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

此文件於 2021年 1月 25日 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 25 JAN 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/49 |
|---|---|---|
| | Date Received 收到日期 | 25 JAN 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。

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**1. Name of Applicant 申請人姓名/名稱**

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

**Good Faith Limited**

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

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

**PlanPlus Consultancy Limited**

**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 ☑<br>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 2 and 671 in D.D. 181 in Tai Wai, Sha Tin, New Territories** |
| (c) | Site Area 申請地點面積 | **4,006.39** 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) | .....sq.m 平方米 ☐ About 約 |
| (e) Current use(s) 現時用途 | **Puguangming Temple of worship for Buddhist followers/ believers and a monastery for Buddhist monks**<br>(If there are any Government, institution or community facilities, please illustrate on plan and specify the use and gross floor area)<br>(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 24/12/2020 (DD/MM/YYYY), this application involves a total of 1 "current land owner(s)"#.
根據土地註冊處截至 ..... 年 ..... 月 ..... 日的記錄，這宗申請共牽涉 ..... 名「現行土地擁有人」#。

(b) The applicant 申請人 –

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

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

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

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

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

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

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

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

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

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

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

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

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

Others 其他

☐ others (please specify)
其他（請指明）

_____

_____

_____

_____

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

## 6. 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) | **"Residential (Group B)" ("R(B)") and "Green Belt" ("GB")** |

## 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 Religious Institution with Columbarium)) [ ]
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 Planning Statement**

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

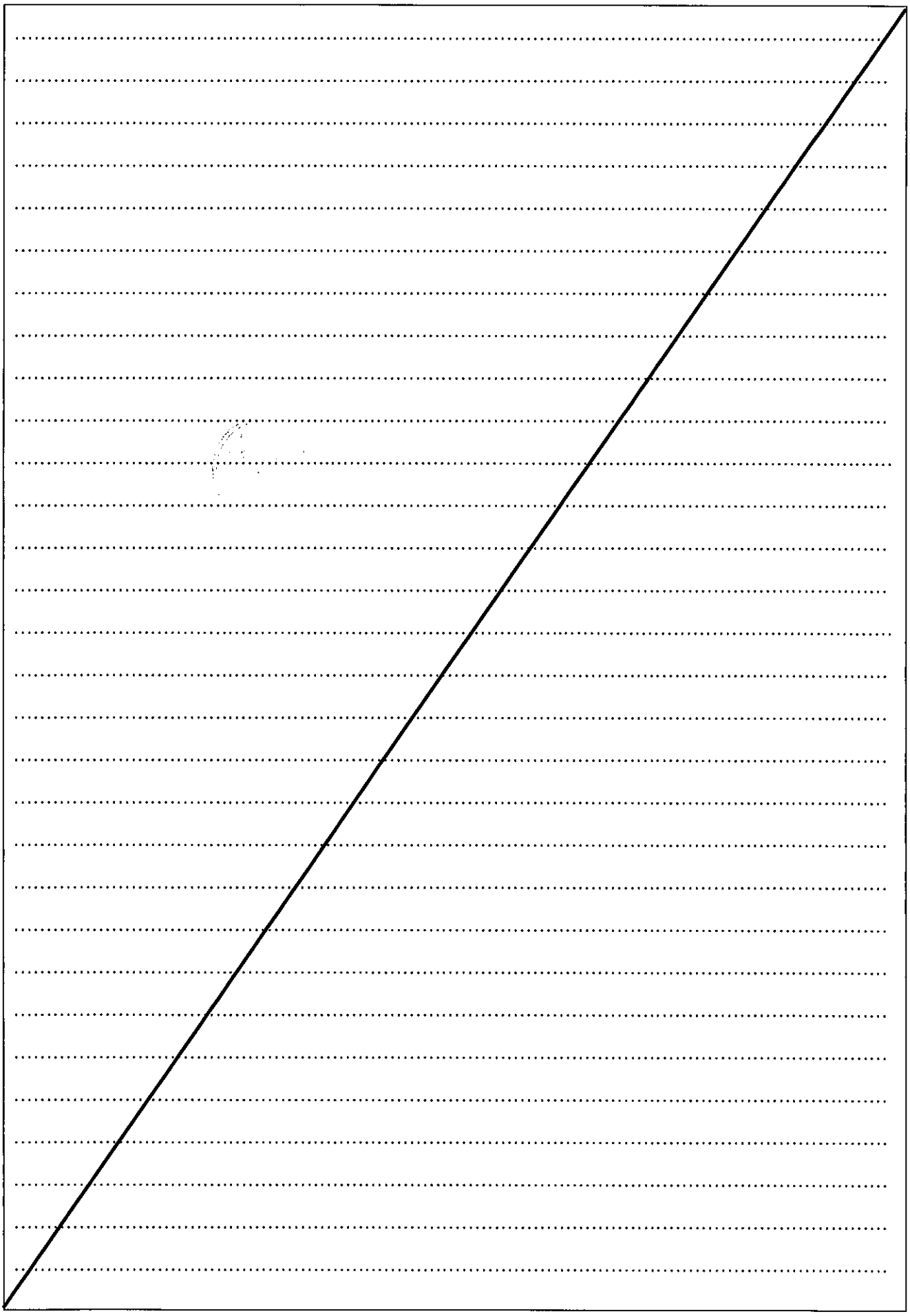
☑ Particulars of development are included in the **Appendix**.
附錄包括一個擬議發展的細節。

☐ 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 Planning Statement**



**Part 9 (Cont'd) 第 9 部分(續)**

## 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

KENNITH CHAN ..... MANAGING DIRECTOR .....

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

Professional Qualification(s) 專業資格
☑ Member 會員 / ☐ Fellow of 資深會員
☑ HKIP 香港規劃師學會 / ☐ HKIA 香港建築師學會 /
☐ HKIS 香港測量師學會 / ☐ HKIE 香港工程師學會 /
☐ HKILA 香港園境師學會/ ☐ HKIUD 香港城市設計學會
Others 其他 RPP

on behalf of 代表 PlanPlus Consultancy Limited

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

Date 日期 3 /12/2020 ..... (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 | 1,412.6 sq.m. 平方米 | ☑ About 約 |
| ☑ Proposed plot ratio 擬議地積比率 | 0.35 | ☑ About 約 |
| ☑ Proposed site coverage 擬議上蓋面積 | 18 % | ☑ 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<br>☐ include 包括 ____ storeys of basements 層地庫<br>☐ 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 | 11.9 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 | 1,412.6 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) 1,412.6 sqm. for religious institution and columbarium uses | |
| 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 | Memorial Hall, Office, Storage, Lavatory, Kitchen, Ancillary Uses |
| 1 | 1 | Memorial Hall, Roof |
| 1 | 2 | Memorial Hall |
| | | |
| | | |

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

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))
.....

☑ 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)
4.5m for the vehicular carriageway and 2m for the pedestrian footpath.

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?<br>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<br>.....<br>.....<br>..... |
| | No 否 | ☑ |
| Does the development proposal involve the operation on the right?<br>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)<br>(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)<br>☐ Diversion of stream 河道改道<br>☐ Filling of pond 填塘<br>Area of filling 填塘面積 ..... sq.m 平方米 ☐About 約<br>Depth of filling 填塘深度 ..... m 米 ☐About 約<br>☐ Filling of land 填土<br>Area of filling 填土面積 ..... sq.m 平方米 ☐About 約<br>Depth of filling 填土厚度 ..... m 米 ☐About 約<br>☐ Excavation of land 挖土<br>Area of excavation 挖土面積..... sq.m 平方米 ☐About 約<br>Depth of excavation 挖土深度 .....m 米 ☐About 約 |
| | No 否 | ☑ |

| | | | |
|---|---|---|---|
| Would the development proposal cause any adverse impacts?<br>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 ☑ |
| | _____<br>_____ | | |

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)

.....
.....
.....
.....
.....
.....

**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<br>在龕位內最多可安放骨灰的數量 | 19,907 (single: 9,173; double: 5,367) |
| Maximum number of sets of ashes that may be interred other than in niches<br>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 | 14,540 |
| Total number of single niches<br>單人龕位總數 | 9,173 |
| Number of single niches (sold and occupied)<br>單人龕位數目 (已售並佔用) | 149 |
| Number of single niches (sold but unoccupied)<br>單人龕位數目 (已售但未佔用) | 9,024 |
| Number of single niches (residual for sale)<br>單人龕位數目 (待售) | 0 |
| Total number of double niches<br>雙人龕位總數 | 5,367 |
| Number of double niches (sold and fully occupied)<br>雙人龕位數目 (已售並全部佔用) | 13 |
| Number of double niches (sold and partially occupied)<br>雙人龕位數目 (已售並部分佔用) | 121 |
| Number of double niches (sold but unoccupied)<br>雙人龕位數目 (已售但未佔用) | 5,233 |
| Number of double niches (residual for sale)<br>雙人龕位數目 (待售) | 0 |
| Total no. of niches other than single or double niches (please specify type)<br>除單人及雙人龕位外的其他龕位總數 (請列明類別) | N/A |
| Number. of niches (sold and fully occupied)<br>龕位數目 (已售並全部佔用) | N/A |
| Number of niches (sold and partially occupied)<br>龕位數目 (已售並部分佔用) | N/A |
| Number of niches (sold but unoccupied)<br>龕位數目 (已售但未佔用) | N/A |
| Number of niches (residual for sale)<br>龕位數目 (待售) | N/A |
| Proposed operating hours 擬議營運時間 | 9am to 6pm, daily |

@ 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.<br>申請編號 | (For Official Use Only) (請勿填寫此欄) |
| Location/address<br>位置／地址 | **Lot Nos. 2 & 671 in D.D. 181 in Tai Wai, Sha Tin, New Territories** |
| Site area<br>地盤面積 | **4,006.39** sq. m 平方米 ☑ About 約<br>(includes Government land of 包括政府土地 sq. m 平方米 ☐ About 約) |
| Plan<br>圖則 | **Approved Sha Tin Outline Zoning Plan No. S/ST/34** |
| Zoning<br>地帶 | **"Residential (Group B)" ("R(B)") and "Green Belt" ("GB")** |
| Proposed Amendment(s)<br>擬議修訂 | ☐ Amend the Covering Notes of the Plan<br>修訂圖則《註釋》的說明頁<br>☐ Amend the Notes of the zone applicable to the site<br>修訂適用於申請地點土地用途地帶的《註釋》<br>☑ Rezone the application site from **"R(B)" & "GB"** to **"Other Specified Uses" annotated "Religious Institution with Columbarium"**<br>把申請地點由_____地帶改劃為_____ |

**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<br>總樓面面積及／或地積比率 | Domestic<br>住用 | ☐ About 約<br>☐ Not more than 不多於 | ☐ About 約<br>☐ Not more than 不多於 |
| | | Non-domestic<br>非住用 | **1,412.6** ☑ About 約<br>☐ Not more than 不多於 | **0.35** ☑ About 約<br>☐ Not more than 不多於 |
| (ii) | No. of block<br>幢數 | Domestic<br>住用 | | |
| | | Non-domestic<br>非住用 | **1** | |
| | | Composite<br>綜合用途 | | |

| | | | |
|---|---|---|---|
| (iii) | Building height/No. of storeys<br>建築物高度／層數 | Domestic<br>住用 | m 米<br>☐ (Not more than 不多於) |
| | | | mPD 米(主水平基準上)<br>☐ (Not more than 不多於) |
| | | | Storeys(s) 層<br>☐ (Not more than 不多於)<br>*(☐Include 包括/☐ Exclude 不包括*<br>☐ *Carport 停車間*<br>☐ *Basement 地庫*<br>☐ *Refuge Floor 防火層*<br>☐ *Podium 平台)* |
| | | Non-domestic<br>非住用 | **11.9** m 米<br>☐ (Not more than 不多於) |
| | | | mPD 米(主水平基準上)<br>☐ (Not more than 不多於) |
| | | | **3** Storeys(s) 層<br>☐ (Not more than 不多於)<br>*(☐Include 包括/☐ Exclude 不包括*<br>☐ *Carport 停車間*<br>☐ *Basement 地庫*<br>☐ *Refuge Floor 防火層*<br>☐ *Podium 平台)* |
| | | Composite<br>綜合用途 | m 米<br>☐ (Not more than 不多於) |
| | | | mPD 米(主水平基準上)<br>☐ (Not more than 不多於) |
| | | | Storeys(s) 層<br>☐ (Not more than 不多於)<br>*(☐Include 包括/☐ Exclude 不包括*<br>☐ *Carport 停車間*<br>☐ *Basement 地庫*<br>☐ *Refuge Floor 防火層*<br>☐ *Podium 平台)* |
| (iv) | Site coverage<br>上蓋面積 | **18** % | ☑ About 約 |
| (v) | No. of units<br>單位數目 | | |
| (vi) | Open space<br>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<br><br>Private Car Parking Spaces 私家車車位<br>Motorcycle Parking Spaces 電單車車位<br>Light Goods Vehicle Parking Spaces 輕型貨車泊車位<br>Medium Goods Vehicle Parking Spaces 中型貨車泊車位<br>Heavy Goods Vehicle Parking Spaces 重型貨車泊車位<br>Others (Please Specify) 其他 (請列明)<br>_____<br>_____ | |
| | Total no. of vehicle loading/unloading bays/lay-bys 上落客貨車位／停車處總數<br><br>Taxi Spaces 的士車位<br>Coach Spaces 旅遊巴車位<br>Light Goods Vehicle Spaces 輕型貨車車位<br>Medium Goods Vehicle Spaces 中型貨車位<br>Heavy Goods Vehicle Spaces 重型貨車車位<br>Others (Please Specify) 其他 (請列明)<br>_____<br>_____ | |

**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。

PLANPLUS 思顧
CONSULTANCY 諮問

# Section 12A Application for Rezoning from "Residential (Group B)" & "Green Belt" to "Other Specified Uses (Religious Institution with Columbarium)" Zone for Puguangming Temple and Columbarium (Proposal 2) at Lot Nos. 2 & 671 in D.D.181 in Tai Wai, Sha Tin, New Territories

## Planning Application No. Y/ST/49

## Further Information 11

**April 2023**

Reference : PPC-PLG-10053b

# Annex 1

Consolidated Planning Statement

# Section 12A Application for Rezoning from "Residential (Group B)" & "Green Belt" to "Other Specified Uses (Religious Institution with Columbarium)" Zone for Puguangming Temple and Columbarium (Proposal 2) at Lot Nos. 2 & 671 in D.D.181 in Tai Wai, Sha Tin, New Territories

## Planning Statement


*Prepared by*
Planning Consultant : PlanPlus Consultancy Limited

*In Association with*
Traffic Consultant : CTA Consultants Limited
Environmental Consultant : Ramboll Limited



**April 2023**
Reference : PPC-PLG-10053b
Report : Version 7.0

# EXECUTIVE SUMMARY

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

This Application is submitted to the Town Planning Board ("**the Board**") under Section 12A of the Town Planning Ordinance for the Rezoning from "Residential (Group B)" ("**R(B)**") and "Green Belt" ("**GB**") zone to "Other Specified Uses" annotated "Religious Institution with Columbarium" zone for Puguangming Temple ("**the Rezoning Proposal**") in the Approved Sha Tin Outline Zoning Plan (**the OZP**) No. S/ST/36 at Lots 2 and 671 in D.D. 181, Sha Tin, New Territories ("**the Application Site**").

An application for Private Columbarium Licence had been submitted by the Applicant to the Private Columbaria Licensing Board ("**PCLB**") for the niches at the Application Site. The Rezoning Proposal aims to rectify the existing 'Religious Insitution' use and the said niches to meet the requirements of the Private Columbaria Ordinance.

The Application Site has been used as 'Religious Institution' uses since the 1950s, long before the gazettal of the first Outline Zoning Plan. The Lutheran Theological Seminary occupied the Application Site commencing from the 1950s till their relocation in 1992. Before taken up by the existing Puguangming Temple and columbarium, the Christian Conference of Asia Centre operated at the Application Site. Throughout the history of the Application Site, 'Religious Institution' use has been retained, yet the use has not been reflected in any versions of the Sha Tin Outline Zoning Plan. In the first draft Sha Tin Outline Zoning Plan No. S/ST/1 gazetted in 1985, the Application Site was zoned as "R(B)". An arbitrary zoning boundary divided the Application Site into partly "R(B)" and partly "GB" zone on the draft Sha Tin OZP No. S/ST/3 gazetted in 1987, and no amendments have been made up to date.

The current Rezoning Proposal can readily supply at least 4,779 niches to help meet the acute demand for niches in Hong Kong as well as rectifying the zoning boundary to reflect the existing 'Religious Institution' use and columbarium. Techical feasiblity has been confirmed by the Traffic Management Plan, Traffic Impact Assessment, Noise Impact Assessment, and Sewerage Impact Assessment.

On the basis of the above justifications, we sincerely wish that the Board can give a favourable consideration to this Application.

# 內容摘要

*(如內文與其英文版本有差異，則以英文版本為準)*

本規劃申請根據《城市規劃條例》第 12A 條，向城市規劃委員會（下稱「**城規會**」）申請將丈量約份 181 約第 2 號及第 671 號地段（下稱「**申請地點**」）在沙田分區計劃大綱核准圖編號 S/ST/36 (下稱「**核准圖**」) 內從「住宅（乙類）」及「綠化地帶」用途改劃作「其他指定用途」註明「宗教機構及靈灰安置所」地帶(下稱「**修訂圖則申請**」)。

申請人已就申請地點內的龕位向私營骨灰安置所發牌委員會（下稱「**發牌委員會**」）提交私人骨灰級骨執照申請。改劃申請旨在理順現存的「宗教機構」用途和上述骨灰龕位，以滿足私營骨灰安置所條例的要求。

申請地點自 1950 年代以來（早於第一份分區計劃大綱圖刊憲前）一直被用作「宗教機構」用途。路德教會神學院自 1950 年代起至 1992 年在申請地點設立神學院。及後亞洲基督教議會中心和現時的普光明寺使用申請地點。「宗教機構」用途在申請地點一直沒有改變，但歷年來不同版本的沙田分區規劃大綱地圖均沒有顯示該用途。在 1985 年刊憲的第一份沙田分區計劃大綱草圖編號 S/ST/1 中，申請地點被劃為「住宅（乙類）」地帶。在 1987 年刊憲的沙田分區計劃大綱草圖編號 S/ST/3 將申請地點的部分範圍改劃作「綠化地帶」，至今仍沒有任何修訂。

是次的修訂圖則申請不但可以提供 4,779 骨灰龕位以解決骨灰龕位嚴重不足的問題，還能夠修正土地用途界線以及把現時的「宗教機構」用途及骨灰安置所理順。交通管理計劃、交通影響評估、噪音影響評估和排污影響評估已確認是次修訂圖則申請的技術可行性。

基於以上考量因素，申請人懇請城規會委員給予考慮並批准是次修訂圖則申請。

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# 1 INTRODUCTION

## 1.1 The Application

1.1.1 We are commissioned by the Applicant, *Good Faith Limited*, to prepare and submit on its behalf this planning application for rezoning "Residential (Group B)" and "Green Belt" zone to "Other Specified Uses" annotated "Religious Institution with Columbarium" zone ("**OU (Religious Institution with Columbarium)**") ("**the Rezoning Proposal**") at Lot Nos. 2 and 671 in D.D.181 in Tai Wai, Sha Tin, New Territories ("**the Application Site**") to the Town Planning Board ("**the Board**") under Section 12A of the Town Planning Ordinance ("the TPO"). The Applicant is the sole owner of the Application Site, i.e. Lot Nos. 2 and 671 in D.D. 181.

1.1.2 The Application Site falls within an area designated as "Residential (Group B)" ("**R(B)**") and "Green Belt" ("**GB**") zone on the Approved Sha Tin Outline Zoning Plan No. S/ST/36 ("**the OZP**"). The Rezoning Proposal is to regularise the existing Religious Institution and Columbarium at the Application Site to meet the requirements under the Private Columbaria Ordinance. The Government announced policy initiatives in 2017 to facilitate pre-cut-off columbaria to address the land premium and traffic impact assessment issues to "contain the magnitude of social disruption that may arise due to the implementation of the Private Columbaria Ordinance."

1.1.3 The Applicant has submitted a planning application (No. Y/ST/48) concurrently for the same use as the current Application to rectify the 1,779 niches sold/resold or donated/redonated to individuals. On 14 October 2022, the Board decided to agree to the planning application No. Y/ST/48. The current Rezoning Proposal applies for a total of 4,779 niches at the Application Site, including the niches applied in the approved planning application No. Y/ST/48.

## 1.2 Structure of the Planning Statement

1.2.1 This supporting Planning Statement is divided into six chapters for the consideration of the Board members.

1.2.2 **Chapter 1** is the introduction above outlining the purpose of the Rezoning Proposal and provided background information of the Applicant. **Chapter 2** gives background details of the Rezoning Proposal in terms of the site history and planning context, and the prevailing Government policies for regulating operations of private columbaria. **Chapter 3** provides an overview on the planning context of the Application Site. **Chapter 4** discusses the Rezoning Proposal and introduces the traffic measurements proposed by the Traffic Management Plan and other technical concerns. Justifications for approval to the Rezoning Proposal are provided in **Chapter 5** and a summary of the submission is provided in **Chapter 6**.

# 2 BACKGROUND

## 2.1 Site History and Existing Use

2.1.1 The Application Site has an extended history of 'Religious Institution' uses since before the establishment of Sha Tin New Town. Before moving to To Fung Shan in 1992[1], the Lutheran Theological Seminary occupied Lots 2 and 671 since the 1950s (**Figure 2.1** refers).

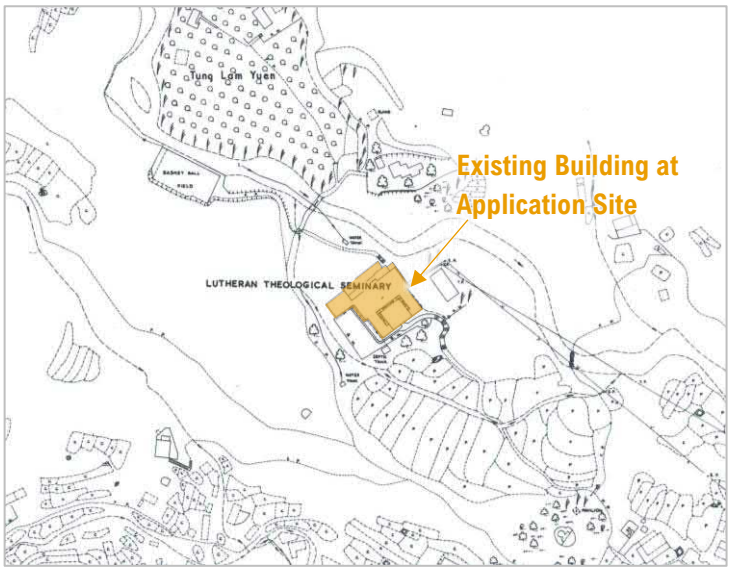



**Figure 2.1 Lutheran Theological Seminary at the Application Site in 1958**
*(Extract of Survey Sheet No. 145-NE-C in 1958)*

2.1.2 The Application Site was taken up by the Christian Conference of Asia Centre (**Figure 2.2** refers) after the Lutheran Theological Seminary relocated. Puguangming Temple occupied the Application Site for temple and columbarium use since May 2010.

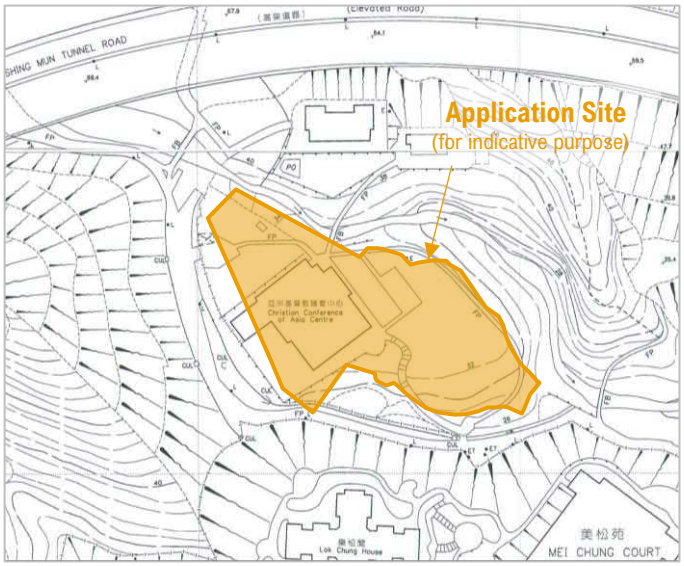



**Figure 2.2 Christian Conference of Asia Centre at the Application Site in 2005**
(Extract of Survey Sheet Nos. 7-SW-14B & 7-SW-14D in 2005)

[1] Source: Lutheran Theological Seminary website (http://lts.edu/2013/e_main.php#0001C)

## 2.2 Existing Use and Zoning History

2.2.1 'Religious Institution' uses have been retained at the Application Site since the 1950s, notwithstanding occupied by various religious organisations, long before the gazettal of the first Outline Zoning Plan under the TPO. Hence, the succession of the 'Religious Institution' use for the existing establishment at the Application Site does not require further action.

2.2.2 The area within the Application Site was initially designated as "R(B)" zone in the first draft Sha Tin OZP No. S/ST/1 (gazetted on 21.6.1985) (**Figure 2.3** refers). This remained unchanged until 1987 when an arbitrary zoning boundary divided the Application Site into partly "R(B)" and partly "GB" zone in the draft Sha Tin OZP No. S/ST/3 (gazetted on 20.11.1987) (**Figure 2.4** refers). No amendments have been made to rectify the zoning boundary since then.

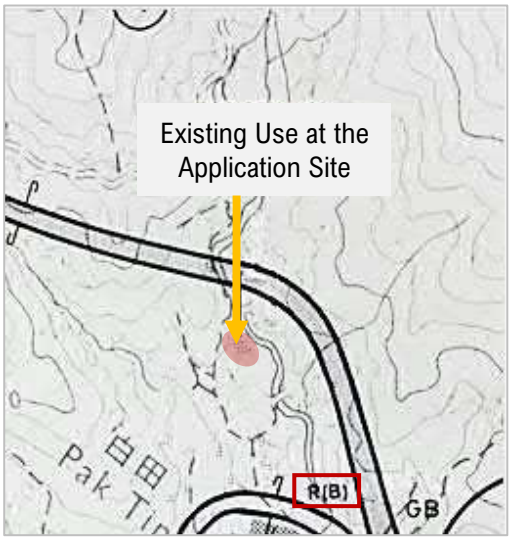



**Figure 2.3 Extract of Draft Sha Tin OZP No. S/ST/1**




**Figure 2.4 Extract of Draft Sha Tin OZP No. S/ST/3**

## 2.3 Regulation of Private Columbaria and Policy Initiatives

2.3.1 In response to Hong Kong's ageing population and increasing demands for columbarium provision, the Private Columbaria Bill ("**the Bill**") was introduced by the Legislative Council on 25 June 2014 and the Private Columbaria Ordinance ("**the Ordinance**") was promulgated on 30 June 2017. The Ordinance aims to "*ensure that private columbaria are operated in compliance with statutory and Government requirements, to enhance the protection of consumer interest, and to ensure that the mode of operation of the trade is sustainable*." Upon the enactment of the Ordinance, the operation of a private columbarium in Hong Kong must be covered by either a licence, or an exemption or temporary suspension of liability. Only private columbaria that have obtained a licence may sell or newly let out niches.

2.3.2 According to *Application Guide for Private Columbarium Licence and Other Specified Instruments*, columbarium in operation on or after 1 January 1990 and before 8am 18 June 2014 can be regarded as a "Pre-cut-off Columbarium" and is required to apply for a licence from the Private Columbaria Licensing Board on or before 29 March 2018 in order to continue its selling or letting out of niches, and its general operation. An application for a licence must prove that the columbarium complies with the following requirements: 1) land-related requirements; 2) planning related requirements; 3) building-related requirements; 4) right to use the columbarium premises; 5) management plan; 6) deed of mutual covenant; 7) fire safety; 8) impact on the environment; 9) hygiene; and 10) electrical and mechanical safety.

# 3 PLANNING CONTEXT

## 3.1 Land Ownership

3.1.1 The Application Site covers Lot Nos. 2 & 671 in D.D. 181 (**Figure 3.1** refers). The Applicant is the sole owner of all the lots within the Application Site.

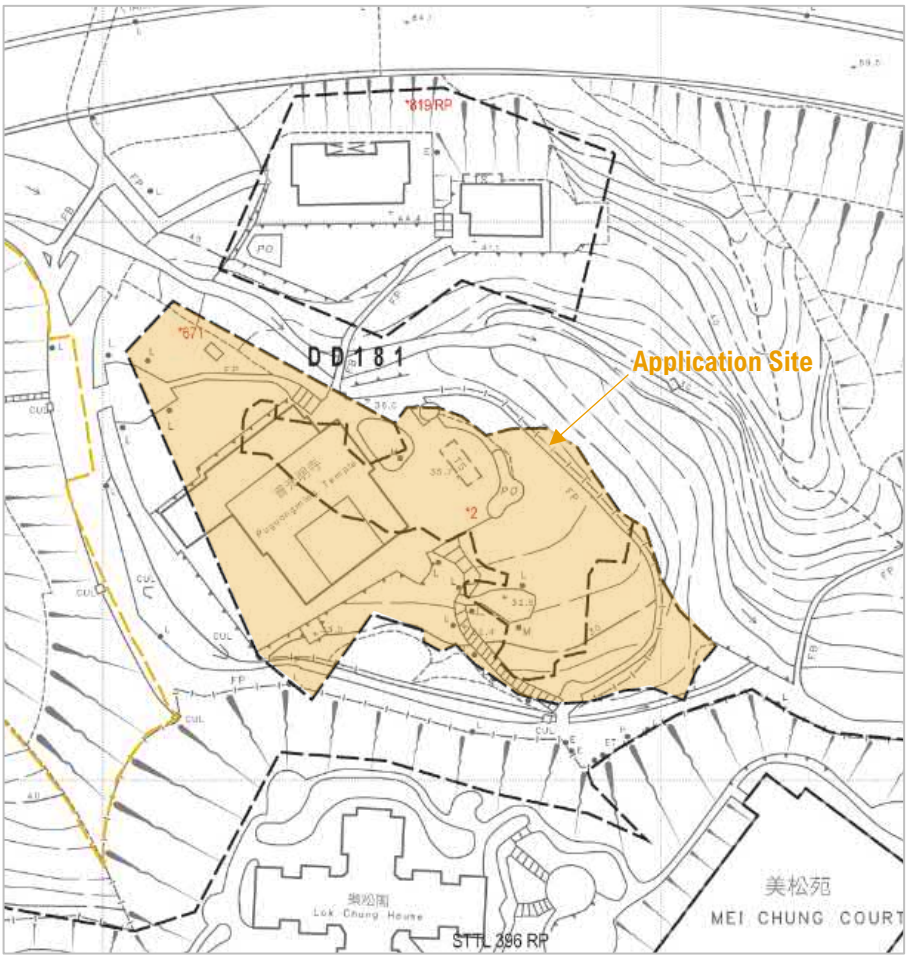



**Figure 3.1 Lot Index Plan for the Application Site**

## 3.2 Statutory Planning Context

3.2.1 The Application Site falls within an area designated partly as "R(B)" zone and "GB" zone on the Approved Sha Tin OZP No. S/ST/36 ("**the OZP**") (**Figure 3.2** refers). According to the Notes of the OZP, the planning intention of the "R(B)" zone is *"…intended primarily for medium-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Town Planning Board."* and the planning intention of the "GB" zone *"…is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets. There is a general presumption against development within this zone."*

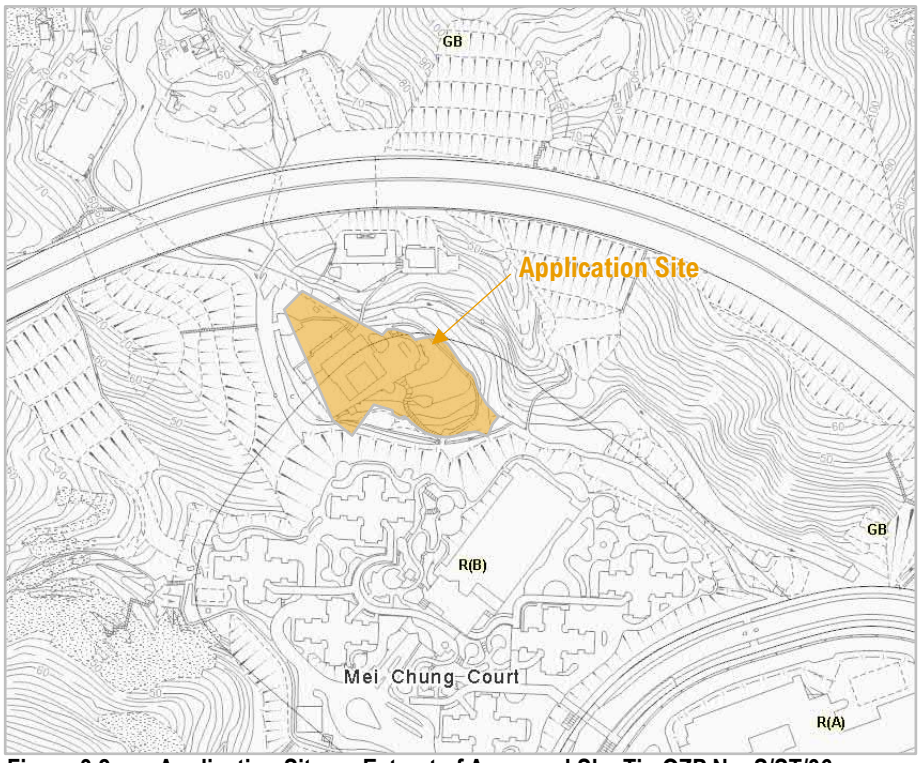



**Figure 3.2 Application Site on Extract of Approved Sha Tin OZP No. S/ST/36**

## 3.3 Existing Use, Surrounding Land Use and Accessibility

3.3.1 The existing Puguangming Temple at the Application Site is a place of worship for Buddhist followers/believers and a monastery for Buddhist monks. Niches are accommodated in parts of the temple as well.

3.3.2 The Application Site is generally surrounded by vegetation with uphill slopes to the west and northeast. The surrounding areas have the following characteristics:

a. To the north is Shing Mun Tunnel Road;

b. To the south is a Home Ownership Scheme Development – Mei Chung Court;

c. To the further south is Mei Tin Road, May Shing Court and facilities including schools, public car park and sports centre; and

d. To the east and west are slopes with vegetation.

3.3.3 The Application Site is only served by a single footpath leading from Mei Tin Road and is not directly connected by any vehicular access. Two bus stations and a minibus station, serving a total of 7 routes, are in proximity of the footpath entrance.

3.3.4 **Figure 3.3** shows the surroundings of the Application Site and public transportation stations in its vicinity.

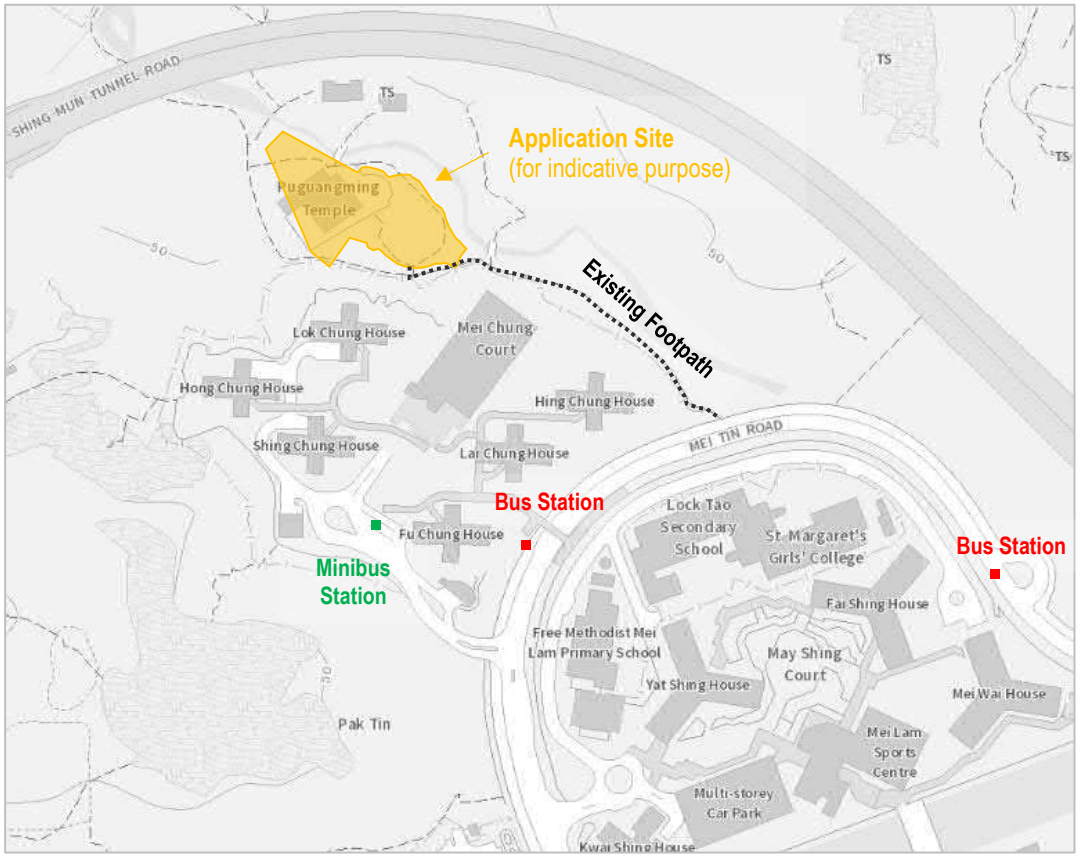



**Figure 3.3 Location Plan and Site Surroundings**

# 4 THE REZONING PROPOSAL

## 4.1 Proposed Zoning and Amendments to Plan

4.1.1 The Application Site is within areas currently zoned as "R(B)" and "GB" in the OZP. An amendment from the existing zonings to "Other Specified Uses (Religious Institution with Columbarium)" ("**OU (Religious Institution with Columbarium)**") zone can rationalise the existing 'Religious Institution' use and columbarium within the Application Site (**Figure 4.1** refers).

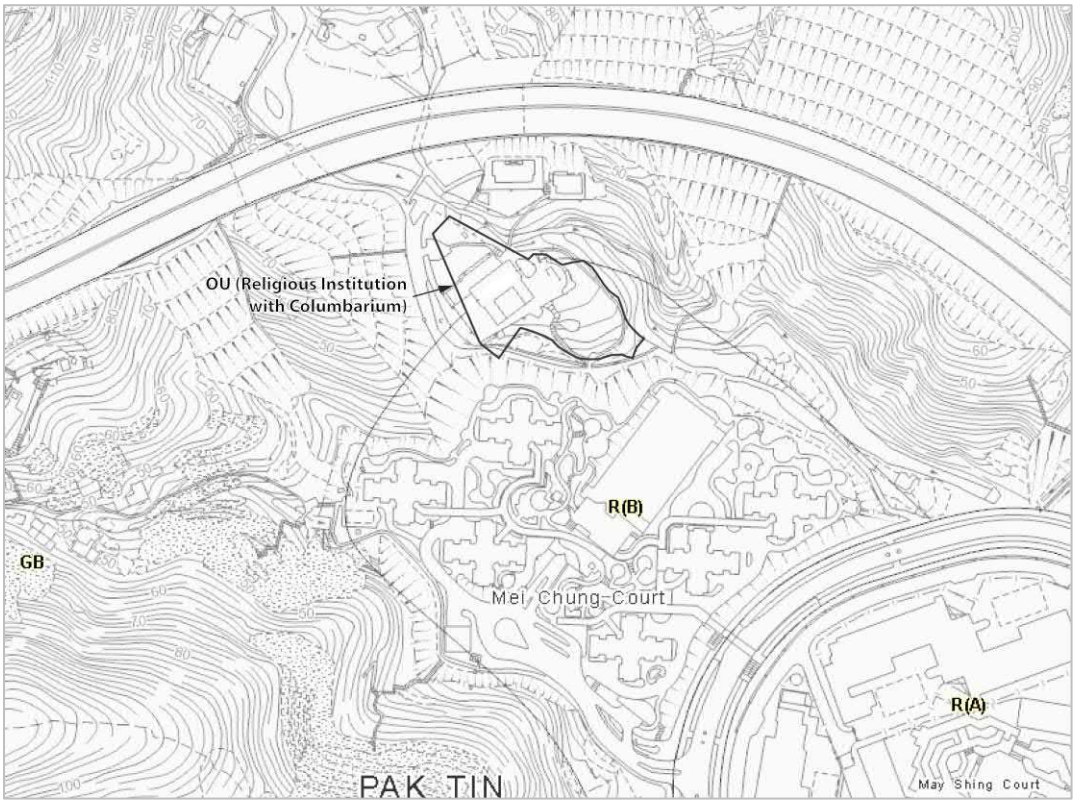



**Figure 4.1 Proposed Amendment from "R(B)" and "GB" Zone to "OU (Religious Institution with Columbarium" Zone**

4.1.2 In the recommended Notes for the proposed "OU (Religious Institution with Columbarium)" (**Appendix 1** refers), 'Religious Institution' use and 'Columbarium' use are the only Column 1 uses included and no other uses included as Column 2 uses. Development restrictions are also suggested to limit any further developments in addition to the existing development scale/intensity, they include: a) a maximum gross floor area ("GFA") of 1,416m$^2$ (GFA of the existing building); b) a maximum building height of 3 storeys; and c) the total number of columbarium niches shall not exceed 4,779 (including the 1,779 niches of the previously approved Application No. Y/ST/48).

## 4.2 Puguangming Temple and Columbarium

4.2.1 Puguangming Temple is a bona-fide religious temple in Hong Kong and provides religious services by hosting occasional Buddhist congregations[2], Buddhist chanting and meditation classes, text citing and copying (**Table 4.1** refers). As Buddhism promotes dedication of merits, the Puguangming Temple also set up a volunteer service team to serve the community via an array of activities, including clothing/rice donations, visits to single elderly/single families and so on. Puguangming Temple became an organizational member of the World Buddhist Sangha Council in December 2011 (**Appendix 2** refers).

[2] https://www.pgmtemple.org/events/puja/

**Table 4.1 Frequency of Religious Services**

| Religious services | Frequency (in average) | Approx. No. of Participants in each event |
|---|---|---|
| Buddhist congregation | Twice a month | 50-60 |
| Buddhist chanting and meditation class | Twice a year | 20 |
| Text citing and copying | Once in two weeks | 10 |

4.2.2 Puguangming Temple is a place of workshop for Buddhist followers/believers, with about 810 nos. of memorial tablets (sold: 667, for donation: 4; unsold: 139). The existing building contains religious halls and memorial halls to allow Buddhist followers/believers to offer incenses and lamps to Buddha and Bodhisattva and pay respect to ancestors. The religious activities take place on the ground floor of the Application Site. **Table 4.1** shows the major development parameters of the existing Puguangming Temple and columbarium in the Application Site. The indicative layout plan with site photos is in **Appendix 3**.

**Table 4.2 Major Development Parameters of the Existing Building**

| | **Existing Building** (Lot Nos. 2 & 671) |
|---|---|
| **Main Uses** | Memorial Hall (with Columbarium), Offices & Ancillary Uses |
| **Site Area** | About 4,006.39m$^2$ |
| **No. of Storeys** | 3 |
| **Plot Ratio** | About 0.36 |
| **Total GFA** | About 1,415.853m$^2$ |
| G/F | About 716.217m$^2$ |
| 1/F | About 426.285m$^2$ |
| 2/F | About 273.351m$^2$ |
| **Building Height** | 11.9m |
| **Site Coverage** | About 19% |
| **No. of Niches** | 4,779<br>(G/F - 3,017; 1/F – 1,762; 2/F – 0) |

**All parameters are the same as the existing building within the Application Site and are subjected to further verification.*

4.2.3 Puguangming Temple opens to the public from 9:00am to 5:00pm daily including public holidays. The maximum number of visitors within Puguangming Temple is limited to 300. However, due to the recent pandemic situation, the number of visitors is restricted to a maximum of 4 people in each room/apartment at any one time.

4.2.4 The provision of niches is not an uncommon practice for Buddhist followers in a temple and Puguangming Temple has been offering niches to followers/believers since 2010. No joss paper and candle burning will be allowed within the Application Site. The Applicant will be cautious on the use of sound amplification system or musical instruments on the premises. Sound amplification system will be used for Buddhist congregations and chanting purposes only, while the music-involved activities will mainly proceed in indoor areas or enclosed rooms. The sound amplification system will not be used for crowd control purposes or any outdoor activities. The Applicant will maintain the music or chanting volume at the minimum operational capacity to avoid any noise nuisance to the surroundings.

4.2.5 **Table 4.3** details the conditions of the applied niches. 319 niches out of the total 4,779 niches were occupied. And 16 of them are reserved for charity purpose.

**Table 4.3 Conditions of Niches**

| Niches | | Occupied | Unoccupied | Total |
|---|---|---|---|---|
| **Single** | Sold/resold to Individuals | 165 | 731 | 896 |
| | For Charity Purpose | 16 | - | 16 |
| | Unsold | - | 1,948 | 1,948 |
| **Double** | Sold/resold to Individuals | 138 | 729 | 867 |
| | For Charity Purpose | - | - | - |
| | Unsold | - | 1,052 | 1,052 |
| **Total** | | 319 | 4,460 | 4,779 |

4.2.6 The Applicant has submitted a planning application (No. Y/ST/48) concurrently for the same use as the current Application to rectify the 1,779 niches sold/resold or donated/redonated to individuals. On 14 October 2022, the Board decided to agree to the planning application No. Y/ST/48. The current Rezoning Proposal applies for a total of 4,779 niches at the Application Site, including the 1,779 niches applied in the planning application No. Y/ST/48. The indicative location plans of the 4,779 niches applied in the current Rezoning Proposal are in **Appendix 4**.

### 4.3 Traffic Consideration

4.3.1 The Puguangming Temple is well-served by public transportation services including various bus routes (i.e., 46P, 80, 80A, 81, 81S, 82B, 82K, 283, 286P, 286X, 288C, 985, 985A, 989 and NA41) and various green minibus (GMB) routes (i.e., 63A, 63B, 63K and 63S). Traffic Impact Assessment (**Appendix 5** refers) indicates that existing bus services have surplus capacities to accommodate the potential increase of visitors during peak hours of the festive period.

4.3.2 The Application Site is accessible via a local footpath branching off the Mei Tin Road and is a 20-minute walk from the closest railway station (Tai Wai MTR Station). The existing footpath is 2m to 3.5m in width and about 200m in length. Details of the traffic impact assessments can be found in **Appendix 5**.

### 4.4 Pedestrian Management

4.4.1 A special management mechanism has been proposed for visitors paying respects to their ancestors at the Application Site during the festive periods (the Ching Ming and Chung Yeung Festival Day plus 3 weekends before and 3 weekends after the festival days) (**Appendix 6** refers). Visitors coming to Puguangming Temple during the festive periods will be restricted to 10 sections, each section for 1 hour. Visiting periods during the festive periods are 8am to 6pm. Each section will restrict the number of visitors to 250 people with a total of 2,500 people per day. All visitors to Puguangming Temple are required to pre-register via hotline booking or online booking during the festive periods prior to visitation.

4.4.2 All incoming visitors will be diverted to the central reception area (**Figure 4.2** refers) before allowing entry to Puguangming Temple. If the temple is overcrowded, the staff will withhold visitors from entering until the overcrowding has been relieved.

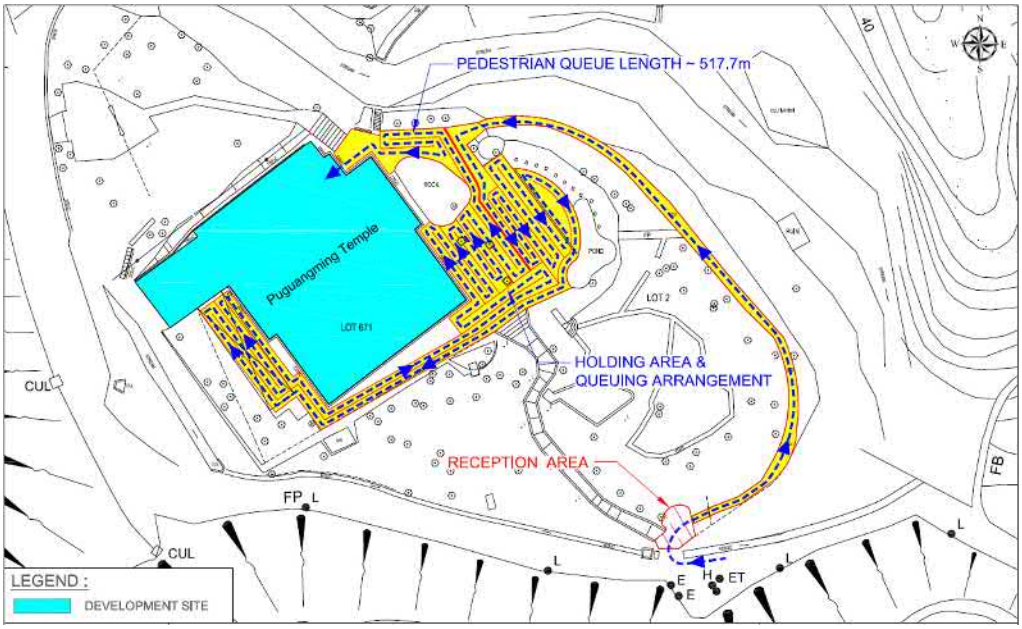



**Figure 4.2** **Pedestrian Management Plan** (Extracted from Figure TP2.1 of Traffic Management Plan)

## 4.5 Sewerage Consideration

4.5.1 The capacity of the existing sewers serving the area would be sufficient to cater the sewage generation from Puguangming Temple and the surrounding catchment areas. Since there are existing drainage system at the location where the proposed connection pipe will be collided and therefore crossing underneath the existing drainage system is recommended. The proposed connection from Puguangming temple to the nearest existing sewage manhole (no. FMH4039977) will be undertaken by the Applicant and the drainage plan will be submitted during the detail design stage. The above assessment is detailed in the Sewerage Impact Assessment in **Appendix 7**.

## 4.6 Water Quality and Noise Impact

4.6.1 The new sewer will be located along the alignment of the proposed access road and the construction will be carried out concurrently. Construction works for the new sewer and access road will only involve general construction works such as extraction and filling. Potential construction phase water quality impact would mainly be the uncontrolled discharge of surface run-off. Appropriate mitigation measures following ProPECC PN 1/94 – "Construction Site Drainage" guideline would be implemented to minimise the potential water impact. Adverse impact on water quality in the surroundings is not anticipated.

4.6.2 Mitigation for construction noise impacts shall be implemented through standard contract document clauses. The "Recommended Pollution Control Clauses for Construction Contracts" which can be downloaded on EPD website, contain the recommended noise control measures, and these measures will be implemented by the contractor during the construction of the development.

## 4.7 Air quality

4.7.1 Candle, large incense sticks and joss paper burning are prohibited within the Application Site. Visitors will be reminded not to burn their incenses but only the incenses provided by the Puguangming Temple. There will be incenses provided in each memorial hall. After paying respect to ancestors, visitors shall place the burning incenses in the designated containers. The Puguangming Temple will diligently clean up the containers. Thus, there will be no significant air pollution.

# 5 PLANNING JUSTIFICATIONS AND MERITS

## 5.1 Contributing to Meet the Needs of the Worshippers

The Application Site has an extended history of 'Religious Institution' uses since the 1950s. The Puguangming Temple is one of the few Buddhist temples in the Tai Wai, Pak Tin and Heung Fan Liu area and was built in response to the worshippers' demand. The tranquil environment surrounded by mature trees and a stream is suitable for worshippers to meditate and learn Buddhist doctrine. The premises also allows believers to pray for blessings and dedicate merits to their ancestors.

## 5.2 Contributing to Meet the Acute Demand for Niches in Hong Kong

5.2.1 The increase in the supply of columbarium facilities is essential for meeting the acute demand for niches, given the growing and ageing population in Hong Kong. The Government announced 24 potential sites in 18 districts for columbarium development in three batches in July and December 2010. Up to 2020 (10 years after the Government's first announcement), only 7 out of the 24 potential sites have been completed[3]. The provision of public columbarium has been slow and unable to satisfy the public's increasing demand. Under the "Three-Pronged Strategy" of the Government's Columbarium Policy[4], regulated private columbaria is recognised complementary in nature to public columbaria provided by Government and can help meet social needs for ancestral worshipping.

5.2.2 The columbarium facilities at Puguangming Temple can readily provide 4,779 niches for both Buddhist followers/believers and the general public without additional time for planning and developing a new columbarium.

## 5.3 Re-assessment of the Current Zoning and the Zoning Boundary

5.3.1 **Chapter 2** of this Planning Statement illustrated the existing building has been used for 'Religious Institution' since the 1950s, long before the gazettal of the first Outline Zoning Plan in 1985. In the first draft Sha Tin OZP No. S/ST/1 (**Figure 2.3** refers), the Application Site was zoned as "R(B)" until 1987 when the draft Sha Tin OZP No. S/ST/3 was gazetted where the Application Site is divided into partly "R(B)" and partly "GB" by an arbitrary zoning boundary (**Figure 2.4** refers). The Rezoning Proposal can rectify the zoning boundary and designate the most appropriate zoning that reflects the existing use.

5.3.2 The proposed "OU (Religious Institution with Columbarium)" zone can reflect the existing use at the Application Site and contain the scale of development of the columbarium with the recommended restrictions in order to avoid undesirable impacts on the surroundings in the future.

## 5.4 Unable to Realise the Planning Intention of "R(B)" Zone

5.4.1 Nearly half of the Application Site is within the "R(B)" zone. However, the Application Site is predominantly covered by uphill slopes and mature trees. Land formation works at this slope gradient would weaken the slope stability. The locality of the Application Site is considered not feasible for medium-density residential development.

5.4.2 The other half of the Application Site and the existing building is zoned "GB". The planning intention of "GB" zone specifies that "*there is a general presumption against development within this zone*", which was one of the rejection reasons for a previous planning application for 'Flat' use in 2007. Hence, redevelopment for residential uses at the Application Site is not feasible.

[3] FEHB website: Supply of Public Niches (from 2019 to 2022) (https://www.fehd.gov.hk/english/cc/notice_supply_of_public_niches.html) & Introduction to Cemeteries and Crematoria Services (https://www.fehd.gov.hk/english/cc/introduction.html)

[4] Legislative Council Paper: Columarium Policy – Three-Pronged Strategy (LC Paper No. CB(2)1955/13-14(03))

5.4.3 The Application Site has an extended history of 'Religious Institution' uses since 1950s, which indicates that the site has been hard paved. The Application Site has never been used as "GB" use but accommodates continued operation of various religious institutions only. The proposed plan amendment would better reflect the longstanding land use setting.

**5.5 No Adverse Traffic Impact**

5.5.1 The Applicant is committed to undertaking necessary measures to limit the traffic impact (even during the festive periods) within acceptable levels. There will be a pedestrian management mechanism for crowd-controlling during the festive period. In addition, the Lands Department has replaced the existing concrete blocks on the footpath by the bollards and be responsible for the replacement costs and the subsequent maintenance for the bollards. The Traffic Management Plan in **Appendix 6** further demonstrates the effectiveness of the proposed measures.

**5.6 No Adverse Sewerage, Water Quality, Air Quality and Noise Impact**

5.6.1 The capacity of the existing sewers serving the area would be sufficient to cater the sewage generation from the Puguangming Temple and the surrounding catchment areas as demonstrated in the Sewerage Impact Assessment in **Appendix 7**. No upgrading or improvement works of the existing sewerage system and the existing footpath will be required. The proposed connection from Puguangming temple to the nearest existing sewage manhole (Figure 2 in **Appendix 7**) will be undertaken by the Applicant. Besides, no pesticides would be adopted for the landscape area within the Application Site. The water quality of the surrounding watercourse would not be affected.

5.6.2 To minimise air pollution to the surrounding area, the Puguangming Temple provides incenses to visitors and replaces all candles with LED light bulbs. Visitors are not allowed to burn their own incenses, candles, large incense sticks or joss paper within or near the Application Site. There will be no shreds of burning paper or heavy smoke from the operation of the Puguangming Temple. Therefore, adverse air quality impact is not anticipated.

5.6.3 No significant noise will be generated from the operation of the temple and the columbarium. The sound amplification system will only be used for Buddhist congregations and chanting purposes, while the music-involved activities will mainly proceed in indoor areas or enclosed rooms. The sound amplification system will not be used for crowd control purposes or any outdoor activities. Those rooms will be designed to meet the relevant noise criteria as stipulated in the HKPSG. Provisions shall be made to control the noise sources by suitable silencers, acoustic louvres and enclosures, if necessary.

**5.7 Preservation of the Existing Green Setting**

5.7.1 The Application Site is surrounded by fairly dense vegetation and is adjacent to a stream. No changes will be made to this green setting as a result from the Rezoning Proposal. The Rezoning Proposal will maintain the existing scale of Puguangming Temple, and the columbarium use will not cause any adverse impact. The Rezoning Proposal facilitates the preservation of the existing condition at the Application Site as well as the landscape and natural elements in the surroundings.

# 6 CONCLUSION

6.1.1 This Planning Statement is submitted to the Board in support of the proposed rezoning at the Application Site from "R(B)" and "GB" zone to "OU (Religious Institution with Columbarium)" zone. This Planning Statement aims to provide background information and planning justifications in support of the Rezoning Proposal.

6.1.2 The Rezoning Proposal is well justified on the grounds that:

a. All 4,779 niches within the Application Site can contribute to meet the needs of worshippers and the acute demand for niches in Hong Kong.

b. The Rezoning Proposal can rectify the zoning boundary that reflects the existing use and limit the scale of the existing columbarium.

c. The planning intention of the existing "R(B)" zone is unable to be realised under the existing circumstances.

d. The technical reports have demonstrated no adverse traffic, sewerage, water quality, air quality and noise impact would be generated by the Rezoning Proposal.

e. There will be no impact on the existing green setting.

6.1.3 In view of the above and the detailed planning justifications in this Planning Statement, we respectfully request the Board Members to give favourable consideration on this planning application.

***April 2023***
***PlanPlus Consultancy Limited***

# Annex 2

Consolidated R-to-C Table

## Responses-to-Comments

| Item | Departmental Comments | Applicant's Responses |
|---|---|---|
| **1. Comments from Highways Department received on 17.2.2021** | | |
| 1. | Section 3.2.4 of the Traffic Management Plan refers, please clarify if the proposed works would be carried out by the project proponent | Based on the latest Traffic Impact Assessment report (**TIA**) and Traffic Management Plan (**TMP**), EVA is not required for the subject columbarium development and the TIA has demonstrated that the existing public transport services and the existing footpath are sufficient to meet transport demands. Therefore, the proposed access road has been removed from the rezoning proposal. |
| 2. | Please be advised that the proposed new access road shall be commented by relevant parties including but not limited to TD and FSD | After reviewing, no upgrading works will be carried out for the existing footpath under the latest proposal. |
| 3. | Please note that the proposed improvement of the concerned access connected to Mei Tin Road is not currently a carriageway maintained by this Office. Please clarify the future management and maintenance parties of the access. | After reviewing, no upgrading works will be carried out for the existing footpath under the latest proposal. |
| 4. | Drawing AR1 refers, it is noted that the proposed improvement of access road would affect the connectivity of existing cycle track. Detailed design shall be submitted to TD and HyD for comments. | After reviewing, no upgrading works will be carried out for the existing footpath under the latest proposal. The connectivity of the existing cycle track will not be affected. |
| 5. | Drawing No. AR3 to AR7 refers, it is noted that the proposed improvement of access road would affect existing slope features, design submission shall be provided to CEDD/GEO for comments / approval. | After reviewing, no upgrading works will be carried out for the existing footpath under the latest proposal. |
| **2. Comments from Drainage Services Department received on 5.3.2021, 5.5.2022, 25.5.2022** | | |
| 1. | The SIA for the subject planning application needs to meet the full satisfaction of Environmental Protection Department (EPD), the planning authority of sewerage infrastructure. DSD's comments on the captioned SIA submitted by the developer area subject to views and agreement of EPD. | Well noted. |

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| 2. | Table 1 – According to the quoted reference, the UFF for visitors were assumed as 0.01$m^3$/h/d while the UFF adopted in the assessment was 0.3 $m^3$/d. Please clarify on the opening hours for the development. | The UFF adopted in the assessment should be 0.01$m^3$/d. The relevant content has been revised in Appendix A and Table 1 in the report text (**Appendix 7**). |
| 3. | Table 1 – Please quote the reference/elaborate on the basis for the assumption of UFF for volunteers. | The UFF adopted for volunteers has been referred to the UFF of Commercial Employee (0.08$m^3$/day), the assumption has been annotated in Table 1 of the report text and Appendix A (**Appendix 7**). |
| 4. | Section 2.4 - Please clarify if cafeteria/kitchen will be provided in the development | Kitchen will be designed in the development and the sewage generated from cafeteria/kitchen has been included in the calculation for SIA. |
| 5. | Section 2.6.4 – The Consultant shall supplement with brief details for the design of connection pipe (e.g. size, gradient, manhole locations, constraints) to demonstrate the technical feasibility of the development. A more detailed design could be submitted via drainage plan submission on later stage. | Well noted and it is confirmed that a more detailed design will be submitted via design plan submission on later stage. |
| 6. | Figure 2 – Please clarify on the meaning of "proposed connection cross underneath drainage system". Please provide details on the pipe alignment and elaborate on mitigation measures for potential conflict on the location of proposed sewerage works and existing drainage system. | Since there are existing drainage system at the location where the proposed connection pipe will be collided and therefore crossing underneath the existing drainage system is recommended. The detailed design of pipe alignment will be provided via design plan submission on later stage. |
| 7. | Appendix A – Please clarify if swimming pool backwash for Granville Garden has been considered. | The swimming pool backwash for Granville Garden has not been considered in our calculation since the swimming pool will be closed during public holidays and certain season period i.e. Ching Ming Festival, in winter and spring season. |
| 8. | I noted that part of the proposed access road would encroach upon a natural stream. A Drainage Impact Assessment ("DIA") shall be submitted by the applicant and the DIA should evaluate the potential drainage impact induced from the proposed development and recommend adequate mitigation measures to minimize any adverse drainage impacts on the natural stream and the existing stormwater drainage system for our consideration. | After reviewing, no upgrading works will be carried out for the existing footpath under the latest proposal.. Adverse drainage impacts on the natural stream and the existing stormwater drainage system is not anticipated. |

| **3. Comments from Food and Environmental Hygiene Department received on 3.3.2021, 14.1.2022, 1.8.2022, 17.8.2022, 31.10.2022, 19.12.2022** | | |
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| 1. | Under the Private Columbaria Ordinance (the PCO), only private columbaria that have obtained a licence may sell or newly let out niches. Any private columbarium which applies for a licence must comply with the Town Planning Ordinance (Cap. 131) and other requirements prescribed in the PCO or specified by the Private Columbaria Licensing Board (the PCLB), including land-related, building-related, right to use the columbarium premises, deed of mutual covenant (if applicable), fire safety, electrical and mechanical safety, environmental protection, etc. Moreover, Section 18(2) of the PCO stipulates that the PCLB may grant a licence only if a management plan submitted by the applicant has been approved by the PCLB. The management plan submitted by the licence applicant to the PCLB should cover matters including traffic and transport arrangement or management, crowd management, manpower deployment on peak grave sweeping days or periods and other days or periods, etc. among various matters. For cases in which planning permission has been given by the Town Planning Board (TPB), the management plan should include the crowd and traffic management measures accepted (and the conditions imposed) by the relevant departments and the TPB when the TPB approved the planning application. In considering the management plan submitted by a licence applicant, the PCLB will take into account comments provided by concerned departments including Transport Department, the Police, Fire Services Department and the Planning Department. If a licence application is approved by the PCLB, the Private Columbaria Affairs Office will oversee the monitoring of the licensee's implementation of the approved management plan in coordination with other concerned departments. | Well noted. |

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| 2. | According to our record, the following two sets of Specified Instruments (SI) applications in respect of the private columbarium named as "普光明寺" with address "No. 96, 2nd District Pak Tin Village, Mei Tin Road, Tai Wai, Shatin, New Territories (DD 181 Lot 2 & Lot 671)" have been received by the PCLB: | Well noted. |

| | 申請人聲稱已於2017 年6 月30 日前出售的龕位的數目 | 申請人聲稱已安放骨灰的龕位的數目 |
|---|---|---|
| 申請牌照及暫免法律責任書 (「只包括 2017 年 6 月 30 日前已出售的龕位」) | 14,540 | 319 |
| 申請牌照及暫免法律責任書(「只包括 2017 年 6 月 30 日仍未售出的龕位」) | - | - |

The SI applications are being processed by the Private Columbaria Affairs Office (PCAO) according to the prevailing procedure.

