Consultancy Limited has been commissioned by the Applicant to prepare and submit the current application on his behalf.

1.2.5 The proposed development strives to achieve the following objectives:-

- To regularise the current columbarium use at the application site thus complying with the requirements of the PCO;
- To respond to Government's policy in providing columbarium services and to subject the current columbarium use to a proper control of the Board and other Government departments concerned;
- To fully utilize the unused land into a beneficial and socially viable land use for general public;
- To meet and relieve the surging demands for columbarium niches space in Hong Kong; and
- To induce no adverse drainage, sewage, environmental nor traffic impacts on its surroundings by providing adequate protection and mitigation measures.

1.3 Structure of the Planning Statement

1.3.1 This Planning Statement is divided into 6 chapters. **Chapter 1** is the above introduction outlining the purpose and background of the current application. **Chapter 2** gives background details of the site in terms of the current land use characteristics, neighboring developments and land ownership. **Chapter 3** offers the planning context of the proposed development. **Chapter 4** and **Chapter 5** introduce the development proposals of the proposed development. A full list of planning justifications is given in **Chapter 6** whilst **Chapter 7** provides a concluding remark for the proposed development under the planning application.

2 SITE PROFILE

2.1 Location and Current Condition of the Application Site

2.1.1 The application site is situated in the northern part of Planning Area 56 of the current OZP. As shown on **Figures 1** and **2**, the application site can be accessed via Tai Po Road (Ma Liu Shui), which is a single-two lane carriageway. Tai Po Road (Ma Liu Shui) is connected to the slip road of Tai Po Road (Sha Tin). Vehicles from Tai Po Road (Sha Tin) can enter Tai Po Road (Ma Liu Shui) northbound via the slip road. The ingress/egress point is at the northeastern part of the application site.

2.1.2 As shown on **Illustrations 1-I** and **2**, the application site is on a platform of the foot of a hillslope and hard paved. The application site has a total area of approximately 189.64m^2 (including Government land of about 46.19m^2). It is occupied by a 3-storey non-domestic block with a total floor area of about 119.76m^2, currently being used for a columbarium facility with a total of 1,716 niches.

2.2 Surrounding Land Uses in the Vicinity

2.2.1 The subject locality of the application site is predominantly covered with hill slopes, mature trees, vegetated area, residential dwellings, village houses, burial ground and indigenous graves (refer to **Figure 1** and **Illustration 2**).

2.2.2 To the immediate north and northeast of the application site is Tai Po Road (Ma Liu Shui), to the further north across Tai Po Road (Ma Liu Shui) is the area zoned "Village Type Development", where is surrounded by village houses and low-rise residential developments of Chek Nai Ping Village. To the immediate west and southwest of the application site are some residential dwellings on hillslope and vegetated area. To the further west, south and southwest of the application site is the designated area of Permitted Burial Ground of Sha Tin Site No. ST/23 (refer to **Figure 4**) and is occupied by numerous indigenous graves and hillside burials. The surrounding land uses in the vicinity of the application site generally adopts a low-rise and low-density rural character.

2.3 Lease Conditions and Land Status

2.3.1 The site comprises 6 private lots in D.D.42 and its adjoining Government land along Tai Po Road (Ma Liu Shui). All the lots are owned by the Applicant except the adjoining Government land and Lots Nos. 504 and 505, whose owners are well notified of the proposed plan amendment. All private lots within the application site are held under Block Government Lease originally granted in 1898 with a term expiring in June 1997. The lease was extended to 2047 by virtue of the provisions of the New Territories Lease (Extension) Ordinance, Cap. 151.

2.3.2 Upon the approval of this rezoning application under s.12A of the Town Planning Ordinance, the Applicant will submit to the District Land Office an application for a lease modification or land exchange before implementation.

3 PLANNING CONTEXT

3.1 Planning History and Planning Intention

3.1.1 The application site falls entirely within an area zoned "GB" on the current OZP. The application site was not covered by the first draft Sha Tin OZP No. LST/47 which was exhibited for public inspection on 15.4.1966. The application site was zoned as "GB" under the approved Sha Tin OZP No. S/ST/4 which was gazetted on 5.7.1988. The zoning has not been amended until now.

3.1.2 The Notes of the current OZP stipulates that "GB" zone is intended 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 the "GB" zone*". Since the current use is not considered as an "existing use" under the planning requirement, and the application site falls within "GB" zone which the Notes of the Current OZP only allows an existing religious institution to apply for columbarium use under s.16 application, the Applicant has to submit a s.12A rezoning application for columbarium use so as to comply with the town planning requirements. Hence, this brings the Applicant to put forward the subject rezoning application from "GB" zone to "OU(Columbarium)(1)" for the Board's approval.

3.1.3 The application site is subject to a current use for private columbarium within a 3-storey block with a total of 1,716 niches (336 sold niches and 1,380 niches available for sale before 30.6.2017). The current columbarium facility has been operated since 2009. The building structure has a total GFA of about 119.67m^2 and site coverage of about 27.7%. According to the aerial photos as shown in **Illustration 3**, the application site was a piece of paved land with existing block since 1988. The general layout and composition of the block has not been changed or redeveloped since then until now.

3.2 Private Columbaria Ordinance

3.2.1 The Private Columbaria Ordinance (hereinafter "PCO") enacted in 30.6.2017 is in line with 2017 Policy Address for *"implementing the new regulatory regime for private columbaria"*. The PCO provides the legal framework for a licensing regime for private columbaria to regulate and ensure private columbaria's compliance with the statutory and Government requirements. In general, the Government takes a pragmatic and sympathetic approach towards the handling of pre-cut-off columbaria. Owners of existing private columbaria are required to apply for a licence, an exemption or a TSOL in order to continue the operation of the columbaria. As such, the Applicant has submitted the application of the columbarium licence and TSOL to the PCLB on 27.3.2018 (refer to **Appendix I**) and is currently under the progress of complying all statutory and Government requirements.

3.3 Prevailing Land Shortage for Columbarium Uses

3.3.1 According to the *"Consolidated Land Requirement and Supply Analysis"* conducted by the Planning Department in 2016 as part of the *"Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030"* territorial development strategy, the estimated new

land requirement for columbaria uses in long term constitutes more than 75 hectares, revealing the Government's recognition of the need to provide more land for columbaria uses to cope with the increasing demand for such needs.

3.3.2 There has also been a rising trend for cremation over the past decades which leads to the increased demand for columbaria in Hong Kong. The "Public Consultation on Review of Columbarium Policy" conducted by the Food and Health Bureau in 2010 reported a substantial increase in the number of percentage of cremations from 7,300 cremations (35%) in 1975 to 36,500 cremations (89%) in 2009. According to the *Legislative Council Paper (No. CB(2)1182/18-19(05))* for the meeting of the "Legislative Council Panel on Food Safety and Environmental Hygiene" on 16.4.2019, the cumulative number of cremations is estimated to be 1.2 million in year 2038. While the number of deaths is also anticipated to experience continual rise, the rise is expected to surpass the increase in number of cremations, reflecting the growing public demand for niches in columbarium.

3.3.3 As the Government recognizes the shortage of supply of columbarium facilities in Hong Kong, the Government has identified 24 potential sites for columbarium development, with 14 projects given support or no objection by relevant District Councils by 31.12.2017, reflecting the generally supportive public opinions on increasing the supply of columbarium facilities. For Sha Tin District where the application site locates at, a new public columbarium development in Shek Mun is also expected to commence in 2023, providing around 40,000 niches. Considering that the subject application site has been housing more than a thousand niches, should this rezoning application be allowed, the application site would continue to serve the community and help addressing the long term demand for niches in a legal and organized manner.

3.3.4 Apart from the shortage of columbarium facilities, the irreversibly aging trend in Hong Kong further exerts pressure on the need for columbarium niches. According to the *"Projections of Population Distribution 2019-2028"* conducted by the Planning Department, the elderly population is expected to reach over 1.8 million in 2028, constituting 23% of total population. The death toll is also anticipated to rise from over 47,000 in 2018 to 73,900 in 2038, according to the *Legislative Council Paper (No. CB(2)1182/18-19(05))* mentioned in 3.3.2. As such, it evidences the imminent need for providing more columbarium niches in Hong Kong.

3.4 Previous and Similar Planning Application

3.4.1 The application site is not subject to any previous application. Meanwhile, there is a similar application for rezoning "GB" zone to "OU(Columbarium(1))" zone on the same OZP. The application No. Y/ST/47 was approved by the Committee on 10.9.2021, the nature of the proposed development was similar to the current application for regularizing the existing columbarium use. The application was approved mainly on the grounds that the proposed development was considered to be limited nuisance to the surroundings, no significant impacts from traffic, environmental, urban design, visual and landscape perspectives.

4 PROPOSED AMENDMENT TO THE OZP

4.1.1 To regularise the current pre-cut-off columbarium use at the application site, this application proposes to rezone the application site from "GB" zone to "OU(Columbarium)(1)" zone on the approved Sha Tin OZP No. S/ST/34.

4.1.2 The proposed plan amendment involves the following items to the approved Sha Tin OZP No. S/ST/34:-

- To rezone Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and adjoining Government land from "GB" zone to "OU(Columbarium)(1)" zone with columbarium use listed under Column 1 of the OZP;

- To impose a maximum gross floor area of 189.64m^2, a maximum site coverage of 27.7% and a maximum building height restriction of 3-storey (7.62m) under the Remarks of the Notes of the proposed "OU(Columbarium)(1)" zone; and

- To impose a total number of niches for columbarium use shall not exceed 1,716 niches under the Remarks of the Notes of the proposed "OU(Columbarium)(1)" zone.

The schedule of uses for "OU(Columbarium)(1)" zone is shown in **Table 1**. The proposed plan amendment will allow the relevant Government departments to properly control the land use, development intensity, layout of the proposed development and number of niches.

Table 1: Schedule of Uses for "OU" zone annotated "Columbarium (1)"

OTHER SPECFIED USES

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
For "Columbarium (1)" Only	
Columbarium	

Planning Intention

This zone is primarily for land intended for columbarium use.

Remarks

(a) On land designated "Other Specified Uses" annotated "Columbarium (1)",

(i) no new development or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of **a maximum gross floor area of 119.76m^2** and **a maximum site coverage of 27.7%**;

(ii) no new development or addition, alteration and/or modification to an existing building, other than redevelopment of an existing building, shall exceed **a maximum building height of 3-storey (7.62m)**. An existing building is allowed to be redeveloped to the same height of the building provided the existing gross floor area of the building is not exceeded; and

(iii) **a total number of niches for columbarium use shall not exceed 1,716 niches**.

(b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the gross floor area/site coverage/building height restrictions/total number of niches stated in paragraphs (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

5 THE DEVELOPMENT PROPOSAL

5.1 Master Layout Plan and Development Schedule

5.1.1 The Master Layout Plan and the perspective drawings are shown in **Appendix II** illustrating the proposed form, scale and layout of the proposed development at the application site. The proposed development mainly involves the retention of current 3-storey non-domestic block and no additional building would be proposed at the application site. The development schedules of the proposed development, schedule of structure and schedule of niches count are summarized in the **Table 2, 3 and 4** respectively:

Table 2: Development Schedule of the Proposed Development

Item	
Site Area	About 189.64m^2 (including Government land of about 46.19m^2)
Plot Ratio	About 0.63
Proposed GFA	About 119.76m^2
Site Coverage	About 27.7%
Number of Block(s) and Storey(s)	1 (3-storey)
Maximum Building Height	About 7.62m
Number of Niche(s)	Total 1,716 niches
Number of Car Parking Spaces	0
Number of Loading/Unloading Spaces	0
Operation Hours	10:00am to 5:00pm during normal days; 9:00am to 6:00pm during Ching Ming and Chung Yeung Festival periods

Table 3: Schedule of the Structure

Level	**Use**	**GFA**
G/F	Columbarium and Staircase	About 51.80 m^2
1/F	Columbarium	About 33.98 m^2
2/F	Columbarium	About 33.98 m^2
Total		About 119.76 m^2

Table 4: Schedule of Niches Count as at 30.6.2017

Classification	**Double-Urn Niche**	**Family-Urn Niche**	**Total Niches**
No. of Sold but Unoccupied Niches	328	5	333
No. of Sold and Occupied Niches	3 (Partially occupied)	0	3
No. of Niches Available for Sale	1283	97	1380
Total Niches	1,614	102	**1,716**

5.2 Design and Operation

5.2.1 As illustrated in the Layout Plan and the perspective drawings and illustrations in **Appendix II** and **Illustration 1-III**, there are 14 walls in the existing block erected on the application site. With certain thickness, each of these walls is partitioned to form number of identical slots as niche spaces. The current columbarium involves only the placement of cremated human ashes in individual urn storage spaces attached to the columbarium walls within the application site. No incineration will take place at the application site and the ashes are already stored in urns prior to delivery to the application site.

5.2.2 The operation hours of the proposed development are from 10:00a.m. to 5:00p.m. during normal days, 9:00a.m. to 6:00p.m. during Ching Ming and Chung Yeung Festival periods.

5.3 Access Arrangement and Special Traffic Arrangement During Festival Periods

Traffic Conditions and Access Arrangement

5.3.1 The application site can be accessed via Tai Po Road (Ma Liu Shui), which is a single-two lane carriageway. Tai Po Road (Ma Liu Shui) is connected to the slip road of Tai Po Road (Sha Tin), vehicles from Tai Po Road (Sha Tin) could enter Tai Po Road (Ma Liu Shui) northbound via the slip road. The entrance gate is for pedestrian access only and is located at the north-eastern part of the application site (refer to **Figures 1, 2 and Appendix II**). No car parking and loading/unloading spaces would be provided at the application site.

5.3.2 Visitors are expected to enter the application site by the existing footpath via Tai Po Road (Ma Liu Shui) and public transports readily available in the locality. Given the number of urn spaces at the application site is limited to a maximum of 1,716, it is expected that only about 25 visitors on the average weekdays and about 50 visitors on the average weekends would be generated. In light of this, it is unlikely that adverse impacts on the local traffic conditions will be generated by approving the proposed development.

Special Traffic Arrangement During Festival Periods

5.3.3 During the grave sweeping festivals, i.e. Ching Ming Festival and Chung Yeung Festival periods, the Crowd Management Plan will be implemented (refer to **Appendix III**), the major measures are summarized as follow:-

(a) Appointment system will be implemented to control the number of visitors, by online or telephone booking. A maximum capacity of 25 visitors is allowed to enter in every 30-minute slot, hence a maximum capacity of 50 visitors is restricted each day for a total of 2 timeslots. Each columbarium niche only allows visitors' reservation for once a day, for those without appointment will not be allowed to enter the application site.

(b) Shuttle services will be provided to facilitate the visitors to access to/from the application site in 30-minute interval. The pick-up/drop-off point will be at Fo Tan

MTR Exit B and Chek Nai Ping lay-by area. One 24-seat shuttle bus will be used for the shuttle service.

(c) Online memorial system has been set up in order to allow the visitors who cannot commemorate their ancestors in person and to avoid overcrowding/queuing at the application site. At the same time, it provides high flexibility for visitors to commemorate any time with their own preferred time and ways. As a result, the traffic flow to/from the application site will be expected to minimize.

(d) The crowd control management staff will be stationed at each pick-up/drop off point and waiting area to assist the visitors to undertake the worship activities in a safe and orderly manner. Direction signs will be displayed at suitable locations to guide the visitors. At the entrance, a registration desk will be placed to record the identity of the pre-booked visitors, a first aid station with qualified first aider will be on duty as well.

5.3.4 The Traffic Impact Assessment assessing the existing traffic conditions and concerned junction capacity has been prepared as attached in **Appendix III**, it is demonstrated that the proposed development would not induce adverse traffic impact on the surrounding road network and it is considered acceptable from the traffic engineering point of view.

5.4 Tree Preservation and Landscape Treatment

5.4.1 The application site is generally small scale in nature, 5 mature trees within the application site are identified (refer to **Illustration 1-II**). They are well-maintained and in good condition, such provisions will continue to be properly maintained by the Applicant. The application site does not involve any clearance of existing natural vegetation. For the landscape treatment, the soft landscape treatment could fully respond to the site context, both in terms of landscape characters and visual amenity, by planting nursery for trees and shrubs at the application.

5.4.2 In terms of visual aspect, the adjoining piece of "GB" land of the application site has long been characterized by numerous indigenous graves and recorded as Permitted Burial Ground, existing block of which 3-storeys in height, is therefore compatible with the rural character in the vicinity. The tall trees and vegetations around the application site provide a screening effect to shield the view from the residential village in the surroundings. As a result, insignificant visual impact or no direct psychological effect is therefore envisaged from the proposed development.

5.5 No Adverse Environmental Impact

5.5.1 As the building block at the application site has existed long before the area was zoned as "GB" under the approved Sha Tin OZP No. S/ST/4 which was gazetted on 5.7.1988. Since then, very few complaints about nuisances or adverse impacts on the neighbourhood in term of odour, dust, smoke, noise, wastewater and solid waste have been recorded. As mentioned earlier, no cremation of human remains nor any incineration would take place within the application site. In addition, the "GB" land adjoining immediately to the application site also acts as a buffer area to segregate

impacts from the application site, if any, to the sensitive receivers. It is therefore anticipated that no adverse impacts regarding dust, smoke, odour nor any of wastewater and solid waste impacts would be induced by the proposed development.

5.5.2 Considering limited covered area is allowed at the application site, it is unlikely that any blessing ceremony would be able to take place within the application site. More importantly, the nature of the proposed development is for the peaceful settlement for deceased, there should not be any noise issue arising from the application site if the continuation of the proposed development is allowed.

5.6 Provision of Drainage Facilities

5.6.1 A drainage proposal is prepared (refer to **Appendix IV**) in assessing the potential drainage impacts arising from the proposed development and recommending the necessary mitigation measures to alleviate the potential drainage impacts.

5.6.2 In order to manage stormwater flows for the proposed development, a drainage system consisting of a set of U-channels and stepped channels for diverting stormwater flows will be proposed to avoid flooding. The drainage analysis has demonstrated that there is no adverse drainage impact to the application site and the surroundings at the peak runoff under 50 years return period.

5.7 Provision of Sewage Facilities

5.7.1 A sewage proposal is prepared (refer to **Appendix V**) in assessing the potential sewerage impacts arising from the proposed development and recommending mitigation measures to alleviate the potential sewerage impacts.

5.7.2 With a low level of human activities at the application site, sewage generation, i.e. foul water is limited. Two portable toilets would be proposed to be placed at the application site for foul water. Regular conservancy service would be arranged to empty the effluent. No sewerage will be discharged from the application site to the foul manhole in the vicinity. As a result, there is no adverse sewerage impact to the application site and surrounding area.

6 PLANNING JUSTIFICATIONS

6.1 In line with Government's Policy Direction to provide Columbarium Services

6.1.1 The *"Consolidated Land Requirement and Supply Analysis"* conducted by the Planning Department in 2016 as part of the *"Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030"* territorial development strategy identified the need for reserving more than 75ha of land in long term for providing columbaria facilities, revealing the Government's recognition of the need to provide more land for columbaria uses to cope with the increasing demand for such needs. The proposed plan amendment is a timely response to the Government's findings by contributing to provide more than a thousand of niche spaces for the community.

6.2 Town Planning Mechanism to Comply with Requirements of the Private Columbaria Ordinance

6.2.1 The PCO enacted in 30.6.2017 is in line with *2017 Policy Address* for "implementing the new regulatory regime for private columbaria". The PCO provides the legal framework for a licensing regime for private columbaria to regulate and ensure private columbaria's compliance with the statutory and Government requirements. In general, the Government takes a pragmatic and sympathetic approach towards the handling of pre-cut-off columbaria. Owners of existing private columbaria are required to apply for a licence, an exemption or a TSOL in order to continue the operation of the columbaria. As such, the Applicant has submitted the application of the columbarium licence and TSOL to the PCLB on 27.3.2018 (refer to **Appendix I**) and is currently under the progress of complying all statutory and Government requirements.

6.2.2 However, in view of the subject "GB" zone does not include "columbarium" use under both Column 1 and 2 under the current OZP, the current rezoning application is therefore submitted to seek the permission from the Board to amend application site from the "GB" zone to "OU(Columbarium)(1)" zone so as to allow the existing niches for the placement of urns at the current columbarium facility. It is understood that the Government is planned to embark on the development of more Government columbaria and enhancing its regulations on private columbaria through the introduction of the PCO, the proposed plan amendment would allow the current columbarium services provided in the application site to comply with relevant town planning and Government requirements. As such, the application site would be able to continue serving the community in a legal and organized manner subject to the supervision by the concerned Government departments.

6.3 Responding to the Increasing Demand for Niche Spaces

6.3.1 There has also been a rising trend for cremation over the past decades which leads to the increased demand for columbaria in Hong Kong. The *"Public Consultation on Review of Columbarium Policy"* conducted by the Food and Health Bureau in 2010 reported a substantial increase in the number of percentage of cremations from 7,300 cremations (35%) in 1975 to 36,500 cremations (89%) in 2009. According to the *Legislative Council Paper (No. CB(2)1182/18-19(05))* for the meeting of the "Legislative Council Panel on Food

Safety and Environmental Hygiene" on 16.4.2019, the cumulative number of cremations is estimated to be 1.2 million in year 2038. While the number of deaths is also anticipated to experience continual rise, the rise is expected to surpass the increase in number of cremations, reflecting the growing public demand for columbarium niches.

6.3.2 As the Government recognizes the shortage of supply of columbarium facilities in Hong Kong, the Government has identified 24 potential sites for columbarium development, with 14 projects given support or no objection by relevant District Councils by 31.12.2017, reflecting the generally supportive public opinions on increasing the supply of columbarium facilities. For Sha Tin District where the application site locates at, a new public columbarium development in Shek Mun is also expected to commence in 2023, providing around 40,000 niches. Considering that the subject application site has been housing more than a thousand niches, should the proposed plan amendment be allowed, the current columbarium use at the application site could respond to the foreseeable rising territorial demand for niche spaces and provide well-managed columbarium services for the community.

6.3.3 Apart from the shortage of columbarium facilities, the irreversibly aging trend in Hong Kong further exerts pressure on the need for columbarium niches. According to the *"Projections of Population Distribution 2019-2028"* conducted by the Planning Department, the elderly population is expected to reach over 1.8 million in 2028, constituting 23% of total population. The death toll is also anticipated to rise from over 47,000 in 2018 to 73,900 in 2038 according to the *Legislative Council Paper (No. CB(2)1182/18-19(05))* mentioned in 6.3.1. As such, it evidences the imminent need for providing more columbarium niches in Hong Kong.

6.4 Suitable Site for Columbarium Development and Compatible Land Uses with Surrounding Areas

6.4.1 The site profile and its characteristics show the application site is suitable for columbarium development. Since all niches of the proposed development are placed inside a 3-storey block, with the existing tall trees and vegetation around the application site, it provides a screening effect to shield the view from public roads and the proposed development is unable to be viewed from the residential village in the surroundings. In addition, the application site is accessible by existing vehicular road and it is in close proximity to public transport facilities. The single-two lane Tai Po Road (Ma Liu Shui) could also act as an effective buffer distance to segregate between the proposed development and Chek Nai Ping Village. The proposed traffic, environmental and landscape measures would help minimize potential impacts and allow visitors to commemorate their ancestors in a convenient and peaceful environment.

6.4.2 The proposed columbarium at the application site is compatible with the surrounding land uses where numerous indigenous graves and hillside burials and the designated area of Permitted Burial Ground Site No. ST/23 (refer to **Figure 4**) are located at the immediate west, south and southwest of the application site. Given their close proximity and the same

nature of use, the proposed development is in full harmony with surrounding graves and burial uses.

6.4.3 The application site has a long history of sub-urban character as it is occupied by a 3-storey block. The aerial photo in 1988 (refer to **Illustration 3**) shows that the site was hard paved, which has not been changed since then until now. When the statutory planning control started to take effect in 1988, the Board has taken a broad brush approach to zone the land of the application site and its surroundings to "GB" on the first approved Sha Tin OZP No. S/ST/4 which was gazetted on 5.7.1988. The application site has not functioned as "GB"use since then, hence, the proposed plan amendment could rationalize the existing land use profile with proper control and regularize the current columbarium use.

6.5 Effective Use of Land Resources in Stimulating Local Environment

6.5.1 Apart from having a locational advantage of being not incompatible with the surrounding land uses, allowing the proposed development can be regarded as utilizing effectively the unused private land and Government land. Owing to the columbarium use of longstanding nature and to the fact that the application site has long been paved and bounded by a slopping of "GB" land largely with indigenous graves, it is highly and unlikely that the strip of land constituting the application site would be suitable for proper "GB" uses nor it would be optimistic for sale or tendering to the market for other uses. The site constraint, inter alia, could also effectively prevent any other developments including the proposed development extending out of the application site.

6.5.2 The proposed development is also expected to stimulate improvement of the local amenity and environment, the upgrade and enhancement of locality will be beneficial to the community. In view of the above, it should be noted that the application site is currently still abandoned and that a suitable and optimized use is not yet realized. This rezoning application is considered rational and serves as a good chance to realize a better use for the site that the approval can bring various benefits to the local community.

6.5.3 All the lots are owned by the Applicant except the adjoining Government land and Lots Nos. 504 and 505, whose owners are well notified of the proposed plan amendment. As such, there should be little trouble of involving further time-consuming assembling procedure at the development stage. Upon the approval of this application, the Applicant will submit to the District Land Office an application for a lease modification and land exchange before implementation.

6.6 Safeguard the Interest of Community and Enhance Social Benefits to Locality

6.6.1 This rezoning application represents the Applicant's strong commitment to regularize the columbarium use at the application site in an ordered manner to meet the statutory planning and PCO requirements. The current application is in line with the Government's intention to resolve the historic problems of pre-cut-off columbarium in order to minimize any social disruption arisen from people who have purchased those niches and massive displacement of interred ashes before the introduction of the regulatory regime. The

Applicant is also well-aware that any interment right for those who have purchased or rented a niche must not be newly let out before the Applicant has obtained a license. The Applicant being a responsible columbarium operator is willing to provide social services to the community and is well-committed to secure the interests and wellbeing of its clients and the community by ensuring the columbarium service provided fits the prevailing laws and requirements.

6.6.2 Moreover, the Applicant is also committed to selling the unsold niches at reasonable price as part of social responsibility to serve the community, amid the recent rising unaffordability of niches provided by private columbaria. Given the current shortage of niches in Hong Kong, and more time is needed for the commencement of planned public columbaria developments, allowing the current application would be able to meet the immediate needs for niches of citizens, as well as create employment opportunities in providing columbaria services in long run.

6.7 No adverse Impact in terms of Environmental, Drainage, Sewage and Traffic Aspects

6.7.1 As demonstrated in Section 5.5 and **Appendices III, IV** and **V**, the proposed development would not generate adverse environmental, drainage, sewage and traffic impacts to the application site and its surroundings during operation.

6.7.2 From the environmental perspective, no adverse impacts on the neighborhood in term of odour, dust, smoke, noise, wastewater and solid waste have been recorded. In addition, no cremation of human remains nor any incineration would take place within the application site. The "GB" land adjoining immediately to the application site also acts as a buffer area to segregate impacts from the application site, if any, to the sensitive receivers. It is therefore anticipated that no adverse impacts regarding dust, smoke, odour nor any of wastewater and solid waste impacts would be induced by the proposed development. Considering the small scale of the proposed development, it is unlikely that any blessing ceremony would be able to take place within the application site. More importantly, the nature of the proposed development is for the peaceful settlement for deceased, there should not be any noise issue arising from the application site if the continuation of the proposed development is allowed.

6.7.3 The Traffic Impact Assessment (**Appendix III**) also assesses the existing traffic conditions and demonstrates that the concerned junctions capacity operates satisfactorily with the proposed development. The application site can be accessed via Tai Po Road (Ma Liu Shui), which is a single-two lane carriageway and the entrance point is at the north-eastern part of the application site (refer to **Figure 1** and **2**). No car parking and loading/unloading spaces would be provided at the application site. Visitors are expected to enter the application site by the existing footpath and public transports readily available in the locality. Given the proposed development is small scale in nature, it is expected that only about 25 visitors on the average weekdays and about 50 visitors on the average weekends would be generated. In conclusion, the proposed development will not induce significant traffic impact on the surrounding road network and it is considered acceptable from the traffic engineering point of view.

6.7.4 In terms of drainage, potential drainage impacts that may arise from the proposed development could be alleviated through necessary mitigation measures (refer to **Appendix IV**). In order to manage stormwater flows for the proposed development, a drainage system consisting of a set of U-channels and stepped channels for diverting stormwater flows will be proposed to avoid flooding. As a result, the drainage analysis has demonstrated that there is no adverse drainage impact to the application site and the surroundings at the peak runoff under 50 years return period.

6.7.5 In terms of sewage treatment, no adverse sewage or water quality impacts are anticipated that mitigation measures are strictly implemented during operation (refer to **Appendix V**). With a low level of human activities at the application site, sewerage generation, i.e. foul water is limited. Two portable toilets would be proposed to be placed at the application site for visitors. Regular conservancy service would be arranged to empty the effluent. No sewerage will be discharged from the application site to the foul manhole in the vicinity. Hence, there is no adverse sewerage impact to the application site and its surrounding area.

6.8 No Undesirable Precedent on the Current Outline Zoning Plan

6.8.1 There is a similar approved application in the same OZP boundary (No. Y/ST/46) and other successful rezoning applications from "GB" zone to religious and columbarium uses are set in different OZPs, i.e. Yuen Yuen Institute (No. Z/TW/7) and Si Fong Che (No. Z/TW/8). Moreover, the "OU(Columbarium)" zone is set in Planning Area 6 of the current OZP, it is commonly known that the Board would consider each columbarium development proposal in a discretionary manner, with regards to its specific planning circumstances and development schedule. In view of that, no undesirable precedent would be set whatsoever by allowing the proposed plan amendment as the proposed development is definitely of its planning background, site suitability, scale, policy initiatives and unique nature i.e. already formed and operated columbarium facility which has been recognized by public.

6.8.2 Instead, approval of the rezoning application should lead to an outcome of desirable precedent by virtue of the fact that opportunity could be given by the Board and other Government departments concerned to legitimately and perpetually regularize the current columbarium use and to comply with the town planning requirements under PCO, by adopting proper planning, land and building controls over the application site thereafter.

7 CONCLUSION

7.1.1 This Planning Statement is submitted to the Board under Section 12A of the Town Planning Ordinance to rezone the site at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories from "GB zone to "OU(Columbarium)(1)" on the Approved Sha Tin Outline Zoning Plan No. S/ST/34 for **regularising the current columbarium use**.

7.1.2 The rezoning request is for complying with the statutory planning requirements under the application for a private columbarium licence and a TSOL under PCO in order to continue the operation of the current columbarium use. Considering that it is in line with the Government's policy, and that no adverse environmental, traffic or infrastructural impacts are anticipated, the proposed development is expected to contribute to community gains and enhance locality by optimizing the potential of the application site.

7.1.3 As detailed in this Planning Statement, the proposed plan amendment and development is well justified on the grounds that: -

(a) It is in line with the visions of territorial planning strategy "Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030", revealing the Government's recognition of the need to provide more land for columbaria uses to cope with the increasing demand for such needs. The proposed plan amendment is a timely response to the Government's findings by contributing to provide more than a thousand of niche spaces for the community;

(b) It is for regularizing the current columbarium use and is in line with the requirements of the PCO. The proposed plan amendment would allow the current columbarium services provided in the application site to comply with relevant town planning and Government requirements so that the application site would be able to continue serving the community in a legal and organized manner subject to the supervision by the concerned Government departments;

(c) It timely responds to the soaring demand for columbaria in Hong Kong since there is a substantial increase in the number of cremations from 7,300 in 1975 to 36,500 in 2009 and the cumulative number of cremations is estimated to be 1.2 million in year 2038. While the number of deaths is also anticipated to experience continual rise, the rise is expected to surpass the increase in number of cremations, reflecting the growing public demand for columbarium niches. Considering that the subject application site has been housing more than a thousand niches, the current columbarium use at the application site could respond to the foreseeable rising territorial demand for niche spaces and provide well-managed columbarium services for the community;

(d) The site profile and its characteristics show the application site is suitable for columbarium development. Since all niches of the proposed development are placed inside a 3-storey block, with the existing tall trees and vegetation around the application site, it provides a screening effect to shield the view from public roads and the proposed development is unable to be viewed from the surroundings. The application site is accessible by existing vehicular road and it is in close proximity to

public transport facilities. The site profile provides suitable conditions for visitors to commemorate their ancestors in a convenient and peaceful environment;

(e) The proposed columbarium at the application site is compatible with the surrounding land uses where numerous indigenous graves and hillside burials and the designated area of Permitted Burial Ground Site are located at the adjoining areas of the application site. Given their close proximity and the same nature of use, the proposed development is in full harmony with surrounding graves and burial uses;

(f) The application site has a long history of sub-urban character and was hard paved before the gazette of first OZP. When the statutory planning control started to take effect in 1988, the Board has taken a broad brush approach to zone the land of the application site and its surroundings to "GB" on the first approved Sha Tin OZP. Yet, the application site has not functioned as "GB" use since then, hence, the proposed plan amendment could rationalize the existing land use profile with proper control and regularize the current columbarium use;

(g) It serves as effective use of land resources and stimulates local environment. Owing to the columbarium use of longstanding nature and to the fact that the application site has long been paved and bounded by a slopping of "GB" land largely with indigenous graves, it is highly and unlikely that the strip of land constituting the application site would be suitable for proper "GB" uses. The proposed development is also expected to stimulate improvement of the local amenity and environment, the upgrade and enhancement of locality will be beneficial to the community;

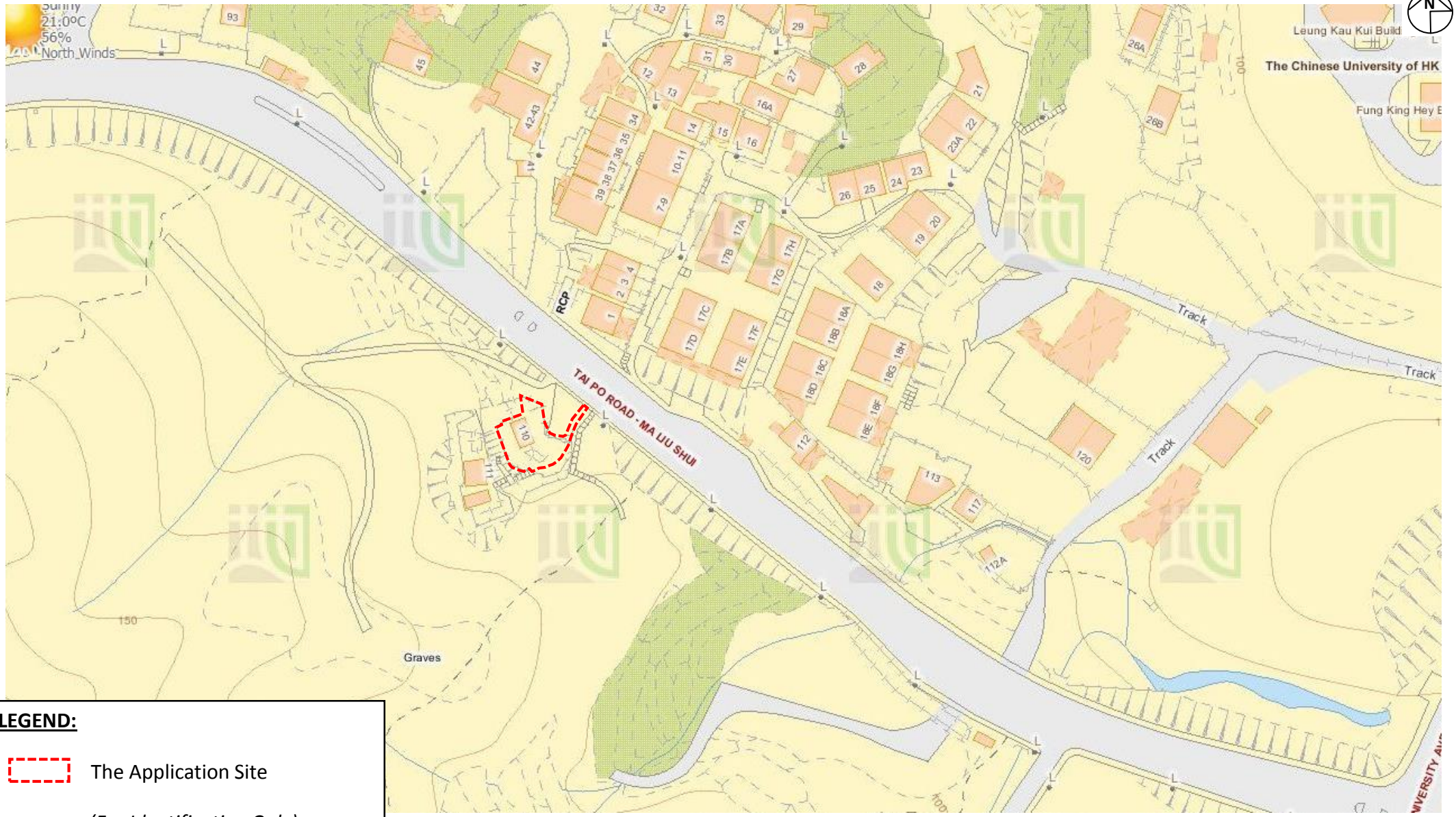
(h) The Applicant has strong commitment to safeguard the interest of community and enhance social benefits to locality. He is willing to provide social services to the community and to secure the interests and wellbeing of the niches-owners and the community by ensuring the columbarium service provided fits the prevailing laws and requirements;

(i) It will create no adverse impact in terms of drainage, sewage, environmental and traffic aspects on the surrounding area as proven in the technical reports; and

(j) It will not set an undesirable precedent for similar applications in view of its planning background, site suitability, scale and new policy initiatives.

7.1.4 In view of the above and the list of detailed planning justifications in this Planning Statement, the Board is respectfully requested to give favorable consideration to the proposed plan amendment.

List of Figures

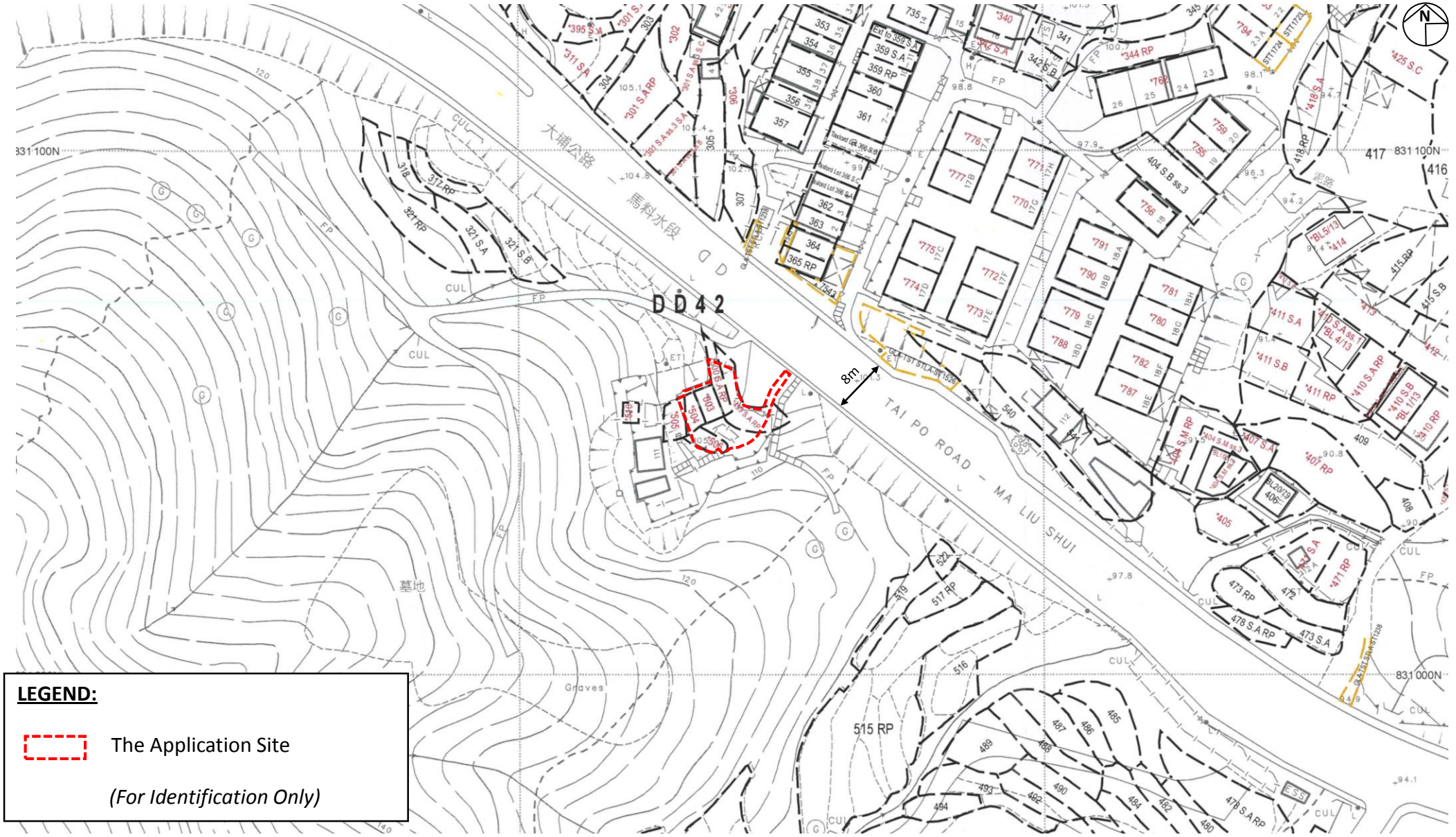


LEGEND:

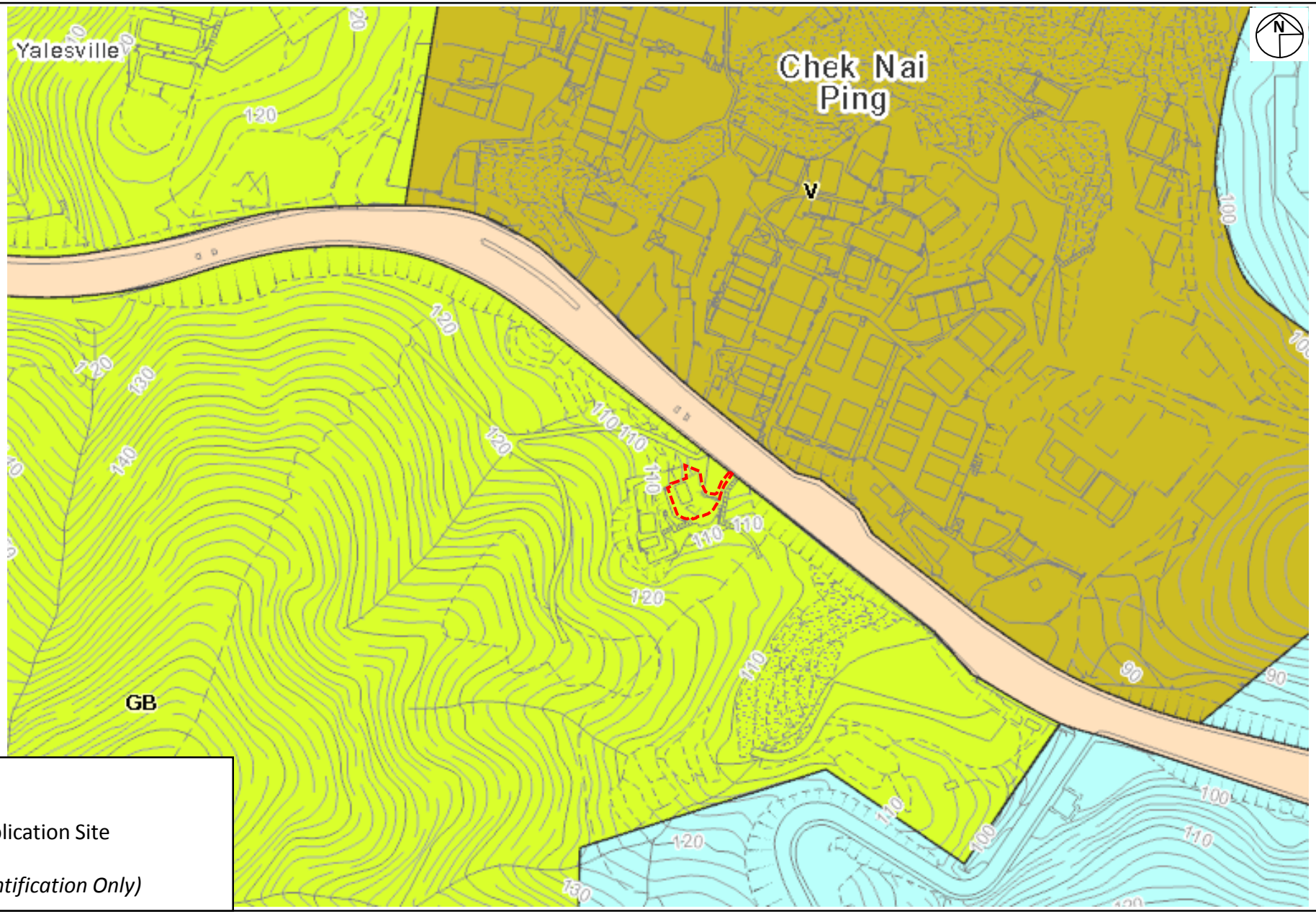
The Application Site

(For Identification Only)

Project: Section 12A Rezoning Application from "Green Belt" Zone to "Other Specified Uses" annotated "Columbarium (1)" Zone for Columbarium Development under Approved Sha Tin Outline Zoning Plan No. S/ST/34 at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories	**Title:** The Location Plan *Ref.: ADCL/PLG-10191-R002/F001*	**Figure:** 1 **Scale:** Not to scale **Date:** Sep 2021	AiKoN AIKON DEVELOPMENT CONSULTANCY LTD.



Project: Section 12A Rezoning Application from "Green Belt" Zone to "Other Specified Uses" annotated "Columbarium (1)" Zone for Columbarium Development under Approved Sha Tin Outline Zoning Plan No. S/ST/34 at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories	**Title:** Extract of Lot Index Plan No. ags_S00000038733_0001 *Ref.: ADCL/PLG-10191-R002/F002*	**Figure:** 2 **Scale:** 1:1000 **Date:** Sep 2021	AIKON DEVELOPMENT CONSULTANCY LTD.

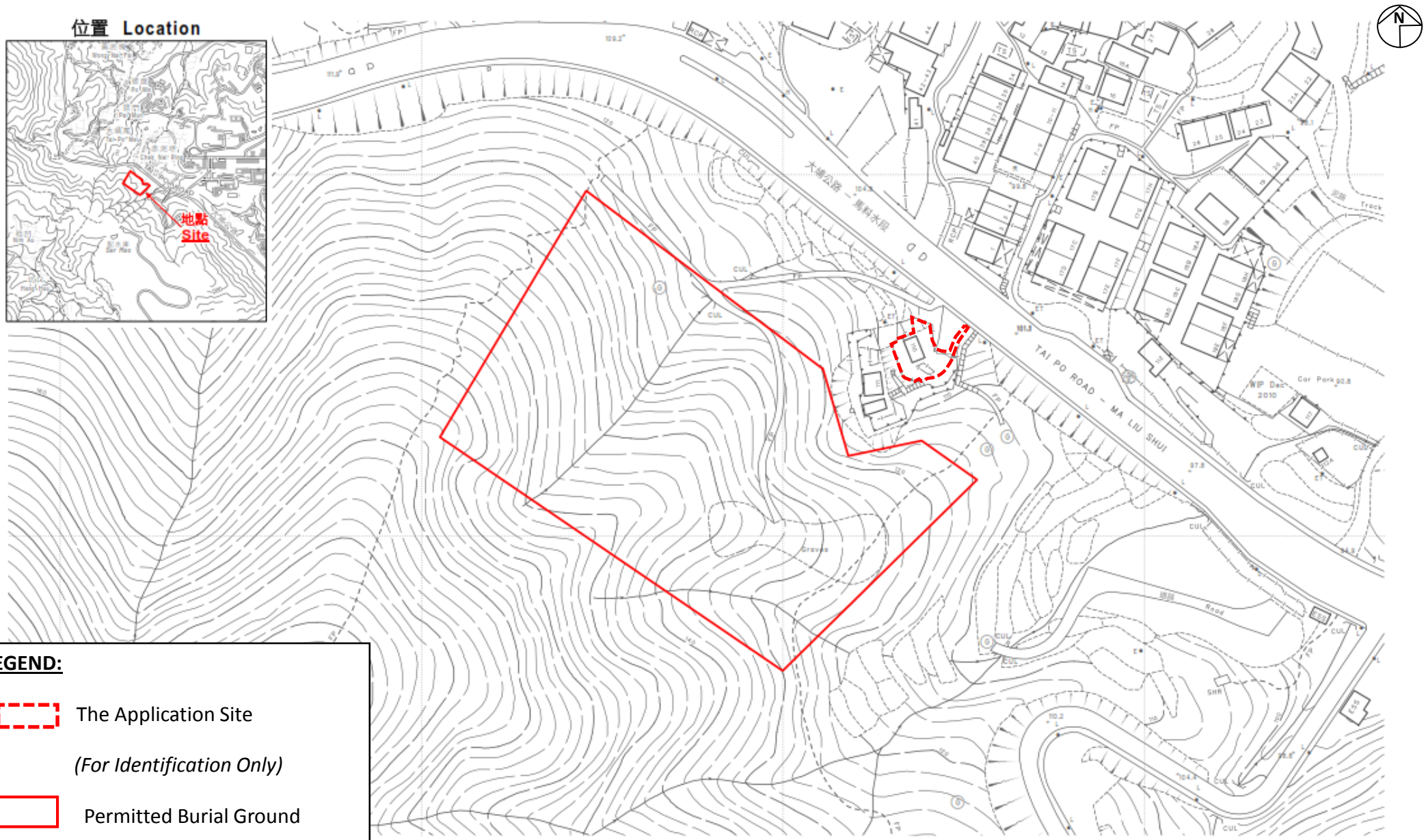


LEGEND:

The Application Site

(For Identification Only)

Project: Section 12A Rezoning Application from "Green Belt" Zone to "Other Specified Uses" annotated "Columbarium (1)" Zone for Columbarium Development under Approved Sha Tin Outline Zoning Plan No. S/ST/34 at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories	**Title:** Extract of Approved Sha Tin Outline Zoning Plan No. S/ST/34 *Ref.: ADCL/PLG-10191-R002/F003*	**Figure:** 3 **Scale:** Not to scale **Date:** Sep 2021	AIKON DEVELOPMENT CONSULTANCY LTD.



Project:
Section 12A Rezoning Application from "Green Belt" Zone to "Other Specified Uses" annotated "Columbarium (1)" Zone for Columbarium Development under Approved Sha Tin Outline Zoning Plan No. S/ST/34 at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories

Title:
Extract of Permitted Burial Ground Site No. ST/23

Ref.: ADCL/PLG-10191-R002/F004

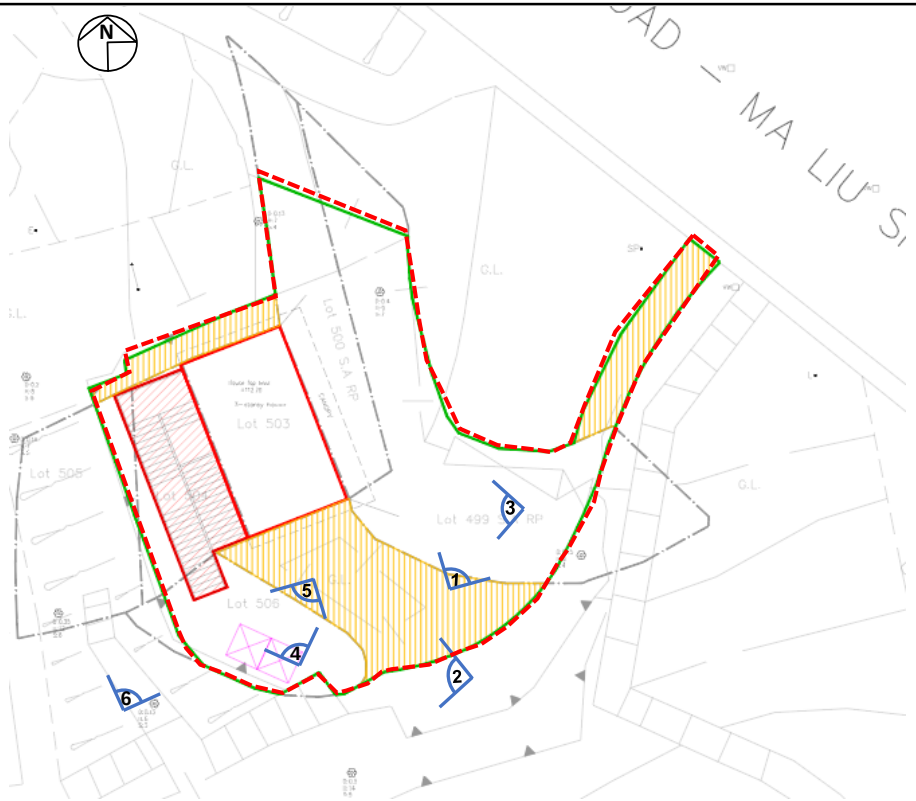
Figure:
4

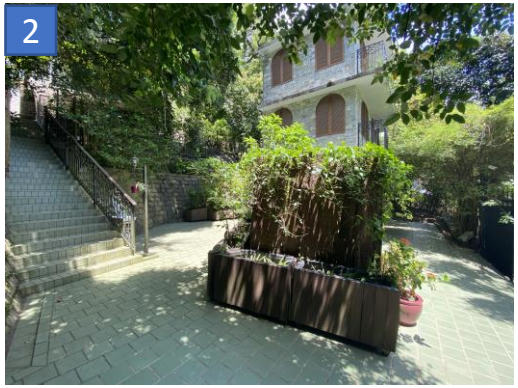
Scale:
Not to scale

Date:
Sep 2021

AIKON DEVELOPMENT CONSULTANCY LTD.

List of Illustrations





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Section 12A Rezoning Application from "Green Belt" Zone to "Other Specified Uses" annotated "Columbarium (1)" Zone for Columbarium Development under Approved Sha Tin Outline Zoning Plan No. S/ST/34 at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories

Title:
Current Condition of the Application Site (1)

Ref.: ADCL/PLG-10191-R002/I001-I

Illustration:
1-I

Scale:
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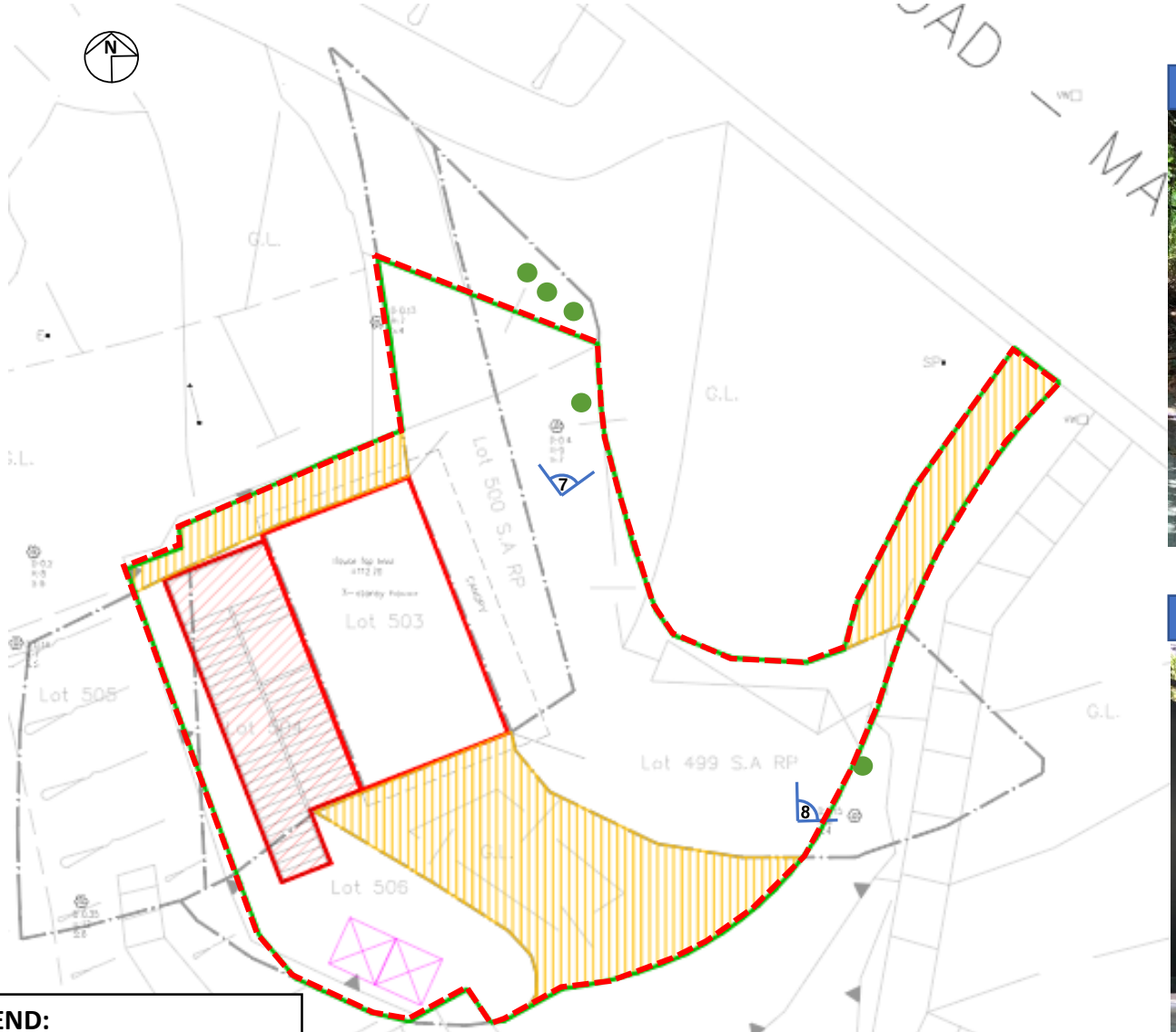
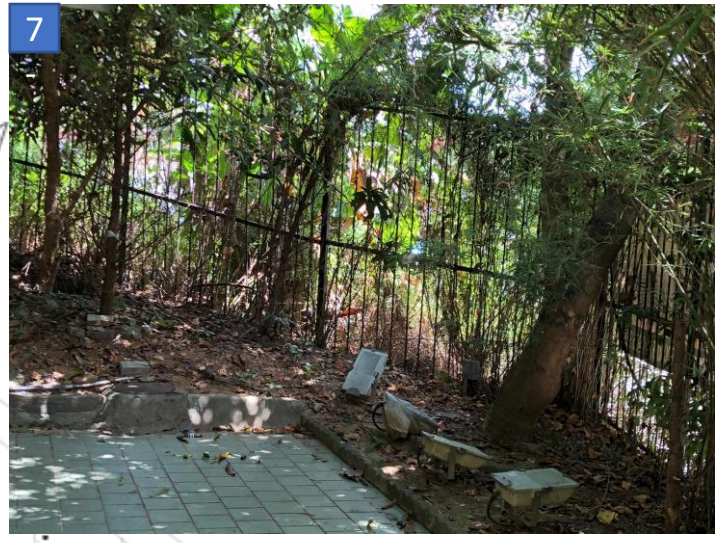
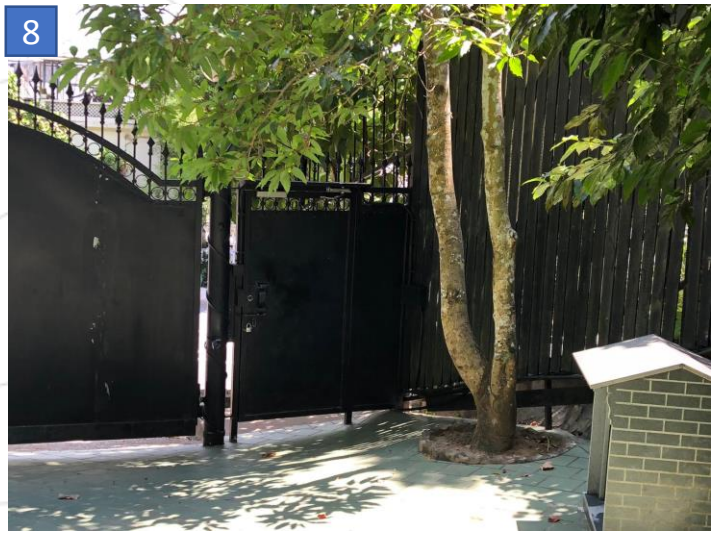
Date:
Sep 2021

AIKON DEVELOPMENT CONSULTANCY LTD.