In providing comments on a previous planning application in respect of the above private columbarium in which the total number of sold niches stated is 14,540, the PCAO has already informed the concerned departments and the applicant that "經審核及考慮了上述申請人截至目前就上述牌照申請提交的有關資料和其他相關資料後，本署並不信納上述牌照申請的建議圖則內列出的共 14,540 個龕位是於 2017 年 6 月 30 日前已全部真

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| | 正售出，但不排除其中部分龕位有可能 2017 年 6 月 30 日前已售出。因此，本署認為上牌照申請並不屬於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–申請指引》(《申請指引》) 第 18 章內的(B)部第(ii)項所指的情況。". | |
| 3. | We are of the view that there is nothing new of our concern from the licensing perspective and we offer no specific comments to the subject Further Information 4.<br><br>It is preliminarily noted that the total number of niches proposed for the Specified Instruments (SI) applications apparently tally with that as shown in this planning application. However, please ask the applicant to clarify the meaning of "niches considered unsold" in this planning application.<br><br>Besides, as state in our comments dated 29.9.2021, the revised indicative location plan for niches sold/donated to companies that provided at Annex 4 of the FI 3 was different from that provided in the latest plans submitted by the applicant for the SI applications. Please ask the applicant to clarify and submit revised documents for the Private Columbaria Affairs Office's consideration if necessary. | Please refer to the latest planning statement in **Annex 1** and indicative location plan for niches in **Appendix 4**. Revised documents have been submitted for the Private Columbaria Affairs Office's consideration. |
| **4. Comments from Lands Department received on 12.3.2021, 1.6.2021, 14.1.2022** | | |
| 1. | Regarding the applicant's proposal to upgrade an existing footpath into a single track road branching off from Mei Tin Road to the Columbarium as per Figure AR 1 of Appendix 3, it is located on unleased and unallocated government land with small portion of it within the private lot of the subject application. The lot owner does not have any right under lease to carry out the proposed upgrading works on the government land. Unless relevant government departments agree to take | After reviewing, no shuttle bus or other transport will use the existing footpath and hence existing footpath will be used and no upgrading works will be carried out under the latest proposal. For details, please refer to the latest transport management plan (**Appendix 6**). |

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| | up the proposed upgrading work and the subsequent management and maintenance of the improved access road, there would be certainty on the implementation footpath upgrading work nor grant of right to the applicant for carrying out the road work. | |
| 2. | Unlawful occupation of Government land outside the application site in relation to Puguangming Temple has been detected. Please request the applicant to confirm whether they are intended to rectify the illegal occupation of government land or to apply regularization. | The westernmost portion of the Puguangming Temple has been vacated by the Government on 24.9.2015. Please find the area vacated, photos of relevant demolition works and a letter to District Lands Office for the Notice dated 11 May 2015 Under Section 6(1) of the Land (Miscellaneous Provisions) Ordinance Cap. 28 in **Annex 3** for your reference. |
| 3. | In response to the applicant's response to our comment in paragraph 7 and the letter from Li, Wong, Lam & W.I. Cheung Solicitors dated 10.7.2015 in Annex 2 of the further information, our comment is as follows:<br>"In response to the letter dated 10.7.2015 from Li, Wong, Lam & W.I. Cheung Solicitors, the Government hereby reserved the rights under Land (Miscellaneous Provisions) Ordinance to take land control actions against any unlawful occupation of government land by the structure at the western side of Lot No. 671 in D.D. 181." | Noted. |
| 4. | Regarding the applicant's proposal to upgrade an existing footpath into a single track road branching off from Mei Tin Road to the Columbarium as per Figure AR 1 of Appendix 3, it is located on unleased and unallocated government land with small portion of it within the private lot of the subject application. The lot owner does not have any right under lease to carry out the proposed upgrading works on the government land. Unless relevant government departments agree to take up the proposed upgrading work and the subsequent management and maintenance of the improved access road, there would be uncertainty on the | After reviewing, no upgrading works will be carried out for the existing footpath under the latest proposal. |

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| | implementation footpath upgrading work nor grant of right to the applicant for carrying out the road work. | |
| **5. Comments from Environmental Protection Department received on 12.3.2021, 1.6.2021 and 21.7.2021** | | |
| 1. | The Applicant should address the road traffic noise impact associated with the operation of the proposed new access road, as required under sections 4.2.5 to 4.2.7 of Chapter 9 of the HKPSG.<br>https://www.pland.gov.hk/pland_en/tech_doc/hkpsg/full/pdf/ch9.pdf<br>The Applicant should provide a quantitative road traffic noise impact assessment associated with the operation of the proposed new access road, to demonstrate that the operation of the proposed new access road would not generate any significant impact on the surrounding sensitive receivers; | Based on the latest TIA and TMP, upgrading work is not required for the existing footpath. The proposed access road has been removed from the rezoning proposal. |
| 2. | The Applicant should evaluate the noise nuisance due to the operation of the columbarium, in particular, the Applicant should be cautious on if there will be any activities involving the use of sound amplification system or musical instrument in the proposed uses. Such information should be provided in the planning statement to address the noise nuisances aspect. | It is anticipated that the potential activities' noise will not be significant since the sound amplification system will only be used for occasional Buddhist congregations and chanting purposes, while the music-involved activities will mainly proceed in the indoor area of enclosed room. The sound amplification system will not be used for crowd control purposes or any outdoor activities. Those rooms will be designed to meet the relevant noise criteria as stipulated in the HKPSG. Provisions shall be made to control the noise sources by suitable silencers, acoustic louvres and enclosures, if necessary. Please refer to the Planning Statement in **Annex 1**. |
| 3. | Apart from the noise standard of 70 dB(A) for new access road in accordance with the HKPSG, the assessment should also evaluate if there is significant contribution to the overall noise from other existing roads, i.e. increase of 1.0 dB(A) by the new access road, if the cumulative noise level from the new access road together with other existing roads exceeds the noise standard. | After reviewing, no upgrading works will be carried out for the existing footpath under the latest proposal. There will be no cumulative contribution to the overall noise from existing roads. |

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| 4. | It is noted in the planning statement that a maximum of 12 shuttle per hour during festive periods but a traffic flow of 20 veh/hr was adopted in the traffic noise impact assessment. Please clarify. Supporting document from the Transport Deportment (TD) shall be provided to substantiate that the adopted peak 'hour traffic flows are the maximum projected within 15 years from the completion of the proposed new access road. The traffic data shall be forecasted by strictly adopting the methodology which had been endorsed by the TD. | After reviewing, no shuttle bus is proposed under the latest proposal. |
| 5. | The Applicant is reminded to adopt pesticides registered under the Pesticides Ordinance (Cap 133), when necessary. Apart from the choice agrochemicals, the Applicant should follow instructions of the agrochemicals' manufacturers including but not limited to the dosage, application method etc. Application of chemicals in dry season is preferred. The applicant should minimize water quality impact to the watercourse nearby as far as practicable. | It is confirmed that no pesticides would be adopted for the landscape area within the Application Site. |
| 6. | **Appendix 6 – Sewerage Impact Assessment**<br><u>Appendix A, Table 1</u><br>The roughness coefficient ks is written as 0.0030m instead of 0.6mm in the remark (2). Please review and advise the value of ks.<br><u>Appendix A</u><br>Please take into account the sewage generated from Heung Fan Liu in the assessment. | The roughness coefficient (k) of the slimed clayware sewer should be 0.003mm, Appendix A, Table 1 has been revised accordingly (**Appendix 7**).<br><br>The sewage generated from Heung Fan Liu has been included in the assessment. Details could be referred to Appendix A (**Appendix 7**). |
| 7. | The Applicant should provide a quantitative road traffic noise impact assessment associated with the operation of the proposed new access road, to demonstrate that the operation of the proposed new access road would not generate any significant impact on the surrounding sensitive receivers; | After reviewing, new access road will not be proposed. For details, please refer to the latest TIA and TMP. There will be no additional noise impact on the surrounding sensitive receivers. |

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| 8. | The Applicant advised that there will be no activity involving the use of sound amplification system or musical instruments on the premises. Such information should be provided in the planning statement to address the noise nuisance aspect; and | Please refer to the latest Planning Statement (**Annex 1**). Sound amplification system will be used for Buddhist congregations and chanting purposes only, while the music-involved activities will mainly proceed in indoor areas or enclosed rooms. The sound amplification system will not be used for crowd control purposes or any outdoor activities. The Applicant will maintain the music or chanting volume at the minimum operational capacity to avoid any noise nuisance to the surroundings. |
| 9. | The Applicant is reminded to adopt pesticides registered under the Pesticides Ordinance (Cap. 133), when necessary. Apart from the choice of agrochemicals, the Applicant should follow instructions of the agrochemicals' manufacturers including but not limited to the dosage, application method etc. Application of agrochemicals in dry season is preferred. The applicant should minimize water quality impact to the watercourse nearby as far as practicable. | No pesticides would be adopted for the landscape area within the Application Site. |
| 10. | R-to-C item 1 & Annex 1 of FI 3:<br>Apart from the noise standard of 70 dB(A) for new access road in accordance with the HKPSG, the assessment should also evaluate if there is significant contribution to the overall noise from other existing roads, i.e. increase of 1.0 dB(A) by the new access road, if the cumulative noise level from the new access road together with other existing roads exceeds the noise standard. | After reviewing, no upgrading works will be carried out for the existing footpath under the latest proposal. |
| 11. | It is noted in the planning statement that a maximum of 12 shuttle per hour during festive periods but a traffic flow of 20 veh/hr was adopted in the traffic noise impact assessment. Please clarify. Supporting document from the Transport Department (TD) shall be provided to substantiate that the adopted peak hour traffic flows are the maximum projected within 15 years from the completion of the proposed new access road. The traffic data shall be forecasted by strictly adopting the methodology which had been endorsed by the TD. | After reviewing, no shuttle bus service is proposed for the subject columbarium development and no shuttle bus or other transportation will use the existing footpath. |

| **6. Comments from Transport Department received on 19.3.2021, 1.6.2021, 21.7.2021, 3.11.2021, 14.1.2022, 20.5.2022, 25.5.2022, 17.8.2022 and 10.11.2022** | | |
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| **General** | | |
| 1. | The assessment in the TIA report only focus on the traffic impact during festival days arising from the proposed development. Nevertheless, the traffic impact during non-festival days or days without traffic management should also be assessed and included in the report. | Noted. Traffic impact during non-festival days was assessed. Details please refer to the revised TIA report (**Appendix 5**). |
| 2. | In conjunction with Comment 1 above, the mode of access of visitors and suppliers during non-festival days or days without traffic management should be elaborated. | As there is no traffic management and no shuttle services provided during weekdays, the visitors or other person will come to the proposed development as existing pattern. |
| 3. | Please clarify whether the proposed access road will be used by the proposed development for daily operation during non-festival days. | After reviewing, no upgrading works will be carried out for the existing footpath under the latest proposal. |
| 4. | The no. of niches in the revised Traffic Management Plan and Traffic Impact Assessment Report is inconsistent with the revised Planning Statement. | Noted. The no. of niches in the revised Traffic Management Plan and Traffic Impact Assessment Report (**Appendix 5 & 6**) was updated and consistent with the revised Planning Statement (**Annex 1**). |
| 5. | The term of "Public Transport" is not consistent throughout the Traffic Management Plan and Traffic Impact Assessment Report. For example, "Public Transport" is including "Taxi" in Figure 2.1 of the Traffic Management Plan, but not included in Tables 2.1 and 4.3. As taxi is one of public transport modes, please specify in the paragraphs and header rolls of tables and figures whether taxi is excluded or not. | Normally taxi does not consider as a public transport as they do not operate on a schedule and on fixed routes. Our Traffic Management Plan and TIA ( **Appendix 5 & 6**) do not treat it as public transport.<br><br>The "Taxi stand" in **Figure 2.1** is just an indication of the location of taxi stand location but not classified it as public transport. |
| 6. | According to the response in the RtoC table, the proposed new niches/tablets will not be occupied before the completion of the proposed access road. My understanding is that the proposed new niches/tables are referred to the concerned 14,483 niches sold/donated to companies. If yes, please clearly state "The 14,483 niches sold/donated to companies will not be occupied before the | Based on the latest TIA and TMP, upgrading work is not required for the existing footpath. The proposed access road has been removed from the rezoning proposal. |

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| | completion of the proposed access road" in the planning statement, management plan and TIA report. If not, the TIA report should include the assessment on the traffic impact at the interim stage that the construction of the proposed access road has not yet been completed. | |
| 7. | Para, 1.3.2 – It is noted that the applicant proposes to be responsible for construction, management and maintenance of the proposed access road but the agreement-in-principle to the proposed access road from all relevant government departments has not been obtained and therefore, it is considered that the feasibility of the proposed access road could not be concluded as this moment. Therefore, I reserve my right to provide further comment upon the receipt of sufficient information. | Based on the latest TIA and TMP, upgrading work is not required for the existing footpath. The proposed access road has been removed from the rezoning proposal. |
| 8. | Para, 2.1.3 – "…5 junctions were …" should be read as "… 9 junctions were …". | Noted and revised accordingly in the revised TIA report ( **Appendix 5**). |
| 9. | Para. 2.3.1 and 2.3. 2 – Figure 2.13 "Major Pedestrian Routes to the Subject Site" is found missing. Besides, for clarity, the pedestrian flow from Mei Lam Bus Terminus and Mei Lam multi-storey car park should be separately presented on Figure 2.13. | Pedestrian flow from Mei Lam Bus Terminus and Mei Lam multi-storey car park separately presented in **Figure 2.13** and is included in the revised TIA. |
| 10. | Tables 3.4 and relevant information in Management Plan – There was no admission control to the subject columbarium during Ching Ming Festival in 2018 but will in future. It is questionable to use the peak hour factor of Ching Ming Festival in 2018 to estimate the future peak hour visitor flow for the proposed development. Please review and revise the proposed estimation method. | The management plan was revised to restrict 250 visitors per 1 hour sections, that gives a total 2,500 visitors per day. All visitors to Puguangming Temple are required to pre-register via hotline book or online booking during the festive periods prior to visitation. |
| 11. | Table 3.5 – It is still unable to correlate the percentages of the modal split shown in the tables with the percentage of major pedestrian routes shown on Figure 2.13. Also, please provide a drawing showing the future pedestrian routing with the estimated pedestrian flow after the completion of the proposed access road. | The Figure 2.13 is the surveyed flow which contains both the columbarium related pedestrian and non- columbarium related pedestrian flow. The Figure 2.13 is revised to present 2018 observed flow for your easy understanding. The future pedestrian routing with the estimated pedestrian flow is shown in Figure 7.3 of the revised TIA report. |

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| 12. | Para. 3.4.10 – The assessment on the existing lay-by at Chik Wan Street near Tai Wai Station should be included in the report instead of in the RtoC table. Besides; please clarify the source of factor (space per person of 0.5m2) adopted for assessment. According to the Figure R-4, it is noted that 3m out of 5m of the footpath is proposed to use for queuing area. Please demonstrate the remaining footpath of 2m is sufficient to cater for the pedestrian flow. In addition, please elaborate the survey method for the utilization of the lay-by at Chik Wan Street and provide the full survey result, with video records, for reference. For the assessment of utilization of the la-by at Chik Wan Street, please advise the number of vehicles surveyed in term of veh/hr and the conversation factor to pcu/hr. In addition, the calculation of "Max. Capacity" is not traceable. | The factor of $0.5m^2$ is reference from TPDM Vol.9 Chapter 2.6.3.11 that minimum width of queuing aisle is 600mm for one route bus stop. Thus, 600mm x 600mm = $0.36m^2$ is required and $0.5m^2$ is adopted in our assessment for conservative. It is noted that the pedestrian flow is low at this section of footpath, the remaining footpath is sufficient to cater for the pedestrian flow. Anyway, the queuing area could further reduce to 2m but increase the queue length to increase the remaining width of footpath to 3m. The LOS of remaining footpath = 100ppl / 60min / 2.5m = 0.66 (LOS A). Therefore, the remaining footpath is sufficient to cater for the pedestrian flow. There is no video recorded in our survey. The pcu value is converted by the surveyed vehicles types and pcu factor in TPDM. The detailed survey method, number of vehicles surveyed in term of veh/hr and assessment of lay-by are included in Chapter 8 of the revised TIA. |
| 13. | Para. 3.4.16 – The proposed access road could not comply with TPDM Vol.2 Chap 3 Ch 3.11.9.1, which stated that where forward visibility is unrestricted passing places should be provided at intervals of approximately 60m and therefore, it is considered that 2-way traffic flows of 100 vehs/hr at stated in TPDM is applicable to the proposed access road. Please review the design accordingly. | Based on the latest TIA and TMP, upgrading work is not required for the existing footpath. The proposed access road has been removed from the rezoning proposal. |
| 14. | Para. 6.1.3 and 6.1.4 – It seems that my previous comment has not been fully addressed. Please be requested again to clarify who was responsible for the carpark survey and provide a full set of survey methodology and result for reference and record. Also, please review and justify whether a factor of annual growth should be applied on parking demand other than the subject columbarium. | Surveyors appointed by Traffic Consultant were responsible to do the car park survey. Before the survey begins, the numbers of occupied and provided car parking space were recorded. Surveyor will be dispatched to the entrance of the car park to record the number of ingress and egress vehicles. By calculating the net increase of vehicle in/out, the occupancy of each hour could be obtained. |
| 15. | Para. 7.1.2 – In conjunction with Comment 5 above, please review the peak flow of visitors and the LOS assessment accordingly. Besides, it seems that my | The assessment was updated in revised TIA report. Pedestrian crossing facilities are assessed in Tables 7.2 and 7.3 of the revised TIA. They could operate with ample |

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| | previous comment has not been fully addressed. Please be requested again that the assessment on the pedestrian crossing facilities should be included in the TIA report. | capacities. |
| 16. | It is noted that there are some new tables and figures added in the TIA report. Please be reminded to revise the table number and figure number in the text accordingly. | Noted. The table number and figure number in the TIA is revised and updated. |
| **Specific** | | |
| 17. | Para. 1.3.2 and relevant information in Management Plan- Please clarify the land status of the proposed access road, loading/unloading area and works area for the construction work. Besides, please clarify who will be responsible for (i) construction, (ii) management and (iii) maintenance of the proposed access road. In addition, it is noted that the proposed single track access road and its fill slopes at Chainage from 40 to 60 and from 130 to 150 would encroach onto/ close to the nature stream in the vicinity. The agreement-in-principle to the proposal from all relevant government departments should be obtained to demonstrate its feasibility. | Based on the latest TIA and TMP, upgrading work is not required for the existing footpath. The proposed access road has been removed from the rezoning proposal. |
| 18. | Para. 1.3.4 -Please elaborate how to restrict vehicles, except for emergency, to use the proposed access road on those non-festival days. | Based on the latest TIA and TMP, upgrading work is not required for the existing footpath. The proposed access road has been removed from the rezoning proposal.<br><br>Besides, the contractor of land control team of Lands Department has replaced the concrete blocks on the existing footpath by bollards. The bollards will restrict vehicles, except for emergency, to use the existing footpath. |
| 19. | Para. 2.1.3- The junctions (i) roundabout of Mei Tin Road/ Che Kung Miu Road/ Hung Mui Kuk Road, (ii) junction of Mei Tin Road/ Chik Wan Street, (iii) roundabout of Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan | Noted. These junctions are added and assessed in the revised TIA (**Appendix 5**). All junctions would operate with ample capacities during peak hours of festival and non-festival day. Details please refer to **Table 2.4** of the TIA report (**Appendix 5**). |

<table>
<tr><td></td><td>Lane/ Tsing Sha Highway Slop Road and (iv) junction of Heung Fan Liu Street/ Mei Fai Street should be classified as the affected junctions.</td><td></td></tr>
<tr><td>20.</td><td>Tables 2.1, 2.4 and 4.1 -"Mei Tin Road/ Tai Po Road Slip Road" should read as "Mei Tin Road/ Tsing Sha Highway Slip Road".</td><td>Noted. The wordings were amended in the revised TIA (Appendix 5).</td></tr>
<tr><td>21.</td><td>Para. 2.3.1 - According to Figure 2.9, there is no pedestrian flow from Mei Lam Multi Storey Car Park. Therefore, it should not be considered as the available parking facilities in the vicinity.</td><td>The flow included pedestrian from both Mei Lam Muli Storey Car Park and Bus Terminus.</td></tr>
<tr><td>22.</td><td>Section 2.5 - In conjunction with Comment 6 above, please provide the assessment on the junction performance for the concerned affected junctions accordingly.</td><td>Noted. These junctions are added and accessed in the revised TIA (Appendix 5). All junctions would operate with ample capacities during peak hours of festival and non-festival day. Details please refer to Table 2.4 of the TIA report (Appendix 5).</td></tr>
<tr><td>23.</td><td>Para. 3.1.1 - It is noted that there are 664 occupied niches/tables in 2018. Please advise the figure up to date and the daily occupation capacity so as to justify the anticipated full occupation in 2024 is reasonable.</td><td>Year 2024 is the OP year. The design year 2027 (i.e. OP + 3 years) is adopted based on the traditional assessment method of TIA. The latest number of occupied niches/tables in Year 2021 is 843.</td></tr>
<tr><td>24.</td><td>Table 3.3 - Please clarify the source of the data for the proposed development, i.e. GFA, nos. of units and average flat size.</td><td>The information is obtained TPB and HOS websites. The following table summarized the source and the detailed information is attached in Annex 4.
<table>
<tr><th>Ref.</th><th>Development</th><th>Planning Application No. / HOS</th></tr>
<tr><td>A</td><td>Residential Dev at Various Lots in D.D. 181, Heung Fan Liu</td><td>A/ST/851</td></tr>
<tr><td>B</td><td>Mei Ying Court</td><td>HOS</td></tr>
<tr><td>C</td><td>Mei Pak Court</td><td>HOS</td></tr>
<tr><td>D</td><td>Tai Wai Station Property Development</td><td>A/ST/691</td></tr>
</table>
Please noted that Mei Ying Court and Mei Pak Court had been already completed in Year 2017. Their trips had already been counted in the traffic survey. Therefore, the TIA is assessed in a conservative approach.</td></tr>
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| 25. | Para. 3.4.1 - Although it is proposed to implement administrative measures to restrict the number of visitor, the effectiveness of the administrative measures is questionable. Comments should be sought from relevant authorities on the practicality and enforceability of the proposed administrative measures. Relevant contingency plan should also be included in the report in case visitors do not follow the proposed administrative measures. | Noted. Comments of relevant authorities will be sought.<br><br>Visitors cannot enter the proposed development if they do not follow the booking system. This requirement will be clearly stated in sale agreement of niches. As the total number of people, the development and holding space can hold greatly larger than the expected demand, sufficient space could be temporary hold those non-booking visitors before they left. |
| 26. | Table 3.4 and relevant information in Management Plan - It is not convincing that the visitor distribution profile for AM and PM sections under the management plan will be similar to that of 2018 Ching Ming Festival. Also, the peak flow under the management plan occurred at 9:30am and 3pm is not reasonable and the expected peak hour factors of 0.384 and 0.31 for "In" and "Out" plan is questionable. Please review and revise the proposed estimation method. | The methodology of estimation is reviewed and amended. Please refer to **Chapter 3** of the traffic management plan (**Appendix 5**). |
| 27. | Para. 3.4.2 and 3.4.3 - Please advise the actual number of users being interviewed successfully and justify the sample size is large enough to come up with a reasonable modal split for visitors to the columbarium in future. Also, please include the contingency plan in case the actual number of visitors for each transport mode is significantly increased. The questionnaire for modal split should be attached to the report for reference and record. | Among 595 nos. of visitors, 325 nos. of them were being interviewed successfully (54%). Thus, it is considered the interview is representable and reasonable to obtain the result.<br><br>As mentioned in Sections 3.3 and shown in Figures 3.1 to 3.2 of the Traffic Management Plan (**Appendix 6**), the total number of people the development and holding space can hold greatly larger than the expected demand. Even the people significantly increased, there is still large amount of buffer to hold the people. |
| 28. | Table 3.5 - It' is unable to correlate the figures of the existing modal split shown in the table with the percentage shown on Figure 2.9. For example, 19% of visitors is by taxi as shown in the table but only 3% of pedestrian flow is from Mei Chung Court Taxi Stand. Please clarify. In addition, please provide drawings showing the | The 3% is the pedestrian flow is from Mei Chung Court Taxi Stand only. The taxi passengers could also be dropped-off at other place such as Mei Tin Road near the Site entrance. According to the latest TIA and TMP, the proposed access road has been removed from the rezoning proposal. |

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| | future pedestrian routing with the estimated pedestrian flow for two scenarios (i) interim stage that the construction of the proposed access road has not yet been completed and (ii) after the completion of the proposed access road. | |
| 29. | Para. 3.4.10- It is noted that the existing lay-by at Chik Wan Street near Tai Wai Station is proposed as the pick-up/drop-off point to the subject columbarium, where is the existing pick-up/drop-off point to Po Fook Memorial Hall. Please assess the implication on the existing lay-by at Chik Wan Street arising from the proposed development taking into account the visitors to Po Fook Memorial Hall and other road users. Besides, please clarify whether there will be shuttle services for interim stage that the construction of the proposed access road has not yet been completed. If yes, please provide plan showing the alternative proposed pick-up/drop-off area near the subject columbarium. | According to the latest TIA and TMP, shuttle bus service has been removed from the rezoning proposal. |
| 30. | Para. 3.4.12, Figure 3.4 and relevant information in Management Plan-<br>a) According to Para. 1.3.3 and 1.3.4, the access road will be used by the shuttle buses during festival days and it will also serve as an EVA and will be restricted to all vehicles except for emergency on non-festival day. Nevertheless, there are proposed parking spaces for private cars. Please clarify when the proposed parking spaces are allowed to be used and elaborate how to manage those parking spaces.<br>b) There is a proposed passing bay. Please elaborate how to manage it so that it would not be misused as a parking space.<br>c) Please advise the proposed measures to prevent illegal parking and loading/unloading activities at the proposed access road. Also, please elaborate how to deal with in case illegal parking and loading/unloading activities at the proposed access road occur. | According to the latest TIA and TMP, new access road and shuttle bus service have been removed from the rezoning proposal. |

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| | d) Please provide the details of the proposed access road, such as radius of curvature, gradient, vertical curvature, crossfall and dimensions of passing bays.<br>e) The inner bend of the junction of Mei Tin Road and the proposed access road would affect the visibility and increase the potential safety hazard and dead-lock at the proposed access road. Please review the layout accordingly.<br>f) Drawings TTA1 to TTA3 -There is a level difference of about 2.3m between existing ground and the proposed road level. The proposed TTA scheme is too simplified to demonstrate the feasibility and constructability of the proposed access road. Also, the proposed retaining walls (including their footings) and slopes should be shown on the drawings.<br>g) The TIA report would be valid only if the proposed access road can be timely completed for operation. Therefore, please provide project programme for proposed access road from planning, design, construction to operation stages. | |
| 31. | Para. 3.4.16- According to TPDM, "... a single track road when provided with adequate passing places can accommodate 2-way traffic flows of 100 vehicles per hour, ...". As stated in the Comment 17(f) above, the inner bend of the junction of Mei Tin Road and the proposed access road would affect the visibility and increase the potential and dead-lock at the proposed access road. Please review and provide the assessment on the design flow of the proposed access road. Besides, please demonstrate the compliance of requirement "the normal daily 2-way traffic flow should not exceed 500 vehicles per day" as stated in TPDM. | According to the latest TIA and TMP, the proposed access road has been removed from the rezoning proposal. |
| 32. | Table 3.8 and Para. 3.4.18 - It is noted that the estimated 2-way peak hour flow would be 98 pcu/hr (49 pcus in and 49 pcus out). In conjunction with Comment 18 above, please review whether the estimated 2-way peak hour flow is less than the design flow of the proposed access road. | According to the latest TIA and TMP, the proposed access road has been removed from the rezoning proposal. |

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| 33. | Para. 6.1.3 and 6.1.4 - It is noted from Figure 2.9 that there are about 6% of total pedestrian flow from Mei Chung Court Carpark but about 13% from Mei Shing Court Carpark, which is deviated from the statement "the majority of visitors use Mei Chung Court Carpark". Please clarify who was responsible for the carpark survey and provide a full set of survey methodology and result for reference and record. Also, please review and justify whether a factor of annual growth should be applied on parking demand other than the subject columbarium. In addition, please assess the implication on the parking provision during the interim stage that the construction of the proposed access road has not yet been completed and propose necessary mitigation measures. | This chapter discuss on the parking issues. Visitor will first select the nearest car park and therefore Mei Chung Court is the majority of visitors use.<br><br>As the proposed new niches/tablets will not be occupied before the completion of the proposed access road. There will be no affected on the parking provision during the interim stage. |
| 34. | Titles of Sub-sections 7.1 and 7.2 - "Ching Ming Festival” should read as "Festival Days in Design Year”. | Noted. The wordings were amended in the revised TIA (**Appendix 5**). |
| 35. | Para 7.1.2 - In conjunction with Comment 13 above, please review the peak flow of visitors and the LOS assessment accordingly. | The peak flow of visitors and the LOS assessment were reviewed and updated in the revised TIA (**Appendix 5**). |
| 36. | Para. 7.2.3, Table 7.2, Figures 2.9 and 7.1 - Footpaths (i) at Mei Chung Court, (ii) Mei Shing Court Carcark, (iii) Mei Lam Bus Terminus, (iv) to/from Tai Wai Station, and staircase to/from the subject columbarium should be included. Besides, it seems that actual widths of footpaths, instead of their effective widths (deducting building edge/dead areas), have been used for the LOS assessment. Please review and clarify. Furthermore, please access the implication on the footpath during the interim stage that the construction of the proposed access road has not yet been completed and propose necessary mitigation measures. In addition, the assessment on the pedestrian crossing facilities should be included in the TIA report. | According to the latest TIA and TMP, the proposed access road has been removed from the rezoning proposal.<br><br>As the proposed new niches/tablets will not be occupied before the completion of the proposed access road. There will be no affected on the parking provision during the interim stage. |

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| 37. | Figure 2.2 - The drawing title should read as "Existing Junction Layout of Mei Tin Road/ Heung Fan Liu Street". | Noted. The wordings were amended in the revised TIA (**Appendix 5**). |
| 38. | Figure 2.3 – The drawing title should read as "Existing Junction Layout of Mei Tin Road/ Tsing Sha Highway Slip Road". | Noted. The wordings were amended in the revised TIA (**Appendix 5)**. |
| 39. | As the TIA is considered not acceptable in principle, we are not prepared to provide our comments on the Management Plan at this moment. We reserve the right to provide further comments on the Management Plan upon the revised TIA report is considered acceptable in principle. | Noted. |
| 40. | TONT of Transport Department will give comments on the captioned application from traffic operation point of view separately. | Noted |
| 41. | Table 2.1 of the Traffic Management Plan –<br>Please specify the operating days of each bus and GMB routes listed, whether they provide services daily, Mondays to Fridays (except Public Holidays), Saturdays, Sundays and Public Holidays or specific days. | Noted. **Table 2.1** was updated in the revised Traffic Management Plan (**Appendix 6**). |
| 42. | Table 2.1 of the Traffic Management Plan –<br>KMB 81S, 82B, 286P, 288C and 985A only provide services on Mondays to Fridays (except Public Holidays), which is outside the implementation period of the transport plan, i.e., the festival day plus 3 weekends before the festival day and 3 weekends after the festival day. While LWB NA41 and GMB 63S provides overnight services, which is outside the opening hours of Puguangming Temple. Therefore, they should not be included in Table 2.1 and Figure 2.1 as well. | The information of **Table 2.1** and **Figure 2.1** give a general idea of the public transport nearby. Therefore, the information of public transport outside the working hours of Puguangming Temple would also be listed in the table. |
| 43. | Table 2.1 of the Traffic Management Plan –<br>KMB 81 (Jordan (West Kowloon Station) bound) has en-route stop at Mei Fai Street, which should be included in the Table. | Noted. **Figure 2.1** was updated in the revised Traffic Management Plan (**Appendix 6**). |

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| 44. | Table 2.1 of the Traffic Management Plan –<br>The above comments also apply to Table 2.2 of the Traffic Impact Assessment Reports. | Noted. **Table 2.2** and **Figure 2.11** were updated in the revised TIA report (**Appendix 6**). |
| 45. | Para. 3.2.2 and Para. 4.1 of the Traffic Management Plan –<br>Please clarify the term of "Owner / Operator Arranged Bus" and its detailed arrangement. Please also advise if it is free of charge to visitors to the columbarium. | According to the latest TIA and TMP, shuttle bus service has been removed from the rezoning proposal. |
| 46. | Para. 3.2.2 and Para. 4.1 of the Traffic Management Plan –<br>Please advise the no. of coaches to be deployed for the shuttle service and any identity proof or pre-registration for taking the shuttle service. Should there be more than one coach to be deployed, please advise the stacking place for idling coaches. | According to the latest TIA and TMP, shuttle bus service has been removed from the rezoning proposal. |
| 47. | Para. 3.2.2 and Para. 4.1 of the Traffic Management Plan –<br>Please advise if taxi is allowed to access internal transport facilities during festival days. | There will be no internal transport facilities and taxi is not allowed to the existing footpath at any time. |
| 48. | Para. 3.2.2 and Para. 4.1 of the Traffic Management Plan –<br>Table 3.3 mentioned in Para. 4.1.8 was not found in the Traffic Management Plan. Please clarify. | There is **Table 3.3** in this proposal (Proposal-2) but not in Proposal-1 (Application No. Y/ST/48). |
| 49. | Para. 3.2.2 and Para. 4.1 of the Traffic Management Plan –<br>Please specify the duration of the peak hour in Para. 4.1.8 and Table 4.3 of the Traffic Management Plan. | The duration of the peak hour is 11:15 to 12:15 |
| 50. | Para. 3.2.2 and Para. 4.1 of the Traffic Management Plan –<br>Table 4.3 only demonstrates the occupancy rates of KMB 283 and GMB 63A and whether they have spare capacity to cater for the expected passenger demand increase. Please advise the rationale why the other road-based public transports | It is understood that the most critical peak of a columbarium development would happen on Ching Ming / Cheung Yueng Festival day. However, many of the public transport listed in **Table 2.1** of the Traffic Management Plan would not operate during festival days. |

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| | are not considered. In addition, please provide maximum hourly occupancy rate and advise the exact survey period conducted for these two routes. | Based on our interview survey, most of the visitors using PT will travel by KMB 283 and GMB 63A. The survey result is reasonable as these two routes travel to Sha Tin / Tai Wai MTR stations and could be taken at Mei Chung Court's stops which are the nearest PT stops from Puguangming Temple. Therefore, these 2 routes are the major affected PT routes and assess on their occupancy rates are sufficient to know the effect by future Puguangming Temple's visitors to PT.<br><br>Maximum hourly occupancy rate are: KMB283 (65%), GMB (85%)<br>The survey period was 10:30 to 14:30. |
| 51. | Para. 3.2.2 and Para. 4.1 of the Traffic Management Plan –<br>The above comments also apply to relevant paragraphs of the Traffic Impact Assessment Report. | Noted. The revised TIA report (**Appendix 5)** is updated accordingly. |
| 52. | Figure 2.1 of the Traffic Management Plan –<br>The en-route stops of KMB 46P (Kwai Fong Station bound), 82B (Mei Chung Court bound), 283 (Mei Chung Court bound) and 985 (Wan Chai bound) at Mei Tin Road opposite to Yat Shing Court, May Shing Court are missing. | Noted. **Figure 2.1** was updated in the revised Traffic Management Plan (**Appendix 6**). |
| 53. | Figure 2.1 of the Traffic Management Plan –<br>The en-route stop of KMB 81 (Jordan (West Kowloon Station) bound) at Mei Fai Street is missing. | Noted. **Figure 2.1** was updated in the revised Traffic Management Plan (**Appendix 6**). |
| 54. | Figure 2.1 of the Traffic Management Plan –<br>Please refer to specific comment 1b, KMB 286P and GMB 63S should not be included. | As mentioned above, the information of **Table 2.1** and **Figure 2.1** give a general idea of the public transport nearby. Therefore, the information of public transport outside the working hours of Puguangming Temple would also be listed in the table. |
| 55. | Figure 2.1 of the Traffic Management Plan –<br>The above comments also apply to Figure 2.7 of the Traffic Impact Assessment Report. | Noted. **Figure 2.11** (Original Figure 2.7) was updated in the revised TIA report (**Appendix 5**). |

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| 56. | Figure 2.1 of the Traffic Management Plan –<br>The public transports listed on Figure 2.1 of the Traffic Management Plan and Figure 2.7 of the Traffic Impact Assessment Report are inconsistent. Please review which public transports are more likely to be taken by the visitors and include those on the Figures. | Noted. Both figures are revised to be consistent. The public transports are more likely to be taken by the visitors are KMB 283 and GMB 63A. |
| 57. | Para. 3.3 and Figure 3.1 of the Traffic Impact Assessment Report:<br>Mei Park Court and Mei Ying Court are not future residential developments. Please revisit whether these two residential developments shall be included in this section. | It is noted that due to the social distance rules under the effect of COVID-19, the no. of visitors and traffic flow should be lower than normal and therefore new survey cannot be carried out. Therefore, our assessment is based on the survey data in Year 2018. Mei Park Court and Mei Ying Court were completed in Year 2017, they may not be fully occupied during Year 2018 survey. Therefore, additional trips generated by them were added in our assessment as conservative approach. |
| 58. | According to the attached PCAO's letter dated 29 November 2019 the PCAO does not trust that all the 14,540 niches were genuinely sold before 30.6.2017. The captioned application is therefore considered as including sold niches and unsold niches. Hence, I have the following comments on the submitted information:<br><br>RtoC 2 – The feasibility of the proposed access road, including the relocation of the existing shrines and modification of natural stream, (named as ''Access Road Proposal'' is considered crucial for the operation of the subject columbarium from traffic management point of view. Based on the Drawing Nos. AR2, AR3, AR4 and AR5, it is noted that the existing shrines and natural Stream in the vicinity would be affected by the Access Road Proposal. Agreement/no adverse comments to the Access Road Proposal should be obtained from all relevant government departments, such as LandsD, HAD, FEHD and DSD. Please include the correspondence from all relevant government departments explicitly expressing | After reviewing, no shuttle bus or other transport will use the existing footpath and hence existing footpath will be used and no upgrading works will be carried out under the latest arrangement. |

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| | their agreement/no adverse comments on the Access Road Proposal in the TIA report. | |
| 59. | RtoC 5 – Please demonstrate that the proposed total visiting quota during festival periods (i.e. Festival Days plus 3 weekends before and after festival day) could meet the demand arising from the proposed development. | Based on our telephone survey, average around 5 people per niche/tablet in each visit. In practice, not all 5 people will go visit the Columbarium. For conservative, assume all 5 people will come to visit during festival period. For 4,779 niches/tablets, which give the demand about 4,779 x 5 = 23,895 people.<br><br>Under the management control, the no. of visitors will be restricted to 2,500 ppl/day. Festival Days plus 3 weekends (include Sat and Sun) which give a visiting quota 2,500 x 11 = 27,500 ppl. Moreover, management control could also be implemented during weekdays within the 6 weekends, which give 2,500 x 25 = 62,500 ppl. Thus, total visiting quota 86,395ppl could be provided which could meet the demand. |
| 60. | Figure A-1 – Please specify the length and width of the proposed passing bays on the figure. | After reviewing, no shuttle bus is proposed under the latest arrangement. |
| 61. | Figure A-1 (SP 1) – Shuttle bus waiting at the proposed passing bays should be presented on the figure so as to demonstrate that the passing bays are sufficiently large enough. | After reviewing, no shuttle bus is proposed under the latest arrangement. |
| 62. | Figure 2.13 – There were 1515 ped/hr and 1720 ped/hr walking along the footpaths Sections C and D respectively but there was only 205 ped/hr walking along the existing access road (i.e. Section B) to the subject columbarium. Besides, it is stated that there were 200 ped/hr using the cautionary crossing in the vicinity (i.e. Section F) but the pedestrian flow at the crossing would be 1585 ped/hr (i.e. 1720 –135) as calculated based on the observed pedestrian flows at Section D and E. Please clarify. | The previous flow is typo error. The flows were updated and the updated **Figure 2.13**, **Figure 7.3** and **Table 7.2** of TIA was enclosed in **Appendix 5**. |

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| 63. | Table 7.2 – Please be reminded that effective width of footpath should be used for LOS assessment. Besides, pedestrian/vehicles flows conflict assessment for cautionary crossings should be included in the TIA report. Appropriate mitigation measure should be proposed as necessary. | Effective width of footpath was used for LOS assessment.<br><br>Our assessment on cautionary crossings in TIA reference to **Table 3.7.2.1** of TPDM Volume 2 which should have considered the conflict effect at the crossing. |
| 64. | Para. 8.12 – It is stated that the expected shuttle bus passenger demand would be 553 ppl/hr but from Tables 3.7, it would be 360 ppl/hr. Please clarify. | After reviewing, no shuttle bus is proposed under the latest arrangement. |
| 65. | TONT of Transport Department will give comments on the captioned application from transport operation point of view separately. | Noted. |
| **Traffic Impact Assessment (TIA)** | | |
| 66. | Full TIA report should be submitted for comment. | Noted. Full report (**Appendix 5**) is attached for your comment. |
| 67. | RtoC 2 – Our previous comment on including the correspondence from all relevant government departments explicitly expressing their agreement/no adverse comments on the Access Road Proposal in the TIA report is still valid. | After reviewing, no shuttle bus or other transport will use the existing footpath and hence existing footpath will be used and no upgrading works will be carried out under the latest arrangement. For details, please refer to the latest transport management plan (**Appendix 6**). |
| 68. | RtoC 3 – Please clarify whether the proposed management control will be implemented during weekdays within the 6 weekends. If yes, Management Plan should be revised and the assessment on the traffic impact on weekdays arising from the development should be included in the TIA report. | Weekdays will also open for visitors; however, it is understood that people going to Columbarium during weekdays are much lesser than weekends. Therefore, the proposed management control will not be implemented during weekdays. |
| 69. | RtoC 4 – Length and width of the proposed passing bay at Chainage 270 are found missing. | After reviewing, no shuttle bus or other transport will use the existing footpath and hence existing footpath will be used and no upgrading works will be carried out under the latest arrangement. For details, please refer to the latest transport management plan (**Appendix 6**). |

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| 70. | RtoC 5 – Shuttle Bus waiting at the proposed passing bay at Chainage 270 is found missing. Besides, swept path should be presented should be shown on the samedrawing. | After reviewing, no shuttle bus or other transport will use the existing footpath and hence existing footpath will be used and no upgrading works will be carried out under the latest arrangement. For details, please refer to the latest transport management plan (**Appendix 6**). |
| 71. | RtoC 6 – According to Application No. Y/ST/48, the surveyed peak hour pedestrian flow visiting the columbarium would be 305 persons (177 persons in and 128 persons out), but there was only 205 ped/hr walking along the existing access road (i.e. Section B). Please clarify. | The pedestrian flows are amended to 305 ped/hr persons (177 persons in and 128 persons out) and the assessment on footpaths was updated in the TIA. All studied footpath could achieve LOS A. |
| 72. | RtoC – Please elaborate how to determine the effective width of each footpath section. Besides, according to TPDM, the Table 3.7.2.1 may be used to determine the appropriate width over which the kerbs should be dropped, but it is not the capacity of cautionary crossing. The pedestrian/vehicle flow conflict assessment for cautionary crossings is requested again to be included in the TIA report. | 0.5m deduced of actual width from wall/fence and 1m deduced from shop to give effective width. Footnote is added to each section of footpath in **Table 7.3** (**Appendix 5**).<br><br>To assess the conflict between pedestrian/vehicle flows of the cautionary crossings, the crossings were treated as signalized crossings. Assume 1/4 of the "cycle time" was used by the pedestrian and the Pedestrian crossing capacity (PC) was found. All the crossing would operate with ample capacity and the results were shown in **Tables 7.2** and **7.3** of the updated TIA report (**Appendix 5**). |
| 73. | Table 2.5 of Section 2.4.2 refers. Please provide details showing the peak hour factor and daily trip rate. | **Table 2.5** was updated to provide more detail calculation. |
| 74. | Table 2.6 of Section 2.4.2 refers. According to Section 2.4.1, it is expected that 4 people per trip would be generated for visiting each niche. It appears that the flow is underestimated. Please review. | **Section 2.4.1** is referring to the social distance measures of maximum of 4 people in each group but not the no. of people per trip per niche. Our survey data are surveyed before the outbreak of COVID-19. Even assume 4 people per each niche, not all the people of all niches will visit the Columbarium on the same day. |

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| 75. | Table 2.7 of Section 2.4.2 and Section 7.1.3 refer. As per item 2, the growth factor should be review accordingly. | As per item 2, the survey data are surveyed before the outbreak of COVID-19 and therefore the assessment are in order. |
| 76. | Table 2.6 of Section 2.6.3, Table 4.1 of Section 4.1.1 and Table 4.2 of Section 4.1.1 refer. Please be advised that TD's acceptance criteria of design flow/capacity (DFC) ratio of the affected priority junctions/roundabouts is less than or equal to 0.85 and reserve capacity (RC) of affected signalized junctions is equal to more than 15%. Mitigation measure(s) should be proposed to restore the DFC ratio and RC of the affected junctions to the above acceptance criteria. | According to our assessment results in **Tables 2.6, 4.1** and **4.2**, there is no critical junction have DFC>0.85 or RC<15% in the existing and design years. Therefore, no mitigation measure is required. |
| 77. | Section 3.2.4 and Section 3.2.5 refer. The population and employment growth from 2016 to 2026 should be based on Sha Tin District instead of Tsing Yi District. Please review. | This is a typo. The data used are data of Sha Tin District. |
| 78. | Section 3.4.1 refers. It is stated that 3,000 visitors per day, 300 visitors per section, 1 hour per section, total 10 sections. However, as mention in Section 3.2.l (i) of TMF, the visitors coming to Puguangming Temple in Festival periods has to be restricted into 8 Sections, each section for 1 hour from 8am to l2:30pm and 1:30pm to 6pm, each section will last for 1 hour. Please clarify and review the whole TIA and TMF. | It will be restricted to 10 sections from 8am to 6pm in the latest arrangement. Both TIA and TMP were updated. |
| 79. | Table 3.4 of Section 3.4.1 refers. The number of maximum visitors stay in the temple would be 300 visitors per hours. While the ultimate number of niches and tablets is 17,417 (i.e. 16,262 niches + 1,155 tablets), the ultimate number of visitors would be 69,668 visitors (to be further reviewed) during Ching Ming Festival and Chung Yeung Festival (i.e. Festival). Based on the assumption of 8 sections per day with maximum 300 visitors per section, the total number of visitors per day would be 2,400 visitors. Therefore. it would take approximately 30 days for grave-sweeping during Festival. Please review both the TIA and TMP the | The latest number of niches proposed in this application is reduced to 4,779. For details, please refer to the updated TIA and TMP. |

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| | measures to control the number of visitors to visit the temple (i.e. any agreement in between the temple and visitors for the arrangement of visit). | |
| 80. | Section 3.4.3 refers. As the visitors may travel early to the temple and leave lately from the temple, it is necessary to allow extra contingency for the net increase of visitors. Please review. | The visitors are required to come in different sections under TMP. Before the visitors of the next section enter the columbarium building, the visitors of the previous section will be asked to leave and not allowed to stay. For arrival, it is believed that many of the visitors would arrive and wait at the holding area before their timeslot. However, the same situation will happen for the visitors of the next section. Therefore, the overall number of visitors in each hour would be 250 people (to the temple) and 250 people (leaving the temple).<br><br>Besides, based on the assessment results, there is sufficient holding capacity and ample LOS, etc., there is a sufficient buffer for any unexpected increase of visitors. |
| 81. | Section 3.4.6 refers. As there are no measures to control the number of visitors during normal weekdays or weekend outside Festival, please review the number of visitors among the total 69,668 visitors to visit the temple during normal weekdays or weekend outside Festival and hence the traffic generation and traffic impact. | Please refer to the updated TMP. |
| 82. | Table 5.1 of Section 5.1.2 refers. The number of observed trips from 09:00 to 17:00 for both franchised and minibus to Mei Shing Court are not reasonable. Please review again the observed trips based on the actual record. Please also provide the survey record for inspection. In addition, the hourly surplus capacity should be adopted to compare the net increase demand. | The data used in the assessment (such as observed trip) are already in the peak hour data but not the whole survey period. |
| 83. | Table 5.2 of Section 5.2.1 refers. Please provide calculation for the trips during peak hour. (1-way) | Calculation for the trips during peak hour (1-way) is provided in updated **Table 5.2 of** the TMP. |

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| 84. | Section 6.1.2 refers. A peak hour of 4 car parks is required by the columbarium visitors. However, 6 numbers of car entering temple and 8 numbers of car leaving the temple are specified in Table 3.7 of Section 3.4.4. Please review the number of car parks required. | It should be 8 car parks is required by the columbarium visitors. **Section 6.1.2** is updated. |
| 85. | Table 6.1 of Section 6.1.4 refers. The number of surplus parking spaces are not consistent with Appendix 1. Please review and revise. | After checking, it is consistent between **Table 6.1** and **Appendix 5**. |
| 86. | Table 7.2 of Section 7.2.3 refers. Please provide assessment for the pedestrian space. | The assessments are revised to **Tables 7.2** to **7.7**. Pedestrian space assessments are presented in **Tables 7.6** and **7.7**. |
| 87. | Table 7.2 and 7.3 of Section 7.2.3 refer. Please provide data to support the background pedestrian 2-way flow, additional pedestrian 2-way flow and future pedestrian 2-way flow. | The background pedestrian flows are based on the survey data, the additional pedestrian flows are based on the restricted no. of visitors under the TMP and superimpose to the network. The future pedestrian flows are background flow (with 1% growth rate) plus the additional flow. |
| 88. | Section 7.2.3 Table 7.3 refers. The effective width of Section B is incorrect. Please review and revise the calculation. | There is a typo in actual width of Section B, should be 2.4m and therefore the effective width of 1.9m and the assessment are correct. |
| 89. | Section 8.1.1 refers. Please review the total occupation of niches and tablets. As per the item 7, it appears that the total occupation of niches and tablets would be 17,417. | There are only 810 tablets but not 1,155 (i.e. 810+345), 345 out of 810 tablets are occupied tablets in 2018. Therefore, it should be 5,589 niches/tablets (4,779 niches + 810 tablets). |
| **Traffic Management Plan (TMP)** | | |
| 90. | Table 2.1: Some of the routes, e.g. KMB 80A and 81, XHT 989, are missing. Please check and update. | Noted, agreed and updated in the revised report (**Appendix 6**) accordingly. |
| 91. | Figure 2.1: The routes shown in the figure are not tallied with Table 2.1. In addition, en-route stops of some routes, e.g. KMB 80A, 81, XHT 985A, 989 are missing. Please check and update. | Fire services installations for the subject development will be further studied in the detailed design stage. |
| 92. | Para. 3.2.2 and Para.4.1:<br>(a) Please advise if the shuttle services operated by the owner and the operator | After reviewing, no shuttle bus or other transport will use the existing footpath and |

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| | refers to private bus services and contract hire service of public buses respectively. If the shuttle services operated by the operator refers to contract hire service of public buses, approval for contract hire service of public buses with scheduled service for more than 2 days either intermittently or consecutively in a period of 30 days may not be granted. Please elaborate details on the hiring arrangement of shuttle buses and include in the report. | hence existing footpath will be used and no upgrading works will be carried out under the latest arrangement. For details, please refer to the latest transport management plan (**Appendix 6**). |
| 93. | (b) Please incorporate in the report whether the shuttle service is free of charge. If the shuttle services is free of charge to passengers which may attract passengers from existing public transport services, please advise the measures to avoid direct competition to the existing public transport services in the vicinity. | After reviewing, no shuttle bus or other transport will use the existing footpath and hence existing footpath will be used and no upgrading works will be carried out under the latest arrangement. |
| 94. | (c) Please confirm if a 65-person coach can access to the subject site. | After reviewing, no shuttle bus or other transport will use the existing footpath and hence existing footpath will be used and no upgrading works will be carried out under the latest arrangement. |
| 95. | (d) Details are inconsistent with Para. 3.4 in the TIA, e.g. the no. of coaches per hour. Please revise. | After reviewing, no shuttle bus or other transport will use the existing footpath and hence existing footpath will be used and no upgrading works will be carried out under the latest arrangement. |
| 96. | Table 4.4.: According to the estimated demand and the proposed carrying capacity of a coach, the peak hour frequency shall be not as frequent as 5 minutes. Please advise. In addition, in view of the round-trip journey time and the revised headway, please state the actual no. of coach to be deployed in the report. | After reviewing, no shuttle bus or other transport will use the existing footpath and hence existing footpath will be used and no upgrading works will be carried out under the latest arrangement. For details, please refer to the latest transport management plan (**Appendix 6**). |
| 97. | Para. 4.2.5: The operating frequency is inconsistent with that in para. 4.1.11. Please revise. | After reviewing, existing footpath will be used and no upgrading on it will be carried out. Therefore, no shuttle buses services will be provided under the latest arrangement. |
| 98. | Table 4.3: Maximum hourly occupancy rates shall be demonstrated in the report. In addition, please advise what the figures in the column of "Demand (Satisfied or | The maximum hourly occupancy rates are show in the updated **Table 4.3** (**Appendix 5**). The demand flow given in **Table 4.3** refers to the peak attraction / generation of |

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| | not)" refer to. | the modal split of franchised bus and minibus given in **Table 4.2**. |
| 99. | The above comments are also applicable to the TIA. Please revise the relevant sections in the TIA as appropriate. | Noted, agreed and updated in the revised report (**Appendix 5**) accordingly. |
| 100. | Section 1.1.5 refers. The traffic impact due to the columbarium should include both the niches and tablets (i.e. 16,262 niches and 1,155 tablets). Please review the total number of niches and tablets accordingly. | There are only 810 tablets but not 1,155 (i.e. 810+345), 345 out of 810 tablets are the occupied tablets in 2018. The traffic impact by both the niches and tablets were considered in the assessment. |
| 101. | Section 3.2.1 refers. The visitors coming to Puguangming Temple in Festival periods has to be restricted into 8 Sections, each section for 1 hour from 8am to l2:30pm and 1:30pm to 6pm, each section will last for 1 hour. However, it appears that 10 sections would be offered to the visitors in Section 3.3.2 and 6.l.1. Please clarify and review the whole TIA and TMF. | It will be restricted to 10 sections from 8am to 6pm in the latest arrangement. It was updated in the TIA and TMP. Both TIA and TMP were updated. |
| 102. | Section 3.2.1 refers. Please advise the measures to control the unregistered visitors and also how to control the visitor to stay for at most 1 hour. Please confirm clearly and specify in the report that the measures should adopted for both Ching Ming Festival and Chung Yeung Festival. | Staffs will check the visitors at the reception area as shown in **Figure 3.1** and only registered visitors are allowed to enter the Temple. The visitors in the building of the Temple will be cleared in the end of each hour and then allow the visitors of next section to enter the building. The measures would be adopted for both Ching Ming Festival and Chung Yeung Festival and specified in **Section 3.2.2** of the TMP. |
| 103. | Section 3.3.2(d) refers. Please review the number of visitors could be held by the external holding area (i.e. 1,095 or 1,195). Due to outbreak of COVID-19, it is necessary to maintain appropriate social distance with other people. As such, please review the space per person. | It should be 1,195 people could be held by the external holding area. (Area A and B in **Figure 3.2**)<br><br>The purpose of the TMP is to reflect management in the normal situation during the Ching Ming Festival and Chung Yeung Festival periods. The outbreak of COVID-19 is a special situation and the social distance measures and restrictions are changing from time to time with the level of COVID-19 epidemic. The space per person cannot be predicted with a changing social distance measures and restrictions. |

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| | | In case there is still COVID-19 epidemic or other special case during the actual operation, the Temple will adjust the arrangement to tally with the social distance measures and restrictions at that time. |
| 104. | Section 3.3.2(g) refers. Please review the expected demand which should include both the people inside the columbarium for grave-sweeping (i.e. 300 person) and the people outside the columbarium to stay for the next section of grave-sweeping. | As the internal holding area could hold 341 persons (>300) and external holding area could hold 1,195 persons (>300). Therefore, the columbarium could hold more than two sections of people at the same time. |
| 105. | Section 3.4.3 refers. Please review the space per person for Place A, B and C according to the latest development of COVID-19. Furthermore, please indicate clearly Place A, B and C in Figure 3.2. The total holding capacity in Section 3.4.3 and Table 3.2 is different. Please clarify. | The purpose of the TMP is to reflect management in the normal situation during the Ching Ming Festival and Chung Yeung Festival periods. The outbreak of COVID-19 is a special situation and the social distance measures and restrictions are changing with the level of COVID-19 epidemic. Moreover, **Section 3.4** is discussing on the contingency plan in the event of fire or other emergency situations, the social distance measures would not be applied to the emergency situations.<br><br>Places A, B and C are indicated clearly in the updated **Figure 3.2**. **Section 3.4.3** updated to tally with **Table 3.2**. |
| 106. | Section 4.1.1 refers. Please advise the methodology to conduct the modal split survey and provide data support. | The modal split survey was based on the survey results of the telephone interview on existing niches/tablets owners. |
| 107. | Section 4.1.2 refers. Please advise how the figure 500 comes from. Although the visitor should be registered before coming to the temple, the visitors may visit the temple early or later. Please allow contingency in calculating the peak attraction (to temple) and peak generation (leaving temple). | 500 people are the previous proposed restricted no. in each section. It was amended to 250 people per section in revised TMP. The visitors are required to come in different sections under TMP. Visitors in the Temple building will be cleared in the end of each section and will not be allowed to stay to next section. For arrival, it is believed that many of the visitors would be arrived and wait at the holding area before their timeslot. However, same situation will happen for the visitors of next section. Therefore, the overall visitors in each hour would be 300 people (to temple) and 300 people (leaving temple). |

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| | | Besides, based on the assessments results, there is sufficient holding capacity and ample LOS, etc., there are sufficient buffer for any unexpected increase of visitors. |
| 108. | Section 4.1.3 refers. As the survey is conducted from 10:30 to 14:30, the adopted capacity should be taken as per hour to compare the peak hour flow. Please review the calculation. | The survey was conducted from 10:30 to 14:30 but the data used in the assessment (such as observed trip) are already in the peak hour data but not the whole survey period. |
| 109. | Table 4.4 of Section 4.1.5 refers. Please demonstrate the pedestrian space fulfill the Level-of-Service (LOS) A. | The Pedestrian Space of LOS Standard Criteria in **Table 4.5** are used for calculate the waiting area. As **Table 4.4** is the assessment of pedestrian flow but no waiting area. Therefore, pedestrian space assessment required. |
| 110. | Please be reminded that any special traffic arrangement using Police proposed by the applicant shall be agreed by the Police. | Noted. Police comment will be sought in implementation stage. |
| 111. | Figure 2.2 refers. Please show the complete pedestrian route from Tai Wai Station to the temple. | Please refer to updated **Figure 2.2** for your review. |
| 112. | Figure 3.1 refers. In general, the maximum walkable distance should be around 500m. If the distance is more than 500m, provision of an intermediate resting point should be considered to facilitate the visitors. In addition, please advise the holding capacity of the concerned footpath. | **Figure 3.1** indicates the maximum queuing length could be provided in the holding area. As mentioned in **Section 3.3** it could hold up to 1,195 persons but only 300 persons are required be held under management plan. Therefore, the actual queuing length required will be much lesser.<br><br>As the queuing line will be built up by temporary railings/bollards, the queuing shape is flexible and the queuing length could be changed to below 500m. As spaces are released, intermediate resting point could also be provided, if required. |
| **7. Comments from Transport Department received on 10.11.2022** | | |
| **Traffic Impact Assessment (TIA)** | | |
| 1. | Our previous comment item 4 via memo ref. (NKXU9) dated 16 August 2022 in the same series remains valid.<br>Table 3.3 refers. The trip generation/attraction for the residential development at | |