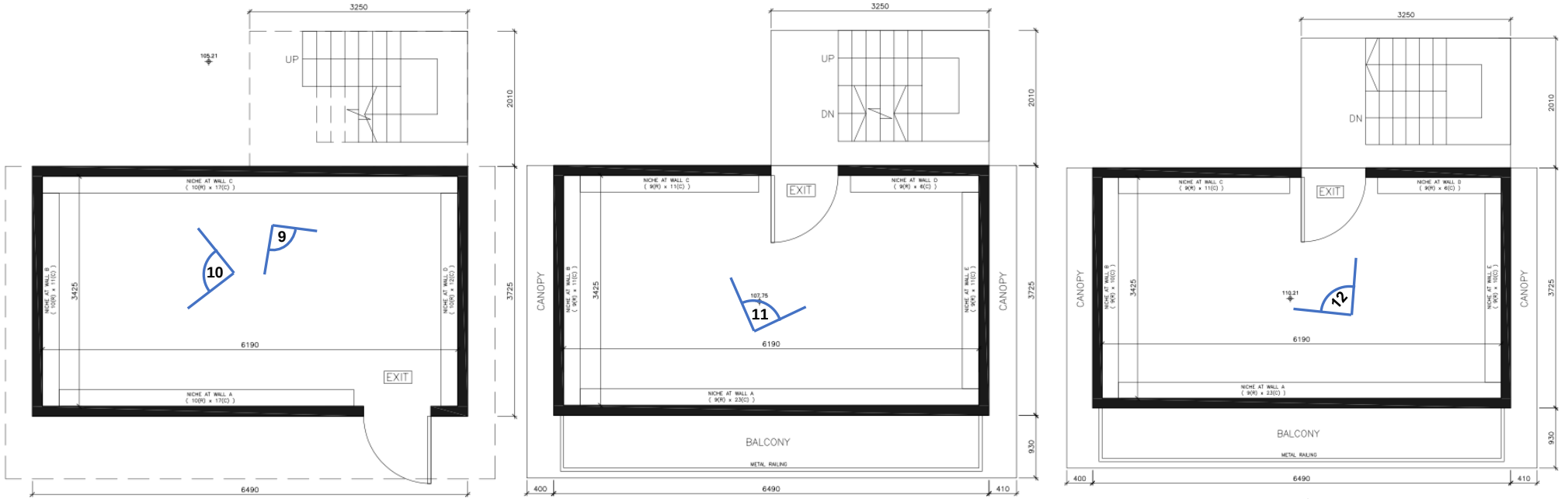


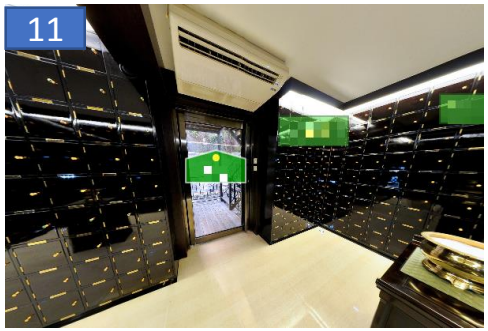


LEGEND:

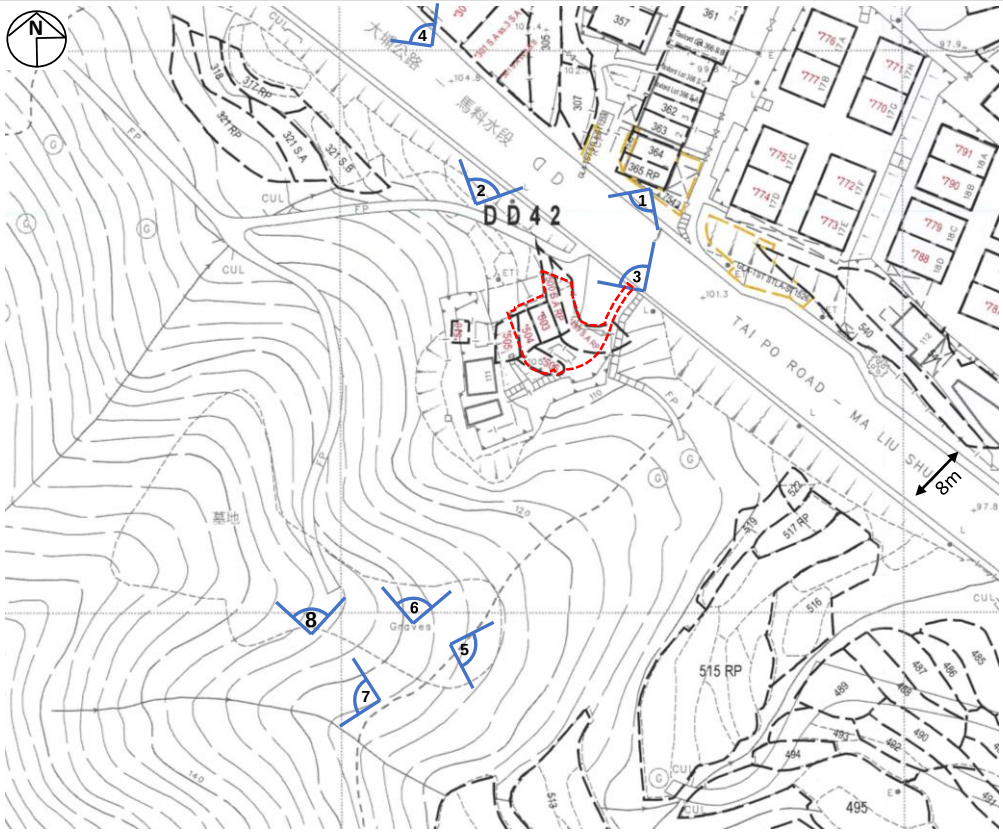
- Existing Tree
  (For Identification Only)

Project: Section 12A Rezoning Application from "Green Belt" Zone to "Other Specified Uses" annotated "Columbarium (1)" Zone for Columbarium Development under Approved Sha Tin Outline Zoning Plan No. S/ST/34 at Lot Nos. 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories	**Title:** Current Condition of the Application Site (2) *Ref.: ADCL/PLG-10191-R002/I001-II*	**Illustration:** 1-II **Scale:** N.A. **Date:** Sep 2021	AiKoN AIKON DEVELOPMENT CONSULTANCY LTD.





Project: Section 12A Rezoning Application from "Green Belt" Zone to "Other Specified Uses" annotated "Columbarium (1)" Zone for Columbarium Development under Approved Sha Tin Outline Zoning Plan No. S/ST/34 at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories	**Title:** Current Condition of the Application Site (3) *Ref.: ADCL/PLG-10191-R002/I001-III*	**Illustration:** 1-III **Scale:** N.A. **Date:** Sep 2021	AIKON DEVELOPMENT CONSULTANCY LTD.



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Aerial photo dated
05.06.1988

Zoom in

LEGEND:

The Application Site

(For Identification Only)

Project: Section 12A Rezoning Application from "Green Belt" Zone to "Other Specified Uses" annotated "Columbarium (1)" Zone for Columbarium Development under Approved Sha Tin Outline Zoning Plan No. S/ST/34 at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories	**Title:** Extract of Aerial Photo No. A14020 dated 05.06.1988 *Ref.: ADCL/PLG-10191-R002/I003*	**Illustration:** 3 **Scale:** N.A. **Date:** Sep 2021	AiKoN AIKON DEVELOPMENT CONSULTANCY LTD.

List of Appendices

Appendix | I

Proof of Application of Private Columbarium Licence and a TSOL to the PCLB on 27.3.2018

食物環境衞生署
Food and Environmental Hygiene Department

私營骨灰安置所事務辦事處
Private Columbaria Affairs Office

認收回條

致：吳維乾 (姓名) 先生 / ~~女士~~

沙田靜苑 (骨灰安置所名稱)

本辦事處已收到閣下於 2018 年 3 月 27 日 提交的申請。

Food And Environmental Hygiene Department
Private Columbaria Licensing Team
私營骨灰安置所牌照組
食物環境衞生署

私營骨灰安置所事務辦事處
食物環境衞生署

日期：27 March 2018

食物環境衞生署
Food and Environmental Hygiene Department

私營骨灰安置所事務辦事處
Private Columbaria Affairs Office

覆函請寄交食物環境衞生署並引用本署檔案編號

本署檔號: (69) in FEHD PC 72-40/62/2018/080 Pt. 2

掛號郵件

沙田靜苑
新界大埔公路馬料水段
沙田赤泥坪村110號
百年控股有限公司
(獲授權人士: 吳維乾先生)

吳先生：

根據《私營骨灰安置所條例》（第630章）（《條例》）
申請指明文書
沙田靜苑
新界沙田大埔公路馬料水段赤泥坪村110號
(丈量約份第42約地段第499號A分段餘段、
第500號A分段餘段、第503號、第504號、第505號、第506號)

關於你在 2018 年 3 月 27 日就上述私營骨灰安置所向私營骨灰安置所發牌委員會(發牌委員會) 提交的牌照及暫免法律責任書申請，私營骨灰安置所事務辦事處(骨灰所辦) 已分送到相關部門，由各有關部門審核屬於其範疇的證明文件及資料，並就申請是否符合該範疇的要求給予意見。消防處就你提交的文件及資料提出的意見詳情列於附件一。

如需要就消防處要求澄清及/或補交所須文件及資料等事項回應及補充文件和資料，請盡快向骨灰所辦提交回應及補充文件和資料，以便本署送交有關部門跟進上述申請。若你對消防處的意見有任何疑問，請致電 2302 5326 與消防隊長(私營骨灰安置所專責隊伍) 徐達志先生聯絡。

申請人是否因應上述部門的意見而進行某些跟進工作(例如改動處所/裝置的工程) 純屬申請人的決定，完成某些跟進工作並不保證上述指明文書申請一定最終獲批。各有關部門就該申請是否符合該部門範疇的要求給予的意見會提交發牌委員會考慮。當發牌委員會就某項指明文書申請作出定奪時，該項申請必須已提交足夠證明致使委員會信納該申請符合《條例》指明的所有規定及發牌委員會的所有相關要求，發牌委員會才會考慮是否批出指明文書。在作出決定時，發牌委員會須顧及公眾利益及可顧及任何其他相關因素。

九龍長沙灣道 681 號貿易廣場 5 樓 501-502
Units 501-502, 5/F, Trade Square, 681 Cheung Sha Wan Road, Cheung Sha Wan, Kowloon
電話 Tel : 2350 7319 傳真 Fax : 2827 2908

以上並非涵蓋所有相關部門就上述私營骨灰安置所提交的牌照及暫免法律責任書申請的意見，當骨灰所辦陸續收到其他有關部門的意見時，會盡快通知申請人。此外，在處理有關指明文書申請的過程中，各部門有可能因應新的資訊及/或最新的情況而修訂其意見及/或建議的要求/條件。

若有任何疑問，請致電 2350 7398 或電郵發送致 pc_app@fehd.gov.hk 與個案經理姚恩芳女士聯絡。

食物環境衞生署署長

(朱俊禧 代行)

2020 年 4 月 20 日

九龍長沙灣道 681 號貿易廣場 5 樓 501-502
Units 501-502, 5/F, Trade Square, 681 Cheung Sha Wan Road, Cheung Sha Wan, Kowloon
電話 Tel : 2350 7319 傳真 Fax : 2827 2908

重要事項

《私營骨灰安置所條例》第 99 條 － 提供虛假或具誤導性的資料的罪行

(1) 任何人如 －

(a) 根據本條例，就某骨灰安置所提出申請，而在該申請中，或在與該申請相關的情況下，提供在要項上屬虛假或具誤導性的資料；或

(b) 在知悉某資料在要項上屬虛假或具誤導性的情況下，根據本條例，向署長、獲授權人員或公職人員，提供該資料，

即屬犯罪。

(2) 任何人犯第(1)款所訂罪行，一經定罪，可處罰款五十萬元及監禁 2 年。

重要提醒

(1) 任何私營骨灰安置所在2018年3月29日之後，如果沒有暫免法律責任書申請在處理中，亦未取得任何指明文書，便不能繼續營辦。任何人士在沒有指明文書的情況下營辦、維持、管理或以任何方式控制骨灰安置所即屬違法，循簡易程序定罪，可處罰款二百萬元及監禁3年；如循公訴程序定罪，則可處罰款五百萬元及監禁7年。

(2) 在寬限期後而沒有持有任何指明文書的情況下繼續營運骨灰安置所，或停辦骨灰安置所，營辦人須根據《私營骨灰安置所條例》附表5的「訂明骨灰處置程序」處置存放於該骨灰安置所內的骨灰，否則即屬犯罪，違例者可被檢控，循簡易程序定罪，可處最高罰款二百萬元及監禁3年；而循公訴程序定罪，則可處最高罰款五百萬元及監禁7年。

副本送(如適用)：

暫免法律責任書申請檔案：FEHD PC 72-40/64/2018/097

九龍長沙灣道 681 號貿易廣場 5 樓 501-502
Units 501-502, 5/F, Trade Square, 681 Cheung Sha Wan Road, Cheung Sha Wan, Kowloon
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規劃署對根據《私營骨灰安置所條例》(《條例》)(第630章)就截算前骨灰安置所提交的牌照及暫免法律責任書申請的意見

骨灰安置所名稱： 沙田靜苑
申請人姓名： 百年控股有限公司
骨灰安置所地址： 新界沙田大埔公路馬料水段赤泥坪村110號 (丈量約份第42約地段第499號A分段餘段、第500號A分段餘段、第503號、第504號、第505號、第506號)

檔號：(63)&(71) in FEHD PC 72-40/62/2018/080 Pt.2 (牌照)
檔號：(53)&(57) in FEHD PC 72-40/64/2018/097 (暫免法律責任書)

本署對題述申請(包括申請人就申請提交的建議圖則)的意見如下：

I. 是否有《條例》第17條所述的指明執法行動針對有關骨灰安置所？
[請在以下其中一個方格內加上✓號。]

☑ 沒有《條例》第 17 條所述就違例發展採取的指明執法行動針對有關骨灰安置所。

☐ 有《條例》第 17 條所述就違例發展採取的指明執法行動針對有關骨灰安置所，詳情載於附錄 3。

II. 關乎規劃要求內有關「骨灰安置」的規定：

(1) 是否准許在牌照申請範圍內存放骨灰？
☐ 是 ☑ 否

(2) 如上述第(II)部問題(1) 的答案為「是」，請在適當方格內加上✓號:

☐ 在有關分區計劃大綱圖內，存放骨灰屬經常准許的用途
(如有特定限制，請註明:_____)
☐ 已獲城市規劃委員會根據《城市規劃條例》第 16 條批准規劃許可申請
☐ 屬現有用途

(3) 如在上述第(II)部問題(1) 的答案為「是」，有否註明在牌照申請範圍內准許骨灰龕位數目上限？

☐ 有，請註明准許骨灰龕位數目上限：_____ 個
☐ 否

(4) 如在上述第(II)部問題(1) 的答案為「是」，有否註明在牌照申請範圍內准許安放骨灰份數(或骨灰甕數)上限？

☐ 有，請註明准許上限： _____ 份骨灰/個骨灰甕
☐ 否

(5) 如上述第(II)部問題(1) 的答案為「否」，理由如下：
「靈灰安置所（只限設於宗教機構內或現有靈灰安置所的擴建部分）」在相關法定圖則下的「綠化地帶」屬於「第二欄」用途並須先向城市規劃委員會（城規會）申請規劃許可。除此以外，「靈灰安置所」並非相關法定圖則下的「綠化地帶」的准許用途。

(6) [如申請人須提供進一步資料，請在以下方格內加上✓號]

☑ 申請人須提供進一步資料，以便本署審核申請是否符合《條例》內關乎規劃的要求內有關「骨灰安置」的規定。所需資料載列於附錄1(見第V部)。

III. 對申請人就牌照申請提交的建議圖則的意見

[請在以下其中一個方格內加上✓號。]

☐ 本署對上述牌照申請的建議圖則並無意見。

☑ 本署對上述牌照申請的建議圖則有以下意見：

請參閱上列第 II 部分的意見。

IV. 對牌照申請人所提交的管理方案的意見

[請在適當方格內加上✓號。]

☑ 本署對上述管理方案並無意見。進一步的意見將會於根據城市規劃條例第 12A 條或第 16 條提出的申請獲批准後提供(如有)。

☐ 本署對上述管理方案有以下意見：

☐ 沒有提交管理方案。請要求申請人提交管理方案，以便進一步處理／在根據城市規劃條例第 12A 條或 16 條提出規劃申請時提交可容納的訪客量及入場管制／交通及公共運輸安排／人流管理／應對火警或其他緊急情況的應變方案等資料*。

☐ 管理方案沒有提供以下的資料：可容納的訪客量及入場管制／交通及公共運輸安排／人流管理／應對火警或其他緊急情況的應變方案／其他(請註明：_____)*。請要求申請人提交已包括上述資料的修訂管理方案。

☐ 管理方案沒有提供下列的資料：可容納的訪客量及入場管制／交通及公共運輸安排／人流管理／應對火警或其他緊急情況的應變方案／其他(請註明：_____)*。請要求申請人在根據城市規劃條例第 12A 條或第 16 條提出的規劃申請時提交所有上述資料。

☐ 其他意見：

V. 對將列入"須符合的要求的通知書"內的要求的意見

[請在以下其中一個方格內加上✓號。]

☐ 就牌照的申請，本署對將列入"須符合的要求的通知書"內的要求並無意見。

☑ 本署建議把附錄 1所載的要求列入發給申請人的"須符合的要求的通知書"。

VI. 建議對將發出的牌照(如批准)施加的條件

如私營骨灰安置所發牌委員會決定批准這宗申請，

[請在以下其中一個方格內加上✓號。]

☐ 本署建議對牌照施加附錄 2所載的條件。

☐ 本署對施加於牌照的條件並無任何建議。

☑ 本署會待牌照的申請人報告已符合"須符合的要求的通知書"內關乎規劃的要求後，才提出建議 (見附錄1)。

VII. 對暫免法律責任書申請人所提交有關符合申請牌照要求的行動計劃(如適用)的意見

[請在適當方格內加上✓號。]

☑ 本署對申請人的行動計劃並無意見。

☐ 本署對申請人的行動計劃有以下意見：

VIII. 訴訟程序#

[請在以下其中一個方格內加上✓號。]

☑ 本署與上述申請指明文書的私營骨灰安置所或申請人現時沒有進行訴訟程序。

☐ 本署與上述申請指明文書的私營骨灰安置所或申請人現正進行訴訟程序，詳情如下：

IX. 其他意見

請申請人注意，在根據《城市規劃條例》第 12A 條/16 條向城規會提交規劃申請前，應先向發牌委員會就牌照申請提交已獲合資格人士核證的建議圖則（包括龕位資料），並在骨灰所辦完成審核及接納龕位資料後，才向城規會提交規劃申請。

在提交規劃申請時，申請人應利用夾附在申請指引附件 8 中附錄 1 的表格一併提交龕位數目的詳情，並應提交可容納的訪客量及入場管制／交通及公共運輸安排／人流管理／應對火警或其他緊急情況的應變方案等資料。

首份涵蓋有關地點的法定圖則的公告在憲報刊登的日期是: 1961 年 4 月 28 日。如申請人要求享有法定圖則下「現有用途」權利，應提交：

- *在緊接首份涵蓋申請地點／處所的法定圖則的公告在憲報刊登前已被用作「靈灰安置所」用途及其規模的證明；以及*
- *自首份涵蓋申請地點／處所的法定圖則的公告在憲報刊登以來一直持續進行「靈灰安置所」用途及其規模（即地點／處所的範圍及龕位數目）的證明；或*
- *自首份涵蓋申請地點／處所的法定圖則的公告在憲報刊登其後的任何一份圖則所准許的「靈灰安置所」用途，而該「靈灰安置所」用途在有關圖則有效期內展開，而且自展開以來一直持續進行及其規模（即地點／處所的範圍及龕位數目）的證明。*
- *有關證明包括布局圖、地點／處所的照片／航攝照片、已批准的建築圖則、短期豁免書、短期租約、租賃協議、商業登記申請表、土地業權證明及單據等。*

規劃署向私營骨灰安置所事務辦事處提出上述意見的日期： *16/4/2020*

'指除第I部分所述的執法行動以外的法律事宜。

關乎規劃的規定
牌照申請人須注意事項

《私營骨灰安置所條例》（第 630 章）（《條例》）：

根據《條例》第18(1)(a)(ii)條及附表2第2條，申請牌照的私營骨灰安置所須符合《城市規劃條例》(第131章)的規定。

如果牌照申請涉及的骨灰安置所處所的用途並不符合《條例》內關乎規劃的規定，申請人須按照規劃署的意見 (附件 1/附錄 1) 去採取行動 (包括向城市規劃委員會提出修訂圖則／規劃許可申請、履行規劃許可的附帶條件等) 。

請注意: 申請人如要求享有「現有用途」權利，須提供足夠有力證據以證明該申請處所在有關首份法定圖則刊憲之前已被用作並在其後一直持續用作「靈灰安置所」用途，主要詳情如下:

- 在緊接首份涵蓋申請地點／處所的法定圖則的公告在憲報刊登前已被用作「靈灰安置所」用途及其規模 (即地點／處所的範圍及龕位數目) 的證明；及

- 自首份涵蓋申請地點／處所的法定圖則的公告在憲報刊登以來一直持續進行「靈灰安置所」用途及其規模 (即地點／處所的範圍及龕位數目) 的證明。

有關證明包括布局圖、地點／處所的照片／航攝照片、已批准的建築圖則、短期豁免書、短期租約、租賃協議、土地業權證明及單據等。

提交管理方案事宜

就申請牌照的「截算前骨灰安置所」在符合規劃規定時是否須提交交通影響評估方面，政府在2017年11月22日公布政策措施。因應這項政策措施的相關安排，請參閱私營骨灰安置所發牌委員會(發牌委員會)公布的《私營骨灰安置所牌照及其他指明文書申請指引》(《申請指引》)的第18章，該章已在2018年1月公布，而當時私營骨灰安置所事務辦事處(骨灰所辦)亦已向就「截算前骨灰安置所」申請牌照的申請人發出通知信；當中內容提及下列安排:

- 如果「截算前骨灰安置所」並未符合關乎規劃的規定，申請人在向發牌委員會提交管理方案前，應先向城規會提交規劃申請並取得城規會的同意/批准。

- 如果該規劃申請只包括在 2017 年 6 月 30 日前已出售的龕位，在就規劃申請提供意見時，相關部門不會要求申請人遞交交通影響評估。

- 申請人在向城規會提交規劃申請前，應先向發牌委員會就牌照申請提交已獲合資格人士核證的建議圖則(包括龕位資料)，並在骨灰所辦完成審核龕位資料及接納以該些資料作為進一步處理其牌照申請的基礎後，才向城規會提交規劃申請。

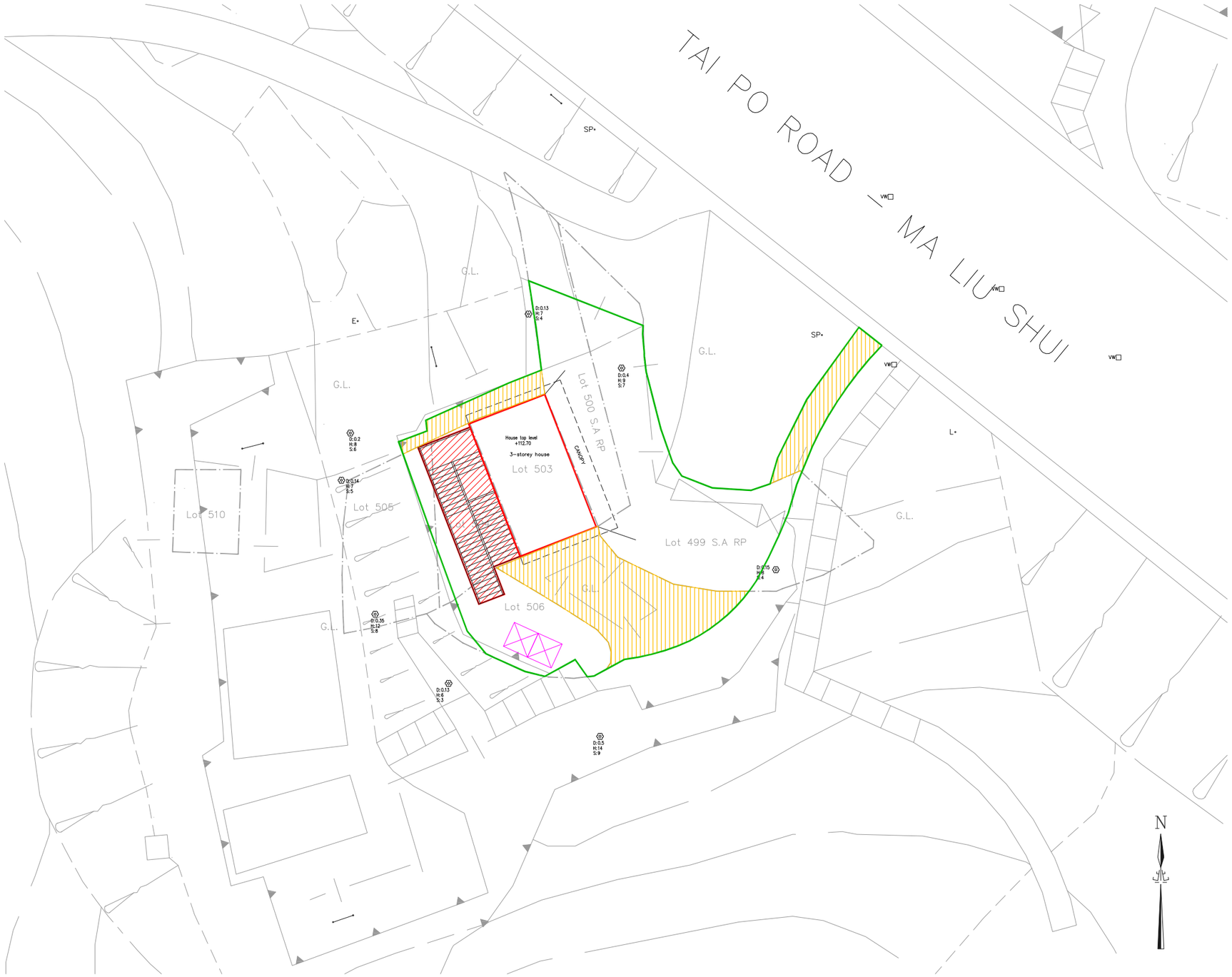
- 申請人在獲得城規會的同意/批准後，向發牌委員會提交管理方案，並在管理方案內加入城規會審批規劃申請時相關部門及城規會接納的人流及交通管理措施(及所施加的條件(如有)) 和在《申請指引》)的第 18 章和附件 16 內指明的所須資料。

- 如果申請人在未獲規劃署確認其牌照申請符合規劃規定前已向發牌委員會提交了管理方案，有關部門可能會待牌照申請獲規劃署確認符合規劃規定後才就管理方案提供意見。申請人應盡快採取行動以符合規劃規定。

私營骨灰安置所發牌委員會

Appendix | II

Architectural Drawings



N

LEGENDS

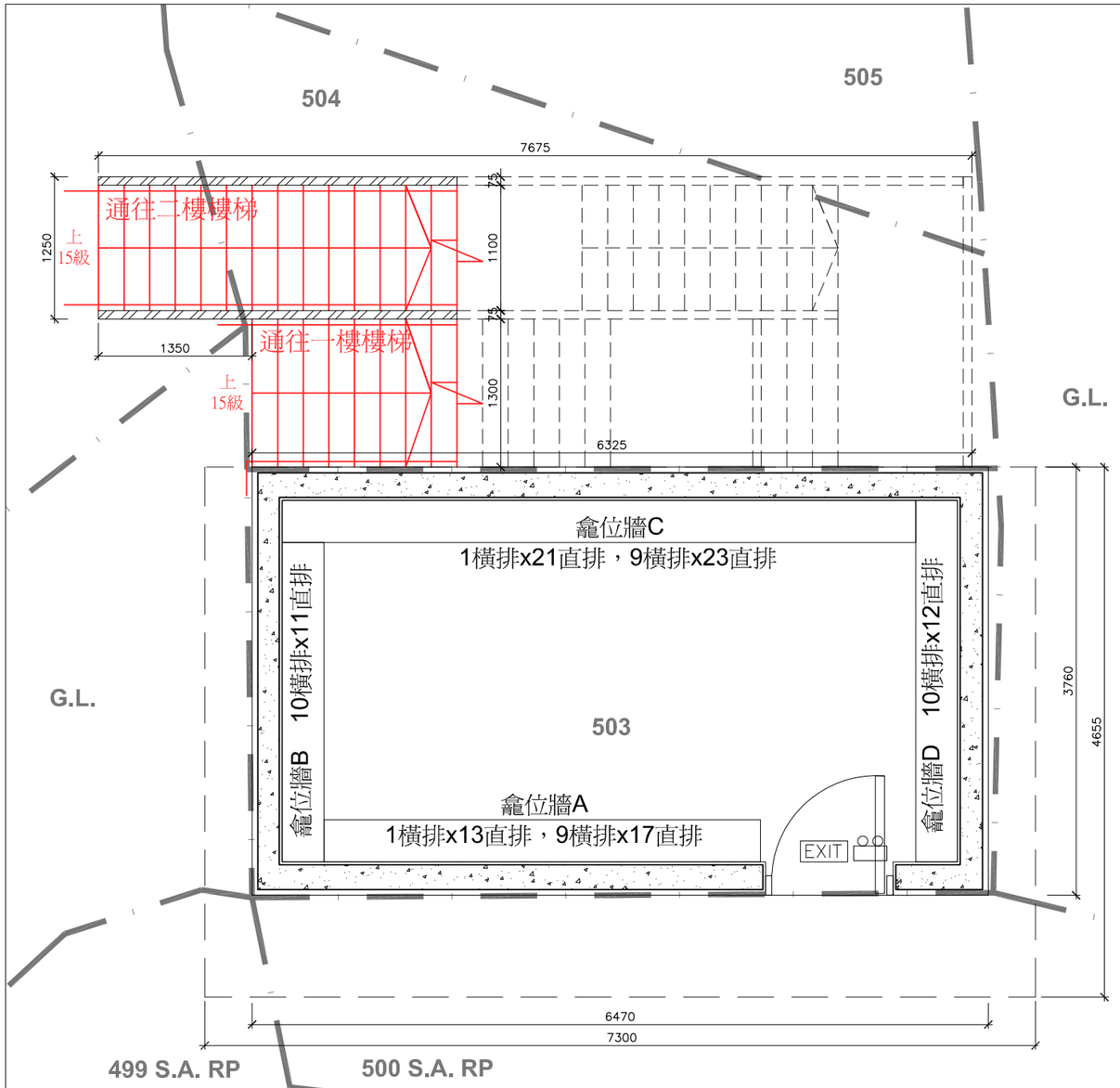
- APPLICATION SITE BOUNDARY / PROPOSED RE–ZONING BOUNDARY — 189.638m²
- GOVERNMENT LAND — 46.185m²
- 3–STOREY HOUSE (COLUMBARIUM)
- STAIRCASE
- LOT BOUNDARY
- PORTABLE TOILET

APPLICATION SITE AREA/ PROPOSED RE–ZONING BOUNDARY	: 189.638 s.m.
GOVERNMENT LAND	: 46.185 s.m.
CLASS OF SITE	: DETERMINED BY BD
PLOT RATIO	: 0.632
TOTAL GFA	: 33.982x3+17.816 = 119.762 s.m.
SITE COVERAGE	: 33.982+17.816 = 51.798s.m. (27.7%)
BUILDING HEIGHT	: 7.62m
NO. OF NICHES	: 624+555+537 = 1716

SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT LOTS 499 S.A RP (PART), 500 S.A RP (PART), 503, 504 (PART), 505 (PART), 506 (PART) IN D.D. 42 AND ADJOINING GOVERNMENT LAND, 110 CHEK NAI PING VILLAGE, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIE

SP–01

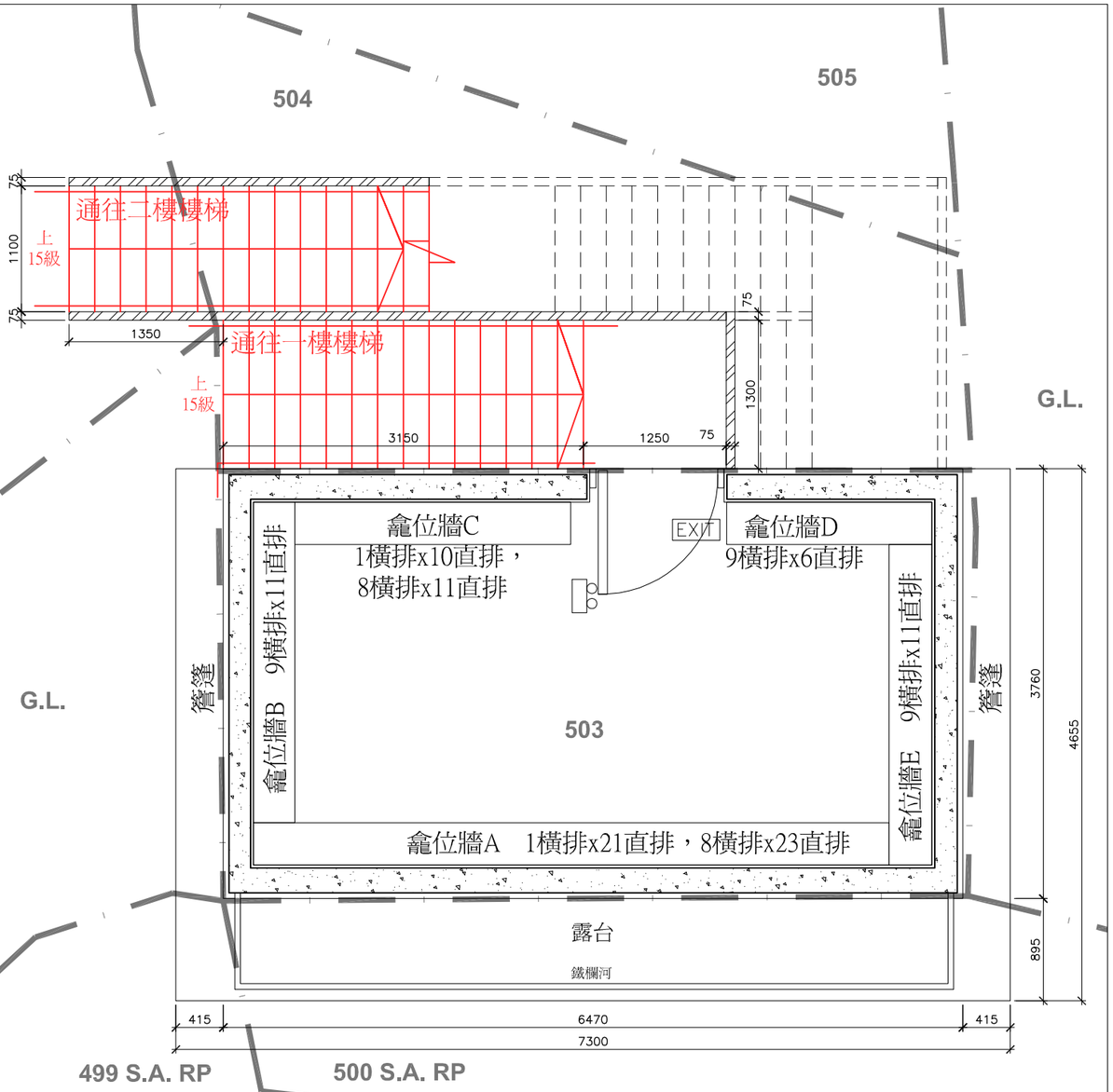
2021.9.20



地下

G/F GFA
7.300x4.655+1.250x7.675+1.300x6.325
= 51.798 s.m.

NO. OF NICHES AT G/F
= 624 NOS.



一樓

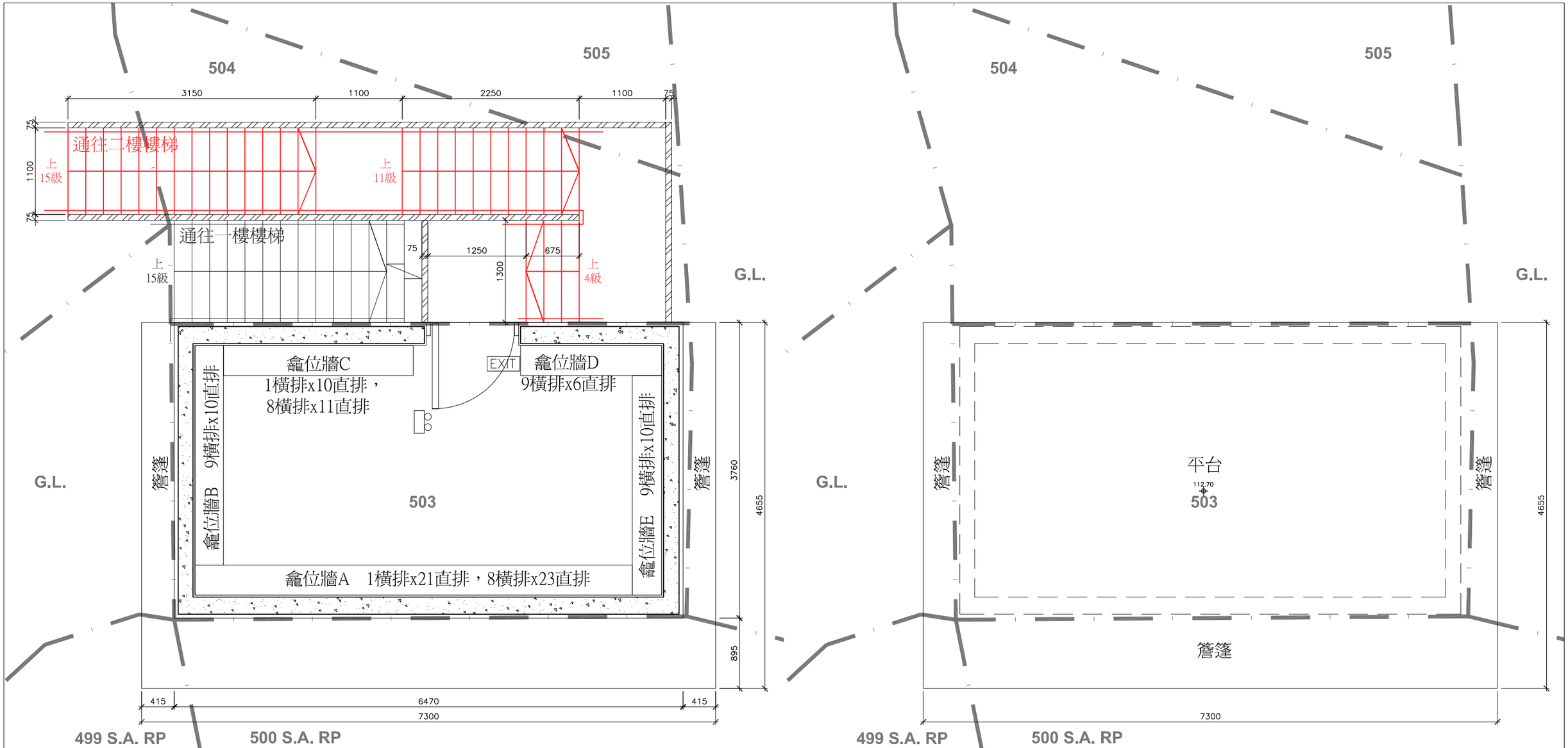
1/F GFA
7.300x4.655
= 33.982 s.m.

NO. OF NICHES AT 1/F
= 555 NOS.

SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT LOTS 499 S.A RP (PART), 500 S.A RP (PART), 503, 504 (PART), 505 (PART), 506 (PART) IN D.D. 42 AND ADJOINING GOVERNMENT LAND, 110 CHEK NAI PING VILLAGE, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIE

BP-01

2021.9.17



二樓

2/F GFA
7.300x4.655
= 33.982 s.m.

NO. OF NICHES AT 2/F
= 537 NOS.

天台

SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT LOTS 499 S.A RP (PART), 500 S.A RP (PART), 503, 504 (PART), 505 (PART), 506 (PART) IN D.D. 42 AND ADJOINING GOVERNMENT LAND, 110 CHEK NAI PING VILLAGE, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIE

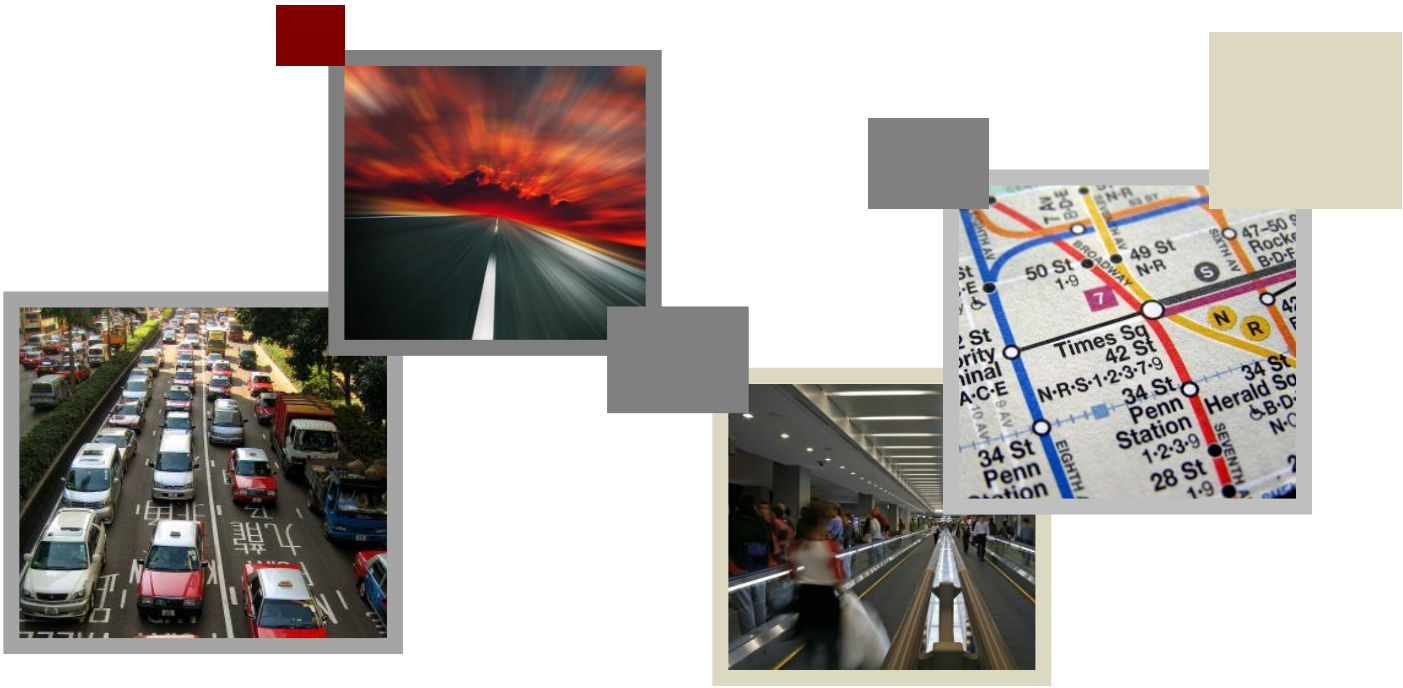
BP-02

2021.9.17

Appendix | III

Traffic Impact Assessment

Technical Support of Section 12A Rezoning Application for Proposed Columbarium Development at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories



TRAFFIC IMPACT ASSESSMENT REPORT

Reference: 30768-A-R02-01
Date: September 2021

AXON
CONSULTANCY

Contents

1 Introduction

1.1 Background

The Applicant intends to apply for licence for the Private Columbarium at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land Ma Liu Shui for Private Columbaria under Section 12A Rezoning Application of Columbarium Development.

Under the Approved Shatin Outline Zoning Plan No. S/ST/34, the application site is zoned as “Green Belt” (“GB”), which columbarium (within a Religious Institution of extension of existing Columbarium) is listed in “Column 2”, however the proposed development has no religious background.

In view of the above, a rezoning application under Section 12A to rezone the land use of the Site into “Other Specified Uses (Columbarium)” (“OU(Columbarium)”) zone is hence proposed.

AXON Consultancy is therefore commissioned to prepare the TIA report to support the subject Planning Application.

1.2 Objectives

The objectives of the traffic impact study are as follows:

- to estimate the potential traffic generation due to the proposed development;
- to assess the future traffic situation in the surrounding network;
- to appraise the potential traffic impact of the proposed development; and
- to consider road improvement proposals, if required.

2 The Proposed Development

2.1 The Site

The site is located at the various lots in D.D. 42 and Adjoining Government Land Ma Liu Shui, Sha Tin as shown in **Figure 2.1**. The site area is about 189.6m^2, including 46.2m^2 of Government land. The site will consist of 1 non-domestic blocks with a total floor area of about 119.76m^2.

Under the Approved Shatin Outline Zoning Plan No. S/ST/34, the application site is currently zoned as “Green Belt” (“GB”).

2.2 The Proposed Columbarium Development

The site is proposed to be developed as a 3-steroy Private Columbaria, with a total of 1,716 niches. As provided by the applicant, 336 no. of niches are sold, in which 3 no. of niches are occupied.

The development is proposed to operate from 10:00 am to 5:00 pm during normal days throughout the week. The operation hours would be extended to 9:00 am to 6:00 pm on Ching Ming Festival and Chung Yeung Festival.

3 Existing Traffic Situation

3.1 Existing Road Network

The site can be reached by the westbound of Tai Po Road (Ma Liu Shui). Tai Po Road (Ma Liu Shui) is a single-two lane carriageway.

Tai Po Road (Ma Liu Shui) is connected to the slip road of Tai Po Road (Sha Tin), which is a single carriageway running from south to north. Vehicles from Tai Po Road (Sha Tin) can enter Tai Po Road (Ma Liu Shui) Northbound via the slip road.

3.2 Public Transport

Public transport services including franchised bus company, green minibus (GMB) and Public Light Bus (PLB) are listed in **Table 3.1** and illustrated in **Figure 3.1**.

Table 3.1 Existing Public Transport Services

Route No.	Route	Headway
Kowloon Motor Bus (KMB)		
72	Cheung Sha Wan – Tai Wo	Every 20-25 minutes
72A	Tai Wai Station – Tai Po Industrial Estate	Every 30 minutes
73A	Wah Ming – Yu Chui Court	Every 30 minutes
74A	Kai Yip – Tai Wo	Every 60 minutes
872	Shatin Race Course – Tai Po Central	On the occasion of race days
Green Minibus (GMB)		
28K	Tai Po Market Station – Sha Tin (Pak Hok Ting Street)	Every 6-9 minutes
28S	Pak Shek Kok (Providence Bay) – Sha Tin (Pak Hok Ting Street)	Every 30-45 minutes
Public Light Bus (PLB)		
Kwun Tong – Tai Po		Every 8-15 minutes
Sham Shui Po – Sheung Shui		No fixed schedule; Upon full occupancy
Mongkok – Sheung Shui		
Mongkok – Tai Po		
Jordan – Sheung Shui		

3.3 Traffic Count Surveys

In order to appraise the existing traffic conditions under the worst traffic situation, classified turning movement count surveys were carried out at the key junctions of the study area, as shown in **Figure 3.2**, on Ching Ming Festival 4 April 2021 (Sunday) from 8:30 am to 6:30 pm. The critical junctions were selected according to applicant proposed traffic routes as shown in **Appendix A**. The area of influence (AOI) is demonstrated in **Figure 3.3**.

The morning and afternoon peak hours of the road network have been identified as 11:15am to 12:15pm and 2:00pm to 3:00pm, respectively. In view of the abnormal traffic conditions under the COVID-19 pandemic during Ching Ming Festival 2021, calibration of survey data have been carried out.

Adjustments on Survey Data

To incorporate and eliminate the impacts of abnormal traffic conditions during the pandemic during Ching Ming Festival 2021, the observed traffic flows in 2021 shall be calibrated with reference to the survey data in Ching Ming Festival 2018. As junctions A to G have been surveyed in both 2018 and 2021, the traffic count movements of those junctions were used for the calibration.

The average growth factor of the planning data "Projections of Population Distribution 2019-2028" of Tai Po and Sha Tin between 2018 and 2021 is +1.6% per annum as shown in **Appendix C**. Meanwhile, adjacent developments that have been completed between April 2018 and March 2021 shall have been fully covered in the mentioned planning data and observed in the traffic survey during Ching Ming Festival 2021. Therefore, no further adjustment would be required for the completed adjacent developments.

Hence, 2021 Anticipated Flows = 2018 Observed Flows x (Average Annual Growth Rate in Tai Po and Sha Tin)^3

The overall proportional difference of the observed traffic flows in 2021 and the anticipate traffic flows (with reference to 2018 data) in 2021 can be obtained. By comparing the sum of all common movements of the mutual junctions surveyed in 2018 and 2021, an adjustment factor of 1.121 (1.152) is applied to the morning (evening) peak, which is derived by the formulas below:

2021 Adjustment Factors = Total Sum of 2021 Anticipated Flows at Junctions A to G ÷ Total Sum of 2021 Observed Flows at Junctions A to G

2021 Calibrated Flows = 2021 Observed Flows x 2021 Adjustment Factors

The calibrated 2021 traffic flows in the study area are presented in **Figure 3.4**.

3.4 Existing Junction Capacity Assessment

Based on the observed traffic flows, the junction performance analysis of the key junctions in the vicinity of the subject site during the morning and afternoon peak hours were assessed in accordance with the Transport Planning Design Manual Volume 2 Chapter 4.

The performance of a traffic signalised junction is indicated by its reserve capacity (RC). A positive RC indicates that the junction is operating with spare capacity. A negative RC indicates that the junction is overloaded; resulting in traffic queues and longer delay time.

The performances of a priority junction and roundabout are indicated by its design flow to capacity (DFC). A DFC ratio of 100% would therefore indicate continual queuing and could not be considered acceptable. A DFC ratio of 85%, indicating that queuing would theoretically be avoided in 85% of cases, can be considered reasonable. A DFC of 70% indicates that queuing will be avoided in 95% of cases.

Based on the observed traffic flows, the performance of the key junctions in the vicinity of the subject site during the peak hours was assessed. The results are summarised and presented in **Table 3.2** and the detailed calculation sheets are attached in **Appendix B**.

Table 3.2 Existing Junction Performance

Junction	Location	Type / Capacity Index	2021 Calibrated	
			AM	PM
A	Fo Tan Road / Min Fong Street / Shan Mei Street	Signal / RC	>100%	>100%
B	Tai Po Road / Fo Tan Road / Lok King Street	Signal / RC	>100%	>100%
C	Yuen Wo Road / Fo Tan Road	Signal / RC	89.8%	76.3%
D	Yuen Wo Road / Slip road of Sha Tin Road	Signal / RC	83.1%	87.7%
E	Tsun King Road / Tai Po Road	Roundabout / DFC	0.20	0.28
F	Kau To Shan Road / Tai Po Road	Roundabout / DFC	0.27	0.34
G	Lai Ping Road / Tai Po Road	Roundabout / DFC	0.25	0.25
H	Tai Po Road / University Avenue	Priority / DFC	0.17	0.16
I	Tai Po Road / Yau King Lane	Priority / DFC	0.11	0.11
J	Tai Po Road / Kwong Wang Street	Roundabout / DFC	0.52	0.54

Notes: RC =reserve capacity, DFC = design flow to capacity

It can be seen from **Table 3.2** that all of the key junctions perform satisfactorily during peak hours.

3.5 Existing Pedestrian Network

Pedestrian movement survey was conducted at the existing site access at Tai Po Road (Ma Liu Shui) of the same period as the traffic count surveys mentioned in Section 3.3. The local peak of pedestrian flows was observed at the same peak periods as Section 3.3. The performance of a footpath is indicated by its Level-of-Service (LOS), ranged from A to F, according to its flow rate. Conflicts between pedestrians are very unlikely to happen with LOS A, while unavoidable with LOS F.

Based on the observed pedestrian flows, the performance of the footpaths in the vicinity of the subject site during local peak hours was assessed. The observed pedestrian flow of the footpath at Tai Po Road (Ma Liu Shui) is presented in Table 3.3 and **Figure 3.5**.

Table 3.3 Pedestrian Flow and Level-of-Service of the assessed footpaths

Location	Actual Width (m)	Effective Width (m)[2]	Observed Pedestrian Flow (ped/min/m)		LOS	
			AM	PM	AM	PM
Footpath W	1.1	0.6	<1	<1	A	A
Footpath X	1.4	0.9	<1	<1	A	A
Footpath Y	1.1	0.6	<1	<1	A	A
Footpath Z	1.7	1.2	<1	<1	A	A

Notes: 1. LOS A indicates a pedestrian flow rate of below 16 ped/min/m.
2. Railing is not installed along the outer edge of the footpaths

It can be seen from Table 3.3 that the Level-of-Service of the assessed footpath performs desirably during local peak hours.

4 Future Traffic Situation

4.1 2034 Design Year Road Network

The design year is either 3 years after the completion year or 5 years after the application year, whichever longer. As all remaining niches are expected to be sold out by 2031, the niches could be fully occupied earliest in year 2031. Therefore, year 2034 is adopted as the design year of this study.

4.2 Traffic Generation & Attraction of Proposed Development

In view of the site constraint, no parking provision will be reserved for visitors. Visitors will be highly encouraged to use the existing public transports and the proposed shuttle services of the site.

According to the proposed schedule of the shuttle services in **Appendix A**, 2 round trips shuttle bus services (using 24-seater light bus) will be provided hourly. Meanwhile, for conservative assessment purposed, assuming that 90% of visitors would access by shuttle buses, while 10% of visitors would access by taxis. The trip generations of the proposed development are summarized in **Table 4.1**.

Table 4.1 Traffic Generation and Attraction

Transport Modes	Generation		Attraction	
	AM	PM	AM	PM
Trips in veh/hr (pcu/hr)				
Shuttle Bus	4(6)	4(6)	4(6)	4(6)
Taxi	4(4)	4(4)	4(4)	4(4)
Total	**8(10)**	**8(10)**	**8(10)**	**8(10)**

4.3 Adjacent Development

It is found that several potential developments under planning/construction in the vicinity, which the locations are indicated in **Figure 3.3.1**. The design parameters of adjacent potential developments are in **Table 4.2**. The detail methodology for trip rate adjustment is presented in **Appendix D**.

Table 4.2 Traffic Generation and Attraction from Adjacent Developments

Development			Generation		Attraction	
			AM Peak	PM Peak	AM peak	PM Peak
Trip Rates[1][3]						
Residential Use	R(B)-30	(pcu/hr/ 100sqm GFA)	0.0416	0.0187	0.0137	0.0212
	R(B)-85		0.1021	0.0703	0.0519	0.1124
	R(C)-70		0.1411	0.0564	0.0604	0.0901
	R(C)-180		0.1677	0.1725	0.1070	0.2526

Development			Generation		Attraction	
			AM Peak	PM Peak	AM peak	PM Peak
Science Park[2]	G/IC		0.0989	0.1434	0.2316	0.0829
Trips (pcus/hour)						
TPTL 231, Yat Yiu Avenue (A/TP/627)	(R(C)-70)	Extra 13 units	2	1	1	1
STTL 614, 18 Lai Ping Road	(R(B)-85)[4]	266 units	27	19	14	30
TPTL 244, Yau King Lane (A/TP/656)	(R(B)-30)	100 units	4	2	1	2
TPTL 230	(R(C)-180)[5]	135 units	23	23	14	34
TPTL 234	(R(C)-180)[6]	56 units	9	10	6	14
TPTL 241	(R(C)-180)[6]	52 units	9	9	6	13
SPX2 of Science Park	(G/IC)	28000 m^2	28	40	65	23
Net			**102**	**104**	**107**	**117**

Notes: 1. TPDM Volume 1
2. With reference to the open-source traffic data of HKSTP on a typical weekday.
3. Trip rates are extrapolated from the mean values of given flat size options of the corresponding OZP Zonings, and further adjusted with the daily variation patterns of ATC for weekend data.
4. According to the OZP, STTL 614 is zoned as R(B). The average flat size was derived from the Sales Brochure and Promotion Booklets of the proposed development.
5. According to the OZP, TPTL 230 is zoned as R(C). The average flat size was derived from the "Tender awarded for site in Tai Po" issued on 26 July 2016.
6. The lots are listed in 2020-21 Land Sale Programme by Development Bureau and zoned as Residential (Group C) in Approved Tai Po Outline Zoning Plan No. S/TP/28. Assumptions are made if relevant design parameters are not available.