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| | Heung Fan Liu and Tai Wai Station Property Development is underestimate by comparing with our record. Please review the trip generation/attraction and the assess the traffic impact accordingly. Mitigation measure(s) should be proposed to restore the design flow/capacity ratio and reserve capacity of the affected junctions to the above acceptance criteria if necessary; | The trip generation/attraction have been reviewed and shown in the **Table 3.4.**<br><br>Please be noted Upper limit of the TPDM trip rates is adopted for a conservative approach, except for the "Tai Wai Station Property Development " of which the Mean of the TPDM trip rates is adopted. |
| 2. | Our previous comment item 5 via memo ref. (NKXU9) dated 16 August 2022 in the same series remains valid.<br>Section 3.2.4 and Section 3.2.5 refer. The population and employment growth from 2016 to 2026 should be based on Sha Tin District instead of Tsing Yi District. Please amend the report; | Agreed. The population and employment growth from 2016 to 2026 should be based on Sha Tin District is adopted and revised in the TIA (**Appendix 5**). |
| 3. | Our previous comment item 7 via memo ref. (NKXU9) dated 16 August 2022 in the same series remains valid.<br>Please provide the calculation for the implementation period (i.e. 15 days in festival period and 35 days in weekdays) of crowd control; | The crowd control assessment is shown in Section 2.3 and 2.4 of the Transport Plan. |
| 4. | Our previous comment item 9 via memo ref. (NKXU9) dated 16 August 2022 in the same series remains valid.<br>Section 3.4.5 and Figure 3.4 refer. The trip generation/attraction for Ching Ming Festival (i.e. 14 pcu generation and 18 pcu attraction) in Section 3.4.5 is not adopted for the 2027 Design Traffic Flows (Ching Ming Festival) in Figure 3.4 (i.e. 25 pcu generation and 20 pcu attraction).<br>Section 3.4.6 and Figure 3.5 refer. The trip generation/attraction for weekday (i.e. 15 pcu generation and 15 pcu attraction) in Section 3.4.6 is not adopted for the 2027 Design Traffic Flows (Weekday) in Figure 3.5 (i.e. 10 pcu generation and 10 pcu attraction). Furthermore, the adopted trip generation/attraction 15 pcu may not be conservative. Please review; | The trips have been revised as shown in the TIA.<br><br>The TIA report is revised based on the latest assumptions. |

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| 5. | Our previous comment item 15 via memo ref. (NKXU9) dated 16 August 2022 in the same series remains valid.<br><br>Table 7.2 to 7.7 refer. Please provide detailed calculation for the background pedestrian, additional pedestrian and future pedestrian 2-way flow; and | Detailed calculation is added to the Tables in the revised TIA. |
| 6. | Table 2.8 and Section 3.2.8 refer. The growth factor adopted (i.e. 1.5%) in Table 2.8 is different from growth factor adopted in Section 3.2.8 (i.e. 1%). Furthermore, please review the growth factor flow from 2018 to 2020 which appears not correct. Please also provided the surveyed flow result as stated in Table 2.8. | The TIA is revised with growth factor of 1% is adopted. |
| **Traffic Management Plan** | | |
| 7. | Our previous comment item 2 via memo ref. (NKXU9) dated 16 August 2022 in the same series remains valid.<br>Please provide the calculation for the implementation period (i.e. 15 days in festival period and 35 days in weekdays) of crowd control; | The crowd control assessment is shown in Section 2.3 and 2.4 of the Transport Plan. |
| 8. | Our previous comment item 5 via memo ref. (NKXU9) dated 16 August 2022 in the same series remains valid.<br><br>Section 3.3.2(d) refers. Please review the space per person for the external holding area which should comply with the design requirement for columbarium facilities; | Due to the changed in the proposed no. of niches (changed from 14,483 to 4,779), the Transport Plan has been revised to reflect the current changes. |
| 9. | Our previous comment item 11 via memo ref. (NKXU9) dated 16 August 2022 in the same series remains valid.<br>Please be reminded that any special traffic arrangement involving Policy proposed by the applicant shall be agreed by the Police with written record; and | Note and agreed. |
| 10. | Our previous comment item 13 via memo ref. (NKXU9) dated 16 August 2022 in | |

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| | the same series remains valid.<br>Section 2.1.2 refers. Please demonstrate that the queue length of GMB, bus, taxi and private car would not cause adverse traffic impact at Mei Tin Road for boarding/alighting passenger. Otherwise, mitigation measure(s) should be proposed to avoid traffic congestion.<br>Figure FP1 refers. Please advise the distance from the pick-up/drop-off point to the temple. If the distance is more than 500m, provision of an intermediate resting point should be considered to facilitate the visitors. | Due to the substantial reduction in the proposed no. of niches (changed from 14,483 to 4,779), it is not expected to cause adverse traffic impact at Mei Tin Road for boarding/alighting passenger.<br><br>There is not an issue for the current situation. Since we have not done any physical changed to the transport system, it is not expected to be a requirement for an intermediate resting point. |
| **8. Comments from Water Services Department received on 1.6.2021, 19.1.2022** | | |
| 1. | For provision of water supply to the development, the applicant may need to extend his/her inside services to the nearest suitable government water mains for connection. The applicant shall resolve any potential land matters (such as private lots) associated with the provision of water supply and shall be responsible for the construction, operation and maintenance of the inside services within the private lots to WSD's standards. | Noted. |
| 2. | The existing water mains in vicinity would not be able to support the provision of standard pedestal hydrant. | Noted. The development will comply with fire safety requirements if deemed necessary. |
| **9. Comments from Agriculture, Fisheries and Conservation Department received on 17.1.2022 and 16.5.2022** | | |
| 1. | It is noted that the proposed access road would encroach on a natural stream and affect some trees along the existing footpath. The applicant should provide supplementary information to evaluate any anticipated impacts on the stream and trees arising from the proposed access road and propose mitigation measures, where necessary. | After reviewing, no shuttle bus or other transport will use the existing footpath and hence existing footpath will be used and no upgrading works will be carried out under the latest arrangement. |
| 2. | According to the latest design of the proposed access road, the proposed works would encroach minor portion of the natural stream and appropriate mitigation | After reviewing, no shuttle bus or other transport will use the existing footpath and hence existing footpath will be used and no upgrading works will be carried out |

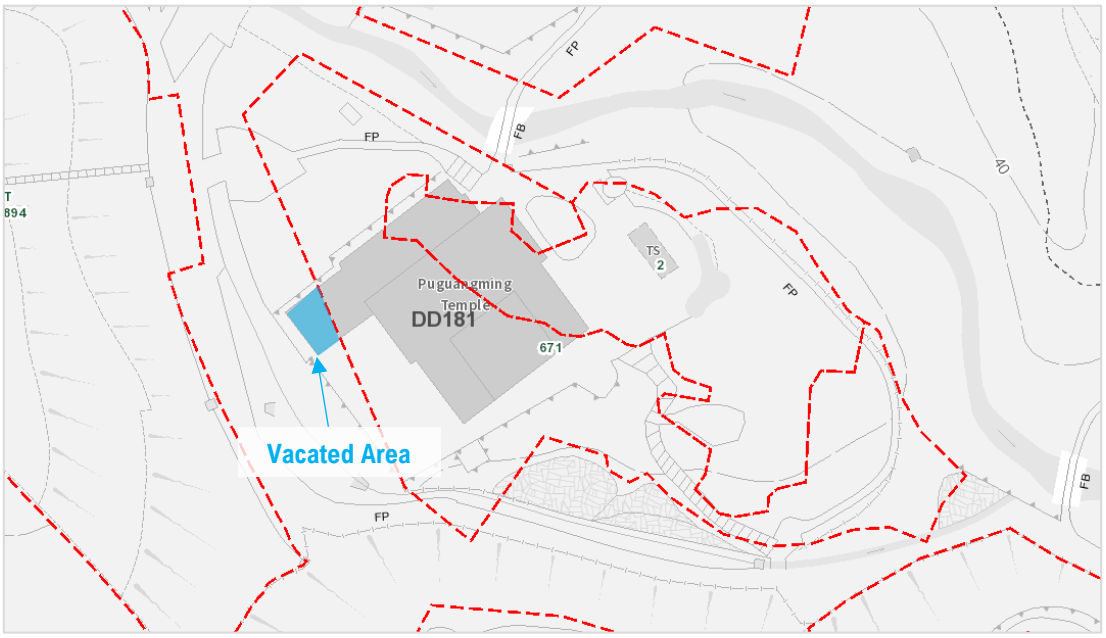
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| | measures (i.e. cantilever design and precautionary measures from PNAP ADV-27) were proposed to avoid direct impacts and minimize indirect impacts to the stream. As such, I have no further comment on the captioned, please. | under the latest arrangement. |
| **10. Comments from Antiquities and Monuments Office received on 16.5.2022** | | |
| 1. | As a precautionary measure, the applicant is required to inform AMO immediately when any antiquities or supposed antiquities are discovered in the course of works. | Noted. |
| **11. Comments from Geotechnical Engineering Office of Civil Engineering and Development Department received on 18.5.2022** | | |
| 1. | The proposed improved access road shown in Figure No. AR1 is very close to the existing feature nos. 7SW-D/C787, 7SW-D/C790, 7SW-D/C791, 7SW-D/CR801 and 7SW-D/C796. Please ask the applicant to clarify whether the above-mentioned features will affect or be affected by the proposed improved access road, and whether any permanent slopes or retaining walls will be formed to maintain the level difference between the proposed road works and existing ground. Please also ask the applicant to obtain comments from the maintenance parties of the above-mentioned features if necessary. | After reviewing, no upgrading works will be carried out for the existing footpath under the latest proposal. |
| **12. Comments from Buildings Department received on 20.5.2022** | | |
| 1. | If the proposed access road is vested in & maintained by the Government, we have no comment under the Buildings Ordinance. However, for any proposed private access road, the requirements specified in the Building (Private Streets & Access Roads) Regulations should be followed.<br><br>If the proposed access road is intended for purpose of emergency vehicular access, it should comply with Part D Section 6 of the Code of Practice for Fire Safety in Buildings 2011. | After reviewing, no shuttle bus or other transport will use the existing footpath and hence existing footpath will be used and no upgrading works will be carried out under the latest arrangement. For details, please refer to the latest transport management plan (**Appendix 6**). |

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| **13. Comments from Fire Services Department received on 27.6.2022** | | |
| 1. | The concrete blocks located along the existing footpath as revealed in Figure 2 of Annex 1 shall be removed to avoid unnecessary hindrance for users. As regards the applications for License, please be advised that fire safety requirements were issued on 28.2.2019 and yet to be complied with. | Besides, the contractor of land control team of Lands Department has replaced the concrete blocks on the existing footpath by bollards. The bollards will restrict vehicles, except for emergency, to use the existing footpath. |
| **14. Comments from Police Force received on 16.3.2023** | | |
| 1. | Having examined the Further Information, from the perspective of crowd management and traffic matters, the Police would have no further comment on them.<br><br>Besides, approved the sales of the unsold 14,483 niches in one go may generate a sudden upsurge of grave-sweepers and overload the existing footpaths. As a prudent measure, it is recommended that the sales of the remaining niches should be conducted by phases so that the situation could be reviewed from time to time. | Noted. The latest number of niches proposed in this application is reduced to 4,779. For details, please refer to the updated TIA and TMP. |

# Annex 3

Information on Demolition Works of the Westernmost Portion

## Area of Demolition Works




## Photo of Demolition Works (dated 24.9.2015)









# LI, WONG, LAM & W. I. CHEUNG 張永賢·李黃林律師行

Solicitors & Notaries, Agents for Trade Marks & Patents

**Partners:**

| | |
|---|---|
| Cheung Tak Man, Desmond^ | 張德民 |
| Lee, Moses | 李摩西 |
| Lam Siu Sun, Dennis | 林少新 |
| Chan Wai Yuen, Benson | 陳惠源 |
| Lam Chi Ki | 林子麒 |
| Leung Wai Pui | 梁偉培 |

**Senior Associates:**

| | |
|---|---|
| Au Keung Fuk, James | 區強福 |
| Chiu Sze Wai, Wilfred | 趙思瑋 |
| Fong Wai Yee | 方慧儀 |
| Liu Wen, Simon* | 劉 文 |
| Tam Po Lin, Pauline | 譚寶蓮 |

**Consultants:**

| | |
|---|---|
| Cheung Yee Ling, Elaine^ | 張懿玲 |
| Fung Ping Kwan, Ringo#^ | 馮秉鈞 |
| Lam Kwun Fu^ | 林冠夫 |
| Lam Ming Fai | 林名輝 |
| Leung See Ming, Samuel | 梁思明 |
| Tsoi Wing Tak, Michelle | 蔡穎德 |
| Wong Chi Wai | 黃志偉 |

**Associates:**

| | |
|---|---|
| Cheng Yee Shan, Ivy | 鄭綺珊 |
| Cheung Hiu Ching | 張曉靜 |
| Shum Hin Han | 岑顯恆 |
| Kwong Ka Ho | 鄺家皓 |
| Wai Yuen Ching, Florence | 韋沅澄 |
| Yu Chung Yin | 余仲賢 |

地址 : 香港德輔道中 199 號 無限極廣場 22 樓
Add : 22/F., Infinitus Plaza, 199 Des Voeux Road Central, Hong Kong
電話 Tel : (852) 3181 6655
傳真 Fax : (852) 3181 6699
DX : 075021 Sheung Wan 1
E-mail : info@lwlwic.com
Website : http://lwlwic.com

*Registered Foreign Lawyer (PRC) 註冊境外律師(中國)
# Notary Public 國際公証員
^China-Appointed Attesting Officer 中國委托公証人


Your Ref 閣下檔號 : LD DLO/ST 138/4573/37 Pt.5

Our Ref 本行檔號 : 033/76015/10/LIT-CV/E/033/116

Please Reply to 請回覆 : Neville Leung/Florence Wai
Direct Line 電話直線 : 3181 6631 / 3181 6645
Direct Fax 傳真直線 : 3181 7531
Date 日期 : 10 July 2015

Fax 傳真 :

| | | |
|---|---|---|
| Commercial | 商業部 | (852) 3181 6699 |
| Litigation | 訴訟部 | (852) 3181 6633 |
| Conveyancing | 物業部 | (852) 3181 6611 |

**BY FAX (2602 4093) & BY POST**

District Lands Office, Sha Tin
11/F., Sha Tin Government Offices,
1 Sheung Wo Che Road,
Sha Tin,
New Territories.

Dear Sir,

Re: Notice dated 11 May 2015 (the "Notice")
Under Section 6(1) of the Land (Miscellaneous Provisions) Ordinance Cap. 28

We act for Good Faith Limited.

We are instructed that you have issued the Notice to our client dated 11 May 2015 whereby you alleged that our client unlawfully occupied the unleased land near Lot No. 671 in D.D. 181, Sha Tin as indicated in the Notice (the "Alleged Area").

We are instructed that our client has not unlawfully occupied the unleased land on the Alleged Area and as far as our client knows, the Alleged Area has been vacant. Our client also replies that the structures on the Alleged Area were not constructed by our client.

Our client further reserve its rights in the unfortunate event that our client's properties shall be damaged or interfered with by any works to be carried out by the Government and/or its agents on the Alleged Area (including but not limited to removal of the structure(s)).

In the meantime, all our client's rights are hereby reserved.

Yours faithfully,



Li, Wong, Lam & W.I. Cheung
c.c. Client

# Appendix 1

Recommended Notes for the Proposed
"OU (Columbarium with Religious Institution)" Zone

OTHER SPECIFIED USES

| Column 1<br>Uses always permitted | Column 2<br>Uses that may be permitted with or without conditions on application to the Town Planning Board |
|---|---|

For "Religious Institution with Columbarium" Only

Religious Institution
Columbarium

Planning Intention

This zone is primarily for land intended for religious and columbarium uses.

Remarks

(1) No new development, or addition, alternation 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 1,416m$^2$.

(2) No new development, or addition, alternation and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment shall exceed a maximum building height of 3 storeys.

(3) The number of niches for columbarium use under Column 1 shall not exceed 4,779.

(4) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the gross floor area/ building height restrictions/ number of niches stated in paragraphs (1) to (3) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

# Appendix 2

World Buddhist Sangha Council Certificate of Organizational Membership

# WORLD BUDDHIST SANGHA COUNCIL
# CERTIFICATE OF ORGANIZATIONAL MEMBERSHIP
# 世界佛教僧伽會團體會員證

NAME 名稱 普光明寺

PERSON IN CHARGE 負責人 法亮法師

ADDRESS 地址 香港沙田大圍美田路白田村2區96號

DATE ADMITTED 入會日期 2011/12/01

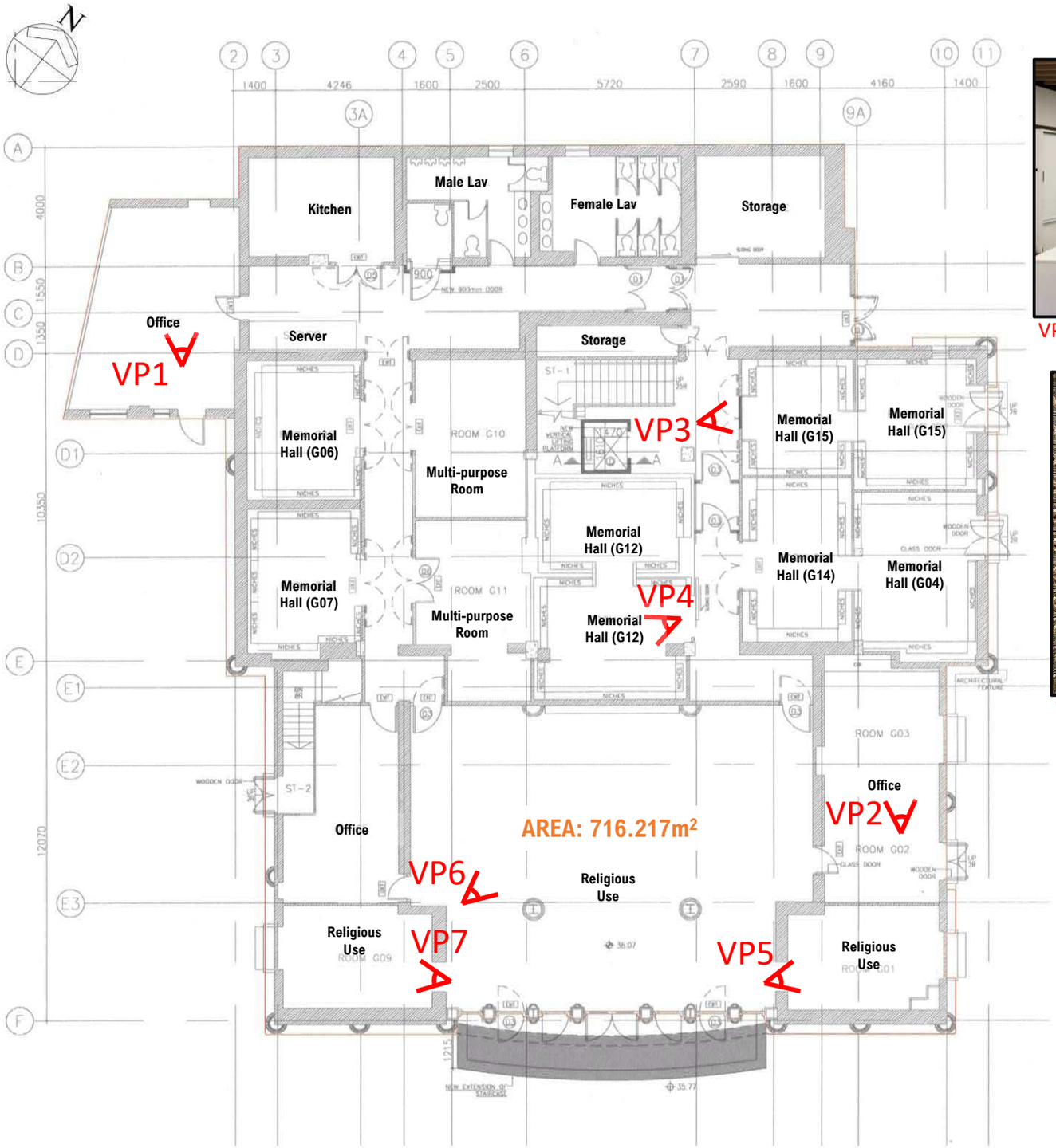
MEMBERSHIP No. 會籍號碼 OM-0125


**ISSUED BY WORLD BUDDHIST SANGHA COUNCIL**
6 Shaoxing N. Street, Taipei, Taiwan, 100, R.O.C.
Tel: +886-2-23965564 Fax: +886-2-23913770
E-mail: wbsc5564@ms64.hinet.net http: //www.wbsc886.org
世界佛教僧伽會 核發
100台北市中正區紹興北街六號
電話: +886-2-23965564 · 傳真: +886-2-23913770


**PRESIDENT**
會長

# Appendix 3

Indicative Layout Plan with Site Photos






VP1



VP2



VP3



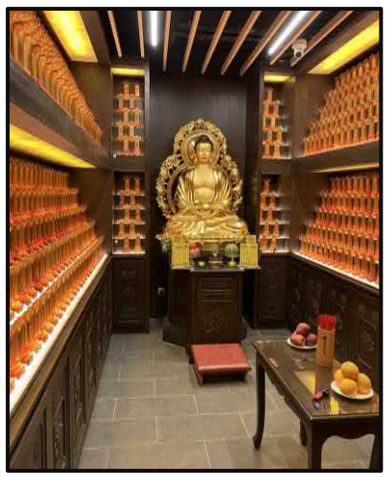
VP4



VP5



VP6



VP7

PLANPLUS 思顧 CONSULTANCY 隽問

**Figure:** 1

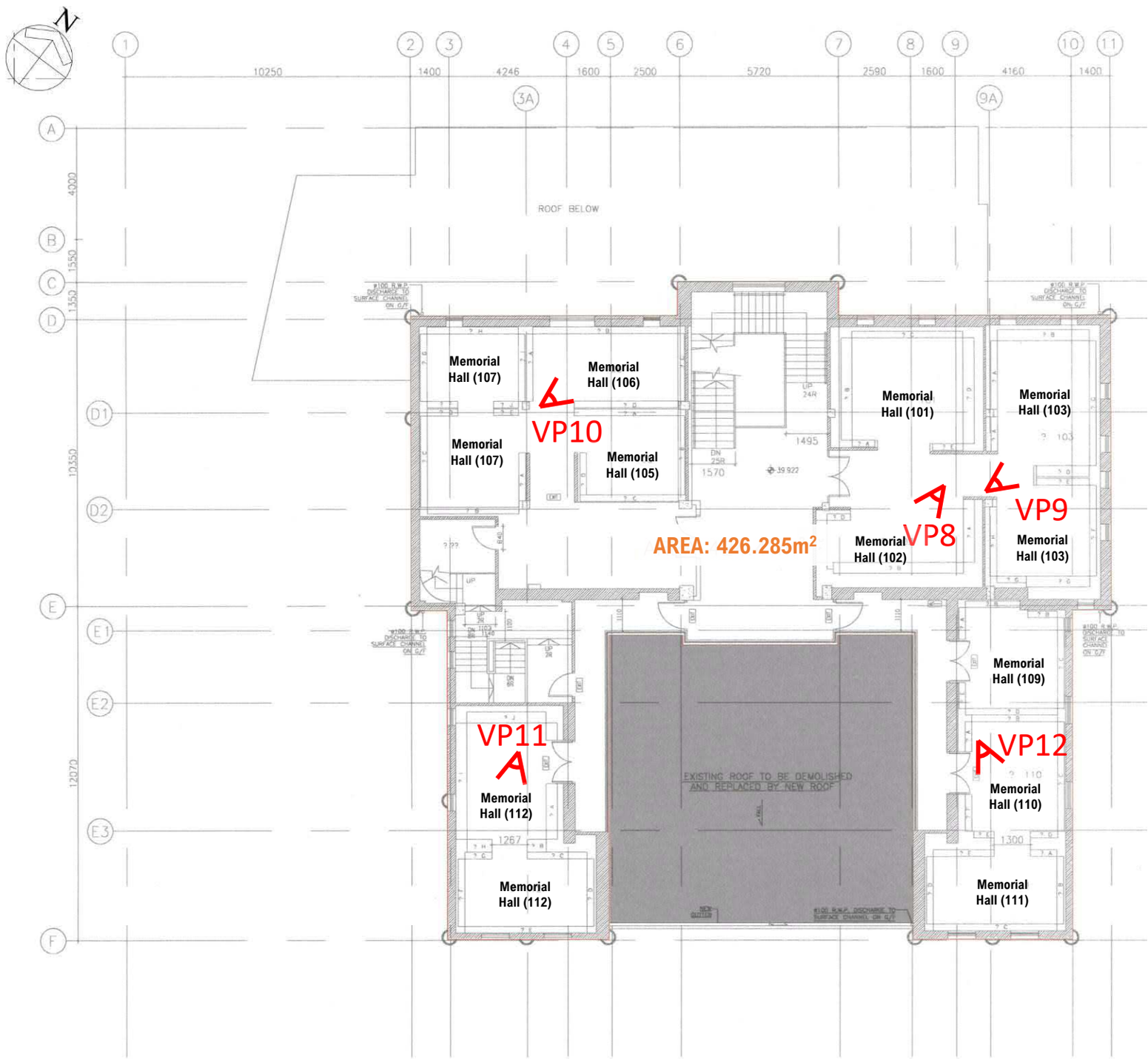
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**Date:** *October 2022*

**Title:**
Indicative Ground Floor Layout Plan with Site Photos

**Project No.:**
PPCL-PLG-10053b

**Project:**
Section 12A Application for Rezoning from “Residential (Group B)” & “Green Belt” to “Other Specified Uses (Religious Institution with Columbarium)” Zone for Puguangming Temple and Columbarium (Proposal 2) at Lot Nos. 2 & 671 in D.D.181 in Tai Wai, Sha Tin, New Territories






VP8



VP9



VP10



VP11



VP12

PLANPLUS 思顧 CONSULTANCY 隽問

**Figure:** 2

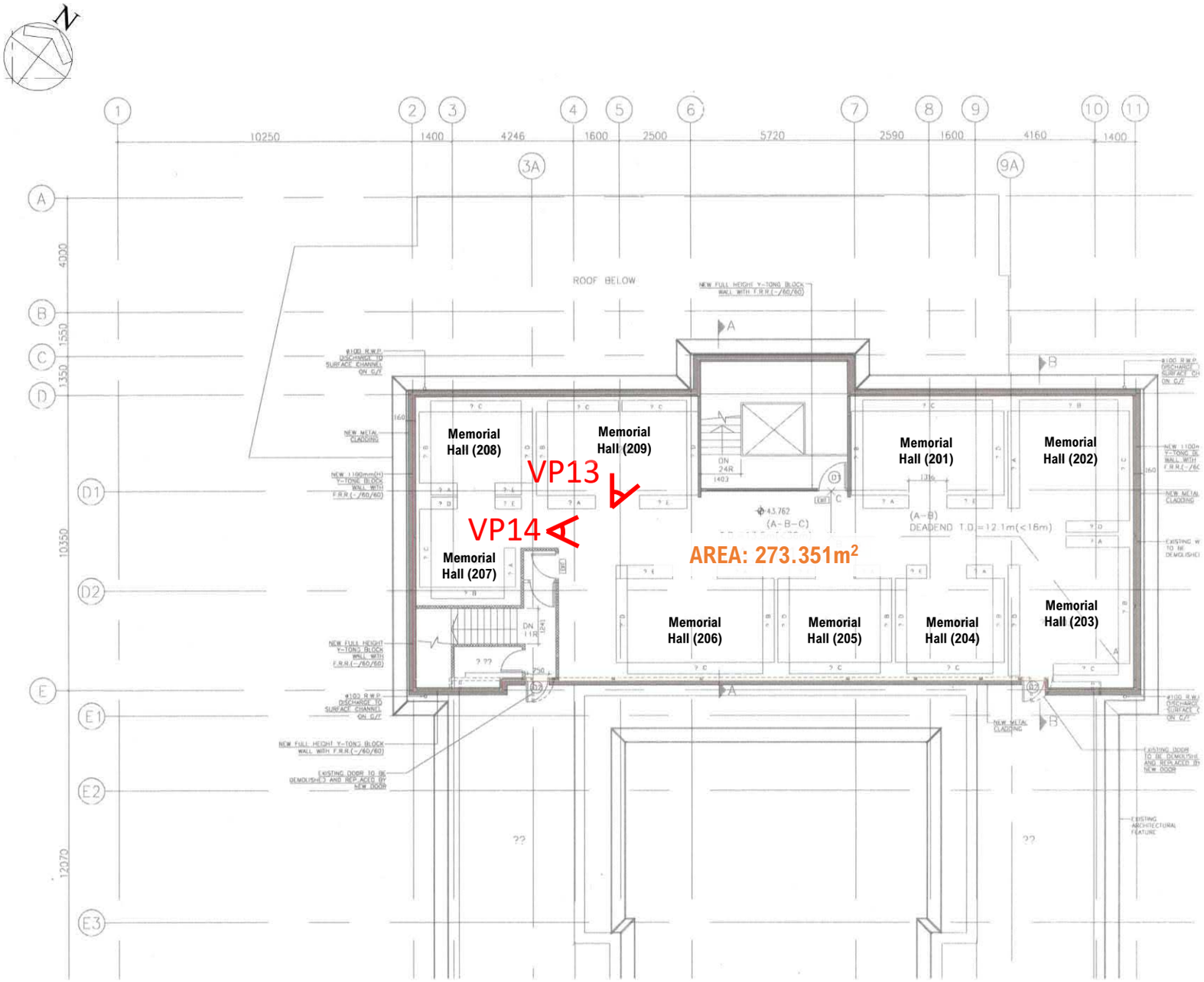
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**Date:** *October 2022*

**Title:**
Indicative First Floor Layout Plan with Site Photos

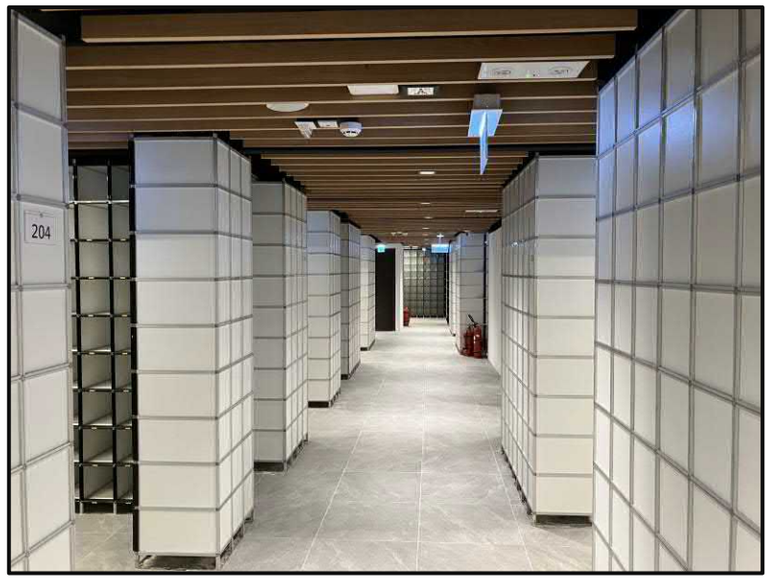
**Project No.:**
PPCL-PLG-10053b

**Project:**
Section 12A Application for Rezoning from “Residential (Group B)” & “Green Belt” to “Other Specified Uses (Religious Institution with Columbarium)” Zone for Puguangming Temple and Columbarium (Proposal 2) at Lot Nos. 2 & 671 in D.D.181 in Tai Wai, Sha Tin, New Territories






VP13




VP14

PLANPLUS 思顧 CONSULTANCY 焦問

| Figure: | Scale: | Date: |
|---|---|---|
| 3 | N/A | *October 2022* |

**Title:**
Indicative Second Floor Layout Plan with Site Photos

**Project No.:**
PPCL-PLG-10053b

**Project:**
Section 12A Application for Rezoning from “Residential (Group B)” & “Green Belt” to “Other Specified Uses (Religious Institution with Columbarium)” Zone for Puguangming Temple and Columbarium (Proposal 2) at Lot Nos. 2 & 671 in D.D.181 in Tai Wai, Sha Tin, New Territories

# Appendix 4

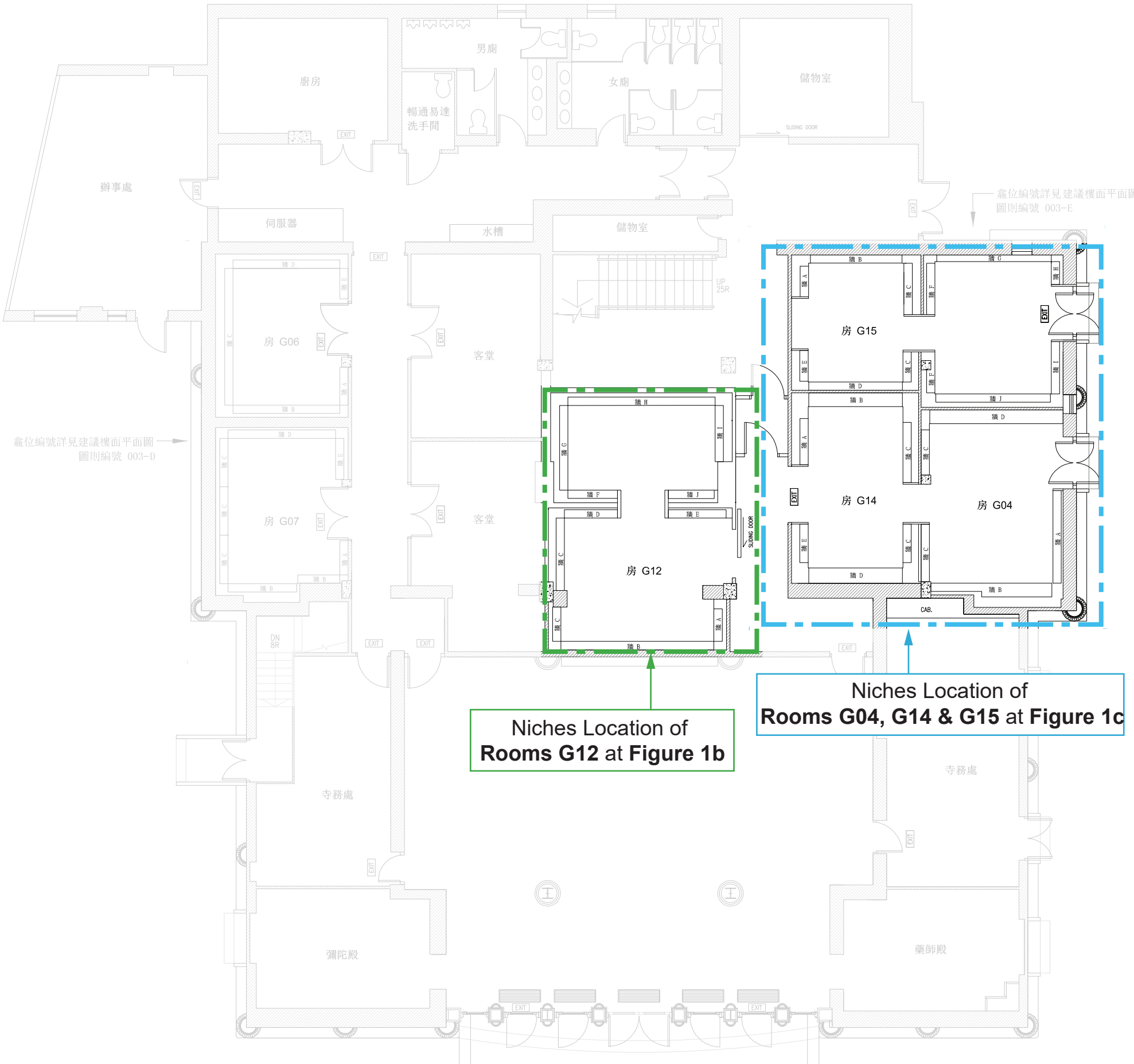
Indicative Location Plan for Niches at Puguangming Temple

| 房號 | 未售的單人位 | 未售的雙人位 | 已出售或轉售給個別人士的單人位 | 已出售或轉售給個別人士的雙人位 | 捐贈 | 小計 | 按層數計 |
|---|---|---|---|---|---|---|---|
| G04 | 348 | 312 | 0 | 0 | 0 | 660 | 3017 |
| G06 | 0 | 0 | 0 | 0 | 0 | 0 | |
| G07 | 0 | 0 | 0 | 0 | 0 | 0 | |
| G12 | 1080 | 59 | 12 | 13 | 0 | 1164 | |
| G14 | 288 | 288 | 0 | 0 | 0 | 576 | |
| G15 | 232 | 0 | 371 | 0 | 14 | 617 | |
| 101 | 0 | 72 | 189 | 287 | 0 | 548 | 1762 |
| 102 | 0 | 78 | 23 | 325 | 0 | 426 | |
| 103 | 0 | 85 | 298 | 207 | 2 | 592 | |
| 105 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 106 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 107 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 109 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 110 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 111 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 112 | 0 | 158 | 3 | 35 | 0 | 196 | |
| 201 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 202 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 203 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 204 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 205 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 206 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 207 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 208 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 209 | 0 | 0 | 0 | 0 | 0 | 0 | |
| **小計** | **1948** | **1052** | **896** | **867** | **16** | **4779** | **4779** |

# G/F Location Plan (Whole Floor)

Figure 1a

建議樓面平面圖 就截算前骨灰安置所的牌照申請




（按公制比例繪製）

建議骨灰安置所大樓地下樓面平面圖（圖則編號 003-A）

（1 ： 125）

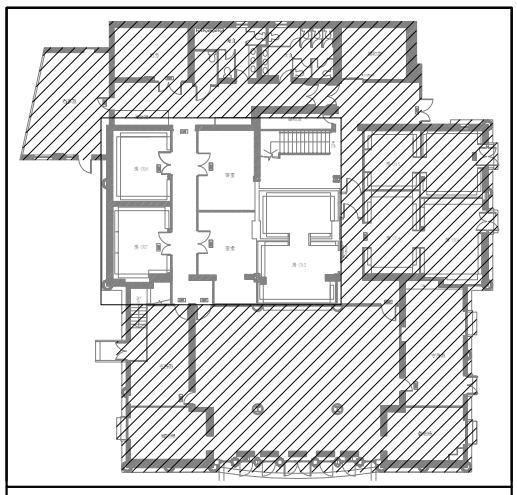
骨灰安置所名稱 ： 普光明寺（只包括2017年6月30日前已售出的龕位）

地址 ： 新界沙田大圍美田路白田村二區96號
（丈量約份第181約地段第2號及第671號）

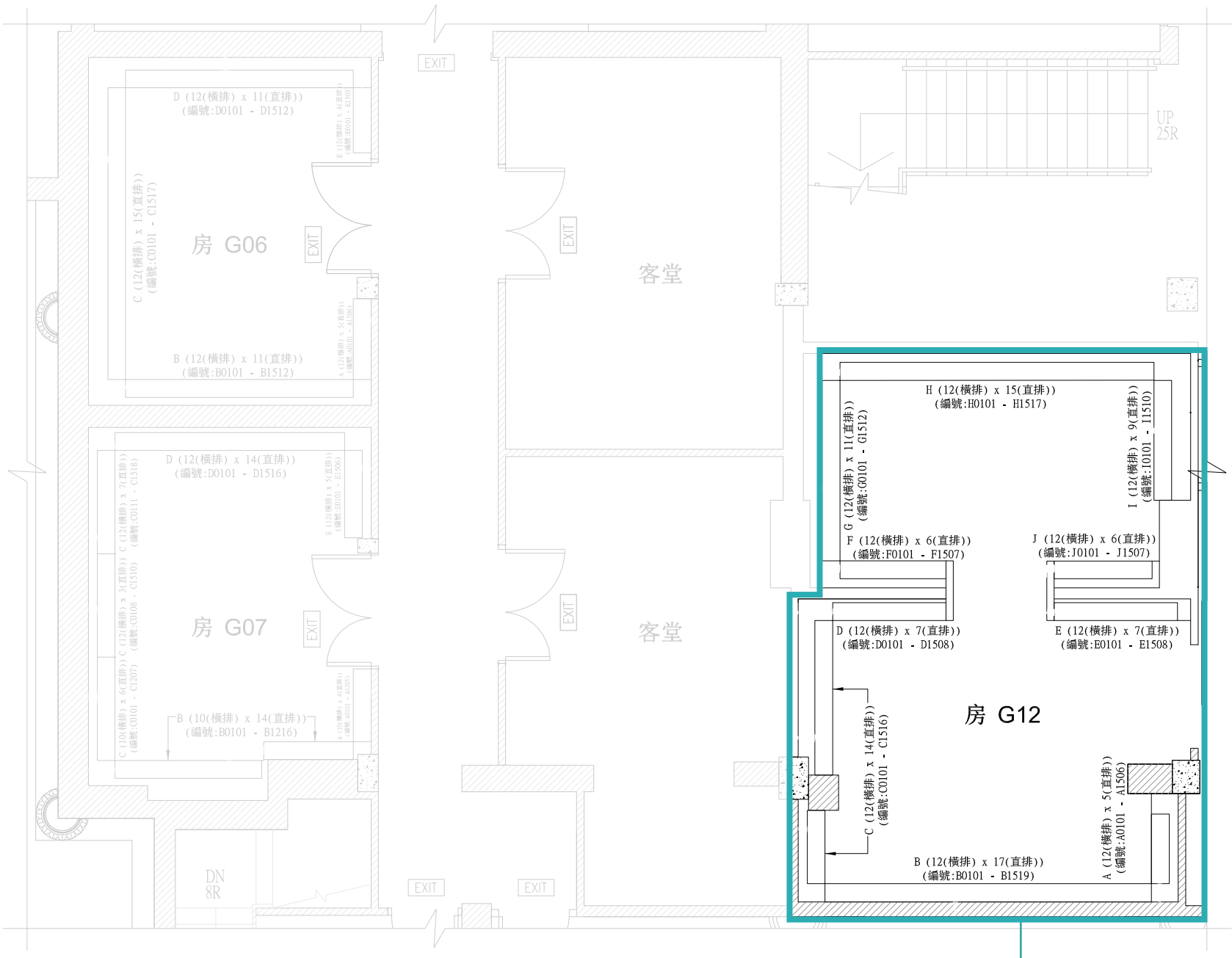
# G/F Location Plan (Rooms G06, G07 & G12)

Figure 1b

建議樓面平面圖 就截算前骨灰安置所的牌照申請



主要圖 1 : 500




(按公制比例繪製)

建議骨灰安置所大樓地下部份樓面平面圖 (圖則編號 003-D)

(1

骨灰安置所名稱 : 普光明寺 (只包

地址 : 新界沙田大圍美田路白田村
(丈量約份第181約地段第2號

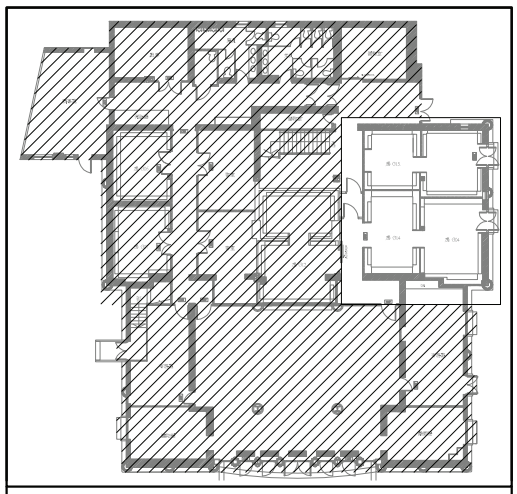
***Please refer to the following Figures for detailed niches locations on the walls in <u>Room G12</u>:***

Wall A & B: Figure 3a
Wall C, D & E: Figure 3b
Walls F, G & J: Figure 3c
Wall H & I: Figure 3d

# G/F Location Plan (Rooms G04, G14 & G15)

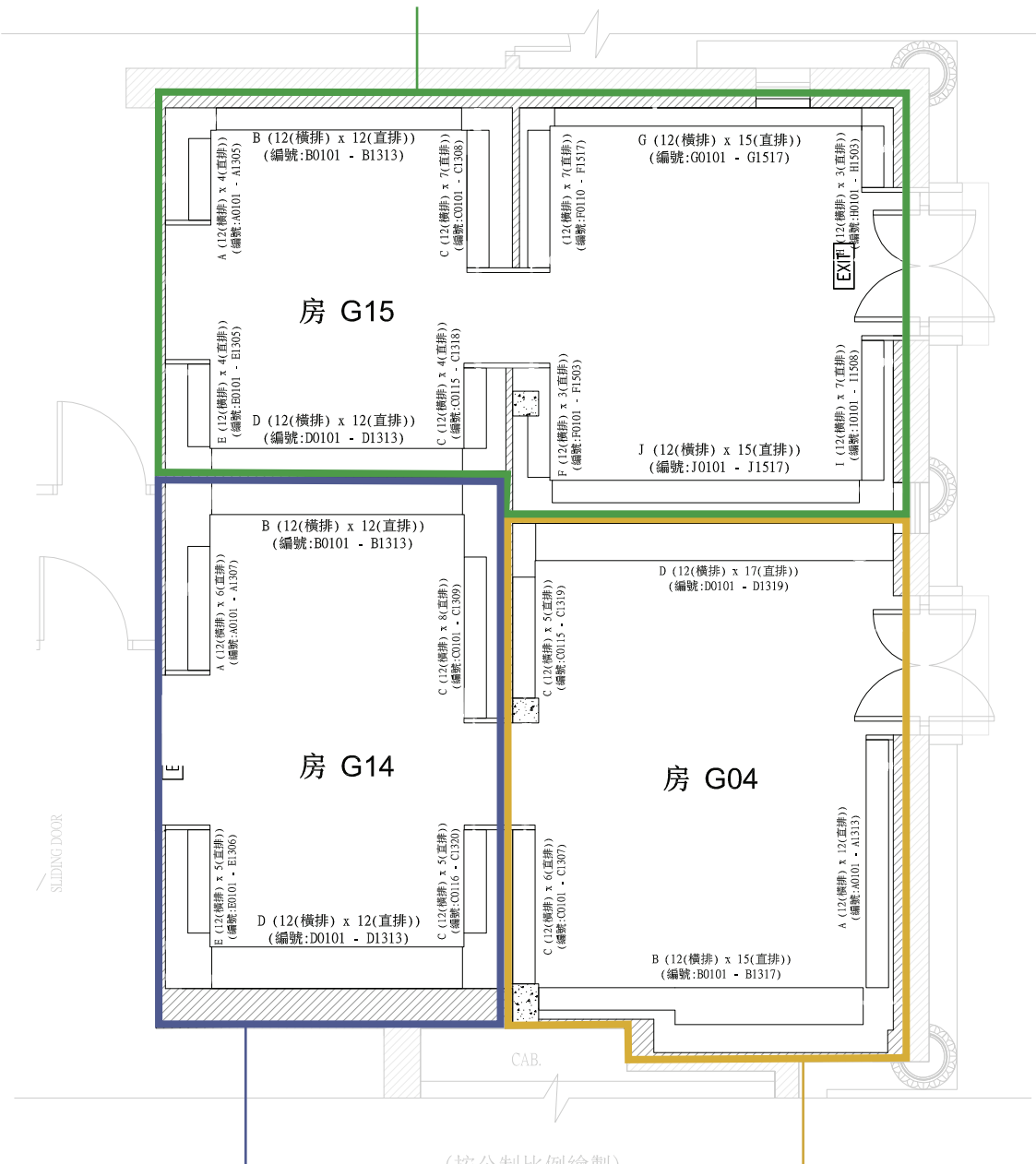
Figure 1c

建議樓面平面圖 就截算前骨灰安置所的牌照申請



主要圖 1 : 500

***Please refer to the following Figures for detailed niches locations on the walls in <u>Room G15</u>:***
Wall A, D & E: Figure 5a
Wall B & C: Figure 5b
Wall F & G: Figure 5c
Walls H, I & J: Figure 5d




（按公制比例繪製）


大樓地下部份樓面
（1 : 75
明寺（只包括20
田路白田村二區
地段第2號及第


***Please refer to the following Figures for detailed niches locations on the walls in <u>Room G14</u>:***
Wall A, D & E: Figure 4a
Wall B & C: Figure 4b

***Please refer to the following Figures for detailed niches locations on the walls in <u>Room G04</u>:***
Wall A & B: Figure 2a
Wall C & D: Figure 2b

**Figure 2a**

| G04-A | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 15 | A1501 | A1502 | A1503 | A1505 | A1506 | A1507 | A1508 | A1509 | A1510 | A1511 | A1512 | A1513 |
| 13 | A1301 | A1302 | A1303 | A1305 | A1306 | A1307 | A1308 | A1309 | A1310 | A1311 | A1312 | A1313 |
| 12 | A1201 | A1202 | A1203 | A1205 | A1206 | A1207 | A1208 | A1209 | A1210 | A1211 | A1212 | A1213 |
| 11 | A1101 | A1102 | A1103 | A1105 | A1106 | A1107 | A1108 | A1109 | A1110 | A1111 | A1112 | A1113 |
| 10 | A1001 | A1002 | A1003 | A1005 | A1006 | A1007 | A1008 | A1009 | A1010 | A1011 | A1012 | A1013 |
| 9 | A0901 | A0902 | A0903 | A0905 | A0906 | A0907 | A0908 | A0909 | A0910 | A0911 | A0912 | A0913 |
| 8 | A0801 | A0802 | A0803 | A0805 | A0806 | A0807 | A0808 | A0809 | A0810 | A0811 | A0812 | A0813 |
| 6 | A0601 | A0602 | A0603 | A0605 | A0606 | A0607 | A0608 | A0609 | A0610 | A0611 | A0612 | A0613 |
| 5 | A0501 | A0502 | A0503 | A0505 | A0506 | A0507 | A0508 | A0509 | A0510 | A0511 | A0512 | A0513 |
| 3 | A0301 | A0302 | A0303 | A0305 | A0306 | A0307 | A0308 | A0309 | A0310 | A0311 | A0312 | A0313 |
| 2 | A0201 | A0202 | A0203 | A0205 | A0206 | A0207 | A0208 | A0209 | A0210 | A0211 | A0212 | A0213 |
| 1 | A0101 | A0102 | A0103 | A0105 | A0106 | A0107 | A0108 | A0109 | A0110 | A0111 | A0112 | A0113 |

| G04- B | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 |
| 15 | B1501 | B1502 | B1503 | B1505 | B1506 | B1507 | B1508 | B1509 | B1510 | B1511 | B1512 | B1513 | B1515 | B1516 | B1517 |
| 13 | B1301 | B1302 | B1303 | B1305 | B1306 | B1307 | B1308 | B1309 | B1310 | B1311 | B1312 | B1313 | B1315 | B1316 | B1717 |
| 12 | B1201 | B1202 | B1203 | B1205 | B1206 | B1207 | B1208 | B1209 | B1210 | B1211 | B1212 | B1213 | B1215 | B1616 | B1217 |
| 11 | B1101 | B1102 | B1103 | B1105 | B1106 | B1107 | B1108 | B1109 | B1110 | B1111 | B1112 | B1113 | B1515 | B1116 | B1117 |
| 10 | B1001 | B1002 | B1003 | B1005 | B1006 | B1007 | B1008 | B1009 | B1010 | B1011 | B1012 | B1013 | B1015 | B1016 | B1017 |
| 9 | B0901 | B0902 | B0903 | B0905 | B0906 | B0907 | B0908 | B0909 | B0910 | B0911 | B0912 | B0913 | B0915 | B0916 | B0917 |
| 8 | B0801 | B0802 | B0803 | B0805 | B0806 | B0807 | B0808 | B0809 | B0810 | B0811 | B0812 | B0813 | B0815 | B0816 | B0817 |
| 6 | B0601 | B0602 | B0603 | B0605 | B0606 | B0607 | B0608 | B0609 | B0610 | B0611 | B0612 | B0613 | B0615 | B0616 | B0617 |
| 5 | B0501 | B0502 | B0503 | B0505 | B0506 | B0507 | B0508 | B0509 | B0510 | B0511 | B0512 | B0513 | B0515 | B0516 | B0517 |
| 3 | B0301 | B0302 | B0303 | B0305 | B0306 | B0307 | B0308 | B0309 | B0310 | B0311 | B0312 | B0313 | B0315 | B0316 | B0317 |
| 2 | B0201 | B0202 | B0203 | B0205 | B0206 | B0207 | B0208 | B0209 | B0210 | B0211 | B0212 | B0213 | B0215 | B0216 | B0217 |
| 1 | B0101 | B0102 | B0103 | B0105 | B0106 | B0107 | B0108 | B0109 | B0110 | B0111 | B0112 | B0113 | B0115 | B0116 | B0117 |

| | |
|---|---|
| 未售的單人位 | 216 |
| 未售的雙人位 | 108 |
| 已出售或轉售給個別人士的單人位 | 0 |
| 已出售或轉售給個別人士的雙人位 | 0 |
| 捐贈 | 0 |

**Figure 2b**

| G04-C | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 臨時通道 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | | 15 | 16 | 17 | 18 | 19 |
| 15 | C1501 | C1502 | C1503 | C1505 | C1506 | C1507 | | C1515 | C1516 | C1517 | C1518 | C1519 |
| 13 | C1301 | C1302 | C1303 | C1305 | C1306 | C1307 | | C1315 | C1316 | C1717 | C1318 | C1919 |
| 12 | C1201 | C1202 | C1203 | C1205 | C1206 | C1207 | | C1215 | C1616 | C1217 | C1818 | C1219 |
| 11 | C1101 | C1102 | C1103 | C1105 | C1106 | C1107 | | C1515 | C1116 | C1117 | C1118 | C1119 |
| 10 | C1001 | C1002 | C1003 | C1005 | C1006 | C1007 | | C1015 | C1016 | C1017 | C1018 | C1019 |
| 9 | C0901 | C0902 | C0903 | C0905 | C0906 | C0907 | | C0915 | C0916 | C0917 | C0918 | C0919 |
| 8 | C0801 | C0802 | C0803 | C0805 | C0806 | C0807 | | C0815 | C0816 | C0817 | C0818 | C0819 |
| 6 | C0601 | C0602 | C0603 | C0605 | C0606 | C0607 | | C0615 | C0616 | C0617 | C0618 | C0619 |
| 5 | C0501 | C0502 | C0503 | C0505 | C0506 | C0507 | | C0515 | C0516 | C0517 | C0518 | C0519 |
| 3 | C0301 | C0302 | C0303 | C0305 | C0306 | C0307 | | C0315 | C0316 | C0317 | C0318 | C0319 |
| 2 | C0201 | C0202 | C0203 | C0205 | C0206 | C0207 | | C0215 | C0216 | C0217 | C0218 | C0219 |
| 1 | C0101 | C0102 | C0103 | C0105 | C0106 | C0107 | | C0115 | C0116 | C0117 | C0118 | C0119 |

| G04-D | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 | 18 | 19 |
| 15 | D1501 | D1502 | D1503 | D1505 | D1506 | D1507 | D1508 | D1509 | D1510 | D1511 | D1512 | D1513 | D1515 | D1516 | D1517 | D1518 | D1519 |
| 13 | D1301 | D1302 | D1303 | D1305 | D1306 | D1307 | D1308 | D1309 | D1310 | D1311 | D1312 | D1313 | D1315 | D1316 | D1717 | D1318 | D1919 |
| 12 | D1201 | D1202 | D1203 | D1205 | D1206 | D1207 | D1208 | D1209 | D1210 | D1211 | D1212 | D1213 | D1215 | D1616 | D1217 | D1818 | D1219 |
| 11 | D1101 | D1102 | D1103 | D1105 | D1106 | D1107 | D1108 | D1109 | D1110 | D1111 | D1112 | D1113 | D1515 | D1116 | D1117 | D1118 | D1119 |
| 10 | D1001 | D1002 | D1003 | D1005 | D1006 | D1007 | D1008 | D1009 | D1010 | D1011 | D1012 | D1013 | D1015 | D1016 | D1017 | D1018 | D1019 |
| 9 | D0901 | D0902 | D0903 | D0905 | D0906 | D0907 | D0908 | D0909 | D0910 | D0911 | D0912 | D0913 | D0915 | D0916 | D0917 | D0918 | D0919 |
| 8 | D0801 | D0802 | D0803 | D0805 | D0806 | D0807 | D0808 | D0809 | D0810 | D0811 | D0812 | D0813 | D0815 | D0816 | D0817 | D0818 | D0819 |
| 6 | D0601 | D0602 | D0603 | D0605 | D0606 | D0607 | D0608 | D0609 | D0610 | D0611 | D0612 | D0613 | D0615 | D0616 | D0617 | D0618 | D0619 |
| 5 | D0501 | D0502 | D0503 | D0505 | D0506 | D0507 | D0508 | D0509 | D0510 | D0511 | D0512 | D0513 | D0515 | D0516 | D0517 | D0518 | D0519 |
| 3 | D0301 | D0302 | D0303 | D0305 | D0306 | D0307 | D0308 | D0309 | D0310 | D0311 | D0312 | D0313 | D0315 | D0316 | D0317 | D0318 | D0319 |
| 2 | D0201 | D0202 | D0203 | D0205 | D0206 | D0207 | D0208 | D0209 | D0210 | D0211 | D0212 | D0213 | D0215 | D0216 | D0217 | D0218 | D0219 |
| 1 | D0101 | D0102 | D0103 | D0105 | D0106 | D0107 | D0108 | D0109 | D0110 | D0111 | D0112 | D0113 | D0115 | D0116 | D0117 | D0118 | D0119 |

| | |
|---|---|
| 未售的單人位 | 132 |
| 未售的雙人位 | 204 |
| 已出售或轉售給個別人士的單人位 | 0 |
| 已出售或轉售給個別人士的雙人位 | 0 |
| 捐贈 | 0 |

**Figure 3a**

| G12 - A | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 |
| 15 | A1501 | A1502 | A1503 | A1505 | A1506 |
| 13 | A1301 | A1302 | A1303 | A1305 | A1306 |
| 12 | A1201 | A1202 | A1203 | A1205 | A1206 |
| 11 | A1101 | A1102 | A1103 | A1105 | A1106 |
| 10 | A1001 | A1002 | A1003 | A1005 | A1006 |
| 9 | A0901 | A0902 | A0903 | A0905 | A0906 |
| 8 | A0801 | A0802 | A0803 | A0805 | A0806 |
| 6 | A0601 | A0602 | A0603 | A0605 | A0606 |
| 5 | A0501 | A0502 | A0503 | A0505 | A0506 |
| 3 | A0301 | A0302 | A0303 | A0305 | A0306 |
| 2 | A0201 | A0202 | A0203 | A0205 | A0206 |
| 1 | A0101 | A0102 | A0103 | A0105 | A0106 |

| G12 - B | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 並排雙人位 | 並排雙人位 | 並排雙人位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 | 18 | 19 |
| 15 | B1501 | B1502 | B1503 | B1505 | B1506 | B1507 | B1508 | B1509 | B1510 | B1511 | B1512 | B1513 | B1515 | B1516 | B1517 | B1518 | B1519 |
| 13 | B1301 | B1302 | B1303 | B1305 | B1306 | B1307 | B1308 | B1309 | B1310 | B1311 | B1312 | B1313 | B1315 | B1316 | B1317 | B1318 | B1319 |
| 12 | B1201 | B1202 | B1203 | B1205 | B1206 | B1207 | B1208 | B1209 | B1210 | B1211 | B1212 | B1213 | B1215 | B1216 | B1217 | B1218 | B1219 |
| 11 | B1101 | B1102 | B1103 | B1105 | B1106 | B1107 | B1108 | B1109 | B1110 | B1111 | B1112 | B1113 | B1115 | B1116 | B1117 | B1118 | B1119 |
| 10 | B1001 | B1002 | B1003 | B1005 | B1006 | B1007 | B1008 | B1009 | B1010 | B1011 | B1012 | B1013 | B1015 | B1016 | B1017 | B1018 | B1019 |
| 9 | B0901 | B0902 | B0903 | B0905 | B0906 | B0907 | B0908 | B0909 | B0910 | B0911 | B0912 | B0913 | B0915 | B0916 | B0917 | B0918 | B0919 |
| 8 | B0801 | B0802 | B0803 | B0805 | B0806 | B0807 | B0808 | B0809 | B0810 | B0811 | B0812 | B0813 | B0815 | B0816 | B0817 | B0818 | B0819 |
| 6 | B0601 | B0602 | B0603 | B0605 | B0606 | B0607 | B0608 | B0609 | B0610 | B0611 | B0612 | B0613 | B0615 | B0616 | B0617 | B0618 | B0619 |
| 5 | B0501 | B0502 | B0503 | B0505 | B0506 | B0507 | B0508 | B0509 | B0510 | B0511 | B0512 | B0513 | B0515 | B0516 | B0517 | B0518 | B0519 |
| 3 | B0301 | B0302 | B0303 | B0305 | B0306 | B0307 | B0308 | B0309 | B0310 | B0311 | B0312 | B0313 | B0315 | B0316 | B0317 | B0318 | B0319 |
| 2 | B0201 | B0202 | B0203 | B0205 | B0206 | B0207 | B0208 | B0209 | B0210 | B0211 | B0212 | B0213 | B0215 | B0216 | B0217 | B0218 | B0219 |
| 1 | B0101 | B0102 | B0103 | B0105 | B0106 | B0107 | B0108 | B0109 | B0110 | B0111 | B0112 | B0113 | B0115 | B0116 | B0117 | B0118 | B0119 |

| | |
|---|---|
| 未售的單人位 | 224 |
| 未售的雙人位 | 33 |
| 已出售或轉售給個別人士的單人位 | 4 |
| 已出售或轉售給個別人士的雙人位 | 3 |
| 捐贈 | 0 |

**Figure 3b**

| G12 - C | 單位 | 單位 | 單位 | 單位 | 單位 | | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 |
| 15 | C1501 | C1502 | C1503 | C1505 | C1506 | | C1507 | C1508 | C1509 | C1510 | C1511 | C1512 | C1513 | C1515 | C1516 |
| 13 | C1301 | C1302 | C1303 | C1305 | C1306 | | C1307 | C1308 | C1309 | C1310 | C1311 | C1312 | C1313 | C1315 | C1316 |
| 12 | C1201 | C1202 | C1203 | C1205 | C1206 | | C1207 | C1208 | C1209 | C1210 | C1211 | C1212 | C1213 | C1215 | C1216 |
| 11 | C1101 | C1102 | C1103 | C1105 | C1106 | | C1107 | C1108 | C1109 | C1110 | C1111 | C1112 | C1113 | C1115 | C1116 |
| 10 | C1001 | C1002 | C1003 | C1005 | C1006 | | C1007 | C1008 | C1009 | C1010 | C1011 | C1012 | C1013 | C1015 | C1016 |
| 9 | C0901 | C0902 | C0903 | C0905 | C0906 | | C0907 | C0908 | C0909 | C0910 | C0911 | C0912 | C0913 | C0915 | C0916 |
| 8 | C0801 | C0802 | C0803 | C0805 | C0806 | | C0807 | C0808 | C0809 | C0810 | C0811 | C0812 | C0813 | C0815 | C0816 |
| 6 | C0601 | C0602 | C0603 | C0605 | C0606 | | C0607 | C0608 | C0609 | C0610 | C0611 | C0612 | C0613 | C0615 | C0616 |
| 5 | C0501 | C0502 | C0503 | C0505 | C0506 | | C0507 | C0508 | C0509 | C0510 | C0511 | C0512 | C0513 | C0515 | C0516 |
| 3 | C0301 | C0302 | C0303 | C0305 | C0306 | | C0307 | C0308 | C0309 | C0310 | C0311 | C0312 | C0313 | C0315 | C0316 |
| 2 | C0201 | C0202 | C0203 | C0205 | C0206 | | C0207 | C0208 | C0209 | C0210 | C0211 | C0212 | C0213 | C0215 | C0216 |
| 1 | C0101 | C0102 | C0103 | C0105 | C0106 | | C0107 | C0108 | C0109 | C0110 | C0111 | C0112 | C0113 | C0115 | C0116 |

| G12 - D | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 |
| 15 | D1501 | D1502 | D1503 | D1505 | D1506 | D1507 | D1508 |
| 13 | D1301 | D1302 | D1303 | D1305 | D1306 | D1307 | D1308 |
| 12 | D1201 | D1202 | D1203 | D1205 | D1206 | D1207 | D1208 |
| 11 | D1101 | D1102 | D1103 | D1105 | D1106 | D1107 | D1108 |
| 10 | D1001 | D1002 | D1003 | D1005 | D1006 | D1007 | D1008 |
| 9 | D0901 | D0902 | D0903 | D0905 | D0906 | D0907 | D0908 |
| 8 | D0801 | D0802 | D0803 | D0805 | D0806 | D0807 | D0808 |
| 6 | D0601 | D0602 | D0603 | D0605 | D0606 | D0607 | D0608 |
| 5 | D0501 | D0502 | D0503 | D0505 | D0506 | D0507 | D0508 |
| 3 | D0301 | D0302 | D0303 | D0305 | D0306 | D0307 | D0308 |
| 2 | D0201 | D0202 | D0203 | D0205 | D0206 | D0207 | D0208 |
| 1 | D0101 | D0102 | D0103 | D0105 | D0106 | D0107 | D0108 |

| G12 - E | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 |
| 15 | E1501 | E1502 | E1503 | E1505 | E1506 | E1507 | E1508 |
| 13 | E1301 | E1302 | E1303 | E1305 | E1306 | E1307 | E1308 |
| 12 | E1201 | E1202 | E1203 | E1205 | E1206 | E1207 | E1208 |
| 11 | E1101 | E1102 | E1103 | E1105 | E1106 | E1107 | E1108 |
| 10 | E1001 | E1002 | E1003 | E1005 | E1006 | E1007 | E1008 |
| 9 | E0901 | E0902 | E0903 | E0905 | E0906 | E0907 | E0908 |
| 8 | E0801 | E0802 | E0803 | E0805 | E0806 | E0807 | E0808 |
| 6 | E0601 | E0602 | E0603 | E0605 | E0606 | E0607 | E0608 |
| 5 | E0501 | E0502 | E0503 | E0505 | E0506 | E0507 | E0508 |
| 3 | E0301 | E0302 | E0303 | E0305 | E0306 | E0307 | E0308 |
| 2 | E0201 | E0202 | E0203 | E0205 | E0206 | E0207 | E0208 |
| 1 | E0101 | E0102 | E0103 | E0105 | E0106 | E0107 | E0108 |

| | |
|---|---|
| 未售的單人位 | 333 |
| 未售的雙人位 | 0 |
| 已出售或轉售給個別人士的單人位 | 3 |
| 已出售或轉售給個別人士的雙人位 | 0 |
| 捐贈 | 0 |

**Figure 3c**

| G12 -F | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 |
| 15 | F1501 | F1502 | F1503 | F1505 | F1506 | F1507 |
| 13 | F1301 | F1302 | F1303 | F1305 | F1306 | F1307 |
| 12 | F1201 | F1202 | F1203 | F1205 | F1206 | F1207 |
| 11 | F1101 | F1102 | F1103 | F1105 | F1106 | F1107 |
| 10 | F1001 | F1002 | F1003 | F1005 | F1006 | F1007 |
| 9 | F0901 | F0902 | F0903 | F0905 | F0906 | F0907 |
| 8 | F0801 | F0802 | F0803 | F0805 | F0806 | F0807 |
| 6 | F0601 | F0602 | F0603 | F0605 | F0606 | F0607 |
| 5 | F0501 | F0502 | F0503 | F0505 | F0506 | F0507 |
| 3 | F0301 | F0302 | F0303 | F0305 | F0306 | F0307 |
| 2 | F0201 | F0202 | F0203 | F0205 | F0206 | F0207 |
| 1 | F0101 | F0102 | F0103 | F0105 | F0106 | F0107 |

| G12 -J | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 |
| 15 | J1501 | J1502 | J1503 | J1505 | J1506 | J1507 |
| 13 | J1301 | J1302 | J1303 | J1305 | J1306 | J1307 |
| 12 | J1201 | J1202 | J1203 | J1205 | J1206 | J1207 |
| 11 | J1101 | J1102 | J1103 | J1105 | J1106 | J1107 |
| 10 | J1001 | J1002 | J1003 | J1005 | J1006 | J1007 |
| 9 | J0901 | J0902 | J0903 | J0905 | J0906 | J0907 |
| 8 | J0801 | J0802 | J0803 | J0805 | J0806 | J0807 |
| 6 | J0601 | J0602 | J0603 | J0605 | J0606 | J0607 |
| 5 | J0501 | J0502 | J0503 | J0505 | J0506 | J0507 |
| 3 | J0301 | J0302 | J0303 | J0305 | J0306 | J0307 |
| 2 | J0201 | J0202 | J0203 | J0205 | J0206 | J0207 |
| 1 | J0101 | J0102 | J0103 | J0105 | J0106 | J0107 |

| G12 -G | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 15 | G1501 | G1502 | G1503 | G1505 | G1506 | G1507 | G1508 | G1509 | G1510 | G1511 | G1512 |
| 13 | G1301 | G1302 | G1303 | G1305 | G1306 | G1307 | G1308 | G1309 | G1310 | G1311 | G1312 |
| 12 | G1201 | G1202 | G1203 | G1205 | G1206 | G1207 | G1208 | G1209 | G1210 | G1211 | G1212 |
| 11 | G1101 | G1102 | G1103 | G1105 | G1106 | G1107 | G1108 | G1109 | G1110 | G1111 | G1112 |
| 10 | G1001 | G1002 | G1003 | G1005 | G1006 | G1007 | G1008 | G1009 | G1010 | G1011 | G1012 |
| 9 | G0901 | G0902 | G0903 | G0905 | G0906 | G0907 | G0908 | G0909 | G0910 | G0911 | G0912 |
| 8 | G0801 | G0802 | G0803 | G0805 | G0806 | G0807 | G0808 | G0809 | G0810 | G0811 | G0812 |
| 6 | G0601 | G0602 | G0603 | G0605 | G0606 | G0607 | G0608 | G0609 | G0610 | G0611 | G0612 |
| 5 | G0501 | G0502 | G0503 | G0505 | G0506 | G0507 | G0508 | G0509 | G0510 | G0511 | G0512 |
| 3 | G0301 | G0302 | G0303 | G0305 | G0306 | G0307 | G0308 | G0309 | G0310 | G0311 | G0312 |
| 2 | G0201 | G0202 | G0203 | G0205 | G0206 | G0207 | G0208 | G0209 | G0210 | G0211 | G0212 |
| 1 | G0101 | G0102 | G0103 | G0105 | G0106 | G0107 | G0108 | G0109 | G0110 | G0111 | G0112 |

| | |
|---|---|
| 未售的單人位 | 276 |
| 未售的雙人位 | 0 |
| 已出售或轉售給個別人士的單人位 | 0 |
| 已出售或轉售給個別人士的雙人位 | 0 |
| 捐贈 | 0 |

**Figure 3d**

| G12 -H | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 並排雙人位 | 並排雙人位 | 並排雙人位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 |
| 15 | H1501 | H1502 | H1503 | H1505 | H1506 | H1507 | H1508 | H1509 | H1510 | H1511 | H1512 | H1513 | H1515 | H1516 | H1517 |
| 13 | H1301 | H1302 | H1303 | H1305 | H1306 | H1307 | H1308 | H1309 | H1310 | H1311 | H1312 | H1313 | H1315 | H1316 | H1317 |
| 12 | H1201 | H1202 | H1203 | H1205 | H1206 | H1207 | H1208 | H1209 | H1210 | H1211 | H1212 | H1213 | H1215 | H1216 | H1217 |
| 11 | H1101 | H1102 | H1103 | H1105 | H1106 | H1107 | H1108 | H1109 | H1110 | H1111 | H1112 | H1113 | H1115 | H1116 | H1117 |
| 10 | H1001 | H1002 | H1003 | H1005 | H1006 | H1007 | H1008 | H1009 | H1010 | H1011 | H1012 | H1013 | H1015 | H1016 | H1017 |
| 9 | H0901 | H0902 | H0903 | H0905 | H0906 | H0907 | H0908 | H0909 | H0910 | H0911 | H0912 | H0913 | H0915 | H0916 | H0917 |
| 8 | H0801 | H0802 | H0803 | H0805 | H0806 | H0807 | H0808 | H0809 | H0810 | H0811 | H0812 | H0813 | H0815 | H0816 | H0817 |
| 6 | H0601 | H0602 | H0603 | H0605 | H0606 | H0607 | H0608 | H0609 | H0610 | H0611 | H0612 | H0613 | H0615 | H0616 | H0617 |
| 5 | H0501 | H0502 | H0503 | H0505 | H0506 | H0507 | H0508 | H0509 | H0510 | H0511 | H0512 | H0513 | H0515 | H0516 | H0517 |
| 3 | H0301 | H0302 | H0303 | H0305 | H0306 | H0307 | H0308 | H0309 | H0310 | H0311 | H0312 | H0313 | H0315 | H0316 | H0317 |
| 2 | H0201 | H0202 | H0203 | H0205 | H0206 | H0207 | H0208 | H0209 | H0210 | H0211 | H0212 | H0213 | H0215 | H0216 | H0217 |
| 1 | H0101 | H0102 | H0103 | H0105 | H0106 | H0107 | H0108 | H0109 | H0110 | H0111 | H0112 | H0113 | H0115 | H0116 | H0117 |

| G12 -I | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 |
| 15 | I1501 | I1502 | I1503 | I1505 | I1506 | I1507 | I1508 | I1509 | I1510 |
| 13 | I1301 | I1302 | I1303 | I1305 | I1306 | I1307 | I1308 | I1309 | I1310 |
| 12 | I1201 | I1202 | I1203 | I1205 | I1206 | I1207 | I1208 | I1209 | I1210 |
| 11 | I1101 | I1102 | I1103 | I1105 | I1106 | I1107 | I1108 | I1109 | I1110 |
| 10 | I1001 | I1002 | I1003 | I1005 | I1006 | I1007 | I1008 | I1009 | I1010 |
| 9 | I0901 | I0902 | I0903 | I0905 | I0906 | I0907 | I0908 | I0909 | I0910 |
| 8 | I0801 | I0802 | I0803 | I0805 | I0806 | I0807 | I0808 | I0809 | I0810 |
| 6 | I0601 | I0602 | I0603 | I0605 | I0606 | I0607 | I0608 | I0609 | I0610 |
| 5 | I0501 | I0502 | I0503 | I0505 | I0506 | I0507 | I0508 | I0509 | I0510 |
| 3 | I0301 | I0302 | I0303 | I0305 | I0306 | I0307 | I0308 | I0309 | I0310 |
| 2 | I0201 | I0202 | I0203 | I0205 | I0206 | I0207 | I0208 | I0209 | I0210 |
| 1 | I0101 | I0102 | I0103 | I0105 | I0106 | I0107 | I0108 | I0109 | I0110 |

| | |
|---|---|
| 未售的單人位 | 247 |
| 未售的雙人位 | 26 |
| 已出售或轉售給個別人士的單人位 | 5 |
| 已出售或轉售給個別人士的雙人位 | 10 |
| 捐贈 | 0 |

Figure 4a

| G14 福綿堂 - A | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 |
| 15 | A1501 | A1502 | A1503 | A1505 | A1506 | A1507 |
| 13 | A1301 | A1302 | A1303 | A1305 | A1306 | A1307 |
| 12 | A1201 | A1202 | A1203 | A1205 | A1206 | A1207 |
| 11 | A1101 | A1102 | A1103 | A1105 | A1106 | A1107 |
| 10 | A1001 | A1002 | A1003 | A1005 | A1006 | A1007 |
| 9 | A0901 | A0902 | A0903 | A0905 | A0906 | A0907 |
| 8 | A0801 | A0802 | A0803 | A0805 | A0806 | A0807 |
| 6 | A0601 | A0602 | A0603 | A0605 | A0606 | A0607 |
| 5 | A0501 | A0502 | A0503 | A0505 | A0506 | A0507 |
| 3 | A0301 | A0302 | A0303 | A0305 | A0306 | A0307 |
| 2 | A0201 | A0202 | A0203 | A0205 | A0206 | A0207 |
| 1 | A0101 | A0102 | A0103 | A0105 | A0106 | A0107 |

| G14 福綿堂-E | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 5 |
| 15 | E1501 | E1502 | E1503 | E1505 | E1506 |
| 13 | E1301 | E1302 | E1303 | E1305 | E1306 |
| 12 | E1201 | E1202 | E1203 | E1205 | E1206 |
| 11 | E1101 | E1102 | E1103 | E1105 | E1106 |
| 10 | E1001 | E1002 | E1003 | E1005 | E1006 |
| 9 | E0901 | E0902 | E0903 | E0905 | E0906 |
| 8 | E0801 | E0802 | E0803 | E0805 | E0806 |
| 6 | E0601 | E0602 | E0603 | E0605 | E0606 |
| 5 | E0501 | E0502 | E0503 | E0505 | E0506 |
| 3 | E0301 | E0302 | E0303 | E0305 | E0306 |
| 2 | E0201 | E0202 | E0203 | E0205 | E0206 |
| 1 | E0101 | E0102 | E0103 | E0105 | E0106 |

| G14 福綿堂 - D | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 15 | D1501 | D1502 | D1503 | D1505 | D1506 | D1507 | D1508 | D1509 | D1510 | D1511 | D1512 | D1513 |
| 13 | D1301 | D1302 | D1303 | D1305 | D1306 | D1307 | D1308 | D1309 | D1310 | D1311 | D1312 | D1313 |
| 12 | D1201 | D1202 | D1203 | D1205 | D1206 | D1207 | D1208 | D1209 | D1210 | D1211 | D1212 | D1213 |
| 11 | D1101 | D1102 | D1103 | D1105 | D1106 | D1107 | D1108 | D1109 | D1110 | D1111 | D1112 | D1113 |
| 10 | D1001 | D1002 | D1003 | D1005 | D1006 | D1007 | D1008 | D1009 | D1010 | D1011 | D1012 | D1013 |
| 9 | D0901 | D0902 | D0903 | D0905 | D0906 | D0907 | D0908 | D0909 | D0910 | D0911 | D0912 | D0913 |
| 8 | D0801 | D0802 | D0803 | D0805 | D0806 | D0807 | D0808 | D0809 | D0810 | D0811 | D0812 | D0813 |
| 6 | D0601 | D0602 | D0603 | D0605 | D0606 | D0607 | D0608 | D0609 | D0610 | D0611 | D0612 | D0613 |
| 5 | D0501 | D0502 | D0503 | D0505 | D0506 | D0507 | D0508 | D0509 | D0510 | D0511 | D0512 | D0513 |
| 3 | D0301 | D0302 | D0303 | D0305 | D0306 | D0307 | D0308 | D0309 | D0310 | D0311 | D0312 | D0313 |
| 2 | D0201 | D0202 | D0203 | D0205 | D0206 | D0207 | D0208 | D0209 | D0210 | D0211 | D0212 | D0213 |
| 1 | D0101 | D0102 | D0103 | D0105 | D0106 | D0107 | D0108 | D0109 | D0110 | D0111 | D0112 | D0113 |

| | |
|---|---|
| 未售的單人位 | 132 |
| 未售的雙人位 | 144 |
| 已出售或轉售給個別人士的單人位 | 0 |
| 已出售或轉售給個別人士的雙人位 | 0 |
| 捐贈 | 0 |

**Figure 4b**

| G14 福綿堂 - B | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 15 | B1501 | B1502 | B1503 | B1505 | B1506 | B1507 | B1508 | B1509 | B1510 | B1511 | B1512 | B1513 |
| 13 | B1301 | B1302 | B1303 | B1305 | B1306 | B1307 | B1308 | B1309 | B1310 | B1311 | B1312 | B1313 |
| 12 | B1201 | B1202 | B1203 | B1205 | B1206 | B1207 | B1208 | B1209 | B1210 | B1211 | B1212 | B1213 |
| 11 | B1101 | B1102 | B1103 | B1105 | B1106 | B1107 | B1108 | B1109 | B1110 | B1111 | B1112 | B1113 |
| 10 | B1001 | B1002 | B1003 | B1005 | B1006 | B1007 | B1008 | B1009 | B1010 | B1011 | B1012 | B1013 |
| 9 | B0901 | B0902 | B0903 | B0905 | B0906 | B0907 | B0908 | B0909 | B0910 | B0911 | B0912 | B0913 |
| 8 | B0801 | B0802 | B0803 | B0805 | B0806 | B0807 | B0808 | B0809 | B0810 | B0811 | B0812 | B0813 |
| 6 | B0601 | B0602 | B0603 | B0605 | B0606 | B0607 | B0608 | B0609 | B0610 | B0611 | B0612 | B0613 |
| 5 | B0501 | B0502 | B0503 | B0505 | B0506 | B0507 | B0508 | B0509 | B0510 | B0511 | B0512 | B0513 |
| 3 | B0301 | B0302 | B0303 | B0305 | B0306 | B0307 | B0308 | B0309 | B0310 | B0311 | B0312 | B0313 |
| 2 | B0201 | B0202 | B0203 | B0205 | B0206 | B0207 | B0208 | B0209 | B0210 | B0211 | B0212 | B0213 |
| 1 | B0101 | B0102 | B0103 | B0105 | B0106 | B0107 | B0108 | B0109 | B0110 | B0111 | B0112 | B0113 |

| G14 福慧堂 - C | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 臨時通道 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | | 16 | 17 | 18 | 19 | 19 |
| 15 | C1501 | C1502 | C1503 | C1505 | C1506 | C1507 | C1508 | C1509 | | C1516 | C1517 | C1518 | C1519 | C1520 |
| 13 | C1301 | C1302 | C1303 | C1305 | C1306 | C1307 | C1308 | C1309 | | C1316 | C1317 | C1318 | C1319 | C1320 |
| 12 | C1201 | C1202 | C1203 | C1205 | C1206 | C1207 | C1208 | C1209 | | C1616 | C1217 | C1218 | C1219 | C1220 |
| 11 | C1101 | C1102 | C1103 | C1105 | C1106 | C1107 | C1108 | C1109 | | C1116 | C1117 | C1118 | C1119 | C1120 |
| 10 | C1001 | C1002 | C1003 | C1005 | C1006 | C1007 | C1008 | C1009 | | C1016 | C1017 | C1018 | C1019 | C1020 |
| 9 | C0901 | C0902 | C0903 | C0905 | C0906 | C0907 | C0908 | C0909 | | C0916 | C0917 | C0918 | C0919 | C0920 |
| 8 | C0801 | C0802 | C0803 | C0805 | C0806 | C0807 | C0808 | C0809 | | C0816 | C0817 | C0818 | C0819 | C0820 |
| 6 | C0601 | C0602 | C0603 | C0605 | C0606 | C0607 | C0608 | C0609 | | C0616 | C0617 | C0618 | C0619 | C0620 |
| 5 | C0501 | C0502 | C0503 | C0505 | C0506 | C0507 | C0508 | C0509 | | C0516 | C0517 | C0518 | C0519 | C0520 |
| 3 | C0301 | C0302 | C0303 | C0305 | C0306 | C0307 | C0308 | C0309 | | C0316 | C0317 | C0318 | C0319 | C0320 |
| 2 | C0201 | C0202 | C0203 | C0205 | C0206 | C0207 | C0208 | C0209 | | C0216 | C0217 | C0218 | C0219 | C0220 |
| 1 | C0101 | C0102 | C0103 | C0105 | C0106 | C0107 | C0108 | C0109 | | C0116 | C0117 | C0118 | C0119 | C0120 |

| | |
|---|---|
| 未售的單人位 | 156 |
| 未售的雙人位 | 144 |
| 已出售或轉售給個別人士的單人位 | 0 |
| 已出售或轉售給個別人士的雙人位 | 0 |
| 捐贈 | 0 |

Figure 5a

| G15 - A | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|
| | 1 | 2 | 3 | 5 |
| 13 | A1301 | A1302 | A1303 | A1305 |
| 12 | A1201 | A1202 | A1203 | A1205 |
| 11 | A1101 | A1102 | A1103 | A1105 |
| 10 | A1001 | A1002 | A1003 | A1005 |
| 9 | A0901 | A0902 | A0903 | A0905 |
| 8 | A0801 | A0802 | A0803 | A0805 |
| 7 | A0701 | A0702 | A0703 | A0705 |
| 6 | A0601 | A0602 | A0603 | A0605 |
| 5 | A0501 | A0502 | A0503 | A0505 |
| 3 | A0301 | A0302 | A0303 | A0305 |
| 2 | A0201 | A0202 | A0203 | A0205 |
| 1 | A0101 | A0102 | A0103 | A0105 |

| G15 - E | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|
| | 01 | 02 | 03 | 05 |
| 13 | E1301 | E1302 | E1303 | E1305 |
| 12 | E1201 | E1202 | E1203 | E1205 |
| 11 | E1101 | E1102 | E1103 | E1105 |
| 10 | E1001 | E1002 | E1003 | E1005 |
| 9 | E0901 | E0902 | E0903 | E0905 |
| 8 | E0801 | E0802 | E0803 | E0805 |
| 7 | E0701 | E0702 | E0703 | E0705 |
| 6 | E0601 | E0602 | E0603 | E0605 |
| 5 | E0501 | E0502 | E0503 | E0505 |
| 3 | E0301 | E0302 | E0303 | E0305 |
| 2 | E0201 | E0202 | E0203 | E0205 |
| 1 | E0101 | E0102 | E0103 | E0105 |

| G15 - D | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 13 | D1301 | D1302 | D1303 | D1305 | D1306 | D1307 | D1308 | D1309 | D1310 | D1311 | D1312 | D1313 |
| 12 | D1201 | D1202 | D1203 | D1205 | D1206 | D1207 | D1208 | D1209 | D1210 | D1211 | D1212 | D1213 |
| 11 | D1101 | D1102 | D1103 | D1105 | D1106 | D1107 | D1108 | D1109 | D1110 | D1111 | D1112 | D1113 |
| 10 | D1001 | D1002 | D1003 | D1005 | D1006 | D1007 | D1008 | D1009 | D1010 | D1011 | D1012 | D1013 |
| 9 | D0901 | D0902 | D0903 | D0905 | D0906 | D0907 | D0908 | D0909 | D0910 | D0911 | D0912 | D0913 |
| 8 | D0801 | D0802 | D0803 | D0805 | D0806 | D0807 | D0808 | D0809 | D0810 | D0811 | D0812 | D0813 |
| 7 | D0701 | D0702 | D0703 | D0705 | D0706 | D0707 | D0708 | D0709 | D0710 | D0711 | D0712 | D0713 |
| 6 | D0601 | D0602 | D0603 | D0605 | D0606 | D0607 | D0608 | D0609 | D0610 | D0611 | D0612 | D0613 |
| 5 | D0501 | D0502 | D0503 | D0505 | D0506 | D0507 | D0508 | D0509 | D0510 | D0511 | D0512 | D0513 |
| 3 | D0301 | D0302 | D0303 | D0305 | D0306 | D0307 | D0308 | D0309 | D0310 | D0311 | D0312 | D0313 |
| 2 | D0201 | D0202 | D0203 | D0205 | D0206 | D0207 | D0208 | D0209 | D0210 | D0211 | D0212 | D0213 |
| 1 | D0101 | D0102 | D0103 | D0105 | D0106 | D0107 | D0108 | D0109 | D0110 | D0111 | D0112 | D0113 |

| | |
|---|---|
| 未售的單人位 | 29 |
| 未售的雙人位 | 0 |
| 已出售或轉售給個別人士的單人位 | 151 |
| 已出售或轉售給個別人士的雙人位 | 0 |
| 捐贈 | 4 |

**Figure 5b**

| G15 - B | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 13 | B1301 | B1302 | B1303 | B1305 | B1306 | B1307 | B1308 | B1309 | B1310 | B1311 | B1312 | B1313 |
| 12 | B1201 | B1202 | B1203 | B1205 | B1206 | B1207 | B1208 | B1209 | B1210 | B1211 | B1212 | B1213 |
| 11 | B1101 | B1102 | B1103 | B1105 | B1106 | B1107 | B1108 | B1109 | B1110 | B1111 | B1112 | B1113 |
| 10 | B1001 | B1002 | B1003 | B1005 | B1006 | B1007 | B1008 | B1009 | B1010 | B1011 | B1012 | B1013 |
| 9 | B0901 | B0902 | B0903 | B0905 | B0906 | B0907 | B0908 | B0909 | B0910 | B0911 | B0912 | B0913 |
| 8 | B0801 | B0802 | B0803 | B0805 | B0806 | B0807 | B0808 | B0809 | B0810 | B0811 | B0812 | B0813 |
| 7 | B0701 | B0702 | B0703 | B0705 | B0706 | B0707 | B0708 | B0709 | B0710 | B0711 | B0712 | B0713 |
| 6 | B0601 | B0602 | B0603 | B0605 | B0606 | B0607 | B0608 | B0609 | B0610 | B0611 | B0612 | B0613 |
| 5 | B0501 | B0502 | B0503 | B0505 | B0506 | B0507 | B0508 | B0509 | B0510 | B0511 | B0512 | B0513 |
| 3 | B0301 | B0302 | B0303 | B0305 | B0306 | B0307 | B0308 | B0309 | B0310 | B0311 | B0312 | B0313 |
| 2 | B0201 | B0202 | B0203 | B0205 | B0206 | B0207 | B0208 | B0209 | B0210 | B0211 | B0212 | B0213 |
| 1 | B0101 | B0102 | B0103 | B0105 | B0106 | B0107 | B0108 | B0109 | B0110 | B0111 | B0112 | B0113 |

| G15 - C | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 臨時通道 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | | 15 | 16 | 17 | 18 |
| 13 | C1301 | C1302 | C1303 | C1305 | C1306 | C1307 | C1308 | | C1315 | C1316 | C1317 | C1318 |
| 12 | C1201 | C1202 | C1203 | C1205 | C1206 | C1207 | C1208 | | C1215 | C1216 | C1217 | C1218 |
| 11 | C1101 | C1102 | C1103 | C1105 | C1106 | C1107 | C1108 | | C1115 | C1116 | C1117 | C1118 |
| 10 | C1001 | C1002 | C1003 | C1005 | C1006 | C1007 | C1008 | | C1015 | C1016 | C1017 | C1018 |
| 9 | C0901 | C0902 | C0903 | C0905 | C0906 | C0907 | C0908 | | C0915 | C0916 | C0917 | C0918 |
| 8 | C0801 | C0802 | C0803 | C0805 | C0806 | C0807 | C0808 | | C0815 | C0816 | C0817 | C0818 |
| 7 | C0701 | C0702 | C0703 | C0705 | C0706 | C0707 | C0708 | | C0715 | C0716 | C0717 | C0718 |
| 6 | C0601 | C0602 | C0603 | C0605 | C0606 | C0607 | C0608 | | C0615 | C0616 | C0617 | C0618 |
| 5 | C0501 | C0502 | C0503 | C0505 | C0506 | C0507 | C0508 | | C0515 | C0516 | C0517 | C0518 |
| 3 | C0301 | C0302 | C0303 | C0305 | C0306 | C0307 | C0308 | | C0315 | C0316 | C0317 | C0318 |
| 2 | C0201 | C0202 | C0203 | C0205 | C0206 | C0207 | C0208 | | C0215 | C0216 | C0217 | C0218 |
| 1 | C0101 | C0102 | C0103 | C0105 | C0106 | C0107 | C0108 | | C0115 | C0116 | C0117 | C0118 |

| | |
|---|---|
| 未售的單人位 | 38 |
| 未售的雙人位 | 0 |
| 已出售或轉售給個別人士的單人位 | 146 |
| 已出售或轉售給個別人士的雙人位 | 0 |
| 捐贈 | 10 |

**Figure 5c**

| G15 II- F | 單位 | 單位 | 單位 | 臨時通道 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | | 10 | 11 | 12 | 13 | 15 | 16 | 17 |
| 15 | F1501 | F1502 | F1503 | | F1510 | F1511 | F1512 | F1513 | F1515 | F1516 | F1517 |
| 13 | F1301 | F1302 | F1303 | | F1310 | F1311 | F1312 | F1313 | F1315 | F1316 | F1317 |
| 12 | F1201 | F1202 | F1203 | | F1210 | F1211 | F1212 | F1213 | F1215 | F1216 | F1217 |
| 11 | F1101 | F1102 | F1103 | | F1110 | F1111 | F1112 | F1113 | F1115 | F1116 | F1117 |
| 10 | F1001 | F1002 | F1003 | | F1010 | F1011 | F1012 | F1013 | F1015 | F1016 | F1017 |
| 9 | F0901 | F0902 | F0903 | | F0910 | F0911 | F0912 | F0913 | F0915 | F0916 | F0917 |
| 8 | F0801 | F0802 | F0803 | | F0810 | F0811 | F0812 | F0813 | F0815 | F0816 | F0817 |
| 6 | F0601 | F0602 | F0603 | | F0610 | F0611 | F0612 | F0613 | F0615 | F0616 | F0617 |
| 5 | F0501 | F0502 | F0503 | | F0510 | F0511 | F0512 | F0513 | F0515 | F0516 | F0517 |
| 3 | F0301 | F0302 | F0303 | | F0310 | F0311 | F0312 | F0313 | F0315 | F0316 | F0317 |
| 2 | F0201 | F0202 | F0203 | | F0210 | F0211 | F0212 | F0213 | F0215 | F0216 | F0217 |
| 1 | F0101 | F0102 | F0103 | | F0110 | F0111 | F0112 | F0113 | F0115 | F0116 | F0117 |

| G15 II- G | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 |
| 15 | G1501 | G1502 | G1503 | G1505 | G1506 | G1507 | G1508 | G1509 | G1510 | G1511 | G1512 | G1513 | G1515 | G1516 | G1517 |
| 13 | G1301 | G1302 | G1303 | G1305 | G1306 | G1307 | G1308 | G1309 | G1310 | G1311 | G1312 | G1313 | G1315 | G1316 | G1317 |
| 12 | G1201 | G1202 | G1203 | G1205 | G1206 | G1207 | G1208 | G1209 | G1210 | G1211 | G1212 | G1213 | G1215 | G1216 | G1217 |
| 11 | G1101 | G1102 | G1103 | G1105 | G1106 | G1107 | G1108 | G1109 | G1110 | G1111 | G1112 | G1113 | G1115 | G1116 | G1117 |
| 10 | G1001 | G1002 | G1003 | G1005 | G1006 | G1007 | G1008 | G1009 | G1010 | G1011 | G1012 | G1013 | G1015 | G1016 | G1017 |
| 9 | G0901 | G0902 | G0903 | G0905 | G0906 | G0907 | G0908 | G0909 | G0910 | G0911 | G0912 | G0913 | G0915 | G0916 | G0917 |
| 8 | G0801 | G0802 | G0803 | G0805 | G0806 | G0807 | G0808 | G0809 | G0810 | G0811 | G0812 | G0813 | G0815 | G0816 | G0817 |
| 6 | G0601 | G0602 | G0603 | G0605 | G0606 | G0607 | G0608 | G0609 | G0610 | G0611 | G0612 | G0613 | G0615 | G0616 | G0617 |
| 5 | G0501 | G0502 | G0503 | G0505 | G0506 | G0507 | G0508 | G0509 | G0510 | G0511 | G0512 | G0513 | G0515 | G0516 | G0517 |
| 3 | G0301 | G0302 | G0303 | G0305 | G0306 | G0307 | G0308 | G0309 | G0310 | G0311 | G0312 | G0313 | G0315 | G0316 | G0317 |
| 2 | G0201 | G0202 | G0203 | G0205 | G0206 | G0207 | G0208 | G0209 | G0210 | G0211 | G0212 | G0213 | G0215 | G0216 | G0217 |
| 1 | G0101 | G0102 | G0103 | G0105 | G0106 | G0107 | G0108 | G0109 | G0110 | G0111 | G0112 | G0113 | G0115 | G0116 | G0117 |

| | |
|---|---|
| 未售的單人位 | 75 |
| 未售的雙人位 | 0 |
| 已出售或轉售給個別人士的單人位 | 65 |
| 已出售或轉售給個別人士的雙人位 | 0 |
| 捐贈 | 0 |

**Figure 5d**

| G15 II - H | 單位 | 單位 | 單位 |
|---|---|---|---|
| | 1 | 2 | 3 |
| 15 | H1501 | H1502 | H1503 |
| 13 | H1301 | H1302 | H1303 |
| 12 | H1201 | H1202 | H1203 |
| 11 | H1101 | H1102 | H1103 |
| 10 | H1001 | H1002 | H1003 |
| 9 | H0901 | H0902 | H0903 |
| 8 | H0801 | H0802 | H0803 |
| 6 | H0601 | H0602 | H0603 |
| 5 | H0501 | H0502 | H0503 |
| 3 | H0301 | H0302 | H0303 |
| 2 | H0201 | H0202 | H0203 |
| 1 | H0101 | H0102 | H0103 |

| G15 II - I | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 |
| 15 | I1501 | I1502 | I1503 | I1505 | I1506 | I1507 | I1508 |
| 13 | I1301 | I1302 | I1303 | I1305 | I1306 | I1307 | I1308 |
| 12 | I1201 | I1202 | I1203 | I1205 | I1206 | I1207 | I1208 |
| 11 | I1101 | I1102 | I1103 | I1105 | I1106 | I1107 | I1108 |
| 10 | I1001 | I1002 | I1003 | I1005 | I1006 | I1007 | I1008 |
| 9 | I0901 | I0902 | I0903 | I0905 | I0906 | I0907 | I0908 |
| 8 | I0801 | I0802 | I0803 | I0805 | I0806 | I0807 | I0808 |
| 6 | I0601 | I0602 | I0603 | I0605 | I0606 | I0607 | I0608 |
| 5 | I0501 | I0502 | I0503 | I0505 | I0506 | I0507 | I0508 |
| 3 | I0301 | I0302 | I0303 | I0305 | I0306 | I0307 | I0308 |
| 2 | I0201 | I0202 | I0203 | I0205 | I0206 | I0207 | I0208 |
| 1 | I0101 | I0102 | I0103 | I0105 | I0106 | I0107 | I0108 |

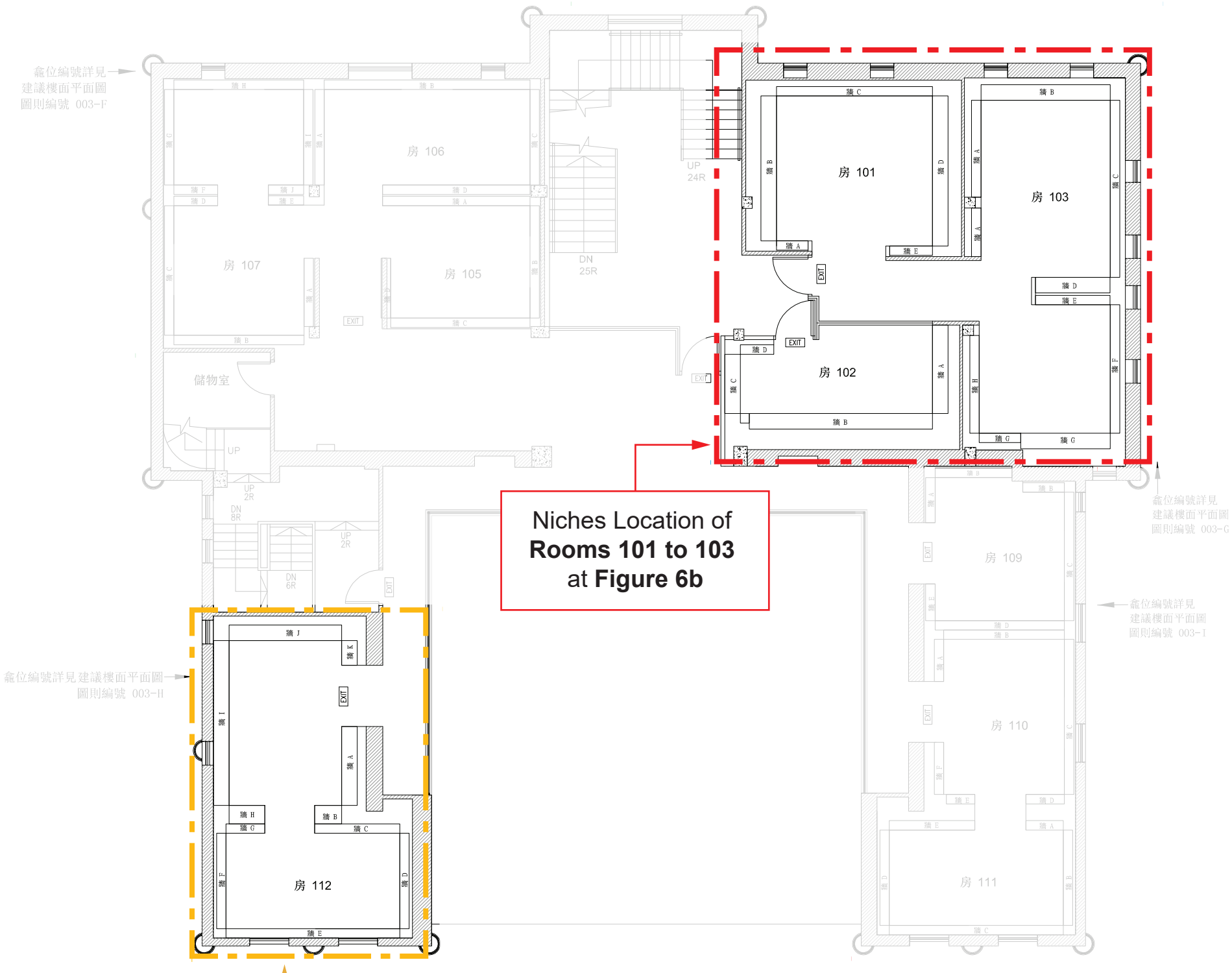
| G15 - J | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 |
| 15 | J1501 | J1502 | J1503 | J1505 | J1506 | J1507 | J1508 | J1509 | J1510 | J1511 | J1512 | J1513 | J1515 | J1516 | J1517 |
| 13 | J1301 | J1302 | J1303 | J1305 | J1306 | J1307 | J1308 | J1309 | J1310 | J1311 | J1312 | J1313 | J1315 | J1316 | J1317 |
| 12 | J1201 | J1202 | J1203 | J1205 | J1206 | J1207 | J1208 | J1209 | J1210 | J1211 | J1212 | J1213 | J1215 | J1216 | J1217 |
| 11 | J1101 | J1102 | J1103 | J1105 | J1106 | J1107 | J1108 | J1109 | J1110 | J1111 | J1112 | J1113 | J1115 | J1116 | J1117 |
| 10 | J1001 | J1002 | J1003 | J1005 | J1006 | J1007 | J1008 | J1009 | J1010 | J1011 | J1012 | J1013 | J1015 | J1016 | J1017 |
| 9 | J0901 | J0902 | J0903 | J0905 | J0906 | J0907 | J0908 | J0909 | J0910 | J0911 | J0912 | J0913 | J0915 | J0916 | J0917 |
| 8 | J0801 | J0802 | J0803 | J0805 | J0806 | J0807 | J0808 | J0809 | J0810 | J0811 | J0812 | J0813 | J0815 | J0816 | J0817 |
| 6 | J0601 | J0602 | J0603 | J0605 | J0606 | J0607 | J0608 | J0609 | J0610 | J0611 | J0612 | J0613 | J0615 | J0616 | J0617 |
| 5 | J0501 | J0502 | J0503 | J0505 | J0506 | J0507 | J0508 | J0509 | J0510 | J0511 | J0512 | J0513 | J0515 | J0516 | J0517 |
| 3 | J0301 | J0302 | J0303 | J0305 | J0306 | J0307 | J0308 | J0309 | J0310 | J0311 | J0312 | J0313 | J0315 | J0316 | J0317 |
| 2 | J0201 | J0202 | J0203 | J0205 | J0206 | J0207 | J0208 | J0209 | J0210 | J0211 | J0212 | J0213 | J0215 | J0216 | J0217 |
| 1 | J0101 | J0102 | J0103 | J0105 | J0106 | J0107 | J0108 | J0109 | J0110 | J0111 | J0112 | J0113 | J0115 | J0116 | J0117 |

| | |
|---|---|
| 未售的單人位 | 90 |
| 未售的雙人位 | 0 |
| 已出售或轉售給個別人士的單人位 | 9 |
| 已出售或轉售給個別人士的雙人位 | 0 |
| 捐贈 | 0 |

# 1/F Location Plan (Whole Floor)

Figure 6a

建議樓面平面圖 就截算前骨灰安置所的牌照申請




Niches Location of
**Rooms 101 to 103**
at **Figure 6b**

Niches Location of
**Room 112** at **Figure 6c**

（按公制比例繪製）

建議骨灰安置所大樓一樓樓面平面圖（圖則編號 003-B）

（1 ： 125）

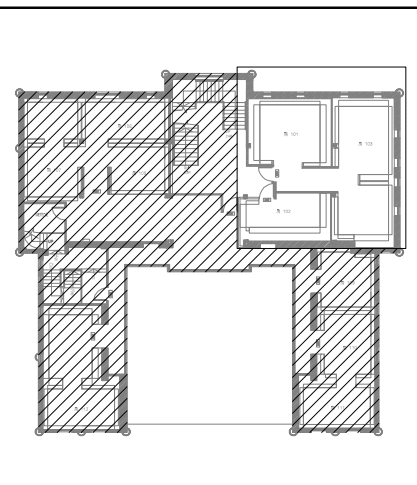
骨灰安置所名稱 ： 普光明寺（只包括2017年6月30日前已售出的龕位）

地址 ： 新界沙田大圍美田路白田村二區96號
（丈量約份第181約地段第2號及第671號）

# 1/F Location Plan (Rooms 101, 102 & 103)

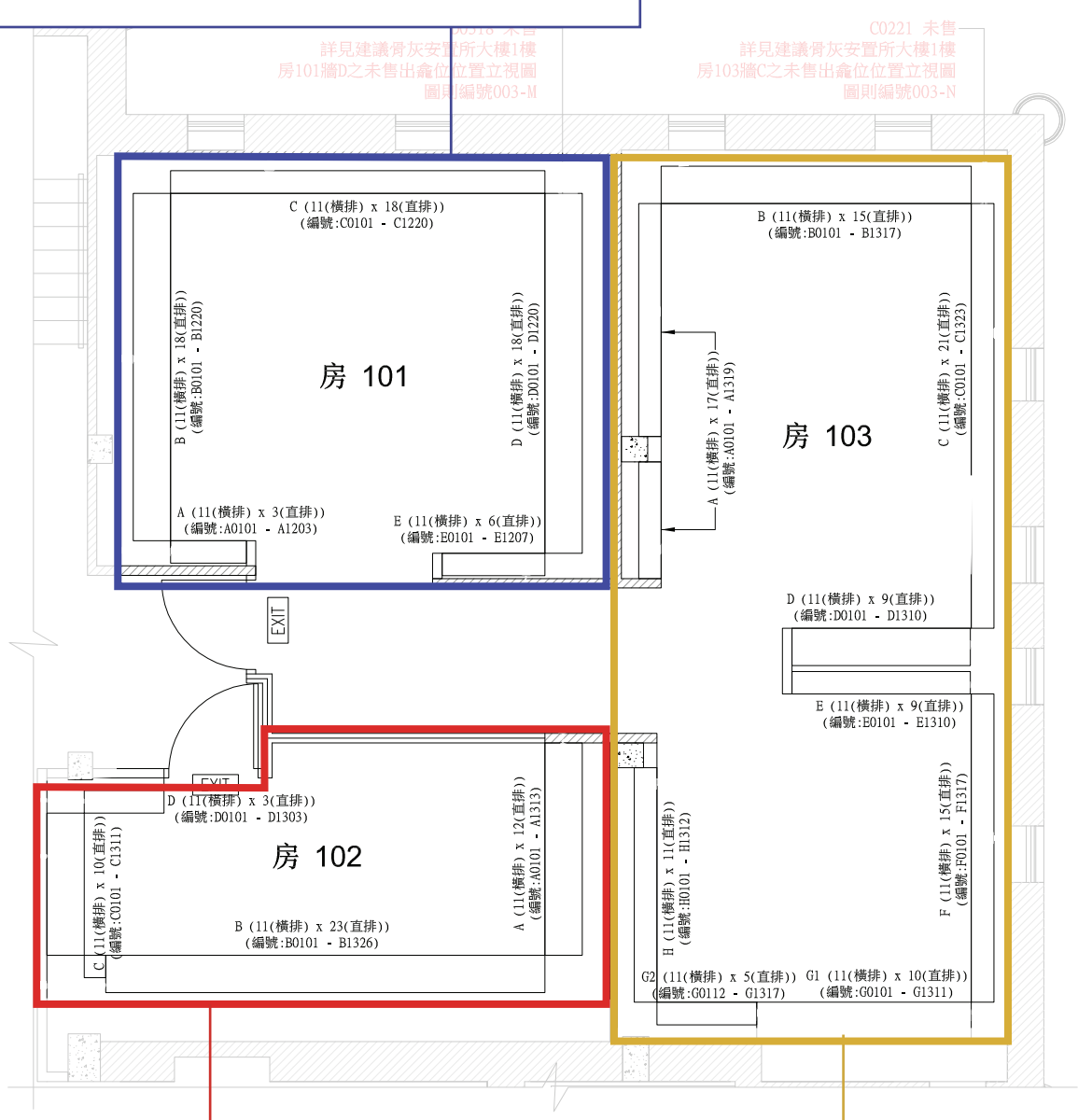
Figure 6b

建議樓面平面圖 就截算前骨灰安置所的牌照申請



主要圖 1 : 500

***Please refer to the following Figures for detailed niches locations on the walls in <u>Room 101</u>:***
Wall A, D & E: Figure 7a
Wall B & C: Figure 7b



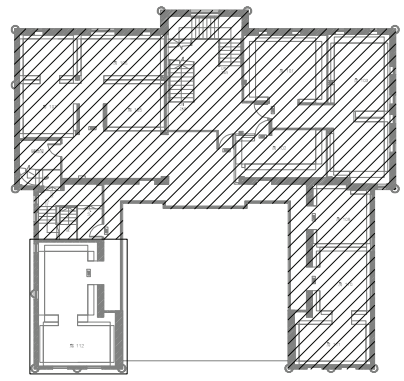

***Please refer to the following Figures for detailed niches locations on the walls in <u>Room 102</u>:***
Wall A: Figure 8a
Wall B, C & D: Figure 8b

***Please refer to the following Figures for detailed niches locations on the walls in <u>Room 103</u>:***
Wall A & B: Figure 9a
Wall C, D, E & H: Figure 9b
Wall F & G: Figure 9c

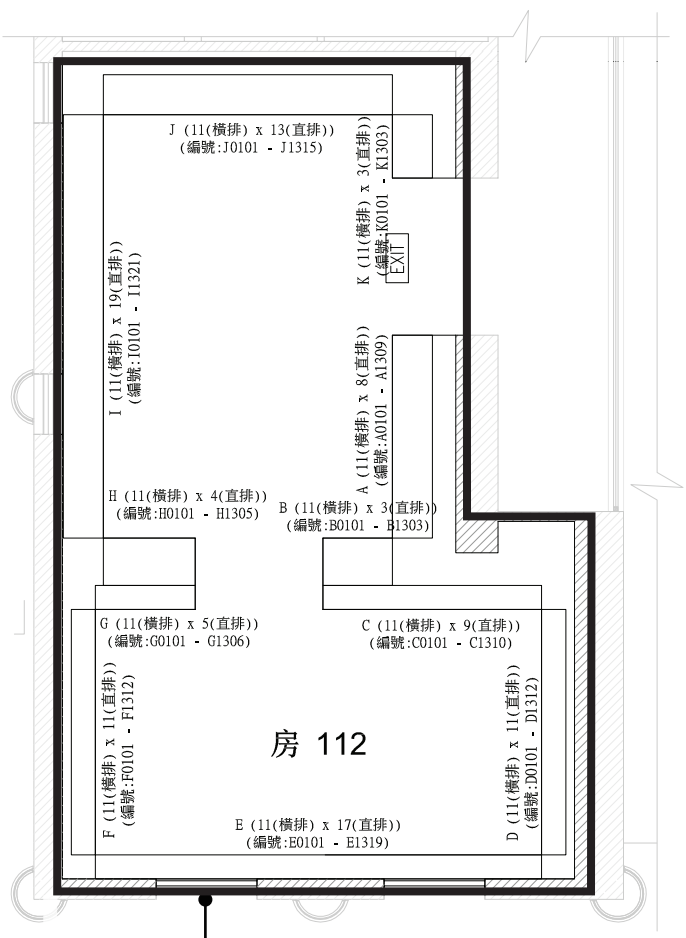
# 1/F Location Plan (Room 112)

Figure 6c

建議樓面平面圖 就截算前骨灰安置所的牌照申請



主要圖 1 : 500




（按公制比例繪製）

建議骨灰安置所大樓一樓部份樓面平面圖（圖則編號 003-H）

（1 : 75）

骨灰安置所名稱 : 普光明寺（只包括2017年6月30日前已售出的龕位）

地址 : 新界沙田大圍美田路白田村二區96號

***Please refer to the following Figures for detailed niches locations on the walls in <u>Room 112</u>:***

Wall A, B & C: Figure 10a
Wall D, H & I: Figure 10b
Wall E, F & G: Figure 10c
Wall J & K: Figure 10d

**Figure 7a**

| 101 -A | 單人位 | 單人位 | 單人位 |
|---|---|---|---|
| | 1 | 2 | 3 |
| 12 | A1201 | A1202 | A1203 |
| 11 | A1101 | A1102 | A1103 |
| 10 | A1001 | A1002 | A1003 |
| 9 | A0901 | A0902 | A0903 |
| 8 | A0801 | A0802 | A0803 |
| 7 | A0701 | A0702 | A0703 |
| 6 | A0601 | A0602 | A0603 |
| 5 | A0501 | A0502 | A0503 |
| 3 | A0301 | A0302 | A0303 |
| 2 | A0201 | A0202 | A0203 |
| 1 | A0101 | A0102 | A0103 |

| 101- E | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 |
| 12 | E1201 | E1202 | E1203 | E1205 | E1206 | E1207 |
| 11 | E1101 | E1102 | E1103 | E1105 | E1106 | E1107 |
| 10 | E1001 | E1002 | E1003 | E1005 | E1006 | E1007 |
| 9 | E0901 | E0902 | E0903 | E0905 | E0906 | E0907 |
| 8 | E0801 | E0802 | E0803 | E0805 | E0806 | E0807 |
| 7 | E0701 | E0702 | E0703 | E0705 | E0706 | E0707 |
| 6 | E0601 | E0602 | E0603 | E0605 | E0606 | E0607 |
| 5 | E0501 | E0502 | E0503 | E0505 | E0506 | E0507 |
| 3 | E0301 | E0302 | E0303 | E0305 | E0306 | E0307 |
| 2 | E0201 | E0202 | E0203 | E0205 | E0206 | E0207 |
| 1 | E0101 | E0102 | E0103 | E0105 | E0106 | E0107 |

| 101- D | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 | 18 | 19 | 20 |
| 12 | D1201 | D1202 | D1203 | D1206 | D1207 | D1208 | D1209 | D1210 | D1211 | D1212 | D1213 | D1215 | D1216 | D1217 | D1218 | D1219 | D1220 |
| 11 | D1101 | D1102 | D1103 | D1106 | D1107 | D1108 | D1109 | D1110 | D1111 | D1112 | D1113 | D1115 | D1116 | D1117 | D1118 | D1119 | D1120 |
| 10 | D1001 | D1002 | D1003 | D1006 | D1007 | D1008 | D1009 | D1010 | D1011 | D1012 | D1013 | D1015 | D1016 | D1017 | D1018 | D1019 | D1020 |
| 9 | D0901 | D0902 | D0903 | D0906 | D0907 | D0908 | D0909 | D0910 | D0911 | D0912 | D0913 | D0915 | D0916 | D0917 | D0918 | D0919 | D0920 |
| 8 | D0801 | D0802 | D0803 | D0806 | D0807 | D0808 | D0809 | D0810 | D0811 | D0812 | D0813 | D0815 | D0816 | D0817 | D0818 | D0819 | D0820 |
| 7 | D0701 | D0702 | D0703 | D0706 | D0707 | D0708 | D0709 | D0710 | D0711 | D0712 | D0713 | D0715 | D0716 | D0717 | D0718 | D0719 | D0720 |
| 6 | D0601 | D0602 | D0603 | D0606 | D0607 | D0608 | D0609 | D0610 | D0611 | D0612 | D0613 | D0615 | D0616 | D0617 | D0618 | D0619 | D0620 |
| 5 | D0501 | D0502 | D0503 | D0506 | D0507 | D0508 | D0509 | D0510 | D0511 | D0512 | D0513 | D0515 | D0516 | D0517 | D0518 | D0519 | D0520 |
| 3 | D0301 | D0302 | D0303 | D0306 | D0307 | D0308 | D0309 | D0310 | D0311 | D0312 | D0313 | D0315 | D0316 | D0317 | D0318 | D0319 | D0320 |
| 2 | D0201 | D0202 | D0203 | D0206 | D0207 | D0208 | D0209 | D0210 | D0211 | D0212 | D0213 | D0215 | D0216 | D0217 | D0218 | D0219 | D0220 |
| 1 | D0101 | D0102 | D0103 | D0106 | D0107 | D0108 | D0109 | D0110 | D0111 | D0112 | D0113 | D0115 | D0116 | D0117 | D0118 | D0119 | D0120 |

| | |
|---|---|
| 未售的單人位 | 0 |
| 未售的雙人位 | 34 |
| 已出售或轉售給個別人士的單人位 | 51 |
| 已出售或轉售給個別人士的雙人位 | 142 |
| 捐贈 | 0 |

**Figure 7b**

| 101-B | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 | 18 | 19 | 20 |
| 12 | B1201 | B1202 | B1203 | B1205 | B1206 | B1207 | B1208 | B1209 | B1210 | B1211 | B1212 | B1213 | B1215 | B1216 | B1217 | B1218 | B1219 | B1220 |
| 11 | B1101 | B1102 | B1103 | B1105 | B1106 | B1107 | B1108 | B1109 | B1110 | B1111 | B1112 | B1113 | B1115 | B1116 | B1117 | B1118 | B1119 | B1120 |
| 10 | B1001 | B1002 | B1003 | B1005 | B1006 | B1007 | B1008 | B1009 | B1010 | B1011 | B1012 | B1013 | B1015 | B1016 | B1017 | B1018 | B1019 | B1020 |
| 9 | B0901 | B0902 | B0903 | B0905 | B0906 | B0907 | B0908 | B0909 | B0910 | B0911 | B0912 | B0913 | B0915 | B0916 | B0917 | B0918 | B0919 | B0920 |
| 8 | B0801 | B0802 | B0803 | B0805 | B0806 | B0807 | B0808 | B0809 | B0810 | B0811 | B0812 | B0813 | B0815 | B0816 | B0817 | B0818 | B0819 | B0820 |
| 7 | B0701 | B0702 | B0703 | B0705 | B0706 | B0707 | B0708 | B0709 | B0710 | B0711 | B0712 | B0713 | B0715 | B0716 | B0717 | B0718 | B0719 | B0720 |
| 6 | B0601 | B0602 | B0603 | B0605 | B0606 | B0607 | B0608 | B0609 | B0610 | B0611 | B0612 | B0613 | B0615 | B0616 | B0617 | B0618 | B0619 | B0620 |
| 5 | B0501 | B0502 | B0503 | B0505 | B0506 | B0507 | B0508 | B0509 | B0510 | B0511 | B0512 | B0513 | B0515 | B0516 | B0517 | B0518 | B0519 | B0520 |
| 3 | B0301 | B0302 | B0303 | B0305 | B0306 | B0307 | B0308 | B0309 | B0310 | B0311 | B0312 | B0313 | B0315 | B0316 | B0317 | B0318 | B0319 | B0320 |
| 2 | B0201 | B0202 | B0203 | B0205 | B0206 | B0207 | B0208 | B0209 | B0210 | B0211 | B0212 | B0213 | B0215 | B0216 | B0217 | B0218 | B0219 | B0220 |
| 1 | B0101 | B0102 | B0103 | B0105 | B0106 | B0107 | B0108 | B0109 | B0110 | B0111 | B0112 | B0113 | B0115 | B0116 | B0117 | B0118 | B0119 | B0120 |

| 101 - C | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 | 18 | 19 | 20 |
| 12 | C1201 | C1202 | C1203 | C1205 | C1206 | C1207 | C1208 | C1209 | C1210 | C1211 | C1212 | C1213 | C1215 | C1216 | C1217 | C1218 | C1219 | C1220 |
| 11 | C1101 | C1102 | C1103 | C1105 | C1106 | C1107 | C1108 | C1109 | C1110 | C1111 | C1112 | C1113 | C1115 | C1116 | C1117 | C1118 | C1119 | C1120 |
| 10 | C1001 | C1002 | C1003 | C1005 | C1006 | C1007 | C1008 | C1009 | C1010 | C1011 | C1012 | C1013 | C1015 | C1016 | C1017 | C1018 | C1019 | C1020 |
| 9 | C0901 | C0902 | C0903 | C0905 | C0906 | C0907 | C0908 | C0909 | C0910 | C0911 | C0912 | C0913 | C0915 | C0916 | C0917 | C0918 | C0919 | C0920 |
| 8 | C0801 | C0802 | C0803 | C0805 | C0806 | C0807 | C0808 | C0809 | C0810 | C0811 | C0812 | C0813 | C0815 | C0816 | C0817 | C0818 | C0819 | C0820 |
| 7 | C0701 | C0702 | C0703 | C0705 | C0706 | C0707 | C0708 | C0709 | C0710 | C0711 | C0712 | C0713 | C0715 | C0716 | C0717 | C0718 | C0719 | C0720 |
| 6 | C0601 | C0602 | C0603 | C0605 | C0606 | C0607 | C0608 | C0609 | C0610 | C0611 | C0612 | C0613 | C0615 | C0616 | C0617 | C0618 | C0619 | C0620 |
| 5 | C0501 | C0502 | C0503 | C0505 | C0506 | C0507 | C0508 | C0509 | C0510 | C0511 | C0512 | C0513 | C0515 | C0516 | C0517 | C0518 | C0519 | C0520 |
| 3 | C0301 | C0302 | C0303 | C0305 | C0306 | C0307 | C0308 | C0309 | C0310 | C0311 | C0312 | C0313 | C0315 | C0316 | C0317 | C0318 | C0319 | C0320 |
| 2 | C0201 | C0202 | C0203 | C0205 | C0206 | C0207 | C0208 | C0209 | C0210 | C0211 | C0212 | C0213 | C0215 | C0216 | C0217 | C0218 | C0219 | C0220 |
| 1 | C0101 | C0102 | C0103 | C0105 | C0106 | C0107 | C0108 | C0109 | C0110 | C0111 | C0112 | C0113 | C0115 | C0116 | C0117 | C0118 | C0119 | C0120 |

| | |
|---|---|
| 未售的單人位 | 0 |
| 未售的雙人位 | 38 |
| 已出售或轉售給個別人士的單人位 | 138 |
| 已出售或轉售給個別人士的雙人位 | 145 |
| 捐贈 | 0 |

**Figure 8a**

| 102-A | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 13 | A1301 | A1302 | A1303 | A1305 | A1306 | A1307 | A1308 | A1309 | A1310 | A1311 | A1312 | A1313 |
| 12 | A1201 | A1202 | A1203 | A1205 | A1206 | A1207 | A1208 | A1209 | A1210 | A1211 | A1212 | A1213 |
| 11 | A1101 | A1102 | A1103 | A1105 | A1106 | A1107 | A1108 | A1109 | A1110 | A1111 | A1112 | A1113 |
| 10 | A1001 | A1002 | A1003 | A1005 | A1006 | A1007 | A1008 | A1009 | A1010 | A1011 | A1012 | A1013 |
| 9 | A0901 | A0902 | A0903 | A0905 | A0906 | A0907 | A0908 | A0909 | A0910 | A0911 | A0912 | A0913 |
| 8 | A0801 | A0802 | A0803 | A0805 | A0806 | A0807 | A0808 | A0809 | A0810 | A0811 | A0812 | A0813 |
| 6 | A0601 | A0602 | A0603 | A0605 | A0606 | A0607 | A0608 | A0609 | A0610 | A0611 | A0612 | A0613 |
| 5 | A0501 | A0502 | A0503 | A0505 | A0506 | A0507 | A0508 | A0509 | A0510 | A0511 | A0512 | A0513 |
| 3 | A0301 | A0302 | A0303 | A0305 | A0306 | A0307 | A0308 | A0309 | A0310 | A0311 | A0312 | A0313 |
| 2 | A0201 | A0202 | A0203 | A0205 | A0206 | A0207 | A0208 | A0209 | A0210 | A0211 | A0212 | A0213 |
| 1 | A0101 | A0102 | A0103 | A0105 | A0106 | A0107 | A0108 | A0109 | A0110 | A0111 | A0112 | A0113 |

| | |
|---|---|
| 未售的單人位 | 0 |
| 未售的雙人位 | 19 |
| 已出售或轉售給個別人士的單人位 | 0 |
| 已出售或轉售給個別人士的雙人位 | 94 |
| 捐贈 | 0 |