Meanwhile, the traffic flows of columbaria, which are applying or has been applied for Licence Application, in Sha Tin and Tai Po are considered. The locations of columbaria are indicated in **Figure 3.3.1**. Those fall within the area of influence are listed below:

Table 4.3 Traffic Generation and Attraction from Adjacent Columbaria

Development		Generation		Attraction	
		AM Peak	PM Peak	AM peak	PM Peak
Trip Rates[1]					
Columbarium proximate to MTR Station and other public transports[2]	(pcu/hr/niche)	0.0180	0.0180	0.0178	0.0178
Trips (pcus/hour)					
Memorial Park Hong Kong Lot Nos. 551 S.A, RP, 640 and 644 S.A, S.B & RP in D.D.176	2,999 niches[3]	54	54	53	53
Yan Hau Ancestral Hall, Lot Nos. 35, 36s.A, 36RP, 38s.A. s.s.1, 38s.A. RP, 624, 676, 699 and 832(Part) in D.D. 176	5,428 niches[3]	98	98	97	97
Net		**152**	**152**	**150**	**150**

Notes: 1. TPDM Volume 1
2. Approved Planning Application A/TP/657
3. No. of niches yet to be occupied according to the available information

4.4 Regional Traffic Growth

For the estimation of traffic flows in the design year of 2034, it is proposed to adjust the existing traffic flows by considering the natural traffic growth which is related to the increase in car usage. The traffic forecasts were developed based on the existing traffic flows in 2021 from the traffic surveys and applying an appropriate annual traffic growth factor to derive the background traffic in 2034.

Annual Traffic Census (ATC)

With reference to the Annual Average Daily Traffic (AADT) from the 2010 to 2019 Annual Traffic Census (ATC) issued by Transport Department, the traffic data recorded at counting stations adjacent to the site are shown in **Table 4.4**.

Table 4.4 Annual Traffic Census Data

Station No. / Road Name	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	G.P.A
6210/Tai Po Rd - Ma Liu Shui	8390	8020	8179	8720	8270	7790	8240	8900	7650	7640	-1.0%
5820/Tai Po Rd - Shatin	10950	11020	8010	8180	8220	8410	12870	13790	13840	13830	2.6%
5807/Tai Po Rd - Shatin	86790	82130	96220	98280	98770	101040	120750	123410	123870	123730	4.0%
5806/Sha Tin Rd	44770	51440	38820	39650	39850	40760	48180	52890	53090	53030	1.9%
5614/Yuen Wo Rd	13810	15280	15410	15740	15820	17430	15330	15370	15430	15410	1.2%
Growth per Annum (Sha Tin)											**2.9%**
6652/ Yau King Lane	780	760	730	1100	990	1090	1260	1060	1320	1160	4.5%
5265/ Tai Po Rd - Yuen Chau Tsai E-B ramp H	17220	17470	17310	17560	17940	18760	19820	19680	19660	20200	1.8%
5420/ Tai Po Rd - Yuen Chau Tsai	33170	33650	33330	34730	31910	32400	34220	33980	35060	36630	1.1%
Growth per Annum (Tai Po)											**1.4%**

Notes 1. G.P.A. = Growth Per Annum
2. Source: Annual Traffic Census, Transport Department

It is noted that average annual growth factors of +2.9% and +1.4% are found in Sha Tin and Tai Po respectively the past 10 years.

Planning Data

For the estimation of traffic flows in the design year of 2034, it is proposed to adjust the existing traffic flows to take into account of the natural traffic growth which is related to the increase in car usage.

According to the report “Projections of Population Distribution 2021-2029” issued by Planning Department in March 2021, the population growth from base year 2019 to 2029 is shown in Table 4.5 and **Appendix C.**

Table 4.5 Projected Population by District Council District, 2021-2029

Planning Data District	Year 2019#	Year 2029	Growth Rate p.a. (%)
Shatin	692500	695400	<0.1%
Tai Po	309900	348000	1.2%

 # Base Year Estimates

The anticipated increases in growth would reduce gradually since 2024, such that the annual growth in 2034 shall be lower than 2029. For conservative assessment purpose, the planning data indicates an increase in population at the rates of +0.1% per annum in Shatin District and +1.2% per annum in Tai Po District.

After comparing the historical data with the future planning data, for the purpose of a conservative assessment, annual growth rates of +2.9% and +1.4% were adopted to the junctions at Sha Tin and Tai Po respectively. This factor is used to forecast the future traffic volume for this study.

4.5 Junction Capacity Assessment

The growth factor will be applied to the 2021 observed traffic flows to estimate the 2034 reference flows.

The reference and design flows for the year 2034 are calculated from the following formulae:

2034 Reference Flows **(Figure 4.2)** = 2021 Calibrated Flows (Figure 3.4) x (annual growth rate)[13] + Adjacent Development Flows **(Figure 4.4)**

2034 Design Flows **(Figure 4.3)** = 2034 Reference Flows **(Figure 4.2)** + Development Flows **(Figure 4.1)**

Based on the calibrated existing traffic flows and pattern of existing road network, the 2034 peak hour Reference and Design traffic flows at the critical junctions are distributed and assigned in **Figures 4.2** and **4.3** respectively.

Capacity assessments were carried out for the major junctions in the local road network for the Reference and Design scenarios. Results are summarised and presented in **Table 4.3** with detailed calculation sheets attached in **Appendix B**.

Table 4.6 2034 Junction Capacity Assessments

Junction	Location	Type / Capacity Index	2034			
			Reference		Design	
			AM	PM	AM	PM
A	Fo Tan Road / Min Fong Street / Shan Mei Street	Signal / RC	>100%	99.7%	>100%	97.9%
B	Tai Po Road / Fo Tan Road / Lok King Street	Signal / RC	90.0%	77.5%	89.6%	77.1%
C	Yuen Wo Road / Fo Tan Road	Signal / RC	26.5%	17.8%	26.5%	17.8%
D	Yuen Wo Road / Slip road of Sha Tin Road	Signal / RC	27.5%	24.6%	26.4%	23.5%
E	Tsun King Road / Tai Po Road	Roundabout / RFC	0.30	0.42	0.30	0.42
F	Kau To Shan Road / Tai Po Road	Roundabout / RFC	0.40	0.52	0.41	0.52
G	Lai Ping Road / Tai Po Road	Roundabout / RFC	0.39	0.39	0.39	0.40
H	Tai Po Road / University Avenue	Priority / DFC	0.27	0.25	0.27	0.25
I	Tai Po Road / Yau King Lane	Priority / DFC	0.15	0.13	0.15	0.13
J	Tai Po Road / Kwong Wang Street	Roundabout / DFC	0.63	0.82	0.63	0.83

Notes: RC =reserve capacity; DFC = design flow to capacity

It can be seen from **Table 4.3** that, the capacity of all the key junctions would be performing within their capacity during the peak hours for the Reference and Design Scenarios.

4.6 Future Pedestrian Flows

For the estimation of pedestrian flows in the design year of 2034, it is expected that the pedestrian increases are proportional to the dynamic traffic growth due to the increased occupancy of niches.

As provided by the applicant, 3 no. of niches were occupied in 2021, and all remaining niches are expected to be sold out by 2031. The pedestrian flows are expected to increase sharply. However, with the proposed crowd control measures as stated in **Appendix A**, a maximum of 25 visitors are allowed for every 30-minute slot, so that the site is restricted to a maximum capacity of 50 visitors between 2 timeslots.

It is expected that the pedestrian flows would be maximized right after the shuttle bus arrivals and prior to the departures. In view of the low frequency and short loading/unloading duration of shuttles, the pedestrian flows induced by the site will hence be controlled manually according to **Appendix A**. The future pedestrian flows along the public footpath, as shown in Table 4.7, will be retained at the current level of LOS A.

Table 4.7 Pedestrian Flow and Level-of-Service of the assessed footpaths

Location	Actual Width (m)	Effective Width (m)[2]	Future Pedestrian Flow (ped/min/m)		LOS	
			AM	PM	AM	PM
Footpath W	1.1	0.6	<1	<1	A	A
Footpath X	1.4	0.9	2	2	A	A
Footpath Y	1.1	0.6	3	3	A	A
Footpath Z	1.7	1.2	2	2	A	A

Notes: 1. LOS A indicates a pedestrian flow rate of below 16 ped/min/m.
2. Railing is not installed along the outer edge of the footpaths

Furthermore, an online worshiping application will be developed, which could further reduce the number of visitors accessing the site during Ching Ming and Chung Yeung festivals.

5 Internal Transport Facilities

5.1 Car Parking Provisions

Due to the site constraints, no proper car parking and servicing provision can be provided at the site.

Meanwhile, in accordance with statutory requirements as stipulated in the Hong Kong Planning Standards and Guidelines (HKPSG), no car parking and servicing provision of “columbarium” type of development are specified.

Shuttle services will be provided and highly recommended to the visitors during the festivals according to the proposed arrangement in **Appendix A** to facilitate the visitors to access the site.

6 Summary and Conclusion

6.1 Summary

It is intended to develop Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land Ma Liu Shui for Private Columbaria under Section 12A Rezoning Application of Columbarium Development. The hourly flow of traffic during peak hours for several critical junctions were accessed.

In order to appraise the existing traffic conditions, classified turning movement count surveys were carried out at the key junctions of the study area on 4 April 2021 (Sunday) from 8:30 am to 6:30 pm. The morning and afternoon peak hours of the road network were identified as 11:15am to 12:15pm and 2:00pm to 3:00pm respectively.

The design year of the traffic impact assessment is year 2034. Based on the historical data and planning data, annual growth factors of 2.9% and 1.4% were adopted to the critical junctions in Sha Tin and Tai Po Districts respectively for this study. This growth factor is applied to the observed traffic flows in 2021 to forecast the future traffic volume in 2034.

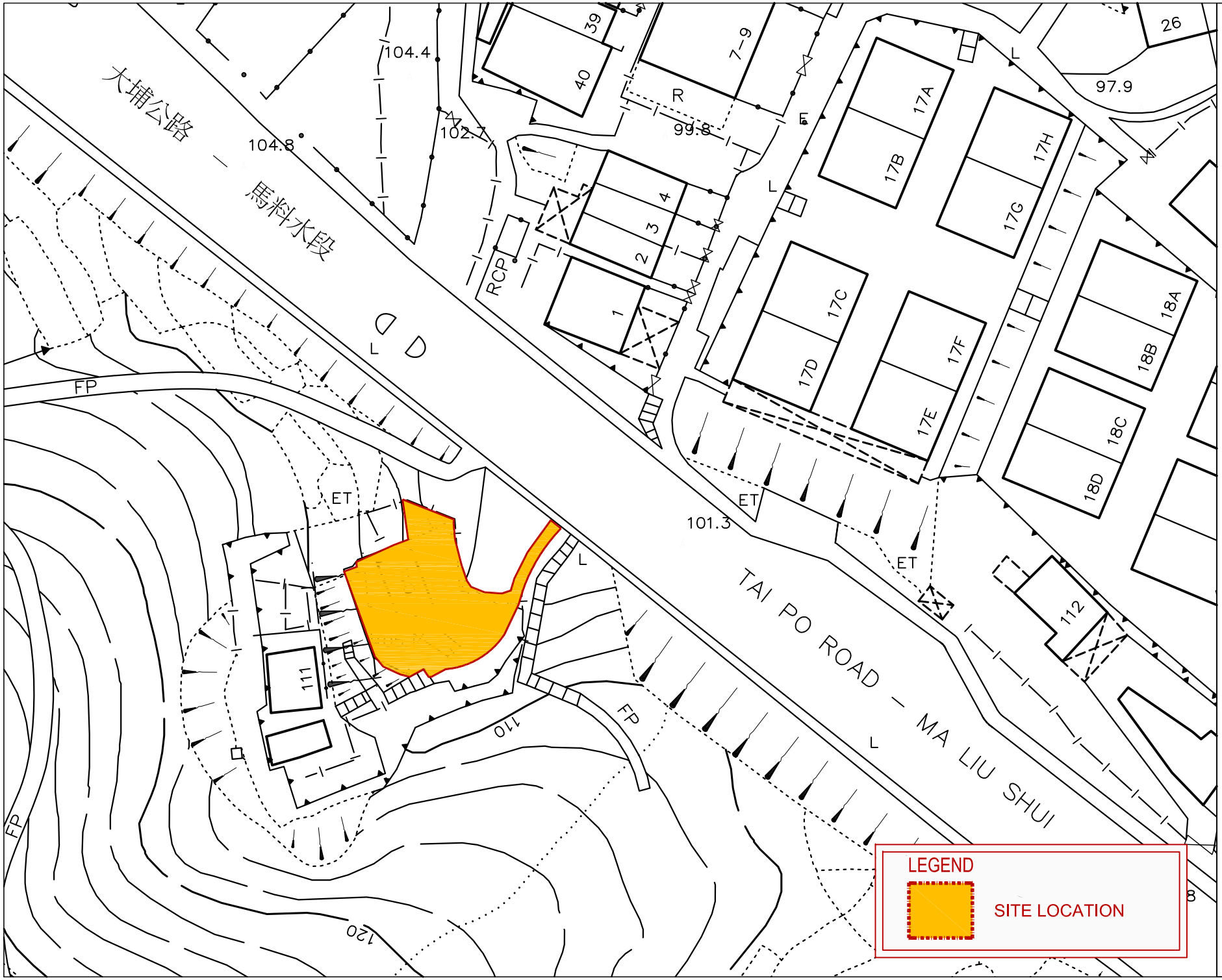
The capacity of all key junctions would be performing within their capacities during the peak hours for both Reference and Design Scenarios.

Therefore, it can be concluded that proposed development would not generate any intolerable traffic impact to the road network.

6.2 Conclusion

The findings of the traffic impact assessment indicate that the road network in the vicinity of the site would be able to cope with the traffic generated by the proposed columbarium development and would not cause any intolerable impact from traffic perspective.

Figures



SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES

SITE LOCATION

FIGURE 2.1

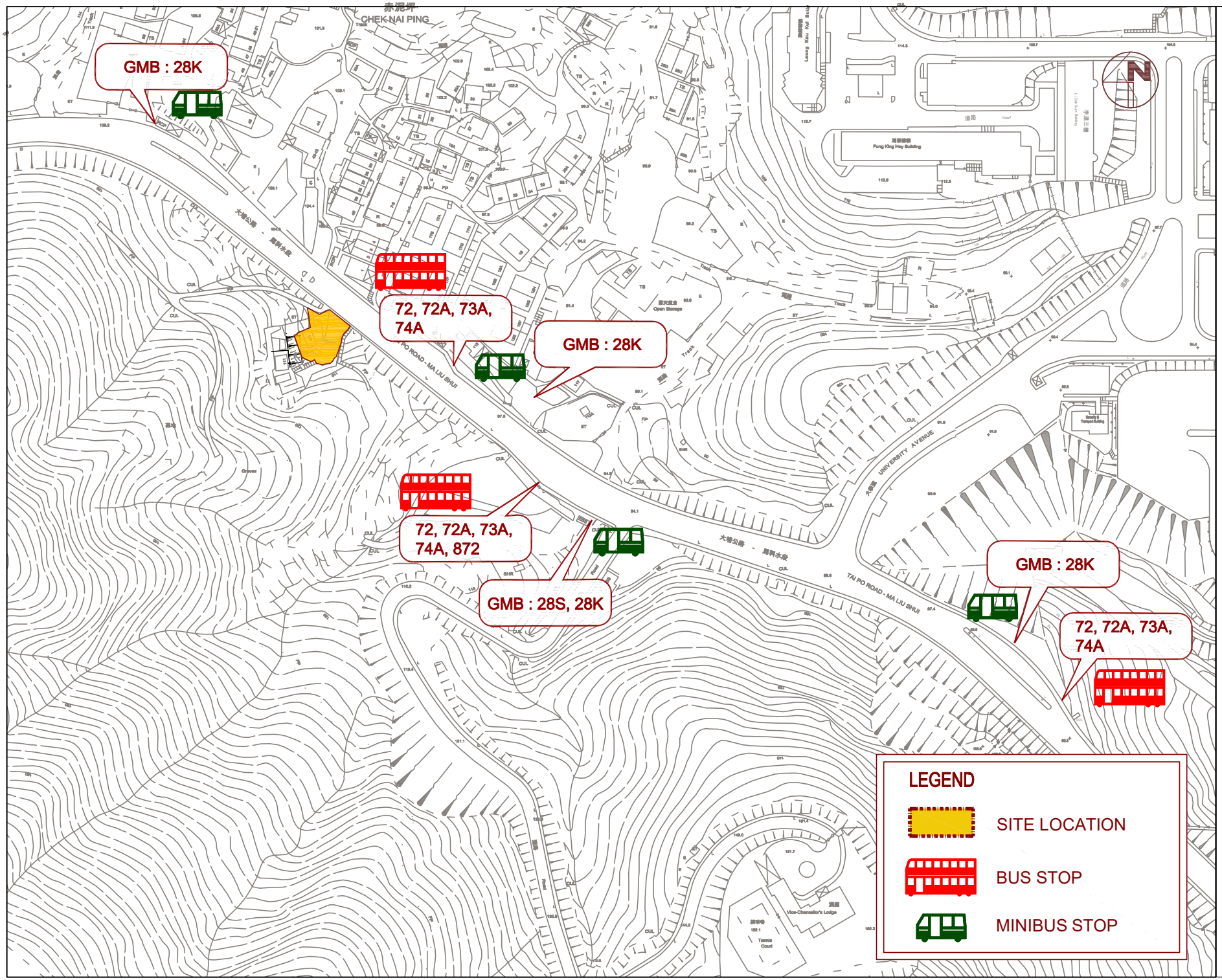
Scale : 1 : 500

Date : SEP 2021

Rev. : C

AXON CONSULTANCY
http://www.axonhk.com

X:\PROJECT\30768 TAI PO ROAD, MA LIU SHUI-COLUMBARIUM DEVELOPMENT\DATA\DRAWING\FIGURE 2.1C.DWG



SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES

PUBLIC TRANSPORT FACILITIES

FIGURE 3.1

Scale : 1 : 2000

Date : JUN 2021

Rev. : B

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X:\PROJECT\30768 TAI PO ROAD, MA LIU SHUI-COLUMBARIUM DEVELOPMENT\DATA\DRAWING\FIGURE 3.1B.DWG

SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES

KEY JUNCTIONS

FIGURE 3.2

Scale : 1 : 7500

Date : JUN 2021

Rev. : C

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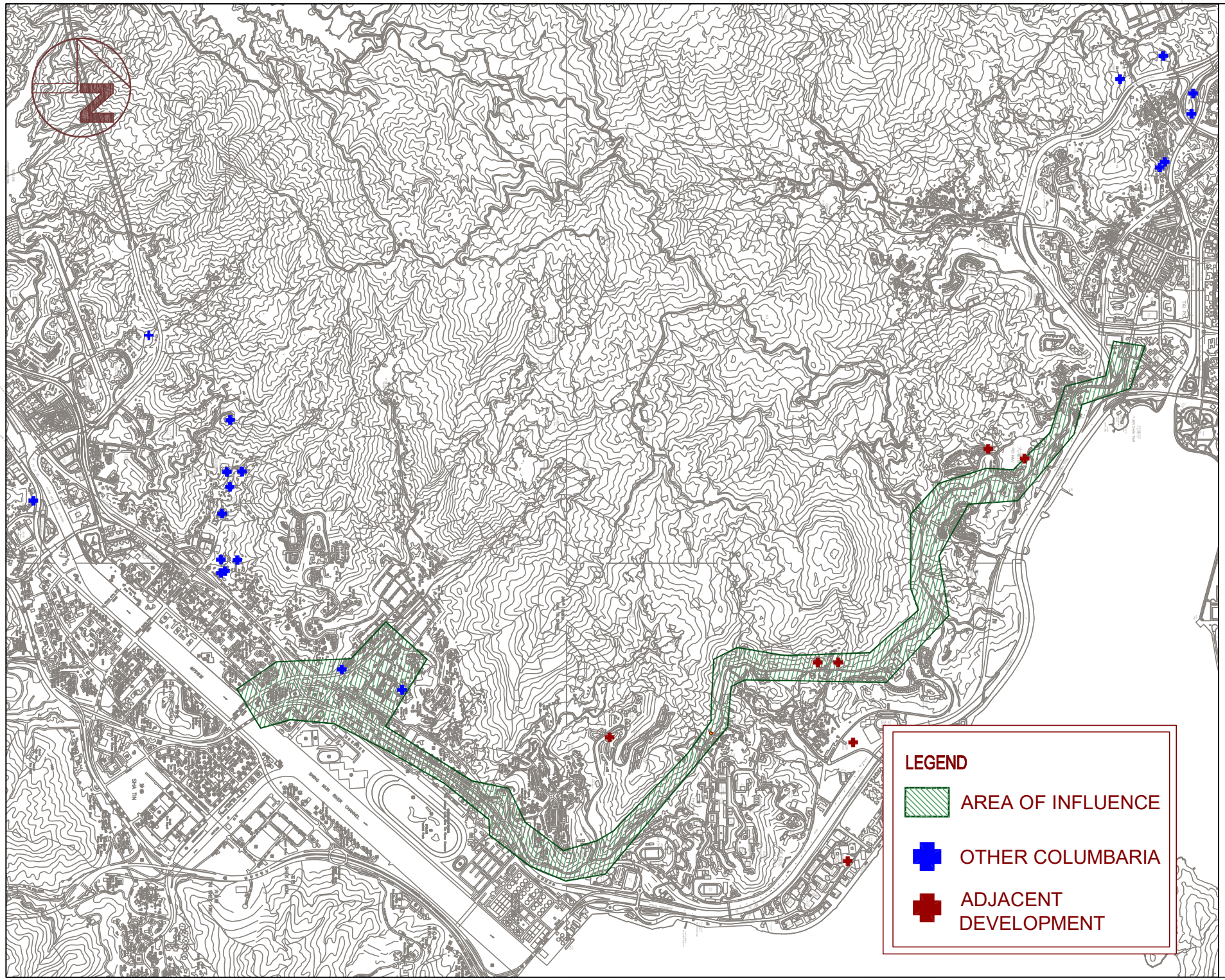
X:\PROJECT\30768 TAI PO ROAD, MA LIU SHUI-COLUMBARIUM DEVELOPMENT\DATA\DRAWING\FIGURE 3.2C.DWG



SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES

ADJACENT DEVELOPMENTS AND COLUMBARIA UNDERGO / HAVE UNDERGONE LICENSE APPLICATIONS

FIGURE 3.3.1

Scale : 1 : 10000

Date : JUN 2021

Rev. : A

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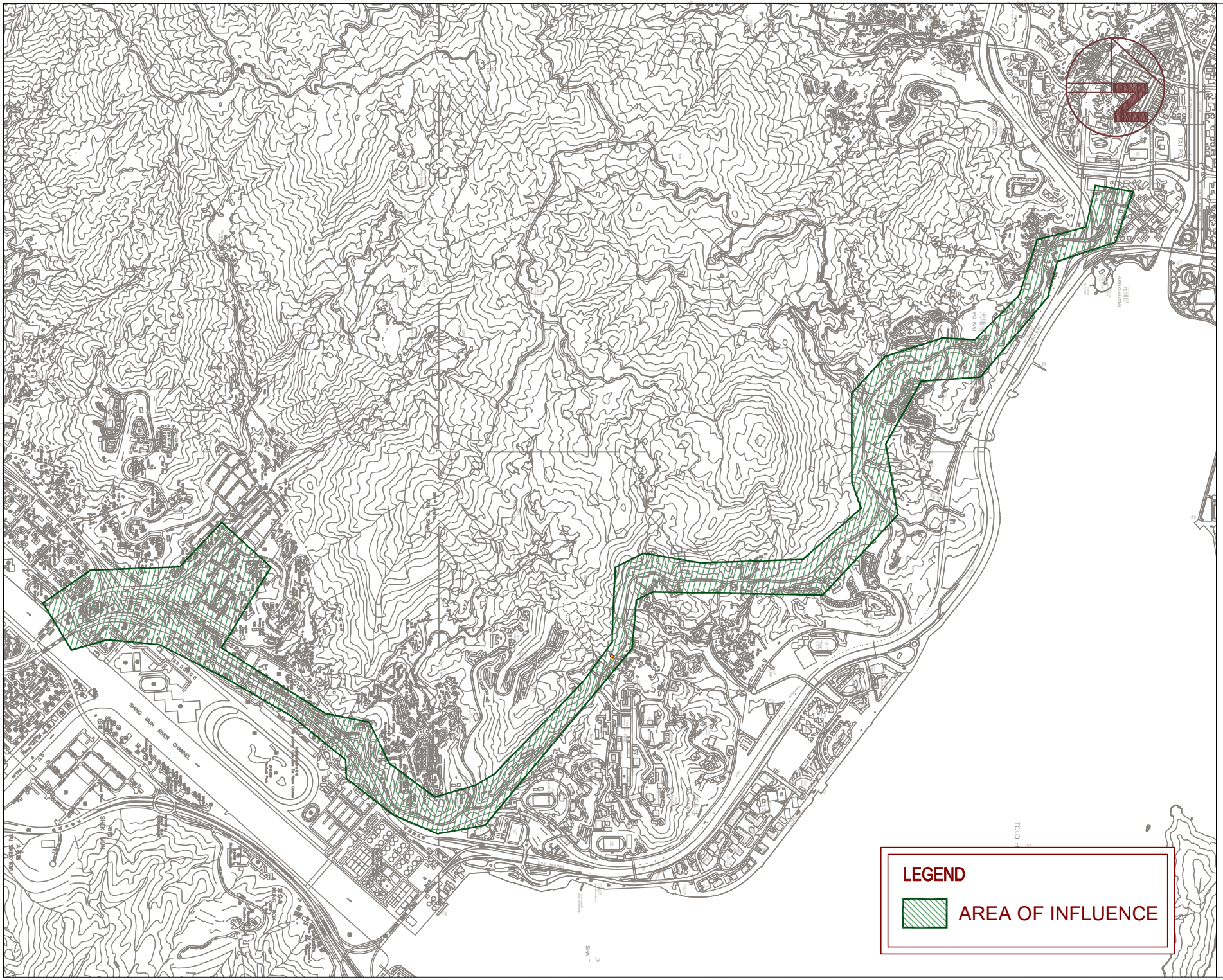
X:\PROJECT\30768 TAI PO ROAD, MA LIU SHUI—COLUMBARIUM DEVELOPMENT\DATA\DRAWING\FIGURE 3.2C.DWG



SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES

AREA OF INFLUENCE

FIGURE 3.3

Scale : 1 : 7500

Date : JUN 2021

Rev. : B

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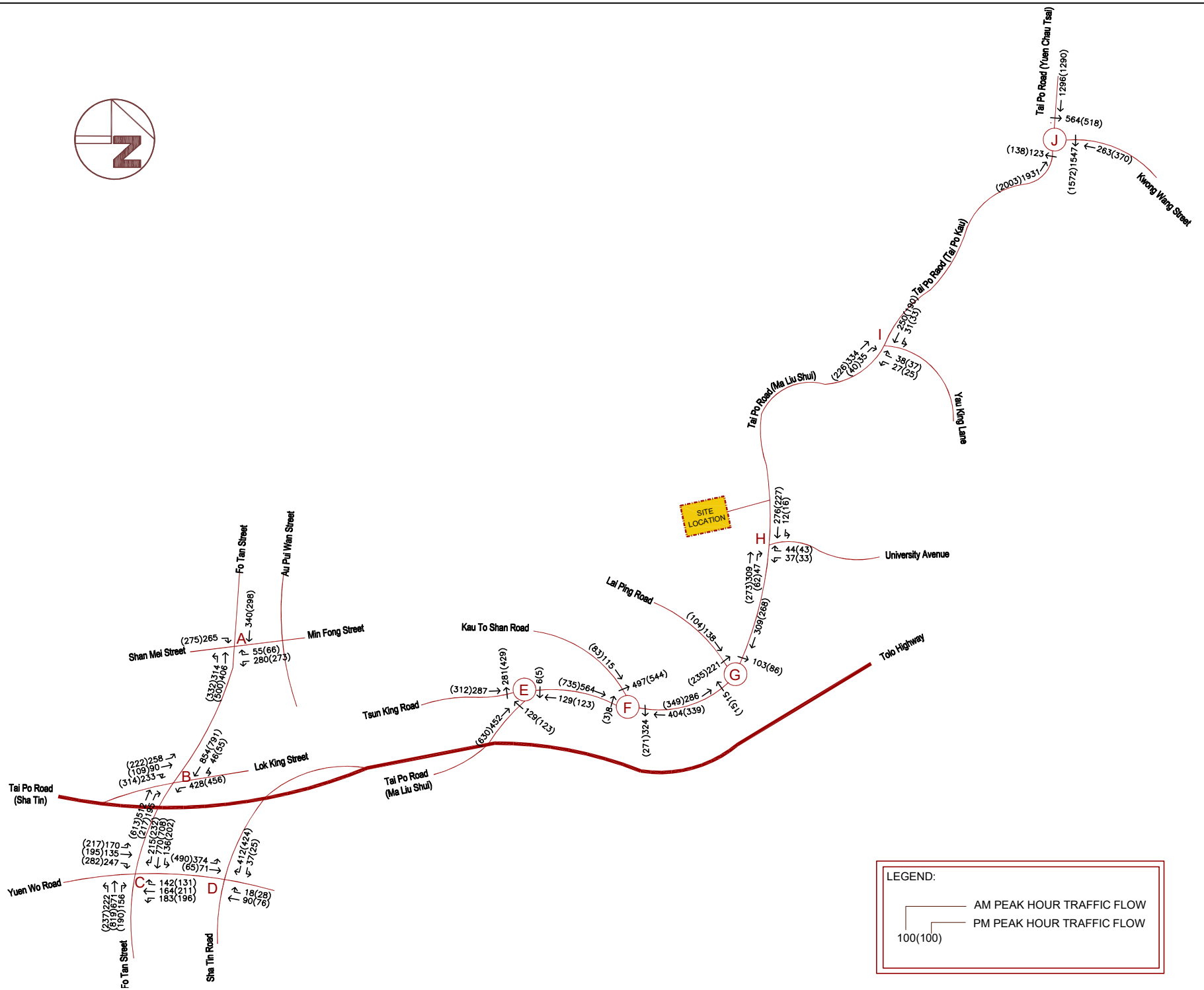
X:\PROJECT\30768 TAI PO ROAD, MA LIU SHUI-COLUMBARIUM DEVELOPMENT\DATA\DRAWING\FIGURE 3.2C.DWG

SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES



2021 CALIBRATED PEAK HOURS TRAFFIC FLOWS

FIGURE 3.4

Scale : N.T.S.

Date : AUG 2021

Rev. : C

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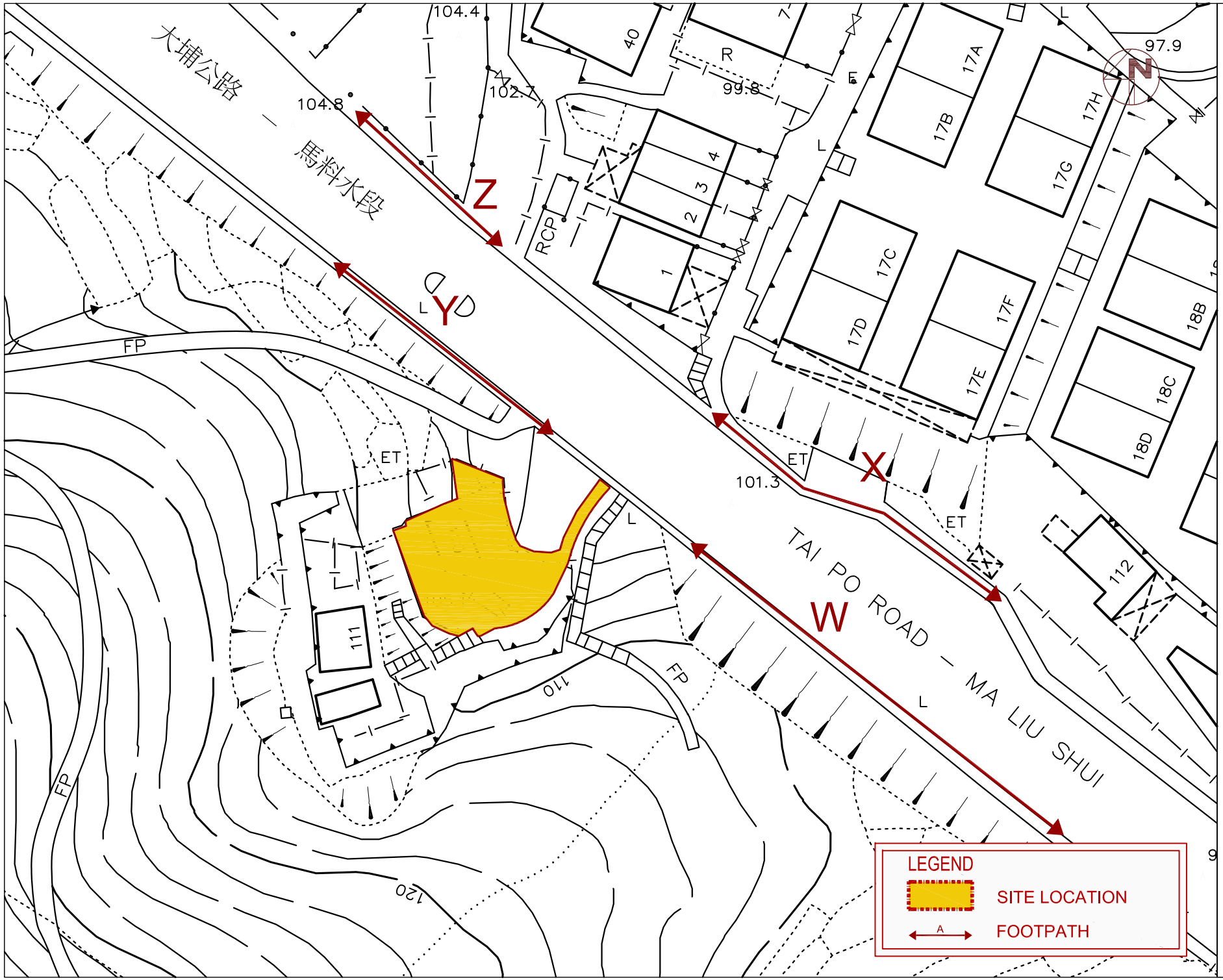

SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES

OBSERVED PEDESTRIAN FLOWS

FIGURE 3.5

Scale : 1 : 500

Date : SEP 2021

Rev. : D

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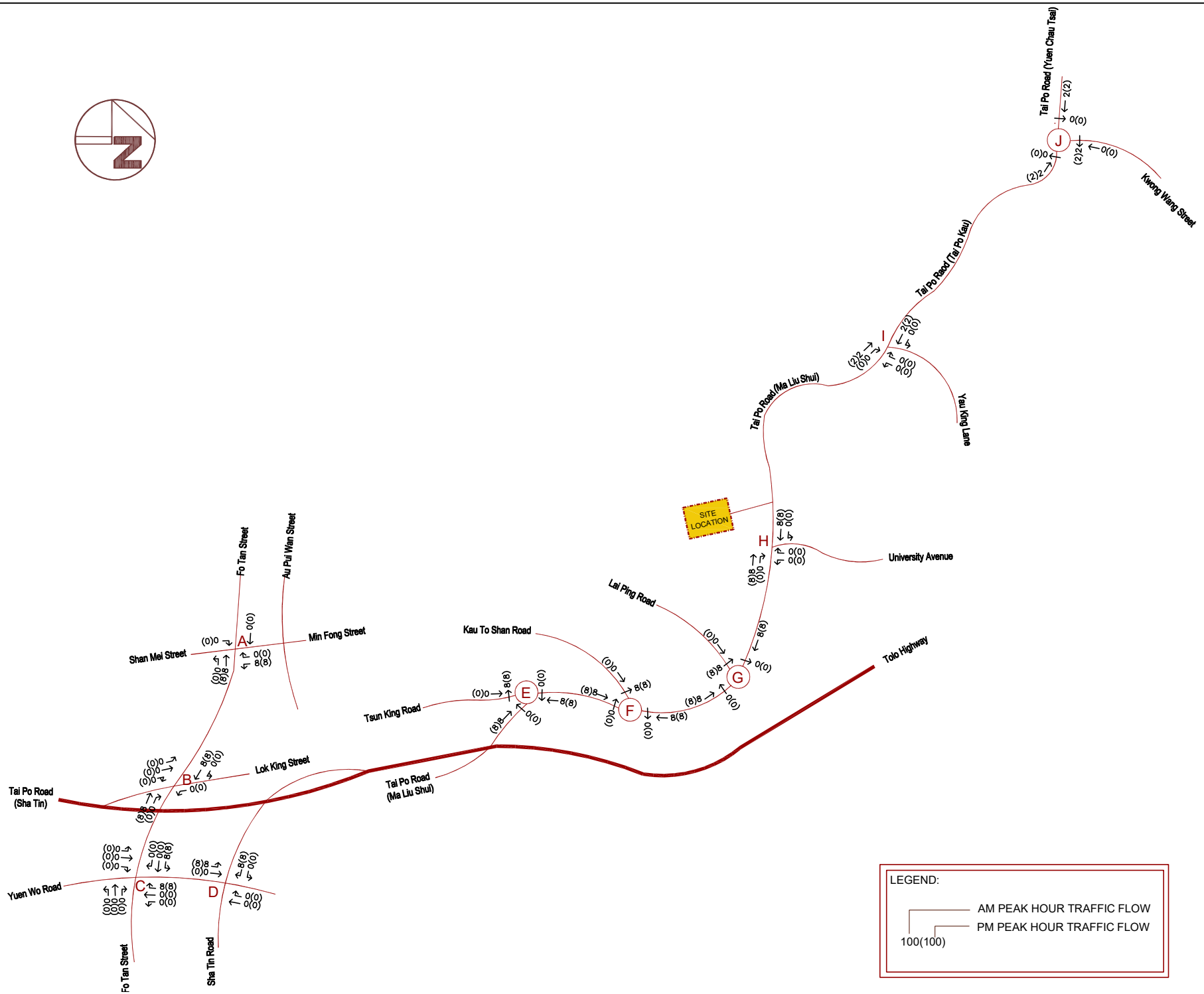
X:\PROJECT\30768 TAI PO ROAD, MA LIU SHUI-COLUMBARIUM DEVELOPMENT\DATA\DRAWING\FIGURE 3.5D.DWG



SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES

NET DEVELOPMENT FLOWS

FIGURE 4.1

Scale : N.T.S.

Date : APR 2021

Rev. : B

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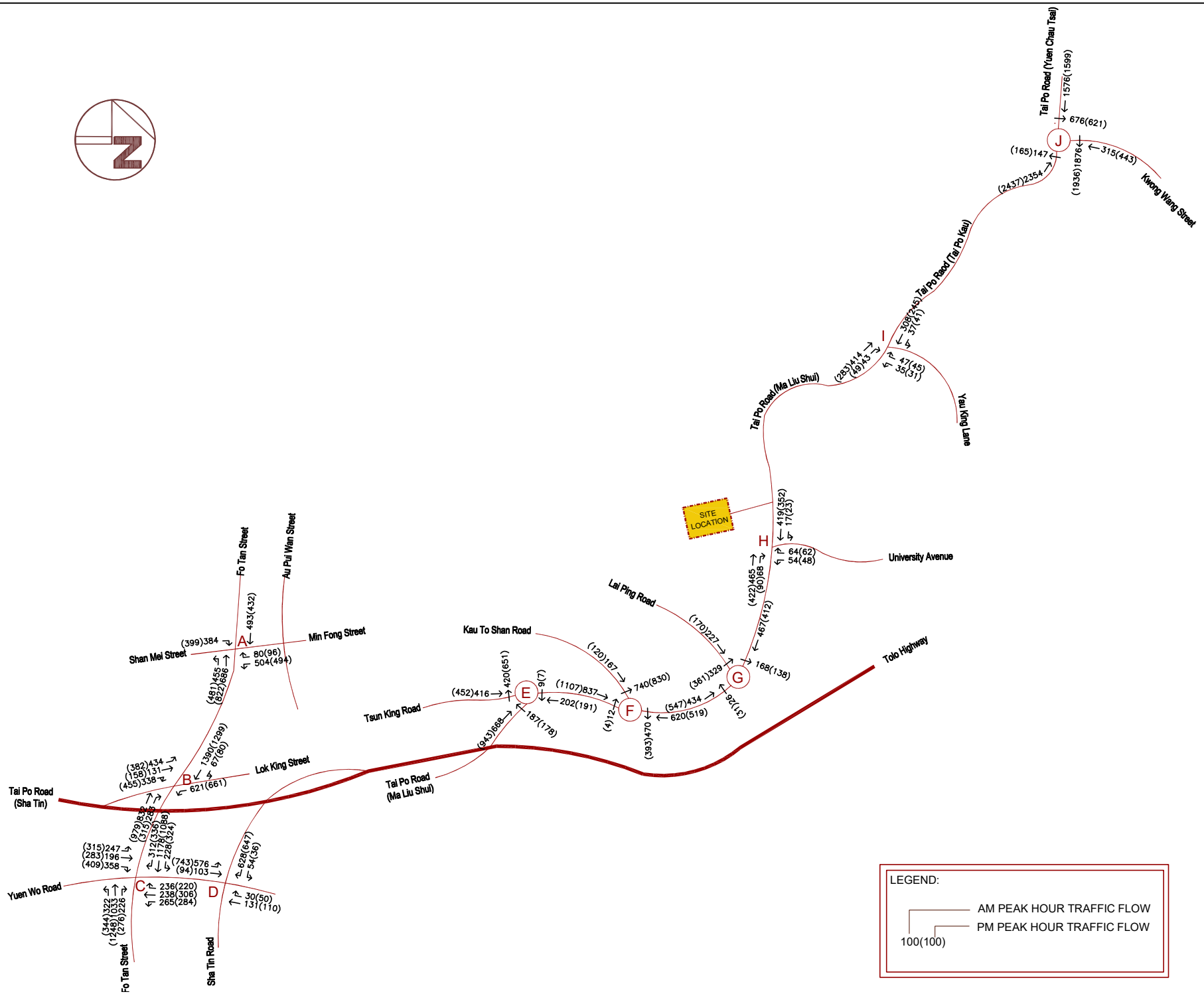

2034 REFERENCE PEAK HOURS TRAFFIC FLOWS

FIGURE 4.2

Scale : N.T.S.

Date : AUG 2021

Rev. : G

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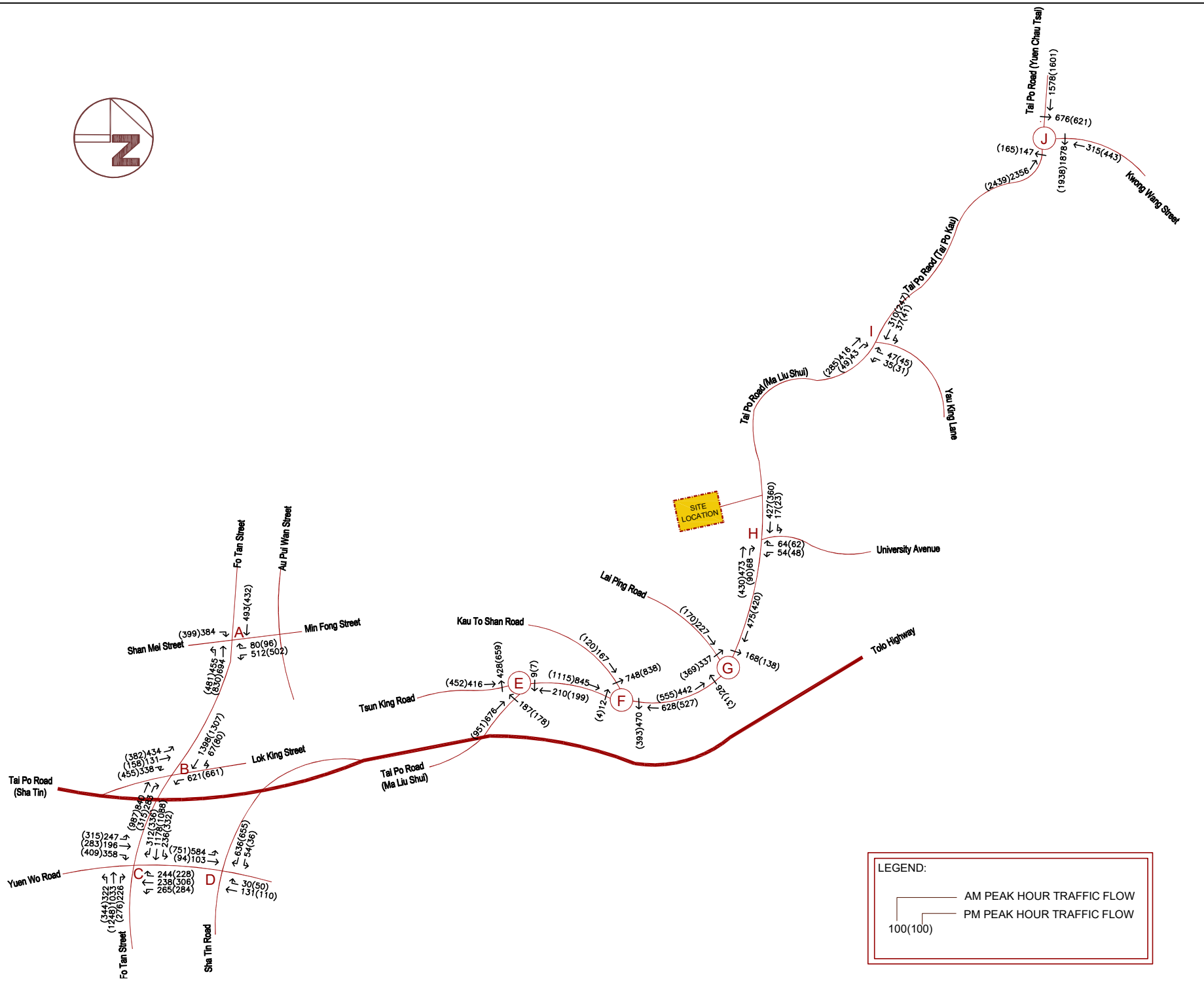

SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES

2034 DESIGN PEAK HOURS TRAFFIC FLOWS

FIGURE 4.3

Scale : N.T.S.

Date : AUG 2021

Rev. : G

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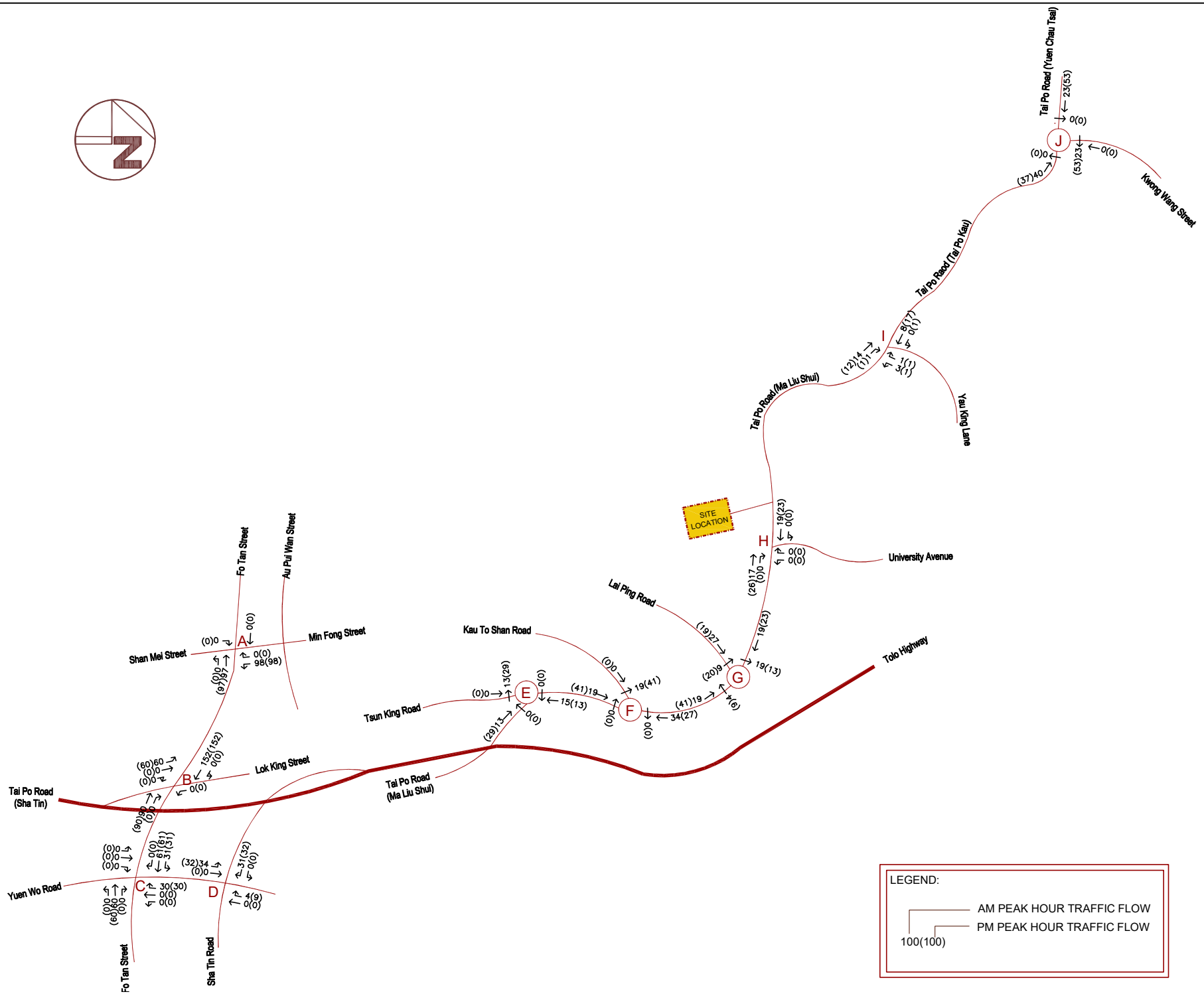

SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES

ADJACENT DEVELOPMENT FLOWS

FIGURE 4.4

Scale : N.T.S.

Date : AUG 2021

Rev. : D

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Appendix A

Proposed Crowd Control Management Plan

沙田靜苑管理方案

沙田靜苑

September 2021

目錄

(1) 基本資料

骨灰安置所名稱	沙田靜苑（簡稱「靜苑」）
地址	大埔公路馬料水段赤泥坪村110號
開始營辦年份	2009
營辦者	百年控股有限公司
營辦者的身分	土地擁有人
所屬宗教	無
佔地面積	約 189.64 平方米
總樓宇建築面積	約 119.76 平方米
建築物	1 座共三層骨灰安置所大樓
配套設施	2間流動廁所 (長期擺放)

(2) 可容納的訪客量及入場管制

- 靜苑同一時間可容納的訪客量為 50 人。各時期的開放時間如下:

時期	開放時間
平日星期一至五	早上10:00 至下午5:00
平日星期六、日及一般公眾假期	早上10:00 至下午5:00
掃墓高峰日子*	早上9:00 至下午6:00

**「掃墓高峰日子」：清明節及重陽節正日及其之前三週和其後三週的星期六及星期日*

預約服務

- 不論平日、公眾假期或掃墓高峰日子，訪客必須以靈灰位編號透過網上預約(網址：http://www.shatinchingyuen.com)或電話預約 (預約電話：2605 3030)，預約時提供同行人數，及必須提供每位訪客的姓名、電話號碼作登記，並指明在到訪時段，於指定時段才可到訪。
- 每個時段最多供25人預約，以確保在兩個時段的過渡期不會超過可容納的訪客量50人。未有預約的訪客，靜苑將會拒絕其進入拜祭先人。
- 於平日（星期一至五、六及日）及一般公眾假期，只要當天仍有時段可提供拜祭，每個靈灰位在同一天可以預約多於一次，以便不同成員前來拜祭。
- 於掃墓高峰日子，為公平原則，每個靈灰位每天只可供訪客預約一次，令其他訪客也能有機會前來拜祭。拜祭人士只可逗留靜苑大樓30分鐘。可選擇的時段如下：

	時段		時段
1	09:00-09:30*	10	13:30-14:00
2	09:30-10:00*	11	14:00-14:30
3	10:00-10:30	12	14:30-15:00
4	10:30-11:00	13	15:00-15:30
5	11:00-11:30	14	15:30-16:00
6	11:30-12:00	15	16:00-16:30
7	12:00-12:30	16	16:30-17:00
8	12:30-13:00	17	17:00-17:30*
9	13:00-13:30	18	17:30-18:00*

**灰色時段只限掃墓高峰日子可供預約。*

- 靜苑將主要採取以上預約的管理方式控制進場人數，但在掃墓高峰日子，靜苑會有額外的交通服務及安排增添人手(將在後段詳述)。

網上拜祭

- 此外，靜苑將會設置網上拜祭服務，以方便已移居外地的家屬、長者、孕婦、婦孺、行動不便及其他討厭交通擠迫、舟車勞頓或不耐煩排隊輪候拜祭人士，不必親臨靜苑亦可達到拜祭目的。靜苑將會鼓勵拜祭人士採用此項服務，一方面能解決他們上述的憂慮及家族各成員聚集等候的苦惱，另一方面更可以在任何時段於舒適環境及各自家中進行自己喜好拜祭模式，為家族不同成員省時及避免不同拜祭意見而減少一份爭拗。同時特別在掃墓高峰日子絕對有助減少過多人流聚集靜苑。

(3) 交通及公共運輸安排

平日

- 現時靜苑不會提供私家車位給予拜祭訪客停泊，故建議拜祭訪客乘坐各項公共交通工具前來。為鼓勵訪客使用現有公共交通工具前往拜祭，靜苑網站已清晰提供可到達靜苑的各交通路線，並提醒訪客靜苑附近不設泊車設施。訪客預約登記後，亦能獲相關資訊提示。到達靜苑的主要交通公具如下：

交通公具	號碼	路線	開放時間內班次
巴士	72	來往大埔（太和）及長沙灣	每20-25分鐘
	72A	來往大圍及大埔工業邨	每30分鐘
	73A	來往沙田愉翠苑及上水華明邨	每30分鐘
	74A	來往沙田愉翠苑及上水華明邨	每60分鐘
	872	由沙田馬場單向前往大埔中心	逢沙田賽馬日行走
專線小巴	28K	港鐵大埔墟站 → 沙田市中心 (循環線)	每6至9分鐘
	28S	來往白石角 → 沙田市中心(循環線)	每30至45分鐘
公共小巴		來往觀塘及大埔	每8-15分鐘
		來往深水埗及上水	客滿即開
		來往旺角及上水	客滿即開
		來往旺角及大埔	客滿即開
		來往佐敦及上水	客滿即開

春秋二祭

- 另外，在掃墓高峰日子，靜苑將安排特別穿梭巴士服務，接載訪客來往火炭火車站和沙田靜苑，詳情如下。其他掃墓高峰日子的安排，則按提前預約人數稍作調整。

  數目　　：　1輛 (按預約人數決定實際車輛數量)

  載客量　　：　24 座位

  行車路線　：　火炭火車站 → 沙田靜苑 (中間不停站)；

  沙田靜苑 → 火炭火車站 (中間不停站)

  行車時間　：　大約10分鐘

  班次　　：　**由火炭火車站開出**

  08:50 – 17:20 (每30分鐘一班)

  由沙田靜苑開出

  09:30 – 18:00 (每30分鐘一班)

上/ 落客點:

(a) 火炭火車站B出口

(b) 沙田靜苑（赤泥坪停車處下車）

(c) 沙田靜苑（赤泥坪垃圾收集站上車）

穿梭巴士暫泊點（澤祥街車場）

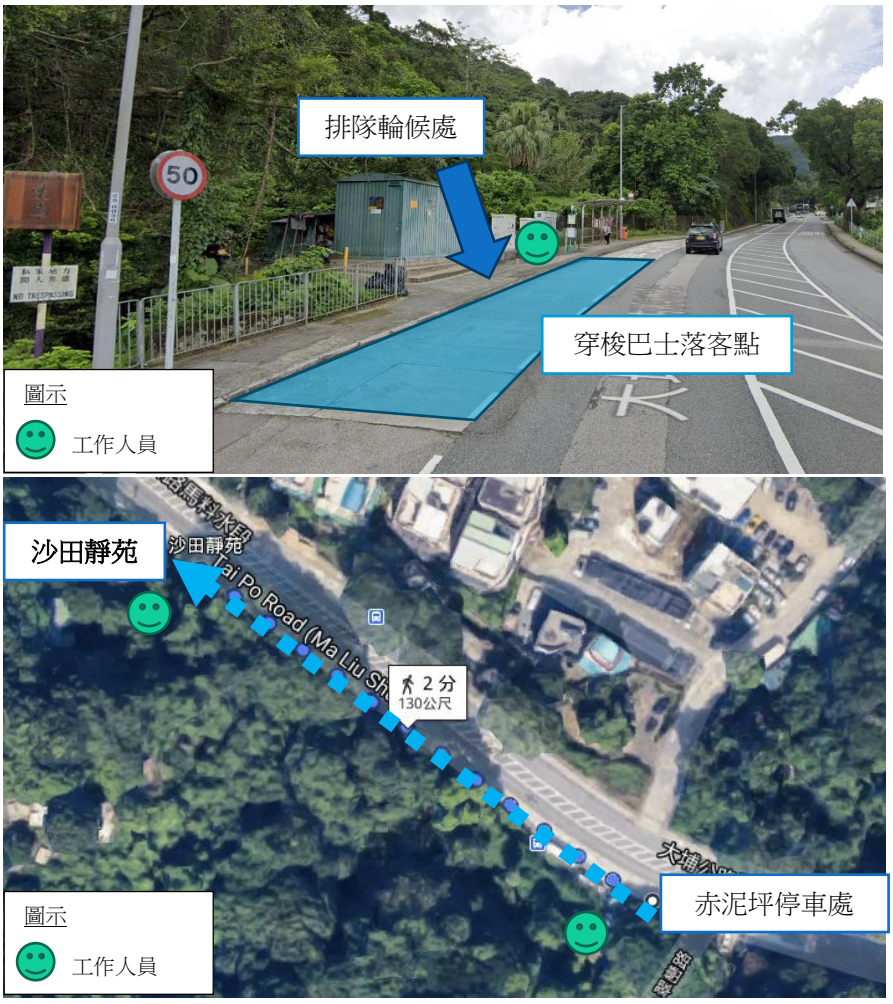
(4) 掃墓高峰日子的人流管理

場外措施

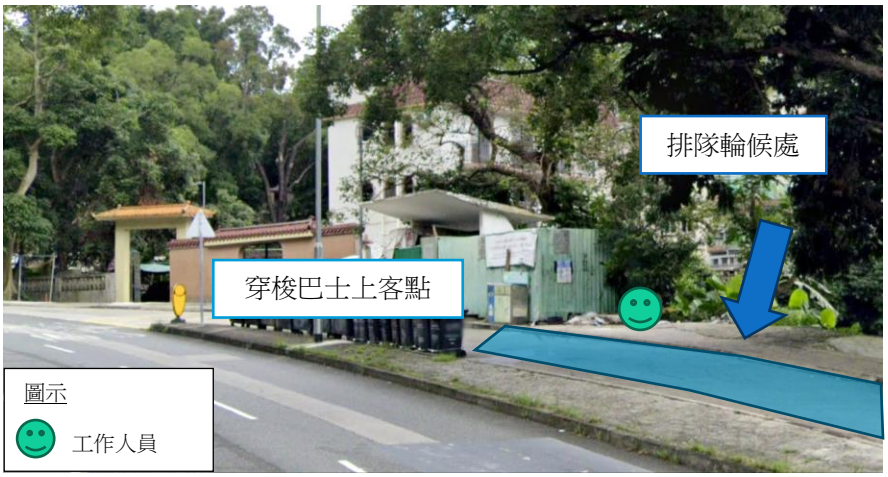
- 在掃墓高峰日子（即清明節及重陽節正日及其之前三週和其後三週的星期六及星期日），靜苑將會安排工作人員在每個上落客區，在適當位置舉牌指示路線、排隊區、等候區等，以維持良好秩序。在各上落客區的工作人員位置及人流方向如下。

(a) 火炭火車站B出口

(b) 沙田靜苑（由赤泥坪停車處下車後再沿以下路線步行）



(c) 沙田靜苑（沿以下路線步行再由赤泥坪垃圾收集站上車）



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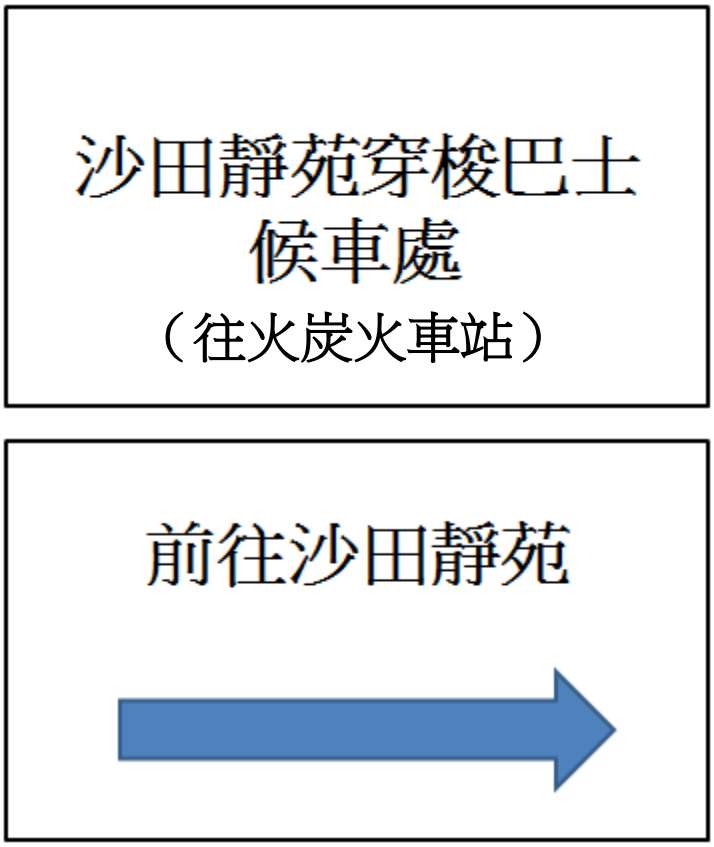
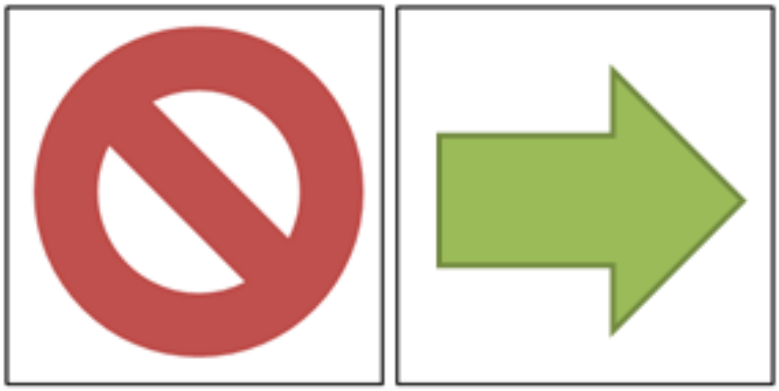
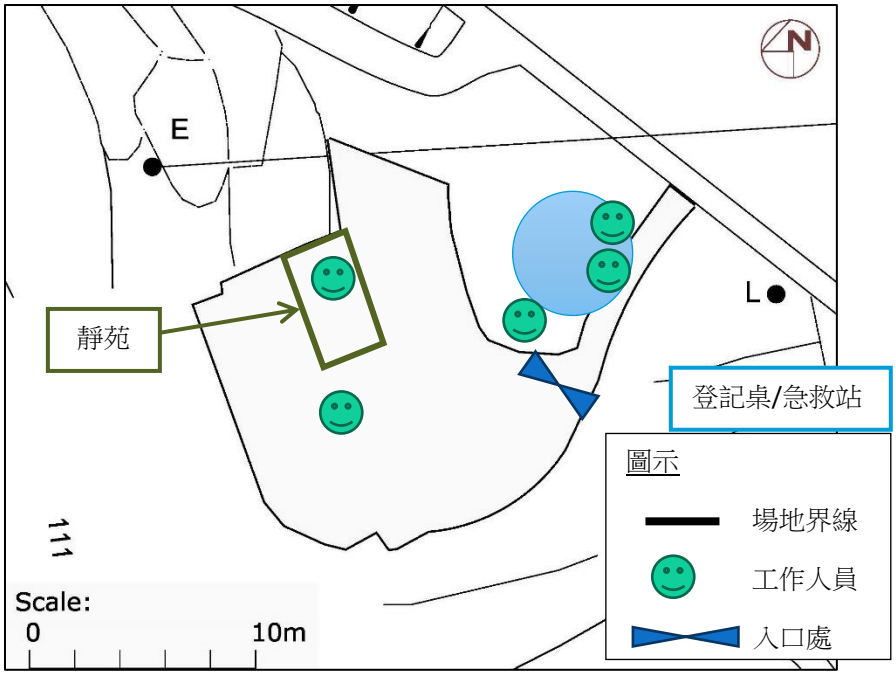




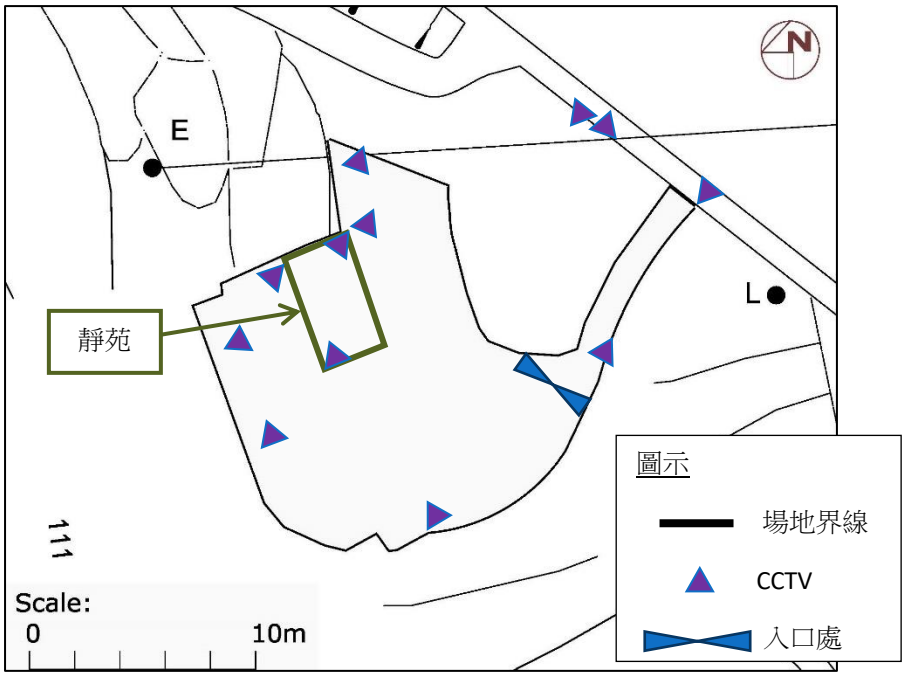
場內措施

- 在靜苑入口處，將安排登記桌，有職員為已預約前來人士進行登記。職員屆時會核對每位訪客的姓名和電話號碼，並登記他們的到達及離開骨灰安置所的時間。已完成登記的訪客，必須要戴上用作分辨時段的訪客證，並在離開時交還，以便識別在場的訪客數目和身份。
- 登記桌同時也作為急救站，具備臨時急救箱，並安排至少一名持有認可合資格急救證書人員當值服務。
- 靜苑會安排廣播措施，廣播場內安排。灰樓每層將安排工作人員負責調配訪客、監控進入人數、確保訪客守時離開以及疏導人群。場內每個工作人員將會佩帶對講機，方便協調和溝通。
- 在拜祭時段全部結束後，將當天的訪客資料整理好，在電子登記冊內補充訪客原有的預約記錄。電子登記冊的資料將會保留最少三年，以便在骨灰所辦人員要求時提供該些紀錄以作查閱。


N
E
L
靜苑
登記桌/急救站
圖示
場地界線
工作人員
入口處
111
Scale:
0
10m

(5) 保安管理

- 靜苑入口處已裝設鐵閘，場內並會裝設 12 部閉路電視系統 (CCTV)，確保入口處及靜苑各處的情況有足夠監察，以隨時回應。閉路電視系統 位置見下圖（灰樓每層兩部）。

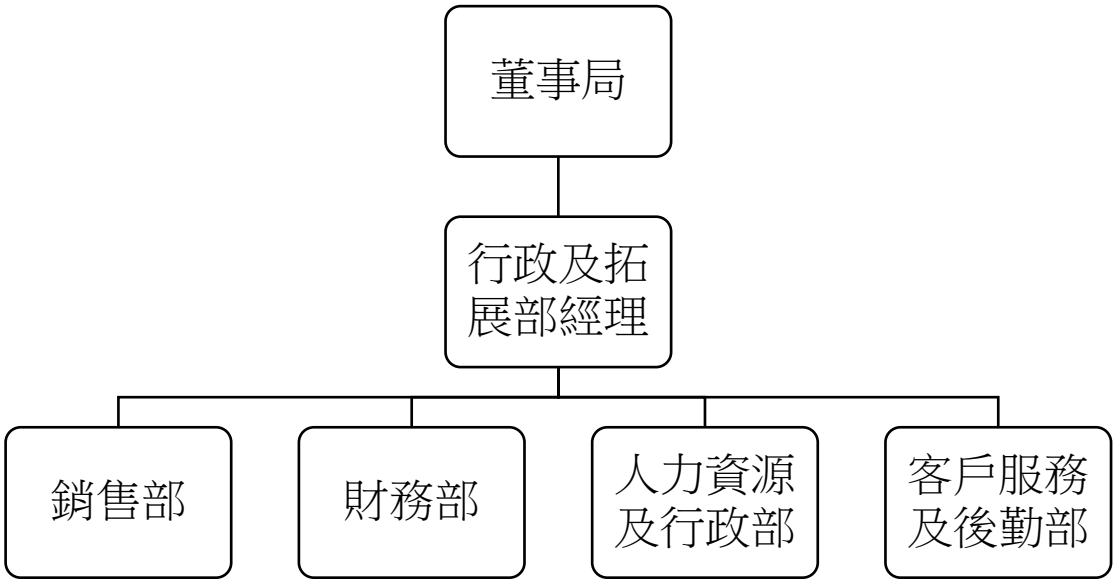


- 在掃墓高峰日子，會增聘巡邏人手，每名職員會佩帶一部對講機，以便有效監察場內秩序及處理衝突。

(6) 人手調配

除董事局外，靜苑日常共僱用2名員工維持日常管理及運作。靜苑的工作組織架構如下頁圖示，其中行政及拓展部經理將負責組織審議、統籌靜苑的規劃，制定靜苑管理制度，監督、協調各職

能部門對靜苑經營計劃的執行。現任的行政及拓展部經理吳維乾先生（聯絡電話號碼：9463 9398），擁有超過20年管理經驗，由靜苑創辦起已負責管理及經營，熟知靜苑運作。



- 在掃墓高峰日子，靜苑會額外僱用16名員工（主要外判具備危機處理知識的保安公司人員），作交通、人流、保安等安排。增聘的人手職位、職責及數目如下。

職位	**職責**	**人數**
登記員	在入口的登記處記錄出入的訪客人次	2人
急救員	在場內負責急救	最少1人
巡邏員	在場內維持秩序、引流訪客、解答訪客疑問、處理危機（e.g. 火警、意外、受傷）、疏散人群、處理及解決即時投訴及衝突	2人

職位	職責	人數
灰樓看守員	在場內維持秩序、引流訪客進出各層、解答訪客疑問、處理危機（e.g.火警、意外、受傷)、疏散人群、處理及解決即時投訴及衝突	共3人（每層1人)
交通指揮員	在穿梭巴士上落客處及靜苑附近行人路要點指揮交通、指示訪客排隊及前往/ 離開靜苑方向，確保行人安全	2人 (火炭站) 5人 (沙田靜苑)
技術員	負責場內設施的檢查及維修，以確保場內所有設施運作正常	1人

- 靜苑將發展一個員工訓練制度，靜苑每半年（於掃墓高峰日子前）舉行一個為期一天的員工訓練課程/會議，所有員工必須出席，接受專業訓練課程。課程內容包括:
  - 靜苑設施及運作說明
  - 各崗位及職責安排
  - 掃墓高峰日子交通及人流安排
  - 危機應變及火警演習
  - 針對過往收到的投訴及意見的檢討及改善
  - 發牌委員會訂明的運作指引及靜苑實務守則

- 靜苑在未來將爭取提升及完善管理模式，並研究獲得國際管理體系的認證的方案，例如質量管理體系（ISO9001）、環境管理體

系（ISO14001）、職業安全健康管理體系（OHSAS18001）及能源管理體系（ISO50001）等，將在未來的董事會探討。

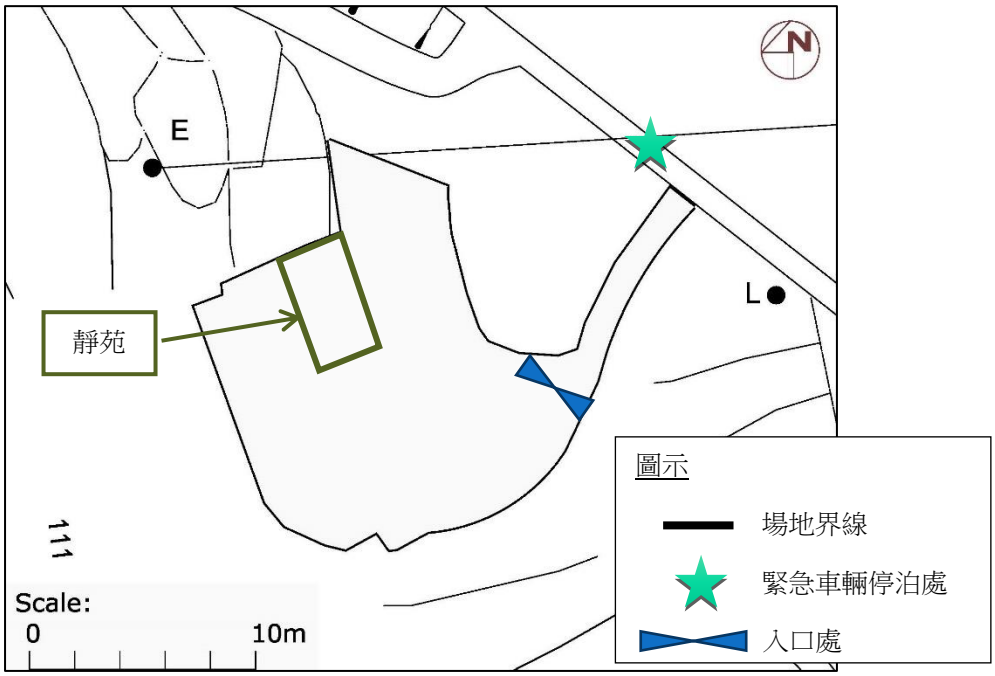
(7) 應對火警或其他緊急情況的應變方案

- 靜苑每半年（於掃墓高峰日子前）舉行一個為期一天的員工訓練課程/會議中，將進行程序指引回顧及檢討，檢視每名員工對處理緊急情況的應變措施。同時也有火警演習，員工將獲訓練如何使用滅火筒、基本急救及危機應對措施。靜苑並鼓勵員工考取急救牌照。以上將確保當發生緊急情況時，當值員工能有效協助疏散人群至安全位置，以及作適當即時應變措施（如簡單滅火、召喚緊急服務等)。

- 灰樓每層會安放2個滅火筒及1個具備後備電源的出路指示燈，共6個滅火筒設備及共3個具備後備電源的出路指示燈。另外，設有簡易的逃生路線，當值人員將以清晰指示牌，指示訪客步行約2分鐘路程到達位於赤坭坪村垃圾收集站的安全集合地點。同時，沙田靜苑入口處以及大埔公路馬料水段對面的巴士站，可作為緊急車輛停泊處（見下圖）。

- 面對火警或緊急情況，當值員工將按需要立即通知警方、消防、緊急車輛等。

- 如不幸發生火警或其他意外，靜苑會以廣播設施立即通知訪客，及指示工作人員，處理疏散人群，指示離開路線及帶領訪客到安全位置。另會點算訪客及職員人數是否齊集安全位置。



- 負責人資料如下。

  姓名　　：　吳維乾

  職位　　：　行政及拓展部經理

  聯絡電話號碼　：　9463 9398

(8) 確保遵從發牌委員會訂明的發牌條件或發出的指引及實務守則的措施

- 靜苑將在場內當眼位置 / 員工休息室張貼有關發牌條件、指引及實務守則。此外，如前所述，靜苑每半年將組織一個為期一天的員工訓練課程/會議，所有員工必須出席，檢討及重温有關運作和安排，安排員工接受專業訓練課程。課程內容將包括有關的發牌條件、運作指引及實務守則。務求確保每個管理人員及員工熟知相關條件、指引及實務守則。

(9) 投訴處理

- 在掃墓高峰日子，靜苑至少有 4 名職員在場(灰樓看守員、巡邏員)，即時處理衝突及投訴，並會記錄以供事後檢討及改善。例如：如發現訪客在苑內吸煙、吐痰等行為，靜苑員工會上前對其進行勸阻，如有必要，會考慮對其進行離場勸籲。另外，靜苑亦十分重視場內的衛生整潔，如發現存在衛生惡劣情況，會即時安

排員工進行清理，確保場內時刻保持整潔、乾淨。靜苑亦會擺放多個垃圾桶，方便訪客拋擲垃圾。

- 另外，靜苑網站及現場設有意見/投訴表可供訪客填寫，表達關於登記、交通、衛生、設施、秩序等意見。相關意見將會妥善記錄，以便日後作出改善方案時作為參考。此外，訪客亦能透過電郵或電話方式提供意見：

電郵地址　　：　info@shatinchingyuen.com

電話號碼　　：　2605 3030

(10) 確保骨灰安置所持續營運的財務方案

- 靜苑已製備完善及配合長期發展方向的財務政策，以確保靜苑的長期運作及日常營運開支及大樓維修保養的安排，以提供舒適及安全的環境供訪客使用。
- 財務方案摘要 詳見附件 1。

(11) 管理方案的執行人及批准人

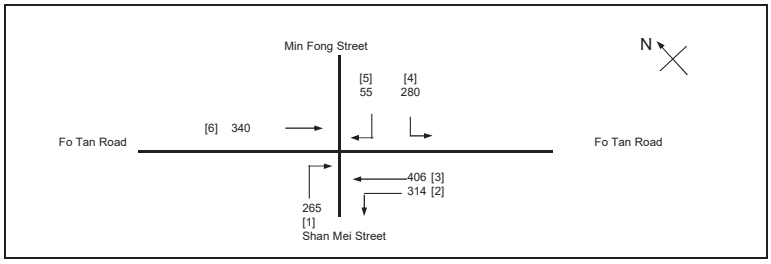
姓名	：	吳維乾
職位	：	行政及拓展部經理
聯絡電話號碼	：	9463 9398
電郵地址	：	kenneth@shatinchingyuen.com
簽署及蓋印	：	

日期 ： 2021 年 9 月 30 日

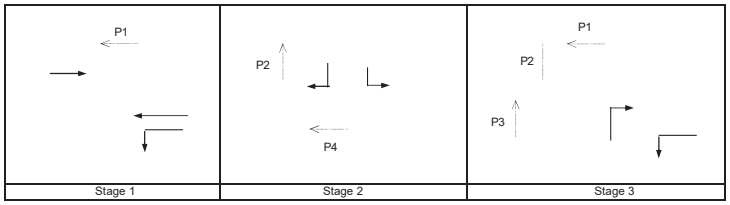
Appendix B

Junction Analysis

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Fo Tan Road / Min Fong Street / Shan Mei Street	2021 Calibrated Flows AM		Checked By: SF	Aug-21



No. of stages per cycle	N =	3
Intergreen Period Stage 1 - 2	I =	5 sec
Stage 2 - 3	I =	5 sec
Stage 3 - 1	I =	5 sec
Cycle time	C =	100 sec
Sum(y)	Y =	0.213
Loss time	L =	24 sec
Total Flow	=	1660 pcu
Co = (1.5*L+5)/(1-Y)	=	52.1 sec
Cm = L/(1-Y)	=	30.5 sec
Yult	=	0.720
R.C.ult = (Yult-Y)/Y*100%	=	238.4 %
Cp = 0.9*L/(0.9-Y)	=	31.4 sec
Ymax = 1-L/C	=	0.760
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	221.4 %



Pedestrian Phase	Width (m)	Stage	Green Time Required SG	FG	Green Time Provided (s) SG	FG	Check
P1	8.4	1,3	8	7	57	7	OK
P2	14.4	2,3	6	12	56	12	OK
P3	12	3	5	10	26	10	OK
P4	12	2	11	10	17	10	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
1	3	3.30		2	20		N	4030			265	265	1.00	3749			3749	0.071	0.071	12	25	37	0.190	23	21
2	1,3	3.30		1	13		N	1945	314			314	1.00	1744			1744	0.180			64	64	0.279	16	8
3	1	3.30		3				6255		406		406	0.00	6255			6255	0.065	0.065		23	23	0.280	43	32
4	2	3.10		2	15		N	3990	280			280	1.00	3627			3627	0.077	0.077		28	28	0.280	28	29
5	2	3.60		2	20		N	4090			55	55	1.00	3805			3805	0.014			5	28	0.052	6	27
6	1	3.50		4			N	8280		340		340	0.00	8280			8280	0.041			15	23	0.177	36	31

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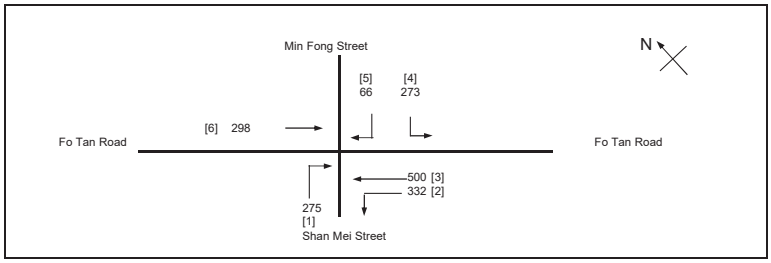
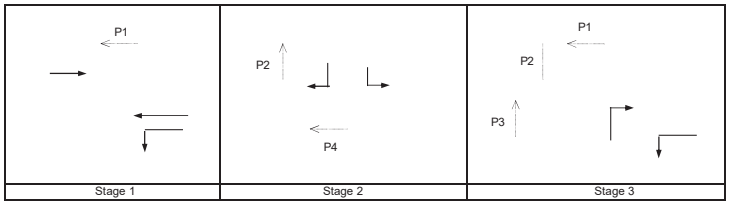
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Fo Tan Road / Min Fong Street / Shan Mei Street	2021 Calibrated Flows PM		Checked By: SF	Aug-21



No. of stages per cycle	N =	3
Intergreen Period Stage 1 - 2	I =	5 sec
Stage 2 - 3	I =	5 sec
Stage 3 - 1	I =	5 sec
Cycle time	C =	100 sec
Sum(y)	Y =	0.229
Loss time	L =	21 sec
Total Flow	=	1744 pcu
Co = (1.5*L+5)/(1-Y)	=	47.3 sec
Cm = L/(1-Y)	=	27.2 sec
Yult	=	0.743
R.C.ult = (Yult-Y)/Y*100%	=	224.9 %
Cp = 0.9*L/(0.9-Y)	=	28.1 sec
Ymax = 1-L/C	=	0.790
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	211.1 %



Pedestrian Phase	Width (m)	Stage	Green Time Required SG	FG	Green Time Provided (s) SG	FG	Check
P1	8.4	1,3	8	7	58	7	OK
P2	14.4	2,3	6	12	52	12	OK
P3	12	3	5	10	23	10	OK
P4	12	2	11	10	16	10	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
1	3	3.30		2	20		N	4030			275	275	1.00	3749			3749	0.073	0.073	9	25	34	0.214	25	24
2	1,3	3.30		1	13		N	1945	332			332	1.00	1744			1744	0.190			66	66	0.289	16	8
3	1	3.30		3				6255		500		500	0.00	6255			6255	0.080	0.080		28	28	0.289	50	29
4	2	3.10		2	15		N	3990	273			273	1.00	3627			3627	0.075	0.075		26	26	0.289	28	30
5	2	3.60		2	20		N	4090			66	66	1.00	3805			3805	0.017			6	26	0.067	7	28
6	1	3.50		4			N	8280		298		298	0.00	8280			8280	0.036			12	28	0.130	30	27

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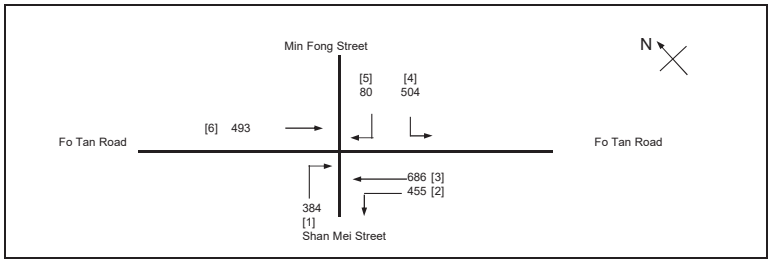
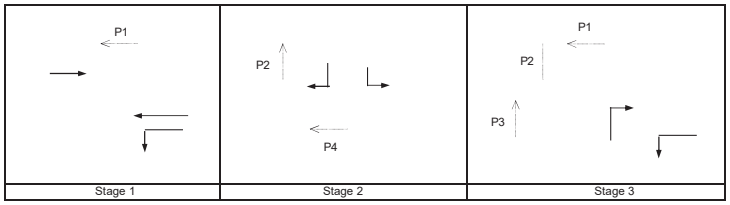
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Fo Tan Road / Min Fong Street / Shan Mei Street	2034 Reference Flows AM		Checked By: SF	Aug-21



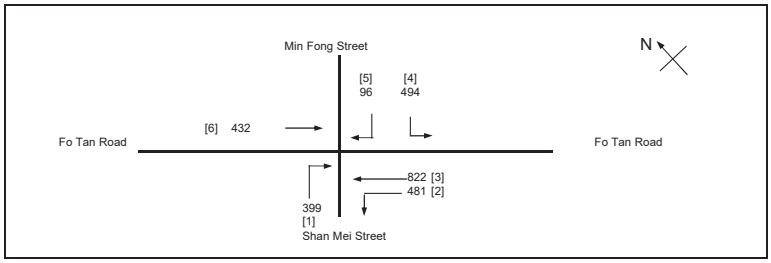
No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	5 sec
	Stage 2 - 3	I =	5 sec
	Stage 3 - 1	I =	5 sec
Cycle time		C =	100 sec
Sum(y)		Y =	0.351
Loss time		L =	19 sec
Total Flow		=	2602 pcu
Co	= (1.5*L+5)/(1-Y)	=	51.6 sec
Cm	= L/(1-Y)	=	29.3 sec
Yult		=	0.758
R.C.ult	= (Yult-Y)/Y*100%	=	115.8 %
Cp	= 0.9*L/(0.9-Y)	=	31.2 sec
Ymax	= 1-L/C	=	0.810
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	107.7 %



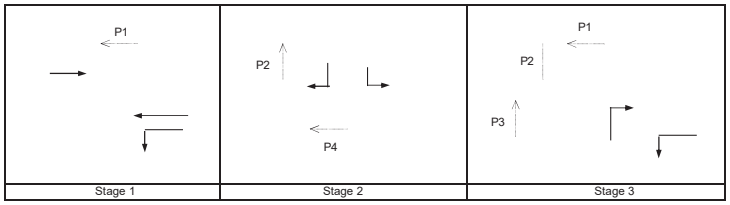
Pedestrian Phase	Width (m)	Stage	Green Time Required SG	FG	Green Time Provided (s) SG	FG	Check
P1	8.4	1,3	8	7	52	7	OK
P2	14.4	2,3	6	12	54	12	OK
P3	12	3	5	10	19	10	OK
P4	12	2	11	10	22	10	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	m Straight-Ahead Sat. Flow	Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				12					
1	3	3.30		2	20		N	4030			384	384	1.00	3749			3749	0.102	0.102	7	24	31	0.334	37	27
2	1,3	3.30		1	13		N	1945	455			455	1.00	1744			1744	0.261			60	60	0.435	25	12
3	1	3.30		3				6255		686		686	0.00	6255			6255	0.110	0.110		25	25	0.433	71	32
4	2	3.10		2	15		N	3990	504			504	1.00	3627			3627	0.139	0.139		32	32	0.433	48	27
5	2	3.60		2	20		N	4090			80	80	1.00	3805			3805	0.021			5	32	0.066	8	24
6	1	3.50		4			N	8280		493		493	0.00	8280			8280	0.060			14	25	0.235	51	30

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Fo Tan Road / Min Fong Street / Shan Mei Street	2034 Reference Flows PM		Checked By: SF	Aug-21



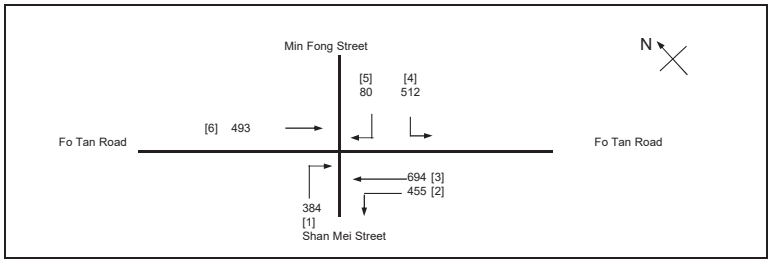
No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	5 sec
	Stage 2 - 3	I =	5 sec
	Stage 3 - 1	I =	5 sec
Cycle time		C =	100 sec
Sum(y)		Y =	0.374
Loss time		L =	17 sec
Total Flow		=	2724 pcu
Co	= (1.5*L+5)/(1-Y)	=	48.7 sec
Cm	= L/(1-Y)	=	27.2 sec
Yult		=	0.773
R.C.ult	= (Yult-Y)/Y*100%	=	106.5 %
Cp	= 0.9*L/(0.9-Y)	=	29.1 sec
Ymax	= 1-L/C	=	0.830
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	99.7 %



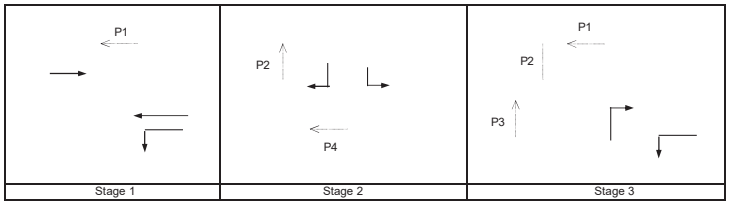
Pedestrian Phase	Width (m)	Stage	Green Time Required SG	FG	Green Time Provided (s) SG	FG	Check
P1	8.4	1,3	8	7	54	7	OK
P2	14.4	2,3	6	12	50	12	OK
P3	12	3	5	10	17	10	OK
P4	12	2	11	10	20	10	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	m Straight-Ahead Sat. Flow	Left pcu/h	Straight pcu/h	Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				12					
1	3	3.30		2	20		N	4030			399	399	1.00	3749			3749	0.106	0.106	5	24	29	0.372	40	29
2	1,3	3.30		1	13		N	1945	481			481	1.00	1744			1744	0.276			61	62	0.446	26	11
3	1	3.30		3				6255		822		822	0.00	6255			6255	0.131	0.131		29	29	0.451	81	29
4	2	3.10		2	15		N	3990	494			494	1.00	3627			3627	0.136	0.136		30	30	0.451	48	29
5	2	3.60		2	20		N	4090			96	96	1.00	3805			3805	0.025			6	30	0.083	9	25
6	1	3.50		4			N	8280		432		432	0.00	8280			8280	0.052			12	29	0.179	43	27

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Fo Tan Road / Min Fong Street / Shan Mei Street	2034 Design Flows AM		Checked By: SF	Aug-21



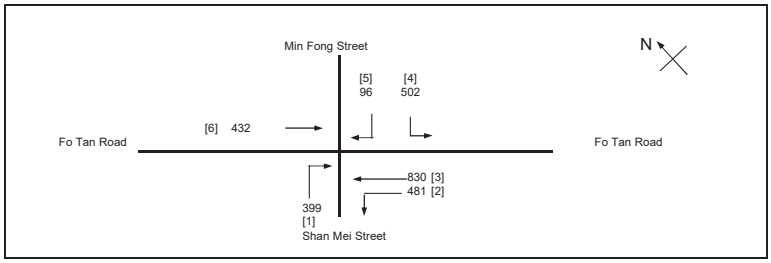
No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	5 sec
	Stage 2 - 3	I =	5 sec
	Stage 3 - 1	I =	5 sec
Cycle time		C =	100 sec
Sum(y)		Y =	0.355
Loss time		L =	19 sec
Total Flow		=	2618 pcu
Co	= (1.5*L+5)/(1-Y)	=	51.9 sec
Cm	= L/(1-Y)	=	29.4 sec
Yult		=	0.758
R.C.ult	= (Ult-Y)/Y*100%	=	113.7 %
Cp	= 0.9*L/(0.9-Y)	=	31.3 sec
Ymax	= 1-L/C	=	0.810
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	105.6 %



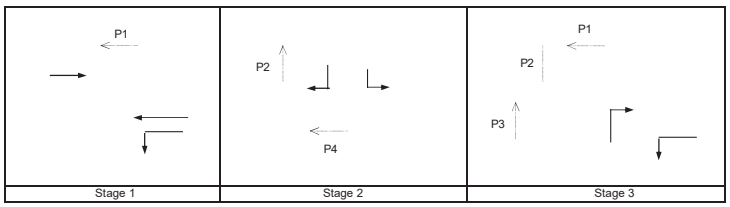
Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
P1	8.4	1,3	8	7	52	7	OK
P2	14.4	2,3	6	12	54	12	OK
P3	12	3	5	10	19	10	OK
P4	12	2	11	10	22	10	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				12					
1	3	3.30		2	20		N	4030			384	384	1.00	3749			3749	0.102	0.102	7	23	30	0.337	37	27
2	1,3	3.30		1	13		N	1945	455			455	1.00	1744			1744	0.261			60	60	0.437	25	12
3	1	3.30		3				6255		694		694	0.00	6255			6255	0.111	0.111		25	25	0.438	72	32
4	2	3.10		2	15		N	3990	512			512	1.00	3627			3627	0.141	0.141		32	32	0.438	48	27
5	2	3.60		2	20		N	4090			80	80	1.00	3805			3805	0.021			5	32	0.065	8	24
6	1	3.50		4			N	8280		493		493	0.00	8280			8280	0.060			14	25	0.235	51	30

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Fo Tan Road / Min Fong Street / Shan Mei Street	2034 Design Flows PM		Checked By: SF	Aug-21



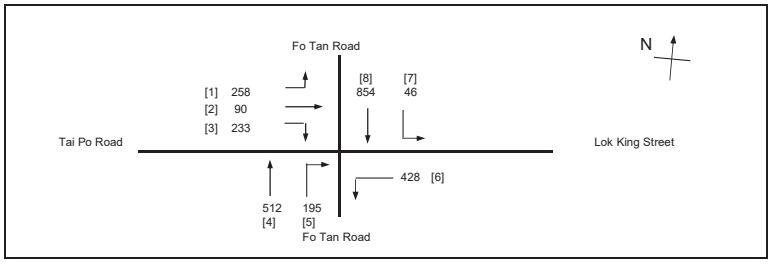
No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	5 sec
	Stage 2 - 3	I =	5 sec
	Stage 3 - 1	I =	5 sec
Cycle time		C =	100 sec
Sum(y)		Y =	0.378
Loss time		L =	17 sec
Total Flow		=	2740 pcu
Co	= (1.5*L+5)/(1-Y)	=	49.0 sec
Cm	= L/(1-Y)	=	27.3 sec
Yult		=	0.773
R.C.ult	= (Ult-Y)/Y*100%	=	104.6 %
Cp	= 0.9*L/(0.9-Y)	=	29.3 sec
Ymax	= 1-L/C	=	0.830
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	97.9 %



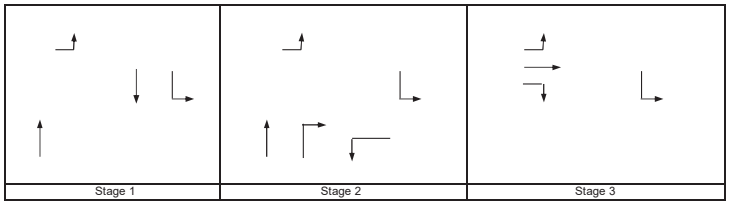
Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
P1	8.4	1,3	8	7	54	7	OK
P2	14.4	2,3	6	12	50	12	OK
P3	12	3	5	10	17	10	OK
P4	12	2	11	10	20	10	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				12					
1	3	3.30		2	20		N	4030			399	399	1.00	3749			3749	0.106	0.106	5	23	28	0.375	40	29
2	1,3	3.30		1	13		N	1945	481			481	1.00	1744			1744	0.276			61	62	0.448	26	11
3	1	3.30		3				6255		830		830	0.00	6255			6255	0.133	0.133		29	29	0.455	82	29
4	2	3.10		2	15		N	3990	502			502	1.00	3627			3627	0.138	0.138		30	30	0.455	49	29
5	2	3.60		2	20		N	4090			96	96	1.00	3805			3805	0.025			6	30	0.083	9	25
6	1	3.50		4			N	8280		432		432	0.00	8280			8280	0.052			11	29	0.179	42	27

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Tai Po Road / Fo Tan Road / Lok King Street	2021 Calibrated Flows AM		Checked By: SF	Aug-21



No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	6 sec
	Stage 2 - 3	I =	5 sec
	Stage 3 - 1	I =	7 sec
Cycle time		C =	125 sec
Sum(y)		Y =	0.275
Loss time		L =	15 sec
Total Flow		=	2616 pcu
Co	= (1.5*L+5)/(1-Y)	=	37.9 sec
Cm	= L/(1-Y)	=	20.7 sec
Yult		=	0.788
R.C.ult	= (Yult-Y)/Y*100%	=	186.6 %
Cp	= 0.9*L/(0.9-Y)	=	21.6 sec
Ymax	= 1-L/C	=	0.880
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	188.2 %



Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				15					
1	1,2,3	3.30		1	70			2085	258			258	1.00	2041			2041	0.126			51	125	0.126	0	0
2	3	3.30		1				2085		90		90	0.00	2085			2085	0.043	0.059		17	24	0.227	13	44
3	3	3.50		2	20			4210			233	233	1.00	3916			3916	0.059			24	24	0.312	33	44
4	1,2	3.30		2				4170		512		512	0.00	4170			4170	0.123			49	91	0.168	24	5
5	2	3.50		2	20			4210			195	195	1.00	3916			3916	0.050	0.113		20	45	0.138	22	27
6	2	3.30		2	15			4170	428			428	1.00	3791			3791	0.113			45	45	0.312	47	29
7	1,2,3	3.30		1	15			2085	46			46	1.00	1895			1895	0.024			10	125	0.024	0	0
8	1	3.30		4				8340		854		854	0.00	8340			8340	0.102	0.102		41	41	0.312	100	32

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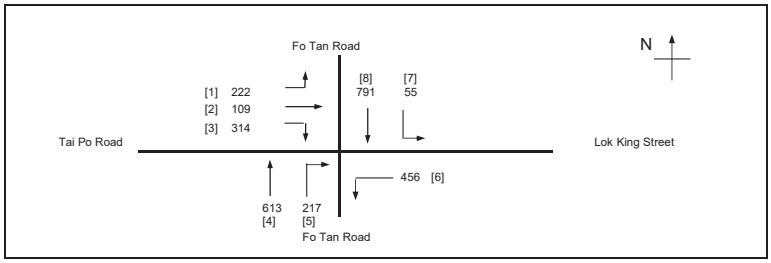
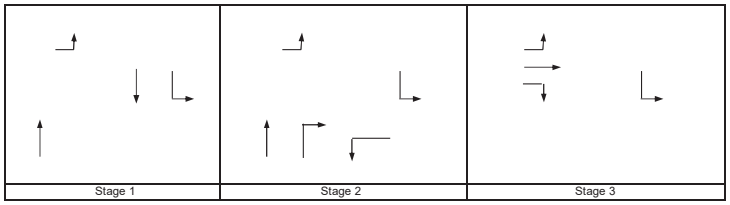
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Tai Po Road / Fo Tan Road / Lok King Street	2021 Calibrated Flows PM		Checked By: SF	Aug-21



No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	6 sec
	Stage 2 - 3	I =	5 sec
	Stage 3 - 1	I =	7 sec
Cycle time		C =	125 sec
Sum(y)		Y =	0.295
Loss time		L =	15 sec
Total Flow		=	2777 pcu
Co	= (1.5*L+5)/(1-Y)	=	39.0 sec
Cm	= L/(1-Y)	=	21.3 sec
Yult		=	0.788
R.C.ult	= (Yult-Y)/Y*100%	=	166.7 %
Cp	= 0.9*L/(0.9-Y)	=	22.3 sec
Ymax	= 1-L/C	=	0.880
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	168.2 %



Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				15					
1	1,2,3	3.30		1	70			2085	222			222	1.00	2041			2041	0.109			41	125	0.109	0	0
2	3	3.30		1				2085		109		109	0.00	2085			2085	0.052	0.080		19	30	0.219	14	39
3	3	3.50		2	20			4210			314	314	1.00	3916			3916	0.080			30	30	0.336	41	40
4	1,2	3.30		2				4170		613		613	0.00	4170			4170	0.147			55	85	0.216	34	8
5	2	3.50		2	20			4210			217	217	1.00	3916			3916	0.055	0.120		21	45	0.155	24	27
6	2	3.30		2	15			4170	456			456	1.00	3791			3791	0.120			45	45	0.336	51	30
7	1,2,3	3.30		1	15			2085	55			55	1.00	1895			1895	0.029			11	125	0.029	0	0
8	1	3.30		4				8340		791		791	0.00	8340			8340	0.095	0.095		35	35	0.336	99	36

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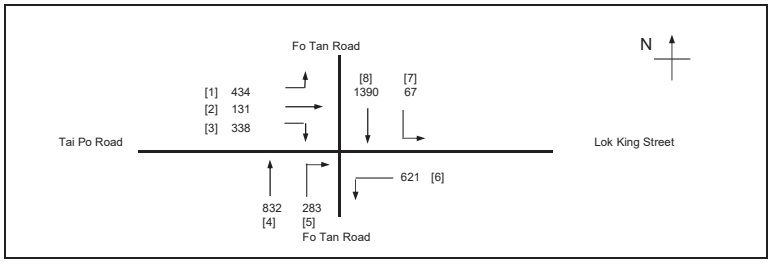
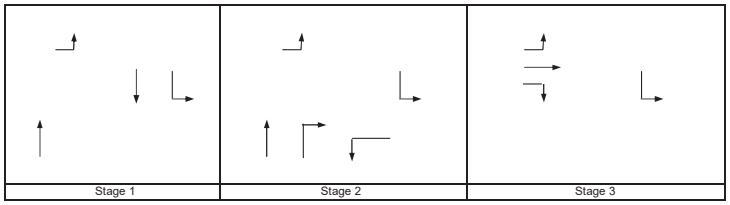
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Tai Po Road / Fo Tan Road / Lok King Street	2034 Reference Flows AM		Checked By: SF	Aug-21



No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	6 sec
	Stage 2 - 3	I =	5 sec
	Stage 3 - 1	I =	7 sec
Cycle time		C =	125 sec
Sum(y)		Y =	0.417
Loss time		L =	15 sec
Total Flow		=	4096 pcu
Co	= (1.5*L+5)/(1-Y)	=	47.2 sec
Cm	= L/(1-Y)	=	25.7 sec
Yult		=	0.788
R.C.ult	= (Yult-Y)/Y*100%	=	88.9 %
Cp	= 0.9*L/(0.9-Y)	=	27.9 sec
Ymax	= 1-L/C	=	0.880
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	90.0 %



Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				15					
1	1,2,3	3.30		1	70			2085	434			434	1.00	2041			2041	0.213			56	125	0.213	0	0
2	3	3.30		1				2085		131		131	0.00	2085			2085	0.063	0.086		17	23	0.345	19	46
3	3	3.50		2	20			4210			338	338	1.00	3916			3916	0.086			23	23	0.474	48	46
4	1,2	3.30		2				4170		832		832	0.00	4170			4170	0.200			53	92	0.270	38	6
5	2	3.50		2	20			4210			283	283	1.00	3916			3916	0.072	0.164		19	43	0.209	32	29
6	2	3.30		2	15			4170	621			621	1.00	3791			3791	0.164			43	43	0.474	71	33
7	1,2,3	3.30		1	15			2085	67			67	1.00	1895			1895	0.035			9	125	0.035	0	0
8	1	3.30		4				8340		1390		1390	0.00	8340			8340	0.167	0.167		44	44	0.474	156	32

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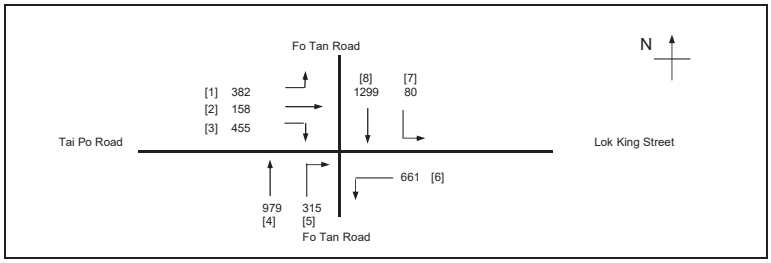
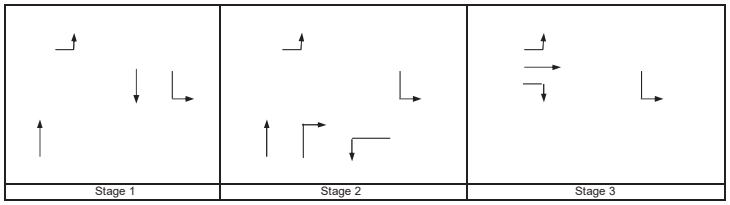
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Tai Po Road / Fo Tan Road / Lok King Street	2034 Reference Flows PM		Checked By: SF	Aug-21



No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	6 sec
	Stage 2 - 3	I =	5 sec
	Stage 3 - 1	I =	7 sec
Cycle time		C =	125 sec
Sum(y)		Y =	0.446
Loss time		L =	15 sec
Total Flow		=	4329 pcu
Co	= (1.5*L+5)/(1-Y)	=	49.7 sec
Cm	= L/(1-Y)	=	27.1 sec
Yult		=	0.788
R.C.ult	= (Yult-Y)/Y*100%	=	76.5 %
Cp	= 0.9*L/(0.9-Y)	=	29.8 sec
Ymax	= 1-L/C	=	0.880
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	77.5 %



Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				15					
1	1,2,3	3.30		1	70			2085	382			382	1.00	2041			2041	0.187			46	125	0.187	0	0
2	3	3.30		1				2085		158		158	0.00	2085			2085	0.076	0.116		19	29	0.331	21	41
3	3	3.50		2	20			4210			455	455	1.00	3916			3916	0.116			29	29	0.507	61	43
4	1,2	3.30		2				4170		979		979	0.00	4170			4170	0.235			58	86	0.340	53	8
5	2	3.50		2	20			4210			315	315	1.00	3916			3916	0.080	0.174		20	43	0.234	36	30
6	2	3.30		2	15			4170	661			661	1.00	3791			3791	0.174			43	43	0.507	75	33
7	1,2,3	3.30		1	15			2085	80			80	1.00	1895			1895	0.042			10	125	0.042	0	0
8	1	3.30		4				8340		1299		1299	0.00	8340			8340	0.156	0.156		38	38	0.507	156	36

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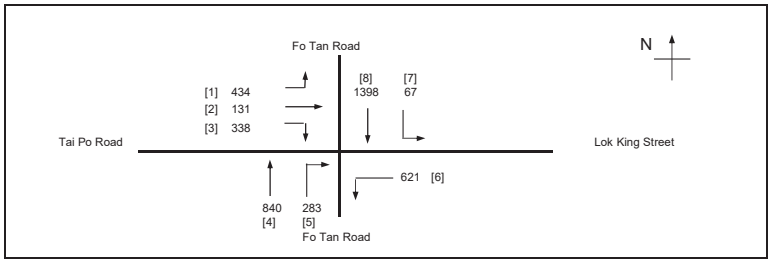
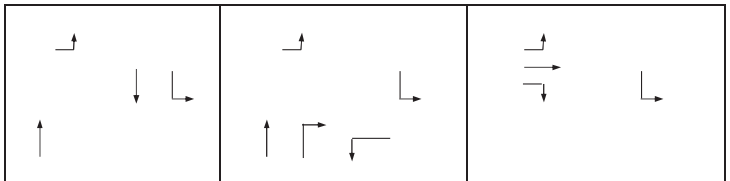
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Tai Po Road / Fo Tan Road / Lok King Street	2034 Design Flows AM		Checked By: SF	Aug-21



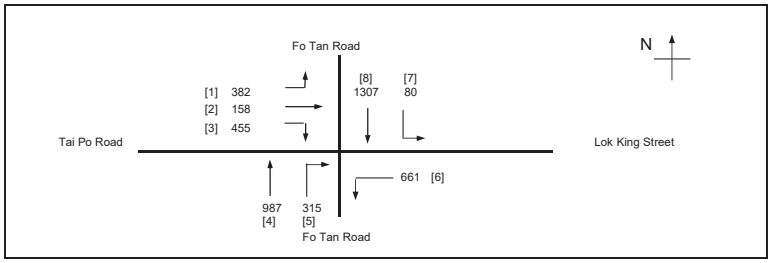
No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	6 sec
	Stage 2 - 3	I =	5 sec
	Stage 3 - 1	I =	7 sec
Cycle time		C =	125 sec
Sum(y)		Y =	0.418
Loss time		L =	15 sec
Total Flow		=	4112 pcu
Co	= (1.5*L+5)/(1-Y)	=	47.2 sec
Cm	= L/(1-Y)	=	25.8 sec
Yult		=	0.788
R.C.ult	= (Yult-Y)/Y*100%	=	88.5 %
Cp	= 0.9*L/(0.9-Y)	=	28.0 sec
Ymax	= 1-L/C	=	0.880
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	89.6 %



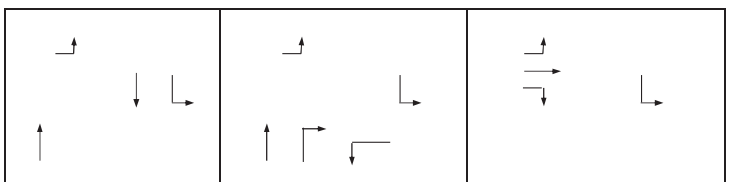
Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				15					
1	1,2,3	3.30		1	70			2085	434			434	1.00	2041			2041	0.213			56	125	0.213	0	0
2	3	3.30		1				2085		131		131	0.00	2085			2085	0.063	0.086		17	23	0.346	19	46
3	3	3.50		2	20			4210			338	338	1.00	3916			3916	0.086			23	23	0.475	48	46
4	1,2	3.30		2				4170		840		840	0.00	4170			4170	0.201			53	92	0.273	38	6
5	2	3.50		2	20			4210			283	283	1.00	3916			3916	0.072	0.164		19	43	0.209	32	29
6	2	3.30		2	15			4170	621			621	1.00	3791			3791	0.164			43	43	0.475	71	33
7	1,2,3	3.30		1	15			2085	67			67	1.00	1895			1895	0.035			9	125	0.035	0	0
8	1	3.30		4				8340		1398		1398	0.00	8340			8340	0.168	0.168		44	44	0.475	157	32

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Tai Po Road / Fo Tan Road / Lok King Street	2034 Design Flows PM		Checked By: SF	Aug-21



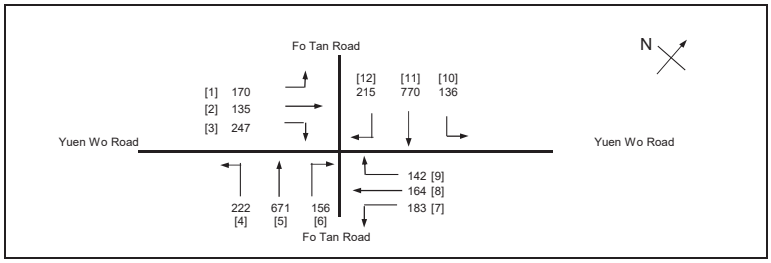
No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	6 sec
	Stage 2 - 3	I =	5 sec
	Stage 3 - 1	I =	7 sec
Cycle time		C =	125 sec
Sum(y)		Y =	0.447
Loss time		L =	15 sec
Total Flow		=	4345 pcu
Co	= (1.5*L+5)/(1-Y)	=	49.8 sec
Cm	= L/(1-Y)	=	27.1 sec
Yult		=	0.788
R.C.ult	= (Yult-Y)/Y*100%	=	76.1 %
Cp	= 0.9*L/(0.9-Y)	=	29.8 sec
Ymax	= 1-L/C	=	0.880
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	77.1 %



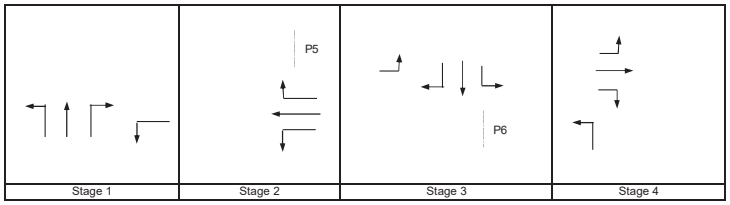
Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				15					
1	1,2,3	3.30		1	70			2085	382			382	1.00	2041			2041	0.187			46	125	0.187	0	0
2	3	3.30		1				2085		158		158	0.00	2085			2085	0.076	0.116		19	29	0.332	21	41
3	3	3.50		2	20			4210			455	455	1.00	3916			3916	0.116			29	29	0.508	61	43
4	1,2	3.30		2				4170		987		987	0.00	4170			4170	0.237			58	86	0.342	53	8
5	2	3.50		2	20			4210			315	315	1.00	3916			3916	0.080	0.174		20	43	0.234	36	30
6	2	3.30		2	15			4170	661			661	1.00	3791			3791	0.174			43	43	0.508	75	33
7	1,2,3	3.30		1	15			2085	80			80	1.00	1895			1895	0.042			10	125	0.042	0	0
8	1	3.30		4				8340		1307		1307	0.00	8340			8340	0.157	0.157		39	39	0.508	157	36

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Yuen Wo Road / Fo Tan Road	2021 Calibrated Flows AM		Checked By: SF	Aug-21



No. of stages per cycle		N =	4
Intergreen Period	Stage 1 - 2	I =	6 sec
	Stage 2 - 3	I =	8 sec
	Stage 3 - 4	I =	6 sec
	Stage 4 - 1	I =	6 sec
Cycle time		C =	125 sec
Sum(y)		Y =	0.391
Loss time		L =	22 sec
Total Flow		=	3351 pcu
Co	= (1.5*L+5)/(1-Y)	=	62.4 sec
Cm	= L/(1-Y)	=	36.1 sec
Yult		=	0.735
R.C.ult	= (Yult-Y)/Y*100%	=	88.1 %
Cp	= 0.9*L/(0.9-Y)	=	38.9 sec
Ymax	= 1-L/C	=	0.824
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	89.8 %



Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
P5	8.4	2	5	7	6	7	OK
P6	13.2	3	8	11	33	11	OK

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				22					
1	3,4	3.30		1	19		N	1945	170			170	1.00	1803			1803	0.094			25	67	0.177	14	15
2	4	3.40		1				2095		133		133	0.00	2095			2095	0.064	0.064		17	17	0.474	20	52
2,3	4	3.40		1	22			2095		2	123	125	0.99	1963			1963	0.064			17	17	0.474	19	52
3	4	3.30		1	20			2085			124	124	1.00	1940			1940	0.064			17	17	0.474	19	52
4	1,4	3.30		1	17		N	1945	222			222	1.00	1787			1787	0.124			33	50	0.310	23	27
5	1	3.30		2				4170		447		447	0.00	4170			4170	0.107	0.107		28	28	0.474	60	42
5,6	1	3.30		1	28			2085		224	0	224	0.00	2085			2085	0.107			28	28	0.474	30	43
6	1	3.30		1	25			2085			156	156	1.00	1967			1967	0.079			21	28	0.351	21	42
7	1,2	3.30		1	17		N	1945	183			183	1.00	1787			1787	0.102			27	46	0.276	20	28
8	2	3.30		1				2085		104		104	0.00	2085			2085	0.050	0.050		13	13	0.474	16	55
8,9	2	3.30		1	45			2085		60	42	102	0.41	2057			2057	0.050			13	13	0.474	16	55
9	2	3.30		1	40			2085			100	100	1.00	2010			2010	0.050			13	13	0.474	16	55
10	3	3.60		1	18		N	1975	136			136	1.00	1823			1823	0.075	0.170		20	45	0.208	15	28
10,11	3	3.30		1	17			2085	0	355		355	0.00	2085			2085	0.170			45	45	0.474	39	32
11	3	3.30		1				2085		140		140	0.00	2085			2085	0.067			18	45	0.187	16	28
11,12	3	3.30		1	24			2085		415	0	276	0.00	2085			2085	0.132			35	45	0.369	31	31
12	3	3.30		1	23			2085			215	215	1.00	1957			1957	0.110			29	45	0.306	24	30