Figure 8b

| 102-B | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 單人位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 25 | 26 |
| 13 | B1301 | B1302 | B1303 | B1305 | B1306 | B1307 | B1308 | B1309 | B1310 | B1311 | B1312 | B1313 | B1315 | B1316 | B1317 | B1318 | B1319 | B1320 | B1321 | B1322 | B1323 | B1325 | B1326 |
| 12 | B1201 | B1202 | B1203 | B1205 | B1206 | B1207 | B1208 | B1209 | B1210 | B1211 | B1212 | B1213 | B1215 | B1216 | B1217 | B1218 | B1219 | B1220 | B1221 | B1222 | B1223 | B1225 | B1226 |
| 11 | B1101 | B1102 | B1103 | B1105 | B1106 | B1107 | B1108 | B1109 | B1110 | B1111 | B1112 | B1113 | B1115 | B1116 | B1117 | B1118 | B1119 | B1120 | B1121 | B1122 | B1123 | B1125 | B1126 |
| 10 | B1001 | B1002 | B1003 | B1005 | B1006 | B1007 | B1008 | B1009 | B1010 | B1011 | B1012 | B1013 | B1015 | B1016 | B1017 | B1018 | B1019 | B1020 | B1021 | B1022 | B1023 | B1025 | B1026 |
| 9 | B0901 | B0902 | B0903 | B0905 | B0906 | B0907 | B0908 | B0909 | B0910 | B0911 | B0912 | B0913 | B0915 | B0916 | B0917 | B0918 | B0919 | B0920 | B0921 | B0922 | B0923 | B0925 | B0926 |
| 8 | B0801 | B0802 | B0803 | B0805 | B0806 | B0807 | B0808 | B0809 | B0810 | B0811 | B0812 | B0813 | B0815 | B0816 | B0817 | B0818 | B0819 | B0820 | B0821 | B0822 | B0823 | B0825 | B0826 |
| 6 | B0601 | B0602 | B0603 | B0605 | B0606 | B0607 | B0608 | B0609 | B0610 | B0611 | B0612 | B0613 | B0615 | B0616 | B0617 | B0618 | B0619 | B0620 | B0621 | B0622 | B0623 | B0625 | B0626 |
| 5 | B0501 | B0502 | B0503 | B0505 | B0506 | B0507 | B0508 | B0509 | B0510 | B0511 | B0512 | B0513 | B0515 | B0516 | B0517 | B0518 | B0519 | B0520 | B0521 | B0522 | B0523 | B0525 | B0526 |
| 3 | B0301 | B0302 | B0303 | B0305 | B0306 | B0307 | B0308 | B0309 | B0310 | B0311 | B0312 | B0313 | B0315 | B0316 | B0317 | B0318 | B0319 | B0320 | B0321 | B0322 | B0323 | B0325 | B0326 |
| 2 | B0201 | B0202 | B0203 | B0205 | B0206 | B0207 | B0208 | B0209 | B0210 | B0211 | B0212 | B0213 | B0215 | B0216 | B0217 | B0218 | B0219 | B0220 | B0221 | B0222 | B0223 | B0225 | B0226 |
| 1 | B0101 | B0102 | B0103 | B0105 | B0106 | B0107 | B0108 | B0109 | B0110 | B0111 | B0112 | B0113 | B0115 | B0116 | B0117 | B0118 | B0119 | B0120 | B0121 | B0122 | B0123 | B0125 | B0126 |

| 102-C | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 13 | C1301 | C1302 | C1303 | C1305 | C1306 | C1307 | C1308 | C1309 | C1310 | C1311 |
| 12 | C1201 | C1202 | C1203 | C1205 | C1206 | C1207 | C1208 | C1209 | C1210 | C1211 |
| 11 | C1101 | C1102 | C1103 | C1105 | C1106 | C1107 | C1108 | C1109 | C1110 | C1111 |
| 10 | C1001 | C1002 | C1003 | C1005 | C1006 | C1007 | C1008 | C1009 | C1010 | C1011 |
| 9 | C0901 | C0902 | C0903 | C0905 | C0906 | C0907 | C0908 | C0909 | C0910 | C0911 |
| 8 | C0801 | C0802 | C0803 | C0805 | C0806 | C0807 | C0808 | C0809 | C0810 | C0811 |
| 6 | C0601 | C0602 | C0603 | C0605 | C0606 | C0607 | C0608 | C0609 | C0610 | C0611 |
| 5 | C0501 | C0502 | C0503 | C0505 | C0506 | C0507 | C0508 | C0509 | C0510 | C0511 |
| 3 | C0301 | C0302 | C0303 | C0305 | C0306 | C0307 | C0308 | C0309 | C0310 | C0311 |
| 2 | C0201 | C0202 | C0203 | C0205 | C0206 | C0207 | C0208 | C0209 | C0210 | C0211 |
| 1 | C0101 | C0102 | C0103 | C0105 | C0106 | C0107 | C0108 | C0109 | C0110 | C0111 |

| 102-D | 單人位 | 單人位 | 單人位 |
|---|---|---|---|
| | 1 | 2 | 3 |
| 13 | D1301 | D1302 | D1303 |
| 12 | D1201 | D1202 | D1203 |
| 11 | D1101 | D1102 | D1103 |
| 10 | D1001 | D1002 | D1003 |
| 9 | D0901 | D0902 | D0903 |
| 8 | D0801 | D0802 | D0803 |
| 6 | D0601 | D0602 | D0603 |
| 5 | D0501 | D0502 | D0503 |
| 3 | D0301 | D0302 | D0303 |
| 2 | D0201 | D0202 | D0203 |
| 1 | D0101 | D0102 | D0103 |

| | |
|---|---|
| 未售的單人位 | 0 |
| 未售的雙人位 | 59 |
| 已出售或轉售給個別人士的單人位 | 23 |
| 已出售或轉售給個別人士的雙人位 | 231 |
| 捐贈 | 0 |

**Figure 9a**

| 103 - A | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 | 18 | 19 |
| 13 | A1301 | A1302 | A1303 | A1305 | A1306 | A1307 | | A1308 | A1309 | A1310 | A1311 | A1312 | A1313 | A1315 | A1316 | A1317 | A1318 | A1319 |
| 12 | A1201 | A1202 | A1203 | A1205 | A1206 | A1207 | | A1208 | A1209 | A1210 | A1211 | A1212 | A1213 | A1215 | A1216 | A1217 | A1218 | A1219 |
| 11 | A1101 | A1102 | A1103 | A1105 | A1106 | A1107 | | A1108 | A1109 | A1110 | A1111 | A1112 | A1113 | A1115 | A1116 | A1117 | A1118 | A1119 |
| 10 | A1001 | A1002 | A1003 | A1005 | A1006 | A1007 | | A1008 | A1009 | A1010 | A1011 | A1012 | A1013 | A1015 | A1016 | A1017 | A1018 | A1019 |
| 9 | A0901 | A0902 | A0903 | A0905 | A0906 | A0907 | | A0908 | A0909 | A0910 | A0911 | A0912 | A0913 | A0915 | A0916 | A0917 | A0918 | A0919 |
| 8 | A0801 | A0802 | A0803 | A0805 | A0806 | A0807 | | A0808 | A0809 | A0810 | A0811 | A0812 | A0813 | A0815 | A0816 | A0817 | A0818 | A0819 |
| 6 | A0601 | A0602 | A0603 | A0605 | A0606 | A0607 | | A0608 | A0609 | A0610 | A0611 | A0612 | A0613 | A0615 | A0616 | A0617 | A0618 | A0619 |
| 5 | A0501 | A0502 | A0503 | A0505 | A0506 | A0507 | | A0508 | A0509 | A0510 | A0511 | A0512 | A0513 | A0515 | A0516 | A0517 | A0518 | A0519 |
| 3 | A0301 | A0302 | A0303 | A0305 | A0306 | A0307 | | A0308 | A0309 | A0310 | A0311 | A0312 | A0313 | A0315 | A0316 | A0317 | A0318 | A0319 |
| 2 | A0201 | A0202 | A0203 | A0205 | A0206 | A0207 | | A0208 | A0209 | A0210 | A0211 | A0212 | A0213 | A0215 | A0216 | A0217 | A0218 | A0219 |
| 1 | A0101 | A0102 | A0103 | A0105 | A0106 | A0107 | | A0108 | A0109 | A0110 | A0111 | A0112 | A0113 | A0115 | A0116 | A0117 | A0118 | A0119 |

| 103 - B | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 |
| 13 | B1301 | B1302 | B1303 | B1305 | B1306 | B1307 | B1308 | B1309 | B1310 | B1311 | B1312 | B1313 | B1315 | B1316 | B1317 |
| 12 | B1201 | B1202 | B1203 | B1205 | B1206 | B1207 | B1208 | B1209 | B1210 | B1211 | B1212 | B1213 | B1215 | B1216 | B1217 |
| 11 | B1101 | B1102 | B1103 | B1105 | B1106 | B1107 | B1108 | B1109 | B1110 | B1111 | B1112 | B1113 | B1115 | B1116 | B1117 |
| 10 | B1001 | B1002 | B1003 | B1005 | B1006 | B1007 | B1008 | B1009 | B1010 | B1011 | B1012 | B1013 | B1015 | B1016 | B1017 |
| 9 | B0901 | B0902 | B0903 | B0905 | B0906 | B0907 | B0908 | B0909 | B0910 | B0911 | B0912 | B0913 | B0915 | B0916 | B0917 |
| 8 | B0801 | B0802 | B0803 | B0805 | B0806 | B0807 | B0808 | B0809 | B0810 | B0811 | B0812 | B0813 | B0815 | B0816 | B0817 |
| 6 | B0601 | B0602 | B0603 | B0605 | B0606 | B0607 | B0608 | B0609 | B0610 | B0611 | B0612 | B0613 | B0615 | B0616 | B0617 |
| 5 | B0501 | B0502 | B0503 | B0505 | B0506 | B0507 | B0508 | B0509 | B0510 | B0511 | B0512 | B0513 | B0515 | B0516 | B0517 |
| 3 | B0301 | B0302 | B0303 | B0305 | B0306 | B0307 | B0308 | B0309 | B0310 | B0311 | B0312 | B0313 | B0315 | B0316 | B0317 |
| 2 | B0201 | B0202 | B0203 | B0205 | B0206 | B0207 | B0208 | B0209 | B0210 | B0211 | B0212 | B0213 | B0215 | B0216 | B0217 |
| 1 | B0101 | B0102 | B0103 | B0105 | B0106 | B0107 | B0108 | B0109 | B0110 | B0111 | B0112 | B0113 | B0115 | B0116 | B0117 |

| | |
|---|---|
| 未售的單人位 | 0 |
| 未售的雙人位 | 34 |
| 已出售或轉售給個別人士的單人位 | 75 |
| 已出售或轉售給個別人士的雙人位 | 106 |
| 捐贈 | 0 |

**Figure 9b**

| 103 - C | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 13 | C1301 | C1302 | C1303 | C1305 | C1306 | C1307 | C1308 | C1309 | C1310 | C1311 | C1312 | C1313 | C1315 | C1316 | C1317 | C1318 | C1319 | C1320 | C1321 | C1322 | C1323 |
| 12 | C1201 | C1202 | C1203 | C1205 | C1206 | C1207 | C1208 | C1209 | C1210 | C1211 | C1212 | C1213 | C1215 | C1216 | C1217 | C1218 | C1219 | C1220 | C1221 | C1222 | C1223 |
| 11 | C1101 | C1102 | C1103 | C1105 | C1106 | C1107 | C1108 | C1109 | C1110 | C1111 | C1112 | C1113 | C1115 | C1116 | C1117 | C1118 | C1119 | C1120 | C1121 | C1122 | C1123 |
| 10 | C1001 | C1002 | C1003 | C1005 | C1006 | C1007 | C1008 | C1009 | C1010 | C1011 | C1012 | C1013 | C1015 | C1016 | C1017 | C1018 | C1019 | C1020 | C1021 | C1022 | C1023 |
| 9 | C0901 | C0902 | C0903 | C0905 | C0906 | C0907 | C0908 | C0909 | C0910 | C0911 | C0912 | C0913 | C0915 | C0916 | C0917 | C0918 | C0919 | C0920 | C0921 | C0922 | C0923 |
| 8 | C0801 | C0802 | C0803 | C0805 | C0806 | C0807 | C0808 | C0809 | C0810 | C0811 | C0812 | C0813 | C0815 | C0816 | C0817 | C0818 | C0819 | C0820 | C0821 | C0822 | C0823 |
| 6 | C0601 | C0602 | C0603 | C0605 | C0606 | C0607 | C0608 | C0609 | C0610 | C0611 | C0612 | C0613 | C0615 | C0616 | C0617 | C0618 | C0619 | C0620 | C0621 | C0622 | C0623 |
| 5 | C0501 | C0502 | C0503 | C0505 | C0506 | C0507 | C0508 | C0509 | C0510 | C0511 | C0512 | C0513 | C0515 | C0516 | C0517 | C0518 | C0519 | C0520 | C0521 | C0522 | C0523 |
| 3 | C0301 | C0302 | C0303 | C0305 | C0306 | C0307 | C0308 | C0309 | C0310 | C0311 | C0312 | C0313 | C0315 | C0316 | C0317 | C0318 | C0319 | C0320 | C0321 | C0322 | C0323 |
| 2 | C0201 | C0202 | C0203 | C0205 | C0206 | C0207 | C0208 | C0209 | C0210 | C0211 | C0212 | C0213 | C0215 | C0216 | C0217 | C0218 | C0219 | C0220 | C0221 | C0222 | C0223 |
| 1 | C0101 | C0102 | C0103 | C0105 | C0106 | C0107 | C0108 | C0109 | C0110 | C0111 | C0112 | C0113 | C0115 | C0116 | C0117 | C0118 | C0119 | C0120 | C0121 | C0122 | C0123 |

| 103 - D | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 |
| 13 | D1301 | D1302 | D1303 | D1305 | D1306 | D1307 | D1308 | D1309 | D1310 |
| 12 | D1201 | D1202 | D1203 | D1205 | D1206 | D1207 | D1208 | D1209 | D1210 |
| 11 | D1101 | D1102 | D1103 | D1105 | D1106 | D1107 | D1108 | D1109 | D1110 |
| 10 | D1001 | D1002 | D1003 | D1005 | D1006 | D1007 | D1008 | D1009 | D1010 |
| 9 | D0901 | D0902 | D0903 | D0905 | D0906 | D0907 | D0908 | D0909 | D0910 |
| 8 | D0801 | D0802 | D0803 | D0805 | D0806 | D0807 | D0808 | D0809 | D0810 |
| 6 | D0601 | D0602 | D0603 | D0605 | D0606 | D0607 | D0608 | D0609 | D0610 |
| 5 | D0501 | D0502 | D0503 | D0505 | D0506 | D0507 | D0508 | D0509 | D0510 |
| 3 | D0301 | D0302 | D0303 | D0305 | D0306 | D0307 | D0308 | D0309 | D0310 |
| 2 | D0201 | D0202 | D0203 | D0205 | D0206 | D0207 | D0208 | D0209 | D0210 |
| 1 | D0101 | D0102 | D0103 | D0105 | D0106 | D0107 | D0108 | D0109 | D0110 |

| 103- E | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 |
| 13 | E1301 | E1302 | E1303 | E1305 | E1306 | E1307 | E1308 | E1309 | E1310 |
| 12 | E1201 | E1202 | E1203 | E1205 | E1206 | E1207 | E1208 | E1209 | E1210 |
| 11 | E1101 | E1102 | E1103 | E1105 | E1106 | E1107 | E1108 | E1109 | E1110 |
| 10 | E1001 | E1002 | E1003 | E1005 | E1006 | E1007 | E1008 | E1009 | E1010 |
| 9 | E0901 | E0902 | E0903 | E0905 | E0906 | E0907 | E0908 | E0909 | E0910 |
| 8 | E0801 | E0802 | E0803 | E0805 | E0806 | E0807 | E0808 | E0809 | E0810 |
| 6 | E0601 | E0602 | E0603 | E0605 | E0606 | E0607 | E0608 | E0609 | E0610 |
| 5 | E0501 | E0502 | E0503 | E0505 | E0506 | E0507 | E0508 | E0509 | E0510 |
| 3 | E0301 | E0302 | E0303 | E0305 | E0306 | E0307 | E0308 | E0309 | E0310 |
| 2 | E0201 | E0202 | E0203 | E0205 | E0206 | E0207 | E0208 | E0209 | E0210 |
| 1 | E0101 | E0102 | E0103 | E0105 | E0106 | E0107 | E0108 | E0109 | E0110 |

| 103 - H | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | H1301 | H1302 | H1303 | H1305 | H1306 | H1307 | H1308 | H1309 | H1310 | H1311 | H1312 |
| 12 | H1201 | H1202 | H1203 | H1205 | H1206 | H1207 | H1208 | H1209 | H1210 | H1211 | H1212 |
| 11 | H1101 | H1102 | H1103 | H1105 | H1106 | H1107 | H1108 | H1109 | H1110 | H1111 | H1112 |
| 10 | H1001 | H1002 | H1003 | H1005 | H1006 | H1007 | H1008 | H1009 | H1010 | H1011 | H1012 |
| 9 | H0901 | H0902 | H0903 | H0905 | H0906 | H0907 | H0908 | H0909 | H0910 | H0911 | H0912 |
| 8 | H0801 | H0802 | H0803 | H0805 | H0806 | H0807 | H0808 | H0809 | H0810 | H0811 | H0812 |
| 6 | H0601 | H0602 | H0603 | H0605 | H0606 | H0607 | H0608 | H0609 | H0610 | H0611 | H0612 |
| 5 | H0501 | H0502 | H0503 | H0505 | H0506 | H0507 | H0508 | H0509 | H0510 | H0511 | H0512 |
| 3 | H0301 | H0302 | H0303 | H0305 | H0306 | H0307 | H0308 | H0309 | H0310 | H0311 | H0312 |
| 2 | H0201 | H0202 | H0203 | H0205 | H0206 | H0207 | H0208 | H0209 | H0210 | H0211 | H0212 |
| 1 | H0101 | H0102 | H0103 | H0105 | H0106 | H0107 | H0108 | H0109 | H0110 | H0111 | H0112 |

| | |
|---|---|
| 未售的單人位 | 0 |
| 未售的雙人位 | 16 |
| 已出售或轉售給個別人士的單人位 | 140 |
| 已出售或轉售給個別人士的雙人位 | 58 |
| 捐贈 | 2 |

**Figure 9c**

| 103 -F | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 |
| 13 | F1301 | F1302 | F1303 | F1305 | F1306 | F1307 | F1308 | F1309 | F1310 | F1311 | F1312 | F1313 | F1315 | F1316 | F1317 |
| 12 | F1201 | F1202 | F1203 | F1205 | F1206 | F1207 | F1208 | F1209 | F1210 | F1211 | F1212 | F1213 | F1215 | F1216 | F1217 |
| 11 | F1101 | F1102 | F1103 | F1105 | F1106 | F1107 | F1108 | F1109 | F1110 | F1111 | F1112 | F1113 | F1115 | F1116 | F1117 |
| 10 | F1001 | F1002 | F1003 | F1005 | F1006 | F1007 | F1008 | F1009 | F1010 | F1011 | F1012 | F1013 | F1015 | F1016 | F1017 |
| 9 | F0901 | F0902 | F0903 | F0905 | F0906 | F0907 | F0908 | F0909 | F0910 | F0911 | F0912 | F0913 | F0915 | F0916 | F0917 |
| 8 | F0801 | F0802 | F0803 | F0805 | F0806 | F0807 | F0808 | F0809 | F0810 | F0811 | F0812 | F0813 | F0815 | F0816 | F0817 |
| 6 | F0601 | F0602 | F0603 | F0605 | F0606 | F0607 | F0608 | F0609 | F0610 | F0611 | F0612 | F0613 | F0615 | F0616 | F0617 |
| 5 | F0501 | F0502 | F0503 | F0505 | F0506 | F0507 | F0508 | F0509 | F0510 | F0511 | F0512 | F0513 | F0515 | F0516 | F0517 |
| 3 | F0301 | F0302 | F0303 | F0305 | F0306 | F0307 | F0308 | F0309 | F0310 | F0311 | F0312 | F0313 | F0315 | F0316 | F0317 |
| 2 | F0201 | F0202 | F0203 | F0205 | F0206 | F0207 | F0208 | F0209 | F0210 | F0211 | F0212 | F0213 | F0215 | F0216 | F0217 |
| 1 | F0101 | F0102 | F0103 | F0105 | F0106 | F0107 | F0108 | F0109 | F0110 | F0111 | F0112 | F0113 | F0115 | F0116 | F0117 |

| 103 - G | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 前後位 | 單人位 | 單人位 | 單人位 | 單人位 | 單人位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 |
| 13 | G1301 | G1302 | G1303 | G1305 | G1306 | G1307 | G1308 | G1309 | G1310 | G1311 | G1312 | G1313 | G1315 | G1316 | G1317 |
| 12 | G1201 | G1202 | G1203 | G1205 | G1206 | G1207 | G1208 | G1209 | G1210 | G1211 | G1212 | G1213 | G1215 | G1216 | G1217 |
| 11 | G1101 | G1102 | G1103 | G1105 | G1106 | G1107 | G1108 | G1109 | G1110 | G1111 | G1112 | G1113 | G1115 | G1116 | G1117 |
| 10 | G1001 | G1002 | G1003 | G1005 | G1006 | G1007 | G1008 | G1009 | G1010 | G1011 | G1012 | G1013 | G1015 | G1016 | G1017 |
| 9 | G0901 | G0902 | G0903 | G0905 | G0906 | G0907 | G0908 | G0909 | G0910 | G0911 | G0912 | G0913 | G0915 | G0916 | G0917 |
| 8 | G0801 | G0802 | G0803 | G0805 | G0806 | G0807 | G0808 | G0809 | G0810 | G0811 | G0812 | G0813 | G0815 | G0816 | G0817 |
| 6 | G0601 | G0602 | G0603 | G0605 | G0606 | G0607 | G0608 | G0609 | G0610 | G0611 | G0612 | G0613 | G0615 | G0616 | G0617 |
| 5 | G0501 | G0502 | G0503 | G0505 | G0506 | G0507 | G0508 | G0509 | G0510 | G0511 | G0512 | G0513 | G0515 | G0516 | G0517 |
| 3 | G0301 | G0302 | G0303 | G0305 | G0306 | G0307 | G0308 | G0309 | G0310 | G0311 | G0312 | G0313 | G0315 | G0316 | G0317 |
| 2 | G0201 | G0202 | G0203 | G0205 | G0206 | G0207 | G0208 | G0209 | G0210 | G0211 | G0212 | G0213 | G0215 | G0216 | G0217 |
| 1 | G0101 | G0102 | G0103 | G0105 | G0106 | G0107 | G0108 | G0109 | G0110 | G0111 | G0112 | G0113 | G0115 | G0116 | G0117 |

| | |
|---|---|
| 未售的單人位 | 0 |
| 未售的雙人位 | 35 |
| 已出售或轉售給個別人士的單人位 | 83 |
| 已出售或轉售給個別人士的雙人位 | 43 |
| 捐贈 | 0 |

Figure 10a

| 112-A | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 |
| 13 | A1301 | A1302 | A1303 | A1305 | A1306 | A1307 | A1308 | A1309 |
| 12 | A1201 | A1202 | A1203 | A1205 | A1206 | A1207 | A1208 | A1209 |
| 11 | A1101 | A1102 | A1103 | A1105 | A1106 | A1107 | A1108 | A1109 |
| 10 | A1001 | A1002 | A1003 | A1005 | A1006 | A1007 | A1008 | A1009 |
| 9 | A0901 | A0902 | A0903 | A0905 | A0906 | A0907 | A0908 | A0909 |
| 8 | A0801 | A0802 | A0803 | A0805 | A0806 | A0807 | A0808 | A0809 |
| 6 | A0601 | A0602 | A0603 | A0605 | A0606 | A0607 | A0608 | A0609 |
| 5 | A0501 | A0502 | A0503 | A0505 | A0506 | A0507 | A0508 | A0509 |
| 3 | A0301 | A0302 | A0303 | A0305 | A0306 | A0307 | A0308 | A0309 |
| 2 | A0201 | A0202 | A0203 | A0205 | A0206 | A0207 | A0208 | A0209 |
| 1 | A0101 | A0102 | A0103 | A0105 | A0106 | A0107 | A0108 | A0109 |

| 112 - B | 前後雙人位 | 前後雙人位 | 前後雙人位 |
|---|---|---|---|
| | 1 | 2 | 3 |
| 13 | B1301 | B1302 | B1303 |
| 12 | B1201 | B1202 | B1203 |
| 11 | B1101 | B1102 | B1103 |
| 10 | B1001 | B1002 | B1003 |
| 9 | B0901 | B0902 | B0903 |
| 8 | B0801 | B0802 | B0803 |
| 6 | B0601 | B0602 | B0603 |
| 5 | B0501 | B0502 | B0503 |
| 3 | B0301 | B0302 | B0303 |
| 2 | B0201 | B0202 | B0203 |
| 1 | B0101 | B0102 | B0103 |

| 112-C | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 |
| 13 | C1301 | C1302 | C1303 | C1305 | C1306 | C1307 | C1308 | C1309 | C1310 |
| 12 | C1201 | C1202 | C1203 | C1205 | C1206 | C1207 | C1208 | C1209 | C1210 |
| 11 | C1101 | C1102 | C1103 | C1105 | C1106 | C1107 | C1108 | C1109 | C1110 |
| 10 | C1001 | C1002 | C1003 | C1005 | C1006 | C1007 | C1008 | C1009 | C1010 |
| 9 | C0901 | C0902 | C0903 | C0905 | C0906 | C0907 | C0908 | C0909 | C0910 |
| 8 | C0801 | C0802 | C0803 | C0805 | C0806 | C0807 | C0808 | C0809 | C0810 |
| 6 | C0601 | C0602 | C0603 | C0605 | C0606 | C0607 | C0608 | C0609 | C0610 |
| 5 | C0501 | C0502 | C0503 | C0505 | C0506 | C0507 | C0508 | C0509 | C0510 |
| 3 | C0301 | C0302 | C0303 | C0305 | C0306 | C0307 | C0308 | C0309 | C0310 |
| 2 | C0201 | C0202 | C0203 | C0205 | C0206 | C0207 | C0208 | C0209 | C0210 |
| 1 | C0101 | C0102 | C0103 | C0105 | C0106 | C0107 | C0108 | C0109 | C0110 |

| | |
|---|---|
| 未售的單人位 | 0 |
| 未售的雙人位 | 25 |
| 已出售或轉售給個別人士的單人位 | 0 |
| 已出售或轉售給個別人士的雙人位 | 5 |
| 捐贈 | 0 |

Figure 10b

| 112-D | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | D1301 | D1302 | D1303 | D1305 | D1306 | D1307 | D1308 | D1309 | D1310 | D1311 | D1312 |
| 12 | D1201 | D1202 | D1203 | D1205 | D1206 | D1207 | D1208 | D1209 | D1210 | D1211 | D1212 |
| 11 | D1101 | D1102 | D1103 | D1105 | D1106 | D1107 | D1108 | D1109 | D1110 | D1111 | D1112 |
| 10 | D1001 | D1002 | D1003 | D1005 | D1006 | D1007 | D1008 | D1009 | D1010 | D1011 | D1012 |
| 9 | D0901 | D0902 | D0903 | D0905 | D0906 | D0907 | D0908 | D0909 | D0910 | D0911 | D0912 |
| 8 | D0801 | D0802 | D0803 | D0805 | D0806 | D0807 | D0808 | D0809 | D0810 | D0811 | D0812 |
| 6 | D0601 | D0602 | D0603 | D0605 | D0606 | D0607 | D0608 | D0609 | D0610 | D0611 | D0612 |
| 5 | D0501 | D0502 | D0503 | D0505 | D0506 | D0507 | D0508 | D0509 | D0510 | D0511 | D0512 |
| 3 | D0301 | D0302 | D0303 | D0305 | D0306 | D0307 | D0308 | D0309 | D0310 | D0311 | D0312 |
| 2 | D0201 | D0202 | D0203 | D0205 | D0206 | D0207 | D0208 | D0209 | D0210 | D0211 | D0212 |
| 1 | D0101 | D0102 | D0103 | D0105 | D0106 | D0107 | D0108 | D0109 | D0110 | D0111 | D0112 |

| 112- H | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 |
|---|---|---|---|---|
| | 1 | 2 | 3 | 5 |
| 13 | H1301 | H1302 | H1303 | H1305 |
| 12 | H1201 | H1202 | H1203 | H1205 |
| 11 | H1101 | H1102 | H1103 | H1105 |
| 10 | H1001 | H1002 | H1003 | H1005 |
| 9 | H0901 | H0902 | H0903 | H0905 |
| 8 | H0801 | H0802 | H0803 | H0805 |
| 6 | H0601 | H0602 | H0603 | H0605 |
| 5 | H0501 | H0502 | H0503 | H0505 |
| 3 | H0301 | H0302 | H0303 | H0305 |
| 2 | H0201 | H0202 | H0203 | H0205 |
| 1 | H0101 | H0102 | H0103 | H0105 |

| 112-I | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 13 | I1301 | I1302 | I1303 | I1305 | I1306 | I1307 | I1308 | I1309 | I1310 | I1311 | I1312 | I1313 | I1315 | I1316 | I1317 | I1318 | I1319 | I1320 | I1321 |
| 12 | I1201 | I1202 | I1203 | I1205 | I1206 | I1207 | I1208 | I1209 | I1210 | I1211 | I1212 | I1213 | I1215 | I1216 | I1217 | I1218 | I1219 | I1220 | I1221 |
| 11 | I1101 | I1102 | I1103 | I1105 | I1106 | I1107 | I1108 | I1109 | I1110 | I1111 | I1112 | I1113 | I1115 | I1116 | I1117 | I1118 | I1119 | I1120 | I1121 |
| 10 | I1001 | I1002 | I1003 | I1005 | I1006 | I1007 | I1008 | I1009 | I1010 | I1011 | I1012 | I1013 | I1015 | I1016 | I1017 | I1018 | I1019 | I1020 | I1021 |
| 9 | I0901 | I0902 | I0903 | I0905 | I0906 | I0907 | I0908 | I0909 | I0910 | I0911 | I0912 | I0913 | I0915 | I0916 | I0917 | I0918 | I0919 | I0920 | I0921 |
| 8 | I0801 | I0802 | I0803 | I0805 | I0806 | I0807 | I0808 | I0809 | I0810 | I0811 | I0812 | I0813 | I0815 | I0816 | I0817 | I0818 | I0819 | I0820 | I0821 |
| 6 | I0601 | I0602 | I0603 | I0605 | I0606 | I0607 | I0608 | I0609 | I0610 | I0611 | I0612 | I0613 | I0615 | I0616 | I0617 | I0618 | I0619 | I0620 | I0621 |
| 5 | I0501 | I0502 | I0503 | I0505 | I0506 | I0507 | I0508 | I0509 | I0510 | I0511 | I0512 | I0513 | I0515 | I0516 | I0517 | I0518 | I0519 | I0520 | I0521 |
| 3 | I0301 | I0302 | I0303 | I0305 | I0306 | I0307 | I0308 | I0309 | I0310 | I0311 | I0312 | I0313 | I0315 | I0316 | I0317 | I0318 | I0319 | I0320 | I0321 |
| 2 | I0201 | I0202 | I0203 | I0205 | I0206 | I0207 | I0208 | I0209 | I0210 | I0211 | I0212 | I0213 | I0215 | I0216 | I0217 | I0218 | I0219 | I0220 | I0221 |
| 1 | I0101 | I0102 | I0103 | I0105 | I0106 | I0107 | I0108 | I0109 | I0110 | I0111 | I0112 | I0113 | I0114 | I0116 | I0117 | I0118 | I0119 | I0120 | I0121 |

| | |
|---|---|
| 未售的單人位 | 0 |
| 未售的雙人位 | 83 |
| 已出售或轉售給個別人士的單人位 | 0 |
| 已出售或轉售給個別人士的雙人位 | 13 |
| 捐贈 | 0 |

**Figure 10c**

| 112-E | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 並排雙人位 | 並排雙人位 | 並排雙人位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 | 18 | 19 |
| 13 | E1301 | E1302 | E1303 | E1305 | E1306 | E1307 | E1308 | E1309 | E1310 | E1311 | E1312 | E1313 | E1315 | E1316 | E1317 | E1318 | E1319 |
| 12 | E1201 | E1202 | E1203 | E1205 | E1206 | E1207 | E1208 | E1209 | E1210 | E1211 | E1212 | E1213 | E1215 | E1216 | E1217 | E1218 | E1219 |
| 11 | E1101 | E1102 | E1103 | E1105 | E1106 | E1107 | E1108 | E1109 | E1110 | E1111 | E1112 | E1113 | E1115 | E1116 | E1117 | E1118 | E1119 |
| 10 | E1001 | E1002 | E1003 | E1005 | E1006 | E1007 | E1008 | E1009 | E1010 | E1011 | E1012 | E1013 | E1015 | E1016 | E1017 | E1018 | E1019 |
| 9 | E0901 | E0902 | E0903 | E0905 | E0906 | E0907 | E0908 | E0909 | E0910 | E0911 | E0912 | E0913 | E0915 | E0916 | E0917 | E0918 | E0919 |
| 8 | E0801 | E0802 | E0803 | E0805 | E0806 | E0807 | E0808 | E0809 | E0810 | E0811 | E0812 | E0813 | E0815 | E0816 | E0817 | E0818 | E0819 |
| 6 | E0601 | E0602 | E0603 | E0605 | E0606 | E0607 | E0608 | E0609 | E0610 | E0611 | E0612 | E0613 | E0615 | E0616 | E0617 | E0618 | E0619 |
| 5 | E0501 | E0502 | E0503 | E0505 | E0506 | E0507 | E0508 | E0509 | E0510 | E0511 | E0512 | E0513 | E0515 | E0516 | E0517 | E0518 | E0519 |
| 3 | E0301 | E0302 | E0303 | E0305 | E0306 | E0307 | E0308 | E0309 | E0310 | E0311 | E0312 | E0313 | E0315 | E0316 | E0317 | E0318 | E0319 |
| 2 | E0201 | E0202 | E0203 | E0205 | E0206 | E0207 | E0208 | E0209 | E0210 | E0211 | E0212 | E0213 | E0215 | E0216 | E0217 | E0218 | E0219 |
| 1 | E0101 | E0102 | E0103 | E0105 | E0106 | E0107 | E0108 | E0109 | E0110 | E0111 | E0112 | E0113 | E0115 | E0116 | E0117 | E0118 | E0119 |

| 112-F | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | F1301 | F1302 | F1303 | F1305 | F1306 | F1307 | F1308 | F1309 | F1310 | F1311 | F1312 |
| 12 | F1201 | F1202 | F1203 | F1205 | F1206 | F1207 | F1208 | F1209 | F1210 | F1211 | F1212 |
| 11 | F1101 | F1102 | F1103 | F1105 | F1106 | F1107 | F1108 | F1109 | F1110 | F1111 | F1112 |
| 10 | F1001 | F1002 | F1003 | F1005 | F1006 | F1007 | F1008 | F1009 | F1010 | F1011 | F1012 |
| 9 | F0901 | F0902 | F0903 | F0905 | F0906 | F0907 | F0908 | F0909 | F0910 | F0911 | F0912 |
| 8 | F0801 | F0802 | F0803 | F0805 | F0806 | F0807 | F0808 | F0809 | F0810 | F0811 | F0812 |
| 6 | F0601 | F0602 | F0603 | F0605 | F0606 | F0607 | F0608 | F0609 | F0610 | F0611 | F0612 |
| 5 | F0501 | F0502 | F0503 | F0505 | F0506 | F0507 | F0508 | F0509 | F0510 | F0511 | F0512 |
| 3 | F0301 | F0302 | F0303 | F0305 | F0306 | F0307 | F0308 | F0309 | F0310 | F0311 | F0312 |
| 2 | F0201 | F0202 | F0203 | F0205 | F0206 | F0207 | F0208 | F0209 | F0210 | F0211 | F0212 |
| 1 | F0101 | F0102 | F0103 | F0105 | F0106 | F0107 | F0108 | F0109 | F0110 | F0111 | F0112 |

| 112- G | 單位 | 單位 | 單位 | 單位 | 單位 |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 |
| 13 | G1301 | G1302 | G1303 | G1305 | G1306 |
| 12 | G1201 | G1202 | G1203 | G1205 | G1206 |
| 11 | G1101 | G1102 | G1103 | G1105 | G1106 |
| 10 | G1001 | G1002 | G1003 | G1005 | G1006 |
| 9 | G0901 | G0902 | G0903 | G0905 | G0906 |
| 8 | G0801 | G0802 | G0803 | G0805 | G0806 |
| 6 | G0601 | G0602 | G0603 | G0605 | G0606 |
| 5 | G0501 | G0502 | G0503 | G0505 | G0506 |
| 3 | G0301 | G0302 | G0303 | G0305 | G0306 |
| 2 | G0201 | G0202 | G0203 | G0205 | G0206 |
| 1 | G0101 | G0102 | G0103 | G0105 | G0106 |

| | |
|---|---|
| 未售的單人位 | 0 |
| 未售的雙人位 | 12 |
| 已出售或轉售給個別人士的單人位 | 3 |
| 已出售或轉售給個別人士的雙人位 | 8 |
| 捐贈 | 0 |

**Figure 10d**

| 112-J | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 | 前後雙人位 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 |
| 13 | J1301 | J1302 | J1303 | J1305 | J1306 | J1307 | J1308 | J1309 | J1310 | J1311 | J1312 | J1313 | J1315 |
| 12 | J1201 | J1202 | J1203 | J1205 | J1206 | J1207 | J1208 | J1209 | J1210 | J1211 | J1212 | J1213 | J1215 |
| 11 | J1101 | J1102 | J1103 | J1105 | J1106 | J1107 | J1108 | J1109 | J1110 | J1111 | J1112 | J1113 | J1115 |
| 10 | J1001 | J1002 | J1003 | J1005 | J1006 | J1007 | J1008 | J1009 | J1010 | J1011 | J1012 | J1013 | J1015 |
| 9 | J0901 | J0902 | J0903 | J0905 | J0906 | J0907 | J0908 | J0909 | J0910 | J0911 | J0912 | J0913 | J0915 |
| 8 | J0801 | J0802 | J0803 | J0805 | J0806 | J0807 | J0808 | J0809 | J0810 | J0811 | J0812 | J0813 | J0815 |
| 6 | J0601 | J0602 | J0603 | J0605 | J0606 | J0607 | J0608 | J0609 | J0610 | J0611 | J0612 | J0613 | J0615 |
| 5 | J0501 | J0502 | J0503 | J0505 | J0506 | J0507 | J0508 | J0509 | J0510 | J0511 | J0512 | J0513 | J0515 |
| 3 | J0301 | J0302 | J0303 | J0305 | J0306 | J0307 | J0308 | J0309 | J0310 | J0311 | J0312 | J0313 | J0315 |
| 2 | J0201 | J0202 | J0203 | J0205 | J0206 | J0207 | J0208 | J0209 | J0210 | J0211 | J0212 | J0213 | J0215 |
| 1 | J0101 | J0102 | J0103 | J0105 | J0106 | J0107 | J0108 | J0109 | J0110 | J0111 | J0112 | J0113 | J0115 |

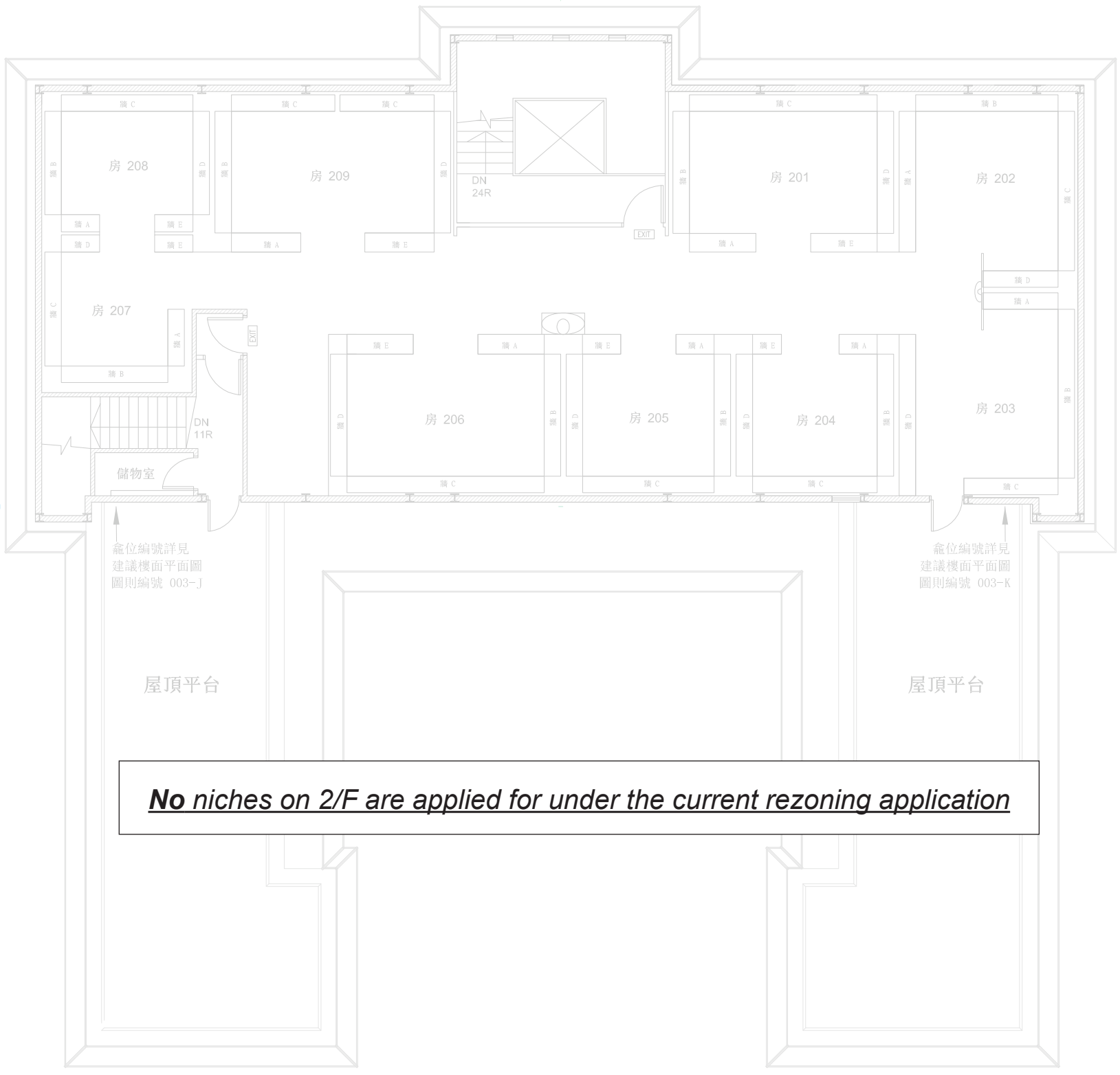
| 112 - K | 前後雙人位 | 前後雙人位 | 前後雙人位 |
|---|---|---|---|
| | 1 | 2 | 3 |
| 13 | K1301 | K1302 | K1303 |
| 12 | K1201 | K1202 | K1203 |
| 11 | K1101 | K1102 | K1103 |
| 10 | K1001 | K1002 | K1003 |
| 9 | K0901 | K0902 | K0903 |
| 8 | K0801 | K0802 | K0803 |
| 6 | K0601 | K0602 | K0603 |
| 5 | K0501 | K0502 | K0503 |
| 3 | K0301 | K0302 | K0303 |
| 2 | K0201 | K0202 | K0203 |
| 1 | K0101 | K0102 | K0103 |

| | |
|---|---|
| 未售的單人位 | 0 |
| 未售的雙人位 | 38 |
| 已出售或轉售給個別人士的單人位 | 0 |
| 已出售或轉售給個別人士的雙人位 | 9 |
| 捐贈 | 0 |

# 2/F Location Plan (Whole Floor)

Figure 11

建議樓面平面圖 就截算前骨灰安置所的牌照申請




***No** niches on 2/F are applied for under the current rezoning application*

2017年6月30日前仍未售出的龕位
不屬於此申請範圍

（按公制比例繪製）

建議骨灰安置所大樓二樓樓面平面圖（圖則編號 003-C）

（1 ： 125）

骨灰安置所名稱 ： 普光明寺（只包括2017年6月30日前已售出的龕位）

地址 ： 新界沙田大圍美田路白田村二區96號
（丈量約份第181約地段第2號及第671號）

# Appendix 5

Traffic Impact Assessment

# Puguangming Temple
# Application for License for Columbarium Use

# Traffic Impact Assessment
# (Proposal - 2)

## Report

**12 April 2023**

**CTA Consultants Limited**
**志達顧問有限公司**

# 1. INTRODUCTION

## 1.1 Background

1.1.1 CTA Consultants Limited ("CTA") is commissioned by the Applicant to carry out a Traffic Impact Assessment Report in supporting the Planning Application for increasing the number of niches in Puguangming Temple.

1.1.2 The Subject Site is located at Mei Tin Road, Tai Wai as shown in **Figure 1.1**. The Subject Site is at present a columbarium with niches/tablets.

1.1.3 **1,779 niches**, comply with the **Private Columbaria Ordinance (i.e. before the date of 30/6/2017**), was approved by TPB in 2022.

1.1.4 The applicant would like to apply for another **3,000 niches** that will give a total of **4,779 niches**.

1.1.5 According to information provided by the client, the utilization of niches/tablets in 2018 and the current status of the niches are summarized in **Table 1.1** below.

**Table 1.1 Summary of Utilization of Niches/Tablets**

| | No. of Niches/Tablets occupied in 2018 | No. of Niches/Tablets Approved in 2022 | This Application (Including the Approved 1,779 niches |
|---|---|---|---|
| **Niches** | 319 | 1,779 | **4,779** |
| **Tablets** | 345 | - | **345** |

## 1.2 Study Objectives

1.2.1 The main objectives of the study are as follows:

i) to assess the existing traffic conditions in the vicinity of the proposed columbarium development;

ii) to forecast traffic demands on the adjacent road network in the design year 2027 (i.e. Full operation year 2024 + 3 years);

iii) to estimate the likely traffic generated by the proposed development;

iv) to assess the impacts of traffic/ pedestrian generated by the temple in the vicinity;

v) to recommend improvement measures, if necessary, to alleviate any traffic problems on the road network.

## 1.3 Structure of the Report

1.3.1 Following this introductory chapter, there are 7 further chapters.

- **Chapter 2 – Existing Traffic Conditions**
- **Chapter 3 – Future Traffic Conditions**
- **Chapter 4 – Vehicular Traffic Impact Assessment**
- **Chapter 5 – Public Transport Demand**
- **Chapter 6 – Parking Provision**
- **Chapter 7 – Pedestrian Traffic Impact Assessment**
- **Chapter 8 – Summary and Conclusion**

# 2. EXISTING TRAFFIC CONDITIONS

## 2.1 Existing Road Network

2.1.1 The existing road network in the vicinity of the proposed Columbarium is shown in **Figure 2.1**. Visitors are mainly access through Mei Tin Road.

2.1.2 Mei Tin Road is a single 2-lane 2-way Local Road, connecting with Pik Tin Street and Tung Lo Wan Hill Road. It serves as road link providing access for the residential development at Tai Wai.

2.1.3 As shown in **Figure 2.1**, 9 junctions were identified to be critical for assessment of traffic impact due to the proposed Columbarium. They are listed in below **Table 2.1** and their existing junction layout arrangements are shown in **Figures 2.2** to **2.10** respectively.

**Table 2.1 Identified Critical Junctions**

| Ref. | Junction | Type | Figure No. |
|---|---|---|---|
| A | Mei Tin Road / Heung Fan Liu Street | Signal | **2.2** |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | **2.3** |
| C | Mei Tin Road / Chik Fai Street | Signal | **2.4** |
| D | Mei Tin Road / Pik Tin Street | Priority | **2.5** |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | **2.6** |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | Roundabout | **2.7** |
| G | Mei Tin Road / Chik Wan Street | Signal | **2.8** |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | **2.9** |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | Roundabout | **2.10** |

2.1.4 No transport facilities are at present provided in the Puguangming Temple, such as car park, loading/unloading and pick up/drop off space.

2.1.5 Therefore, people accessing the temple will use MTR / GMB /Bus / Taxi / Private Car + Walk

## 2.2 Public Transport Facilities

2.2.1 Puguangming Temple can be accessed by various types of public transports. The Subject Site is about 1,000m away from Tai Wai Railway Station. Therefore, some visitors may prefer to take GMB / buses to get access to the Subject Site.

2.2.2 The details of public transport facilities in the vicinity are shown in **Figure 2.11**. The existing Bus and GMB routes are summarized in **Table 2.2** below.

**Table 2.2 Existing Road-based Public Transport Services in the Vicinity**

| Service | Route | Origin - Destination | Services Day | Frequency (min) |
|---|---|---|---|---|
| Franchised Bus | 46P[1] | Mei Tin – Kwai Fong Railway Station | Mon to Sat, except Public Holiday | 10 – 30 |
| | 80 | Mei Lam – Kwun Tong Ferry | Mon to Sun | 7 – 20 |
| | 80A[1] | Mei Lam - Kwun Tong Ferry | Mon To Fri (except Public Holidays) | Two per day |
| | 81 | Wo Che - Jordan (West Kowloon Station) | Mon to Sun | 10 - 20 |
| | 81S[1] | Mei Tin Estate – Nathan Road (Public Square Street) | Mon to Fri, except Public Holiday | 30 |
| | 82B[1] | Mei Tin – Tai Wai Railway Station | Mon to Fri, except Public Holiday | Two per day |
| | 82K | Mei Lam – Wong Nai Tau | Mon to Sun | 30 – 40 |
| | 283 | Shatin Central – Mei Chung Court (Circular) | Mon to Sun | 10 – 15 |
| | 286P[1] | Mei Chung Court – Cheung Sha Wan | Mon to Fri, except Public Holiday | 15 |
| | 286X | Hin Keng – Sham Shui Po (Circular) | Mon to Sun | 12 – 20 |
| | 288C[1] | Shui Chuen O - Tai Wai Station | Mon to Fri, except Public Holiday | Two per day |
| | 985[1] | Mei Tin Estate (Mei Chi House) – Wan Chai (Hennessy Road) | Sat, except Public Holiday | 8 – 10 |
| | 985A[1] | Mei Tin Estate (Mei Chi House) - Wan Chai | Mon to Fri, except Public Holiday | 8 – 10 |
| | 989[1] | Sai Wan Ho - Fo Tan (Chun Yeung Estate) | Mon to Fri, except Public Holiday | Four per peak period |
| | NA41[1] | Shui Chuen O - Tai Wai Station - HZMB Hong Kong Port | Mon to Sun | One per day |
| GMB | 63A | Mei Chung Court – Tai Wai Station (Circular) | Mon to Sun | 3 – 7 |
| | 63B | Granville Garden – Tai Wai Station (Circular) | Mon to Sun | 6 – 10 |
| | 63K | Mei Tin Estate Public Transport Interchange – Tai Wai Station (Circular) | Mon to Sun | 3 – 7 |
| | 63S[2] | Mei Tin Estate Public Transport Interchange – Mong Kok (Circular) | Mon to Sun | 8 – 15 |

*Note:* [1] *Peak Hour Service only*

[2] *Night Time Service only*

## 2.3 Parking Facilities in the Vicinity

2.3.1 There are 3 numbers of multi-storey car parks in the vicinity of the Subject Site, namely Mei Chung Court, May Shing Court and Mei Lam.

2.3.2 The locations of the 3 car parks and pedestrian routing to the proposed columbarium are shown in **Figures 2.12** and **2.13**.

## 2.4 Traffic Survey

2.4.1 Due to the Social Distancing Rules under the effect of COVID-19, a maximum of 4 people in each group are allowed. Following this Rule, Puguangming Temple only allows a maximum of 4 people to stay at any rooms/apartment at any one time. Thus, it is believed that the no. of visitors and vehicles (between 2019 and 2022) to the temple would be much lower than normal situation.

2.4.2 To give a much more reasonable and reliable base for assessment, the previous traffic survey carried out in Year 2018 is adopted for this Report.

***Ching Ming Festival, 2018***

a) To reveal the traffic conditions on the festival day, a pedestrian survey was conducted during Ching Ming Festival on 5 April 2018.

b) The Surveyed results are shown in **Table 2.3** and **2.4**.

c) The total incoming/outgoing daily flow is **595/512 visitors**

d) The incoming/outgoing hourly peak flow is **181/146 visitors**

## Table 2.3 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (15 mins Interval)

| 15 mins Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| 800 | 815 | 8 | 0 | 5 | 0 | 13 | 0 |
| 815 | 830 | 5 | 0 | 0 | 0 | 5 | 0 |
| 830 | 845 | 10 | 3 | 8 | 0 | 18 | 3 |
| 845 | 900 | 11 | 0 | 8 | 2 | 19 | 2 |
| 900 | 915 | 16 | 2 | 11 | 0 | 27 | 2 |
| 915 | 930 | 10 | 0 | 3 | 2 | 13 | 2 |
| 930 | 945 | 0 | 2 | 0 | 1 | 0 | 3 |
| 945 | 1000 | 3 | 0 | 8 | 3 | 11 | 3 |
| 1000 | 1015 | 13 | 5 | 8 | 5 | 21 | 10 |
| 1015 | 1030 | 6 | 0 | 7 | 5 | 13 | 5 |
| 1030 | 1045 | 13 | 10 | 6 | 8 | 19 | 18 |
| 1045 | 1100 | 11 | 2 | 12 | 0 | 23 | 2 |
| 1100 | 1115 | 18 | 6 | 21 | 4 | 39 | 10 |
| 1115 | 1130 | 26 | 23 | 24 | 17 | 50 | 40 |
| 1130 | 1145 | 40 | 10 | 21 | 16 | 61 | 26 |
| 1145 | 1200 | 23 | 19 | 8 | 9 | 31 | 28 |
| 1200 | 1215 | 19 | 21 | 16 | 13 | 35 | 34 |
| 1215 | 1230 | 16 | 13 | 2 | 21 | 18 | 34 |
| 1230 | 1245 | 6 | 8 | 10 | 5 | 16 | 13 |
| 1245 | 1300 | 10 | 35 | 3 | 21 | 13 | 56 |
| 1300 | 1315 | 8 | 29 | 8 | 12 | 16 | 41 |
| 1315 | 1330 | 13 | 0 | 10 | 10 | 23 | 10 |
| 1330 | 1345 | 0 | 26 | 6 | 13 | 6 | 39 |
| 1345 | 1400 | 0 | 6 | 5 | 8 | 5 | 14 |
| 1400 | 1415 | 3 | 5 | 7 | 5 | 10 | 10 |
| 1415 | 1430 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1430 | 1445 | 0 | 6 | 2 | 5 | 2 | 11 |
| 1445 | 1500 | 6 | 4 | 4 | 4 | 10 | 8 |
| 1500 | 1515 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1515 | 1530 | 3 | 5 | 7 | 3 | 10 | 8 |
| 1530 | 1545 | 10 | 6 | 8 | 4 | 18 | 10 |
| 1545 | 1600 | 3 | 7 | 10 | 3 | 13 | 10 |
| 1600 | 1615 | 0 | 3 | 0 | 0 | 0 | 3 |
| 1615 | 1635 | 3 | 7 | 3 | 3 | 6 | 10 |
| 1635 | 1645 | 3 | 2 | 2 | 4 | 5 | 6 |
| 1645 | 1700 | 0 | 8 | 0 | 5 | 0 | 13 |
| 1700 | 1715 | 0 | 9 | 0 | 7 | 0 | 16 |
| 1715 | 1730 | 0 | 4 | 0 | 2 | 0 | 6 |
| 1730 | 1745 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 1800 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | | **328** | **286** | **267** | **226** | **595** | **512** |

**Table 2.4 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (1 hour Interval)**

| 1 hour Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| **800** | **900** | 34 | 3 | 21 | 2 | 55 | 5 |
| **815** | **915** | 42 | 5 | 27 | 2 | 69 | 7 |
| **830** | **930** | 47 | 5 | 30 | 4 | 77 | 9 |
| **845** | **945** | 37 | 4 | 22 | 5 | 59 | 9 |
| **900** | **1000** | 29 | 4 | 22 | 6 | 51 | 10 |
| **915** | **1015** | 26 | 7 | 19 | 11 | 45 | 18 |
| **930** | **1030** | 22 | 7 | 23 | 14 | 45 | 21 |
| **945** | **1045** | 35 | 15 | 29 | 21 | 64 | 36 |
| **1000** | **1100** | 43 | 17 | 33 | 18 | 76 | 35 |
| **1015** | **1115** | 48 | 18 | 46 | 17 | 94 | 35 |
| **1030** | **1130** | 68 | 41 | 63 | 29 | 131 | 70 |
| **1045** | **1145** | 95 | 41 | **78** | 37 | 173 | 78 |
| **1100** | **1200** | 107 | 58 | 74 | 46 | **181** | 104 |
| **1115** | **1215** | **108** | 73 | 69 | 55 | 177 | 128 |
| **1130** | **1230** | 98 | 63 | 47 | 59 | 145 | 122 |
| **1145** | **1245** | 64 | 61 | 36 | 48 | 100 | 109 |
| **1200** | **1300** | 51 | 77 | 31 | **60** | 82 | 137 |
| **1215** | **1315** | 40 | 85 | 23 | 59 | 63 | 144 |
| **1230** | **1330** | 37 | 72 | 31 | 48 | 68 | 120 |
| **1245** | **1345** | 31 | **90** | 27 | 56 | 58 | **146** |
| **1300** | **1400** | 21 | 61 | 29 | 43 | 50 | 104 |
| **1315** | **1415** | 16 | 37 | 28 | 36 | 44 | 73 |
| **1330** | **1430** | 9 | 37 | 25 | 29 | 34 | 66 |
| **1345** | **1445** | 9 | 17 | 21 | 21 | 30 | 38 |
| **1400** | **1500** | 15 | 15 | 20 | 17 | 35 | 32 |
| **1415** | **1515** | 18 | 10 | 20 | 15 | 38 | 25 |
| **1430** | **1530** | 15 | 15 | 20 | 15 | 35 | 30 |
| **1445** | **1545** | 25 | 15 | 26 | 14 | 51 | 29 |
| **1500** | **1600** | 22 | 18 | 32 | 13 | 54 | 31 |
| **1515** | **1615** | 16 | 21 | 25 | 10 | 41 | 31 |
| **1530** | **1630** | 16 | 23 | 21 | 10 | 37 | 33 |
| **1545** | **1645** | 9 | 19 | 15 | 10 | 24 | 29 |
| **1600** | **1700** | 6 | 20 | 5 | 12 | 11 | 32 |
| **1615** | **1715** | 6 | 26 | 5 | 19 | 11 | 45 |
| **1630** | **1730** | 3 | 23 | 2 | 18 | 5 | 41 |
| **1645** | **1745** | 0 | 21 | 0 | 14 | 0 | 35 |
| **1700** | **1800** | 0 | 13 | 0 | 9 | 0 | 22 |

e) The expected visitor trips on festival days are derived based on the trip rates applied to the proposed number of Niches/Tablets as follows:

**Table 2.5 Expected Visitor Trips (Without implantation of Traffic Management Plan)**

| Existing | | Approved | | This Application (Including the Approved 1,779 no. | |
|---|---|---|---|---|---|
| **No. of Niches** | **Peak Flow (ped/hr)** | **No. of Niches** | **Flow (ped/hr)** | **No. of Niches** | **Flow (ped/hr)** |
| 319 | 108 | 1,779 | 602 | **4,779** | **1.617** |

## 2.5 Traffic Flows at Ching Ming Festival

2.5.1 Traffic surveys in the form of manual classified counts were also conducted at the above-mentioned critical junctions in **Table 2.1**. The 2018 observed traffic flows are shown in **Figure 2.14**. Existing operational performance of the critical junctions are listed in **Table 2.7** below.

## 2.6 Traffic Flows at Weekday

2.6.1 Traffic surveys in the form of manual classified counts were also conducted at the above-mentioned critical junctions in **Table 2.1** on normal weekday. The 2021 observed traffic flows are shown in **Figure 2.15**.

2.6.2 Due to the COVID-19, the surveyed traffic flows may be much less that of the normal conditions. Therefore, additional surveys are carried at the ATC Core station 5002 (at Shatin Road) to try to find out "corrected" factor. **Table 2.6** gives the surveyed results as compared to the ATC Core station 5002.

**Table 2.6 Derivation of COVID-19 Factor**

| | Weekday Flow (Veh/hr) | | | | |
|---|---|---|---|---|---|
| | South Bound | | North Bound | | Total |
| | AM Peak | PM Peak | AM Peak | PM Peak | |
| **ATC Core station 5002 (Year 2018)** | 2,730 | 2,400 | 2,470 | 2,280 | - |
| **Growth Factor Flow from 2018 to 2021 (1)** | 2,813 | 2,473 | 2,545 | 2,349 | **10,179** |
| **Surveyed Flow** | 2,482 | 2,297 | 2,084 | 2,201 | **9,064** |
| **COVID-19 Factor** | | | | | **1.12** |

*Note (1): The growth factor = **1.0%** (please refer to **Section 3.3**)*

*(2): ATC 2019 not adopted due to the traffic flows may affected by public meetings and social events in Year 2019*

2.6.3 The COVID-19 Factor of **1.12** is then applied to the surveyed traffic flows in **Figure 2.15** to give the COVID-19 corrected surveyed traffic flows shown in **Figure 2.16** for the use in the later section of this report. Existing operational performance of the critical junctions are listed in **Table 2.7** below.

**Table 2.7 Operational Performance of Identified Critical Junctions in Observed Year**

| Ref. | Junction | Method of Control | Year 2018 (Observed) RC/DFC[(1)] | Year 2021 (COVID-19 Corrected) RC/DFC[(1)] | |
|---|---|---|---|---|---|
| | | | Festival Day | Weekday | |
| | | | Peak | AM Peak | PM Peak |
| A | Mei Tin Road / Heung Fan Liu Street | Signal | >+100% | +85% | >+100% |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | >+100% | >+100% | +79% |
| C | Mei Tin Road / Chik Fai Street | Signal | +60% | +87% | +83% |
| D | Mei Tin Road / Pik Tin Street | Priority | 0.21 | 0.35 | 0.22 |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | >+100% | >+100% | >+100% |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | Roundabout | 0.34 | 0.43 | 0.42 |
| G | Mei Tin Road / Chik Wan Street | Signal | +55% | +28% | +95% |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | +66% | +45% | +36% |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | Roundabout | 0.13 | 0.09 | 0.09 |

*Note: (1) RC = Reserve Capacity for signal junction*

*DFC = Design Ratio of Flow to Capacity for Priority Junction or Roundabout*

2.6.4 The assessment results in **Table 2.7** indicate that all critical junctions are at present operating with ample capacities.

# 3. FUTURE TRAFFIC CONDITIONS

## 3.1 The proposed Management Plan

3.1.1 The columbarium will be operated under a Management Plan "**Traffic Management Plan**" submitted separately.

3.1.2 The plan will base on a Pre-registration arrangement. The arrangement is as follows:

a) Pre–Registration

i) The Visitors coming to Puguangming Temple in Festival periods has to be restricted into 10 Sections, each section for 1 hour:

ii) From 8 am to 6 pm, each section will last for 1 hour.

iii) People coming has to be **Pre–Registration**.

iv) Each section will be restricted to **250 people**, which is able to give a total of **2,500 people a day**.

b) Implementation Period

i) This Plan is to be executed on the Ching Ming and Chung Yeung Festival Day plus **3 weekends before the festival day** and **3 weekends after the festival day**.

3.1.3 The proposed **250 people per hour** is much less than the expected no. of people of **602** per hour for the approved 1,779 no. of niches as shown in **Table 2.5.**

## 3.2 Design year

3.2.1 It is anticipated that the proposed columbarium will be in full operation in 2024. In order to assess the impact of the development related traffic on the local road network, it is necessary to forecast the traffic flows for 2027, the adopted design year (3 years beyond full operation year). This is also the strategic study year currently adopted by the Hong Kong Government for the overall long-term planning of Hong Kong's transport system.

## 3.3 Reference Traffic Flows

3.3.1 To estimate the 2027 reference traffic flows (without the proposed development) during peak festival days in the local road network, an appropriate growth factor has to be identified for the area in the first instance.

3.3.2 The following approaches have been adopted in order to derive a growth factor in this district.

*Historical Trend*

3.3.3 Numerous of traffic count stations are located in the vicinity of the proposed development. The traffic counts reported in the Annual Traffic Census (ATC), which is published by Transport Department, over a period of six years, i.e. 2014 to 2019 are summarized in **Table 3.1**.