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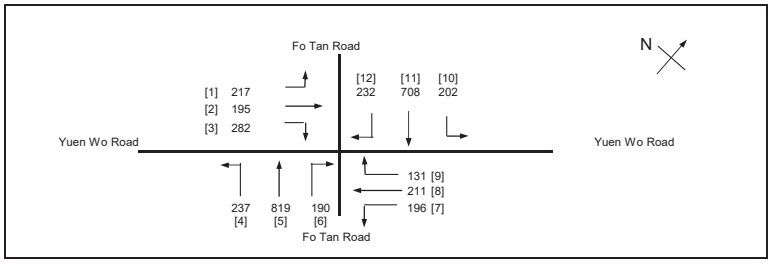
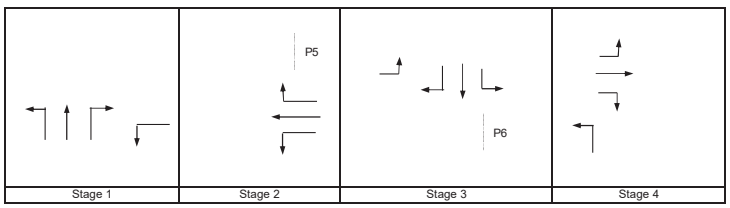
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Yuen Wo Road / Fo Tan Road	2021 Calibrated Flows PM		Checked By: SF	Aug-21



No. of stages per cycle		N =	4
Intergreen Period	Stage 1 - 2	I =	6 sec
	Stage 2 - 3	I =	8 sec
	Stage 3 - 4	I =	6 sec
	Stage 4 - 1	I =	6 sec
Cycle time		C =	125 sec
Sum(y)		Y =	0.421
Loss time		L =	22 sec
Total Flow		=	3711 pcu
Co	= (1.5*L+5)/(1-Y)	=	65.6 sec
Cm	= L/(1-Y)	=	38.0 sec
Yult		=	0.735
R.C.ult	= (Yult-Y)/Y*100%	=	74.7 %
Cp	= 0.9*L/(0.9-Y)	=	41.3 sec
Ymax	= 1-L/C	=	0.824
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	76.3 %



Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
P5	8.4	2	5	7	6	7	OK
P6	13.2	3	8	11	26	11	OK

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				22					
1	3,4	3.30		1	19		N	1945	217			217	1.00	1803			1803	0.120			29	62	0.241	19	18
2	4	3.40		1				2095		166		166	0.00	2095			2095	0.079	0.079		19	19	0.511	24	50
2,3	4	3.40		1	22			2095		29	128	157	0.82	1985			1985	0.079			19	19	0.511	23	50
3	4	3.30		1	20			2085			154	154	1.00	1940			1940	0.079			19	19	0.511	23	51
4	1,4	3.30		1	17		N	1945	237			237	1.00	1787			1787	0.133			32	56	0.294	23	22
5	1	3.30		2				4170		546		546	0.00	4170			4170	0.131	0.131		32	32	0.511	70	40
5,6	1	3.30		1	28			2085		273	0	273	0.00	2085			2085	0.131			32	32	0.511	35	41
6	1	3.30		1	25			2085			190	190	1.00	1967			1967	0.097			24	32	0.377	25	39
7	1,2	3.30		1	17		N	1945	196			196	1.00	1787			1787	0.110			27	51	0.271	20	26
8	2	3.30		1				2085		116		116	0.00	2085			2085	0.055	0.055		14	14	0.511	18	55
8,9	2	3.30		1	45			2085		95	20	115	0.17	2073			2073	0.055			14	14	0.511	18	55
9	2	3.30		1	40			2085			111	111	1.00	2010			2010	0.055			14	14	0.511	17	55
10	3	3.60		1	18		N	1975	202			202	1.00	1823			1823	0.111	0.155		27	38	0.365	24	35
10,11	3	3.30		1	17			2085	0	323		323	0.00	2085			2085	0.155			38	38	0.511	39	37
11	3	3.30		1				2085		91		91	0.00	2085			2085	0.044			11	38	0.144	11	32
11,12	3	3.30		1	24			2085		385	0	293	0.00	2085			2085	0.141			34	38	0.463	35	37
12	3	3.30		1	23			2085			232	232	1.00	1957			1957	0.119			29	38	0.390	28	36

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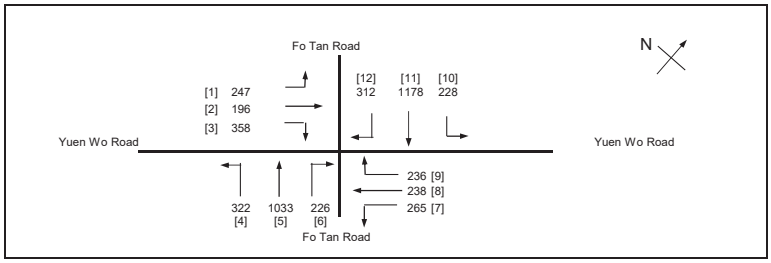
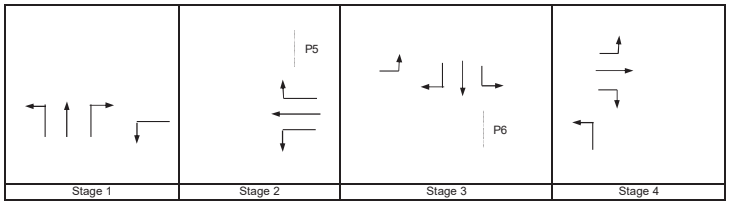
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Yuen Wo Road / Fo Tan Road	2034 Reference Flows AM		Checked By: SF	Aug-21



No. of stages per cycle		N =	4
Intergreen Period	Stage 1 - 2	I =	6 sec
	Stage 2 - 3	I =	8 sec
	Stage 3 - 4	I =	6 sec
	Stage 4 - 1	I =	6 sec
Cycle time		C =	125 sec
Sum(y)		Y =	0.586
Loss time		L =	22 sec
Total Flow		=	5052 pcu
Co	= (1.5*L+5)/(1-Y)	=	91.9 sec
Cm	= L/(1-Y)	=	53.2 sec
Yult		=	0.735
R.C.ult	= (Yult-Y)/Y*100%	=	25.4 %
Cp	= 0.9*L/(0.9-Y)	=	63.1 sec
Ymax	= 1-L/C	=	0.824
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	26.5 %



Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
P5	8.4	2	5	7	6	7	OK
P6	13.2	3	8	11	33	11	OK

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	m Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				22					
1	3,4	3.30		1	19		N	1945	247			247	1.00	1803			1803	0.137			24	65	0.262	20	17
2	4	3.40		1				2095		194		194	0.00	2095			2095	0.092	0.092		16	16	0.712	31	59
2,3	4	3.40		1	22			2095		2	179	181	0.99	1963			1963	0.092			16	16	0.712	29	60
3	4	3.30		1	20			2085			179	179	1.00	1940			1940	0.092			16	16	0.712	28	60
4	1,4	3.30		1	17		N	1945	322			322	1.00	1787			1787	0.180			32	50	0.448	33	29
5	1	3.30		2				4170		689		689	0.00	4170			4170	0.165	0.165		29	29	0.712	92	45
5,6	1	3.30		1	28			2085		344	0	344	0.00	2085			2085	0.165			29	29	0.712	46	48
6	1	3.30		1	25			2085			226	226	1.00	1967			1967	0.115			20	29	0.495	30	43
7	1,2	3.30		1	17		N	1945	265			265	1.00	1787			1787	0.148			26	48	0.390	29	29
8	2	3.30		1				2085		161		161	0.00	2085			2085	0.077	0.077		14	14	0.712	26	63
8,9	2	3.30		1	45			2085		77	81	158	0.51	2050			2050	0.077			14	14	0.712	26	63
9	2	3.30		1	40			2085			155	155	1.00	2010			2010	0.077			14	14	0.712	26	63
10	3	3.60		1	18		N	1975	228			228	1.00	1823			1823	0.125	0.252		22	44	0.354	26	31
10,11	3	3.30		1	17			2085	0	525		525	0.00	2085			2085	0.252			44	44	0.712	59	38
11	3	3.30		1				2085		213		213	0.00	2085			2085	0.102			18	44	0.288	24	30
11,12	3	3.30		1	24			2085		653	0	441	0.00	2085			2085	0.211			37	44	0.598	49	35
12	3	3.30		1	23			2085			312	312	1.00	1957			1957	0.159			28	44	0.451	35	32

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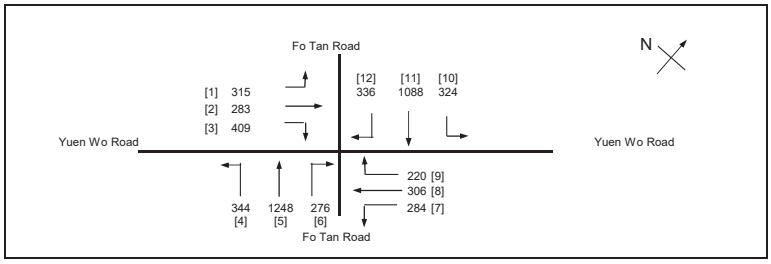
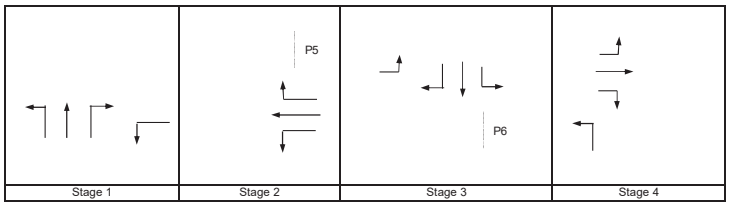
AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Yuen Wo Road / Fo Tan Road	2034 Reference Flows PM		Checked By: SF	Aug-21



No. of stages per cycle		N =	4
Intergreen Period	Stage 1 - 2	I =	6 sec
	Stage 2 - 3	I =	8 sec
	Stage 3 - 4	I =	6 sec
	Stage 4 - 1	I =	6 sec
Cycle time		C =	125 sec
Sum(y)		Y =	0.629
Loss time		L =	22 sec
Total Flow		=	5576 pcu
Co	= (1.5*L+5)/(1-Y)	=	102.5 sec
Cm	= L/(1-Y)	=	59.4 sec
Yult		=	0.735
R.C.ult	= (Yult-Y)/Y*100%	=	16.8 %
Cp	= 0.9*L/(0.9-Y)	=	73.2 sec
Ymax	= 1-L/C	=	0.824
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	17.8 %

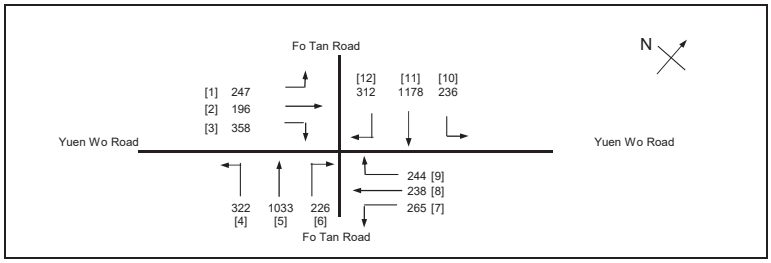


Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
P5	8.4	2	5	7	6	7	OK
P6	13.2	3	8	11	26	11	OK

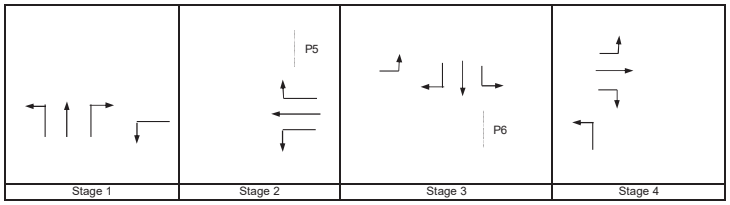
Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	m Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				22					
1	3,4	3.30		1	19		N	1945	315			315	1.00	1803			1803	0.175			29	61	0.356	28	21
2	4	3.40		1				2095		241		241	0.00	2095			2095	0.115	0.115		19	19	0.764	38	60
2,3	4	3.40		1	22			2095		42	186	228	0.82	1985			1985	0.115			19	19	0.764	36	61
3	4	3.30		1	20			2085			223	223	1.00	1940			1940	0.115			19	19	0.764	35	61
4	1,4	3.30		1	17		N	1945	344			344	1.00	1787			1787	0.192			31	56	0.426	33	25
5	1	3.30		2				4170		832		832	0.00	4170			4170	0.200	0.200		33	33	0.764	108	44
5,6	1	3.30		1	28			2085		416	0	416	0.00	2085			2085	0.200			33	33	0.764	55	48
6	1	3.30		1	25			2085			276	276	1.00	1967			1967	0.140			23	33	0.537	35	41
7	1,2	3.30		1	17		N	1945	284			284	1.00	1787			1787	0.159			26	52	0.385	29	27
8	2	3.30		1				2085		178		178	0.00	2085			2085	0.085	0.085		14	14	0.764	30	67
8,9	2	3.30		1	45			2085		128	48	176	0.27	2066			2066	0.085			14	14	0.764	30	67
9	2	3.30		1	40			2085			172	172	1.00	2010			2010	0.085			14	14	0.764	29	67
10	3	3.60		1	18		N	1975	324			324	1.00	1823			1823	0.178	0.230		29	38	0.591	39	39
10,11	3	3.30		1	17			2085	0	479		479	0.00	2085			2085	0.230			38	38	0.764	60	44
11	3	3.30		1				2085		143		143	0.00	2085			2085	0.068			11	38	0.228	17	34
11,12	3	3.30		1	24			2085		609	0	467	0.00	2085			2085	0.224			37	38	0.745	58	43
12	3	3.30		1	23			2085			336	336	1.00	1957			1957	0.172			28	38	0.571	41	39

X:\Project\30768 Tai Po Road, Ma Liu Shui-Columbarium Development\Data\Calculation\[C_Yuen Wo Rd_Fo Tan Rd.xlsm]REF PM

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Yuen Wo Road / Fo Tan Road	2034 Design Flows AM		Checked By: SF	Aug-21



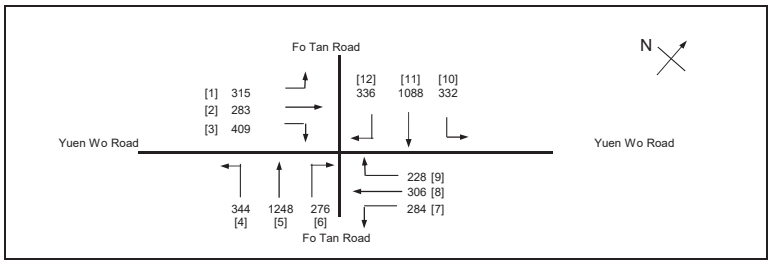
No. of stages per cycle		N =	4
Intergreen Period	Stage 1 - 2	I =	6 sec
	Stage 2 - 3	I =	8 sec
	Stage 3 - 4	I =	6 sec
	Stage 4 - 1	I =	6 sec
Cycle time		C =	125 sec
Sum(y)		Y =	0.586
Loss time		L =	22 sec
Total Flow		=	5065 pcu
Co	= (1.5*L+5)/(1-Y)	=	91.9 sec
Cm	= L/(1-Y)	=	53.2 sec
Yult		=	0.735
R.C.ult	= (Yult-Y)/Y*100%	=	25.4 %
Cp	= 0.9*L/(0.9-Y)	=	63.1 sec
Ymax	= 1-L/C	=	0.824
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	26.5 %



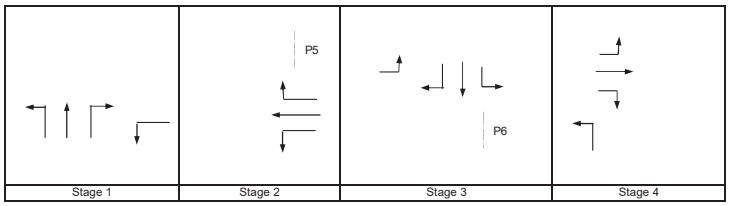
Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
P5	8.4	2	5	7	6	7	OK
P6	13.2	3	8	11	32	11	OK

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	m Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				22					
1	3,4	3.30		1	19		N	1945	247			247	1.00	1803			1803	0.137			24	65	0.263	21	17
2	4	3.40		1				2095		194		194	0.00	2095			2095	0.092	0.092		16	16	0.712	31	59
2,3	4	3.40		1	22			2095		2	179	181	0.99	1963			1963	0.092			16	16	0.712	29	60
3	4	3.30		1	20			2085			179	179	1.00	1940			1940	0.092			16	16	0.712	28	60
4	1,4	3.30		1	17		N	1945	322			322	1.00	1787			1787	0.180			32	50	0.448	33	29
5	1	3.30		2				4170		689		689	0.00	4170			4170	0.165	0.165		29	29	0.712	92	45
5,6	1	3.30		1	28			2085		344	0	344	0.00	2085			2085	0.165			29	29	0.712	46	48
6	1	3.30		1	25			2085			226	226	1.00	1967			1967	0.115			20	29	0.495	30	43
7	1,2	3.30		1	17		N	1945	265			265	1.00	1787			1787	0.148			26	48	0.388	28	29
8	2	3.30		1				2085		164		164	0.00	2085			2085	0.078	0.078		14	14	0.712	27	62
8,9	2	3.30		1	45			2085		74	86	161	0.54	2048			2048	0.078			14	14	0.712	26	63
9	2	3.30		1	40			2085			158	158	1.00	2010			2010	0.078			14	14	0.712	26	63
10	3	3.60		1	18		N	1975	236			236	1.00	1823			1823	0.129	0.250		23	44	0.368	27	31
10,11	3	3.30		1	17			2085	0	522		522	0.00	2085			2085	0.250			44	44	0.712	59	38
11	3	3.30		1				2085		210		210	0.00	2085			2085	0.101			18	44	0.286	24	30
11,12	3	3.30		1	24			2085		656	0	446	0.00	2085			2085	0.214			38	44	0.608	50	35
12	3	3.30		1	23			2085			312	312	1.00	1957			1957	0.159			28	44	0.453	35	33

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By: JP	Aug-21
Yuen Wo Road / Fo Tan Road	2034 Design Flows PM		Checked By: SF	Aug-21



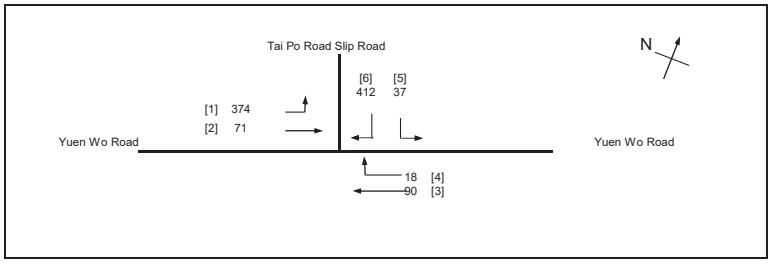
No. of stages per cycle		N =	4
Intergreen Period	Stage 1 - 2	I =	6 sec
	Stage 2 - 3	I =	8 sec
	Stage 3 - 4	I =	6 sec
	Stage 4 - 1	I =	6 sec
Cycle time		C =	125 sec
Sum(y)		Y =	0.629
Loss time		L =	22 sec
Total Flow		=	5589 pcu
Co	= (1.5*L+5)/(1-Y)	=	102.6 sec
Cm	= L/(1-Y)	=	59.4 sec
Yult		=	0.735
R.C.ult	= (Yult-Y)/Y*100%	=	16.8 %
Cp	= 0.9*L/(0.9-Y)	=	73.2 sec
Ymax	= 1-L/C	=	0.824
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	17.8 %



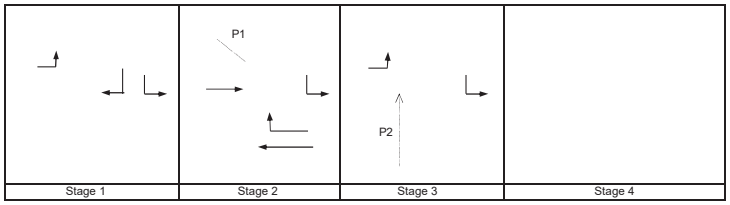
Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
P5	8.4	2	5	7	7	7	OK
P6	13.2	3	8	11	26	11	OK

Movement	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	m Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				22					
1	3,4	3.30		1	19		N	1945	315			315	1.00	1803			1803	0.175			29	61	0.357	28	21
2	4	3.40		1				2095		241		241	0.00	2095			2095	0.115	0.115		19	19	0.764	38	60
2,3	4	3.40		1	22			2095		42	186	228	0.82	1985			1985	0.115			19	19	0.764	36	61
3	4	3.30		1	20			2085			223	223	1.00	1940			1940	0.115			19	19	0.764	35	61
4	1,4	3.30		1	17		N	1945	344			344	1.00	1787			1787	0.192			31	56	0.426	33	25
5	1	3.30		2				4170		832		832	0.00	4170			4170	0.200	0.200		33	33	0.764	108	44
5,6	1	3.30		1	28			2085		416	0	416	0.00	2085			2085	0.200			33	33	0.764	55	48
6	1	3.30		1	25			2085			276	276	1.00	1967			1967	0.140			23	33	0.537	35	41
7	1,2	3.30		1	17		N	1945	284			284	1.00	1787			1787	0.159			26	52	0.383	29	27
8	2	3.30		1				2085		181		181	0.00	2085			2085	0.087	0.087		14	14	0.764	31	66
8,9	2	3.30		1	45			2085		125	54	179	0.30	2064			2064	0.087			14	14	0.764	30	67
9	2	3.30		1	40			2085			174	174	1.00	2010			2010	0.087			14	14	0.764	30	67
10	3	3.60		1	18		N	1975	332			332	1.00	1823			1823	0.182	0.228		30	37	0.609	40	40
10,11	3	3.30		1	17			2085	0	476		476	0.00	2085			2085	0.228			37	37	0.764	60	44
11	3	3.30		1				2085		140		140	0.00	2085			2085	0.067			11	37	0.225	17	34
11,12	3	3.30		1	24			2085		612	0	472	0.00	2085			2085	0.226			37	37	0.758	59	44
12	3	3.30		1	23			2085			336	336	1.00	1957			1957	0.172			28	37	0.574	41	39

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By:	JP	Aug-21
Yuen Wo Road / Slip Road of Sha Tin Road	2021 Calibrated Flows AM		Checked By:	SF	Aug-21



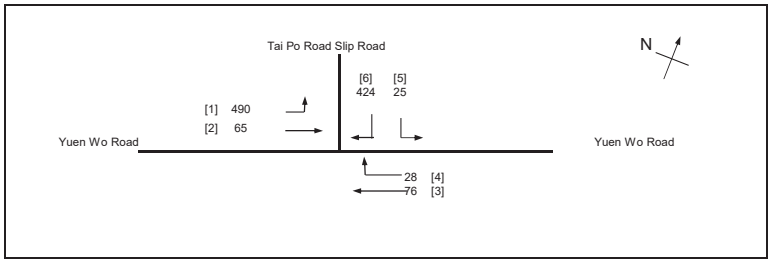
No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	5 sec
	Stage 2 - 3	I =	10 sec
	Stage 3 - 1	I =	5 sec
Cycle time		C =	65 sec
Sum(y)		Y =	0.159
Loss time		L =	44 sec
Total Flow		=	1002 pcu
Co	= (1.5*L+5)/(1-Y)	=	84.4 sec
Cm	= L/(1-Y)	=	52.3 sec
Yult		=	0.570
R.C.ult	= (Yult-Y)/Y*100%	=	258.9 %
Cp	= 0.9*L/(0.9-Y)	=	53.4 sec
Ymax	= 1-L/C	=	0.323
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	83.1 %



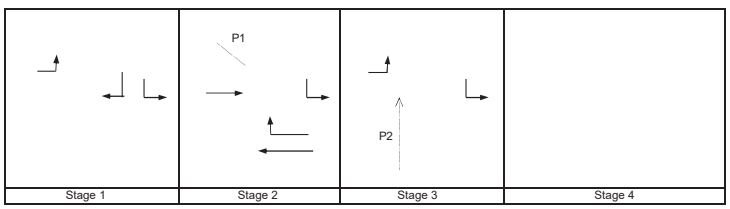
Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
P1	8.4	2	5	7	6	7	OK
P2	10.8	3	10	9	10	9	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				18					
1	1,3	3.30		2	10		N	4030	374			374	1.00	3504			3504	0.107			14	38	0.183	14	7
2	2	3.30		1				2085		71		71	0.00	2085			2085	0.034	0.046	7	5	13	0.169	5	22
3	2	3.30		1			N	1945		90		90	0.00	1945			1945	0.046			6	13	0.229	6	23
4	2	3.50		1	10			2105			18	18	1.00	1830			1830	0.010			1	13	0.049	1	21
5	1,2,3	3.30		1	10		N	1945	37			37	1.00	1691			1691	0.022			3	65	0.022	0	0
6	1	3.50		2	10			4210			412	412	1.00	3661			3661	0.113	0.113		15	15	0.492	29	23
	3		dummy																	19	19	19			

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By:	JP	Aug-21
Yuen Wo Road / Slip Road of Sha Tin Road	2021 Calibrated Flows PM		Checked By:	SF	Aug-21



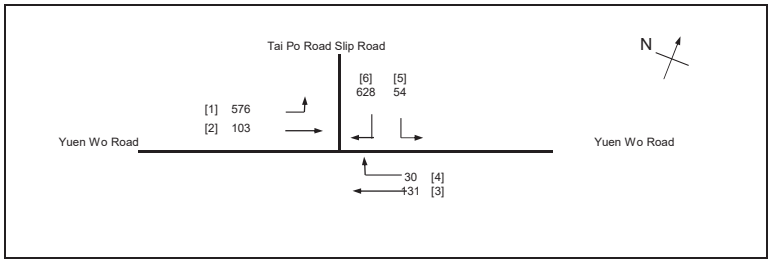
No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	5 sec
	Stage 2 - 3	I =	10 sec
	Stage 3 - 1	I =	5 sec
Cycle time		C =	65 sec
Sum(y)		Y =	0.155
Loss time		L =	44 sec
Total Flow		=	1108 pcu
Co	= (1.5*L+5)/(1-Y)	=	84.0 sec
Cm	= L/(1-Y)	=	52.1 sec
Yult		=	0.570
R.C.ult	= (Yult-Y)/Y*100%	=	268.0 %
Cp	= 0.9*L/(0.9-Y)	=	53.1 sec
Ymax	= 1-L/C	=	0.323
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	87.7 %



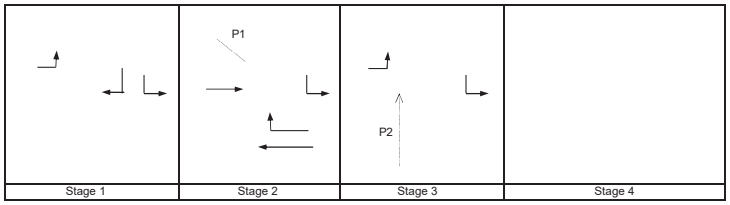
Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
P1	8.4	2	5	7	5	7	OK
P2	10.8	3	10	9	10	9	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				18					
1	1,3	3.30		2	10		N	4030	490			490	1.00	3504			3504	0.140			19	39	0.235	18	6
2	2	3.30		1				2085		65		65	0.00	2085			2085	0.031	0.039	7	4	12	0.165	5	23
3	2	3.30		1			N	1945		76		76	0.00	1945			1945	0.039			5	12	0.207	6	23
4	2	3.50		1	10			2105			28	28	1.00	1830			1830	0.015			2	12	0.081	2	22
5	1,2,3	3.30		1	10		N	1945	25			25	1.00	1691			1691	0.015			2	65	0.015	0	0
6	1	3.50		2	10			4210			424	424	1.00	3661			3661	0.116	0.116		16	16	0.479	29	22
	3		dummy																	19	19	19			

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By:	JP	Aug-21
Yuen Wo Road / Slip Road of Sha Tin Road	2034 Reference Flows AM		Checked By:	SF	Aug-21



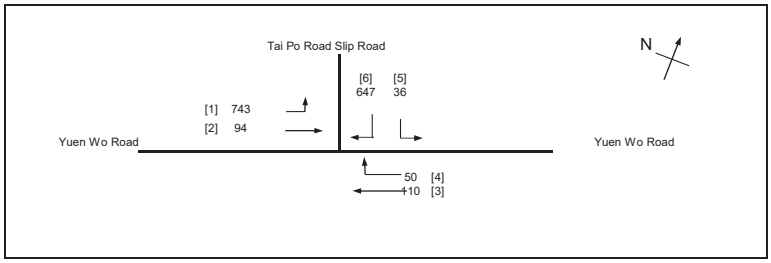
No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	5 sec
	Stage 2 - 3	I =	10 sec
	Stage 3 - 1	I =	5 sec
Cycle time		C =	65 sec
Sum(y)		Y =	0.239
Loss time		L =	43 sec
Total Flow		=	1522 pcu
Co	= (1.5*L+5)/(1-Y)	=	91.3 sec
Cm	= L/(1-Y)	=	56.5 sec
Yult		=	0.578
R.C.ult	= (Yult-Y)/Y*100%	=	141.7 %
Cp	= 0.9*L/(0.9-Y)	=	58.5 sec
Ymax	= 1-L/C	=	0.338
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	27.5 %



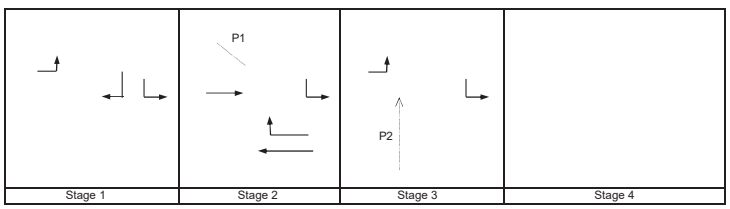
Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
P1	8.4	2	5	7	5	7	OK
P2	10.8	3	10	9	10	9	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				18					
1	1,3	3.30		2	10		N	4030	576			576	1.00	3504			3504	0.164			15	39	0.275	21	7
2	2	3.30		1				2085		103		103	0.00	2085			2085	0.049	0.067	6	5	12	0.263	8	24
3	2	3.30		1			N	1945		131		131	0.00	1945			1945	0.067			6	12	0.359	10	25
4	2	3.50		1	10			2105			30	30	1.00	1830			1830	0.016			2	12	0.087	2	22
5	1,2,3	3.30		1	10		N	1945	54			54	1.00	1691			1691	0.032			3	65	0.032	0	0
6	1	3.50		2	10			4210			628	628	1.00	3661			3661	0.172	0.172		16	16	0.706	43	25
	3		dummy																	19	19	19			

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION		INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By:	JP	Aug-21
Yuen Wo Road / Slip Road of Sha Tin Road	2034 Reference Flows PM		Checked By:	SF	Aug-21



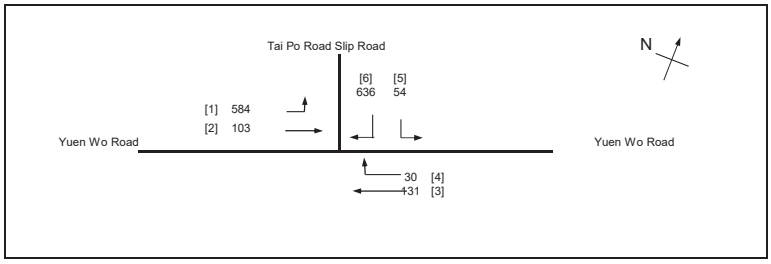
No. of stages per cycle		N =	3
Intergreen Period	Stage 1 - 2	I =	5 sec
	Stage 2 - 3	I =	10 sec
	Stage 3 - 1	I =	5 sec
Cycle time		C =	65 sec
Sum(y)		Y =	0.233
Loss time		L =	44 sec
Total Flow		=	1680 pcu
Co	= (1.5*L+5)/(1-Y)	=	92.6 sec
Cm	= L/(1-Y)	=	57.4 sec
Yult		=	0.570
R.C.ult	= (Yult-Y)/Y*100%	=	144.3 %
Cp	= 0.9*L/(0.9-Y)	=	59.4 sec
Ymax	= 1-L/C	=	0.323
R.C.(C)	= (0.9*Ymax-Y)/Y*100%	=	24.6 %



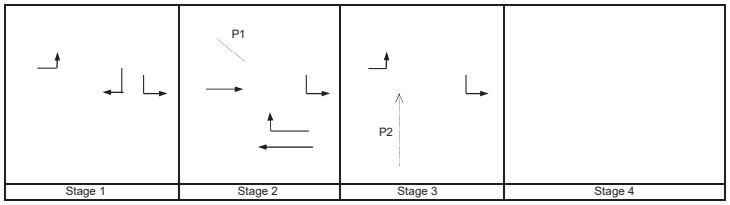
Pedestrian Phase	Width (m)	Stage	Green Time Required SG	Green Time Required FG	Green Time Provided (s) SG	Green Time Provided (s) FG	Check
P1	8.4	2	5	7	5	7	OK
P2	10.8	3	10	9	10	9	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				18					
1	1,3	3.30		2	10		N	4030	743			743	1.00	3504			3504	0.212			19	39	0.354	27	7
2	2	3.30		1				2085		94		94	0.00	2085			2085	0.045	0.057	7	4	12	0.242	7	24
3	2	3.30		1			N	1945		110		110	0.00	1945			1945	0.057			5	12	0.304	8	24
4	2	3.50		1	10			2105			50	50	1.00	1830			1830	0.027			2	12	0.147	4	23
5	1,2,3	3.30		1	10		N	1945	36			36	1.00	1691			1691	0.021			2	65	0.021	0	0
6	1	3.50		2	10			4210			647	647	1.00	3661			3661	0.177	0.177		16	16	0.722	45	25
	3		dummy																	19	19	19			

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By:	JP	Aug-21
Yuen Wo Road / Slip Road of Sha Tin Road	2034 Design Flows AM		Checked By:	SF	Aug-21



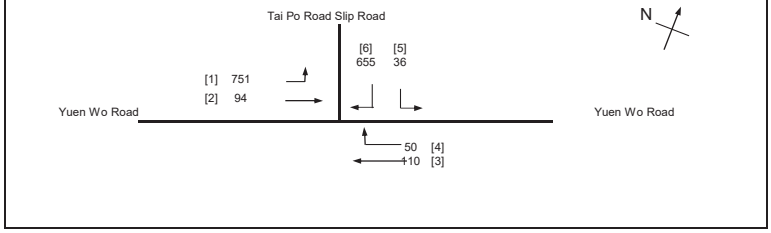
No. of stages per cycle	N =	3
Intergreen Period Stage 1 - 2	I =	5 sec
Stage 2 - 3	I =	10 sec
Stage 3 - 1	I =	5 sec
Cycle time	C =	65 sec
Sum(y)	Y =	0.241
Loss time	L =	43 sec
Total Flow	=	1538 pcu
Co = (1.5*L+5)/(1-Y)	=	91.6 sec
Cm = L/(1-Y)	=	56.7 sec
Yult	=	0.578
R.C.ult = (Yult-Y)/Y*100%	=	139.5 %
Cp = 0.9*L/(0.9-Y)	=	58.7 sec
Ymax = 1-L/C	=	0.338
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	26.4 %



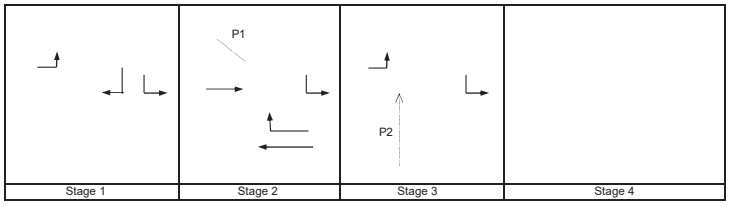
Pedestrian Phase	Width (m)	Stage	Green Time Required SG	FG	Green Time Provided (s) SG	FG	Check
P1	8.4	2	5	7	5	7	OK
P2	10.8	3	10	9	10	9	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				18					
1	1,3	3.30		2	10		N	4030	584			584	1.00	3504			3504	0.167			15	39	0.279	21	7
2	2	3.30		1				2085		103		103	0.00	2085			2085	0.049	0.067	6	5	12	0.264	8	24
3	2	3.30		1			N	1945		131		131	0.00	1945			1945	0.067			6	12	0.360	10	25
4	2	3.50		1	10			2105			30	30	1.00	1830			1830	0.016			1	12	0.088	2	22
5	1,2,3	3.30		1	10		N	1945	54			54	1.00	1691			1691	0.032			3	65	0.032	0	0
6	1	3.50		2	10			4210			636	636	1.00	3661			3661	0.174	0.174		16	16	0.712	44	25
	3		dummy																	19	19	19			

AXON CONSULTANCY LIMITED	TRAFFIC SIGNAL CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		Project No.: 30768	Prepared By:	JP	Aug-21
Yuen Wo Road / Slip Road of Sha Tin Road	2034 Design Flows PM		Checked By:	SF	Aug-21



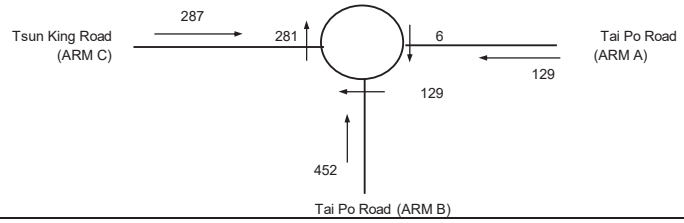
No. of stages per cycle	N =	3
Intergreen Period Stage 1 - 2	I =	5 sec
Stage 2 - 3	I =	10 sec
Stage 3 - 1	I =	5 sec
Cycle time	C =	65 sec
Sum(y)	Y =	0.235
Loss time	L =	44 sec
Total Flow	=	1696 pcu
Co = (1.5*L+5)/(1-Y)	=	92.9 sec
Cm = L/(1-Y)	=	57.6 sec
Yult	=	0.570
R.C.ult = (Yult-Y)/Y*100%	=	142.1 %
Cp = 0.9*L/(0.9-Y)	=	59.6 sec
Ymax = 1-L/C	=	0.323
R.C.(C) = (0.9*Ymax-Y)/Y*100%	=	23.5 %



Pedestrian Phase	Width (m)	Stage	Green Time Required SG	FG	Green Time Provided (s) SG	FG	Check
P1	8.4	2	5	7	5	7	OK
P2	10.8	3	10	9	10	9	OK

Move-ment	Stage	Lane Width m.	Phase	No. of lane	Radius m.	O	N	Straight-Ahead Sat. Flow	m Left pcu/h	m Straight pcu/h	m Right pcu/h	Total Flow pcu/h	Proportion of Turning Vehicles	Sat. Flow pcu/h	lare lan Length m.	Flare lane Effect	Revised Sat. Flow pcu/h	y	Greater y	L sec	g (required sec	g (input) sec	Degree of Saturation X	Queue Length (m/lane)	Average Delay (sec)
																				18					
1	1,3	3.30		2	10		N	4030	751			751	1.00	3504			3504	0.214			19	39	0.358	27	7
2	2	3.30		1				2085		94		94	0.00	2085			2085	0.045	0.057	7	4	12	0.243	7	24
3	2	3.30		1			N	1945		110		110	0.00	1945			1945	0.057			5	12	0.305	8	24
4	2	3.50		1	10			2105			50	50	1.00	1830			1830	0.027			2	12	0.147	4	23
5	1,2,3	3.30		1	10		N	1945	36			36	1.00	1691			1691	0.021			2	65	0.021	0	0
6	1	3.50		2	10			4210			655	655	1.00	3661			3661	0.179	0.179		16	16	0.729	45	25
	3		dummy																	19	19	19			

AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Tsun King Road / Tai Po Road	2021 Calibrated Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.91	8.55	6.77			
E	=	Entry width (m)	7.11	10.19	8.06			
L	=	Effective length of flare (m)	12.67	8.40	16.50			
R	=	Entry radius (m)	68.00	10.80	80.00			
D	=	Inscribed circle diameter (m)	40.00	40.00	40.00			
A	=	Entry angle (degree)	60.00	70.00	70.00			
Q	=	Entry flow (pcu/h)	129	452	287			
Qc	=	Circulating flow across entry (pcu/h)	6	129	281			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.40	0.31	0.13			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.93	0.82	0.90			
X2	=	V + ((E-V)/(1+2S))	5.68	9.56	7.80			
M	=	EXP((D-60)/10)	0.14	0.14	0.14			
F	=	303*X2	1721	2896	2365			
Td	=	1+(0.5/(1+M))	1.44	1.44	1.44			
Fc	=	0.21*Td(1+0.2*X2)	0.65	0.88	0.77			
Qe	=	K(F-Fc*Qc)	1598	2280	1928	Total In Sum =	1284	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.08	0.20	0.15	DFC of Critical Approach =	0.20	

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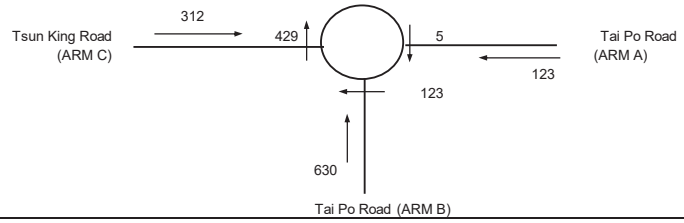
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Tsun King Road / Tai Po Road	2021 Calibrated Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.91	8.55	6.77			
E	=	Entry width (m)	7.11	10.19	8.06			
L	=	Effective length of flare (m)	12.67	8.40	16.50			
R	=	Entry radius (m)	68.00	10.80	80.00			
D	=	Inscribed circle diameter (m)	40.00	40.00	40.00			
A	=	Entry angle (degree)	60.00	70.00	70.00			
Q	=	Entry flow (pcu/h)	123	630	312			
Qc	=	Circulating flow across entry (pcu/h)	5	123	429			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.40	0.31	0.13			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.93	0.82	0.90			
X2	=	V + ((E-V)/(1+2S))	5.68	9.56	7.80			
M	=	EXP((D-60)/10)	0.14	0.14	0.14			
F	=	303*X2	1721	2896	2365			
Td	=	1+(0.5/(1+M))	1.44	1.44	1.44			
Fc	=	0.21*Td(1+0.2*X2)	0.65	0.88	0.77			
Qe	=	K(F-Fc*Qc)	1598	2285	1825	Total In Sum =	1622	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.08	0.28	0.17	DFC of Critical Approach =	0.28	

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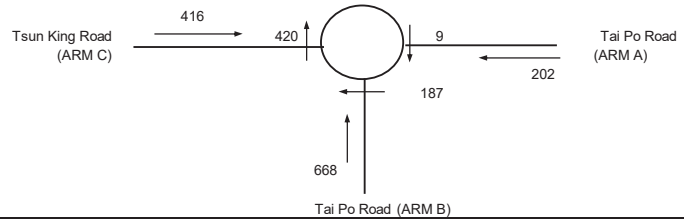
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Tsun King Road / Tai Po Road	2034 Reference Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.91	8.55	6.77			
E	=	Entry width (m)	7.11	10.19	8.06			
L	=	Effective length of flare (m)	12.67	8.40	16.50			
R	=	Entry radius (m)	68.00	10.80	80.00			
D	=	Inscribed circle diameter (m)	40.00	40.00	40.00			
A	=	Entry angle (degree)	60.00	70.00	70.00			
Q	=	Entry flow (pcu/h)	202	668	416			
Qc	=	Circulating flow across entry (pcu/h)	9	187	420			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.40	0.31	0.13			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.93	0.82	0.90			
X2	=	V + ((E-V)/(1+2S))	5.68	9.56	7.80			
M	=	EXP((D-60)/10)	0.14	0.14	0.14			
F	=	303*X2	1721	2896	2365			
Td	=	1+(0.5/(1+M))	1.44	1.44	1.44			
Fc	=	0.21*Td(1+0.2*X2)	0.65	0.88	0.77			
Qe	=	K(F-Fc*Qc)	1596	2238	1831	Total In Sum =	1902	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.13	0.30	0.23	DFC of Critical Approach =	0.30	

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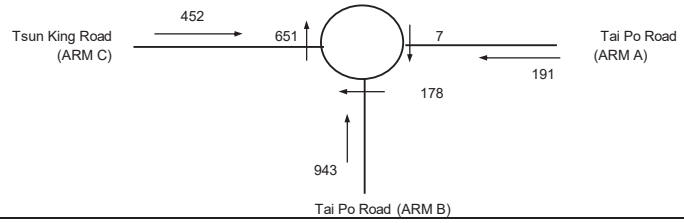
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Tsun King Road / Tai Po Road	2034 Reference Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.91	8.55	6.77			
E	=	Entry width (m)	7.11	10.19	8.06			
L	=	Effective length of flare (m)	12.67	8.40	16.50			
R	=	Entry radius (m)	68.00	10.80	80.00			
D	=	Inscribed circle diameter (m)	40.00	40.00	40.00			
A	=	Entry angle (degree)	60.00	70.00	70.00			
Q	=	Entry flow (pcu/h)	191	943	452			
Qc	=	Circulating flow across entry (pcu/h)	7	178	651			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.40	0.31	0.13			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.93	0.82	0.90			
X2	=	V + ((E-V)/(1+2S))	5.68	9.56	7.80			
M	=	EXP((D-60)/10)	0.14	0.14	0.14			
F	=	303*X2	1721	2896	2365			
Td	=	1+(0.5/(1+M))	1.44	1.44	1.44			
Fc	=	0.21*Td(1+0.2*X2)	0.65	0.88	0.77			
Qe	=	K(F-Fc*Qc)	1597	2245	1670	Total In Sum =	2422	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.12	0.42	0.27	DFC of Critical Approach =	0.42	

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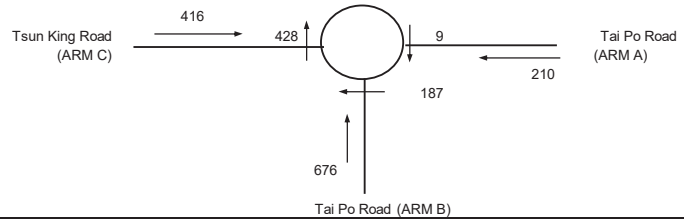
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Tsun King Road / Tai Po Road	2034 Design Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.91	8.55	6.77			
E	=	Entry width (m)	7.11	10.19	8.06			
L	=	Effective length of flare (m)	12.67	8.40	16.50			
R	=	Entry radius (m)	68.00	10.80	80.00			
D	=	Inscribed circle diameter (m)	40.00	40.00	40.00			
A	=	Entry angle (degree)	60.00	70.00	70.00			
Q	=	Entry flow (pcu/h)	210	676	416			
Qc	=	Circulating flow across entry (pcu/h)	9	187	428			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.40	0.31	0.13			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.93	0.82	0.90			
X2	=	V + ((E-V)/(1+2S))	5.68	9.56	7.80			
M	=	EXP((D-60)/10)	0.14	0.14	0.14			
F	=	303*X2	1721	2896	2365			
Td	=	1+(0.5/(1+M))	1.44	1.44	1.44			
Fc	=	0.21*Td(1+0.2*X2)	0.65	0.88	0.77			
Qe	=	K(F-Fc*Qc)	1596	2238	1825	Total In Sum =	1926	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.13	0.30	0.23	DFC of Critical Approach =	0.30	

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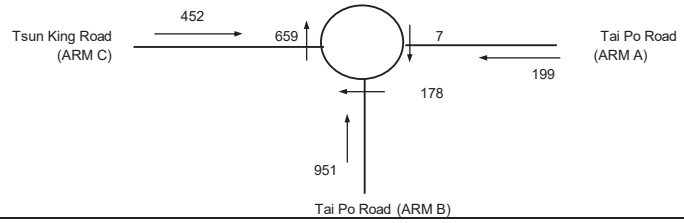
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Tsun King Road / Tai Po Road	2034 Design Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.91	8.55	6.77			
E	=	Entry width (m)	7.11	10.19	8.06			
L	=	Effective length of flare (m)	12.67	8.40	16.50			
R	=	Entry radius (m)	68.00	10.80	80.00			
D	=	Inscribed circle diameter (m)	40.00	40.00	40.00			
A	=	Entry angle (degree)	60.00	70.00	70.00			
Q	=	Entry flow (pcu/h)	199	951	452			
Qc	=	Circulating flow across entry (pcu/h)	7	178	659			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.40	0.31	0.13			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	0.93	0.82	0.90			
X2	=	V + ((E-V)/(1+2S))	5.68	9.56	7.80			
M	=	EXP((D-60)/10)	0.14	0.14	0.14			
F	=	303*X2	1721	2896	2365			
Td	=	1+(0.5/(1+M))	1.44	1.44	1.44			
Fc	=	0.21*Td(1+0.2*X2)	0.65	0.88	0.77			
Qe	=	K(F-Fc*Qc)	1597	2245	1665	Total In Sum =	2446	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.12	0.42	0.27	DFC of Critical Approach =	0.42	

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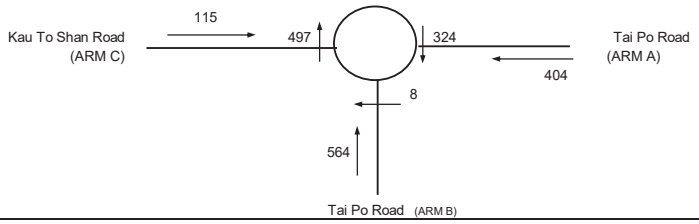
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Kau To Shan Road / Tai Po Road	2021 Calibrated Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.86	6.87	4.74			
E	=	Entry width (m)	8.08	8.80	4.74			
L	=	Effective length of flare (m)	10.30	9.60	1.00			
R	=	Entry radius (m)	55.00	14.00	56.00			
D	=	Inscribed circle diameter (m)	38.00	38.00	38.00			
A	=	Entry angle (degree)	15.00	60.00	12.00			
Q	=	Entry flow (pcu/h)	404	564	115			
Qc	=	Circulating flow across entry (pcu/h)	324	8	497			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.66	0.32	0.00			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.87	1.09			
X2	=	V + ((E-V)/(1+2S))	5.68	8.05	4.74			
M	=	EXP((D-60)/10)	0.11	0.11	0.11			
F	=	303*X2	1722	2439	1435			
Td	=	1+(0.5/(1+M))	1.45	1.45	1.45			
Fc	=	0.21*Td(1+0.2*X2)	0.65	0.79	0.59			
Qe	=	K(F-Fc*Qc)	1637	2128	1247	Total In Sum =	1912	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.25	0.27	0.09	DFC of Critical Approach =	0.27	

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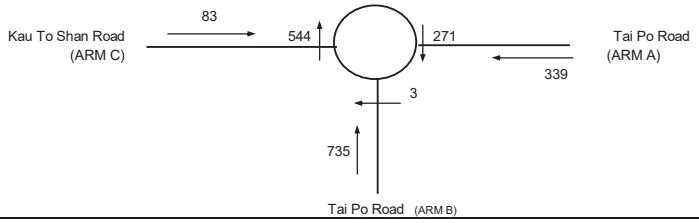
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Kau To Shan Road / Tai Po Road	2021 Calibrated Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.86	6.87	4.74			
E	=	Entry width (m)	8.08	8.80	4.74			
L	=	Effective length of flare (m)	10.30	9.60	1.00			
R	=	Entry radius (m)	55.00	14.00	56.00			
D	=	Inscribed circle diameter (m)	38.00	38.00	38.00			
A	=	Entry angle (degree)	15.00	60.00	12.00			
Q	=	Entry flow (pcu/h)	339	735	83			
Qc	=	Circulating flow across entry (pcu/h)	271	3	544			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.66	0.32	0.00			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.87	1.09			
X2	=	V + ((E-V)/(1+2S))	5.68	8.05	4.74			
M	=	EXP((D-60)/10)	0.11	0.11	0.11			
F	=	303*X2	1722	2439	1435			
Td	=	1+(0.5/(1+M))	1.45	1.45	1.45			
Fc	=	0.21*Td(1+0.2*X2)	0.65	0.79	0.59			
Qe	=	K(F-Fc*Qc)	1675	2132	1217	Total In Sum =	1975	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.20	0.34	0.07	DFC of Critical Approach =	0.34	

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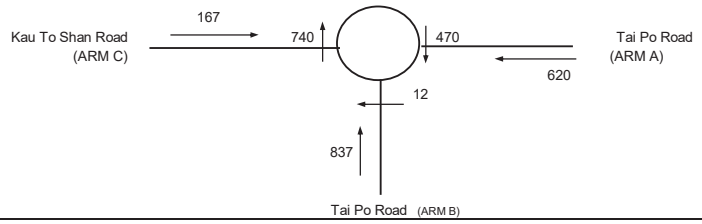
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Kau To Shan Road / Tai Po Road	2034 Reference Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.86	6.87	4.74			
E	=	Entry width (m)	8.08	8.80	4.74			
L	=	Effective length of flare (m)	10.30	9.60	1.00			
R	=	Entry radius (m)	55.00	14.00	56.00			
D	=	Inscribed circle diameter (m)	38.00	38.00	38.00			
A	=	Entry angle (degree)	15.00	60.00	12.00			
Q	=	Entry flow (pcu/h)	620	837	167			
Qc	=	Circulating flow across entry (pcu/h)	470	12	740			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.66	0.32	0.00			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.87	1.09			
X2	=	V + ((E-V)/(1+2S))	5.68	8.05	4.74			
M	=	EXP((D-60)/10)	0.11	0.11	0.11			
F	=	303*X2	1722	2439	1435			
Td	=	1+(0.5/(1+M))	1.45	1.45	1.45			
Fc	=	0.21*Td(1+0.2*X2)	0.65	0.79	0.59			
Qe	=	K(F-Fc*Qc)	1534	2125	1090	Total In Sum =	2846	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.40	0.39	0.15	DFC of Critical Approach =	0.40	

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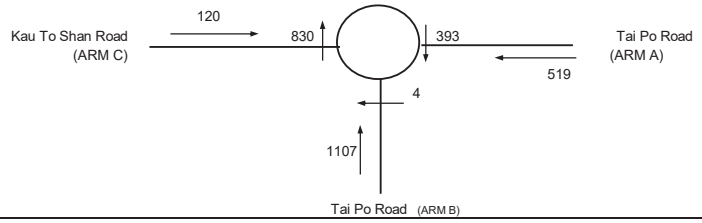
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Kau To Shan Road / Tai Po Road	2034 Reference Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.86	6.87	4.74			
E	=	Entry width (m)	8.08	8.80	4.74			
L	=	Effective length of flare (m)	10.30	9.60	1.00			
R	=	Entry radius (m)	55.00	14.00	56.00			
D	=	Inscribed circle diameter (m)	38.00	38.00	38.00			
A	=	Entry angle (degree)	15.00	60.00	12.00			
Q	=	Entry flow (pcu/h)	519	1107	120			
Qc	=	Circulating flow across entry (pcu/h)	393	4	830			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.66	0.32	0.00			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.87	1.09			
X2	=	V + ((E-V)/(1+2S))	5.68	8.05	4.74			
M	=	EXP((D-60)/10)	0.11	0.11	0.11			
F	=	303*X2	1722	2439	1435			
Td	=	1+(0.5/(1+M))	1.45	1.45	1.45			
Fc	=	0.21*Td(1+0.2*X2)	0.65	0.79	0.59			
Qe	=	K(F-Fc*Qc)	1589	2131	1031	Total In Sum =	2973	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.33	0.52	0.12	DFC of Critical Approach =	0.52	

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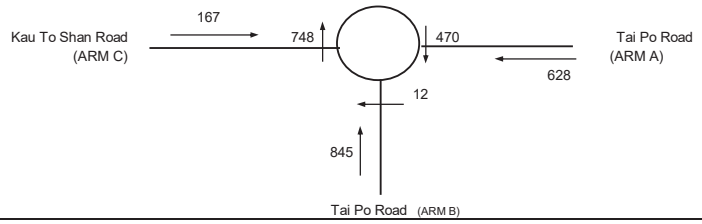
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Kau To Shan Road / Tai Po Road	2034 Design Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.86	6.87	4.74			
E	=	Entry width (m)	8.08	8.80	4.74			
L	=	Effective length of flare (m)	10.30	9.60	1.00			
R	=	Entry radius (m)	55.00	14.00	56.00			
D	=	Inscribed circle diameter (m)	38.00	38.00	38.00			
A	=	Entry angle (degree)	15.00	60.00	12.00			
Q	=	Entry flow (pcu/h)	628	845	167			
Qc	=	Circulating flow across entry (pcu/h)	470	12	748			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.66	0.32	0.00			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.87	1.09			
X2	=	V + ((E-V)/(1+2S))	5.68	8.05	4.74			
M	=	EXP((D-60)/10)	0.11	0.11	0.11			
F	=	303*X2	1722	2439	1435			
Td	=	1+(0.5/(1+M))	1.45	1.45	1.45			
Fc	=	0.21*Td(1+0.2*X2)	0.65	0.79	0.59			
Qe	=	K(F-Fc*Qc)	1534	2125	1084	Total In Sum =	2870	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.41	0.40	0.15	DFC of Critical Approach =	0.41	

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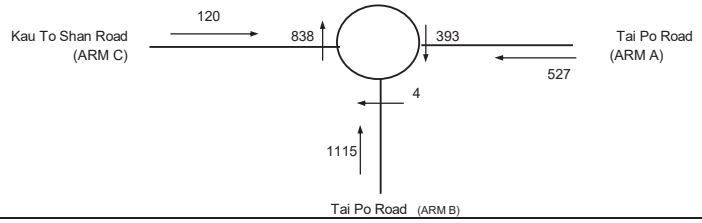
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Kau To Shan Road / Tai Po Road	2034 Design Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.86	6.87	4.74			
E	=	Entry width (m)	8.08	8.80	4.74			
L	=	Effective length of flare (m)	10.30	9.60	1.00			
R	=	Entry radius (m)	55.00	14.00	56.00			
D	=	Inscribed circle diameter (m)	38.00	38.00	38.00			
A	=	Entry angle (degree)	15.00	60.00	12.00			
Q	=	Entry flow (pcu/h)	527	1115	120			
Qc	=	Circulating flow across entry (pcu/h)	393	4	838			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.66	0.32	0.00			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	0.87	1.09			
X2	=	V + ((E-V)/(1+2S))	5.68	8.05	4.74			
M	=	EXP((D-60)/10)	0.11	0.11	0.11			
F	=	303*X2	1722	2439	1435			
Td	=	1+(0.5/(1+M))	1.45	1.45	1.45			
Fc	=	0.21*Td(1+0.2*X2)	0.65	0.79	0.59			
Qe	=	K(F-Fc*Qc)	1589	2131	1026	Total In Sum =	2997	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.33	0.52	0.12	DFC of Critical Approach =	0.52	

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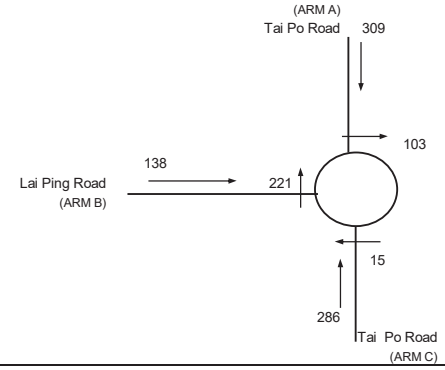
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Lai Ping Road / Tai Po Road	2021 Calibrated Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.65	3.73	3.49			
E	=	Entry width (m)	4.60	4.40	4.88			
L	=	Effective length of flare (m)	2.00	8.12	11.86			
R	=	Entry radius (m)	236.00	20.00	40.70			
D	=	Inscribed circle diameter (m)	28.85	28.85	28.85			
A	=	Entry angle (degree)	21.00	25.00	28.00			
Q	=	Entry flow (pcu/h)	309	138	286			
Qc	=	Circulating flow across entry (pcu/h)	103	221	15			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.76	0.13	0.19			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.02	1.03			
X2	=	V + ((E-V)/(1+2S))	4.03	4.26	4.50			
M	=	EXP((D-60)/10)	0.04	0.04	0.04			
F	=	303*X2	1220	1291	1364			
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48			
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.58	0.59			
Qe	=	K(F-Fc*Qc)	1251	1184	1398	Total In Sum =	1072	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.25	0.12	0.20	DFC of Critical Approach =	0.25	

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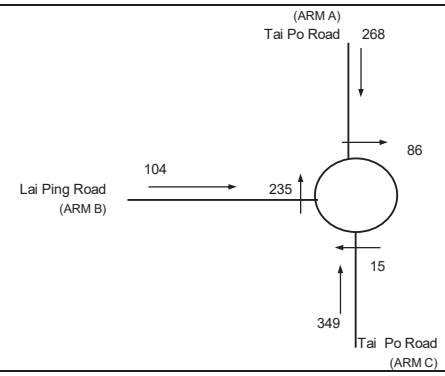
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Lai Ping Road / Tai Po Road	2021 Calibrated Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.65	3.73	3.49			
E	=	Entry width (m)	4.60	4.40	4.88			
L	=	Effective length of flare (m)	2.00	8.12	11.86			
R	=	Entry radius (m)	236.00	20.00	40.70			
D	=	Inscribed circle diameter (m)	28.85	28.85	28.85			
A	=	Entry angle (degree)	21.00	25.00	28.00			
Q	=	Entry flow (pcu/h)	268	104	349			
Qc	=	Circulating flow across entry (pcu/h)	86	235	15			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.76	0.13	0.19			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.02	1.03			
X2	=	V + ((E-V)/(1+2S))	4.03	4.26	4.50			
M	=	EXP((D-60)/10)	0.04	0.04	0.04			
F	=	303*X2	1220	1291	1364			
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48			
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.58	0.59			
Qe	=	K(F-Fc*Qc)	1261	1176	1398	Total In Sum =	1057	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.21	0.09	0.25	DFC of Critical Approach =	0.25	

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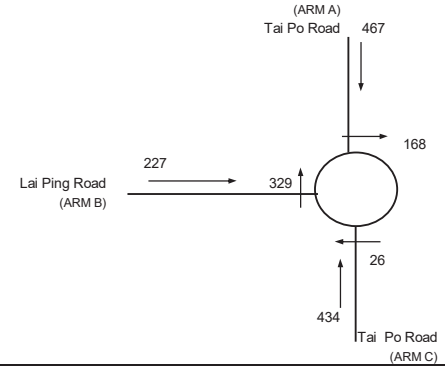
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Lai Ping Road / Tai Po Road	2034 Reference Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.65	3.73	3.49			
E	=	Entry width (m)	4.60	4.40	4.88			
L	=	Effective length of flare (m)	2.00	8.12	11.86			
R	=	Entry radius (m)	236.00	20.00	40.70			
D	=	Inscribed circle diameter (m)	28.85	28.85	28.85			
A	=	Entry angle (degree)	21.00	25.00	28.00			
Q	=	Entry flow (pcu/h)	467	227	434			
Qc	=	Circulating flow across entry (pcu/h)	168	329	26			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.76	0.13	0.19			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.02	1.03			
X2	=	V + ((E-V)/(1+2S))	4.03	4.26	4.50			
M	=	EXP((D-60)/10)	0.04	0.04	0.04			
F	=	303*X2	1220	1291	1364			
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48			
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.58	0.59			
Qe	=	K(F-Fc*Qc)	1212	1121	1391	Total In Sum =	1651	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.39	0.20	0.31	DFC of Critical Approach =	0.39	

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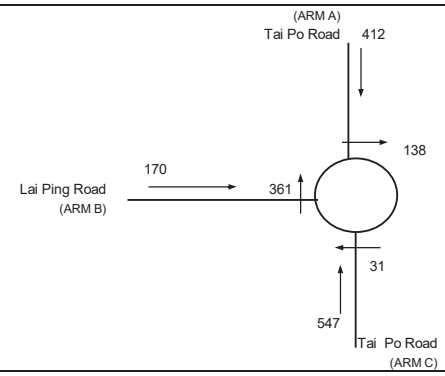
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Lai Ping Road / Tai Po Road	2034 Reference Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.65	3.73	3.49			
E	=	Entry width (m)	4.60	4.40	4.88			
L	=	Effective length of flare (m)	2.00	8.12	11.86			
R	=	Entry radius (m)	236.00	20.00	40.70			
D	=	Inscribed circle diameter (m)	28.85	28.85	28.85			
A	=	Entry angle (degree)	21.00	25.00	28.00			
Q	=	Entry flow (pcu/h)	412	170	547			
Qc	=	Circulating flow across entry (pcu/h)	138	361	31			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.76	0.13	0.19			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.02	1.03			
X2	=	V + ((E-V)/(1+2S))	4.03	4.26	4.50			
M	=	EXP((D-60)/10)	0.04	0.04	0.04			
F	=	303*X2	1220	1291	1364			
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48			
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.58	0.59			
Qe	=	K(F-Fc*Qc)	1230	1102	1388	Total In Sum =	1659	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.34	0.15	0.39	DFC of Critical Approach =	0.39	

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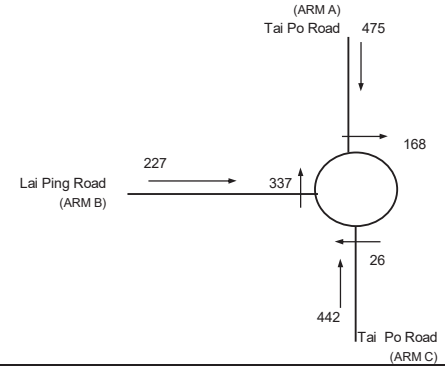
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Lai Ping Road / Tai Po Road	2034 Design Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.65	3.73	3.49			
E	=	Entry width (m)	4.60	4.40	4.88			
L	=	Effective length of flare (m)	2.00	8.12	11.86			
R	=	Entry radius (m)	236.00	20.00	40.70			
D	=	Inscribed circle diameter (m)	28.85	28.85	28.85			
A	=	Entry angle (degree)	21.00	25.00	28.00			
Q	=	Entry flow (pcu/h)	475	227	442			
Qc	=	Circulating flow across entry (pcu/h)	168	337	26			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.76	0.13	0.19			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.02	1.03			
X2	=	V + ((E-V)/(1+2S))	4.03	4.26	4.50			
M	=	EXP((D-60)/10)	0.04	0.04	0.04			
F	=	303*X2	1220	1291	1364			
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48			
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.58	0.59			
Qe	=	K(F-Fc*Qc)	1212	1116	1391	Total In Sum =	1675	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.39	0.20	0.32	DFC of Critical Approach =	0.39	

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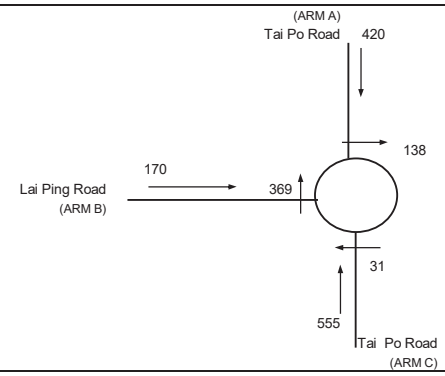
AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Lai Ping Road / Tai Po Road	2034 Design Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:			



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	3.65	3.73	3.49			
E	=	Entry width (m)	4.60	4.40	4.88			
L	=	Effective length of flare (m)	2.00	8.12	11.86			
R	=	Entry radius (m)	236.00	20.00	40.70			
D	=	Inscribed circle diameter (m)	28.85	28.85	28.85			
A	=	Entry angle (degree)	21.00	25.00	28.00			
Q	=	Entry flow (pcu/h)	420	170	555			
Qc	=	Circulating flow across entry (pcu/h)	138	369	31			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.76	0.13	0.19			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.08	1.02	1.03			
X2	=	V + ((E-V)/(1+2S))	4.03	4.26	4.50			
M	=	EXP((D-60)/10)	0.04	0.04	0.04			
F	=	303*X2	1220	1291	1364			
Td	=	1+(0.5/(1+M))	1.48	1.48	1.48			
Fc	=	0.21*Td(1+0.2*X2)	0.56	0.58	0.59			
Qe	=	K(F-Fc*Qc)	1230	1097	1388	Total In Sum =	1683	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.34	0.15	0.40	DFC of Critical Approach =	0.40	

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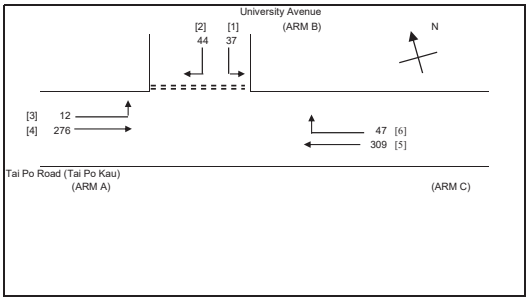
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Tai Po Road / University Avenue	2021 Calibrated Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:	REVIEWED BY:		



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	12.29	(metres)
W cr	=	0	(metres)
q a-b	=	12	(pcu/hr)
q a-c	=	276	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.94	(metres)
Vr c-b	=	60	(metres)
q c-a	=	309	(pcu/hr)
q c-b	=	47	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	2.52	(metres)
W b-c	=	2.52	(metres)
Vl b-a	=	35	(metres)
Vr b-a	=	90	(metres)
Vr b-c	=	80	(metres)
q b-a	=	44	(pcu/hr)
q b-c	=	37	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8096422
E	=	0.8616039
F	=	0.882864
Y	=	0.575995
F for (Qb-ac)	=	0.4567901

THE CAPACITY OF MOVEMENT :

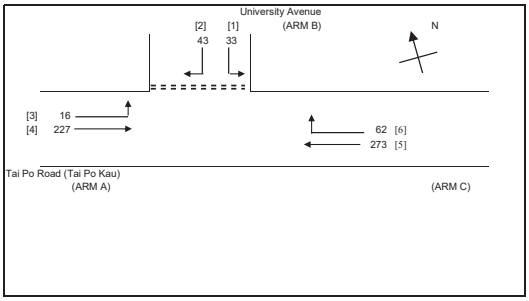
Q b-a	=	416		
Q b-c	=	591	Q b-c (O) =	575.4
Q c-b	=	604		
Q b-ac	=	481.1		
TOTAL FLOW	=	725	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1058
DFC b-c	=	0.0626
DFC c-b	=	0.0778
DFC b-c (share lane)	=	0.1684

CRITICAL DFC = 0.17

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Tai Po Road / University Avenue	2021 Calibrated Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:	REVIEWED BY:		



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	12.29	(metres)
W cr	=	0	(metres)
q a-b	=	16	(pcu/hr)
q a-c	=	227	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.94	(metres)
Vr c-b	=	60	(metres)
q c-a	=	273	(pcu/hr)
q c-b	=	62	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	2.52	(metres)
W b-c	=	2.52	(metres)
Vl b-a	=	35	(metres)
Vr b-a	=	90	(metres)
Vr b-c	=	80	(metres)
q b-a	=	43	(pcu/hr)
q b-c	=	33	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8096422
E	=	0.8616039
F	=	0.882864
Y	=	0.575995
F for (Qb-ac)	=	0.4342105

THE CAPACITY OF MOVEMENT :

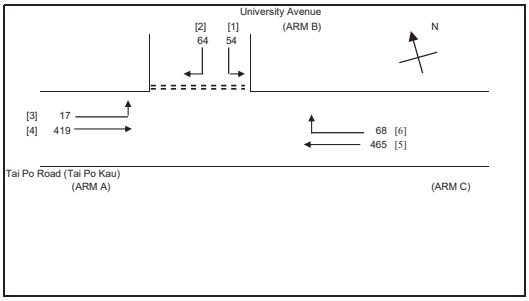
Q b-a	=	424		
Q b-c	=	600	Q b-c (O) =	584.8
Q c-b	=	613		
Q b-ac	=	485.9		
TOTAL FLOW	=	654	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1014
DFC b-c	=	0.0550
DFC c-b	=	0.1011
DFC b-c (share lane)	=	0.1564

CRITICAL DFC = 0.16

AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Tai Po Road / University Avenue	2034 Reference Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:	REVIEWED BY:		



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	12.29	(metres)
W cr	=	0	(metres)
q a-b	=	17	(pcu/hr)
q a-c	=	419	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.94	(metres)
Vr c-b	=	60	(metres)
q c-a	=	465	(pcu/hr)
q c-b	=	68	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	2.52	(metres)
W b-c	=	2.52	(metres)
Vl b-a	=	35	(metres)
Vr b-a	=	90	(metres)
Vr b-c	=	80	(metres)
q b-a	=	64	(pcu/hr)
q b-c	=	54	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8096422
E	=	0.8616039
F	=	0.882864
Y	=	0.575995
F for (Qb-ac)	=	0.4576271

THE CAPACITY OF MOVEMENT :

Q b-a	=	369		
Q b-c	=	565	Q b-c (O) =	540.5
Q c-b	=	577		
Q b-ac	=	438.6		
TOTAL FLOW	=	1087	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1734
DFC b-c	=	0.0956
DFC c-b	=	0.1179
DFC b-c (share lane)	=	0.2690

CRITICAL DFC = 0.27

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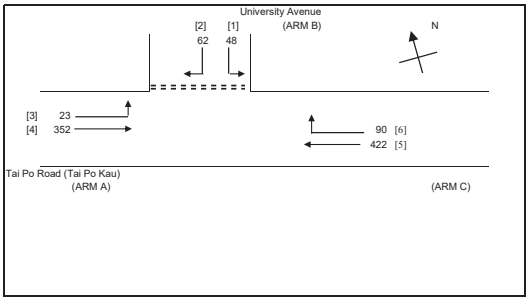
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Tai Po Road / University Avenue	2034 Reference Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:	REVIEWED BY:		



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	12.29	(metres)
W cr	=	0	(metres)
q a-b	=	23	(pcu/hr)
q a-c	=	352	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.94	(metres)
Vr c-b	=	60	(metres)
q c-a	=	422	(pcu/hr)
q c-b	=	90	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	2.52	(metres)
W b-c	=	2.52	(metres)
Vl b-a	=	35	(metres)
Vr b-a	=	90	(metres)
Vr b-c	=	80	(metres)
q b-a	=	62	(pcu/hr)
q b-c	=	48	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8096422
E	=	0.8616039
F	=	0.882864
Y	=	0.575995
F for (Qb-ac)	=	0.4363636

THE CAPACITY OF MOVEMENT :

Q b-a	=	379		
Q b-c	=	577	Q b-c (O) =	553.4
Q c-b	=	588		
Q b-ac	=	445.7		
TOTAL FLOW	=	997	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1636
DFC b-c	=	0.0832
DFC c-b	=	0.1531
DFC b-c (share lane)	=	0.2468

CRITICAL DFC = 0.25

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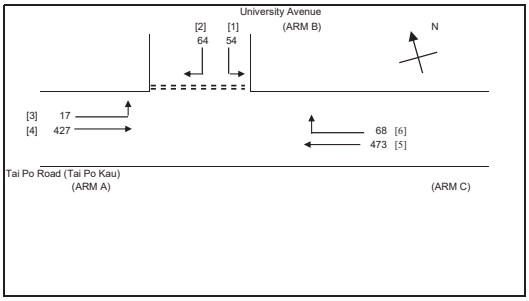
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Tai Po Road / University Avenue	2034 Design Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:	REVIEWED BY:		



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	12.29	(metres)
W cr	=	0	(metres)
q a-b	=	17	(pcu/hr)
q a-c	=	427	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.94	(metres)
Vr c-b	=	60	(metres)
q c-a	=	473	(pcu/hr)
q c-b	=	68	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	2.52	(metres)
W b-c	=	2.52	(metres)
Vl b-a	=	35	(metres)
Vr b-a	=	90	(metres)
Vr b-c	=	80	(metres)
q b-a	=	64	(pcu/hr)
q b-c	=	54	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8096422
E	=	0.8616039
F	=	0.882864
Y	=	0.575995
F for (Qb-ac)	=	0.4576271

THE CAPACITY OF MOVEMENT :

Q b-a	=	367		
Q b-c	=	564	Q b-c (O) =	539.4
Q c-b	=	576		
Q b-ac	=	436.8		
TOTAL FLOW	=	1103	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1744
DFC b-c	=	0.0957
DFC c-b	=	0.1181
DFC b-c (share lane)	=	0.2701

CRITICAL DFC = 0.27

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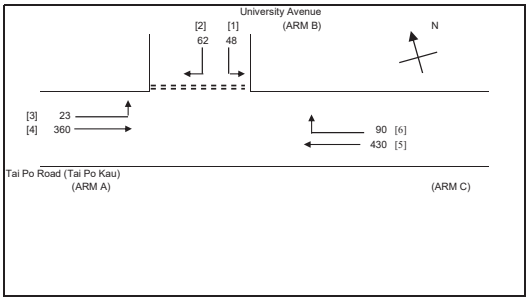
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Tai Po Road / University Avenue	2034 Design Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:	REVIEWED BY:		



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	12.29	(metres)
W cr	=	0	(metres)
q a-b	=	23	(pcu/hr)
q a-c	=	360	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	2.94	(metres)
Vr c-b	=	60	(metres)
q c-a	=	430	(pcu/hr)
q c-b	=	90	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	2.52	(metres)
W b-c	=	2.52	(metres)
Vl b-a	=	35	(metres)
Vr b-a	=	90	(metres)
Vr b-c	=	80	(metres)
q b-a	=	62	(pcu/hr)
q b-c	=	48	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.8096422
E	=	0.8616039
F	=	0.882864
Y	=	0.575995
F for (Qb-ac)	=	0.4363636

THE CAPACITY OF MOVEMENT :

Q b-a	=	377		
Q b-c	=	575	Q b-c (O) =	551.4
Q c-b	=	587		
Q b-ac	=	443.7		
TOTAL FLOW	=	1013	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.1645
DFC b-c	=	0.0835
DFC c-b	=	0.1533
DFC b-c (share lane)	=	0.2479

CRITICAL DFC = 0.25

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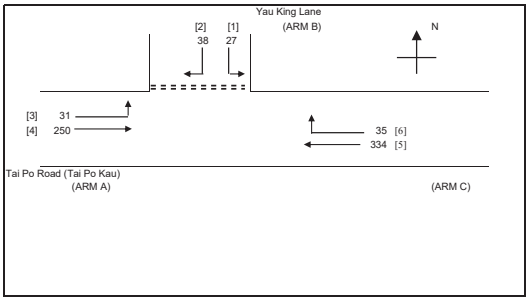
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Tai Po Road / Yau King Lane	2021 Calibrated Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:	REVIEWED BY:		



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	11.17	(metres)
W cr	=	1.58	(metres)
q a-b	=	31	(pcu/hr)
q a-c	=	250	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.60	(metres)
Vr c-b	=	38	(metres)
q c-a	=	334	(pcu/hr)
q c-b	=	35	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.95	(metres)
W b-c	=	3.95	(metres)
Vl b-a	=	35	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	100	(metres)
q b-a	=	38	(pcu/hr)
q b-c	=	27	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9400236
E	=	1.0096924
F	=	0.9218469
Y	=	0.614635
F for (Qb-ac)	=	0.4153846

THE CAPACITY OF MOVEMENT :

Q b-a	=	500		
Q b-c	=	693	Q b-c (O) =	679.8
Q c-b	=	629		
Q b-ac	=	565.4		
TOTAL FLOW	=	715	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0760
DFC b-c	=	0.0390
DFC c-b	=	0.0556
DFC b-c (share lane)	=	0.1150

CRITICAL DFC = 0.11

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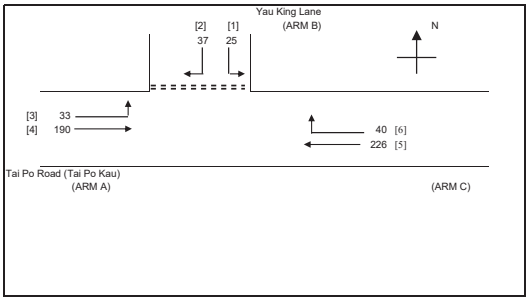
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Tai Po Road / Yau King Lane	2021 Calibrated Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:	REVIEWED BY:		



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	11.17	(metres)
W cr	=	1.58	(metres)
q a-b	=	33	(pcu/hr)
q a-c	=	190	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.60	(metres)
Vr c-b	=	38	(metres)
q c-a	=	226	(pcu/hr)
q c-b	=	40	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.95	(metres)
W b-c	=	3.95	(metres)
Vl b-a	=	35	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	100	(metres)
q b-a	=	37	(pcu/hr)
q b-c	=	25	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9400236
E	=	1.0096924
F	=	0.9218469
Y	=	0.614635
F for (Qb-ac)	=	0.4032258

THE CAPACITY OF MOVEMENT :

Q b-a	=	526		
Q b-c	=	706	Q b-c (O) =	693.6
Q c-b	=	641		
Q b-ac	=	586.3		
TOTAL FLOW	=	551	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0703
DFC b-c	=	0.0354
DFC c-b	=	0.0624
DFC b-c (share lane)	=	0.1058

CRITICAL DFC = 0.11

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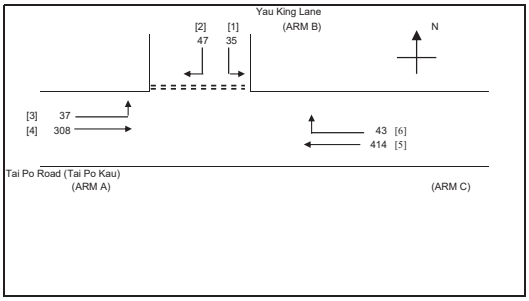
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Tai Po Road / Yau King Lane	2034 Reference Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:	REVIEWED BY:		



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	11.17	(metres)
W cr	=	1.58	(metres)
q a-b	=	37	(pcu/hr)
q a-c	=	308	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.60	(metres)
Vr c-b	=	38	(metres)
q c-a	=	414	(pcu/hr)
q c-b	=	43	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.95	(metres)
W b-c	=	3.95	(metres)
Vl b-a	=	35	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	100	(metres)
q b-a	=	47	(pcu/hr)
q b-c	=	35	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9400236
E	=	1.0096924
F	=	0.9218469
Y	=	0.614635
F for (Qb-ac)	=	0.4268293

THE CAPACITY OF MOVEMENT :

Q b-a	=	475		
Q b-c	=	679	Q b-c (O) =	662.2
Q c-b	=	616		
Q b-ac	=	544.9		
TOTAL FLOW	=	884	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0989
DFC b-c	=	0.0515
DFC c-b	=	0.0698
DFC b-c (share lane)	=	0.1505

CRITICAL DFC = 0.15

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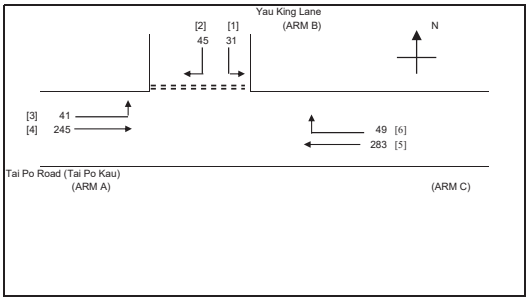
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Tai Po Road / Yau King Lane	2034 Reference Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:	REVIEWED BY:		



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	11.17	(metres)
W cr	=	1.58	(metres)
q a-b	=	41	(pcu/hr)
q a-c	=	245	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.60	(metres)
Vr c-b	=	38	(metres)
q c-a	=	283	(pcu/hr)
q c-b	=	49	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.95	(metres)
W b-c	=	3.95	(metres)
Vl b-a	=	35	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	100	(metres)
q b-a	=	45	(pcu/hr)
q b-c	=	31	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9400236
E	=	1.0096924
F	=	0.9218469
Y	=	0.614635
F for (Qb-ac)	=	0.4078947

THE CAPACITY OF MOVEMENT :

Q b-a	=	503		
Q b-c	=	693	Q b-c (O) =	677.5
Q c-b	=	628		
Q b-ac	=	566.3		
TOTAL FLOW	=	694	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0895
DFC b-c	=	0.0447
DFC c-b	=	0.0780
DFC b-c (share lane)	=	0.1342

CRITICAL DFC = 0.13

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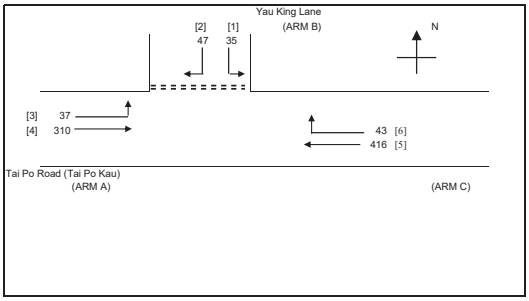
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Tai Po Road / Yau King Lane	2034 Design Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:	REVIEWED BY:		



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	11.17	(metres)
W cr	=	1.58	(metres)
q a-b	=	37	(pcu/hr)
q a-c	=	310	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.60	(metres)
Vr c-b	=	38	(metres)
q c-a	=	416	(pcu/hr)
q c-b	=	43	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.95	(metres)
W b-c	=	3.95	(metres)
Vl b-a	=	35	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	100	(metres)
q b-a	=	47	(pcu/hr)
q b-c	=	35	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9400236
E	=	1.0096924
F	=	0.9218469
Y	=	0.614635
F for (Qb-ac)	=	0.4268293

THE CAPACITY OF MOVEMENT :

Q b-a	=	474		
Q b-c	=	679	Q b-c (O) =	662.2
Q c-b	=	615		
Q b-ac	=	544.1		
TOTAL FLOW	=	888	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0992
DFC b-c	=	0.0515
DFC c-b	=	0.0699
DFC b-c (share lane)	=	0.1507

CRITICAL DFC = 0.15

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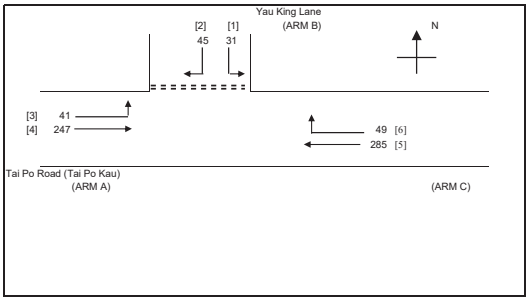
AXON CONSULTANCY LIMITED	PRIORITY JUNCTION CALCULATION			INITIALS	DATE
Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Tai Po Road / Yau King Lane	2034 Design Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
		REFERENCE NO.:	REVIEWED BY:		



NOTES : (GEOMETRIC INPUT DATA)

W	=	MAJOR ROAD WIDTH
W cr	=	CENTRAL RESERVE WIDTH
W b-a	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-a
W b-c	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM b-c
W c-b	=	LANE WIDTH AVAILABLE TO VEHICLE WAITING IN STREAM c-b
Vl b-a	=	VISIBILITY TO THE LEFT FOR VEHICLES WAITING IN STREAM b-a
Vr b-a	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-a
Vr b-c	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM b-c
Vr c-b	=	VISIBILITY TO THE RIGHT FOR VEHICLES WAITING IN STREAM c-b
D	=	STREAM-SPECIFIC B-A
E	=	STREAM-SPECIFIC B-C
F	=	STREAM-SPECIFIC C-B
Y	=	(1-0.0345W)

GEOMETRIC DETAILS:

MAJOR ROAD (ARM A)

W	=	11.17	(metres)
W cr	=	1.58	(metres)
q a-b	=	41	(pcu/hr)
q a-c	=	247	(pcu/hr)

MAJOR ROAD (ARM C)

W c-b	=	3.60	(metres)
Vr c-b	=	38	(metres)
q c-a	=	285	(pcu/hr)
q c-b	=	49	(pcu/hr)

MINOR ROAD (ARM B)

W b-a	=	3.95	(metres)
W b-c	=	3.95	(metres)
Vl b-a	=	35	(metres)
Vr b-a	=	100	(metres)
Vr b-c	=	100	(metres)
q b-a	=	45	(pcu/hr)
q b-c	=	31	(pcu/hr)

GEOMETRIC FACTORS :

D	=	0.9400236
E	=	1.0096924
F	=	0.9218469
Y	=	0.614635
F for (Qb-ac)	=	0.4078947

THE CAPACITY OF MOVEMENT :

Q b-a	=	502		
Q b-c	=	693	Q b-c (O) =	677.5
Q c-b	=	627		
Q b-ac	=	565.6		
TOTAL FLOW	=	698	(PCU/HR)	

COMPARISION OF DESIGN FLOW TO CAPACITY:

DFC b-a	=	0.0896
DFC b-c	=	0.0447
DFC c-b	=	0.0781
DFC b-c (share lane)	=	0.1344

CRITICAL DFC = 0.13

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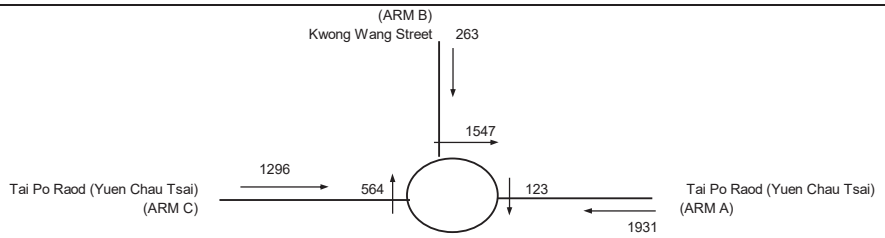
AXON CONSULTANCY LIMITED — ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
Job Title:	Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name:	Tai Po Road / Kwong Wang Street	2021 Calibrated Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
			REFERENCE NO.:	REVIEWED BY:		



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	10.36	4.65	10.31			
E	=	Entry width (m)	12.23	7.35	11.25			
L	=	Effective length of flare (m)	16.60	6.20	7.25			
R	=	Entry radius (m)	450.00	17.00	13.23			
D	=	Inscribed circle diameter (m)	46.90	46.90	46.90			
A	=	Entry angle (degree)	17.50	22.88	22.80			
Q	=	Entry flow (pcu/h)	1931	263	1296			
Qc	=	Circulating flow across entry (pcu/h)	123	1547	564			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.18	0.70	0.21			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.09	1.02	1.00			
X2	=	V + ((E-V)/(1+2S))	11.73	5.78	10.97			
M	=	EXP((D-60)/10)	0.27	0.27	0.27			
F	=	303*X2	3556	1751	3325			
Td	=	1+(0.5/(1+M))	1.39	1.39	1.39			
Fc	=	0.21*Td(1+0.2*X2)	0.98	0.63	0.94			
Qe	=	K(F-Fc*Qc)	3745	787	2798	Total In Sum =	5724	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.52	0.33	0.46	DFC of Critical Approach =	0.52	

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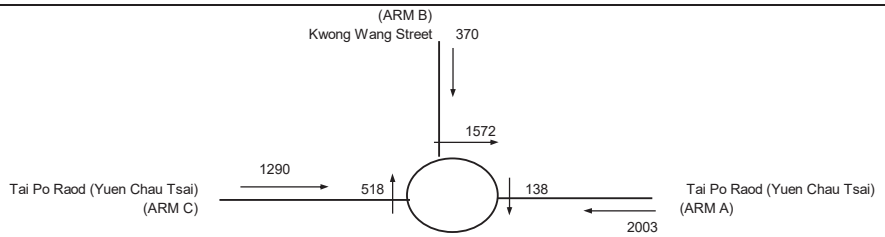
					INITIALS	DATE
Job Title:	Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name:	Tai Po Road / Kwong Wang Street	2021 Calibrated Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
			REFERENCE NO.:	REVIEWED BY:		



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	10.36	4.65	10.31			
E	=	Entry width (m)	12.23	7.35	11.25			
L	=	Effective length of flare (m)	16.60	6.20	7.25			
R	=	Entry radius (m)	450.00	17.00	13.23			
D	=	Inscribed circle diameter (m)	46.90	46.90	46.90			
A	=	Entry angle (degree)	17.50	22.88	22.80			
Q	=	Entry flow (pcu/h)	2003	370	1290			
Qc	=	Circulating flow across entry (pcu/h)	138	1572	518			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.18	0.70	0.21			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.09	1.02	1.00			
X2	=	V + ((E-V)/(1+2S))	11.73	5.78	10.97			
M	=	EXP((D-60)/10)	0.27	0.27	0.27			
F	=	303*X2	3556	1751	3325			
Td	=	1+(0.5/(1+M))	1.39	1.39	1.39			
Fc	=	0.21*Td(1+0.2*X2)	0.98	0.63	0.94			
Qe	=	K(F-Fc*Qc)	3729	771	2841	Total In Sum =	5891	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.54	0.48	0.45	DFC of Critical Approach =	0.54	

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AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
Job Title: Ma Liu Shui Columbarium Development		PROJECT NO.: 30768	PREPARED BY:	JP	Aug-21
Junction Name: Tai Po Road / Kwong Wang Street	2034 Reference Flows AM	FILENAME :	CHECKED BY:	SF	Aug-21
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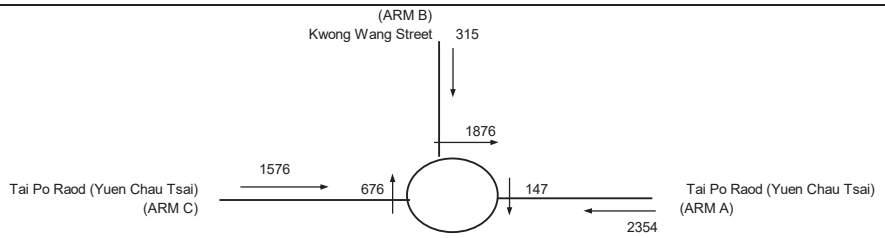

ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	10.36	4.65	10.31			
E	=	Entry width (m)	12.23	7.35	11.25			
L	=	Effective length of flare (m)	16.60	6.20	7.25			
R	=	Entry radius (m)	450.00	17.00	13.23			
D	=	Inscribed circle diameter (m)	46.90	46.90	46.90			
A	=	Entry angle (degree)	17.50	22.88	22.80			
Q	=	Entry flow (pcu/h)	2354	315	1576			
Qc	=	Circulating flow across entry (pcu/h)	147	1876	676			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.18	0.70	0.21			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.09	1.02	1.00			
X2	=	V + ((E-V)/(1+2S))	11.73	5.78	10.97			
M	=	EXP((D-60)/10)	0.27	0.27	0.27			
F	=	303*X2	3556	1751	3325			
Td	=	1+(0.5/(1+M))	1.39	1.39	1.39			
Fc	=	0.21*Td(1+0.2*X2)	0.98	0.63	0.94			
Qe	=	K(F-Fc*Qc)	3719	576	2693	Total In Sum =	6944	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.63	0.55	0.59	DFC of Critical Approach =	0.63	

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AXON CONSULTANCY LIMITED	ROUNDABOUT JUNCTION ANALYSIS			INITIALS	DATE
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Junction Name: Tai Po Road / Kwong Wang Street	2034 Reference Flows PM	FILENAME :	CHECKED BY:	SF	Aug-21
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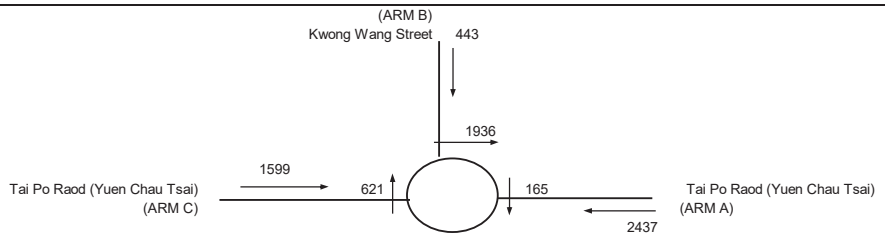

ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	10.36	4.65	10.31			
E	=	Entry width (m)	12.23	7.35	11.25			
L	=	Effective length of flare (m)	16.60	6.20	7.25			
R	=	Entry radius (m)	450.00	17.00	13.23			
D	=	Inscribed circle diameter (m)	46.90	46.90	46.90			
A	=	Entry angle (degree)	17.50	22.88	22.80			
Q	=	Entry flow (pcu/h)	2437	443	1599			
Qc	=	Circulating flow across entry (pcu/h)	165	1936	621			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.18	0.70	0.21			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.09	1.02	1.00			
X2	=	V + ((E-V)/(1+2S))	11.73	5.78	10.97			
M	=	EXP((D-60)/10)	0.27	0.27	0.27			
F	=	303*X2	3556	1751	3325			
Td	=	1+(0.5/(1+M))	1.39	1.39	1.39			
Fc	=	0.21*Td(1+0.2*X2)	0.98	0.63	0.94			
Qe	=	K(F-Fc*Qc)	3700	538	2744	Total In Sum =	7201	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.66	0.82	0.58	DFC of Critical Approach =	0.82	

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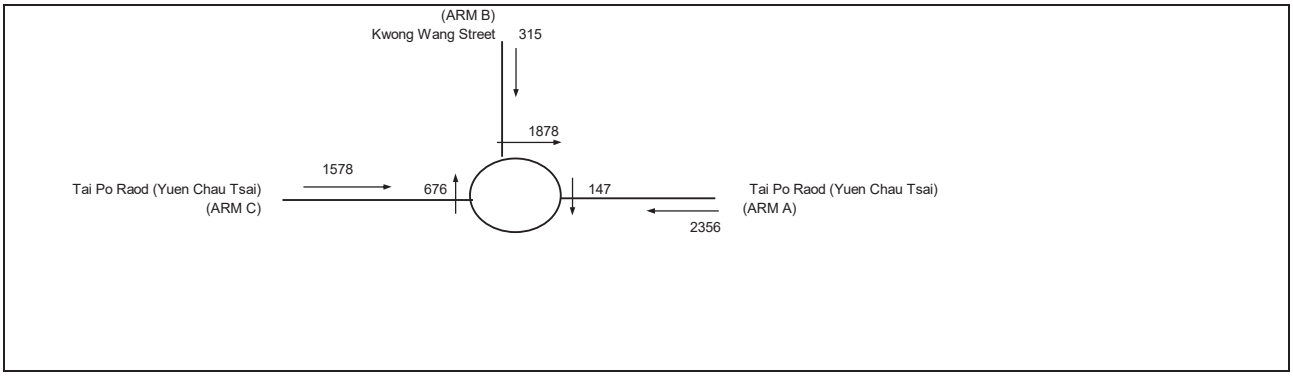
					INITIALS	DATE
Job Title:	Ma Liu Shui Columbarium Development		PROJECT NO.:	30768	PREPARED BY:	JP	Aug-21
Junction Name:	Tai Po Road / Kwong Wang Street	2034 Design Flows AM	FILENAME :		CHECKED BY:	SF	Aug-21
			REFERENCE NO.:		REVIEWED BY:		



ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	10.36	4.65	10.31			
E	=	Entry width (m)	12.23	7.35	11.25			
L	=	Effective length of flare (m)	16.60	6.20	7.25			
R	=	Entry radius (m)	450.00	17.00	13.23			
D	=	Inscribed circle diameter (m)	46.90	46.90	46.90			
A	=	Entry angle (degree)	17.50	22.88	22.80			
Q	=	Entry flow (pcu/h)	2356	315	1578			
Qc	=	Circulating flow across entry (pcu/h)	147	1878	676			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.18	0.70	0.21			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.09	1.02	1.00			
X2	=	V + ((E-V)/(1+2S))	11.73	5.78	10.97			
M	=	EXP((D-60)/10)	0.27	0.27	0.27			
F	=	303*X2	3556	1751	3325			
Td	=	1+(0.5/(1+M))	1.39	1.39	1.39			
Fc	=	0.21*Td(1+0.2*X2)	0.98	0.63	0.94			
Qe	=	K(F-Fc*Qc)	3719	575	2693	Total In Sum =	6950	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.63	0.55	0.59	DFC of Critical Approach =	0.63	

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AXON CONSULTANCY LIMITED — ROUNDABOUT JUNCTION ANALYSIS

					INITIALS	DATE
Job Title:	Ma Liu Shui Columbarium Development		PROJECT NO.:	30768	PREPARED BY:	JP	Aug-21
Junction Name:	Tai Po Road / Kwong Wang Street	2034 Design Flows PM	FILENAME :		CHECKED BY:	SF	Aug-21
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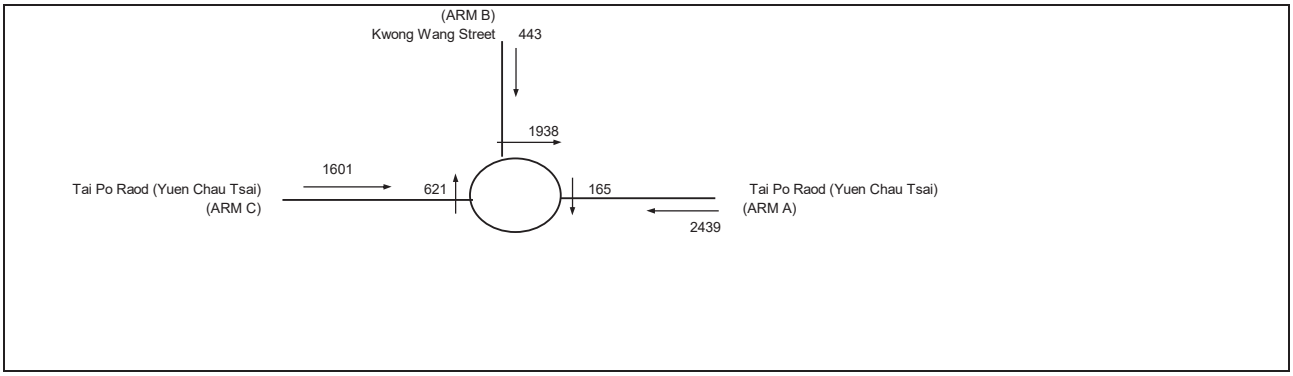

ARM			A	B	C			
INPUT PARAMETERS:								
V	=	Approach half width (m)	10.36	4.65	10.31			
E	=	Entry width (m)	12.23	7.35	11.25			
L	=	Effective length of flare (m)	16.60	6.20	7.25			
R	=	Entry radius (m)	450.00	17.00	13.23			
D	=	Inscribed circle diameter (m)	46.90	46.90	46.90			
A	=	Entry angle (degree)	17.50	22.88	22.80			
Q	=	Entry flow (pcu/h)	2439	443	1601			
Qc	=	Circulating flow across entry (pcu/h)	165	1938	621			
OUTPUT PARAMETERS:								
S	=	Sharpness of flare = 1.6(E-V)/L	0.18	0.70	0.21			
K	=	1-0.00347(A-30)-0.978(1/R-0.05)	1.09	1.02	1.00			
X2	=	V + ((E-V)/(1+2S))	11.73	5.78	10.97			
M	=	EXP((D-60)/10)	0.27	0.27	0.27			
F	=	303*X2	3556	1751	3325			
Td	=	1+(0.5/(1+M))	1.39	1.39	1.39			
Fc	=	0.21*Td(1+0.2*X2)	0.98	0.63	0.94			
Qe	=	K(F-Fc*Qc)	3700	537	2744	Total In Sum =	7207	PCU
DFC	=	Design flow/Capacity = Q/Qe	0.66	0.83	0.58	DFC of Critical Approach =	0.83	

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Appendix C

Planning Data from Planning Department

表 1 : 二零二一年至二零二九年按區議會分區劃分的人口推算數字

Table 1 : Projected Population by District Council District, 2021-2029

(以年中計算 as at mid year)

區議會分區/ *主要區域*	District Council District/ *Broad Area*	2019 #	2020 #	2021	2022	2023	2024	2025	2026	2027	2028	2029
中西區	Central and Western	243 500	239 000	239 000	237 600	233 500	231 600	227 700	223 500	219 200	213 400	214 900
灣仔	Wan Chai	180 100	175 000	173 800	171 600	167 900	166 300	163 300	160 000	156 300	151 100	149 200
東區	Eastern	550 600	542 900	544 800	540 600	535 100	531 600	524 900	517 100	508 500	500 200	495 600
南區	Southern	271 800	267 900	268 300	267 300	267 200	268 300	267 700	267 600	271 500	276 300	274 500
深水埗	Sham Shui Po	423 300	440 500	455 100	459 400	459 000	468 000	468 000	463 900	462 000	455 600	454 200
九龍城	Kowloon City	426 000	425 400	427 600	429 100	433 000	443 800	454 500	468 100	477 200	473 400	471 600
黃大仙	Wong Tai Sin	420 200	418 200	421 400	422 900	423 100	427 700	425 200	422 900	420 400	426 000	424 400
觀塘	Kwun Tong	693 900	692 400	701 700	703 800	703 800	706 800	712 200	723 800	719 900	716 600	721 200
油尖旺	Yau Tsim Mong	333 500	326 600	324 900	322 900	318 800	316 500	312 900	307 500	300 500	292 100	289 200
葵青	Kwai Tsing	510 400	508 900	509 000	508 900	515 500	517 200	514 100	513 000	510 300	507 500	505 000
荃灣	Tsuen Wan	315 300	313 500	315 600	312 700	307 300	305 000	301 200	299 600	295 600	293 700	293 100
屯門	Tuen Mun	503 100	503 100	510 600	530 500	550 400	556 600	559 400	563 900	576 900	579 500	577 400
元朗	Yuen Long	650 100	646 100	651 400	657 700	662 700	666 500	665 600	668 700	674 200	694 200	708 200
北區	North	317 900	318 500	323 600	357 000	359 800	361 600	366 500	372 400	393 900	417 200	426 900
大埔	Tai Po	309 900	311 200	323 200	330 000	343 200	350 800	351 600	353 800	353 700	350 000	348 000
沙田	Sha Tin	692 500	689 300	708 600	708 200	716 500	717 500	712 100	709 900	705 400	698 500	695 400
西貢	Sai Kung	475 300	475 500	489 600	498 000	501 900	504 200	521 800	531 200	532 000	536 900	540 000
離島	Islands	188 900	186 600	190 900	190 600	198 000	197 300	225 100	238 400	256 800	281 600	303 800
香港島	*Hong Kong Island*	*1 246 000*	*1 224 700*	*1 225 900*	*1 217 200*	*1 203 700*	*1 197 700*	*1 183 500*	*1 168 100*	*1 155 500*	*1 141 000*	*1 134 200*
九龍	*Kowloon*	*2 296 900*	*2 303 100*	*2 330 700*	*2 338 100*	*2 337 600*	*2 362 800*	*2 372 800*	*2 386 200*	*2 380 000*	*2 363 600*	*2 360 600*
新界	*New Territories*	*3 963 400*	*3 952 800*	*4 022 500*	*4 093 600*	*4 155 300*	*4 176 700*	*4 217 300*	*4 250 900*	*4 298 800*	*4 358 900*	*4 397 700*
新市鎮	*New Towns*	*3 510 800*	*3 503 000*	*3 566 400*	*3 603 400*	*3 662 000*	*3 677 700*	*3 702 000*	*3 718 200*	*3 733 700*	*3 742 500*	*3 748 700*
其他地區†	*Other Areas †*	*452 600*	*449 800*	*456 100*	*490 200*	*493 300*	*499 100*	*515 300*	*532 700*	*565 100*	*616 400*	*649 000*
陸上總計	**Land Total**	**7 506 200**	**7 480 700**	**7 579 100**	**7 648 900**	**7 696 600**	**7 737 300**	**7 773 700**	**7 805 300**	**7 834 400**	**7 863 500**	**7 892 500**
加 : 水上人口	**Plus : Marine Population**	**1 100**	**1 100**	**1 100**	**1 100**	**1 100**	**1 100**	**1 100**	**1 000**	**1 000**	**1 000**	**1 000**
全港	**Whole Territory**	**7 507 400**	**7 481 800**	**7 580 200**	**7 650 000**	**7 697 600**	**7 738 300**	**7 774 800**	**7 806 300**	**7 835 400**	**7 864 600**	**7 893 500**

基年估計 Base year estimates.

†「其他地區」的數字亦包括新市鎮擴展區及主要新發展區截至有關年份的推算人口。

Figures for "Other Areas" also include the projected population for New Town Extension and major New Development Areas up to relevant years.

Appendix D

Methodology for Trip Rate Adjustment

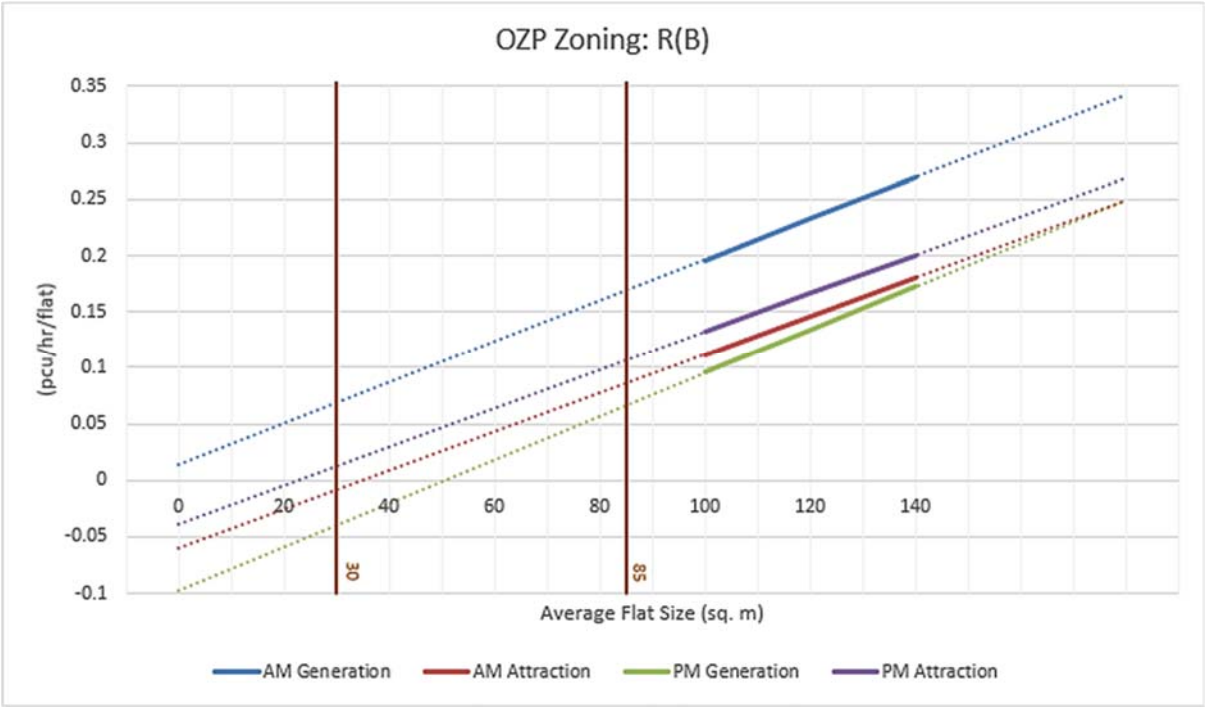
Methodology for Trip Rate Adjustment

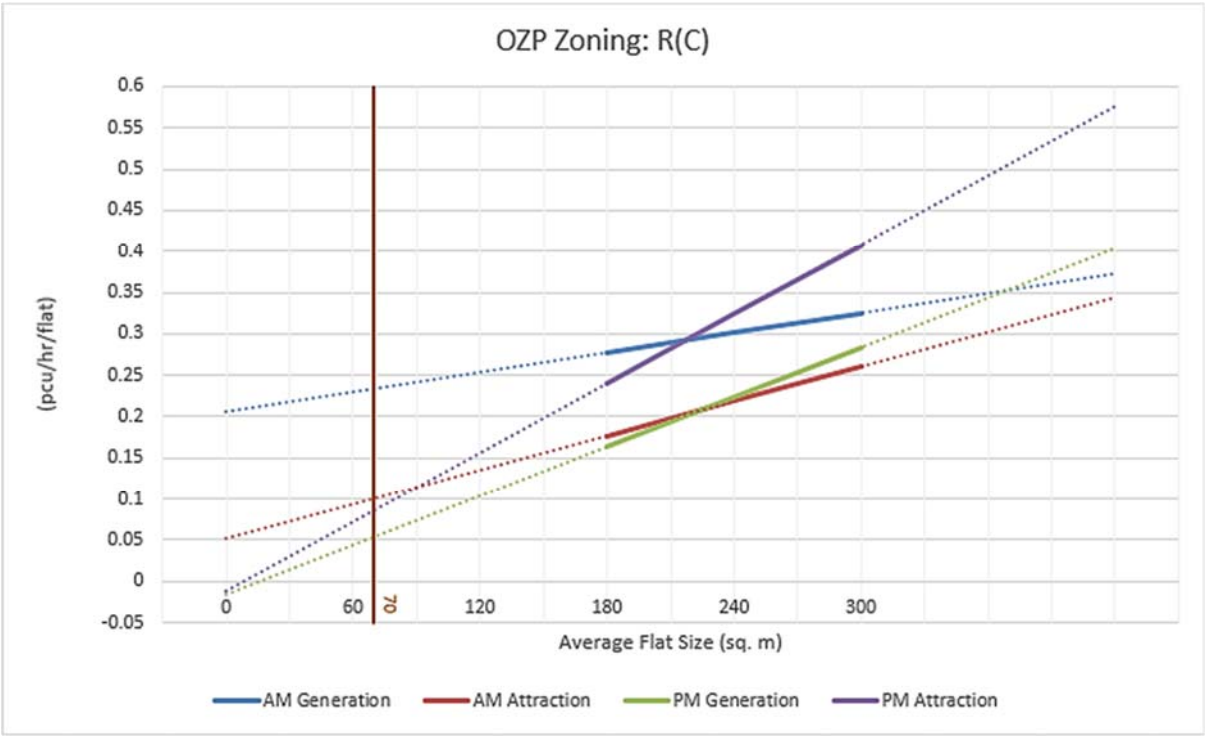
TPDM Volume 1 Annex D quoted the weekday trip rates during peak hours. In view of the significantly smaller flat sizes in the vicinity and the differences of traffic patterns during public holiday, direct application of the TPDM traffic rates might be inappropriate. Further adjustments on traffic characteristics would be required for the application site.

The adjustment shall cover three aspects: (1) average flat size; (2) daily variation.

1. Average Flat Size

In view of significantly smaller flat sizes of the adjacent developments, the limited flat size options given in each of the OZP Zoning provides inaccurate estimation on the traffic generation and attraction rates as shown in TPDM V1 Annex D. More precisive trip rates shall be extrapolated from the mean values of the given data.





The extrapolated values are summarized in the following table:

Table 1.1 Adjusted trip rates with reference to the flat sizes

Average Flat Size	AM Generation	AM Attraction	PM Generation	PM Attraction
(sq. m)	(pcu/hr/flat)			
R(B)				
100	0.1961	0.1116	0.0955	0.1321
120	0.2325	0.1461	0.1340	0.1662
140	0.2689	0.1805	0.1725	0.2004
(Extrapolated) 30	0.0687	*0.0226**	*0.0177**	*0.0201**
(Extrapolated) 85	0.1688	0.0858	0.0666	0.1065
R(C)				
180	0.2772	0.1769	0.1635	0.2394
240	0.3012	0.2189	0.2235	0.3234
300	0.3252	0.2609	0.2835	0.4074
(Extrapolated) 70	0.2332	0.0999	0.0535	0.0854

** When extrapolated values are smaller than the trip rate of other development density suggested in TPDM with similar flat sizes, the values in TPDM will be considered for conservative assessment purpose.*

2. Daily Variation

Except for Science Park, all adjacent developments are neighbored to Tai Po Road (Ma Liu Shui). To incorporate the differences of traffic volume during weekdays and weekends/public holiday, the traffic characteristics along Tai Po Road (Ma Liu Shui) and Tolo Highway would be considered. Hence, traffic data of Station No. 6210 (Tai Po Road – Ma Liu Shui) and 5013 (Tolo Highway) of ATC are referenced. As proposed, shuttle bus services will be provided during the peak periods of Ching Ming and Chung Yeung Festivals. Human behaviors during public holidays are similar to that of weekends, so traffic patterns on either Saturday or Sunday (which even the larger) shall be applied for calibration purpose.

Table 2.1 Proportional differences weekdays and weekends traffic flows

Station No.	A.A.D.T			Traffic Flows of Public Holiday: Traffic Flows of Weekdays
Station 6210 (Two-way)	AM Peak	Monday - Friday	810	0.605
		Weekends	490	
	PM Peak	Monday - Friday	550	1.055
		Weekends	580	
Station 5013 (Two-way)	AM Peak	Monday - Friday	11720	0.909
		Weekends	10650	
	PM Peak	Monday - Friday	11370	1.086
		Weekends	12350	

For conservative purposes, the hourly flows during peak hours of the ATC stations are used directly. Therefore, the anticipated traffic generation and attraction of the developments during public holidays are as follows:

Table 2.2 Adjusted trip rates with reference to the daily variation

Type of Development	AM			PM		
	Adjustment Factor	Generation	Attraction	Adjustment Factor	Generation	Attraction
R(B)-30	0.605	0.0416	0.0137	1.055	0.0187	0.0212
R(B)-85	0.605	0.1021	0.0519	1.055	0.0703	0.1124
R(C)-70	0.605	0.1411	0.0604	1.055	0.0564	0.0901
R(C)-180	0.605	0.1677	0.1070	1.055	0.1725	0.2526
Science Park	0.909	0.0989	0.2316	1.086	0.1434	0.0829

Appendix | IV

Drainage Proposal

Technical Support of Section 12A Rezoning Application for Proposed Columbarium Development at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories

DRAINAGE PROPOSAL

Reference: 30768-D-R02-01
Date: September 2021

AXON
CONSULTANCY

Contents

1 Introduction

1.1 Background

This report serves as the Drainage Proposal for S.12A Application for Proposed Columbarium Development at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories.

This submission intends to demonstrate the overall drainage design and provide basic information, and is structured to follow the requirement of Stormwater Drainage Manual – Planning, Design and Management (2018 Edition) (SDM).

AXON Consultancy (AXON) is commissioned to prepare a Drainage Proposal.

1.2 Objectives

The objectives of the Drainage Proposal are as follows:

- to assess the potential drainage impacts arising from the proposed columbarium development; and
- to recommend the necessary mitigation measures to alleviate the impacts, if necessary.

1.3 Site Description

The site is located at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, Tai Po Road, Ma Liu Shui, Sha Tin, to the south of Tai Po Road (Ma Liu Shui). There is no Drainage Services Department and Highways Department drainage manhole around the site.

The application area is shown in **Figure 1.1**.