**Table 3.1 Historical Traffic Data from Annual Traffic Census (ATC)**

| ATC Stn | Road Name | Annual Average Daily Traffic (AADT) | | | | | | Avg. Annual Growth Rate |
|---|---|---|---|---|---|---|---|---|
| | | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| 5417 | Mei Tin Road (Che Kung Miu Road - Tsuen Nam Road) | 35,750 | 38,760 | 39,340* | 39,450* | 39,600* | 41,140 | 2.85% |
| 5212 | Hung Mui Kuk Road Che Kung Miu Road - Tin Sam Street) | 27,250 | 27,880* | 28,300* | 28,370* | 32,110* | 31,140 | 2.70% |
| 5449 | Tai Po Rd – Tai Wai (Shing Ho Rd – Mei Tin Rd) | 9,770 | 9,120 | 9,220* | 9,160* | 9,310* | 7,860 | -4.26% |
| 5617 | Mei Tin Rd (Tai Po Rd – Tai Wai – Tsuen Nam Rd) | 30,830* | 28,730 | 28,760 | 28,840* | 28,940* | 28,190* | -1.77% |
| 6012 | Hung Mui Kuk Road (Lion Rock Tunnel Road - Tin Sam Street) | 30,320* | 31,010* | 31,480* | 32,240 | 33,620 | 33,590* | 2.07% |
| 6614 | Pik Tin St (Mei Tin Rd – End) | 2,890 | 3,020 | 3,000 | 2,910 | 2,640 | 3,050 | 1.08% |
| **TOTAL** | | **73,810** | **71,880** | **72,460** | **73,150** | **74,510** | **72,690** | **-0.31%** |

***Note: *AADT estimated by Growth factor***

*2019-Based TPEDM planning data*

3.3.4 Reference has also been made to the "2019-Based TPEDM planning data" published by Planning Department for years 2019 and 2031. The average annual growth rates in terms of population and employment from 2019 to 2031 are shown in **Table 3.2**.

**Table 3.2 2019-based Population and Employment Growth from 2019 to 2031**

| Sha Tin District | | | | |
|---|---|---|---|---|
| Data | Year | | | Average Annual Growth Rate |
| | 2019 | 2026 | 2031 | |
| **Population** | 483,000 | 493,750 | 461,100 | -0.39% |
| **Employment** | 200,050 | 186,250 | 179,400 | -0.90% |
| **Total** | **683,050** | **680,000** | **640,500** | **-0.53%** |

3.3.5 From **Table 3.2**, it is found that the average annual growth rates of population and employment in Sha Tin from year 2019 to 2031 are -0.53% per annum.

*Adopted Growth Rate*

3.3.6 A.A.D.T. of ATC indicates that the traffic flows in the local road network have an decreasing trend with annual growth rate of -0.31% during past years 2014 - 2019.

3.3.7 Whilst, the planning data indicates that the population and employment in the area are expected to develop with annual growth rate of -0.53% from 2019 to 2031.

3.3.8 For a conservative approach, the annual growth rate of **+1.0%** p.a. is adopted, which represents the strategic growth of traffic on the main roads in Tai Wai. It is deemed sufficient to allow any unexpected future growth as a result of some changes related to land use or redevelopment in the area.

## 3.4 Traffic Generations of Adjacent New Developments

3.4.1 To fully reflect the growth traffic, trip generation of the future vicinity developments have been considered. According to information from Town Planning Board and on-site observation, 4 numbers of approved/ constructed residential developments located at Tai Wai Area have been included in this TIA study. The locations are shown in **Figure 3.1**. and tabled in Table 3.3 below:

**Table 3.3 Adjacent Developments**

| Ref | Development | GFA ($m^2$) | Nos. of Units | Avg. Flat Size ($m^2$) |
|---|---|---|---|---|
| A | Residential Dev at Various Lots in D.D. 181, Heung Fan Liu | 52,156 | 1,325 | 39.4 |
| B | Mei Ying Court | ~12,000 | 216 | 55.6 |
| C | Mei Pak Court | ~14,500 | 288 | 50.3 |
| D | Tai Wai Station Property Development | 190,480 | 3,090 | 61.6 |

3.4.2 The estimation on trip generations and attractions of the adjacent residential development is based on the information from the application. **Table 3.4** shows the summary of the AM and PM Peak Hour trip of those planned developments.

**Table 3.4 Adopted Trip Gen. & Att. of Adjacent Developments**

| Ref | Nos. of Units | Avg. Flat Size ($m^2$) | Adopted Trips (AM Peak) | | | | Adopted Trips (PM Peak) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Trip Rate (pcu/hr/flat) | | Trips (pcu/hr) | | Trip Rate (pcu/hr/flat) | | Trips (pcu/hr) | |
| | | | Gen. | Att. | Gen. | Att. | Gen. | Att. | Gen. | Att. |
| A | 1,325 | 39.4 | 0.1021 | 0.0709 | **135** | **94** | 0.0415 | 0.0464 | **55** | **61** |
| B | 216 | 55.6 | 0.0761 | 0.0573 | **16** | **12** | 0.0350 | 0.0451 | **8** | **10** |
| C | 288 | 50.3 | 0.0761 | 0.0573 | **22** | **17** | 0.0350 | 0.0451 | **10** | **13** |
| D | 3,090 | 61.6 | 0.0718 | 0.0425 | **222** | **131** | 0.0286 | 0.0370 | **88** | **114** |

*1) Although Mei Ying Court and Mei Pak Court had been already completed in Year 2017, their trips are still added in assessment as conservative approach since they may not be fully occupied during the Year 2018 survey.*

*2) Upper limit of the TPDM trip rates is adopted for a conservative approach, except for the "D" of which the Mean of the TPDM trip rates is adopted.*

3.4.3 For conservative approach, the traffic generation/ attraction of adjacent development during PM peak hour on normal weekdays is included in the 2027 reference traffic flows. The reference traffic in year 2027 is derived following the equation below:

**2027 Reference Flows (Without Proposed Development)** = **2018 Observed Flows (Ching Ming Festival)** x **Adopted Growth Factor (i.e. +1.0% p.a. for 9 years[(1)])** + **Traffic Flows of Adjacent Planned Development (i.e. Sites A+B+C+D)**

**2027 Reference Flows (Without Proposed Development)** = **2021 Observed Flows (Weekday)** x **Adopted Growth Factor (i.e. +1.0% p.a. for 6 years[(1)])** + **Traffic Flows of Adjacent Planned Development (i.e. Sites A+B+C+D)**

3.4.4 The 2027 reference traffic flows are presented in **Figures 3.2** and **3.3**.

## 3.5 Traffic Generations and Attractions of Proposed Columbarium Development

3.5.1 Based on the pre-registration arrangement and allowable no. of visitors is 250 visitors per hour for 10 sections a day.

3.5.2 As mentioned in the Traffic Management Plan, the Expected Visitors under the management plan is shown in **Table 3.5**.

**Table 3.5 Expected Visitor Trip under the Management Plan**

| Date | Visitor | Peak hour flow (ppl/hr) | |
|---|---|---|---|
| | | In | out |
| **Festival Days** | 10 Sections<br>Each 1 hr = 250 | 250 | 250 |
| | Daily = 2,500 | | |

***Modal Split***

3.5.3 A modal split survey has been conducted on the existing columbarium users and shown in **Table 3.6**.

**Table 3.6 Modal Split for Visitors to the Proposed Columbarium**

| Transport Mode | Attraction/ Generation |
|---|---|
| Franchised Bus | 26% |
| GMB | 27% |
| Car | 15% |
| Taxi | 19% |
| Walk | 13% |
| **Total** | 100% |

***Assessment on Public Transport***

3.5.4 Based on the peak hour person trips in **Tables 2.3** and **2.4**, the Net increase of visitors would be 250 - 181 = **69 visitors in AM Peak (entering the Site)** and 250 - 146 = **104 visitors in Noon/PM Peak (leaving the Site)**. And also based on the modal split in **Table 3.5**, the net increase of peak hour person trips by different modes of transports are derived in **Table 3.7**.

**Table 3.7 Net Increase of Peak Hour Person Trips of the Proposed Columbarium**

| Transport Mode | Peak Hour Person Trips | | |
|---|---|---|---|
| | Modal Split | Peak Attraction (To Temple) | Peak Generation (Leaving Temple) |
| Franchised Bus | 26% | 18 | 27 |
| GMB | 27% | 19 | 29 |
| Car | 15% | 11 | 16 |
| Taxi | 19% | 14 | 20 |
| Walk | 13% | 7 | 12 |
| **Total** | **100%** | **69** | **104** |

3.5.5 By applying the assumed vehicle capacity for different transport modes to peak hour person trips for trip generations for conservative approach, the **net** increase of peak hour traffic flows (in pcu/hr) generated by proposed columbarium are shown in **Table 3.8**.

**Table 3.8 Net Increase of Traffic Generation and Attraction of the Proposed Columbarium**

| Transport Mode | Occupancy (in person) | Peak Hour Trip Generations | |
|---|---|---|---|
| | | Peak Attraction (To Temple) | Peak Generation (Leaving Temple) |
| Franchised Bus | 120 | 0 | 0 |
| GMB | 19 | 0 | 0 |
| Car | 3 | 4 | 6 |
| Taxi | 3 | 5 | 7 |
| **Total** | - | **9** | **13** |

*Remarks:* *(1) Demand of Franchised Bus& GMB could be satisfied by existing services (refer to Chapter 5)*
*(2) The average occupancy of a private car assumes 3 persons*
*(3) The average occupancy of a taxi assumes 3 passengers*

3.5.6 Therefore, the estimated peak hour traffic generation of the proposed columbarium in festival day will be **9 pcus in** / **13 pcus out**.

3.5.7 It is understood that the visitors would mostly come to the columbarium during the Ching Ming/Chung Yeung festival and the weekends before/after these festival days. The visitors coming to columbarium during weekdays would not be high. The trips of in weekday would be lower than festival days/ weekend. Therefore, **15 pcus in** / **15 pcus out** would be adopted as the traffic generation of the proposed columbarium in normal weekday.

## 3.6 Design Traffic Forecast

3.6.1 The traffic generated from the proposed development was then assigned to the road network. After that, the development traffic flows were then superimposed onto the 2027 reference traffic flows (without proposed development) as shown in **Figures 3.2** and **3.3** to derive the 2027 design traffic forecasts (with proposed columbarium).

| **2027 Design Flows (with proposed developments)** | = | **2027 Reference Flows (without Proposed Development)** | + | **Proposed Columbarium Traffic** |
|---|---|---|---|---|

3.6.2 The 2027 peak hour design traffic flows (with proposed Puguangming Temple) are shown in **Figures 3.4** and **3.5**.

# 4. VEHICULAR TRAFFIC IMPACT ASSESSMENT

## 4.1 Operational Assessment

4.1.1 Based on the design traffic flows in **Figures 3.4** and **3.5**, a junction capacity assessment is carried out for the key junctions and the results of the assessment are summarized in **Tables 4.1** and **4.2** below.

**Table 4.1 Junction Performance of Critical Junctions in Reference Year 2027 (Without Proposed Columbarium)**

| Ref. | Junction | Method of Control | Year 2027 RC/DFC (1) | | |
|---|---|---|---|---|---|
| | | | Festival Day | Weekday | |
| | | | Peak | AM Peak | PM Peak |
| A | Mei Tin Road / Heung Fan Liu Street | Signal | >+100% | +68% | >+100% |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | >+100% | +91% | +61% |
| C | Mei Tin Road / Chik Fai Street | Signal | +44% | +67% | +65% |
| D | Mei Tin Road / Pik Tin Street | Priority | 0.33 | 0.66 | 0.44 |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | >+100% | >+100% | >+100% |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | R/A | 0.40 | 0.59 | 0.58 |
| G | Mei Tin Road / Chik Wan Street | Signal | +41% | +20% | +83% |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | +53% | +37% | +27% |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | R/A | 0.14 | 0.11 | 0.11 |

*Note: (1) RC = Reserve Capacity for signal junction*
*DFC = Design Ratio of Flow to Capacity for Priority Junction or Roundabout*

**Table 4.2 Junction Performance of Critical Junctions in Design Year 2027 (With Proposed Columbarium)**

| Ref. | Junction | Method of Control | Year 2027 RC/DFC (1) | | |
|---|---|---|---|---|---|
| | | | Festival Day | Weekday | |
| | | | Peak | AM Peak | PM Peak |
| A | Mei Tin Road / Heung Fan Liu Street | Signal | >+100% | +65% | >+100% |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | >+100% | +89% | +62% |
| C | Mei Tin Road / Chik Fai Street | Signal | +44% | +66% | +64% |
| D | Mei Tin Road / Pik Tin Street | Priority | 0.39 | 0.66 | 0.44 |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | >+100% | >+100% | >+100% |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | R/A | 0.40 | 0.59 | 0.58 |
| G | Mei Tin Road / Chik Wan Street | Signal | +41% | +17% | +79% |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | +53% | +33% | +27% |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | R/A | 0.14 | 0.11 | 0.11 |

*Note: (1) RC = Reserve Capacity for signal junction*
*DFC = Design Ratio of Flow to Capacity for Priority Junction or Roundabout*

4.1.2 Based on the assessment presented in **Tables 4.1** and **4.2**, the junctions will be operating with reasonable spare capacities in year 2027 with the full occupation of the proposed columbarium during Ching Ming Festival and weekday.

# 5. PUBLIC TRANSPORT DEMAND

## 5.1 Survey on Existing Public Transport Service

5.1.1 The proposed development is not close to MTR station and the public transport service is not comprehensive. A preliminary and localized public transport survey was carried out at the existing bus/GMB stops on Mei Tin Road and Mei Chung Court as illustrated in **Figure 5.1**.

5.1.2 The survey was carried out from 09:00am to 17:00pm of during Ching Ming Festival in 2018. The findings are presented in the **Table 5.1** below.

**Table 5.1 Observed Occupancy of Public Transport in the Vicinity**

| Duration | Direction | Routes | Observed Trips | Max. Utilization Rate | Average Utilization Rate | Occupancy (passenger) | Surplus Capacity (passenger) |
|---|---|---|---|---|---|---|---|
| **Peak Hour** | **Northbound (To Mei Shing Court)** | | | | | | |
| | Franchised Bus | 283 | 6 | 65% | 50% | 360 | 360 |
| | Minibus | 63A | 18 | 85% | 70% | 202 | 86 |
| **Peak Hour** | **Southbound (To Tai Wai)** | | | | | | |
| | Franchised Bus | 283 | 4 | 50% | 45% | 216 | 264 |
| | Minibus | 63A | 20 | 80% | 75% | 240 | 80 |

*Remarks:* *(1) Full capacity of 120 passengers for Franchised Bus is assumed.*

*(2) Full capacity of 16 passengers for Minibus is assumed.*

5.1.3 The surveyed result indicates that there are surplus capacities for the existing public transport services during the peak hours in Ching Ming Festival 2018.

## 5.2 Assessment on Public Transport Demand

*Proposed Columbarium*

5.2.1 From **Table 3.7**, the peak hour person trips during Ching Ming Festival have been estimated. The expected demand of public transport services during peak hour is calculated and presented in **Table 5.2**.

**Table 5.2 Expected Net Increase Demand of Public Transport Services due to the Proposed Columbarium in Design Year 2027**

| Transport Mode | | Pedestrian Trips during Peak Hour (1-way)(1) | Transport Modal Split | Expected Net Increase Demand of Proposed Development During Peak Hour (passenger) |
|---|---|---|---|---|
| Peak Hour | **Northbound (To Mei Shing Court)** | | | |
| | Franchised Bus | 250 - 181 = 69 | 26% | 69 x 26% = 18 |
| | Minibus | 69 | 27% | 69 x 27% = 19 |
| Peak Hour | **Southbound (To Tai Wai)** | | | |
| | Franchised Bus | 250 - 146 = 104 | 26% | 104 x 26% = 27 |
| | Minibus | 104 | 27% | 104 x 27% = 29 |

*(1) Refer to Section 3.5*

*Adjacent Developments*

5.2.2 As derived from **Section 3.2**, an annual growth rate of **+1.0%** has been adopted to estimate the future growth of traffic and population in the district. For conservative approach, the same annual growth rate is applied to estimate the future public transport demand due to adjacent developments in design year 2027.

5.2.3 The calculation of future public transport demand in the vicinity is summarized in **Table 5.3** below:

**Table 5.3 Expected Public Transport Demand due to Adjacent Development in Design Year 2027**

| Duration | Direction | Routes | Existing Occupancy (passenger) | Future Occupancy (passenger) |
|---|---|---|---|---|
| **Peak Hour** | **Northbound (To Mei Shing Court)** | | | |
| | Franchised Bus | 283 | 360 | 394* |
| | Minibus | 63A | 202 | 221* |
| **Peak Hour** | **Southbound (To Tai Wai)** | | | |
| | Franchised Bus | 283 | 216 | 236* |
| | Minibus | 63A | 240 | 262* |

*Note: *Future occupancy in 2027 is derived from existing occupancy (2018) with +1% growth rate.*

5.2.4 The expected demand of public transport services due to the proposed development is shown in **Table 5.4**.

**Table 5.4 Expected Occupancy of Public Transport in Design Year 2027**

| Duration | Direction | Routes | Full Capacity [A] | 2027 Expected Occupancy (passenger) (1% growth p.a.) (1)(2) [B] | Surplus Capacity (passenger) (1)(2)(3) [A] – [B] | Demand (Satisfied or Not) (4) |
|---|---|---|---|---|---|---|
| Peak Hour | **Northbound (To Mei Shing Court)** | | | | | |
| | Franchised Bus | 283 | 120 x 6 = 720 | 394 | 720 - 394 = 326 | 31 (✓) |
| | Minibus | 63A | 16 x 18 = 288 | 221 | 288 - 221 + (19 - 16) x 18 = 67 + 54 = 121 | 32 (✓) |
| Peak Hour | **Southbound (To Tai Wai)** | | | | | |
| | Franchised Bus | 283 | 120 x 4 = 480 | 236 | 244 | 40 (✓) |
| | Minibus | 63A | 16 x 20 = 320 | 262 | 320 - 262 + (19 - 16) x 20 = 118 | 42 (✓) |

*Remarks:* *(1) Full capacity of 120 passengers for Franchised Bus is assumed.*

*(2) Full capacity of 16 passengers for Minibus is assumed.*

*(3) Full capacity of 19 passengers for Minibus is observed to be used in 2021.*

*(4) From Table 5.2*

5.2.5 Based on the result from above **Table 5.4**, it is indicated that the existing public transport services of Franchised Bus and GMB are with ample reserve capacity to meet the demand due to the proposed development in design year 2027.

# 6. PARKING PROVISION

## 6.1 Existing Parking Situation

6.1.1 Due to site constraints, no transport facilities are provided in the Puguangming Temple, such as car parking space, loading/unloading and pick up/drop off space.

6.1.2 According to the survey, it is revealed that a peak hour of 6 car parks is required by the columbarium visitors in Chung Yeung Festival 2018. They have parked their cars in the adjacent car parks (as mentioned in **Section 2.3**).

6.1.3 The majority of visitors use Mei Chung Court Carpark. Therefore, a survey on parking space occupancy has been conducted at Mei Chung Court Carpark and presented in **Appendix 1**.

6.1.4 It is shown in **Appendix 1** that there are **17** nos. surplus hourly private car parking spaces during the peak hour from 13:30pm to 14:30pm at Mei Ching Court for the public.

**Table 6.1 Parking Utilization at Mei Chung Court Carpark during Ching Ming Festival**

| Time | Total Hourly Carpark Spaces | No. of Surplus Parking Spaces |
|---|---|---|
| 0900-1000 | 37 | 24 |
| 1000-1100 | 37 | 23 |
| 1100-1200 | 37 | 21 |
| 1200-1300 | 37 | 20 |
| 1300-1400 | 37 | 17 |
| 1400-1500 | 37 | 17 |
| 1500-1600 | 37 | 16 |
| 1600-1700 | 37 | 16 |

## 6.2 Future Parking Demand

6.2.1 Based on the estimated traffic attraction of private cars derived in **Table 3.8**, the parking demand for the proposed columbarium during peak hours in festival days is analysed and presented in the calculation below and **Table 6.2**.

- Parking survey indicated a demand of 6 parking spaces for 181 visitors per hour.
- For a 250 visitors per hour, the parking demand will then be
  = (6/181) x 250
  = 8.3 parking spaces (say **9 parking spaces**)

**Table 6.2 Future Parking Demand of Proposed Columbarium**

| Expected Parking Space Demand | Surplus Hourly Parking Space | Demand Satisfied or Not |
|---|---|---|
| 9 | = 17*(1-1%)$^{9}$<br>= 16 | ✓ |

6.2.2 From **Table 6.2**, there are sufficient private car hourly parking spaces in Mei Chung Court to cater for the future demand due to proposed columbarium.

# 7. PEDESTRIAN TRAFFIC IMPACT ASSESSMENT

## 7.1 Visitor Flows in Design Year

7.1.1 To assess the existing footpath during the Festival Days, the pedestrian flow data is estimated based on the pedestrian survey conducted during Ching Ming Festival on 5 April 2018 with about 664 niches/tablets being sold and occupied.

7.1.2 According to **Table 3.4**, there will be a peak flow of **500 visitors** (250 + 250, 2-way flows) per hour traveling to/from Puguangming Temple via the existing footpath in the future.

## 7.2 LOS Assessment on Design Year

7.2.1 In order to ensure a desirable walking environment along the access, the concept of Level-of-Service (LOS) has been applied. LOS directly relates to the pedestrian comfort and ease with which pedestrians proceed along the walkway.

7.2.2 The Break Points of LOS levels are determined on the basis of flow rate, pedestrian spacing, and the probabilities of conflict at various concentrations. These standards with relevant descriptions are summarized in **Table 7.1**.

**Table 7.1 LOS Standard Criteria**

| LOS | Flow Rate (ped/min/m) | Pedestrian Space ($m^2$/p) | Description |
|---|---|---|---|
| A | ≤16 | >5.6 | Pedestrians freely select walking speed and conflicts between pedestrians are unlikely. |
| B | ≤23 | >3.7 – 5.6 | Pedestrians freely select walking speed and bypass other pedestrians in primarily one directional flows. Minor conflicts will occur where reverse direction or crossing movements exist, requiring slightly lowering mean pedestrian speeds and potential volumes. |
| C | ≤33 | >2.2 – 3.7 | Pedestrians are restricted in selecting walking speed and bypass other pedestrians. Conflicts are highly likely to occur where reverse direction or crossing movements exist, requiring frequent adjustment of speed and direction. |
| D | ≤49 | >1.4 – 2.2 | Most pedestrians would have their normal walking speed restricted and reduced. Multiple conflicts with other pedestrians will occur where pedestrian are involved in reverse-flow and crossing movements. |

| LOS | Flow Rate (ped/min/m) | Pedestrian Space ($m^2$/p) | Description |
|---|---|---|---|
| E | ≤75 | >0.75 – 1.4 | Virtually all pedestrians would have their normal walking speeds restricted, requiring frequent adjustment of gait. At the lower range, forward progress would only be made by shuffling. Insufficient area would be available to bypass slower-moving pedestrians. Extreme difficulties for pedestrians attempting reverse-flow and cross-flow movements. |
| F | Varies | ≤0.75 | All pedestrian walking speeds are extremely restricted and forward progress can only be made by shuffling. Frequent and unavoidable contact with other pedestrians will occur. Reverse or crossing movements would be virtually impossible. |

*Source: Chapter 10, Volume 6 of Transport Planning and Design Manual (T.P.D.M.)/Chapter 11 of Highways Capacity Manual 2000.*

7.2.3 For the width as shown in **Figures 7.1** and **7.2** and based on the figures given in **Table 3.4**, the total number of person-trips using the existing footpath and vicinity footpaths is shown in **Figure 7.3** and the assessment are given in **Tables 7.2 to 7.10**.

**Table 7.2 Person-trips Assessment (Ching Ming Festival)**

| Section | Actual Width (m) | Effective Width (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr) | Peak Flow Rate (ped/min/m) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| B | 2.4 | 1.9(1) | 177+128 = 305(4) | 305 | 500(5) – 305 = 195 (100%) | 500(5) | 4.39 | A | √ |
| C | 3.3 | 2.8(1) | 250 | 250 x 1.01^9 = 275 | 195 x 46% = 90 (46%) | 275 + 90 = 365 | 2.17 | A | √ |
| D | 3.5 | 3(1) | 320 | 350 | 100 (50%) | 450 | 2.5 | A | √ |
| E | 3.5 | 3(1) | 135 | 150 | 10 (4%) | 160 | 0.89 | A | √ |
| G | 4.2 | 3.7(1) | 285 | 310 | 90 (46%) | 400 | 1.8 | A | √ |
| H | 3.8 | 3.3(1) | 425 | 465 | 100 (50%) | 565 | 2.85 | A | √ |
| I | 4.3 | 3.8(1) | 480 | 525 | 55 (28%) | 580 | 2.54 | A | √ |
| J | 5.2 | 4.7(1) | 50 | 55 | 10 (4%) | 65 | 0.23 | A | √ |

*Note: (1) 0.5m deduced from wall/fence; 1m deduced from shop*

*(2) Growth by 1% for 9 years*

*(3) √: Acceptable*

*(4) From Table 2.4, In/out flow of 11:15 – 12:15*

*(5) Restricted under management plan*

## Table 7.3 Person-trips Assessment (Weekday AM)

| Section | Actual Width (m) | Effective Width (m) (1) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(2) | Peak Flow Rate (ped/min/ m) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| B | 2.4 | 1.9 | 5 | 5 | 75 – 5 = 70 (100%) | 5 x 4,779/319 = 75(4) | 0.48 | A | √ |
| C | 3.3 | 2.8 | 25 | 25 | 70 x 46% = 30 (46%) | 25 + 30 = 55 | 0.66 | A | √ |
| D | 3.5 | 3 | 10 | 10 | 35 (50%) | 45 | 0.33 | A | √ |
| E | 3.5 | 3 | 10 | 10 | 5 (4%) | 15 | 0.25 | A | √ |
| G | 4.2 | 3.7 | 170 | 185 | 30 (46%) | 215 | 0.08 | A | √ |
| H | 3.8 | 3.3 | 325 | 355 | 35 (50%) | 390 | 0.97 | A | √ |
| I | 4.3 | 3.8 | 475 | 520 | 20 (28%) | 540 | 1.97 | A | √ |
| J | 5.2 | 4.7 | 50 | 55 | 5 (4%) | 60 | 2.37 | A | √ |

***Note:*** *(1) 0.5m deduced from wall/fence; 1m deduced from shop*

*(2) Growth by 1%*

*(3) √: Acceptable*

*(4) Ratio of niches (existing 319 & total 4,779)*

## Table 7.4 Person-trips Assessment (Weekday PM)

| Section | Actual Width (m) | Effective Width (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(2) | Peak Flow Rate (ped/min/ m) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| B | 2.4 | 1.9(1) | 15 | 15 | 225 – 15 = 210 (100%) | 15 x 4,779/319 = 225(4) | 1.97 | A | √ |
| C | 3.3 | 2.8(1) | 60 | 65 | 95 (46%) | 65 + 95 = 160 | 0.95 | A | √ |
| D | 3.5 | 3(1) | 20 | 20 | 105 (50%) | 125 | 0.69 | A | √ |
| E | 3.5 | 3(1) | 15 | 15 | 10 (4%) | 25 | 0.14 | A | √ |
| G | 4.2 | 3.7(1) | 65 | 70 | 95 (46%) | 165 | 0.74 | A | √ |
| H | 3.8 | 3.3(1) | 405 | 445 | 105 (50%) | 550 | 2.78 | A | √ |
| I | 4.3 | 3.8(1) | 465 | 510 | 60 (28%) | 570 | 2.5 | A | √ |
| J | 5.2 | 4.7(1) | 20 | 20 | 10 (4%) | 30 | 0.11 | A | √ |

***Note:*** *(1) 0.5m deduced from wall/fence; 1m deduced from shop*

*(2) Growth by 1%*

*(3) √: Acceptable*

*(4) Ratio of niches (existing 319 & total 4,779)*

## Table 7.5 V/C Ratio of Critical Crossing (Ching Ming Festival)

| Section | Lateral Width of Ped. Crossing (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Pedestrian Crossing Capacity(2) (ped/hr) | V/C | Remark (3) |
|---|---|---|---|---|---|---|---|---|
| F | 4 | 160 | 160 x 1.01^9 = 175 | 195 x 50% = 100 (50%) | 175 + 100 = 275 | Pedestrian Crossing Capacity(3) PC = 1900*1/4*4 = 1900 | 0.14 | √ |
| G2 | 3.6 | 60 | 65 | 10 (4%) | 75 | 1710 (Capacity)(3) | 0.04 | √ |
| H2 | 3.5 | 425 | 465 | 100 (50%) | 565 | 1665 (Capacity)(3) | 0.34 | √ |
| I2 | 3.5 | 160 | 175 | 40 (21%) | 215 | Pedestrian Crossing Capacity PC = 1900*25/90*3.5 = 1845 | 0.12 | √ |

***Note***: *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 1/4 of the "cycle time" was used by the pedestrian*

*(3) √: Acceptable*

## Table 7.6 V/C Ratio of Critical Crossing (Weekday AM)

| Section | Lateral Width of Ped. Crossing (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Pedestrian Crossing Capacity(2) (ped/hr) | V/C | Remark (3) |
|---|---|---|---|---|---|---|---|---|
| F | 4 | 5 | 5 x 1.01^9 = 5 | 70 x 50% = 35 (50%) | 5 + 35 = 40 | Pedestrian Crossing Capacity(4) PC = 1900*1/4*4 = 1900 | 0.02 | √ |
| G2 | 3.6 | 55 | 60 | 5 (4%) | 65 | 1710 (Capacity)(4) | 0.04 | √ |
| H2 | 3.5 | 325 | 355 | 35 (50%) | 390 | 1665 (Capacity)(4) | 0.23 | √ |
| I2 | 3.5 | 150 | 165 | 15 (21%) | 180 | Pedestrian Crossing Capacity PC = 1900*25/90*3.5 = 1845 | 0.10 | √ |

***Note***: *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 1/4 of the "cycle time" was used by the pedestrian*

*(3) √: Acceptable*

## Table 7.7 V/C Ratio of Critical Crossing (Weekday PM)

| Section | Lateral Width of Ped. Crossing (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Pedestrian Crossing Capacity(2) (ped/hr) | V/C | Remark (3) |
|---|---|---|---|---|---|---|---|---|
| F | 4 | 20 | 20 x 1.01^9 = 20 | 210 x 50% = 105 (50%) | 20 + 210 = 125 | Pedestrian Crossing Capacity(4) PC = 1900*1/4*4 = 1900 | 0.07 | √ |
| G2 | 3.6 | 35 | 40 | 10 (4%) | 50 | 1710 (Capacity)(4) | 0.03 | √ |
| H2 | 3.5 | 405 | 445 | 105 (50%) | 550 | 1665 (Capacity)(4) | 0.33 | √ |
| I2 | 3.5 | 140 | 155 | 45 (21%) | 200 | Pedestrian Crossing Capacity PC = 1900*25/90* 3.5 = 1845 | 0.11 | √ |

*Note:* *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 1/4 of the "cycle time" was used by the pedestrian*

*(3) √: Acceptable*

## Table 7.8 Waiting Area of Critical Crossing (Ching Ming Festival)

| Section | Waiting Space Area ($m^2$) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2 | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Waiting Pedestrian (ped/cycle) (2) | Avg. Ped. Space(3) ($m^2$/ped) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| F | 4 | 160 | 160 x 1.01^9 = 175 | 195 x 50% = 100 (50%) | 175 + 100 = 275 | 275/40 x 0.75 = 5 | 1.40 | A | √ |
| G2 | 3.6 | 60 | 65 | 10 (4%) | 75 | 1 | 8.00 | A | √ |
| H2 | 3.5 | 425 | 465 | 100 (50%) | 565 | 11 | 2.73 | A | √ |
| I2 | 3.5 | 160 | 175 | 40 (21%) | 215 | 4 | 6.25 | A | √ |

*Note:* *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 90s "cycle time", "No. of cycle" = 3600/90 = 40, 3/4 of the "cycle time" was pedestrian waiting time*

*Waiting Pedestrian = Two-way Ped. Flow x Red Time Proportion / No. of Cycle*

*(3) √: Acceptable*

**Table 7.9 Waiting Area of Critical Crossing (Weekday AM)**

| Section | Waiting Space Area ($m^2$) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2 | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Waiting Pedestrian (ped/cycle) (2) | Avg. Ped. Space(3) ($m^2$/ped) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| F | 4 | 5 | 5 x 1.01^9 = 5 | 70 x 50% = 35 (50%) | 5 + 35 = 40 | 30/40 x 0.75 = 1 | 7.00 | A | √ |
| G2 | 3.6 | 55 | 60 | 10 (4%) | 65 | 1 | 8.00 | A | √ |
| H2 | 3.5 | 325 | 355 | 35 (50%) | 390 | 7 | 4.29 | A | √ |
| I2 | 3.5 | 150 | 165 | 15 (21%) | 180 | 3 | 8.33 | A | √ |

**Table 7.10 Waiting Area of Critical Crossing (Weekday PM)**

| Section | Waiting Space Area ($m^2$) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2 | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Waiting Pedestrian (ped/cycle) (2) | Avg. Ped. Space(3) ($m^2$/ped) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| F | 4 | 20 | 20 x 1.01^9 = 20 | 210 x 50% = 105 (50%) | 20 + 105 = 125 | 95/40 x 0.75 = 2 | 3.50 | A | √ |
| G2 | 3.6 | 35 | 40 | 10 (4%) | 50 | 1 | 8.00 | A | √ |
| H2 | 3.5 | 405 | 445 | 105 (50%) | 550 | 10 | 3.00 | A | √ |
| I2 | 3.5 | 140 | 155 | 45 (21%) | 200 | 3 | 6.25 | A | √ |

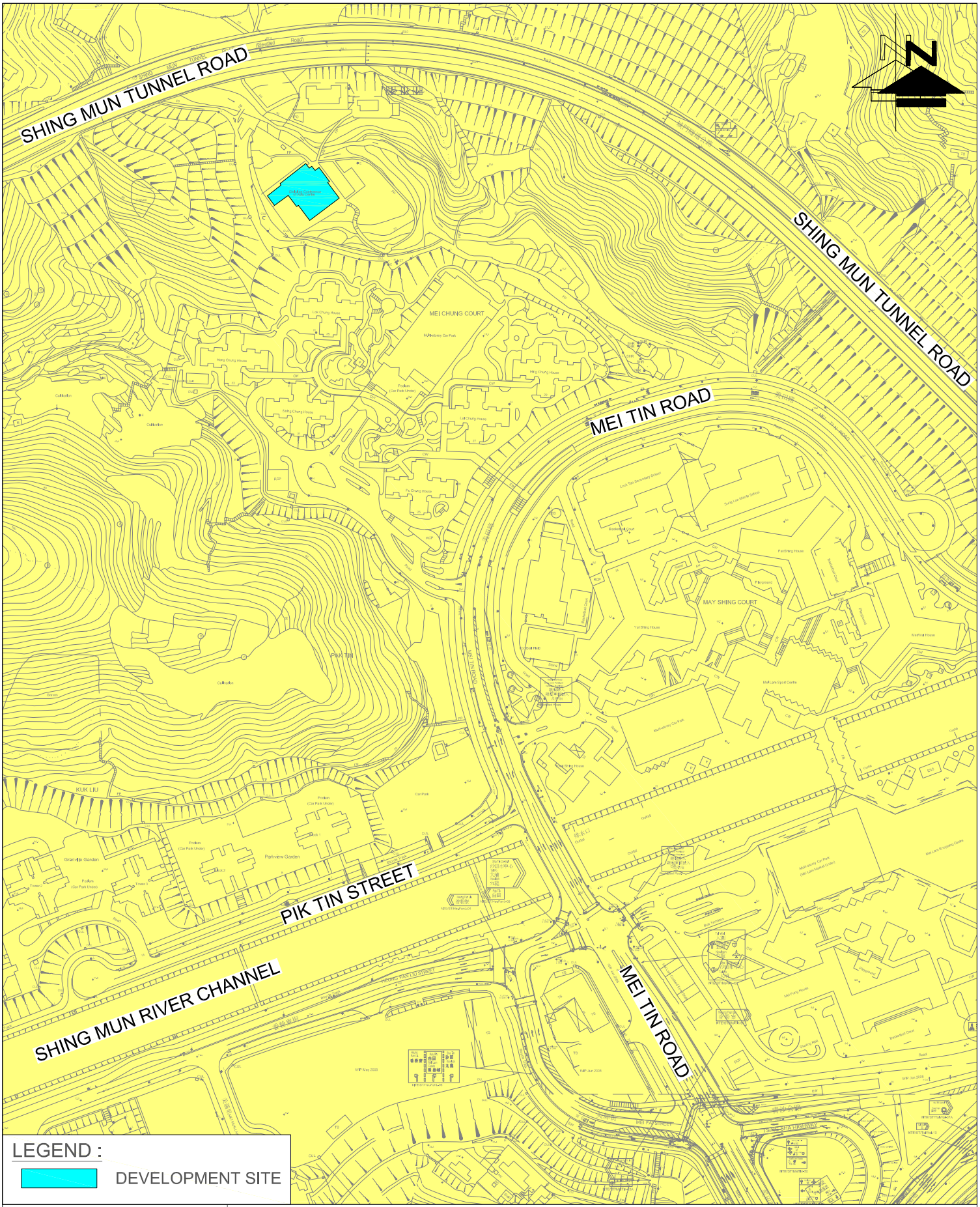
7.2.4 Based on the above calculation and assessment, LOS A or low V/C ratio could be achieved, which is considered acceptable in traffic engineering points of view.

# 8. SUMMARY AND CONCLUSION

8.1.1 From the traffic forecast based on traffic survey during 2018 Ching Ming Festival, and the assessment results of the junction capacity in the vicinity, it indicates that there will not be significant adverse impact caused by the full occupation of **5,124 niches/tablets** (4,779 niches + 345 tablets) during Ching Ming Festival in the design year 2027.

8.1.2 The impacts on the adjacent road networks have been assessed. All of these are found to be technically feasible and acceptable.

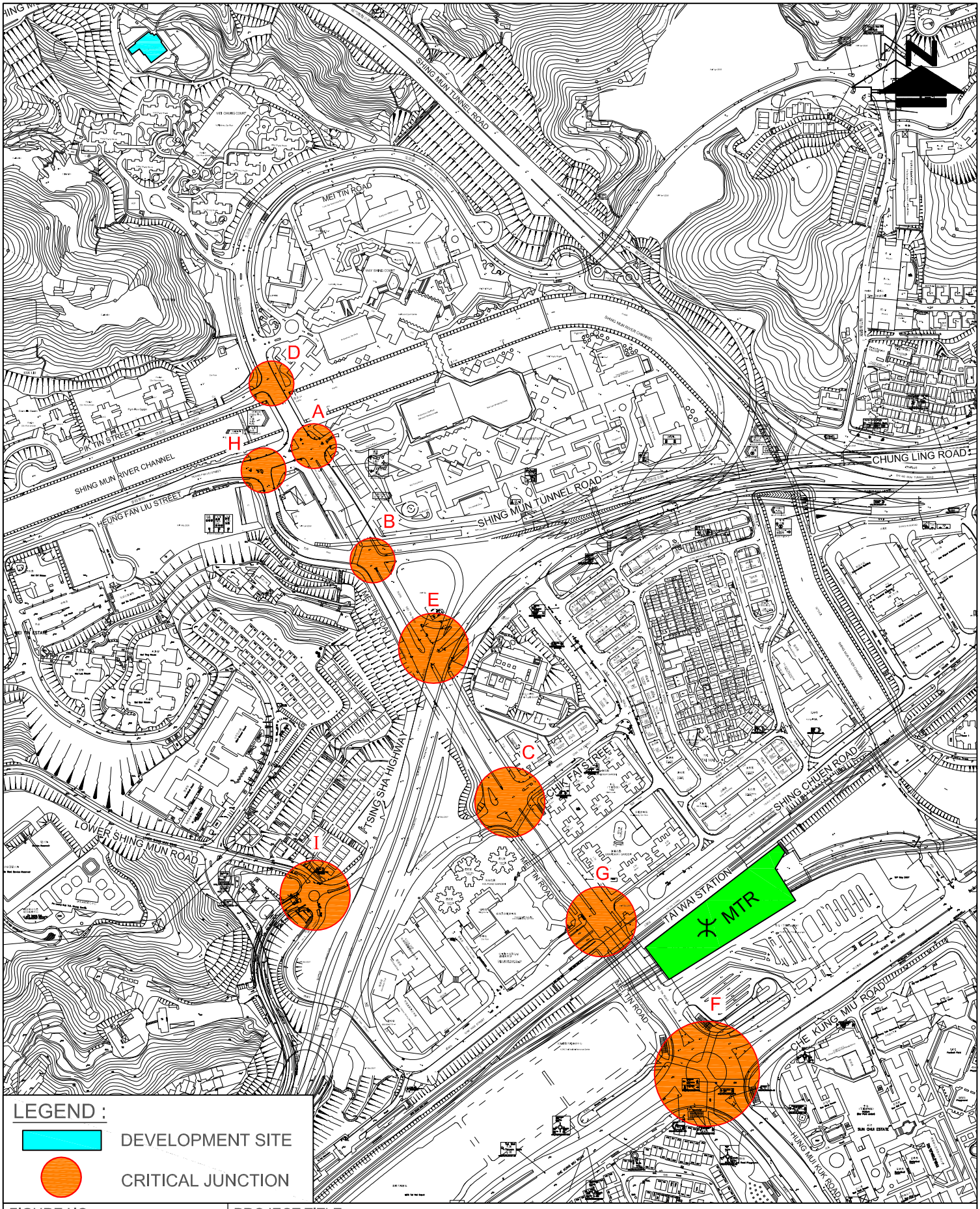
8.1.3 Therefore, the proposed scheme of Puguangminig Temple is considered to be acceptable from the traffic and transportation Point of view.



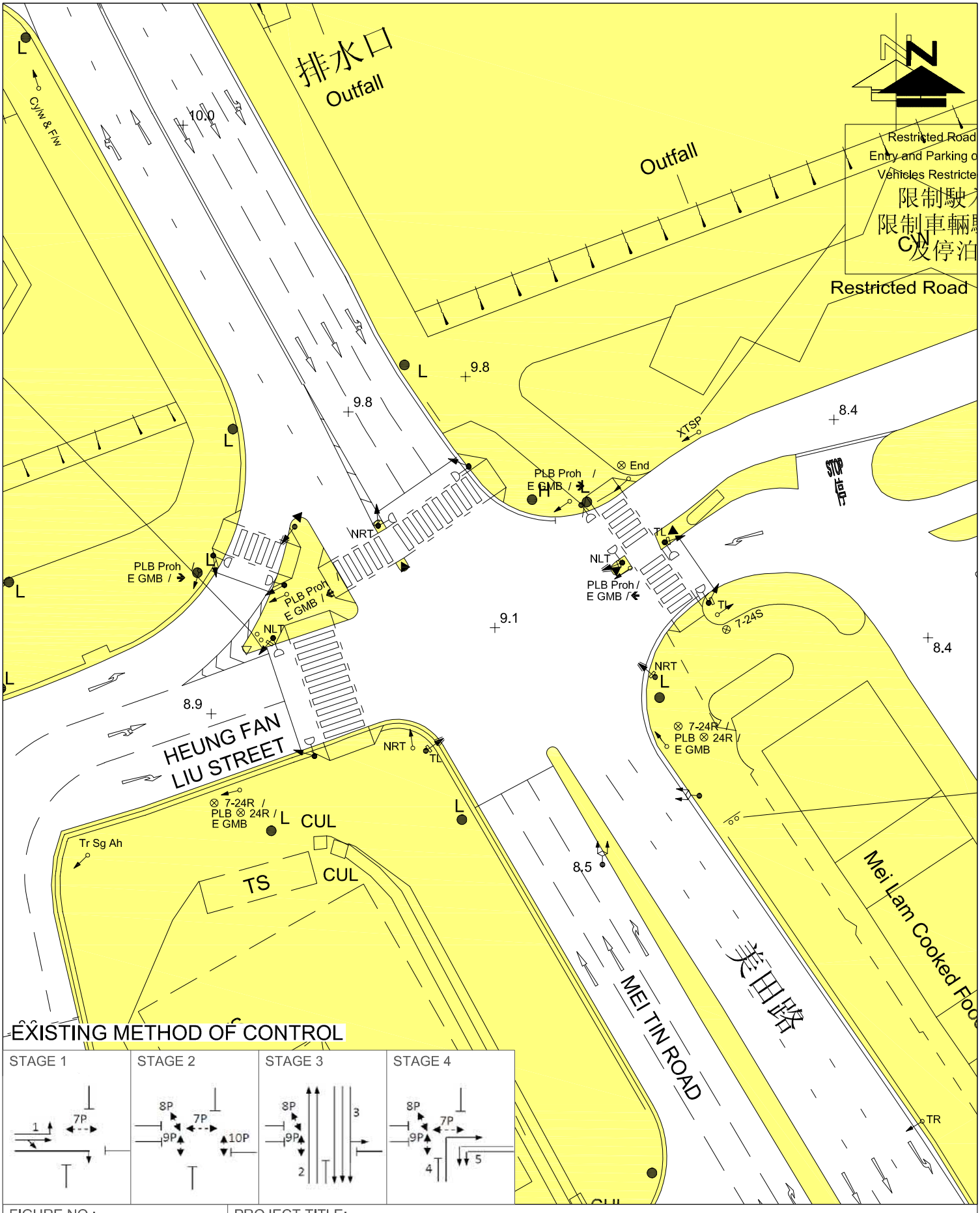

LEGEND :

DEVELOPMENT SITE

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| FIGURE NO.: 1.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: SITE LOCATION PLAN |
| SCALE: 1 : 3000 (IN A4 SIZE) / DATE: 23 OCT 2020 | CTA Consultants Limited 志達顧問有限公司 |



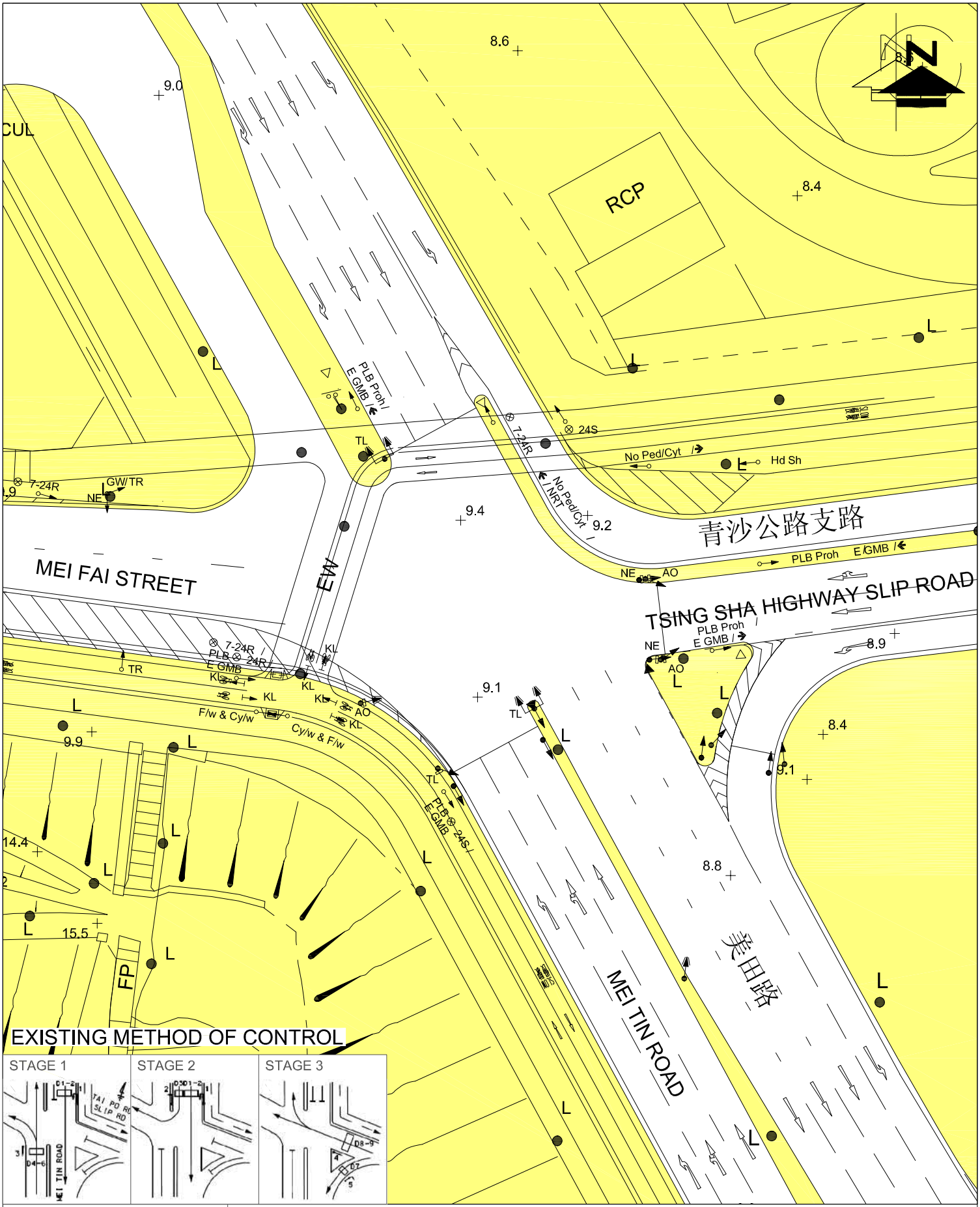

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| PROJECT NO.: 20058HK | DRAWING TITLE: KEY JUNCTIONS AND EXISTING ROAD NETWORK |
| SCALE: 1 : 5500 (IN A4 SIZE) / DATE: 21 APR 2021 | CTA Consultants Limited 志達顧問有限公司 |



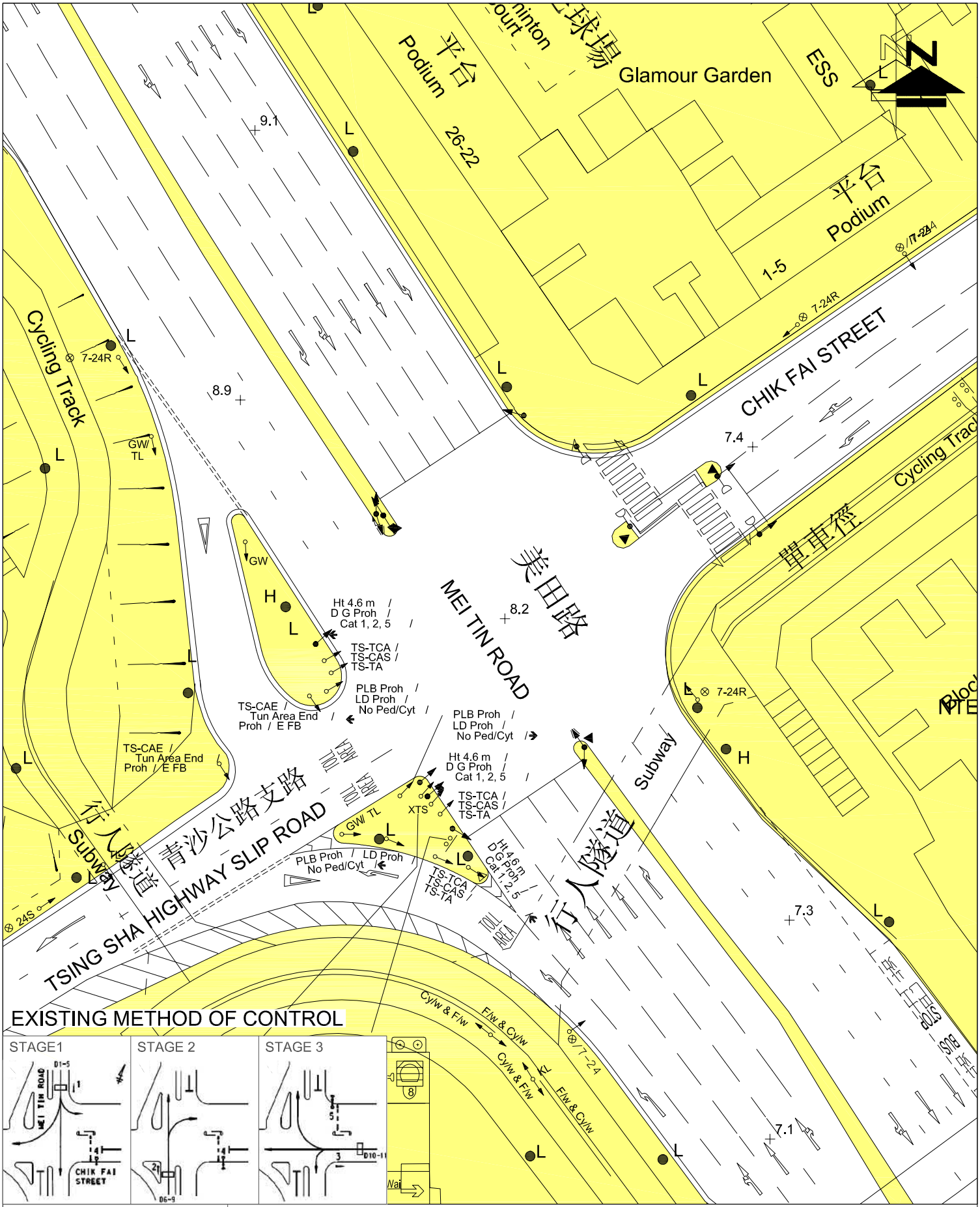

## EXISTING METHOD OF CONTROL




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| FIGURE NO.: 2.2 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / HEUNG FAN LIU STREET (A) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |

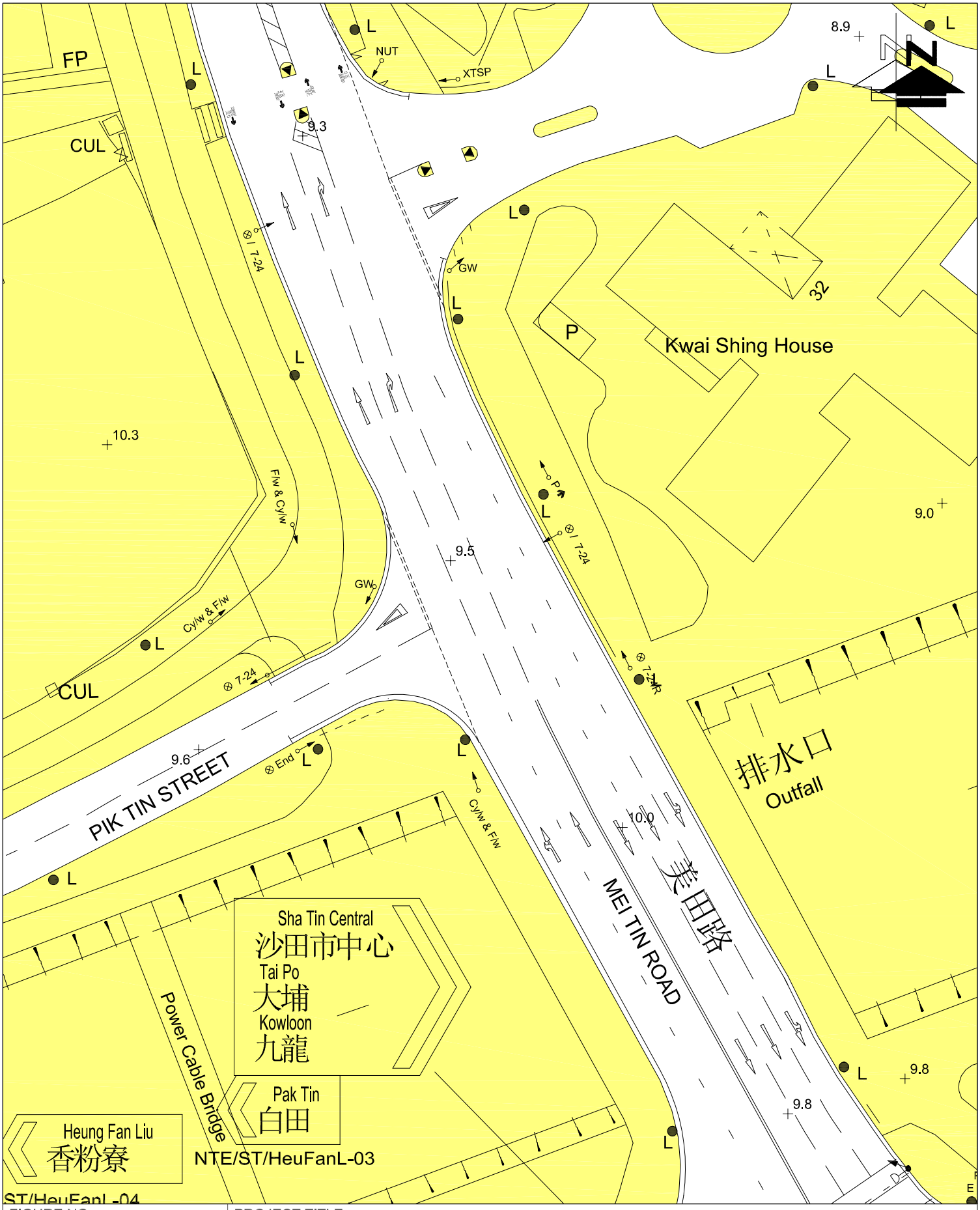



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| FIGURE NO.: 2.3 | PROJECT TITLE: Application for License for Puguangming Temple |
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| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |

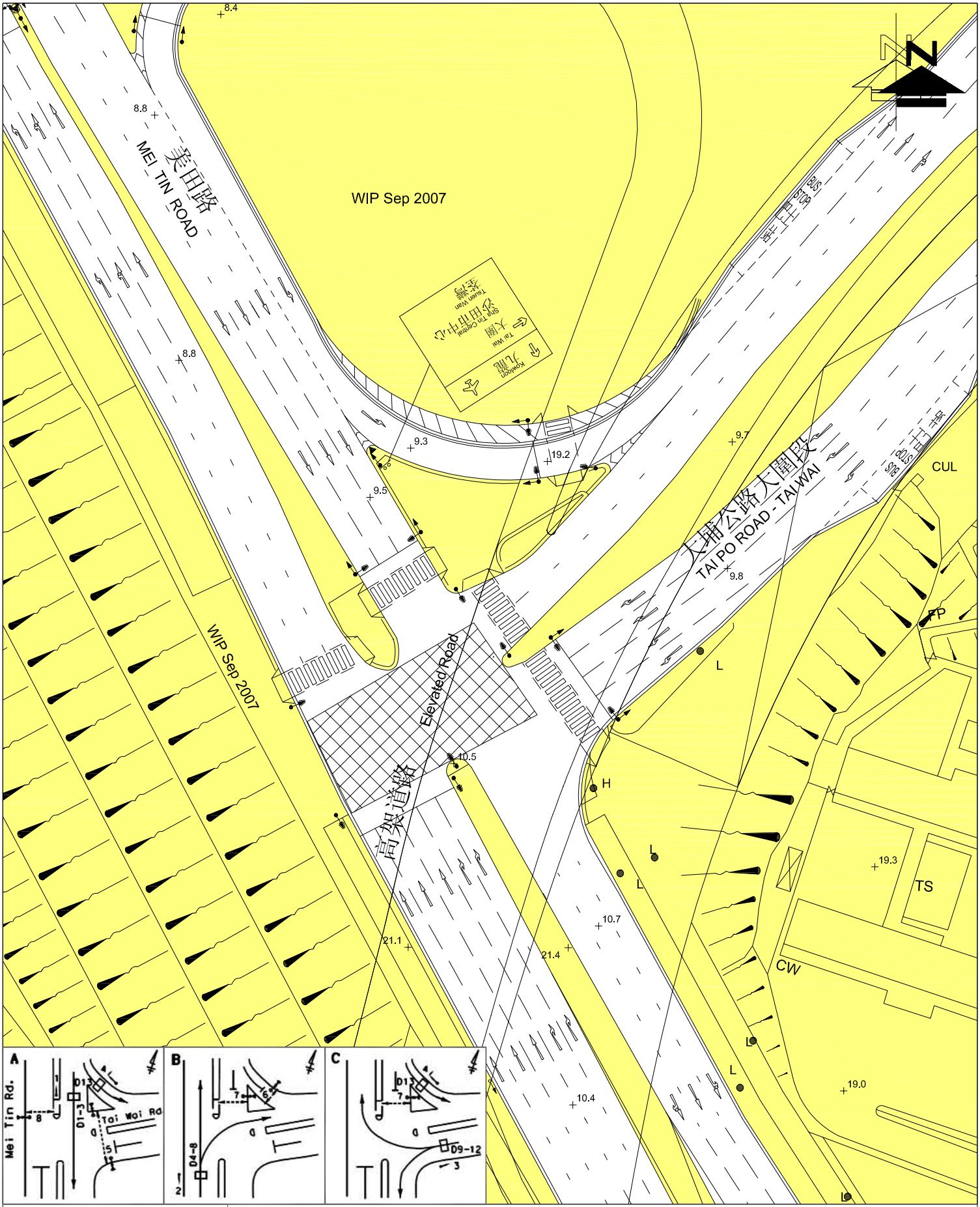



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| FIGURE NO.: 2.4 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / CHIK FAI STREET (C) |
| SCALE: 1 : 500 (IN A4 SIZE) | DATE: 11 MAY 2021 |