2 Baseline Conditions and Assessment Methodology

2.1 Existing Site Conditions

The total application area would be about 189.6 m^2. 85% application area is paved. Regarding the survey maps, the elevations within the application area should range from +101.23 mPD to +112.70 mPD.

Based on the elevations of basemaps 7-NE-32B, the stormwater should mainly flow from the southwest to the northeast.

The catchment area and path flow of the application area are shown on **Figure 2.1**.

2.2 Calculation Methodology for Runoff

Peak instantaneous runoff values before and after the development were calculated based on the Rational Method and with recommended physical parameters including runoff coefficient (C) and storm constants for different return periods referred to the SDM.

The Rational Method is adopted for hydraulic analysis and the peak runoff is calculated based on the following equation:

$$Q_p = 0.278\ C\ i\ A$$

where

Q_p	=	Peak Runoff, m^3/s
C	=	Runoff Coefficient
i	=	Rainfall Intensity, mm/hr
A	=	Catchment Area, km^2

The paved and unpaved areas of the site will account for 272m^2 and 48m^2 respectively. The runoff coefficient of 0.95(paved) and 0.15(unpaved) were assumed.

Based on the storm constants for 50-year return period recommended in the SDM, the appropriate rainfall intensities (i) were calculated as detailed in **Appendix A**.

2.3 Calculation Methodology for Pipe Capacity Checking

Because the catchment areas are less than 1ha, U-channels are recommended to be construction to collect the stormwater runoff within the site. The collected stormwater should finally be diverted to the existing 250mm government U-channel via a proposed 150mm underground pipe.

For the worst-case scenario, the Manning's roughness coefficients used for calculating U-channel capacities by using Manning's Equation were assumed to be 0.016 for the bad condition of concrete pipe, whilst the coefficient values under fair conditions were adopted for the drain pipes.

Typical designs of the U-channel and Catchpit are shown on **Appendix B**.

Manning's Equation for calculating the channel and pipe capacities was adopted for this analysis:

$$V = \frac{R^{2/3} S^{1/2}}{n}$$

where	V	=	mean velocity, m/s
	S	=	slope of the total energy line
	n	=	Manning's roughness coefficient
	R	=	hydraulic radius, m

2.4 Summary of Assessment Assumptions

The assumptions of the Drainage Proposal are summarised below for the ease of reference:

- 50 years return period was adopted;
- Runoff coefficient of 0.95 for the paved area was assumed;
- Runoff coefficient of 0.15 for the unpaved area was assumed;
- Runoff coefficient of 0.65 for the terraced retaining wall was assumed;
- Manning's roughness coefficient of 0.016 for the proposed U-channels was adopted; and
- Manning's roughness coefficient of 0.011 and 0.015 for the proposed Unplasticized Polyvinyl Chloride and underground concrete pipe were adopted respectively.

3 Assessment Results

Runoffs and capacities at the concerned locations of the proposed U-channels and underground pipes were estimated and presented in **Table 3.1**. The detailed design of drainage system and calculations are provided in **Figure 3.1** and **Appendix A** respectively.

Table 3.1 Estimated Runoffs and Capacities of the Channels/Pipe

U-Channel	Catchment Served	Actual Runoff, m3/s	% of Capacity Flow	Sufficient Capacity (Y/N)
UC1	C(80%), G(90%) and L(50%)	0.0052	23%	Y
UC2	F1(50%), G(10%) and H	0.0026	29%	Y
UC3	D1(50%), D2, E, F1(50%), F2, J, M(60%) and UC2	0.0120	42%	Y
UC4	C(20%), D1(50%) and UC1	0.0072	45%	Y
Pipe	**Catchment Served**	**Design Flow, Q (m3/s)**	**% of Capacity Flow**	**Sufficient Capacity (Y/N)**
DP1	A(20%), UC3 and UC4	0.0204	28%	Y
Government U-Channel	**Catchment Served**	**Design Flow, Q (m3/s)**	**% of Capacity Flow**	**Sufficient Capacity (Y/N)**
UC-A	A(80%), B, K, L(50%) and DP1	0.0277	28%	Y

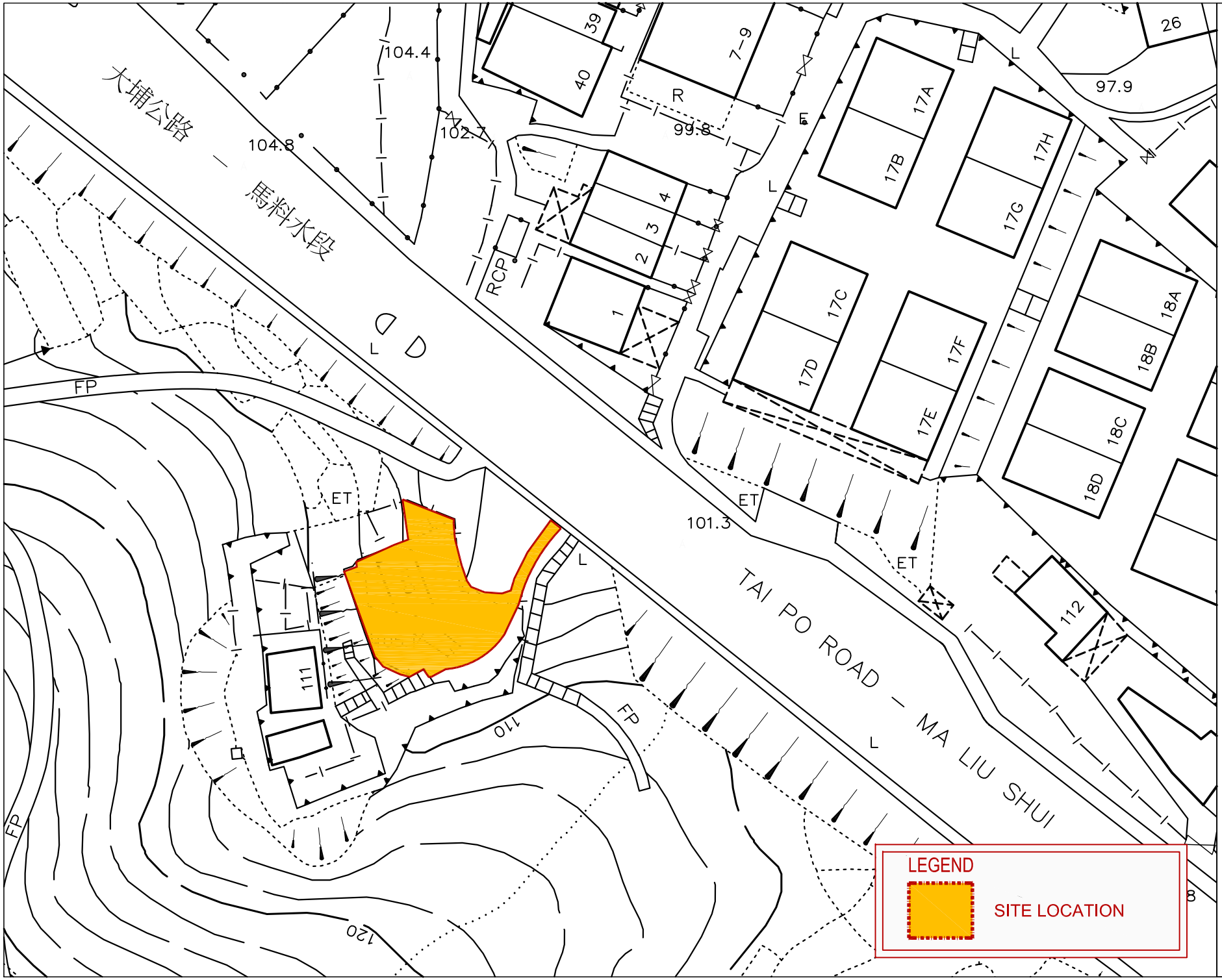
4 Summary and Conclusions

A Drainage Proposal has been designed for the proposed columbarium development at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories.

To manage the stormwater flows after developing the site, this Drainage Proposal detailed the proposed drainage system consist of set of U-channels and underground pipes for diverting stormwater flows to avoid causing flooding to the site and the surroundings.

The result table of drainage analysis shown in **Appendix A** has demonstrated that there is no significant impact to the Site and the surroundings at the peak runoff under 50 years return period.

Figures



SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES

SITE LOCATION

FIGURE 1.1

Scale : 1 : 500

Date : SEP 2021

Rev. : B

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X:\PROJECT\30768 TAI PO ROAD, MA LIU SHUI-COLUMBARIUM DEVELOPMENT\DATA\DRAWING\FIGURE 2.1C.DWG

SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES

CATCHMENT AREAS

FIGURE 2.1

Scale : 1 : 200

Date : SEP 2021

Rev. : B

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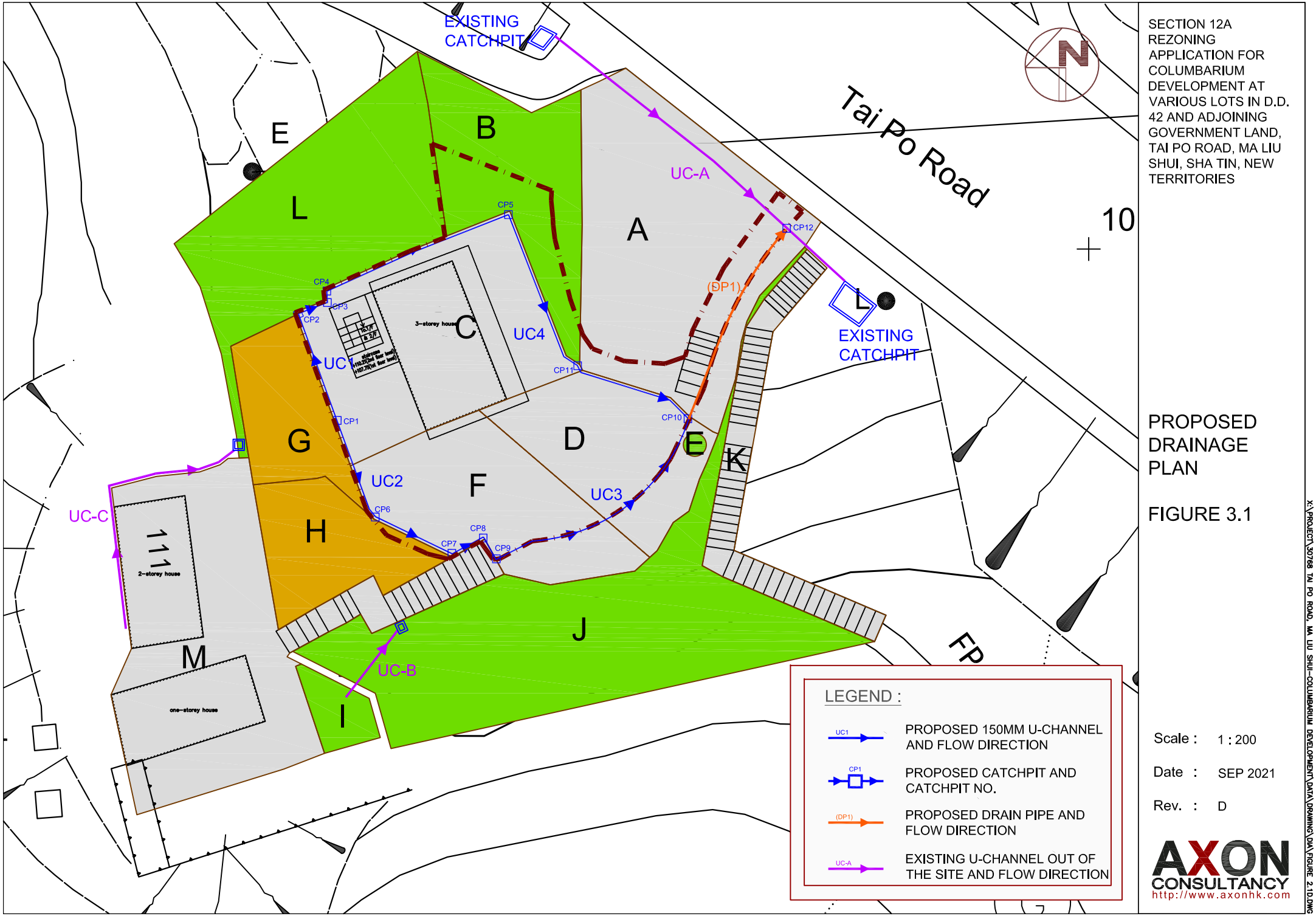
X:\PROJECT\30768 TAI PO ROAD, MA LIU SHUI-COLUMBARIUM DEVELOPMENT\DATA\DRAWING\DIA\FIGURE 2.1D.DWG



SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES

PROPOSED DRAINAGE PLAN

FIGURE 3.1

Scale : 1 : 200

Date : SEP 2021

Rev. : D

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X:\PROJECT\30768 TAI PO ROAD, MA LIU SHUI-COLUMBARIUM DEVELOPMENT\DATA\DRAWING\DIA\FIGURE 2-1D.DWG

Appendix A

Calculations of Drainage Impact

Drainage Analysis

Part A - Estimation of Peak Runoff

Return Period (No. of Years): **50**

Catchment ID	Catchment Area (A), m^2	Level difference, dh, m	Average Low Distance, L	Average Slope (H), m/100m	Flow Path Length (L), m	Inlet Time (t_0), min.	Time of Concentration (t_c), min.	Storm Constants			Runoff Intensity (I) mm/hr	Surface		Runoff Coefficient (C)	Peak Runoff (Qp), m3/s	Inside site boundary (Y/N)
								a	b	c						
Catchment A	100	2.53	10.4	24.327	10.4	0.50	0.6846	1167.6	16.76	0.561	234.8133	2	Concrete	0.95	0.0062	N
Catchment B	48	2.66	6.6	40.303	6.6	0.31	0.4894	1167.6	16.76	0.561	236.2998	6	Grassland (sandy soil) Flat	0.15	0.0005	Y
Catchment C	78	7.78	4.3	180.930	4.3	0.14	0.2603	1167.6	16.76	0.561	238.0789	2	Concrete	0.95	0.0049	Y
Catchment D1	31	1.38	5.7	24.211	5.7	0.31	0.5189	1167.6	16.76	0.561	236.0739	2	Concrete	0.95	0.0019	Y
Catchment D2	13	0.15	1.8	8.333	1.8	0.13	0.3415	1167.6	16.76	0.561	237.4445	2	Concrete	0.95	0.0008	N
Catchment E	1	0.15	0.5	30.000	0.5	0.04	0.0375	1167.6	16.76	0.561	239.8453	6	Grassland (sandy soil) Flat	0.15	0.0000	N
Catchment F1	40	0.65	3.7	17.568	3.7	0.21	0.3549	1167.6	16.76	0.561	237.3404	2	Concrete	0.95	0.0025	Y
Catchment F2	12	0.15	2	7.500	2	0.15	0.2970	1167.6	16.76	0.561	237.7914	2	Concrete	0.95	0.0008	N
Catchment G	26	4.98	4	124.500	4	0.16	0.2296	1167.6	16.76	0.561	238.3202	8	shallow soil surface underlain by impervious rock layer	0.65	0.0011	N
Catchment H	30	4.87	8	60.875	8	0.36	0.5032	1167.6	16.76	0.561	236.1939	8	shallow soil surface underlain by impervious rock layer	0.65	0.0013	N
Catchment I	8	0.50	2.2	22.727	2.2	0.14	0.1776	1167.6	16.76	0.561	238.7307	6	Grassland (sandy soil) Flat	0.15	0.0001	N
Catchment J	113	5.88	12.5	47.040	12.5	0.52	0.7615	1167.6	16.76	0.561	234.2345	7	Grassland (sandy soil) Steep	0.2	0.0015	N
Catchment K	27	9.27	16.3	56.871	16.3	0.76	1.1340	1167.6	16.76	0.561	231.4860	2	Concrete	0.95	0.0016	N
Catchment L	48	4.78	12	39.833	12	0.56	0.9237	1167.6	16.76	0.561	233.0267	7	Grassland (sandy soil) Steep	0.2	0.0006	N
Catchment M	113	5.41	17.6	30.739	17.6	0.80	1.1225	1167.6	16.76	0.561	231.5699	2	Concrete	0.95	0.0069	N

Part B - Estimated Channel Capacities

The fair condition of concrete-lined channels is considered for the value of n fir Manning equation (DSD SDM Table 13)

U-Channel	Diameter, mm	Design Depth, mm	Manning's roughness coefficient	Channel Gradient	Cross Section Area, m^2	Wetted perimeter, m	Hydraulic radius, m	Mean velocity, m/s	Capacity, m^3/s	Catchment Served	Actual Runoff, m^3/s	% of Capcity Flow	Sufficient Capacity (Y/N)
UC1 (CP1 to CP2 to CP3 to CP4 to CP5)	150	150	0.016	0.031	0.0181	0.4606	0.0392	1.2632	0.0228	C(80%) + G(90%) + L(50%)	0.0052	23%	Y
UC2 (CP1 to CP6 to CP7 to CP8)	150	150	0.016	0.005	0.0181	0.4606	0.0392	0.4964	0.0090	F1(50%) + G(10%) + H	0.0026	29%	Y
UC3 (CP8 to CP9 to CP10)	150	150	0.016	0.040	0.0191	0.4606	0.0414	1.5028	0.0287	D1(50%) + D2 + E + F1(50%)+ F2 + J + M(60%) + UC2	0.0120	42%	Y
UC4 (CP5 to CP13 to CP12)	150	150	0.016	0.015	0.0181	0.4606	0.0392	0.8840	0.0160	C(20%) + D1(50%) + UC1	0.0072	45%	Y

Part C - Manning's Equation is adopted for full-bore pipe velocity calculation

The fair conditions of concrete and uPVC are considered for the value of n for Manning equation (DSD SDM Table 13)

Pipe ID	Diameter (mm)	Gradient	Manning's roughness coefficient	Cross Section Area, (m^3)	Wetted perimeter, m	Hydraulic radius, m	Full Bore Velocity, Vc (m/s)	Full bore Capacity, Qc (m^3/s)	Catchment Served	Design Flow, Q (m^3/s)	Pipe Capcitiy Check	% of Capcity Flow	Sufficient Capacity (Y/N)
DRAIN PIPE (DP1)	150	0.368	0.015	0.02	0.47	0.04	4.378	0.073495527	A(20%) + UC3 + UC4	0.0205	OK	28%	Y

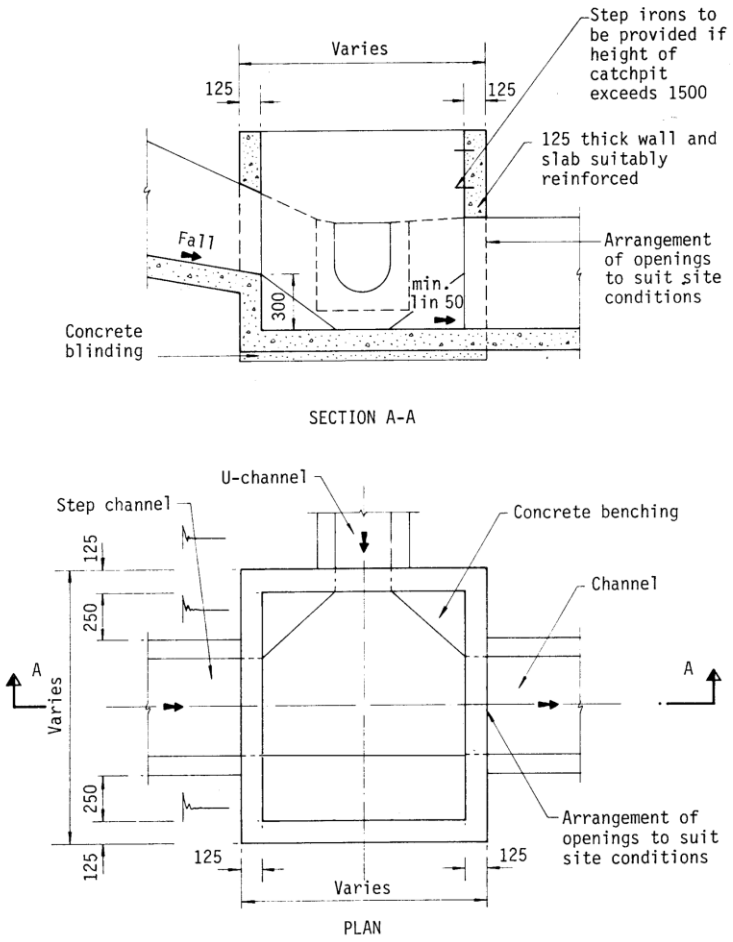
Assessment of impacts to the existing drainage facilities

U-Channel	Diameter, mm	Design Depth, mm	Manning's roughness coefficient	Channel Gradient	Cross Section Area, m^2	Wetted perimeter, m	Hydraulic radius, m	Mean velocity, m/s	Capacity, m^3/s	Catchment Served	Actual Runoff, m^3/s	% of Capcity Flow	Sufficient Capacity (Y/N)
Existing UC-A	250	250	0.016	0.039	0.0502	0.7677	0.0654	2.0037	0.1006	A(80%) + B + K + L(50%) + DP1	0.0278	28%	Y
Existing UC-B	250	250	0.016	0.546	0.0530	0.7677	0.0690	7.7724	0.4120	I	0.0001	0%	Y
Existing UC-C	250	250	0.016	0.028	0.0502	0.7677	0.0654	1.6978	0.0853	M(40%)	0.0028	3%	Y

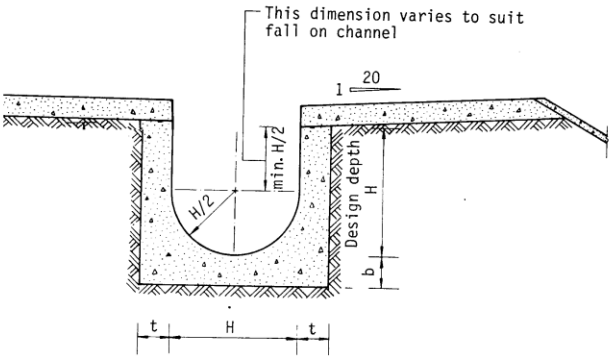
Appendix B

Typical Design of U-channel and Catchpit

Typical Details of U Channel and Catchpit



TYPICAL DETAILS OF CATCHPIT



TYPICAL DETAILS OF U CHANNEL

Appendix | V

Sewerage Proposal

Technical Support of Section 12A Rezoning Application for Proposed Columbarium Development at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories

SEWERAGE PROPOSAL

Reference: 30768-E-R02-01
Date: September 2021

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CONSULTANCY

Contents

1 Introduction

1.1 Background

This report serves as the Sewerage Proposal for S.12A Application, to rezone the site from "Green Belt" ("GB") to " Other Specified Uses (Columbarium)" ("OU(Columbarium)") zone, for Proposed Columbarium Development at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories.

In order to review the sewerage impact arising from the proposed development, AXON Consultancy Limited is commissioned to prepare a Sewerage Proposal to assess the sewerage impact of the site.

1.2 Site Description

The Proposed Columbarium Development will comprise a 3-storey private columbarium, with a total of 1,716 niches. As provided by the applicant, 336 no. of niches are sold, in which 3 no. of niches are occupied.

The development is proposed to operate from 10:00 am to 5:00 pm during normal days, throughout the week. The operation hours would be extended to 9:00 am to 6:00 pm on Ching Ming Festival and Chung Yeung Festival. Without commercial activity, foul water is the only expected source of sewerage discharged from the site. The application area is shown in **Figure 1.1**.

1.3 Objectives

The objectives of the SIA are as follows:

- to assess the potential sewerage impacts arising from the proposed development; and,
- to recommend measures to mitigate unacceptable sewerage impacts, if any.

2 Sewerage Handling Facilities

2.1 Effluent Generation

As the ancillary facilities of the site is excluded from the S.12A application, sewerage generated from employee will not be assessed.

With low level of activities from visitors, sewerage generation is limited. Portable toilet is considered as a reasonable mean for foul water storage.

With reference to the “Provision of Sanitary Fitments in Offices, Shopping Arcades, Department Stores, Places of Public Entertainment, Cinemas and Other Public Places” under PNAP ADV-28 issued by Building Department in November 2012, two chemical portable toilets will be placed at the site for visitors.

2.2 Location

The proposed location of the portable toilet is indicated in **Figure 2.1**.

2.3 Effluent Discharge

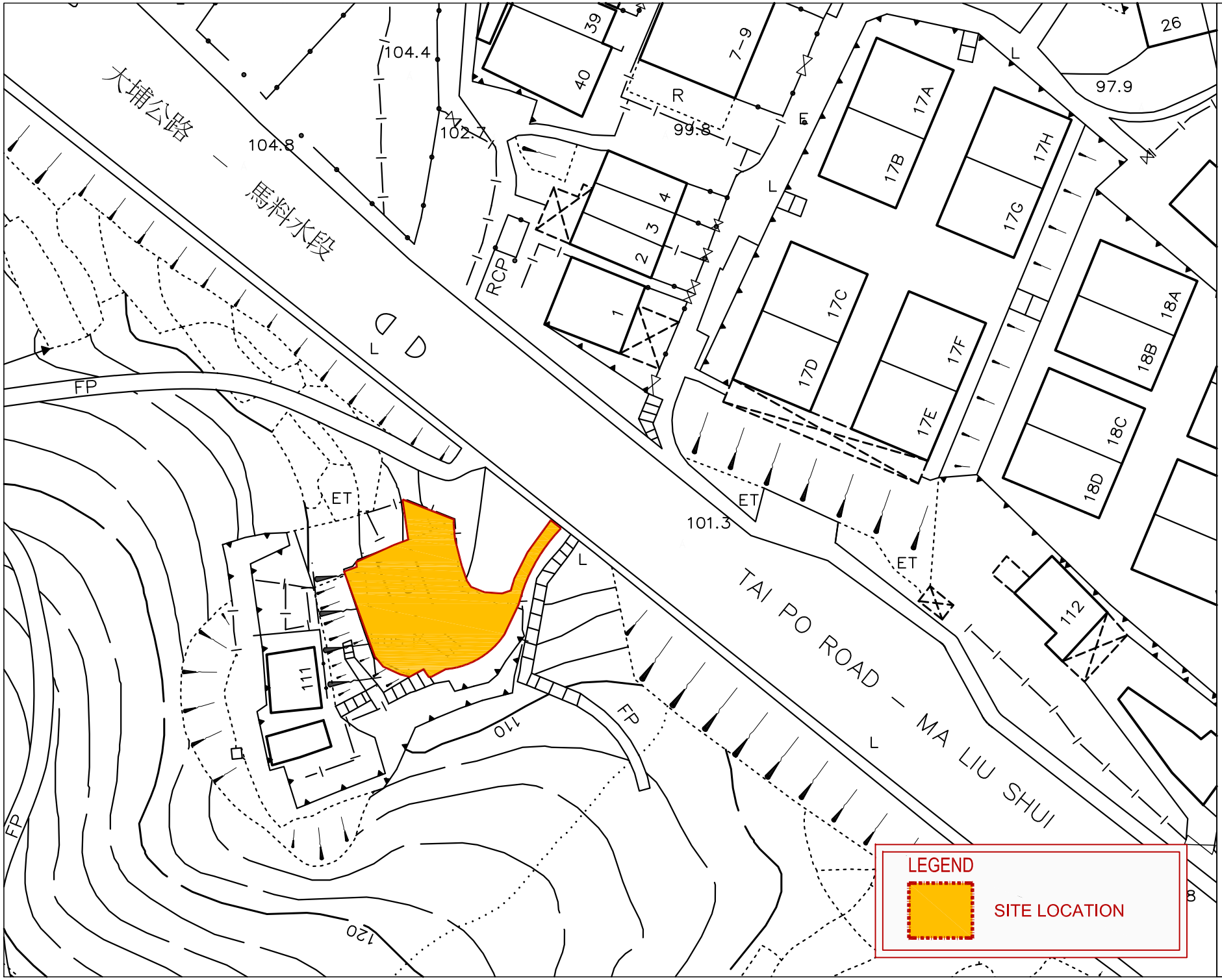
Regular conservancy service will be arranged to empty the effluent. No sewerage will be discharged from the site to the foul manhole in the vicinity.

3 Summary and Conclusions

A Sewerage Proposal has been designed for the proposed columbarium development at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories. With low level of human activities at the application site, no adverse sewerage impact is expected.

To manage the sewerage generated, regular conservancy service is proposed to empty the portable toilet to avoid overflowing of sewerage.

Figures



SECTION 12A REZONING APPLICATION FOR COLUMBARIUM DEVELOPMENT AT VARIOUS LOTS IN D.D. 42 AND ADJOINING GOVERNMENT LAND, TAI PO ROAD, MA LIU SHUI, SHA TIN, NEW TERRITORIES

SITE LOCATION

FIGURE 1.1

Scale : 1 : 500

Date : SEP 2021

Rev. : B

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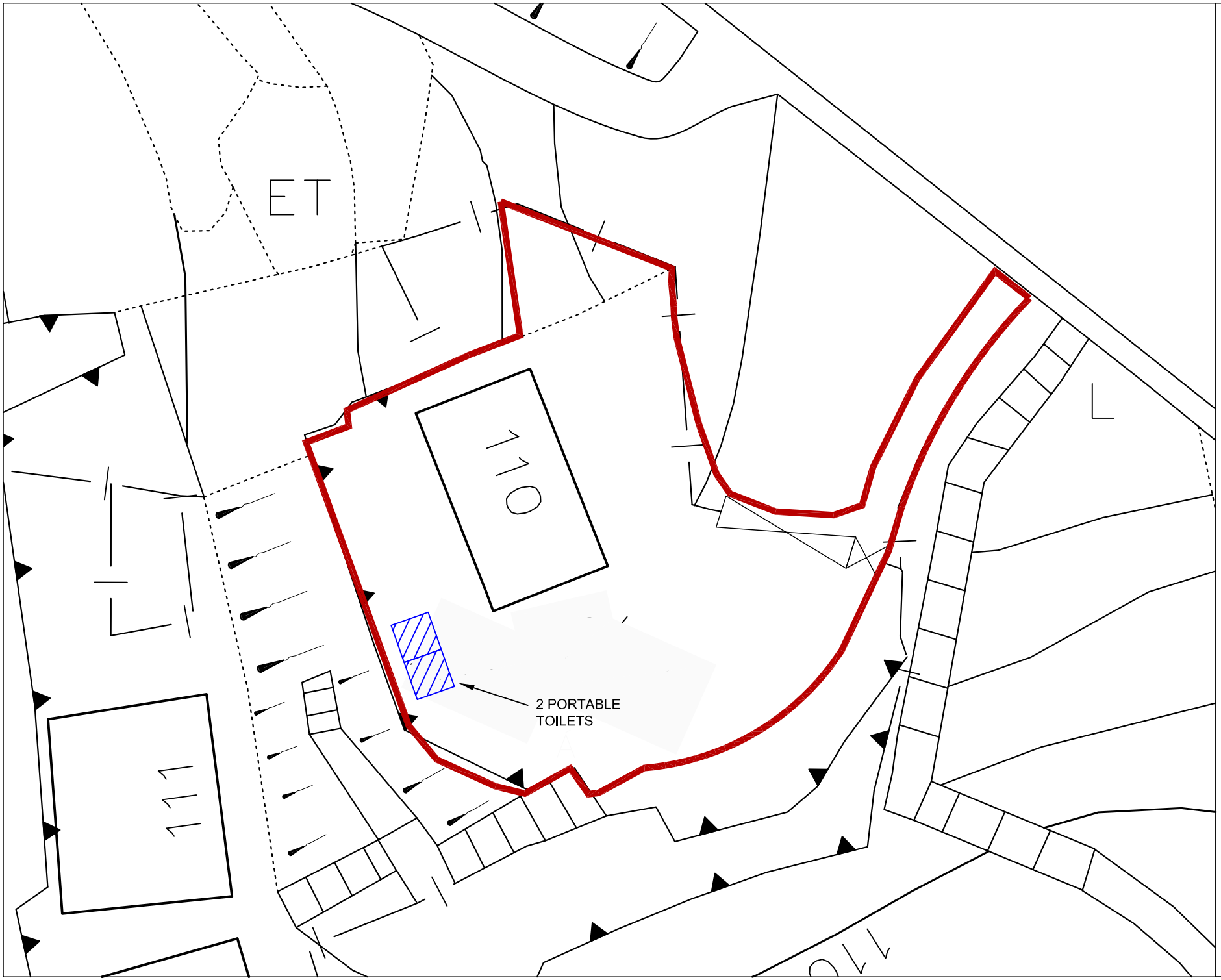
X:\PROJECT\30768 TAI PO ROAD, MA LIU SHUI-COLUMBARIUM DEVELOPMENT\DATA\DRAWING\FIGURE 2.1C.DWG



SECTION 12A
REZONING
APPLICATION FOR
COLUMBARIUM
DEVELOPMENT AT
VARIOUS LOTS IN D.D.
42 AND ADJOINING
GOVERNMENT LAND,
TAI PO ROAD, MA LIU
SHUI, SHA TIN, NEW
TERRITORIES

LOCATION OF PORTABLE TOILET

FIGURE 2.1

Scale : 1 : 150

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X:\PROJECT\30768 TAI PO ROAD, MA LIU SHUI-COLUMBARIUM DEVELOPMENT\DATA\DRAWING\SIA\FIGURE 2.1B_SIA.DWG

毅勤發展顧問有限公司
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Web 網址：www.aikon.hk

Date : 7th January, 2022
Your Ref. : TPB/Y/ST/53
Our Ref. : ADCL/PLG-10191/L014

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

By Email and Hand

Dear Sir/Madam,

Re: Section 12A Planning Application for Request for Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/34 from "Green Belt" Zone to "Other Specified Uses" Zone annotated "Columbarium (1)" at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories (Planning Application No. Y/ST/53)

We refer to the comments from Food and Environmental Hygiene Department dated 6.12.2021 regarding the subject application, we submit herewith the Further Information (FI) for the consideration by relevant Government department(s) or the Town Planning Board. Please find the enclosed items for your onward processing:-

i. 5 copies of a Responses-to-Comments table; and
ii. 5 copies of a revised Crowd Management Plan.

In addition, we would like to provide the supplementary clarifications to support the subject application:

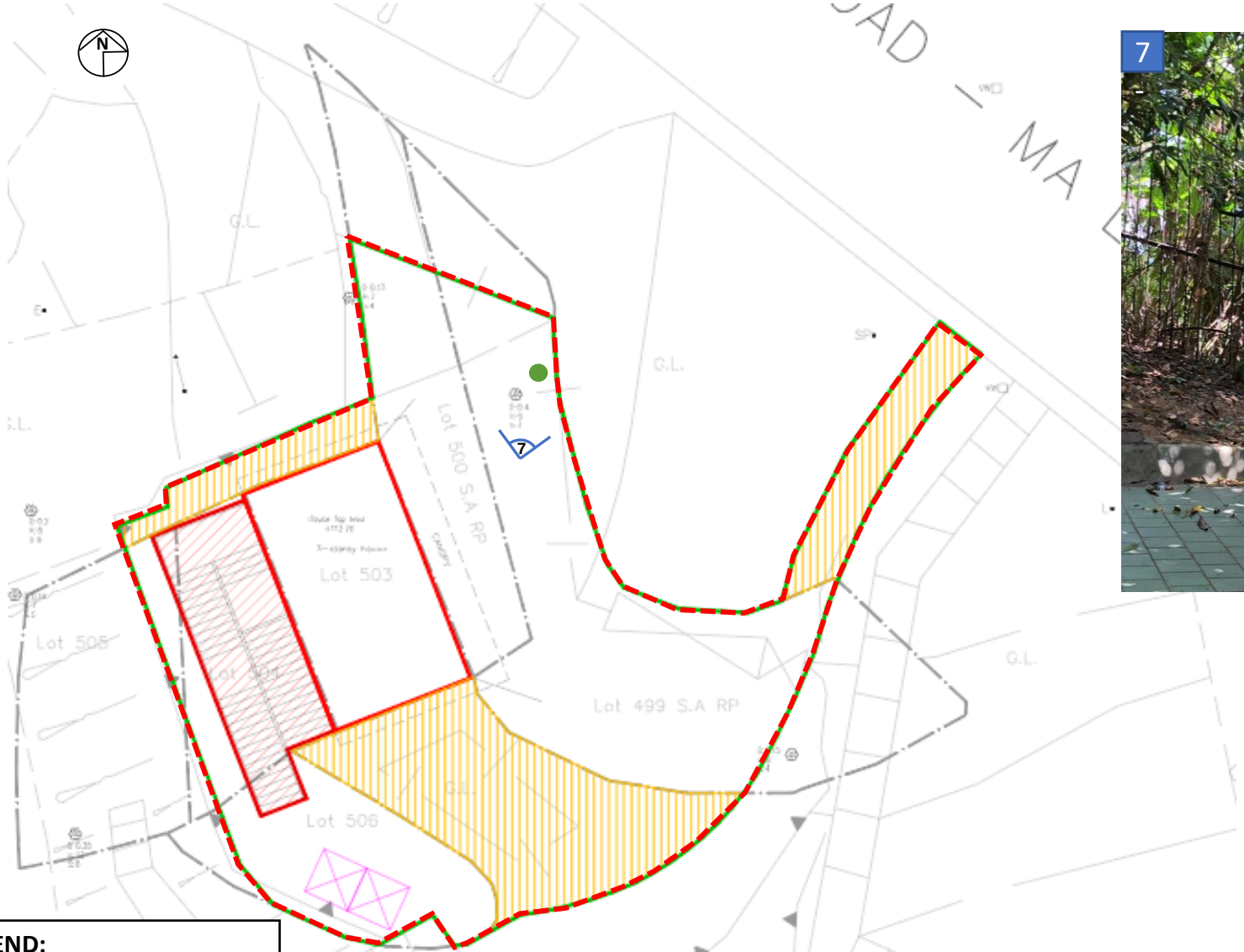
i. The Applicant would provide a boundary fencing along the application site; and
ii. There is only one existing tree found within the application site, Illustration No. 2-IIa is revised accordingly (as enclosed).

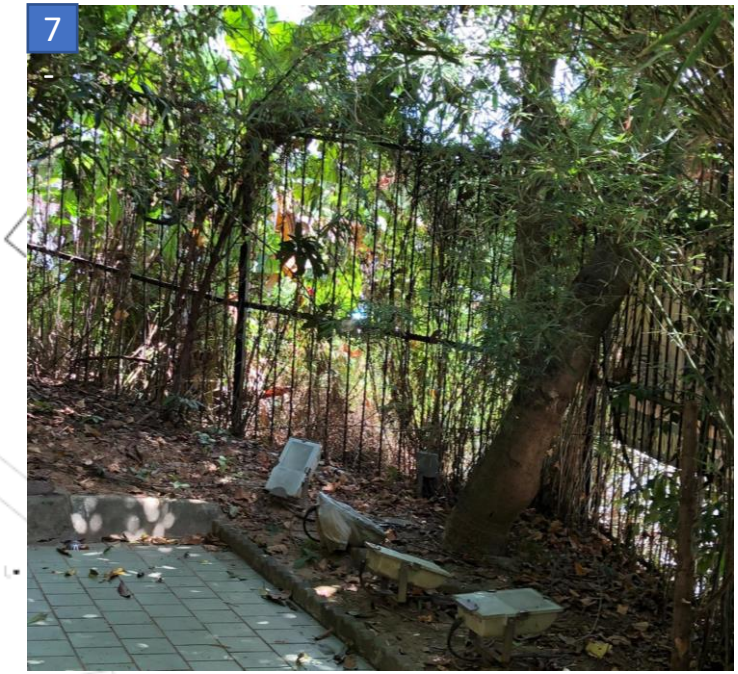
Should you have any queries, please do not hesitate to contact our Miss Grace CHEUNG or Mr. Thomas LUK at 3180 7811. Thank you for your attention.

Yours faithfully,
Aikon Development Consultancy Limited

c.c. DPO/STN, PlanD (Attn.: Mr. Derek Wong) – By Email
Client

Address 地址：
香港葵涌興芳路 223 號新都會廣場 2 期 13 樓 1310 室
Unit 1310, Level 13, Tower 2 Metroplaza,
223 Hing Fong Road, Kwai Chung, New Territories, Hong Kong





LEGEND:

- Existing Tree
  (For Identification Only)

Project: Section 12A Rezoning Application from "Green Belt" Zone to "Other Specified Uses" annotated "Columbarium (1)" Zone for Columbarium Development under Approved Sha Tin Outline Zoning Plan No. S/ST/34 at Lot Nos. 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories	**Title:** Current Condition of the Application Site (2) *Ref.: ADCL/PLG-10191-R002/I001-IIa*	**Illustration:** 1-IIa **Scale:** N.A. **Date:** Jan 2022	AiKoN AIKON DEVELOPMENT CONSULTANCY LTD.

Section 12A Planning Application for Request for Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/34 from "Green Belt" Zone to "Other Specified Uses" Zone annotated "Columbarium (1)" at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories

Responses-to-Comments Table

Comments from Food and Environmental Hygiene Department received on 6 December 2021:

骨灰所辦就「沙田靜苑」所提交管理方案的意見：	回覆
項目(1) 骨灰安置所基本資料	
1. 骨灰安置所地址與申請指明文書的地址不同，申請人需作出澄清。	相關資料已在經修訂的管理方案的第(1)段補充。
2. 申請人應列明冥鏹爐數量(如有)及垃圾處理方法。	沙田靜苑申請範圍內沒有冥鏹爐設置，相關資料已在經修訂的管理方案的第(1)段補充。而運作期間，訪客需自行帶走垃圾。
3. 骨灰安置所的配套設施與指明文書申請的資料不相符。	相關資料已在經修訂的管理方案的第(1)段補充。
項目(4) 人流管理	
1. 申請人應因應實際情況就以下事項提供適當的資料： i. 道路及行人路的布局與人流方向	掃墓高峰日子和平常日子的道路及行人路的布局與人流方向已在經修訂的管理方案的第(4)段補充。
項目(5) 保安管理	
1. 申請人應就骨灰安置所的保安管理提供以下補充資料，以證 明骨灰安置所有足夠能力確保訪客及公眾安全： i. 相關人手	有關保安管理的資料已在經修訂的管理方案的第(5)段補充。

骨灰所辦就「沙田靜苑」所提交管理方案的意見：	回覆
項目(6) 人手調配	
1. 申請人應提供僱用員工總人數	除董事局外，靜苑日常共僱用 5-6 名員工維持日常管理及運作。而在掃墓高峰日子，靜苑會額外僱用 16 名員工（主要外判具備危機處理知識的保安公司人員），作交通、人流、保安等安排。相關資料已在經修訂的管理方案的第(7)段補充。
2. 申請人因應其私營骨灰安置所的實際情況，就以下事項補充適當的資料： i. 工作人員組織圖(例如：骨灰安置所的部門或組別及其 職責、員工人數及管理架構等。) ii. 最高層管理人員(例如： 總經理、行政總裁等)，包括其姓名、職位、聯絡電話號碼、年資、經驗、職責及專業資格(如有的話) iii. 其他管理人員的年資、經驗、職責及專業資格(如有的話) iv. 管理模式(申請人須具體說明管理模式如何運作)	工作人員組織圖、最高層管理人員、其他管理人員及管理模式的資料已在經修訂的管理方案的第(6)段及第(7)段補充。
項目(9) 投訴處理	
1. 申請人應提供資料，說明其骨灰安置所將如何妥善處理投訴(例如接受投訴途徑、處理投訴的流程及時間表、調查程序、回應機制、補救行動及記錄投訴的安排)。	有關投訴處理安排已在經修訂的管理方案的第(10)段補充。
其他項目	
1. 申請人應提供提交本管理方案的人員資料，包括姓名、職位、聯絡電話號碼、電郵地址、簽署及簽署日期。	有關提交本管理方案的人員資料已在經修訂的管理方案的第(12)段補充。

沙田靜苑管理方案

沙田靜苑

January 2022

目錄

附件 1 – 沙田靜苑財務方案 （財務方案將稍後呈交）

(1) 基本資料

骨灰安置所名稱	沙田靜苑（簡稱「靜苑」）
地址	新界沙田馬料水大埔公路赤泥坪村 110 號丈量約份第 42 約地段第 499 號 A 分段餘段(部分)、第 500 號 A 分段餘段(部分)、第 503 號、第 504 號(部分)、第 505 號(部分)及第 506 號(部分)和毗連政府土地
開始營辦年份	2009
營辦者	百年控股有限公司
營辦者的身分	土地擁有人
所屬宗教	無
佔地面積	約 189.64 平方米
總樓宇建築面積	約 119.76 平方米
建築物	1 座共三層骨灰安置所大樓
配套設施	2間流動廁所 (長期擺放) 沒有冥鏹爐設置

(2) 可容納的訪客量及入場管制

- 靜苑同一時間可容納的訪客量為 50 人。各時期的開放時間如下:

時期	開放時間
平日星期一至五	早上10:00 至下午5:00
平日星期六、日及一般公眾假期	早上10:00 至下午5:00
掃墓高峰日子*	早上9:00 至下午6:00

**「掃墓高峰日子」：清明節及重陽節正日及其之前三週和其後三週的星期六及星期日*

預約服務

- 不論平日、公眾假期或掃墓高峰日子，訪客必須以靈灰位編號透過網上預約(網址：http://www.shatinchingyuen.com)或電話預約 (預約電話：2605 3030)，預約時提供同行人數，及必須提供每位訪客的姓名、電話號碼作登記，並指明在到訪時段，於指定時段才可到訪。
- 每個時段最多供25人預約，以確保在兩個時段的過渡期不會超過可容納的訪客量50人。未有預約的訪客，靜苑將會拒絕其進入拜祭先人。
- 於平日（星期一至五、六及日）及一般公眾假期，只要當天仍有時段可提供拜祭，每個靈灰位在同一天可以預約多於一次，以便不同成員前來拜祭。
- 於掃墓高峰日子，為公平原則，每個靈灰位每天只可供訪客預約一次，令其他訪客也能有機會前來拜祭。拜祭人士只可逗留靜苑大樓30分鐘。可選擇的時段如下：

	時段		時段
1	09:00-09:30*	10	13:30-14:00
2	09:30-10:00*	11	14:00-14:30
3	10:00-10:30	12	14:30-15:00
4	10:30-11:00	13	15:00-15:30
5	11:00-11:30	14	15:30-16:00
6	11:30-12:00	15	16:00-16:30
7	12:00-12:30	16	16:30-17:00
8	12:30-13:00	17	17:00-17:30*
9	13:00-13:30	18	17:30-18:00*

**灰色時段只限掃墓高峰日子可供預約。*

- 靜苑將主要採取以上預約的管理方式控制進場人數，但在掃墓高峰日子，靜苑會有額外的交通服務及安排增添人手(將在後段詳述)。

網上拜祭

- 此外，靜苑將會設置網上拜祭服務，以方便已移居外地的家屬、長者、孕婦、婦孺、行動不便及其他討厭交通擠迫、舟車勞頓或不耐煩排隊輪候拜祭人士，不必親臨靜苑亦可達到拜祭目的。靜苑將會鼓勵拜祭人士採用此項服務，一方面能解決他們上述的憂慮及家族各成員聚集等候的苦惱，另一方面更可以在任何時段於舒適環境及各自家中進行自己喜好拜祭模式，為家族不同成員省時及避免不同拜祭意見而減少一份爭拗。同時特別在掃墓高峰日子絕對有助減少過多人流聚集靜苑。

(3) 交通及公共運輸安排

平日

- 現時靜苑不會提供私家車位給予拜祭訪客停泊，故建議拜祭訪客乘坐各項公共交通工具前來。為鼓勵訪客使用現有公共交通工具前往拜祭，靜苑網站已清晰提供可到達靜苑的各交通路線，並提醒訪客靜苑附近不設泊車設施。訪客預約登記後，亦能獲相關資訊提示。到達靜苑的主要交通公具如下：

交通公具	號碼	路線	開放時間內班次
巴士	72	來往大埔（太和）及長沙灣	每20-25分鐘
	72A	來往大圍及大埔工業邨	每30分鐘
	73A	來往沙田愉翠苑及上水華明邨	每30分鐘
	74A	來往沙田愉翠苑及上水華明邨	每60分鐘
	872	由沙田馬場單向前往大埔中心	逢沙田賽馬日行走
專線小巴	28K	港鐵大埔墟站 → 沙田市中心 (循環線)	每6至9分鐘
	28S	來往白石角 → 沙田市中心(循環線)	每30至45分鐘
公共小巴		來往觀塘及大埔	每8-15分鐘
		來往深水埗及上水	客滿即開
		來往旺角及上水	客滿即開
		來往旺角及大埔	客滿即開
		來往佐敦及上水	客滿即開

春秋二祭

- 另外，在掃墓高峰日子，靜苑將安排特別穿梭巴士服務，接載訪客來往火炭火車站和沙田靜苑，詳情如下。其他掃墓高峰日子的安排，則按提前預約人數稍作調整。

  數目　　：　1輛 (按預約人數決定實際車輛數量)

  載客量　　：　24 座位

  行車路線　：　火炭火車站 → 沙田靜苑 (中間不停站)；

  沙田靜苑 → 火炭火車站 (中間不停站)

  行車時間　：　大約10分鐘

  班次　　：　**由火炭火車站開出**

  08:50 – 17:20 (每30分鐘一班)

  由沙田靜苑開出

  09:30 – 18:00 (每30分鐘一班)

上/ 落客點:

(a) 火炭火車站B出口

(b) 沙田靜苑（赤泥坪停車處下車）

(c) 沙田靜苑（赤泥坪垃圾收集站上車）

穿梭巴士暫泊點（澤祥街車場）

(4) 人流管理

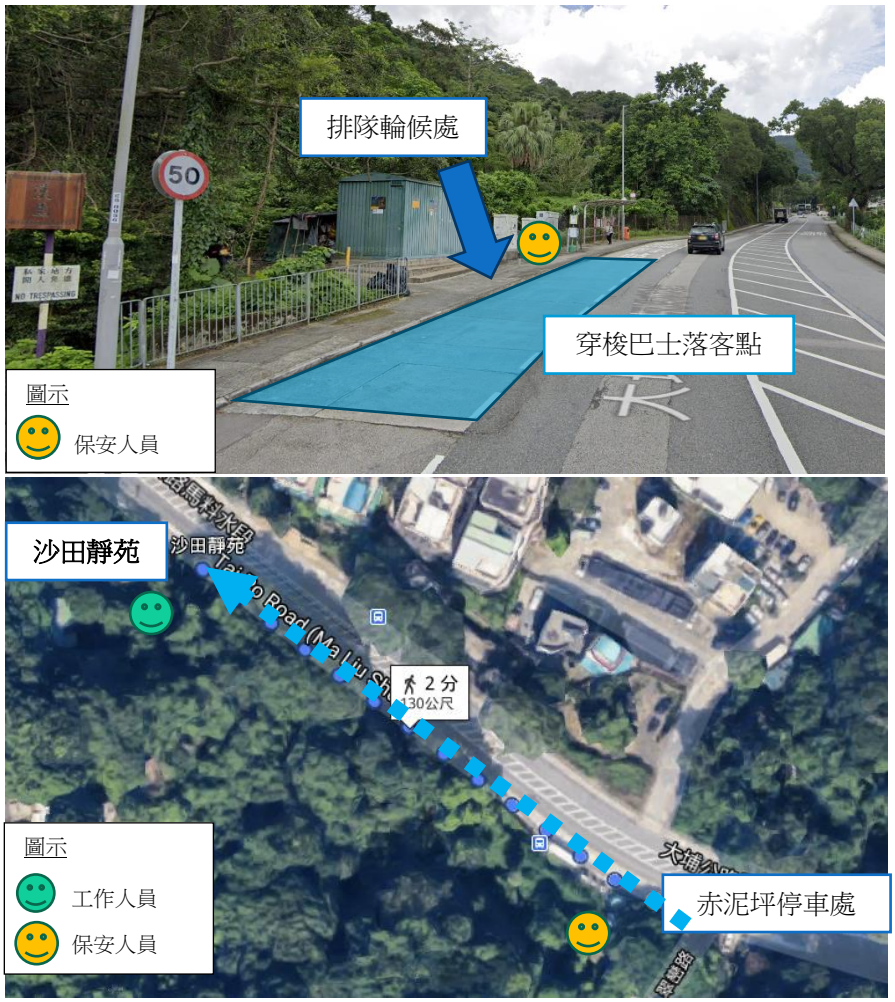
i. 掃墓高峰日子

場外措施

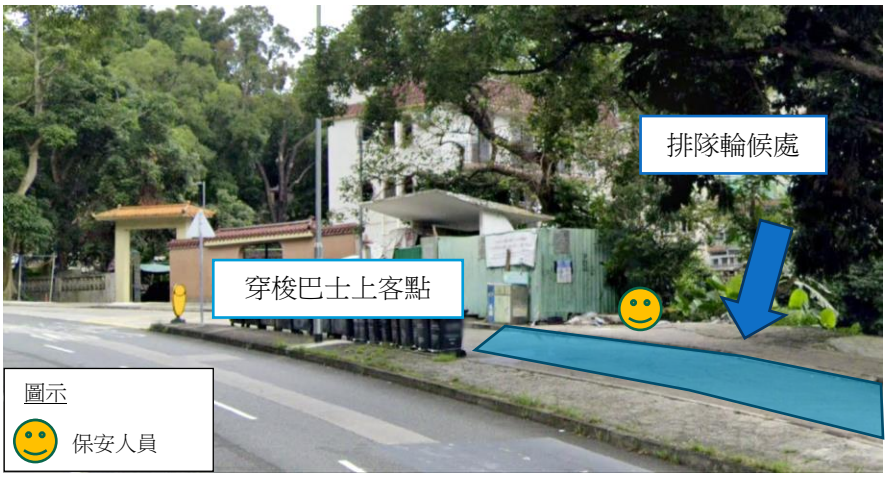
- 在掃墓高峰日子（即清明節及重陽節正日及其之前三週和其後三週的星期六及星期日），靜苑將會安排工作人員在每個上落客區，在適當位置舉牌指示路線、排隊區、等候區等，以維持良好秩序。在各上落客區的工作人員位置及人流方向如下。

(a) 火炭火車站B出口

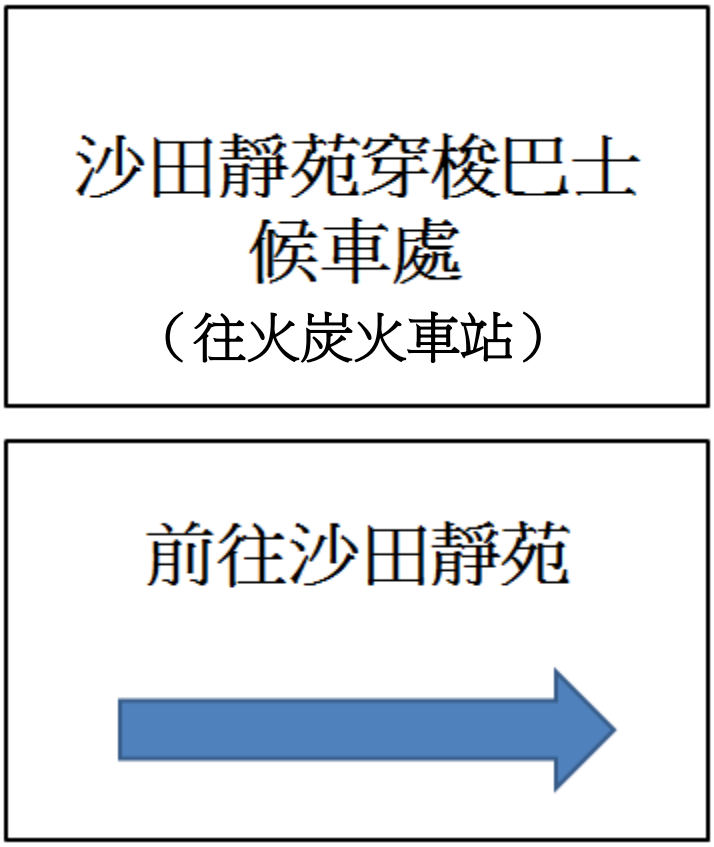
(b) 沙田靜苑（由赤泥坪停車處下車後再沿以下路線步行）

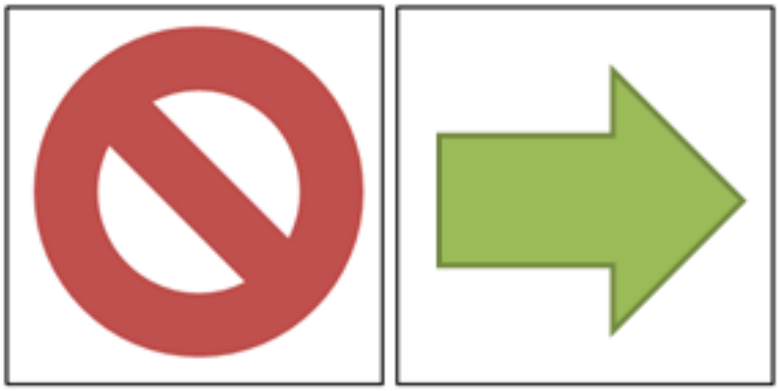


(c) 沙田靜苑（沿以下路線步行再由赤泥坪垃圾收集站上車）



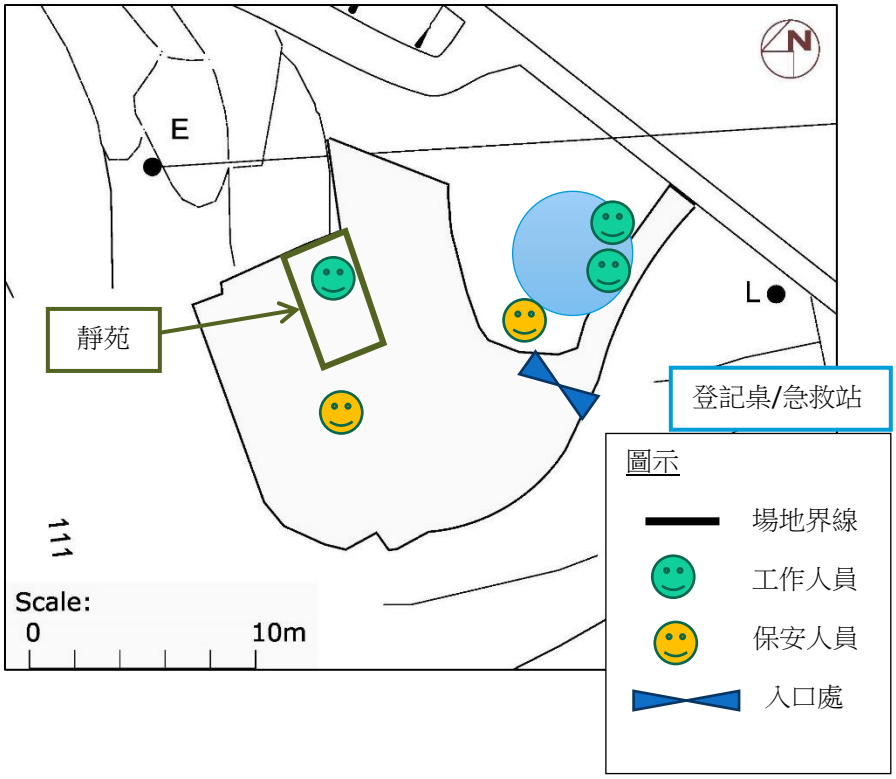
指示牌式樣如下:





場內措施

- 在靜苑入口處，將安排登記桌，有職員為已預約前來人士進行登記。職員屆時會核對每位訪客的姓名和電話號碼，並登記他們的到達及離開骨灰安置所的時間。已完成登記的訪客，必須要戴上用作分辨時段的訪客證，並在離開時交還，以便識別在場的訪客數目和身份。
- 登記桌同時也作為急救站，具備臨時急救箱，並安排至少一名持有認可合資格急救證書人員當值服務。
- 靜苑會安排廣播措施，廣播場內安排。灰樓每層將安排工作人員負責調配訪客、監控進入人數、確保訪客守時離開以及疏導人群。場內每個工作人員將會佩帶對講機，方便協調和溝通。
- 在拜祭時段全部結束後，將當天的訪客資料整理好，在電子登記冊內補充訪客原有的預約記錄。電子登記冊的資料將會保留最少三年，以便在骨灰所辦人員要求時提供該些紀錄以作查閱。


N
E
L
靜苑
登記桌/急救站
111
Scale:
0
10m
圖示
場地界線
工作人員
保安人員
入口處

ii. 平常日子

場外措施

- 在平常日子，靜苑會建議拜祭訪客乘坐各項公共交通工具前來。為鼓勵訪客使用現有公共交通工具前往拜祭，靜苑網站已清晰提供可到達靜苑的各交通路線，並提醒訪客靜苑附近不設泊車設施。(可參閱本管理方案(3)所提供的交通路線)

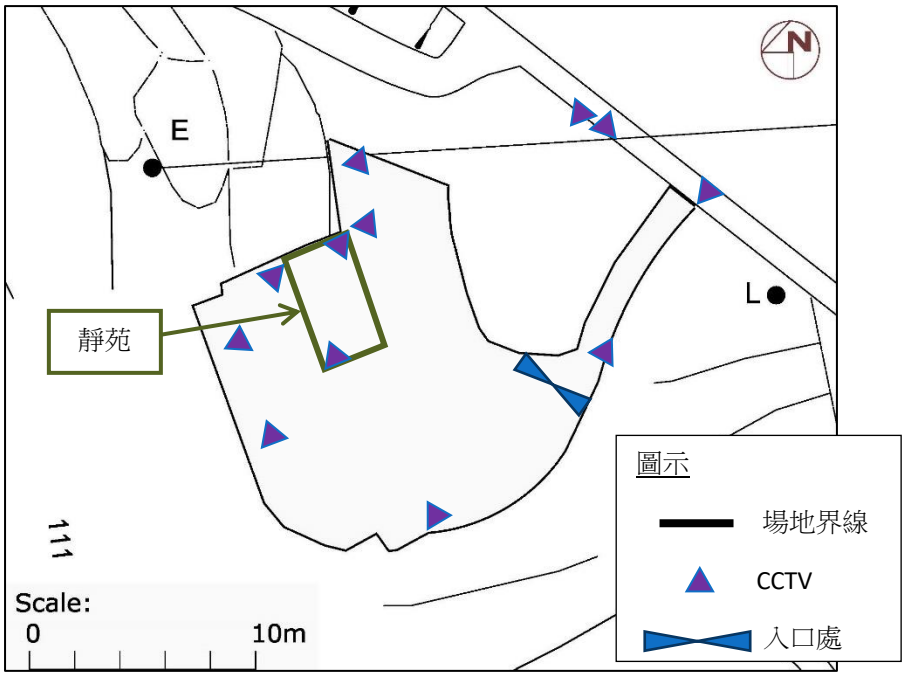
沙田靜苑（由巴士站往返沙田靜苑的行人路線）

場內措施

- 在靜苑入口處，會有職員為已預約前來人士進行登記。職員屆時會核對每位訪客的姓名和電話號碼，並登記他們的到達及離開骨灰安置所的時間。已完成登記的訪客，便可進入靜苑內拜祭。
- 場內具備臨時急救箱，並安排至少一名持有認可合資格急救證書人員當值服務。
- 靜苑會安排廣播措施，廣播場內安排。灰樓會有兩位工作人員負責調配訪客、監控進入人數及疏導人群。場內每個工作人員將會佩帶對講機，方便協調和溝通。
- 當天拜祭時段結束後，靜苑會將當天的訪客資料整理好，在電子登記冊內補充訪客原有的預約記錄。電子登記冊的資料將會保留最少三年，以便在骨灰所辦人員要求時提供該些紀錄以作查閱。

(5) 保安管理

- 靜苑入口處已裝設鐵閘，場內並會裝設 12 部閉路電視系統 (CCTV)，確保入口處及靜苑各處的情況有足夠監察，以隨時回應。閉路電視系統 位置見下圖（灰樓每層兩部）。



- 在掃墓高峰日子，會增聘巡邏人手駐守(合共 16 名保安/工作人員)，每名職員會佩帶一部對講機，以便有效監察場內秩序及處理衝突。
- 在平常日子，會約有 2 名保安人員在場內駐守，每名職員會佩帶一部對講機，以便有效維持場內秩序。

(6) 營辦者管理模式

6.1 營辦者百年控股有限公司是在香港以「有限公司」註冊機構，其日常事務由董事局決議，現任董事會成員包括 1 名董事。

6.2 董事會將會成立沙田靜苑事務委員會（下稱「委員會」），負責管理骨灰安置所日常營運事宜。

6.3 為確保遵從發牌委員會訂明的發牌條件或發出的指引及實務守則的措施，委員會會：

（a）制定與<<私營骨灰安置所條例列>>工作有關的職員架構及職責，當中包括指明 5-6 名職員負責骨灰安置所的日常營運及委派負責職員每半年定期監察，記錄及報告是否遵從發牌委員會訂明的發牌條件。

（b）報告須每年交給予委員會仔細核對骨灰安置所是否有遵從發牌條件及發出的指引及實務守則。

（c）每年於委員會會議中，檢討是否恰當遵從發牌委員會訂明的發牌條件或發出的指引及實務守則。

（d）審閱職員的工作報告，包括：

-安放權出售協議登記冊；

-安放及移走骨灰記錄；

-投訴記錄。

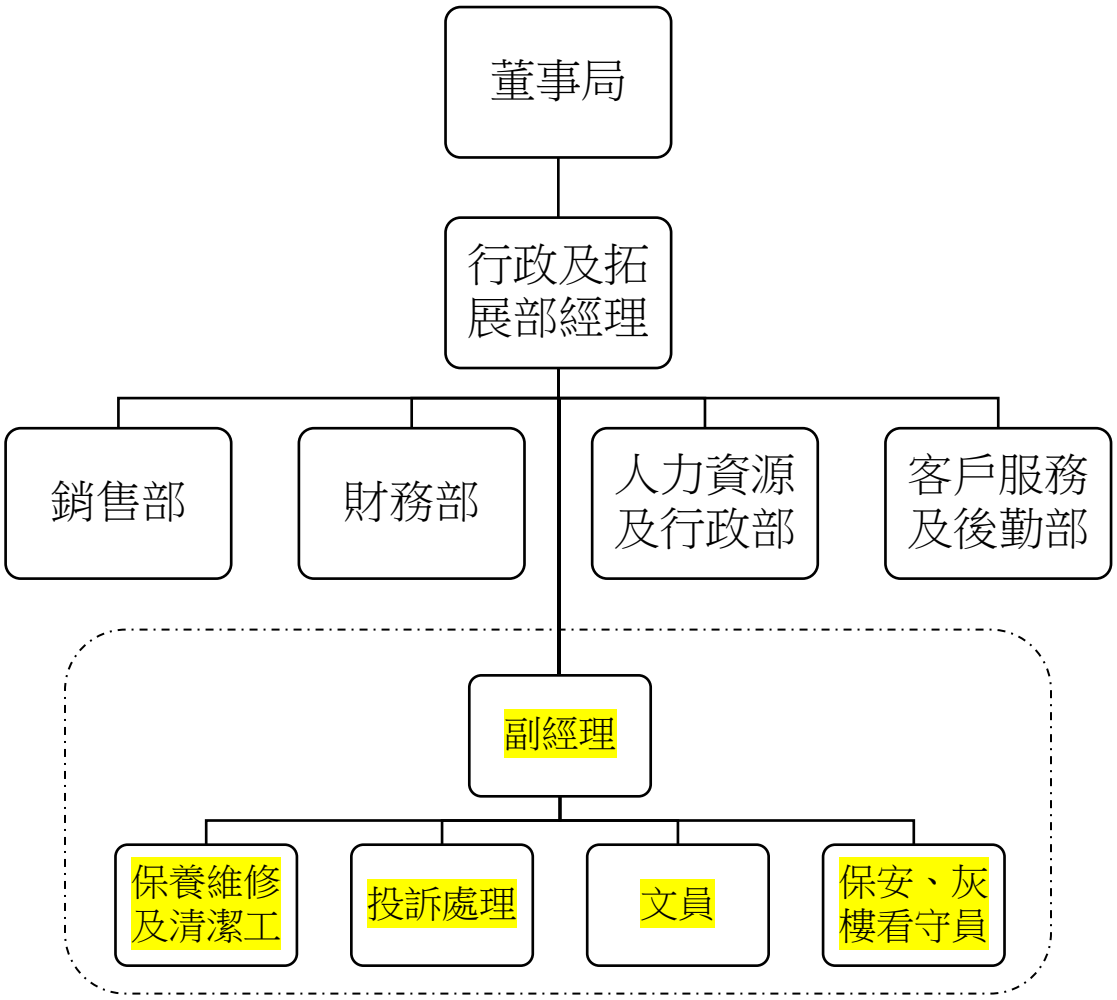
（e）委員會會議紀錄須交董事會通過。

(7) 人手調配

除董事局外，靜苑日常共僱用5-6名員工維持日常管理及運作。靜苑的工作組織架構如下頁圖示，其中行政及拓展部經理將負責組織審議、統籌靜苑的規劃，制定靜苑管理制度，監督、協調各職能部門對靜苑經營計劃的執行。

最高管理人員
姓名：吳維乾
職位：行政及拓展部經理
聯絡電話號碼：9463 9398
年資：20年以上
經驗：由靜苑創辦起已負責管理及經營，熟知靜苑運作

工作組織架構


董事局
行政及拓展部經理
銷售部
財務部
人力資源及行政部
客戶服務及後勤部
副經理
保養維修及清潔工
投訴處理
文員
保安、灰樓看守員

- 在掃墓高峰日子，靜苑會額外僱用16名員工（主要外判具備危機處理知識的保安公司人員），作交通、人流、保安等安排。增聘的人手職位、職責及數目如下。
- 在平常日子，靜苑的人手安排、職責及數目亦顯示如下。

職位	職責	人數 (掃墓高峰日子)	人數 (平常日子)
副經理	協助行政及拓展部經理執行委員會的議決，遵從經理指示，負責銷售龕位、管理工作人員、人手調配、處理投訴、日常運作、場內地維修及保養等。	1人	1人
文員	在入口的登記處記錄出入的訪客人次、處理查詢、保存記錄及一般文書工作	2人	1人
急救員 (可兼任)	在場內負責急救	最少1人	最少1人
保安/工作人員	在場內維持秩序、引流訪客、解答訪客疑問、處理危機（e.g. 火警、意外、受傷)、疏散人群、處理及解決即時投訴及衝突	2人	1人
灰樓看守員	在場內維持秩序、引流訪客進出各層、解答訪客疑問、處理危機（e.g.火警、意外、受傷)、	共 3 人（每層1人)	2人

職位	職責	人數 (掃墓高峰日子)	人數 (平常日子)
	疏散人群、處理及解決即時投訴及衝突		
交通指揮員/工作人員	在穿梭巴士上落客處及靜苑附近行人路要點指揮交通、指示訪客排隊及前往/ 離開靜苑方向，確保行人安全	2人 (火炭站) 5人 (沙田靜苑)	無需要
保養維修及清潔工	負責場內設施的檢查及維修，以確保場內所有設施運作正常，及日常清潔工作	1人	1人

- 靜苑將發展一個員工訓練制度，靜苑每半年（於掃墓高峰日子前）舉行一個為期一天的員工訓練課程/會議，所有員工必須出席，接受專業訓練課程。課程內容包括:
  - 靜苑設施及運作說明
  - 各崗位及職責安排
  - 掃墓高峰日子交通及人流安排
  - 危機應變及火警演習
  - 針對過往收到的投訴及意見的檢討及改善
  - 發牌委員會訂明的運作指引及靜苑實務守則

- 靜苑在未來將爭取提升及完善管理模式，並研究獲得國際管理體系的認證的方案，例如質量管理體系（ISO9001）、環境管理體

系（ISO14001）、職業安全健康管理體系（OHSAS18001）及能源管理體系（ISO50001）等，將在未來的董事會探討。

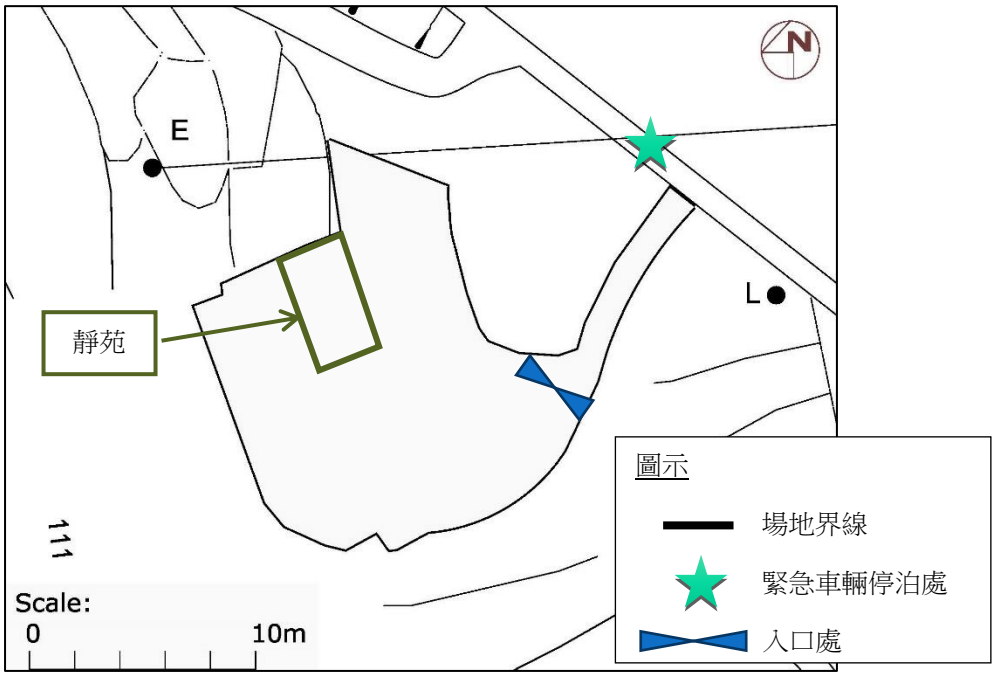
(8) 應對火警或其他緊急情況的應變方案

- 靜苑每半年（於掃墓高峰日子前）舉行一個為期一天的員工訓練課程/會議中，將進行程序指引回顧及檢討，檢視每名員工對處理緊急情況的應變措施。同時也有火警演習，員工將獲訓練如何使用滅火筒、基本急救及危機應對措施。靜苑並鼓勵員工考取急救牌照。以上將確保當發生緊急情況時，當值員工能有效協助疏散人群至安全位置，以及作適當即時應變措施（如簡單滅火、召喚緊急服務等)。

- 灰樓每層會安放2個滅火筒及1個具備後備電源的出路指示燈，共6個滅火筒設備及共3個具備後備電源的出路指示燈。另外，設有簡易的逃生路線，當值人員將以清晰指示牌，指示訪客步行約2分鐘路程到達位於赤坭坪村垃圾收集站的安全集合地點。同時，沙田靜苑入口處以及大埔公路馬料水段對面的巴士站，可作為緊急車輛停泊處（見下圖）。

- 面對火警或緊急情況，當值員工將按需要立即通知警方、消防、緊急車輛等。

- 如不幸發生火警或其他意外，靜苑會以廣播設施立即通知訪客，及指示工作人員，處理疏散人群，指示離開路線及帶領訪客到安全位置。另會點算訪客及職員人數是否齊集安全位置。



- 負責人資料如下。

  姓名　　：　吳維乾

  職位　　：　行政及拓展部經理

  聯絡電話號碼　：　9463 9398

(9) 確保遵從發牌委員會訂明的發牌條件或發出的指引及實務守則的措施

- 靜苑將在場內當眼位置 / 員工休息室張貼有關發牌條件、指引及實務守則。此外，如前所述，靜苑每半年將組織一個為期一天的員工訓練課程/會議，所有員工必須出席，檢討及重温有關運作和安排，安排員工接受專業訓練課程。課程內容將包括有關的發牌條件、運作指引及實務守則。務求確保每個管理人員及員工熟知相關條件、指引及實務守則。

(10) 投訴處理

- 在一般情況下，前線工作人員將透過簡易處理程序，即時或盡快為有關人士提供協助或解決問題。倘若投訴人指明提出正式投訴，前線工作人員將向投訴人說明投訴處理程序
- 投訴人可以口頭或書面作出正式投訴，投訴信可用郵寄，傳真，電郵或親身遞交方式傳遞至本苑投訴箱內。
- 本委員會一般不受理下列類別的投訴：

  （1）與已發展法律程序有關的投訴；

  （2）涉及可能觸犯香港法例的投訴，例如貪污，欺許，盜竊等；

  （3）匿名投訴；

  （4）並非由當時人親自提出的投訴；

  （5）投訴事件已發生超過一年；

  （6）資料不全的投訴。

- 辦事處職員在收到投訴或投訴信後，將於 2 個工作天內呈報了高級職員。高級職員將於收到投訴後進行調查，並於 10 個工作天內以電話，郵寄，傳真或電郵形式回覆投訴人。
- 倘若投訴人不接納調查結果，並提出上訴理據或新證據，有關投訴將提交委員會，委員會將委派適當人員再作調查，並於 20 個工作天內以電話，郵寄，傳真或電郵形式回覆投訴人。

- 所有投訴個案均會存檔，並於本委員會定期會議上報告，如有需要，委員會將會檢討投訴的處理方式是否恰當並建議適當的措施，以改善處理同類事件的手法或防止同類事件再發生。
- 為避免利益衝突，任何被投訴的人員均不應參與或監督調查工作，或簽署任何給予投訴人的信件。

電郵地址	:	info@shatinchingyuen.com
電話號碼	:	2605 3030
傳真號碼	:	2605 3636

(11) 確保骨灰安置所持續營運的財務方案

- 靜苑已製備完善及配合長期發展方向的財務政策，以確保靜苑的長期運作及日常營運開支及大樓維修保養的安排，以提供舒適及安全的環境供訪客使用。
- 財務方案摘要 詳見附件 1。

(12) 管理方案的執行人及批准人

姓名	：	吳維乾
職位	：	行政及拓展部經理
聯絡電話號碼	：	9463 9398
電郵地址	：	kenneth@shatinchingyuen.com
簽署及蓋印	：	

日期 ： 2022 年 1 月 7 日

毅勤發展顧問有限公司
Tel 電話：(852) 3180 7811
Fax 傳真：(852) 3180 7611
Email 電郵：info@aikon.hk
Web 網址：www.aikon.hk

Date : 21st January, 2022
Your Ref. : TPB/Y/ST/53
Our Ref. : ADCL/PLG-10191/L015

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

By Email

Dear Sir/Madam,

Re: Section 12A Planning Application for Request for Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/34 from "Green Belt" Zone to "Other Specified Uses" Zone annotated "Columbarium (1)" at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories
(Planning Application No. Y/ST/53)

We write to supersede the letter dated 20.1.2022.

We refer to the comments from Food and Environmental Hygiene Department dated 17.1.2022 regarding the subject application, we submit herewith the Further Information (FI) for the consideration by relevant Government department(s) or the Town Planning Board. Please find the enclosed items for your onward processing:-

i. Responses-to-Comments table; and
ii. Replacement pages of the revised Crowd Management Plan.

In addition, we would like to provide the supplementary clarifications to support the subject application:

i. Compared to the withdrawn planning application No. Y/ST/46, the purpose of revising the site boundary of the current planning application is to minimise the portion of Government Land and to allow separate access to the adjoining structures locating at south-west of the application site;
ii. The Applicant commits to include the peripheral fencing along the site boundary into the Crowd Management Plan for security and crowd management purposes to minimise disturbances to the neighbourhood;
iii. The proposed staircases in Appendix II and relevant plans are for fulfilling the up-to-date fire safety and building requirements so as to ensure the building safety and to facilitate the efficient operation of the current use.
iv. The visit-by-appointment arrangement will be implemented at all times.

Address 地址：
香港葵涌興芳路 223 號新都會廣場 2 期 13 樓 1310 室
Unit 1310, Level 13, Tower 2 Metroplaza,
223 Hing Fong Road, Kwai Chung, New Territories, Hong Kong

Should you have any queries, please do not hesitate to contact our Miss Grace CHEUNG or Mr. Thomas LUK at 3180 7811. Thank you for your attention.

Yours faithfully,
Aikon Development Consultancy Limited

c.c. DPO/STN, PlanD (Attn.: Mr. Derek Wong) – By Email
Client

Section 12A Planning Application for Request for Amendment to the Approved Sha Tin Outline Zoning Plan No. S/ST/34 from "Green Belt" Zone to "Other Specified Uses" Zone annotated "Columbarium (1)" at Lots 499 S.A RP (Part), 500 S.A RP (Part), 503, 504 (Part), 505 (Part), 506 (Part) in D.D. 42 and Adjoining Government Land, 110 Chek Nai Ping Village, Tai Po Road, Ma Liu Shui, Sha Tin, New Territories

Responses-to-Comments Table

Comments from Food and Environmental Hygiene Department received on 17 January 2022:

骨灰所辦就「沙田靜苑」所提交管理方案的意見：	回覆
項目(1) 骨灰安置所基本資料	
1. 骨灰安置所須設置足夠數量及容量的密蓋垃圾桶，以應付日常運作的需要。	申請範圍內會設置足夠數量及容量的密蓋垃圾桶，並定時把垃圾送到赤泥坪垃圾收集站處理。相關資料已在經修訂的管理方案的第(1)段補充。
2. 骨灰安置所的配套設施與指明文書申請的資料不相符。	申請人會補交骨灰安置所的配套設施的修訂文件給負責指明文書申請的牌照組。
項目(4) 人流管理	
1. 申請人應因應實際情況就以下事項提供適當的資料： i. 場內的道路及行人路的布局與人流方向	場內沒有道路，而行人路只有一個建築物出入口，人流方向只會出入建築物。其他場內措施已在經修訂的管理方案的第(4)段補充。
其他項目場景	
1. 申請人應提供提交本管理方案的人員資料，包括姓名、職位、聯絡電話號碼、電郵地址、簽署及簽署日期。	有關提交本管理方案的人員資料已在經修訂的管理方案的第(12)段補充。

(1) 基本資料

骨灰安置所名稱	沙田靜苑（簡稱「靜苑」）
地址	新界沙田馬料水大埔公路赤泥坪村 110 號丈量約份第 42 約地段第 499 號 A 分段餘段(部分)、第 500 號 A 分段餘段(部分)、第 503 號、第 504 號(部分)、第 505 號(部分)及第 506 號(部分)和毗連政府土地
開始營辦年份	2009
營辦者	百年控股有限公司
營辦者的身分	土地擁有人
所屬宗教	無
佔地面積	約 189.64 平方米
總樓宇建築面積	約 119.76 平方米
建築物	1 座共三層骨灰安置所大樓
配套設施	2間流動廁所 (長期擺放) 沒有冥鏹爐設置

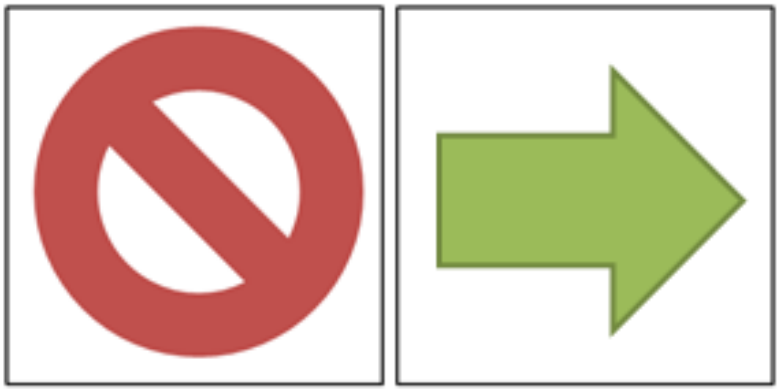
*申請範圍內會設置足夠數量及容量的密蓋垃圾桶，並定時把垃圾送到赤泥坪垃圾收集站處理。

(2) 可容納的訪客量及入場管制

- 靜苑同一時間可容納的訪客量為 50 人。各時期的開放時間如下:

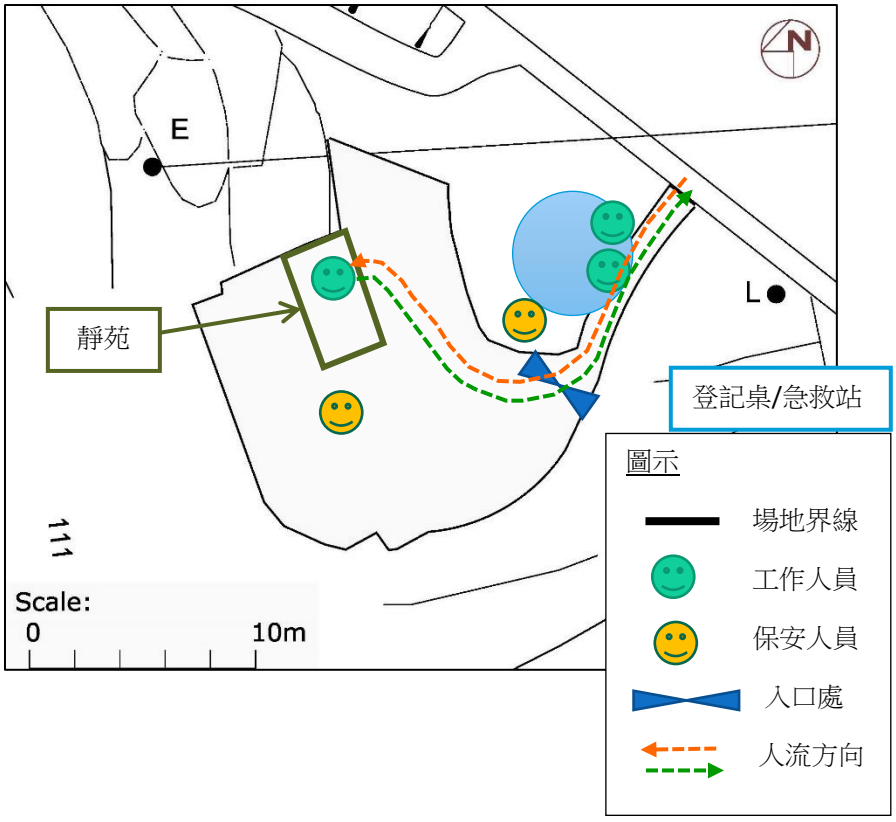
時期	開放時間
平日星期一至五	早上10:00 至下午5:00
平日星期六、日及一般公眾假期	早上10:00 至下午5:00
掃墓高峰日子*	早上9:00 至下午6:00

** 「掃墓高峰日子」：清明節及重陽節正日及其之前三週和其後三週的星期六及星期日*



場內措施

- 場內沒有道路，而行人路只有一個建築物出入口，人流方向只會出入建築物。
- 在靜苑入口處，將安排登記桌，有職員為已預約前來人士進行登記。職員屆時會核對每位訪客的姓名和電話號碼，並登記他們的到達及離開骨灰安置所的時間。已完成登記的訪客，必須要戴上用作分辨時段的訪客證，並在離開時交還，以便識別在場的訪客數目和身份。
- 登記桌同時也作為急救站，具備臨時急救箱，並安排至少一名持有認可合資格急救證書人員當值服務。
- 靜苑會安排廣播措施，廣播場內安排。灰樓每層將安排工作人員負責調配訪客、監控進入人數、確保訪客守時離開以及疏導人群。場內每個工作人員將會佩帶對講機，方便協調和溝通。
- 在拜祭時段全部結束後，將當天的訪客資料整理好，在電子登記冊內補充訪客原有的預約記錄。電子登記冊的資料將會保留最少三年，以便在骨灰所辦人員要求時提供該些紀錄以作查閱。


N
E
L
靜苑
登記桌/急救站
111
Scale:
0
10m
圖示
場地界線
工作人員
保安人員
入口處
人流方向

場內措施

- 場內沒有道路，而行人路只有一個建築物出入口，人流方向只會出入建築物。
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- 場內具備臨時急救箱，並安排至少一名持有認可合資格急救證書人員當值服務。
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(11) 確保骨灰安置所持續營運的財務方案

- 靜苑已製備完善及配合長期發展方向的財務政策，以確保靜苑的長期運作及日常營運開支及大樓維修保養的安排，以提供舒適及安全的環境供訪客使用。
- 財務方案摘要 詳見附件 1。

(12) 管理方案的執行人及批准人

姓名	：	吳維乾
職位	：	行政及拓展部經理
聯絡電話號碼	：	9463 9398
電郵地址	：	kenneth@shatinchingyuen.com
簽署及蓋印	：	

TOP CENTURY GROUP HOLDINGS LIMITED 百年控股有限公司

日期 ： 2022 年 1 月 7 日

9463 9398
kenneth@shatinchingyuen.com

2022 1 7

Table 1: Schedule of Uses for "OU" zone annotated "Columbarium (1)"

OTHER SPECFIED USES

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
For "Columbarium (1)" Only	
Columbarium	

Planning Intention

This zone is primarily for land intended for columbarium use.

Remarks

(a) On land designated "Other Specified Uses" annotated "Columbarium (1)",

(i) no new development or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of **a maximum gross floor area of 119.76m^2** and **a maximum site coverage of 27.7%**;

(ii) no new development or addition, alteration and/or modification to an existing building, other than redevelopment of an existing building, shall exceed **a maximum building height of 3-storey (7.62m)**. An existing building is allowed to be redeveloped to the same height of the building provided the existing gross floor area of the building is not exceeded; and

(iii) **a total number of niches for columbarium use shall not exceed 1,716 niches**.

(b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the gross floor area/site coverage/building height restrictions/total number of niches stated in paragraphs (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

Appendix III of RNTPC
Paper No. Y/ST/53

Detailed Comments of Chief Building Surveyor/New Territories West, Buildings Department (CBS/NTW, BD)

(a) according to Building (Planning) Regulations 27, no building shall be built to abut against a cutting, including a toe wall supporting a cutting and sufficient intervening space should be provide between the building and the cutting;

(b) if the existing structures are New Territories Exempted House under the Buildings Ordinance (Application to the New Territories) (Cap.121 or previous. Cap 322) or existing structure is erected on unleased Government Land, DLO/ST, LandsD should be in a better position to comment on the captioned application;

(c) if the existing structures are erected on leased land, enforcement action may be taken by the BD to effect their removal in accordance with BD's enforcement policy against unauthorised building works (UBW) as and when necessary. The granting of any planning approval should not be construed as an acceptable of any existing building works or UBW on the Site under the BO;

(d) if the proposed use under application is subject to the issue of a license, please be reminded that any existing structures on the Site intended to be used for such purposes are required to comply with the building safety requirements as may be imposed by the licensing authority;

(e) apart from the BO, the use and operation of a columbarium is also subject to the control of various other legislations on town planning, environmental hygiene, traffic control, fire safety etc. and the land lease restrictions under the jurisdiction of the respective Government departments. In addition to complying with the requirements of the BO, the applicant should also seek agreement/approval from the relevant departments and licensing authorities where applicable;

(f) 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) Regulation (B(P)R) respectively;

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

(h) before any new building works are carried out on land, prior approval and consent from the BA should be obtained, otherwise they are UBW. An authorised person must be appointed to coordinate all new building works in accordance with BO; and

(i) detailed comments will be given at building plans submission stage.

城市規劃委員會秘書處
香港北角渣華道 333 號
北角政府合署 15 字樓

規劃申請編號 Y/ST/53 更改規劃用途

本人居住就就近村屋幾十年，每天落車回家都必會由沙田靜苑側邊經過，習以為常。而赤坭坪村對面便是村民土葬墓地，每天都能看見墓園，而沙田靜苑位置比較隱密，亦有大鐵閘遮擋，故沒有特別感覺不妥，外來途人或行山人士經過都不知道有座骨灰安置所存在，而多一所骨灰安置所相信可以幫助部份孝子賢孫解決等候政府龕位之苦，所以本人贊成通過他們申請。

村民

Leonard Cheung.

香港北角政府合署 15 樓
城市規劃委員會秘書處收

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本人為沙田區村民，本人贊成規劃申請編號 Y/ST/53 。得知沙田靜苑向 貴處申請更改規劃用途，回想眾多人士離世後，仍然等候政府骨灰龕位，一等多年，每區都反對在自己區內設置骨灰安置所。而政府卻苦無對策解決。香港大部份土葬墓地或政府骨灰龕場側邊都有骨灰龕安置所，而沙田靜苑位於赤坭坪村村民土葬墓地旁側，距離赤泥坪村都與民居有一寬闊馬路之隔，所以並無特別影響。若說骨灰安置所會令村民不安，土葬不是更加令人不安，若說交通事宜，大埔公路並非繁忙路段，清明及重陽都沒因拜祭問題影響交通。所以本人絕對贊成。

支持者：

Lai Tsz Kit

城市規劃委員會秘書處

香港北角渣華道 333 號

北角政府合署 15 樓

規劃申請編號 Y/ST/53

158

先生/女士：

由大埔公路起點至終點，周邊有不少原居民村落，包括赤泥坪村，大埔尾村等等，另外亦有新型屋苑建立，至於原居民享有香港政府極大權利，包括原居民享有丁權，可向政府取地起屋，原居民一旦離世，亦可以向政府取地作土葬用途的權利，而移居原居民村落或其他非原居民的屋苑，不管居住數以十年，都視為外來人士，沒有任何此項權利。眼見整條大埔公路，眾多原居民墓園(佔地不少於五份一)只准許原居民所用。而移居者一旦去世，親人只能向外尋覓骨灰安置所，當春秋二祭，極為不便。沙田靜苑骨灰安置所座落赤泥坪村原居民墓園傍邊，左右並無任何屋村，而對面村亦相隔一定距離，亦正好解決非原居民人士所需，方便他們短時間內拜祭先人，亦能解決政府現時骨灰龕部份不足問題，真正雙贏局面。所以我絕對讚同有關規劃申請。

Hiliary Tse

謹啟

貴署檔案: 規劃申請編號 Y/ST/53

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香港北角渣華道 333 號
北角政府合署 15 樓
城市規劃委員會秘書處

敬啟者:

「綠化地帶」改劃為「其他指定用途」註明「靈灰安置所(1)」地帶

作為沙田區居民，現特致函 貴署，表示支持 Y/ST/53 規劃申請，支持理據如下:

1) 骨灰龕需求日益增加，需要多管齊下解決骨灰龕位不足的問題。現時的規劃申請能夠於市區附近增加骨灰龕位供應，不能錯過該發展機會。否則，私人骨灰龕位供應可能受到打擊，而發展商於將來亦可能因規劃限制而對發展骨灰龕位卻步；相反，該等發展可帶動就業及經濟，更能提供規劃誘因，鼓勵私人企業發展合規格、合法、質素良好的靈灰安置所，改善現時供應不足及無管理的問題;

2) 該地於數十年前已被平整，沒有任何綠化價值，而發展骨灰龕能夠物盡其用，為社會帶來莫大裨益。同時，該地附近現時有充份綠化，更有大樹阻隔視野，加上該規劃並沒有打算建構樓宇，對現時的景觀及綠化狀況毫無影響。因此，於該地發展骨灰龕場所能有效釋放土地價值，同時又不損害現有環境狀況;

3) 交通顧問評估數據得出發展並不會為附近交通產生嚴重影響，而負責人將提供接駁巴士服務及人流管制系統控制交通流量，因此對附近居民並不會做成重大困擾；而且該地位置接近市區，市民可更方便前往;

綜合上述意見，我支持以上申請。

此致
城市規劃委員會秘書處

李惠敏

香港北角渣華道 333 號
北角政府合署 15 樓
城市規劃委員會秘書處

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敬啟者:

規劃申請編號 Y/ST/53 之意見表達

本人作為沙田區居民，希望對以上規劃申請作出意見表達。

一：人口老化，骨灰龕需求日益增加，因此必須解決骨灰龕位不足的問題。若只因為所規劃的骨灰龕位與民居距離較近(雖已有大樹及公路阻隔)，將不能有效解決骨灰龕位供應問題。希望各位市民對骨灰龕發展更開放，對香港社會發展付出更多。

二：該地一直並非作綠化用途，因此其綠化價值並不高。附近更有大樹阻隔居民視野，而加上該規劃並不會有大型工程，所以理論上對環境並無太大影響。

三：交通問題一直存在，並不覺得因有骨灰龕發展而會惡化。相反，政府應考慮改善現時巴士小巴班次，令遊人及居民能夠同時享用。

無可否認，此規劃更改會令有交通及景觀有些微改變，但希望政府詳細專業評審申請人之設計會否對環境及交通造成不可改變的影響。因此，本人支持有關規劃。

居民

Ms. Yu Shan Chan

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 Y/ST/53

意見詳情（ 如有需要，請另頁說明 ）

Details of the Comment (use separate sheet if necessary)

作為香港居民，本人支持上述規劃申請。

第一，是次改劃用地並非破壞現時綠化帶。根據資料圖片，該地於數十年前已由石屎覆蓋，同時建有寮屋，因此其綠化價值並不高。若有關申請獲得批准，即可物盡其用，運用該土地發展骨灰龕，幫助解決社會問題。同時，該發展亦有效規範及確立現有綠化帶，免受將來發展影響。

第二，所擬議的骨灰龕發展規模少，對該地景觀，交通，環境等等都只產生了微不足道的影響。該地現時及以往一直由大樹覆蓋，而申請人亦表明並不會改動現有屋宇；交通顧問評估數據同時得出發展並不會為附近交通產生嚴重影響，而申請人亦會提供接駁巴士服務，及人流管制系統，管理及預測人流情況。因此，該等發展規模並不會破壞當區民生及環境。

第三，現時骨灰龕供應嚴重不足，需要政府及私人機構多管齊下推動骨灰龕發展。該土地位置相對上較其他骨灰龕場便利，亦能提供約一千三百個龕位，有助解決以上問題。加上人口老化問題越趨嚴重，若錯過是次私人發展骨灰龕場所的機會，相

信對穩定骨灰龕供應有一定負面影響。申請人亦於文件上指出若規劃申請受接納，他將履行社會責任，以合理價錢出售骨灰龕。

第四，該地環境清幽，四圍皆有樹木覆蓋，與大自然融為一體，而民居亦有約十米的大埔公路作阻隔，非常適合發展骨灰龕場所。同時，此發展能提供誘因，鼓勵私人企業發展合規格，合法，質素良好的靈灰安置所，改善現時供應不足及無管理的問題。

最後，香港土地嚴重不足，於香港 2030+規劃框架內，規劃署亦指出骨灰龕場所用地的嚴重不足，而相信沒有私營發展的配合，該發展目標並不能被輕易達成。因此，雖然發展有機會為附近居民帶來輕微影響，但綜觀全港，此等政策對推動香港未來發展有必然性。若錯失此發展機會，除了會減慢供應速度，亦會令私人發展公司失去信心，減慢對發展骨灰龕場所的投質。長遠來說，平衡各方利益及影響，於上述地帶發展骨灰龕場所為對香港，對市民有好處的規劃。因此，我支此有關申請，並希望貴署及相關政府部門適切考慮有關意見，改善現時骨灰龕供應不足的問題。

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

簽署 Signature _____ 日期 Date 18.11.2021

RECEIVED
23 NOV 2021
Town Planning Board

沙田鄉事委員會
電話: 2691 1465 傳真: 2699 2717
新界沙田排頭街 13 號

SHATIN RURAL COMMITTEE
Tel.No.2691 1465 Fax No.2699 2717
No.13 Pai Tau Street, Shatin, N.T.

本會檔號：STRC2021-62
敬啟者：

新界沙田馬料水大埔道赤泥坪村 110 號丈量約份第 42 約地段第 499 號 A 分段餘段（部分）、第 500 號 A 分段餘段（部分）、第 503 號、第 504 號（部分）、第 505 號（部分）、第 506 號（部分）及毗連政府土地把「綠化地帶」地帶改劃「其他指定用途」註明「靈灰安置所（1）」地帶（申請編號：Y/ST/53 申請人提交的進一步資料）

本會及赤泥坪村居民堅決反對題述規劃申請，反對理由以下：

一、反對於村口「綠化帶」改劃骨灰龕，政府漠視村民反對任由申請人繼續擴張經營，助長商家謀利，吸引更多人去拜祭，不但對當區造成負面影響，威脅鄉村原本清幽寧靜，破壞原有生態環境。

二、增加當區車流人流，對居民帶來長遠影響，居民反映由於區內交通設施不足，每逢春秋二祭人流車流加劇，交通問題最為嚴重；至於申請人提出以旅遊巴接載拜祭人士，以減低對當區交通影響，這只是申請人為掩蓋問題提出不切合實際辦法，由於拜祭人數眾多，來自不同地區的拜祭人士來說旅遊巴不是強制性交通工具和唯一交通工具，針對性不大也難以有所作為，旅遊巴和私家車同一時段前往掃墓，對當區交通只會帶來更壞情況，申請人無法提供適合停車場，周邊地理位置也不設任何泊車位置，一旦掃墓人士駕車前往拜祭造成違泊，不但影響居民日常生活，違泊路邊車輛將阻礙其他行駛車輛及行人視線，容易引發交通意外，嚴重將造成人命傷亡。

三、是次興建骨灰龕場存在消防安全隱患，該地段臨近山林容易釀成火災引發山火，且出入山路陡斜狹窄，消防車只能停泊在附近「駁喉」救火，一旦發生嚴重火災，後果將不堪設想。

四、赤泥坪村村民堅決反對骨灰龕場設置，擔心影響村中風水，破壞村中安寧，村民及居民因此而感到精神困擾、心緒不寧、寢食不安，由於該地段正對該村村口，夾於該村兩幅風水地之間，嚴重破壞三百年來赤泥坪村傳統龍脈、風水。

沙田鄉事委員會
電話: 2691 1465 傳真: 2699 2717
新界沙田排頭街 13 號

SHATIN RURAL COMMITTEE
Tel.No.2691 1465 Fax No.2699 2717
No.13 Pai Tau Street, Shatin, N.T.

基於以上原因，漠視居民反對，置居民於水深火熱，破壞該村風水，我等決不能坐視不理，誓死捍衛鄉村合法權益，期盼 貴署理解居民苦況、正視居民訴求，綜合評估和考量否決申請。

此 致
城市規劃委員會

沙田鄉事委員會主席莫錦貴

日期 2021 年 11 月 22 日

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 Y/ST/53

意見詳情 (如有需要，請另頁說明)
Details of the Comment (use separate sheet if necessary)

反對赤坭坪 110 號改劃靈灰安置所

這路段赤坭坪村居民泊車位已嚴重不足，若改劃靈灰安置所會導致違泊問題更嚴重，加上道路網絡不足而出現極為嚴重的交通擠塞問題。

這路段欠缺足夠公共交通路線，無法承載骨灰安置所帶來的人潮壓力，影響附近居民出入；煙灰會導致空氣污染，排污問題或污染水源，引致臭味及環境問題，影響附近居民。

這里是住宅區及位置在赤坭坪村正門口，若改劃將帶來大量人流及進行宗教儀式，會破壞寧靜環境，靈車出入亦封居民構成心理陰影。

「提意見人」姓名/名稱/Name of person/company making this comment YAU CHAK KI

簽署 Signature _____ 日期 Date 30 Nov 2021

致城市規劃委員會祕書處
香港北角渣華道333號
北角政府合署15樓

新界
沙田赤坭坪村
17 A 地下
邱(丘)嘉義堂村公所
日期: 30/11/2021

敬啟者:

關於：規劃申請編號 Y/ST/53的申請
提交以下 反對意見

在申請者換湯不換藥以故弄玄虛手法, 取消之前**規劃申請編號 Y/ST/46的改劃申請,** 並從新改用上列編號再申請, 為求達到其以不良手法奪取不義利益, 不惜勞民傷財, 浪費各有關部門及各方公眾之資源、人力物力, 以***掩蓋***其因各種不利於其申請的條件。

未被批准下, 在各方據理反對下, 於十多年前以先下手為强手段, 將該處位於[綠化地帶] /本村的 [鄉村範圍] 之110號及毗連政府土地等改造為骨灰龕(靈灰安置所), 根據其呈報予 貴處之資料並已售出及佔用了部分龕位, 如此無視道德及不負責任實令人憤慨！

繼之前為反對原本**規劃申請編號 Y/ST/46的改劃申請,** 吾等三位村代表及本村村民曾經呈遞予 貴處的信件、意見書內所力陳該規劃申請將會造成各種不良後果及影響外, *我們再重申如十多年來一樣貫徹堅決反對在 [綠化地帶] / 本村的 [鄉村範圍] 內之上述申請。*

一如既往, 吾等三位村代表及本村村民再次續以***真實姓名及住址***, 向 貴處呈遞反對意見書，再次力陳上述改劃會造成以下各種不良後果及影響 ：

(1) 破壞綠化地帶, 法例不容;
(2) 破壞本村三佰年來風水龍脈, 影響傳統鄉村習俗深遠, 村民憂心戚戚, 後果堪憂;
(3) 春秋二祭龐大數量人流處於該狹窄陡坡地域會造成:
- *衛生及安全問題, 如破壞及污染環境、排污問題、消防問題等等;*
- *嚴重交通問題, 如違泊、道路不勝負荷造成人車擠塞、影響出入及其他等等造成危險易生意外。 就申請人提交的交通影響評估, 我們再强調無論在數字上及天花亂墜的紙上安排、說項, 都離不開及無助春秋二祭, 我們中國人的考思傳統, 眾多家屬前來此狹窄並處於貼近公路旁斜坡上之崎嶇地域, 拜祭1700多個先人骨灰龕的龐大人流所帶來的嚴重交通、擠逼以致意外之難以逆轉的不良後果, 更甚危害人身的安全等等不能排除的問題。以其能力我們不相信其能妥善處理。最現實的例子: 為防意外, 資源、人力強大如政府要控制節日等人流, 都要各有關部門分工合作有計劃下部署及配合, 有序地執行/處理。*
(4) 先破壞後申請，立不良先例; 及
(5) 其它未能盡錄之弊端等等。

並針對其向 貴處提交之 **規劃申請編號 Y/ST/53的申請部分內容作如下反駁:**

1. 申請表格
表格S12A - 附錄 (Form 12A Appendix) - 各樓層的用途 (G/F, 1/F, 2/F)
- 三層之樓梯乃處於(應該)未被批准的屋外, 據知之前申請者曾經用同樣手法在此屋外搭建樓梯, 因改變土地用途而被政府執法充公該裝梯之土地, 據聞後來拆掉該不法樓梯取回土地。現在又重施故技 (先破壞後申請例子), 懇請並相信 貴處定會嚴加考慮前車可鑑; 更可況若此等屋外樓梯被批准的話, 在先例可援及平等機會下, 此例一開其他人(尤

其本村)也可作同樣改劃申請!?

表格S12A - 附錄 (Form 12A Appendix) -擬議發展計劃的影響

- 不同意其所稱不會對環境影響、對交通影響、受斜坡影響、構成視覺影響及其他影響。事實正如我們及各方面的反對意見都有陳述。

2. 繪圖/ 圖則

Ref: ADCL/PLG-10191/R002 – Appendix II – Architectural Drawings

- 如其圖示及此信上述, 各層樓梯(應該是)非法設於屋外 (先破壞後申請)。

3. 規劃綱領

Section 12A Planning Application – Planning Statement

行政摘要

- (五) 該申請地點處於路旁, 對正本村村口, 破壞三佰來風水龍脈, 出入頂口頂面, 村民都畏懼避而遠之; 而敝村之認可葬區處於隱蔽山上, 在路上並不能望見; 與其申請並不互相協調, 更搭不上任何關係。

- (六), (七) (及其提交之圖示) 其強調該地點 (包括幾幅政府地) 已被鋪上水泥! 正顯示其妄顧法紀 (又一個先破壞後申請例子), 多年來不但圍封佔同政府土地還以此作為向 貴處申請的籌碼。

懇請 貴處能諒解正因為該改劃申請擬建靈灰安置所乃處於本村內，而我們乃直接被影響的一群，所以才不懈地向 貴處申訴及極力反對上述申請，並依賴及祈望 貴處體察民情將本村及其它的強烈反對意見加上其他不良因素及影響, 一起考慮將此申請不予批准。

自2010年始, 本村村民一直以來皆萬眾一心以行動及向 貴處提交反對意見等, 齊齊反對該改劃申請，反對擬建骨灰龕於此綠化地帶/本村內。倚賴及懇請 貴處高瞻遠矚, 明察秋毫, 並容納以吾等10多年來及各方面呈遞之反對意見於考慮之列。

懇此。

順頌工作愉快。

赤坭坪村代表暨各村民上

丘東來 丘亞波 丘維 (代行)

副本抄送; 沙田民政事務專員 (柯家樂 女士.JP)

沙田鄉事委員會 (莫錦貴主席)

沙田區議會 (周曉嵐議員)

各界關注骨灰龕法案大聯盟 (謝世傑先生)

另看：其他村民依有關表格上呈的反對意見

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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 **Y/ST/53**

意見詳情（ 如有需要，請另頁說明 ）
Details of the Comment (use separate sheet if necessary)

1. 該地址是綠化地帶，不應該發展其他用途，例如靈灰安置所。
2. 政府不應開壞的先例，讓他們先破壞該綠化地帶然後才申請，他們或已違反法例，政府部門應嚴正執法，如有犯法應即時控告他們。
3. 會帶來大量人流作拜祭和舉行宗教儀式，製造噪音破壞本村寧靜環境。
4. 長時間拜祭會導到煙灰污染本村低空氣。
5. 本村平時已欠缺公共交通路線，拜祭人仕急了會帶來嚴重負荷，更加影響居民出入。筆車施工低時間也受影響。
6. 該路段嚴重缺少泊車位，拜祭人仕一定會架車到來會導致嚴重違例泊車問題，造成交通擠塞，更甚至可能會導致交通意外。
7. 車輛違泊也會阻礙本村居民出入。
8. 本人堅決反對未坑坪110號(沙田靜苑)改劃靈灰安置所。

「提意見人」姓名/名稱 Name of person/company making this comment CHAN CHUN KUEN

簽署 Signature 陳 日期 Date 18-11-2021

RECEIVED
30 NOV 2021
Town Planning Board

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民主黨
THE DEMOCRATIC PARTY

周曉嵐 沙田區議員（駿馬）
Chow Hiu Laam Felix, Sha Tin District Councilor (Chun Ma)

香港北角渣華道北角政府合署 15 樓
城市規劃委員會秘書收啟

傳真信件

敬啟者：

有關新界沙田馬料水大埔道赤坭坪村 110 號及毗連土地把「綠化地帶」改劃為「其他指定用途」註明靈灰安置所(申請編號：Y/ST/53)

本辦事處接獲城規會通知有關上述土地改劃申請，現申述如下：

一、是次改劃用地的土地持有人在 2020 年 9 月 1 日提交土地改劃申請(申請編號:Y/ST/46)，經過超過一年審議過程，申請人前後申請三次延期以回應部門意見，但申請方最終撤回申請，並在修訂發展面積後再次向城規會提交新的申請。新申請的所要求的提供的靈灰龕位數量與上次的一致。

二、必須強調有關改劃位於綠化地帶，政府當年以大埔公路為界劃分綠化地帶和鄉村在於限制城市化的發展，並作為郊野公園和住宅區的緩衝，如果是次申請獲得批准，將會進一步蠶食近大埔滘一帶的綠化地帶面積，對附近環境帶來不良影響。

三、沙田靜苑的發展追朔至 2009 年，當時村民發現原有寮屋改建為骨灰安置所，便發起抗議行動，向政府部門和發展商表達強烈反對意見。發展商早於十年前已經把上述土地上的構築物發展成骨灰龕場並在市場上出售，現是已經有骨灰上位，是次改劃是屬於「先發展後申請」的模式，發展商罔顧土地規劃的相關法例，把原為綠化地帶的土地改變用途，製造既成事實，再要求城規會通過其改劃申請。

四、按照申請人交通及公共運輸安排，春秋二祭期間申請人將安排穿梭巴士接送拜祭人士前往骨灰龕場，約三十分鐘一班。申請人提出穿梭巴士待命期間將會停泊在大學站澤祥街停泊處。然而澤祥街停泊處與靈灰安置所距離甚遠，由澤祥街前往大埔公路馬料水段需繞經新界環迴公路再由馬場折返大埔公路馬料水段，來回車程達十六分鐘，以穿梭巴士半小時一班而言，以澤祥街車場作為暫時停泊處並不符效益，前線司機亦難以執行(見附件一)，相信穿梭巴士在待命期間將會停泊在近赤坭坪村或中文大學附近大埔公路。或赤坭坪垃圾站。

五、雖然，申請方指出鼓勵拜祭人士在平日使用公共交通工具前往靈灰安置所進行拜祭活動，並要求拜祭人士不要駕駛私家車。然而前往靈灰安置所的公共交通

辦事處地址：沙田火炭銀禧薈 706 室
電話：[redacted]/ 26066617
電郵：felixchowhiulaam@dphk.org

民主黨
THE DEMOCRATIC PARTY

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周曉嵐 沙田區議員（駿馬）
Chow Hiu Laam Felix, Sha Tin District Councilor (Chun Ma)

服務不穩，班次亦較為疏落(部分巴士路線需半小時才有一班)相信難以滿足拜祭人士在平日的需求。部分拜祭人士或會在平日駕駛私家車前往靈灰安置所並停泊在近赤坭坪村位置帶來違泊問題，造成阻塞。

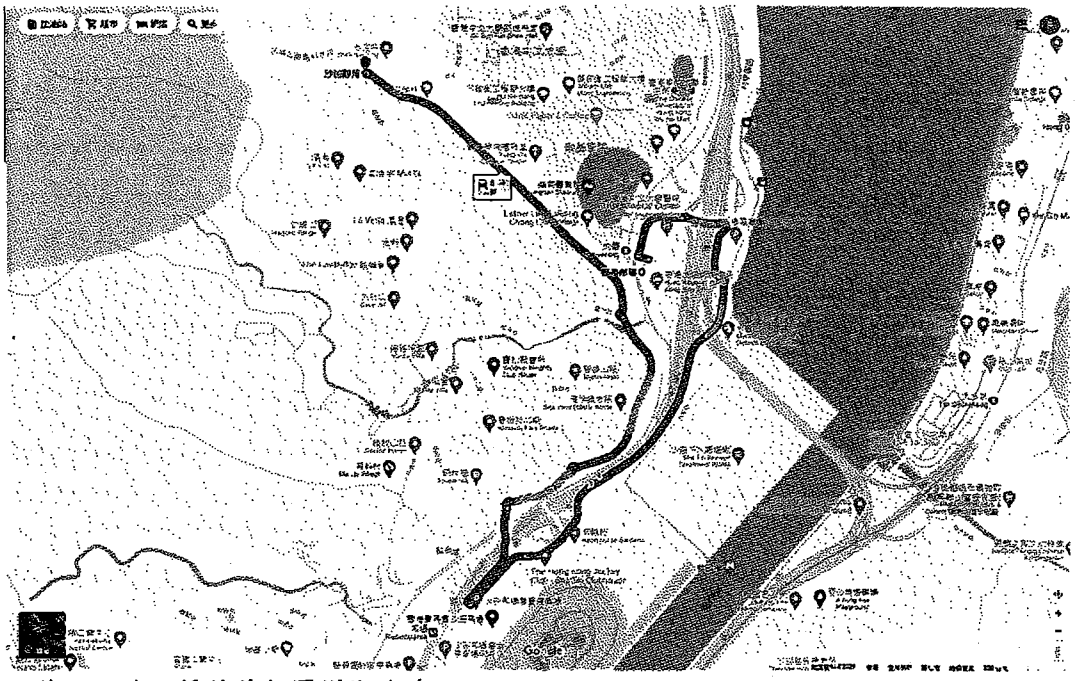
六、本港老年人口比例增加，令骨灰龕位需求增加，造就私營骨灰龕場行業發展。不少鄉村用地、綠化地帶、祠堂、寺院等發展成私人骨灰龕場謀取利潤，但這些改變未經妥善交通規劃，以致未能符合社區的發展。政府必須發揮主導角色加強規管私營骨灰龕場的發展，並增加公營龕位的供應，讓廣大市民能使用價格合理的服務。

Office of CHOW Hiu-laam Felix, District Councilor
周曉嵐
議員辦事處

此致
城市規劃委員會委員

沙田區議員(駿馬) 周曉嵐謹啟

二零二一年十一月十七日



附件一：沙田靜苑前往澤祥街路線

辦事處地址：沙田火炭銀禧薈 706 室
電話：[redacted] / 26066617
電郵： felixchowhiulaam@dphk.org

tpbpd@pland.gov.hk

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寄件者: EAP KFBG <eap@kfbg.org>
寄件日期: 2021年12月03日星期五 16:20
收件者: tpbpd@pland.gov.hk
主旨: KFBG's comments on three planning applications
附件: 211203 s16 MTL 4.pdf; 211203 s12a ST 53.pdf; 211203 s16 NSW 294.pdf

Dear Sir/ Madam,

Attached please see our comments regarding three applications. There are three pdf files attached to this email. If you cannot see/ download these files, please notify us through email.

Best Regards,

Ecological Advisory Programme
Kadoorie Farm and Botanic Garden

嘉道理農場暨植物園公司
Kadoorie Farm & Botanic Garden Corporation

The Secretary,
Town Planning Board,
15/F, North Point Government Offices,
333, Java Road, North Point,
Hong Kong.
(Email: tpbpd@pland.gov.hk)

3rd December, 2021. **By email only**

Dear Sir/ Madam,

To rezone the application site from "Green Belt" to "Other Specified Uses" annotated "Columbarium (1)"
(Y/ST/53)

1. We refer to the captioned.

2. We urge the Board to consider all potential impacts that would be associated with the proposal and also the potential cumulative impacts of approving this application on the Green Belt (GB) zone as the approval would set a precedent for other similar cases in this GB.

3. Thank you for your attention.

Ecological Advisory Programme
Kadoorie Farm and Botanic Garden

香港新界大埔林錦公路
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Email: eap@kfbg.org