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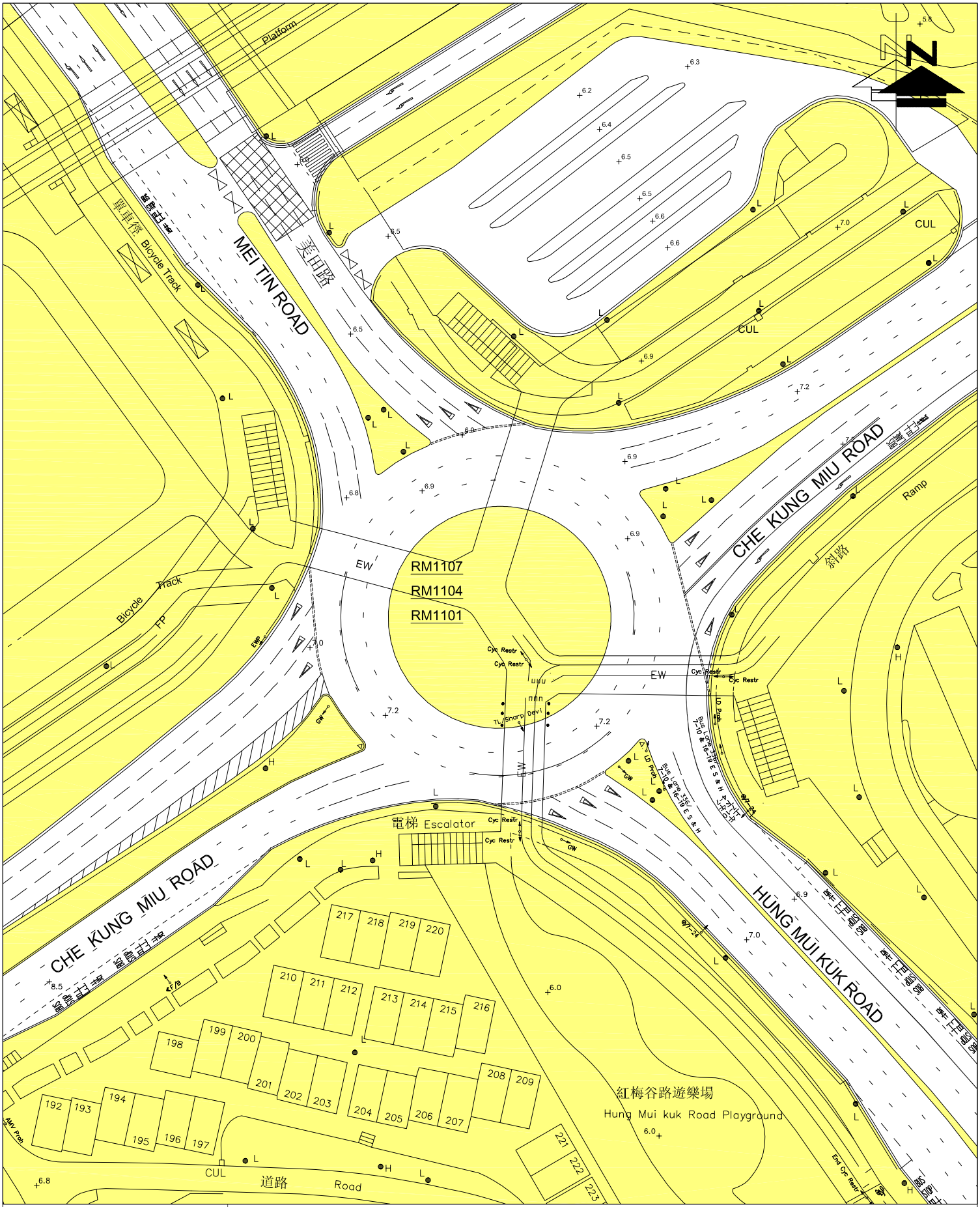



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| FIGURE NO.: 2.5 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / PIK TIN STREET (D) |
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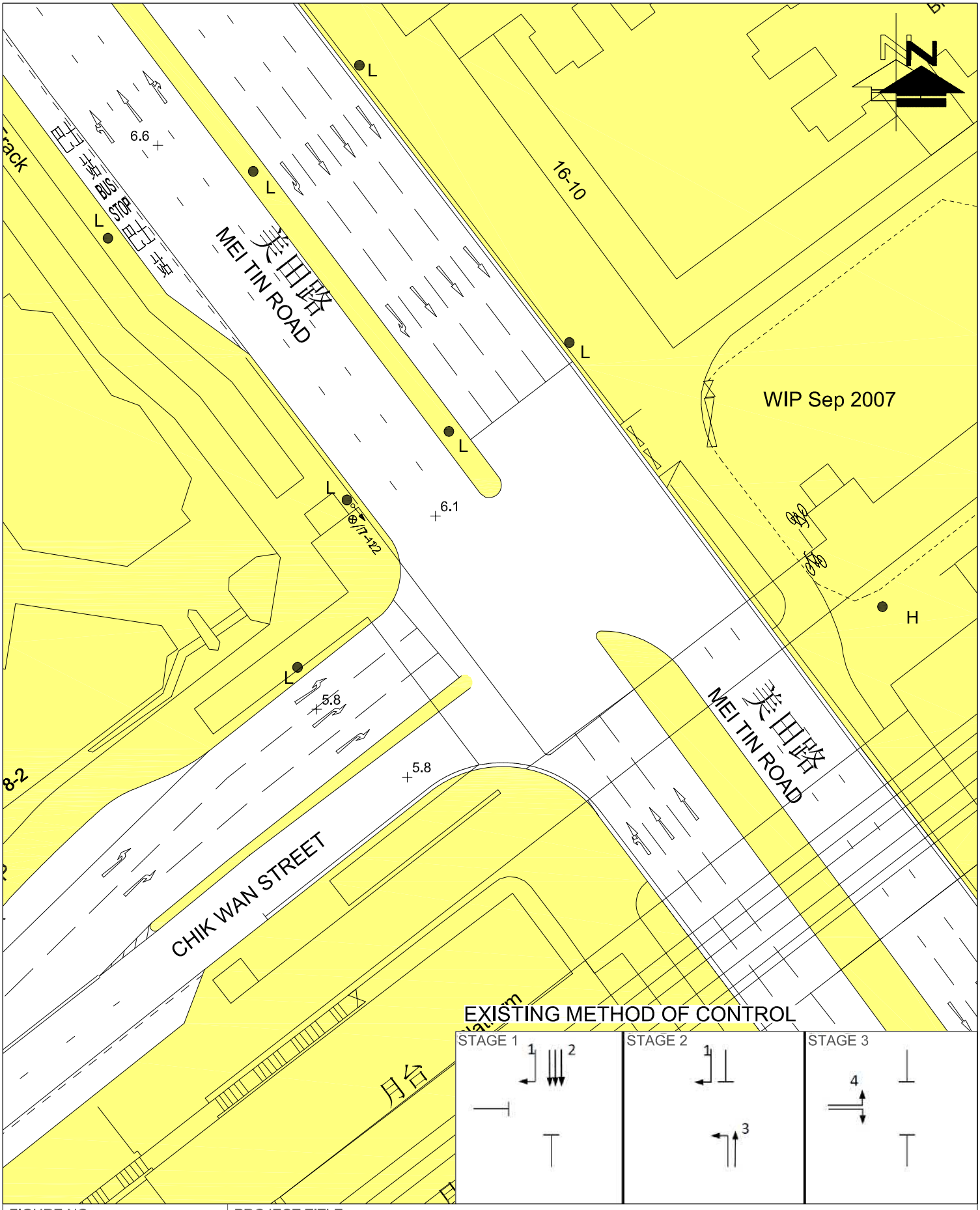

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| SCALE: 1 : 700 (IN A4 SIZE) | DATE: 12 NOV 2021 |

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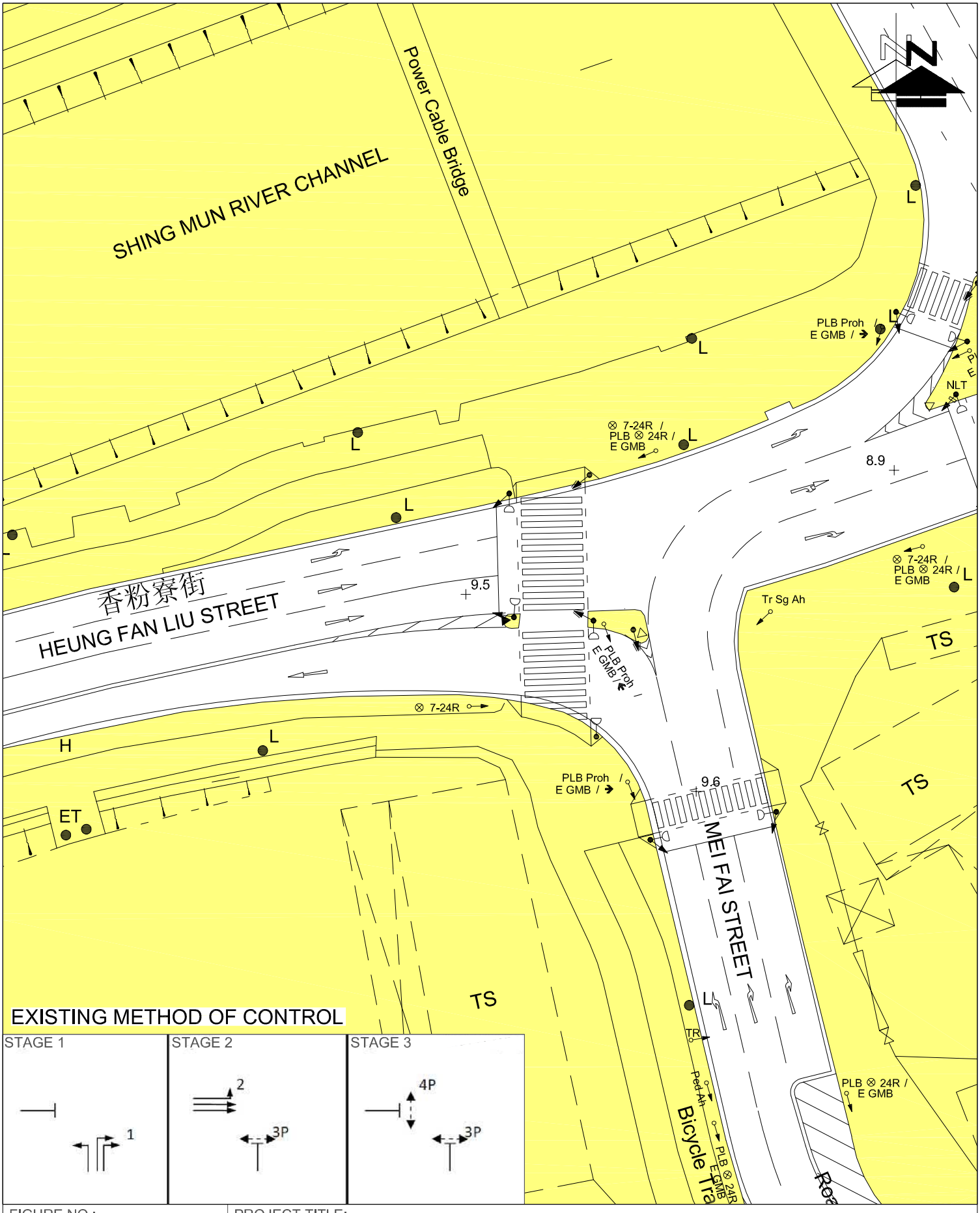



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| FIGURE NO.: 2.7 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / HUNG MUI KUK ROAD / CHE KUNG MIU ROAD (F) |
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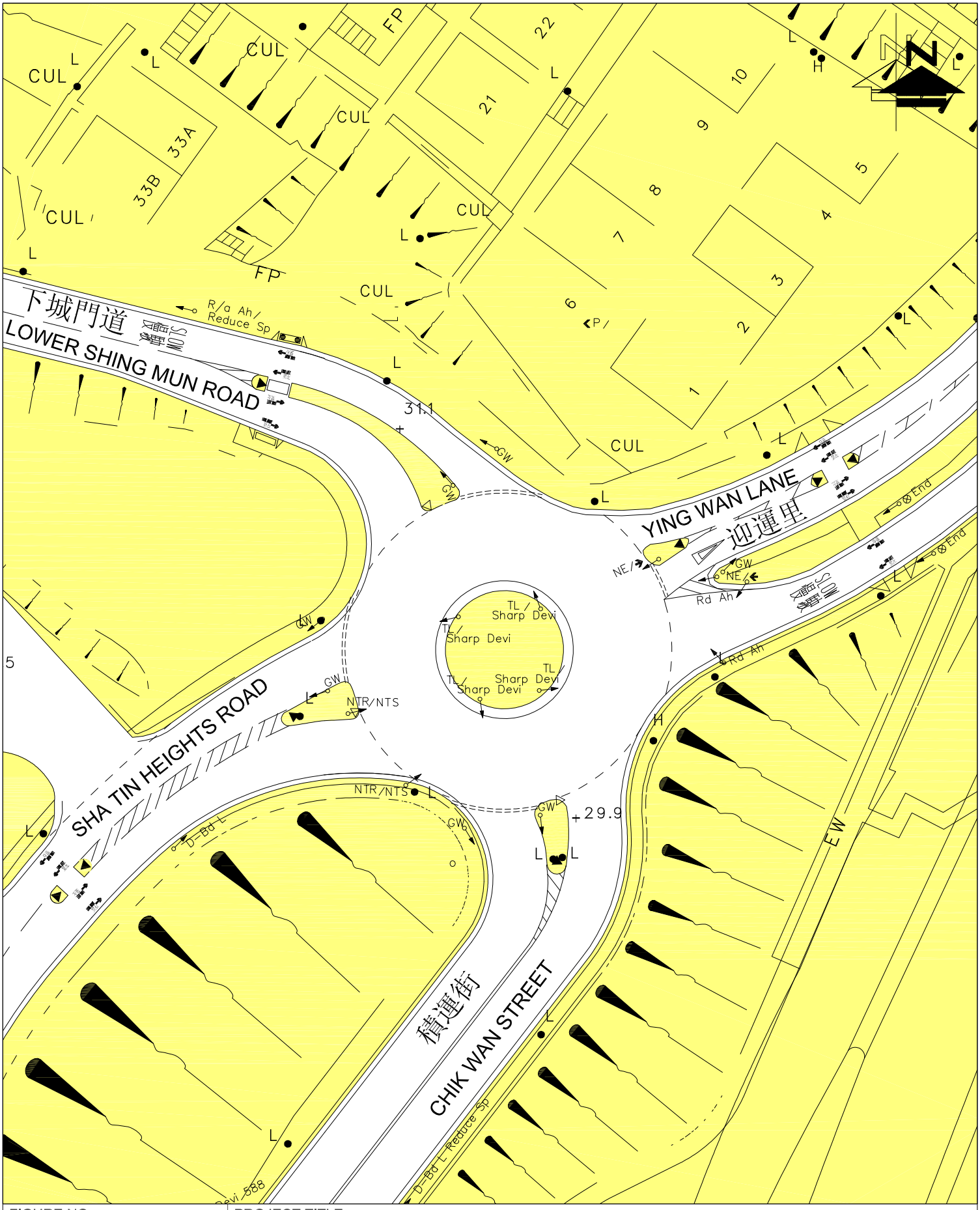
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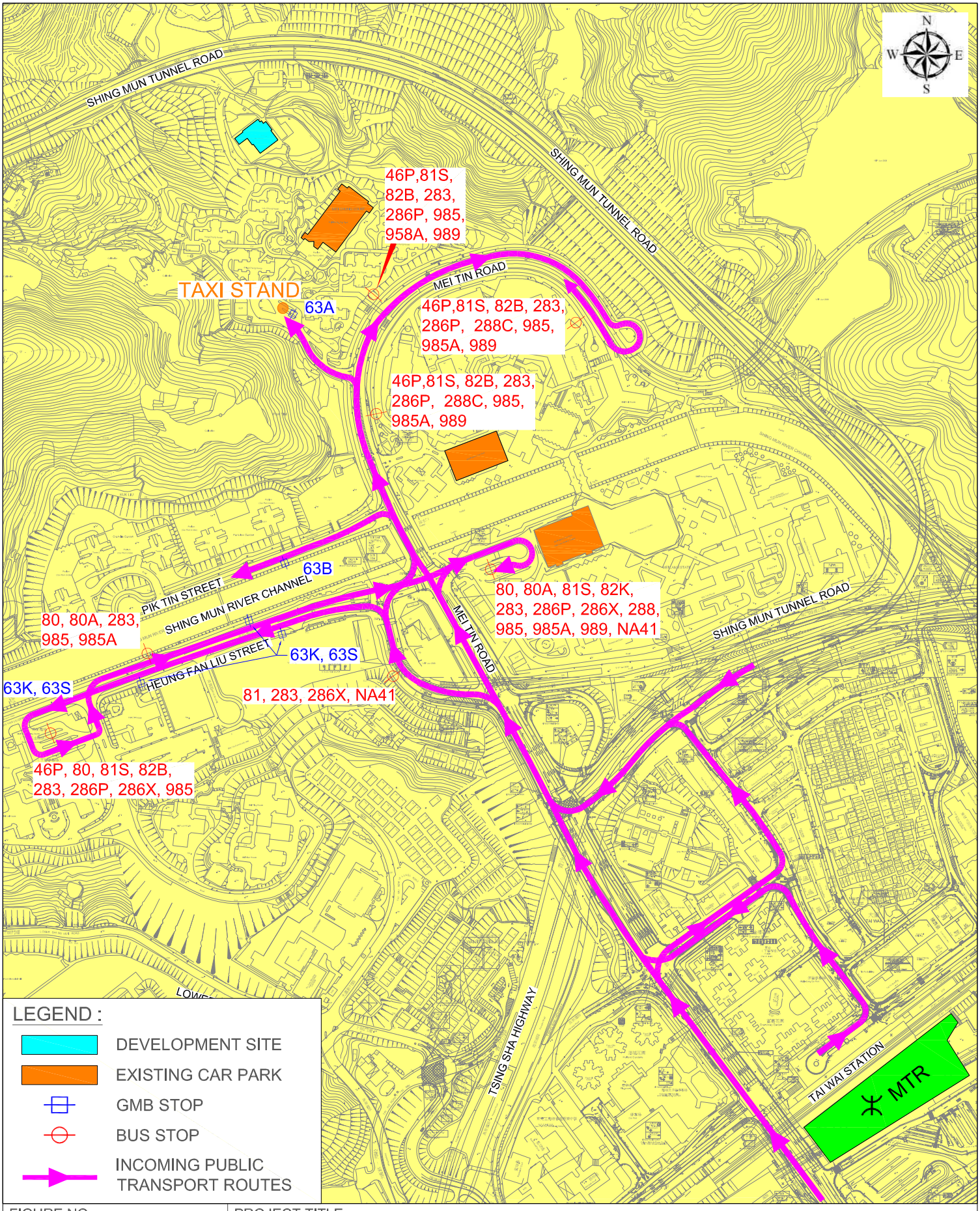

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| FIGURE NO.: 2.8 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / CHIK WAN STREET (G) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |




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| FIGURE NO.: 2.9 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF HEUNG FAN LIU STREET / MEI FAI STREET (H) |
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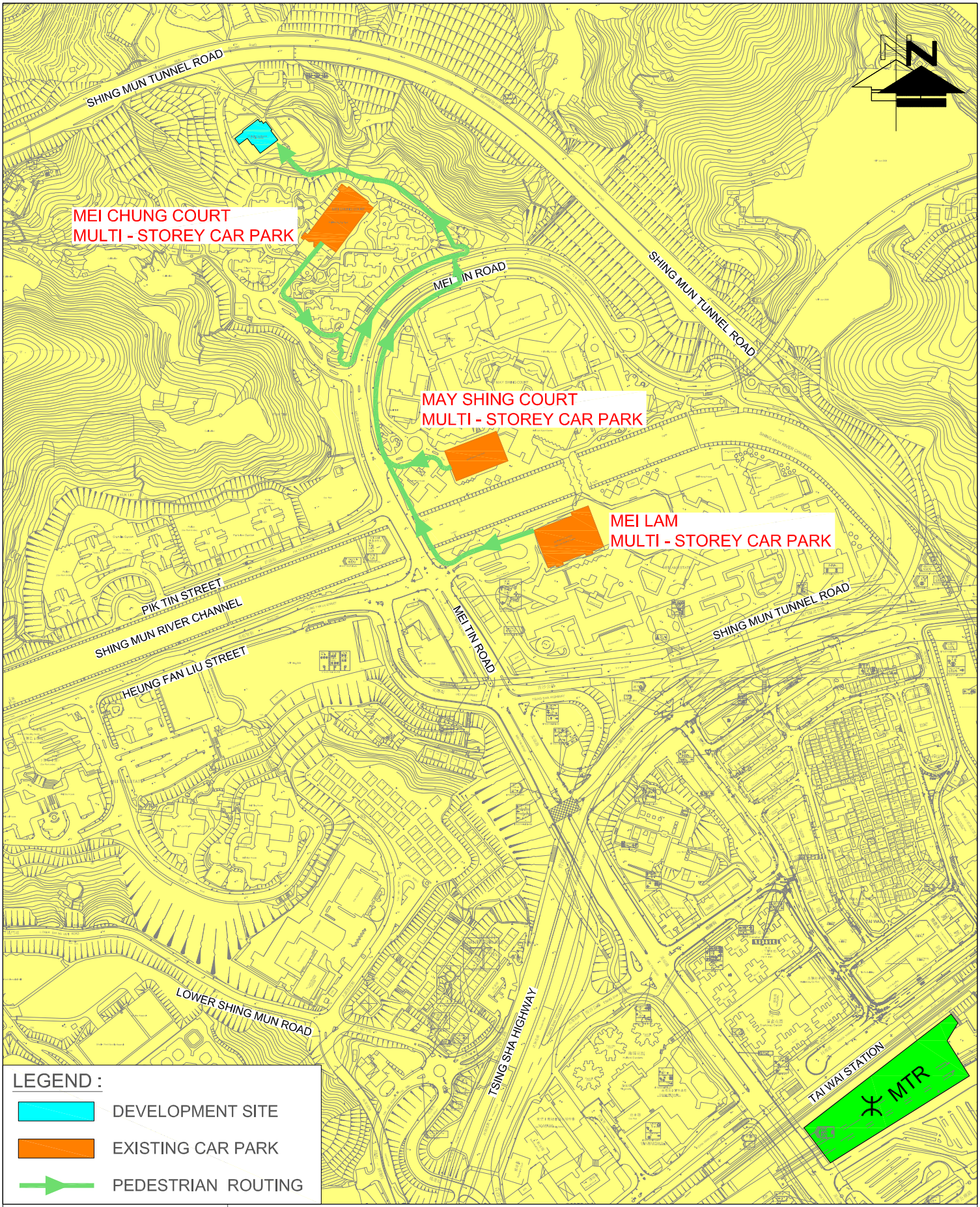



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| FIGURE NO.: 2.10 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF SHA TIN HEIGHTS ROAD / LOWER SHING MUN ROAD ROUNDABOUT (I) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 23 APR 2021 | CTA Consultants Limited 志達顧問有限公司 |



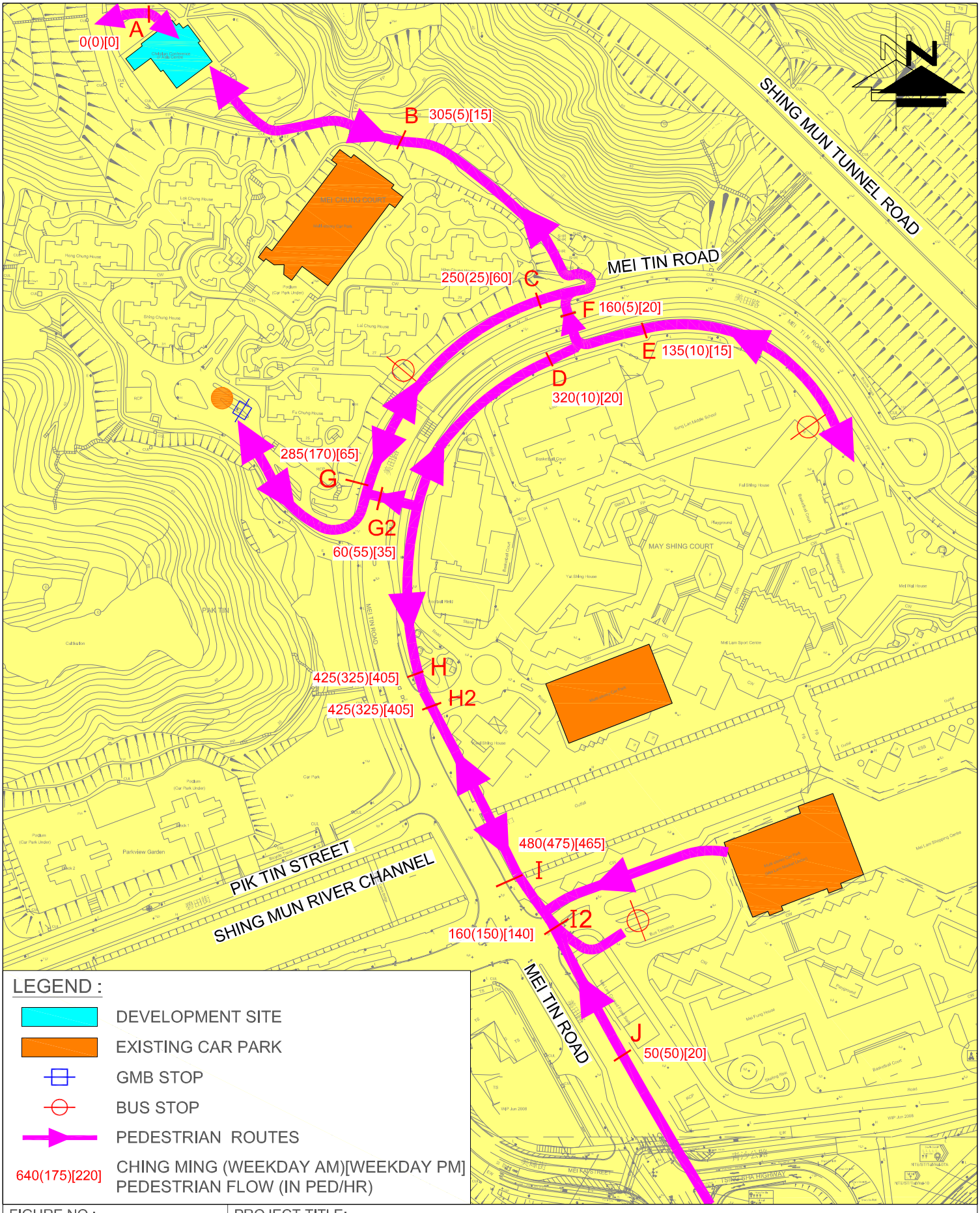

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| PROJECT NO.: 20058HK | DRAWING TITLE: PUBLIC TRANSPORT FACILITIES IN THE VICINITY |
| SCALE: 1 : 5000 @ A4 | DATE: 01 MAR 2023 |

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|---|---|
| FIGURE NO.: 2.12 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: PARKING FACILITIES IN THE VICINITY |
| SCALE: 1 : 5000 @A4 | DATE: 21 APR 2021 |

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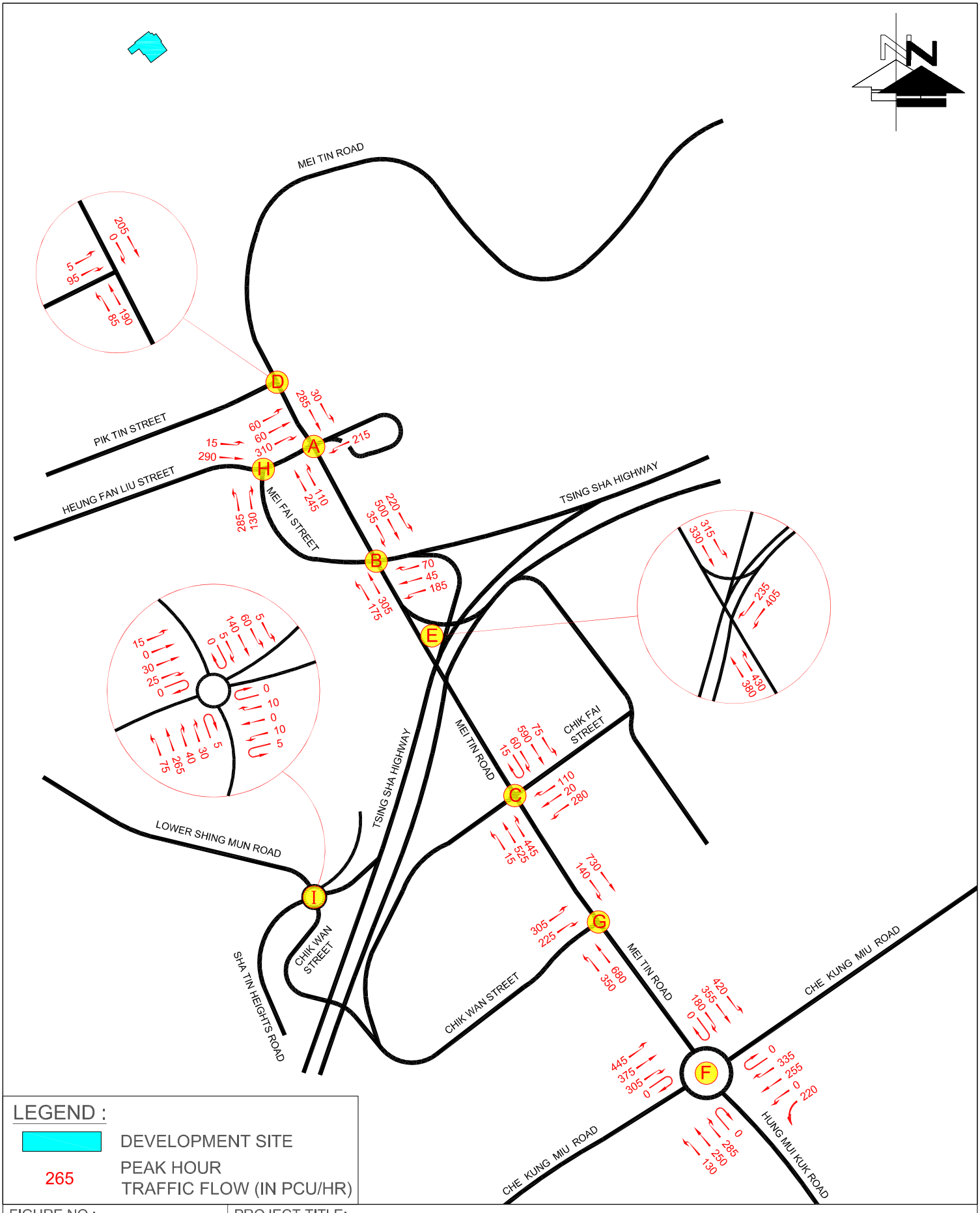



## LEGEND :

- DEVELOPMENT SITE
- EXISTING CAR PARK
- GMB STOP
- BUS STOP
- PEDESTRIAN ROUTES
- 640(175)[220] CHING MING (WEEKDAY AM)[WEEKDAY PM] PEDESTRIAN FLOW (IN PED/HR)

| | |
|---|---|
| FIGURE NO.: 2.13 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2018 OBSERVED PEDESTRIAN FLOWS |
| SCALE: 1 : 2500 @ A4 | DATE: 01 MAR 2023 |

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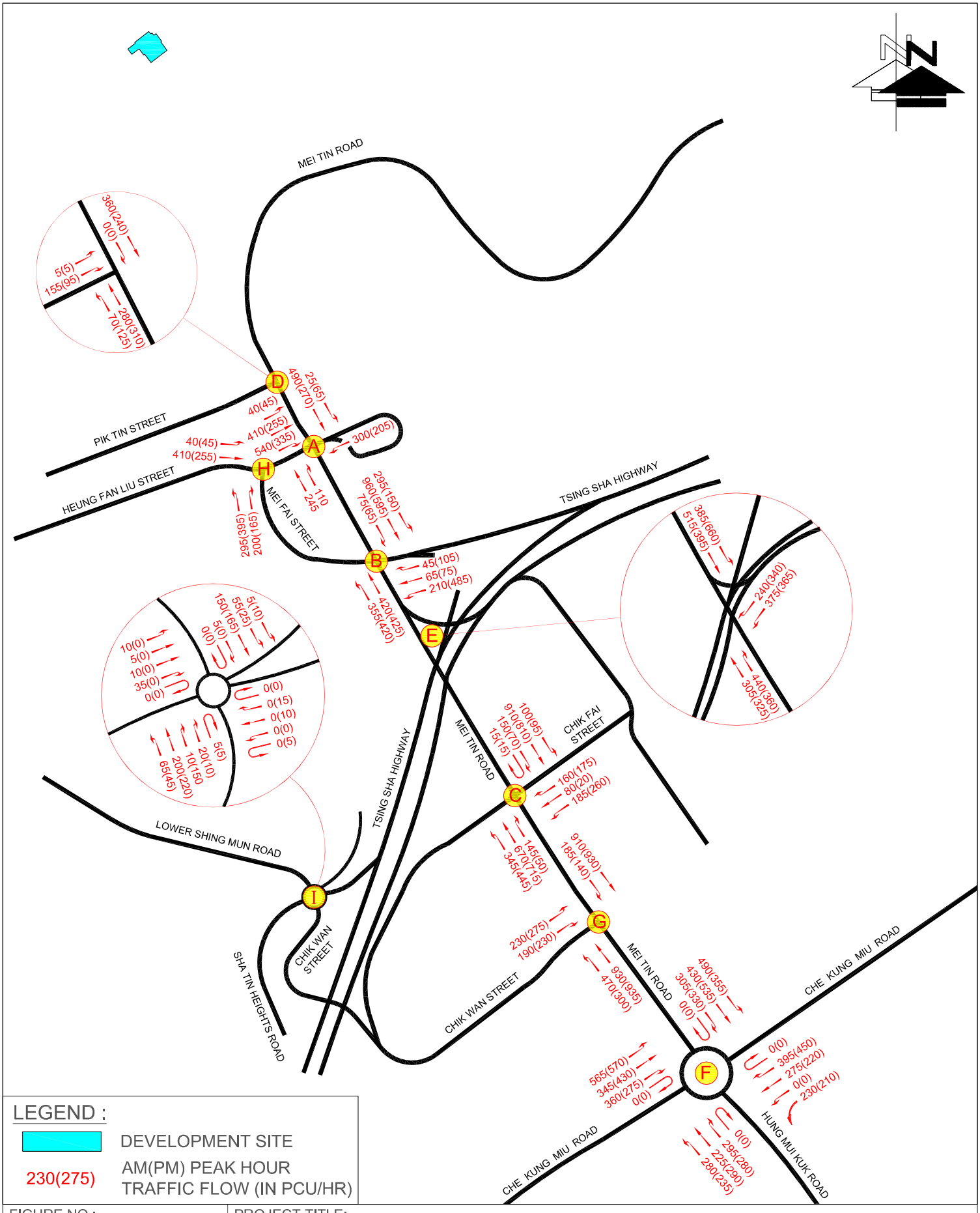

LEGEND :

DEVELOPMENT SITE

265 PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 2.14 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2018 OBSERVED TRAFFIC FLOWS (CHING MING FESTIVAL) |
| SCALE: 1 : 5500 (IN A4 SIZE) | DATE: 15 JUN 2021 |

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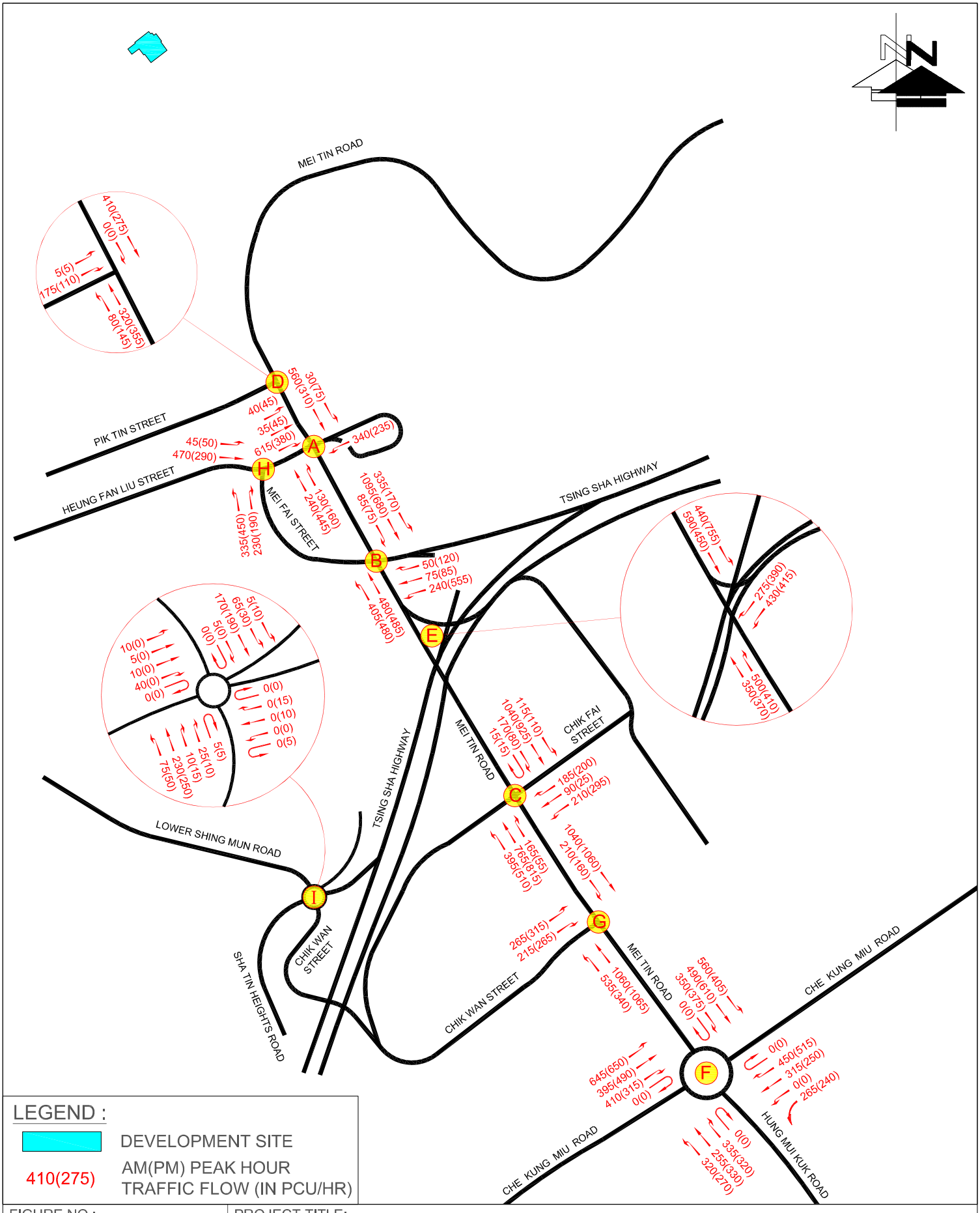



LEGEND :

DEVELOPMENT SITE

230(275) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 2.15 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2021 OBSERVED TRAFFIC FLOWS (WEEKDAY) |
| SCALE: 1 : 5500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |




LEGEND :

DEVELOPMENT SITE

410(275) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 2.16 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY) |
| SCALE: 1 : 5500 (IN A4 SIZE) / DATE: 15 JUN 2021 | CTA Consultants Limited 志達顧問有限公司 |



PRIVATE RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 181, HEUNG FAN LIU, SHA TIN



MEI PARK COURT



TAI WAI STATION PROPERTY DEVELOPMENT



MEI YING COURT

SHING MUN TUNNEL ROAD

PIK TIN STREET

SHING MUN RIVER CHANNEL

HEUNG FAN LIU STREET

MEI TIN ROAD

TSING SHA HIGHWAY

TAI WAI STATION

A

B

C

D

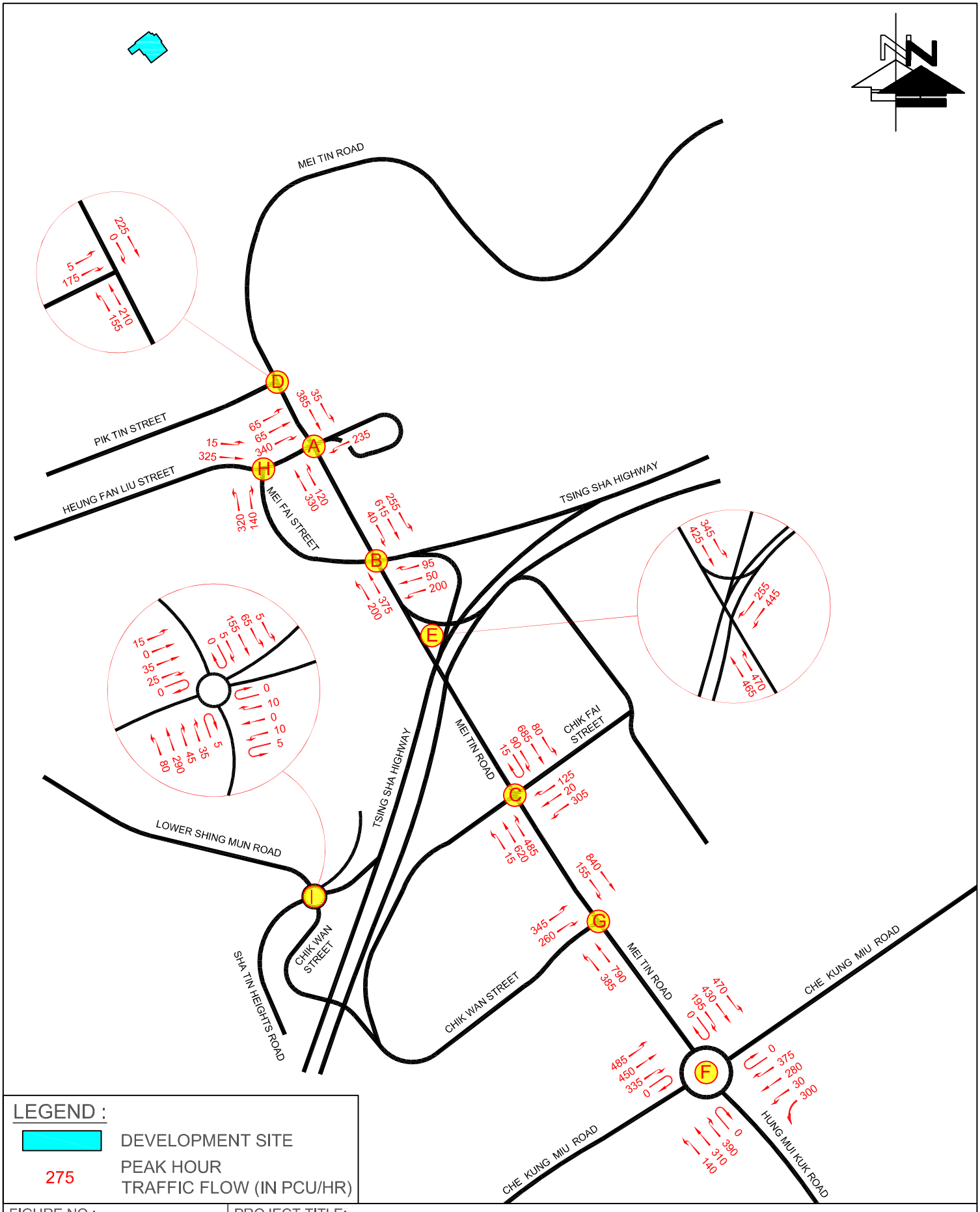
N

LEGEND :

DEVELOPMENT SITE

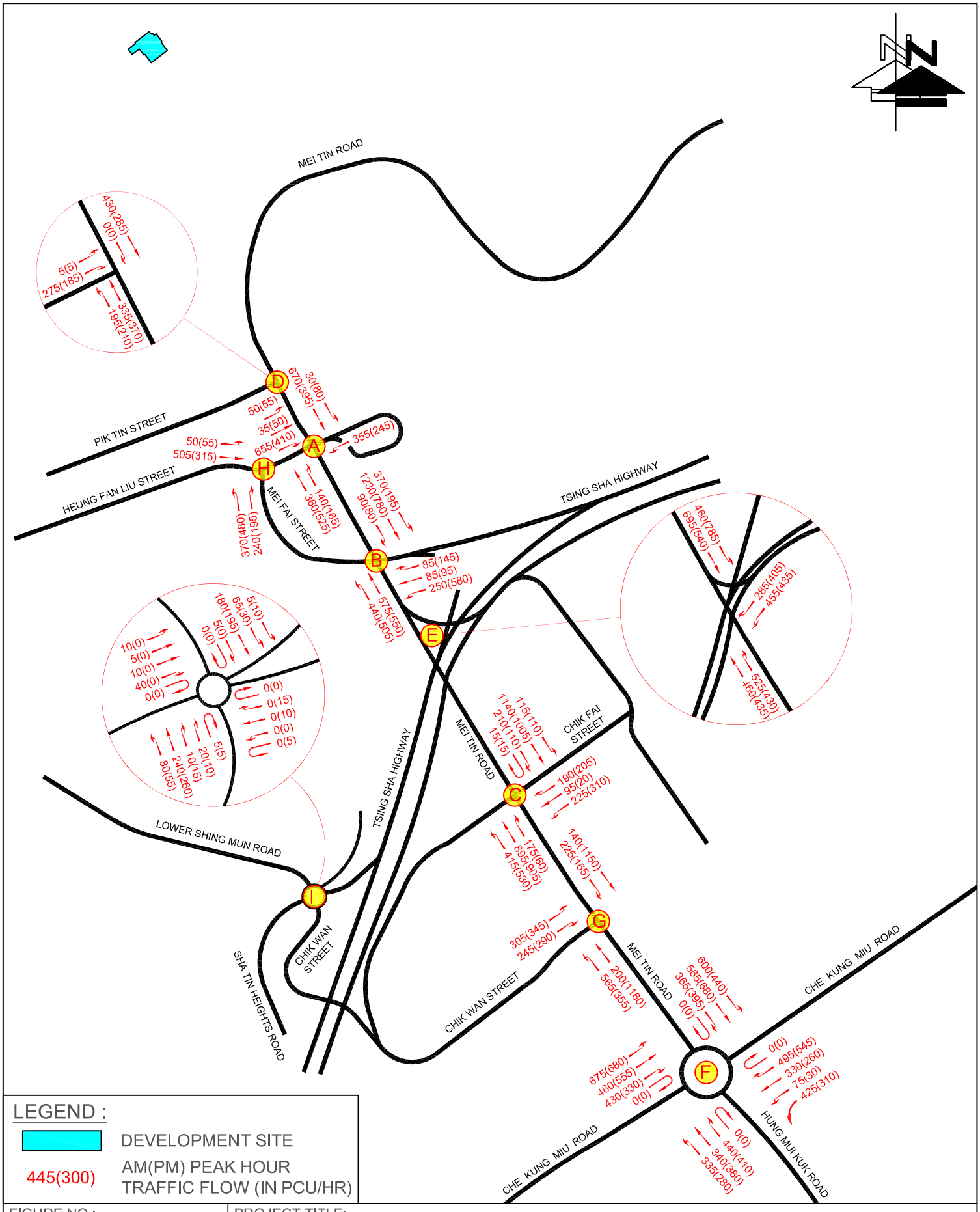
| | |
|---|---|
| FIGURE NO.: 3.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: FUTURE ADJACENT DEVELOPMENT AT TAI WAI |
| SCALE: 1 : 7000 (IN A4 SIZE) | DATE: 23 OCT 2020 |

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| | |
|---|---|
| FIGURE NO.: 3.2 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 REFERENCE TRAFFIC FLOWS (CHING MING FESTIVAL) |
| SCALE: N.T.S. @A4 | DATE: 04 APR 2023 |

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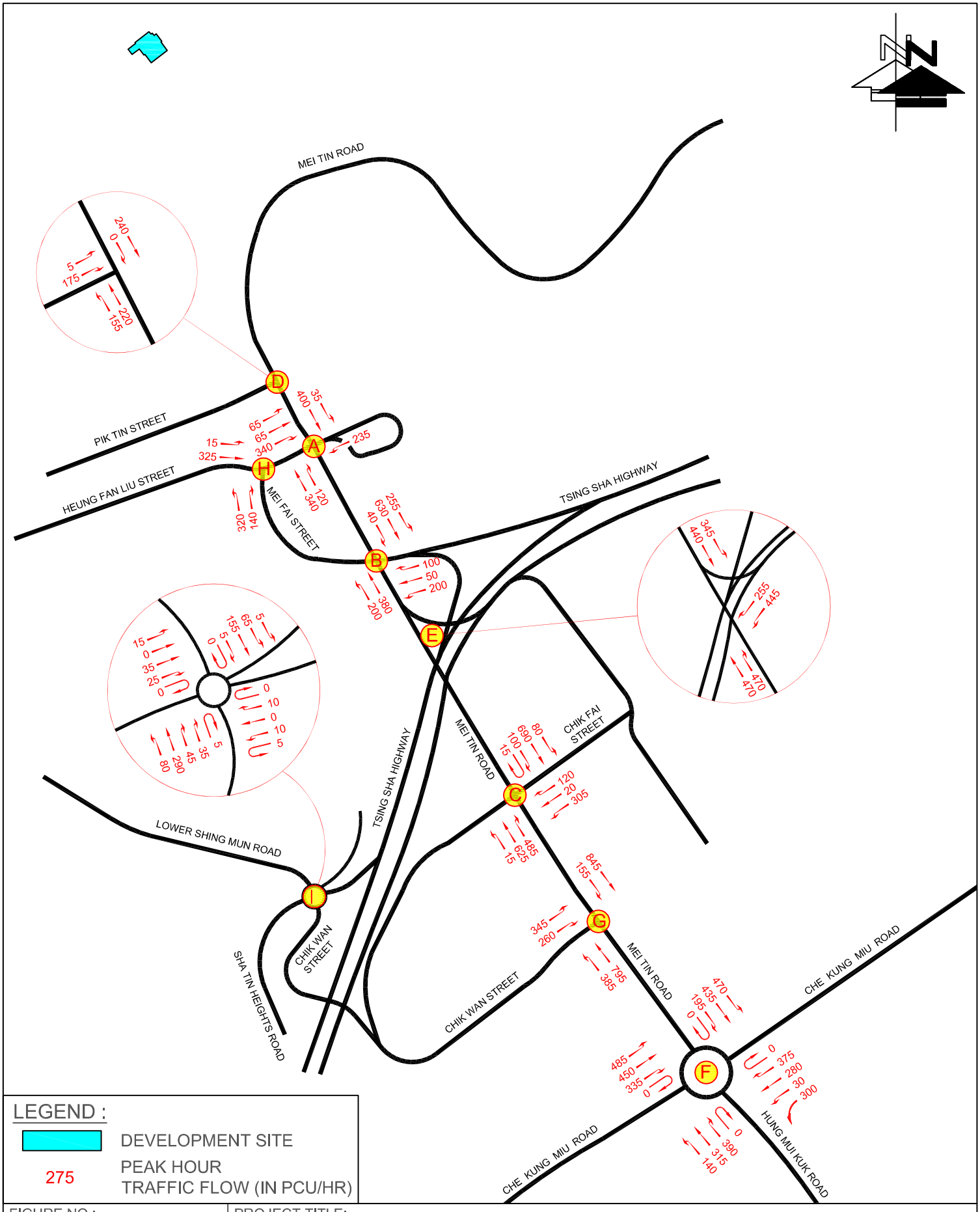



LEGEND :

DEVELOPMENT SITE

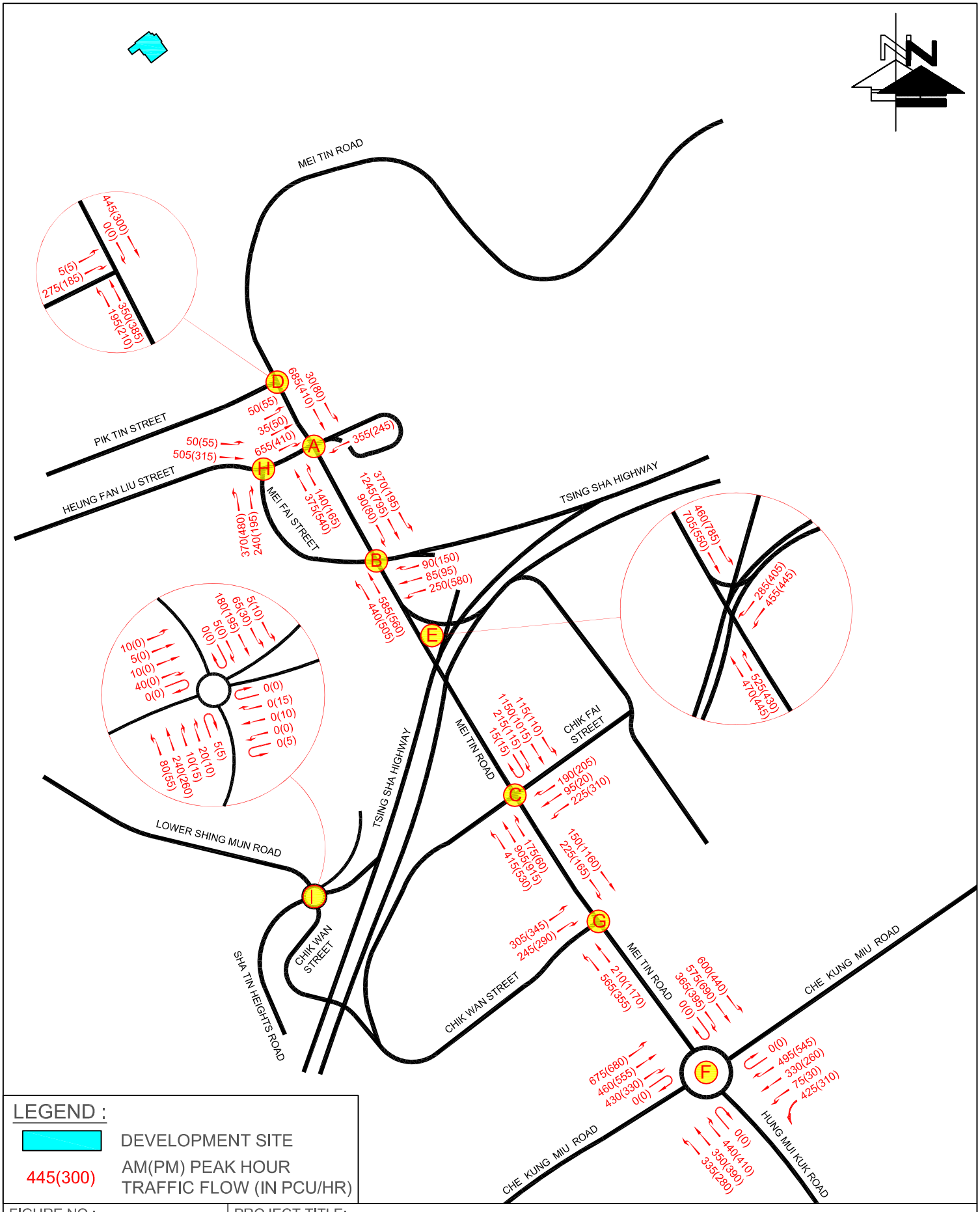
445(300) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.3 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 REFERENCE TRAFFIC FLOWS (WEEKDAY) |
| SCALE: N.T.S. @A4 / DATE: 04 APR 2023 | CTA Consultants Limited 志達顧問有限公司 |




| | |
|---|---|
| FIGURE NO.: 3.4 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 DESIGN TRAFFIC FLOWS (CHING MING FESTIVAL) |
| SCALE: N.T.S. @A4 | DATE: 04 APR 2023 |

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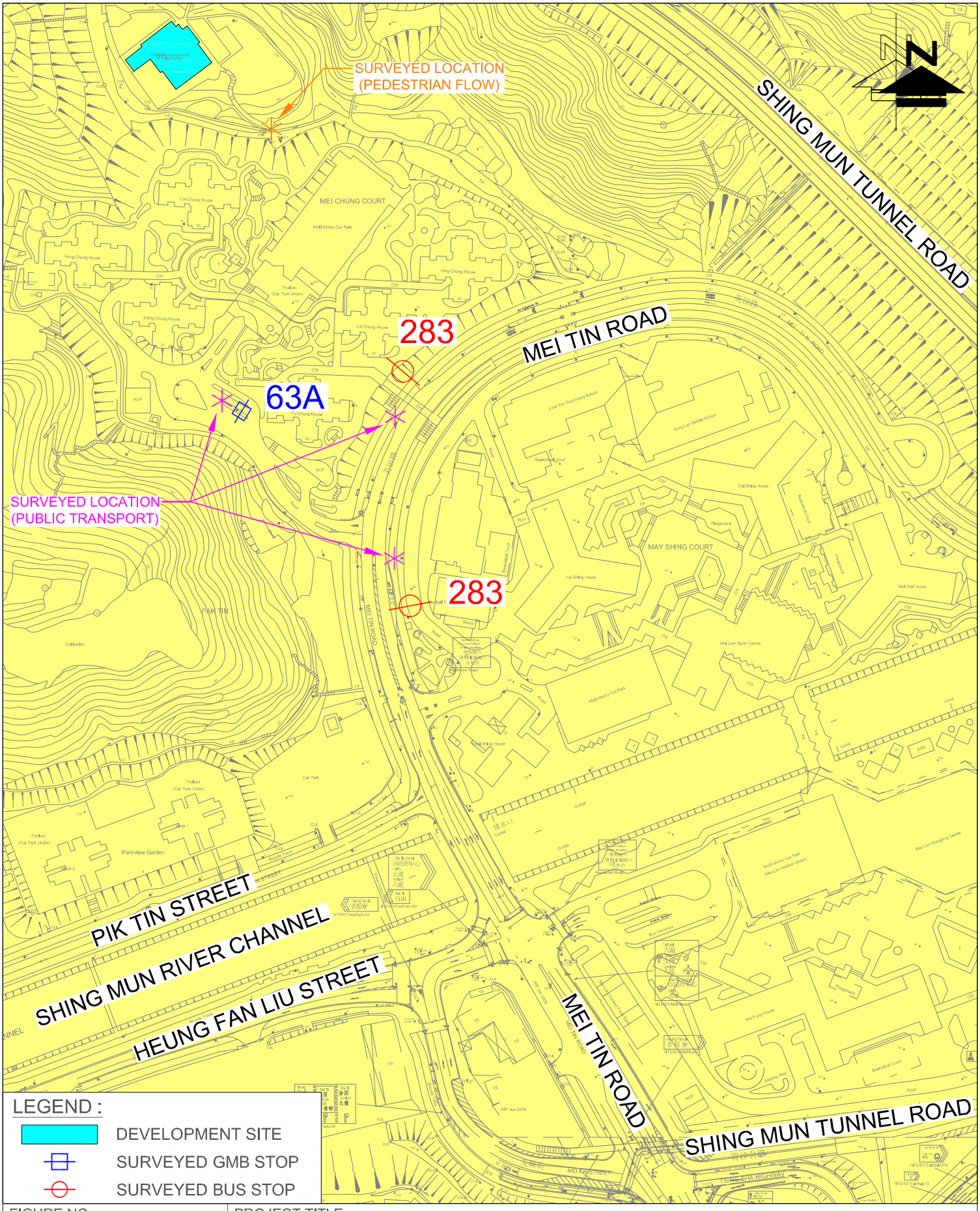

LEGEND :

DEVELOPMENT SITE

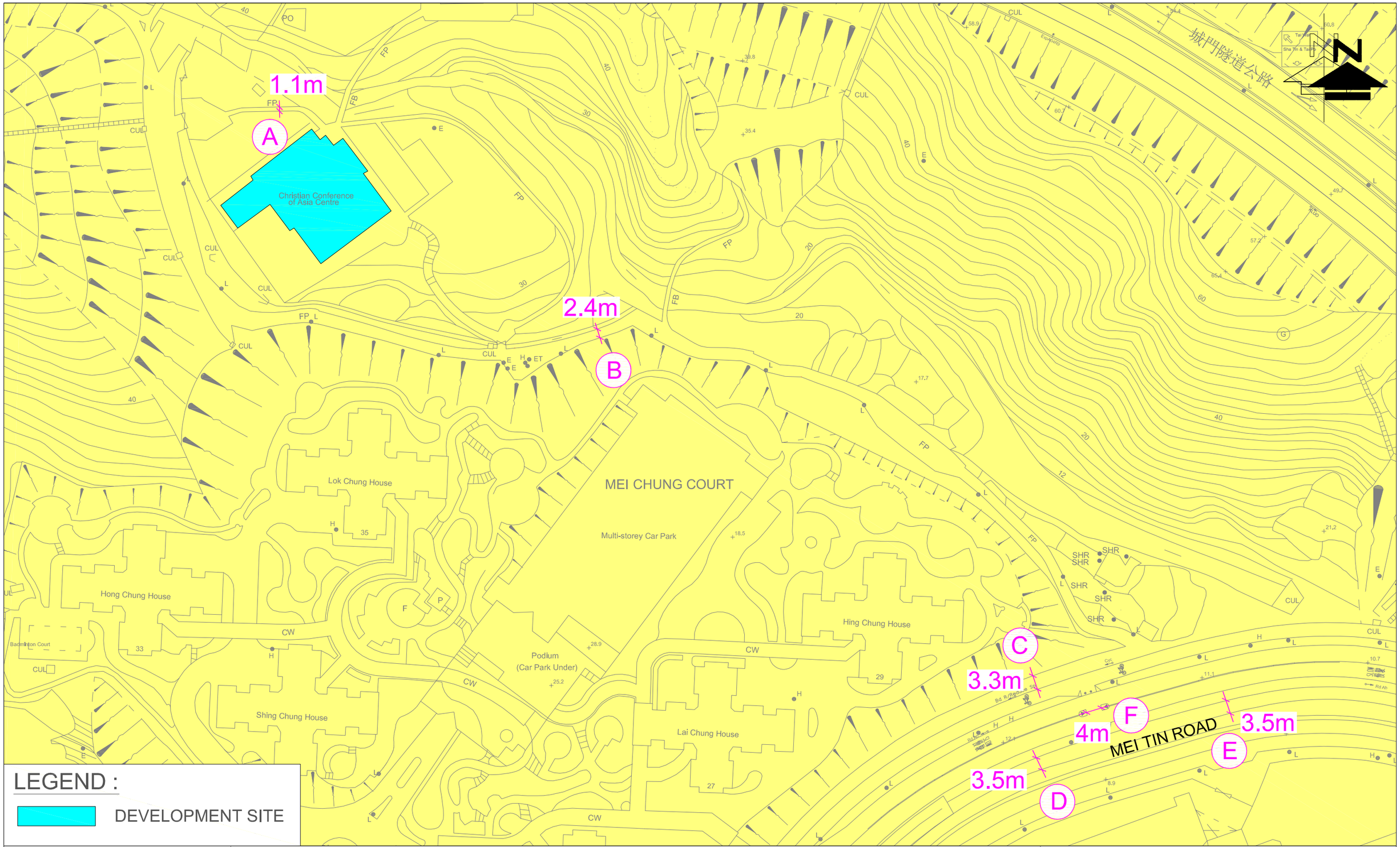
445(300) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.5 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 DESIGN TRAFFIC FLOWS (WEEKDAY) |
| SCALE: N.T.S. @A4 | DATE: 04 APR 2023 |

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| | |
|---|---|
| FIGURE NO.: 5.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: SURVEYED LOCATION PLAN |
| SCALE: 1 : 2500 (IN A4 SIZE) / DATE: 23 OCT 2020 | CTA Consultants Limited 志達顧問有限公司 |

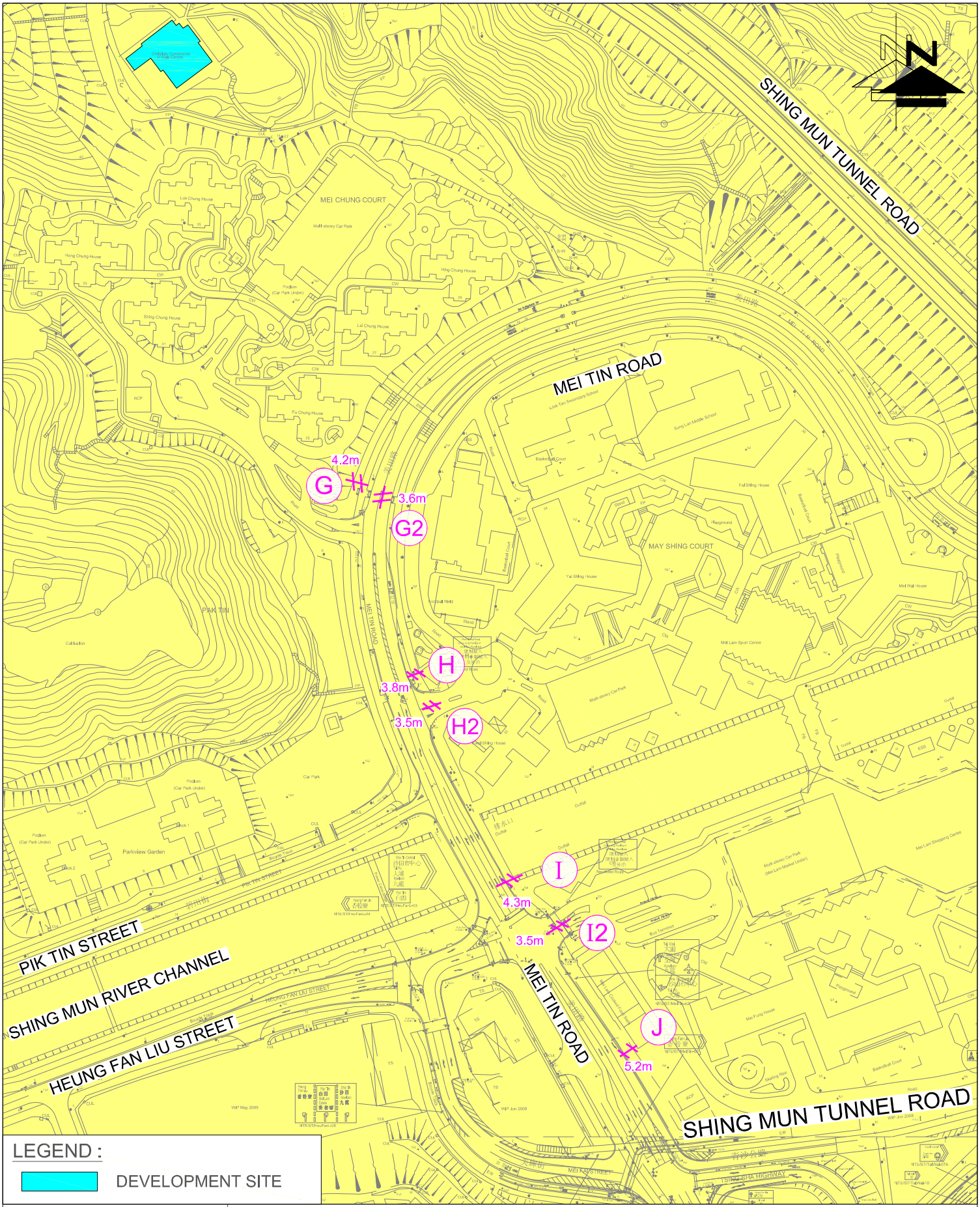



LEGEND :

DEVELOPMENT SITE

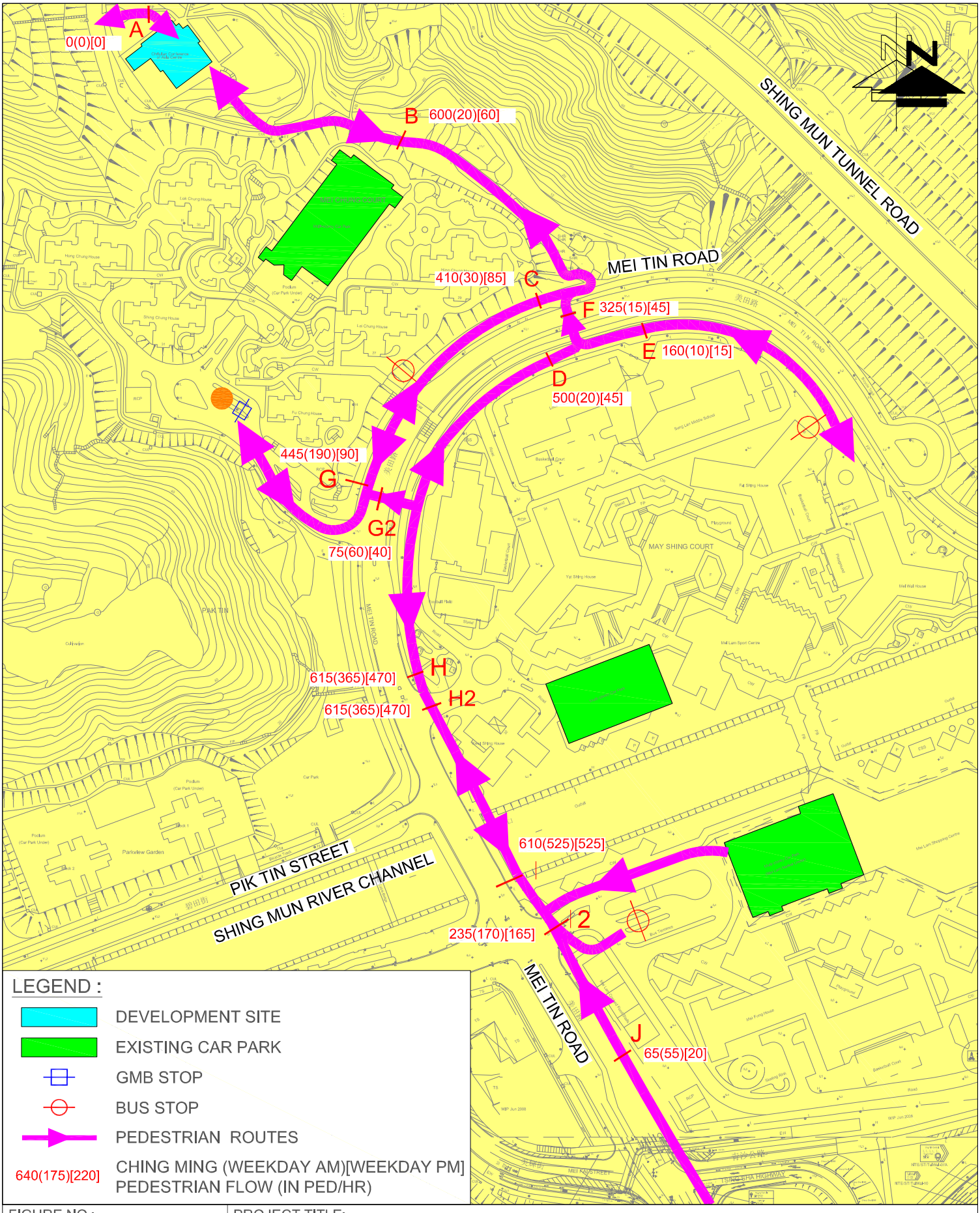
| | |
|---|---|
| FIGURE NO.: 7.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: INDEX PLAN OF CRITICAL SECTIONS - 1 |
| SCALE: 1 : 800 (IN A3 SIZE) / DATE: 29 JUN 2022 | |

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| | |
|---|---|
| FIGURE NO.: 7.2 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: INDEX PLAN OF CRITICAL SECTIONS - 2 |
| SCALE: 1 : 2500 @ A4 | DATE: 10 NOV 2021 |

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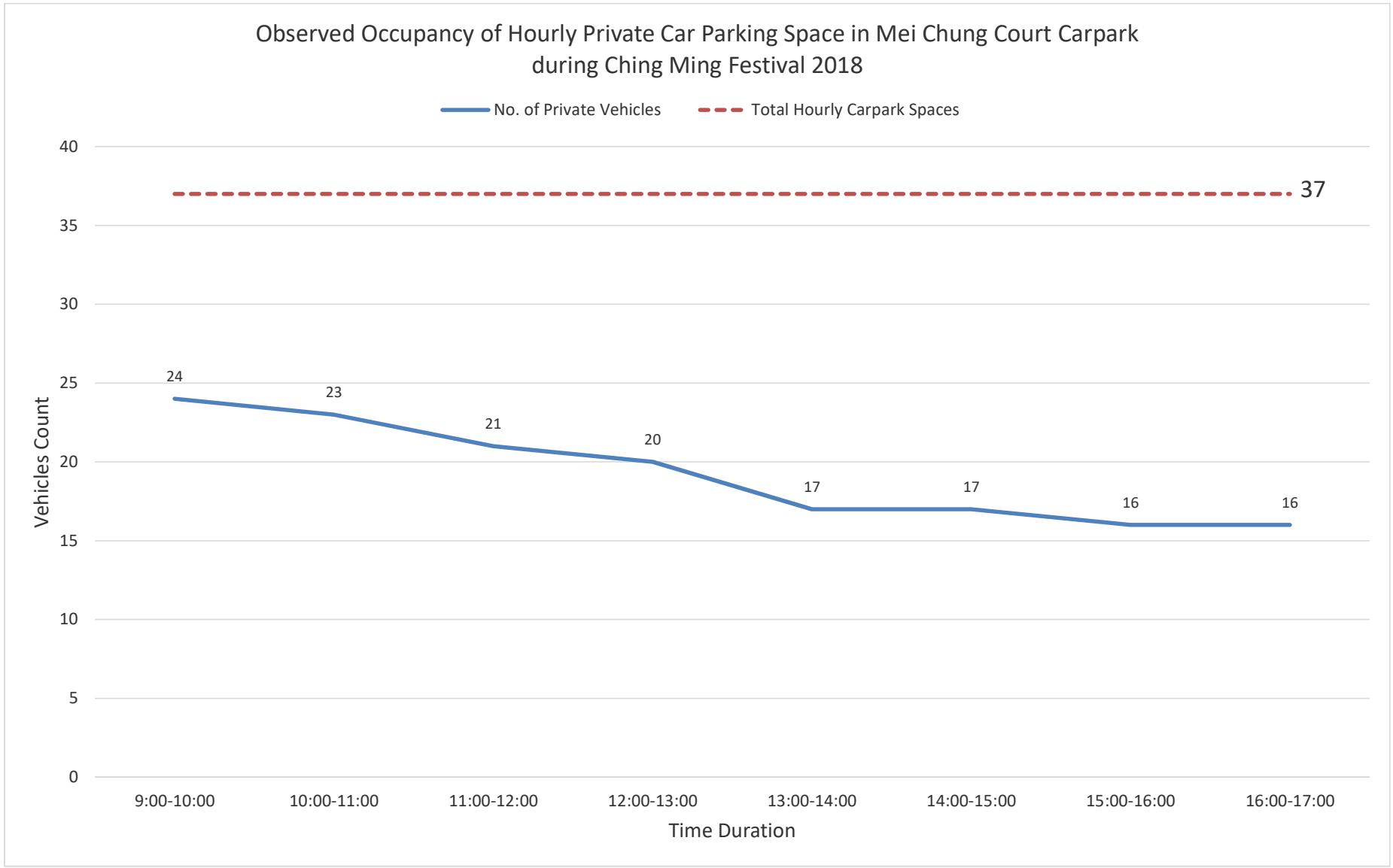



| | |
|---|---|
| FIGURE NO.: 7.3 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 DESIGN PEDESTRIAN FLOWS |
| SCALE: 1 : 2500 @ A4 | DATE: 29 JUNE 2022 |

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# Appendix 1

# Parking Survey


Observed Occupancy of Hourly Private Car Parking Space in Mei Chung Court Carpark during Ching Ming Festival 2018
No. of Private Vehicles
Total Hourly Carpark Spaces
Vehicles Count
Time Duration
40
35
30
25
20
15
10
5
0
37
24
23
21
20
17
17
16
16
9:00-10:00
10:00-11:00
11:00-12:00
12:00-13:00
13:00-14:00
14:00-15:00
15:00-16:00
16:00-17:00

# Appendix 2

# Junction Calculation Sheets

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**

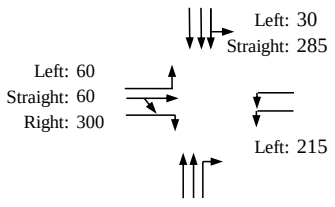
Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 2115 | 2115 | 1960 | 1960 | 60 | 0.031 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 68% | 2255 | 4510 | 2145 | 4105 | 188 | 0.088 | 0.088 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 2255 | 0 | 1960 | 0 | 172 | 0.088 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 1915 | 3970 | 1665 | 3505 | 102 | 0.061 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 2055 | 0 | 1840 | 0 | 113 | 0.061 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 1915 | 3970 | 1915 | 3970 | 118 | 0.062 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 127 | 0.062 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 2055 | 2055 | 1855 | 1855 | 110 | 0.059 | 0.059 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 30% | 1915 | 6025 | 1890 | 6000 | 99 | 0.053 | 0.053 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 108 | 0.052 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 108 | 0.052 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | 7p | A,B,D | green time =50Gm+08Fm=58s | |
| | 8p | B,C,D | green time =49Gm+08Fm=57s | |
| | 9p | B,C,D | green time =49Gm+08Fm=57s | |
| | 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr)

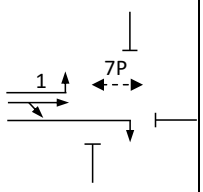



A.M. Check Phase

| | |
|---|---|
| εy | 0.200 |
| L (sec) | 40 |
| C (sec) | 90 |
| y pract. | 0.500 |
| R.C. (%) | 151% |

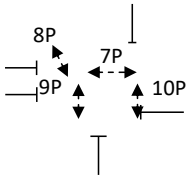
Stage / Phase Diagrams

Stage A



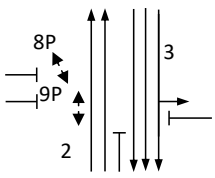

I/G = 5s

Stage B All PED. (25s)



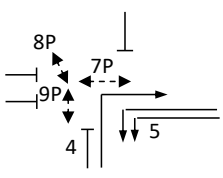

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

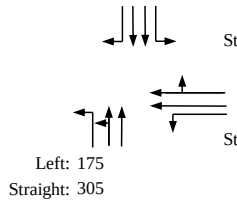
Junction: **(B) Tsing Sha Highway/ Mei Tin Road**

Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 2105 | 0 | 1870 | 0 | 70 | 0.037 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 3975 | 45 | 0.021 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 185 | 0.102 | 0.102 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 1945 | 6135 | 1770 | 5930 | 143 | 0.081 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 19% | 2085 | 0 | 2055 | 0 | 166 | 0.081 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 170 | 0.081 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 4170 | 2085 | 4170 | 250 | 0.120 | 0.120 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 0 | 2085 | 0 | 250 | 0.120 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 35 | 0.018 | |

Notes:

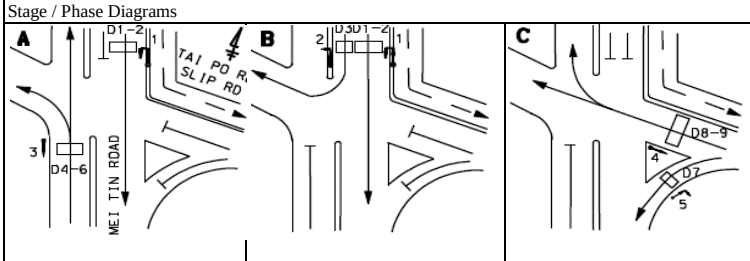
Traffic Flow (pcu / hr)




Peak Hour Check Phase

| | |
|---|---|
| εy | 0.222 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 261% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

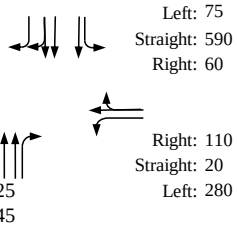
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 75 | 0.041 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 8420 | 2105 | 8300 | 197 | 0.093 | 0.093 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 197 | 0.093 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 2105 | 0 | 2105 | 0 | 197 | 0.093 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 2105 | 0 | 1985 | 0 | 60 | 0.030 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 167 | 0.085 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 179 | 0.085 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 179 | 0.085 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 445 | 0.234 | 0.234 |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 1965 | 1965 | 1890 | 1890 | 280 | 0.148 | 0.148 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 85% | 2105 | 2105 | 2005 | 2005 | 130 | 0.065 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

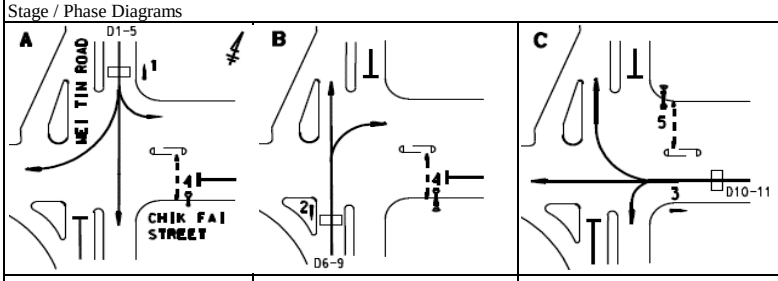
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.476 |
| L (sec) | 14 |
| C (sec) | 90 |
| y pract. | 0.760 |
| R.C. (%) | 60% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**

Description: **2018 OBSERVED TRAFFIC FLOWS**

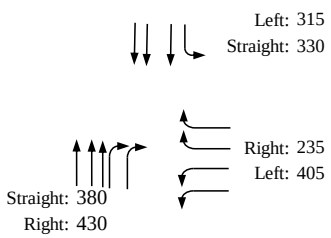
| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 2065 | 2065 | 2005 | 2005 | 315 | 0.157 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 105 | 0.053 | 0.053 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 112 | 0.053 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 112 | 0.053 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6315 | 2105 | 6315 | 127 | 0.060 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 127 | 0.060 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 127 | 0.060 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 216 | 0.109 | 0.109 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 214 | 0.109 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 1965 | 4120 | 1830 | 3865 | 192 | 0.105 | 0.105 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 2155 | 0 | 2035 | 0 | 213 | 0.105 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 1965 | 3930 | 1855 | 3685 | 118 | 0.064 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 1965 | 0 | 1830 | 0 | 117 | 0.064 | |

Pedestrian Phase

| | | | |
|---|---|---|---|
| P1 | A | green time =06Gm+15Fm=21s | |
| P2 | B | green time =17Gm+07Fm=24s | |
| P3 | B, C | green time =27Gm+09Fm=36s | |
| P4 | A | green time =05Gm+10Fm=15s | |

Notes:

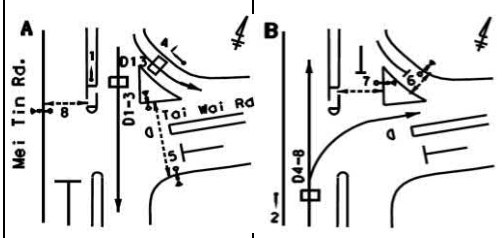
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.267 |
| L (sec) | 12 |
| C (sec) | 90 |
| y pract. | 0.780 |
| R.C. (%) | 192% |

Stage / Phase Diagrams




| | | |
|---|---|---|
| I/G = 5s | I/G = 5s | I/G = 5s |

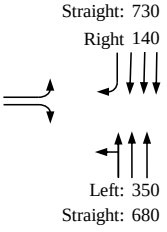
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | A | 3.5 | 0 | 15 | 0 | 100% | 2105 | 2105 | 1915 | 1915 | 140 | 0.073 | |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6175 | 2105 | 6175 | 249 | 0.118 | 0.118 |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 249 | 0.118 | |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 0 | 1965 | 0 | 232 | 0.118 | |
| Mei Tin Road | N | | 3 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 6175 | 1785 | 5995 | 350 | 0.196 | 0.196 |
| | N | | 3 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 340 | 0.162 | |
| | N | | 3 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 340 | 0.162 | |
| Chik Wan Street | E | | 4 | C | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 305 | 0.171 | 0.171 |
| | E | | 4 | C | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 113 | 0.057 | |
| | E | | 4 | C | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 112 | 0.057 | |

Notes:

Traffic Flow (pcu / hr)

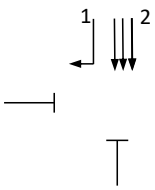



A.M. Check Phase

| | |
|---|---|
| εy | 0.485 |
| L (sec) | 15 |
| C (sec) | 90 |
| y pract. | 0.750 |
| R.C. (%) | 55% |

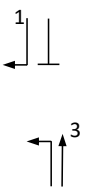
Stage / Phase Diagrams

A



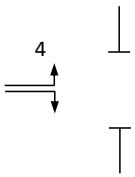

I/G = 6s

B




I/G = 6s

C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 15 | 0.008 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 4210 | 145 | 0.069 | 0.069 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 145 | 0.069 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 285 | 0.160 | 0.160 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 2105 | 4070 | 1960 | 3745 | 68 | 0.035 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 1965 | 0 | 1785 | 0 | 62 | 0.035 | |
| Pedestrian Phase | | | 3p | B,C | green time =68Gm+09Fm=77s | | | | | | | | | | | |
| | | | 4p | C | green time =28Gm+12Fm=40s | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr)

Left: 15
Straight: 290

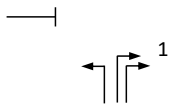
Right: 130
Left: 285

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.229 |
| L (sec) | 52 |
| C (sec) | 90 |
| y pract. | 0.380 |
| R.C. (%) | 66% |

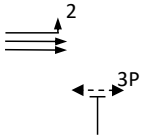
Stage / Phase Diagrams

A



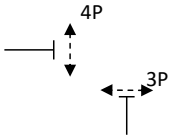

I/G = 3s

B




I/G = 6s

C All PED. (40s)




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 100% | 2115 | 2115 | 1960 | 1960 | 1960 | 1960 | 45 | 0.023 | | 50 | 0.026 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 89% | 79% | 2255 | 4510 | 2115 | 2130 | 4075 | 4090 | 332 | 0.157 | 0.157 | 219 | 0.103 | 0.103 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 100% | 2255 | 0 | 1960 | 1960 | 0 | 0 | 308 | 0.157 | | 201 | 0.103 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 100% | 1915 | 3970 | 1665 | 1665 | 3505 | 3505 | 159 | 0.096 | | 109 | 0.066 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 100% | 2055 | 0 | 1840 | 1840 | 0 | 0 | 176 | 0.096 | | 121 | 0.066 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 0% | 1915 | 3970 | 1915 | 1915 | 3970 | 3970 | 113 | 0.059 | | 212 | 0.111 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 122 | 0.059 | | 228 | 0.111 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 100% | 2055 | 2055 | 1855 | 1855 | 1855 | 1855 | 130 | 0.070 | 0.070 | 155 | 0.084 | 0.084 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 16% | 63% | 1915 | 6025 | 1905 | 1870 | 6015 | 5980 | 184 | 0.096 | 0.096 | 119 | 0.064 | 0.064 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 198 | 0.096 | | 131 | 0.064 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 198 | 0.096 | | 131 | 0.064 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | 7p | A,B,D | green time =50Gm+08Fm=58s |
| | 8p | B,C,D | green time =49Gm+08Fm=57s |
| | 9p | B,C,D | green time =49Gm+08Fm=57s |
| | 10p | B | green time =17Gm+08Fm=25s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

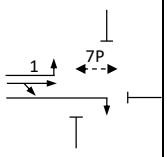
Left: 30(75)
Straight: 550(305)
Left: 45(50)
Straight: 35(45)
Right: 605(375)
Left: 335(230)
Straight: 235(440)
Right: 130(155)

| A.M. Check Phase | |
|---|---|
| εy | 0.324 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 85% |

| P.M. Check Phase | |
|---|---|
| εy | 0.250 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 140% |

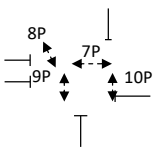
Stage / Phase Diagrams

Stage A



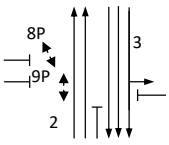

I/G = 5s

Stage B All PED. (25s)



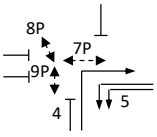

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 84% | 100% | 2105 | 0 | 1905 | 1870 | 0 | 0 | 59 | 0.031 | | 120 | 0.064 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4010 | 3975 | 66 | 0.031 | | 85 | 0.040 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 235 | 0.129 | 0.129 | 545 | 0.299 | 0.299 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 100% | 1945 | 6135 | 1770 | 1770 | 5890 | 5875 | 261 | 0.148 | | 286 | 0.162 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 47% | 57% | 2085 | 0 | 2015 | 2000 | 0 | 0 | 298 | 0.148 | | 323 | 0.162 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 311 | 0.148 | | 340 | 0.162 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 4170 | 2085 | 2085 | 4170 | 4170 | 540 | 0.259 | 0.259 | 335 | 0.161 | 0.161 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 0 | 2085 | 2085 | 0 | 0 | 540 | 0.259 | | 335 | 0.161 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 85 | 0.045 | | 75 | 0.039 | |

Notes:

Traffic Flow (pcu / hr)

Right: 85(75)
Straight: 1080(670)
Left: free flow

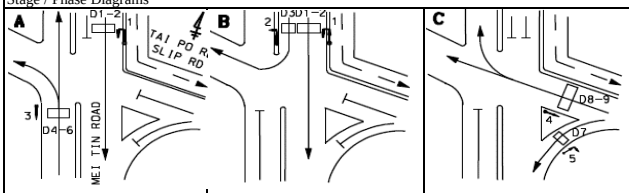
Right: 50(120)
Straight: 75(85)
Left: 235(545)

Left: 400(470)
Straight: 470(480)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.388 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 113% |

| P.M. Check Phase | |
|---|---|
| εy | 0.460 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 79% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

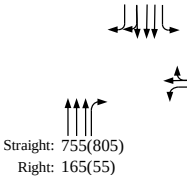
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 110 | 0.060 | | 105 | 0.058 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 8420 | 2105 | 2105 | 8300 | 8300 | 342 | 0.162 | 0.162 | 303 | 0.144 | 0.144 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 342 | 0.162 | | 303 | 0.144 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 342 | 0.162 | | 303 | 0.144 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 0 | 1985 | 1985 | 0 | 0 | 170 | 0.086 | | 80 | 0.040 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 240 | 0.122 | 0.122 | 256 | 0.130 | 0.130 |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 274 | 0.130 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 274 | 0.130 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 165 | 0.087 | | 55 | 0.029 | |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1890 | 1890 | 1890 | 1890 | 210 | 0.111 | | 290 | 0.153 | 0.153 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 67% | 91% | 2105 | 2105 | 2025 | 1995 | 2025 | 1995 | 270 | 0.133 | 0.133 | 215 | 0.108 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

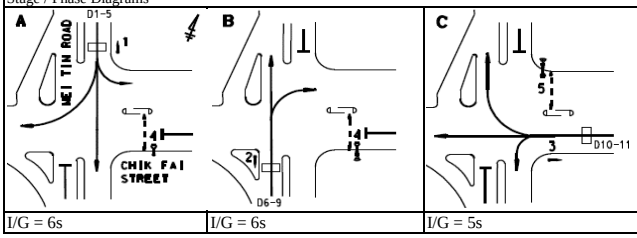
Traffic Flow (pcu / hr) AM(PM)




| A.M. Check Phase | |
|---|---|
| εy | 0.418 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 90% |

| P.M. Check Phase | |
|---|---|
| εy | 0.428 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 86% |

Stage / Phase Diagrams




| I/G = 6s | I/G = 6s | I/G = 5s |
|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 100% | 2065 | 2065 | 2005 | 2005 | 2005 | 2005 | 435 | 0.217 | | 740 | 0.369 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 185 | 0.094 | 0.094 | 142 | 0.072 | 0.072 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 198 | 0.094 | | 152 | 0.072 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 198 | 0.094 | | 152 | 0.072 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6315 | 2105 | 2105 | 6315 | 6315 | 115 | 0.055 | | 122 | 0.058 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 115 | 0.055 | | 122 | 0.058 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 115 | 0.055 | | 122 | 0.058 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 249 | 0.125 | 0.125 | 204 | 0.103 | 0.103 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 246 | 0.125 | | 201 | 0.103 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 100% | 1965 | 4120 | 1830 | 1830 | 3865 | 3865 | 199 | 0.109 | 0.109 | 194 | 0.106 | 0.106 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 100% | 2155 | 0 | 2035 | 2035 | 0 | 0 | 221 | 0.109 | | 216 | 0.106 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 100% | 1965 | 3930 | 1855 | 1855 | 3685 | 3685 | 136 | 0.073 | | 191 | 0.103 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 100% | 1965 | 0 | 1830 | 1830 | 0 | 0 | 134 | 0.073 | | 189 | 0.103 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | P1 | A | green time =06Gm+15Fm=21s |
| | P2 | B | green time =17Gm+07Fm=24s |
| | P3 | B, C | green time =27Gm+09Fm=36s |
| | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

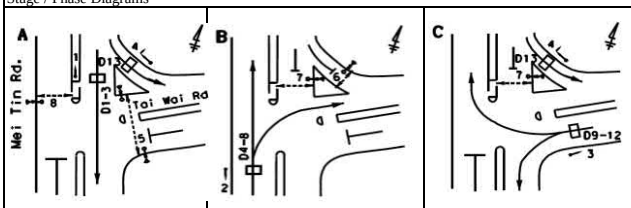
Left: 435(740)
Straight: 580(445)

Right: 270(380)
Left: 420(410)
Straight: 345(365)
Right: 495(405)

| A.M. Check Phase | |
|---|---|
| εy | 0.328 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 147% |

| P.M. Check Phase | |
|---|---|
| εy | 0.281 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 188% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s |
|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | A | 3.5 | 0 | 15 | 0 | 100% | 100% | 2105 | 2105 | 1915 | 1915 | 1915 | 1915 | 210 | 0.110 | | 155 | 0.081 | |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6175 | 2105 | 2105 | 6175 | 6175 | 349 | 0.166 | 0.166 | 356 | 0.169 | 0.169 |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 349 | 0.166 | | 356 | 0.169 | |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 0 | 1965 | 1965 | 0 | 0 | 326 | 0.166 | | 333 | 0.169 | |
| Mei Tin Road | N | | 3 | B | 3.5 | 15 | 0 | 1 | 100% | 80% | 1965 | 6175 | 1785 | 1820 | 5995 | 6030 | 530 | 0.297 | 0.297 | 418 | 0.230 | 0.230 |
| | N | | 3 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 523 | 0.248 | | 484 | 0.230 | |
| | N | | 3 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 523 | 0.248 | | 484 | 0.230 | |
| Chik Wan Street | E | | 4 | C | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 260 | 0.146 | 0.146 | 310 | 0.174 | 0.174 |
| | E | | 4 | C | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 108 | 0.054 | | 131 | 0.066 | |
| | E | | 4 | C | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 107 | 0.054 | | 129 | 0.066 | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

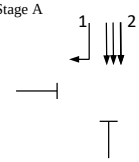
Straight: 1025(1045)
Right 210(155)
Left: 260(310)
Right: 215(260)
Left: 530(335)
Straight: 1045(1050)

| A.M. Check Phase | |
|---|---|
| εy | 0.609 |
| L (sec) | 15 |
| C (sec) | 120 |
| y pract. | 0.788 |
| R.C. (%) | 29% |

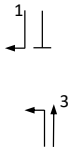
| P.M. Check Phase | |
|---|---|
| εy | 0.399 |
| L (sec) | 15 |
| C (sec) | 120 |
| y pract. | 0.788 |
| R.C. (%) | 97% |

Stage / Phase Diagrams

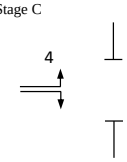
Stage A




Stage B




Stage C




I/G = 6s | I/G = 6s | I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 45 | 0.025 | | 50 | 0.028 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4210 | 4210 | 230 | 0.109 | 0.109 | 143 | 0.068 | 0.068 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 230 | 0.109 | | 143 | 0.068 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 330 | 0.185 | 0.185 | 445 | 0.249 | 0.249 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 4070 | 1960 | 1960 | 3745 | 3745 | 118 | 0.060 | | 97 | 0.049 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 100% | 1965 | 0 | 1785 | 1785 | 0 | 0 | 107 | 0.060 | | 88 | 0.049 | |
| Pedestrian Phase | | | 3p | B,C | green time =68Gm+09Fm=77s | | | | | | | | | | | | | | | | | |
| | | | 4p | C | green time =38Gm+12Fm=50s | | | | | | | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

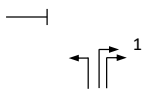
Left: 45(50)
Straight: 460(285)
Right: 225(185)
Left: 330(445)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.294 |
| L (sec) | 62 |
| C (sec) | 120 |
| y pract. | 0.435 |
| R.C. (%) | 48% |

| P.M. Check Phase | |
|---|---|
| εy | 0.317 |
| L (sec) | 62 |
| C (sec) | 120 |
| y pract. | 0.435 |
| R.C. (%) | 37% |

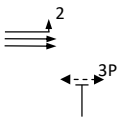
Stage / Phase Diagrams

Stage A



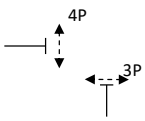

I/G = 3s

Stage B




I/G = 6s

Stage C All PED. (50s)




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

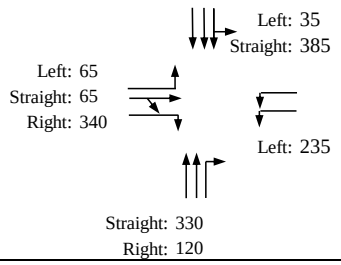
Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 2115 | 2115 | 1960 | 1960 | 65 | 0.033 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 69% | 2255 | 4510 | 2145 | 4105 | 212 | 0.099 | 0.099 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 2255 | 0 | 1960 | 0 | 193 | 0.099 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 1915 | 3970 | 1665 | 3505 | 112 | 0.067 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 2055 | 0 | 1840 | 0 | 123 | 0.067 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 1915 | 3970 | 1915 | 3970 | 159 | 0.083 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 171 | 0.083 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 2055 | 2055 | 1855 | 1855 | 120 | 0.065 | 0.065 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 26% | 1915 | 6025 | 1895 | 6005 | 133 | 0.070 | 0.070 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 144 | 0.070 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 144 | 0.070 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | 7p | A,B,D | green time =50Gm+08Fm=58s | |
| | 8p | B,C,D | green time =49Gm+08Fm=57s | |
| | 9p | B,C,D | green time =49Gm+08Fm=57s | |
| | 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr)

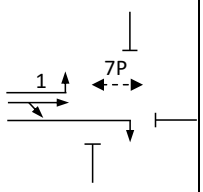



A.M. Check Phase

| | |
|---|---|
| εy | 0.233 |
| L (sec) | 40 |
| C (sec) | 90 |
| y pract. | 0.500 |
| R.C. (%) | 114% |

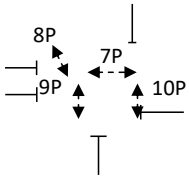
Stage / Phase Diagrams

Stage A



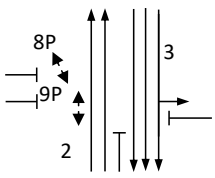

I/G = 5s

Stage B All PED. (25s)



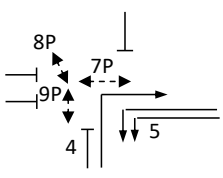

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

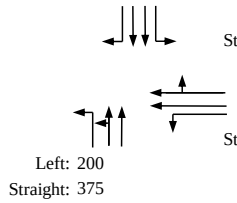
Junction: **(B) Tsing Sha Highway/ Mei Tin Road**

Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | ← | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 2105 | 0 | 1870 | 0 | 95 | 0.051 | |
| | W | ← | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 3975 | 50 | 0.024 | |
| | W | ↰ | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 200 | 0.110 | 0.110 |
| Mei Tin Road | N | ↰ | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 1945 | 6135 | 1770 | 5940 | 171 | 0.097 | |
| | N | ↑← | 3 | A | 3.3 | 20 | 0 | 0 | 14% | 2085 | 0 | 2065 | 0 | 200 | 0.097 | |
| | N | ↑ | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 204 | 0.097 | |
| Mei Tin Road | S | ↓ | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 4170 | 2085 | 4170 | 308 | 0.147 | 0.147 |
| | S | ↓ | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 0 | 2085 | 0 | 308 | 0.147 | |
| | S | ↳ | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 40 | 0.021 | |

Notes:

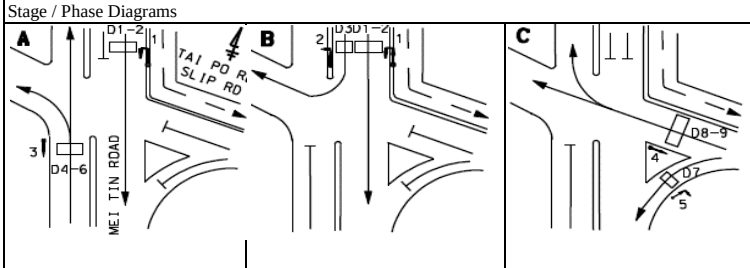
Traffic Flow (pcu / hr)




Peak Hour Check Phase

| | |
|---|---|
| εy | 0.257 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 211% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 6s | I/G = 7s | | |
|---|---|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

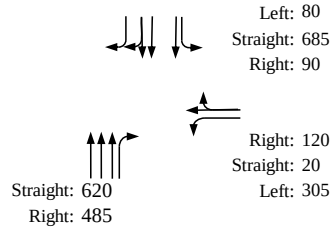
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 80 | 0.044 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 8420 | 2105 | 8300 | 228 | 0.108 | 0.108 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 228 | 0.108 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 2105 | 0 | 2105 | 0 | 228 | 0.108 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 2105 | 0 | 1985 | 0 | 90 | 0.045 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 197 | 0.100 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 211 | 0.100 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 211 | 0.100 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 485 | 0.255 | 0.255 |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 1965 | 1965 | 1890 | 1890 | 305 | 0.161 | 0.161 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 86% | 2105 | 2105 | 2000 | 2000 | 140 | 0.070 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

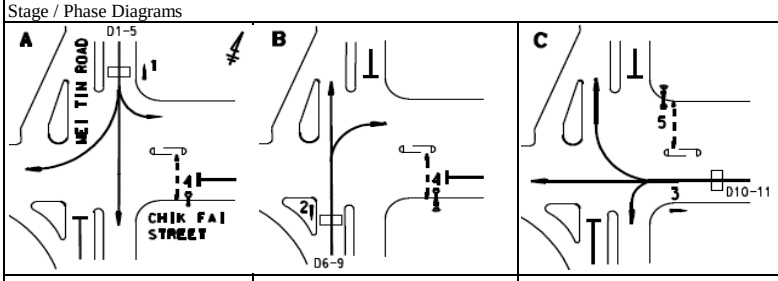
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.525 |
| L (sec) | 14 |
| C (sec) | 90 |
| y pract. | 0.760 |
| R.C. (%) | 45% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**

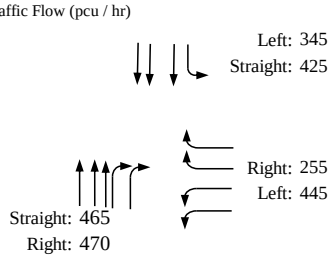
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 2065 | 2065 | 2005 | 2005 | 345 | 0.172 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 135 | 0.069 | 0.069 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 145 | 0.069 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 145 | 0.069 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6315 | 2105 | 6315 | 155 | 0.074 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 155 | 0.074 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 155 | 0.074 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 236 | 0.119 | 0.119 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 234 | 0.119 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 1965 | 4120 | 1830 | 3865 | 211 | 0.115 | 0.115 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 2155 | 0 | 2035 | 0 | 234 | 0.115 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 1965 | 3930 | 1855 | 3685 | 128 | 0.069 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 1965 | 0 | 1830 | 0 | 127 | 0.069 | |

| | | | | |
|---|---|---|---|---|
| Pedestrian Phase | | P1 | A | green time =06Gm+15Fm=21s |
| | | P2 | B | green time =17Gm+07Fm=24s |
| | | P3 | B, C | green time =27Gm+09Fm=36s |
| | | P4 | A | green time =05Gm+10Fm=15s |

Notes:

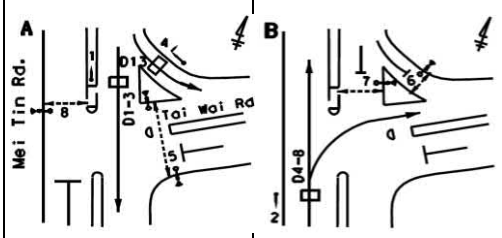
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.303 |
| L (sec) | 12 |
| C (sec) | 90 |
| y pract. | 0.780 |
| R.C. (%) | 157% |

Stage / Phase Diagrams




| | | |
|---|---|---|
| I/G = 5s | I/G = 5s | I/G = 5s |

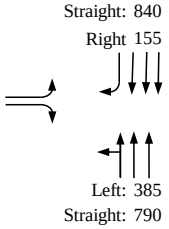
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | A | 3.5 | 0 | 15 | 0 | 100% | 2105 | 2105 | 1915 | 1915 | 155 | 0.081 | |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6175 | 2105 | 6175 | 286 | 0.136 | 0.136 |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 286 | 0.136 | |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 0 | 1965 | 0 | 267 | 0.136 | |
| Mei Tin Road | N | | 3 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 6175 | 1785 | 5995 | 385 | 0.216 | 0.216 |
| | N | | 3 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 395 | 0.188 | |
| | N | | 3 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 395 | 0.188 | |
| Chik Wan Street | E | | 4 | C | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 345 | 0.193 | 0.193 |
| | E | | 4 | C | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 131 | 0.066 | |
| | E | | 4 | C | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 129 | 0.066 | |

Notes:

Traffic Flow (pcu / hr)

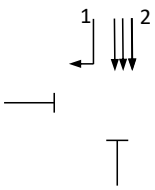



A.M. Check Phase

| | |
|---|---|
| εy | 0.545 |
| L (sec) | 15 |
| C (sec) | 90 |
| y pract. | 0.750 |
| R.C. (%) | 38% |

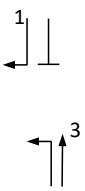
Stage / Phase Diagrams

A



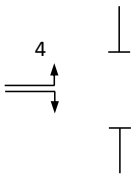

I/G = 6s

B




I/G = 6s

C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**

Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 15 | 0.008 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 4210 | 163 | 0.077 | 0.077 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 163 | 0.077 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 320 | 0.179 | 0.179 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 2105 | 4070 | 1960 | 3745 | 73 | 0.037 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 1965 | 0 | 1785 | 0 | 67 | 0.037 | |
| Pedestrian Phase | | | 3p | B,C | green time =68Gm+09Fm=77s | | | | | | | | | | | |
| | | | 4p | C | green time =28Gm+12Fm=40s | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr)

Left: 15
Straight: 325

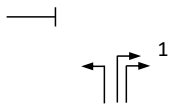
Right: 140
Left: 320

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.256 |
| L (sec) | 52 |
| C (sec) | 90 |
| y pract. | 0.380 |
| R.C. (%) | 48% |

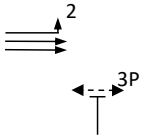
Stage / Phase Diagrams

A



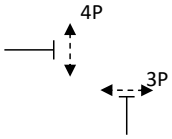

I/G = 3s

B




I/G = 6s

C All PED. (40s)




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

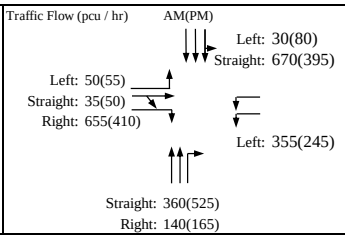
Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 100% | 2115 | 2115 | 1960 | 1960 | 1960 | 1960 | 50 | 0.026 | | 55 | 0.028 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 90% | 79% | 2255 | 4510 | 2110 | 2130 | 4070 | 4090 | 358 | 0.170 | 0.170 | 239 | 0.112 | 0.113 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 100% | 2255 | 0 | 1960 | 1960 | 0 | 0 | 332 | 0.169 | | 221 | 0.113 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 100% | 1915 | 3970 | 1665 | 1665 | 3505 | 3505 | 169 | 0.101 | | 116 | 0.070 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 100% | 2055 | 0 | 1840 | 1840 | 0 | 0 | 186 | 0.101 | | 129 | 0.070 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 0% | 1915 | 3970 | 1915 | 1915 | 3970 | 3970 | 174 | 0.091 | | 253 | 0.132 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 186 | 0.091 | | 272 | 0.132 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 100% | 2055 | 2055 | 1855 | 1855 | 1855 | 1855 | 140 | 0.075 | 0.075 | 165 | 0.089 | 0.089 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 14% | 54% | 1915 | 6025 | 1905 | 1875 | 6015 | 5985 | 222 | 0.116 | 0.116 | 149 | 0.079 | 0.079 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 239 | 0.116 | | 163 | 0.079 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 239 | 0.116 | | 163 | 0.079 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | 7p | A,B,D | green time =50Gm+08Fm=58s |
| | 8p | B,C,D | green time =49Gm+08Fm=57s |
| | 9p | B,C,D | green time =49Gm+08Fm=57s |
| | 10p | B | green time =17Gm+08Fm=25s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

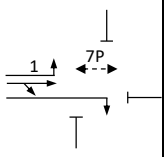



| A.M. Check Phase | |
|---|---|
| εy | 0.361 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 66% |

| P.M. Check Phase | |
|---|---|
| εy | 0.281 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 114% |

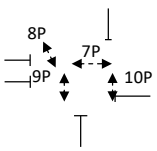
Stage / Phase Diagrams

Stage A



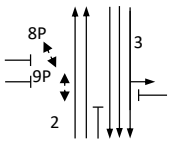

I/G = 5s

Stage B All PED. (25s)



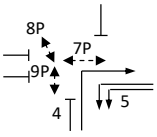

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 100% | 2105 | 0 | 1870 | 1870 | 0 | 0 | 85 | 0.045 | | 145 | 0.078 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 3975 | 3975 | 85 | 0.040 | | 95 | 0.045 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 250 | 0.137 | 0.137 | 580 | 0.319 | 0.319 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 100% | 1945 | 6135 | 1770 | 1770 | 5900 | 5880 | 304 | 0.172 | | 317 | 0.179 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 39% | 52% | 2085 | 0 | 2025 | 2005 | 0 | 0 | 348 | 0.172 | | 360 | 0.180 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 362 | 0.172 | | 378 | 0.179 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 4170 | 2085 | 2085 | 4170 | 4170 | 615 | 0.295 | 0.295 | 390 | 0.187 | 0.187 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 0 | 2085 | 2085 | 0 | 0 | 615 | 0.295 | | 390 | 0.187 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 90 | 0.047 | | 80 | 0.042 | |

Notes:

Traffic Flow (pcu / hr)

Right: 90(80)
Straight: 1230(780)
Left: free flow

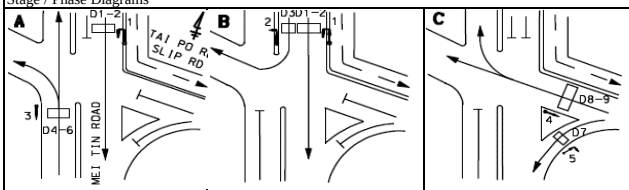
Right: 85(145)
Straight: 85(95)
Left: 250(580)

Left: 440(505)
Straight: 575(550)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.432 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 91% |

| P.M. Check Phase | |
|---|---|
| εy | 0.506 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 63% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 115 | 0.063 | | 110 | 0.060 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 8420 | 2105 | 2105 | 8300 | 8300 | 380 | 0.181 | 0.181 | 335 | 0.159 | 0.159 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 380 | 0.181 | | 335 | 0.159 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 380 | 0.181 | | 335 | 0.159 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 0 | 1985 | 1985 | 0 | 0 | 210 | 0.106 | | 110 | 0.055 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 285 | 0.145 | 0.145 | 288 | 0.147 | 0.147 |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 305 | 0.145 | | 309 | 0.147 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 305 | 0.145 | | 309 | 0.147 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 175 | 0.092 | | 60 | 0.032 | |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1890 | 1890 | 1890 | 1890 | 225 | 0.119 | | 310 | 0.164 | 0.164 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 67% | 91% | 2105 | 2105 | 2025 | 1995 | 2025 | 1995 | 285 | 0.141 | 0.141 | 225 | 0.113 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

Traffic Flow (pcu / hr) AM(PM)



Left: 115(110)
Straight: 1140(1005)
Right: 210(110)



Right: 190(205)
Straight: 95(20)
Left: 225(310)

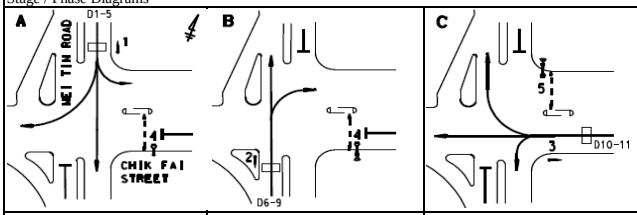


Straight: 895(905)
Right: 175(60)

| A.M. Check Phase | |
|---|---|
| εy | 0.466 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 71% |

| P.M. Check Phase | |
|---|---|
| εy | 0.470 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 69% |

Stage / Phase Diagrams




| I/G = 6s | I/G = 6s | I/G = 5s |
|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 100% | 2065 | 2065 | 2005 | 2005 | 2005 | 2005 | 460 | 0.229 | | 785 | 0.392 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 221 | 0.113 | 0.113 | 172 | 0.087 | 0.087 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 237 | 0.113 | | 184 | 0.087 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 237 | 0.113 | | 184 | 0.087 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6315 | 2105 | 2105 | 6315 | 6315 | 153 | 0.073 | | 145 | 0.069 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 153 | 0.073 | | 145 | 0.069 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 153 | 0.073 | | 145 | 0.069 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 264 | 0.133 | 0.133 | 216 | 0.109 | 0.109 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 261 | 0.133 | | 214 | 0.109 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 100% | 1965 | 4120 | 1830 | 1830 | 3865 | 3865 | 211 | 0.115 | 0.115 | 206 | 0.113 | 0.113 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 100% | 2155 | 0 | 2035 | 2035 | 0 | 0 | 234 | 0.115 | | 229 | 0.113 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 100% | 1965 | 3930 | 1855 | 1855 | 3685 | 3685 | 143 | 0.077 | | 204 | 0.110 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 100% | 1965 | 0 | 1830 | 1830 | 0 | 0 | 142 | 0.077 | | 201 | 0.110 | |

| Pedestrian Phase | | | |
|---|---|---|---|
| | P1 | A | green time =06Gm+15Fm=21s |
| | P2 | B | green time =17Gm+07Fm=24s |
| | P3 | B, C | green time =27Gm+09Fm=36s |
| | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

Left: 460(785)
Straight: 695(540)

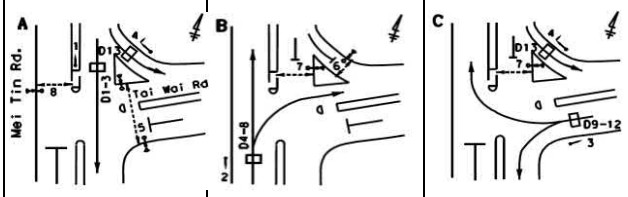
Right: 285(405)
Left: 445(435)

Straight: 460(435)
Right: 525(430)

| A.M. Check Phase | |
|---|---|
| εy | 0.361 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 125% |

| P.M. Check Phase | |
|---|---|
| εy | 0.309 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 162% |

Stage / Phase Diagrams




I/G = 5s | I/G = 5s | I/G = 5s

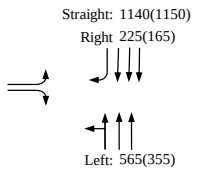
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 0 | 15 | 0 | 100% | 100% | 2105 | 2105 | 1915 | 1915 | 1915 | 1915 | 225 | 0.117 | | 165 | 0.086 | |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6175 | 2105 | 2105 | 6175 | 6175 | 389 | 0.185 | 0.185 | 392 | 0.186 | 0.186 |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 389 | 0.185 | | 392 | 0.186 | |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 0 | 1965 | 1965 | 0 | 0 | 363 | 0.185 | | 366 | 0.186 | |
| Mei Tin Road | N | | 3 | B | 3.5 | 15 | 0 | 1 | 100% | 78% | 1965 | 6175 | 1785 | 1825 | 5995 | 6035 | 565 | 0.317 | 0.317 | 458 | 0.251 | 0.251 |
| | N | | 3 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 600 | 0.285 | | 529 | 0.251 | |
| | N | | 3 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 600 | 0.285 | | 529 | 0.251 | |
| Chik Wan Street | E | | 4 | C | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 305 | 0.171 | 0.171 | 345 | 0.193 | 0.193 |
| | E | | 4 | C | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 123 | 0.062 | | 146 | 0.074 | |
| | E | | 4 | C | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 122 | 0.062 | | 144 | 0.074 | |

Notes:

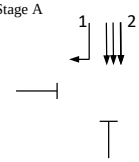
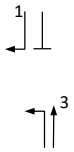
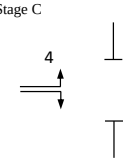
Traffic Flow (pcu / hr) AM(PM)




| A.M. Check Phase | |
|---|---|
| εy | 0.672 |
| L (sec) | 15 |
| C (sec) | 120 |
| y pract. | 0.788 |
| R.C. (%) | 17% |

| P.M. Check Phase | |
|---|---|
| εy | 0.437 |
| L (sec) | 15 |
| C (sec) | 120 |
| y pract. | 0.788 |
| R.C. (%) | 80% |

Stage / Phase Diagrams

| Stage A | Stage B | Stage C |
|---|---|---|
|   |   |   |
| I/G = 6s | I/G = 6s | I/G = 6s |

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 50 | 0.028 | | 55 | 0.031 | |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4210 | 4210 | 253 | 0.120 | 0.120 | 158 | 0.075 | 0.075 |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 253 | 0.120 | | 158 | 0.075 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 370 | 0.207 | 0.207 | 480 | 0.269 | 0.269 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 4070 | 1960 | 1960 | 3745 | 3745 | 126 | 0.064 | | 102 | 0.052 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 100% | 1965 | 0 | 1785 | 1785 | 0 | 0 | 114 | 0.064 | | 93 | 0.052 | |
| Pedestrian Phase | | ⇐⇒ | 3p | B,C | green time =68Gm+09Fm=77s | | | | | | | | | | | | | | | | | |
| | | ⇐⇒ | 4p | C | green time =38Gm+12Fm=50s | | | | | | | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

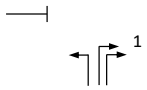
Left: 50(55)
Straight: 505(315)
Right: 240(195)
Left: 370(480)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.327 |
| L (sec) | 62 |
| C (sec) | 120 |
| y pract. | 0.435 |
| R.C. (%) | 33% |

| P.M. Check Phase | |
|---|---|
| εy | 0.344 |
| L (sec) | 62 |
| C (sec) | 120 |
| y pract. | 0.435 |
| R.C. (%) | 27% |

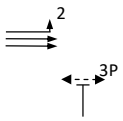
Stage / Phase Diagrams

Stage A



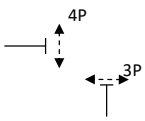

I/G = 3s

Stage B




I/G = 6s

Stage C All PED. (50s)




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

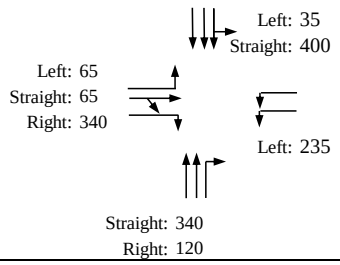
Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 2115 | 2115 | 1960 | 1960 | 65 | 0.033 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 69% | 2255 | 4510 | 2145 | 4105 | 212 | 0.099 | 0.099 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 2255 | 0 | 1960 | 0 | 193 | 0.099 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 1915 | 3970 | 1665 | 3505 | 112 | 0.067 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 2055 | 0 | 1840 | 0 | 123 | 0.067 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 1915 | 3970 | 1915 | 3970 | 164 | 0.086 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 176 | 0.086 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 2055 | 2055 | 1855 | 1855 | 120 | 0.065 | 0.065 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 25% | 1915 | 6025 | 1895 | 6005 | 137 | 0.072 | 0.072 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 149 | 0.072 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 149 | 0.072 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | 7p | A,B,D | green time =50Gm+08Fm=58s | |
| | 8p | B,C,D | green time =49Gm+08Fm=57s | |
| | 9p | B,C,D | green time =49Gm+08Fm=57s | |
| | 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr)

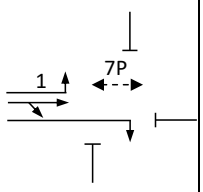



A.M. Check Phase

| | |
|---|---|
| εy | 0.236 |
| L (sec) | 40 |
| C (sec) | 90 |
| y pract. | 0.500 |
| R.C. (%) | 112% |

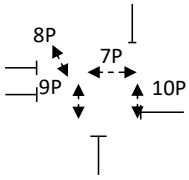
Stage / Phase Diagrams

Stage A



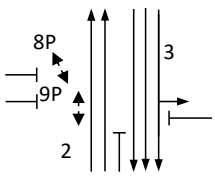

I/G = 5s

Stage B All PED. (25s)



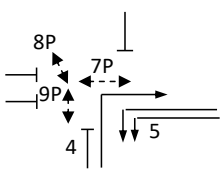

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

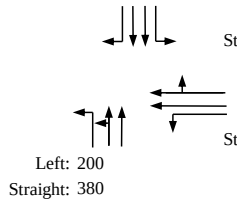
Junction: **(B) Tsing Sha Highway/ Mei Tin Road**

Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) Peak Hour | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) Peak Hour | Total Revised Saturation Flow (pcu/hr) Peak Hour | Peak Hour Flow (pcu/hr) | Peak Hour y Value | Peak Hour Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 2105 | 0 | 1870 | 0 | 100 | 0.053 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 3975 | 50 | 0.024 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 200 | 0.110 | 0.110 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 1945 | 6135 | 1770 | 5940 | 173 | 0.098 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 13% | 2085 | 0 | 2065 | 0 | 202 | 0.098 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 206 | 0.098 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 4170 | 2085 | 4170 | 315 | 0.151 | 0.151 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 0 | 2085 | 0 | 315 | 0.151 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 40 | 0.021 | |

Notes:

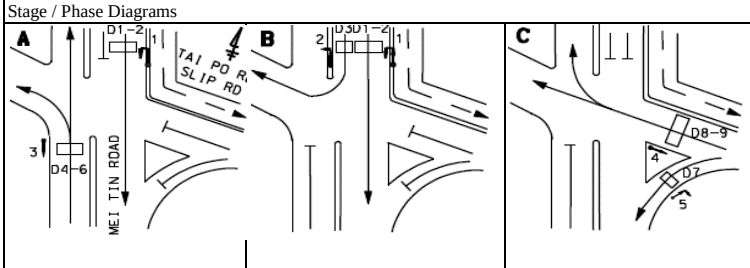
Traffic Flow (pcu / hr)




Peak Hour Check Phase

| | |
|---|---|
| εy | 0.261 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 207% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

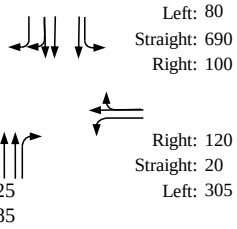
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 80 | 0.044 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 8420 | 2105 | 8300 | 230 | 0.109 | 0.109 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 230 | 0.109 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 2105 | 0 | 2105 | 0 | 230 | 0.109 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 2105 | 0 | 1985 | 0 | 100 | 0.050 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 199 | 0.101 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 213 | 0.101 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 213 | 0.101 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 485 | 0.255 | 0.255 |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 1965 | 1965 | 1890 | 1890 | 305 | 0.161 | 0.161 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 86% | 2105 | 2105 | 2000 | 2000 | 140 | 0.070 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

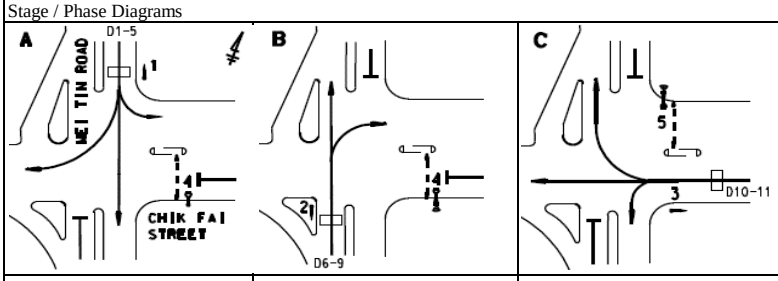
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.526 |
| L (sec) | 14 |
| C (sec) | 90 |
| y pract. | 0.760 |
| R.C. (%) | 45% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**

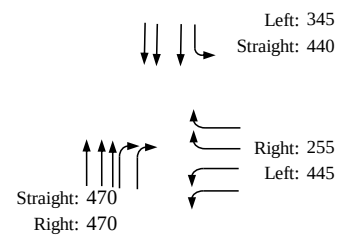
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 2065 | 2065 | 2005 | 2005 | 345 | 0.172 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 140 | 0.071 | 0.071 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 150 | 0.071 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 150 | 0.071 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6315 | 2105 | 6315 | 157 | 0.074 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 157 | 0.074 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 157 | 0.074 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 236 | 0.119 | 0.119 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 234 | 0.119 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 1965 | 4120 | 1830 | 3865 | 211 | 0.115 | 0.115 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 2155 | 0 | 2035 | 0 | 234 | 0.115 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 1965 | 3930 | 1855 | 3685 | 128 | 0.069 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 1965 | 0 | 1830 | 0 | 127 | 0.069 | |

| | | | | |
|---|---|---|---|---|
| Pedestrian Phase | <····> | P1 | A | green time =06Gm+15Fm=21s |
| | <····> | P2 | B | green time =17Gm+07Fm=24s |
| | <····> | P3 | B, C | green time =27Gm+09Fm=36s |
| | <····> | P4 | A | green time =05Gm+10Fm=15s |

Notes:

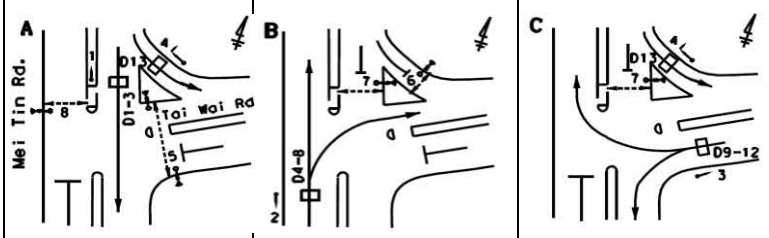
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.306 |
| L (sec) | 12 |
| C (sec) | 90 |
| y pract. | 0.780 |
| R.C. (%) | 155% |

Stage / Phase Diagrams




| | | |
|---|---|---|
| I/G = 5s | I/G = 5s | I/G = 5s |

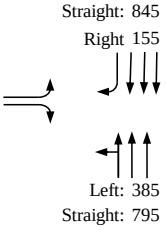
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | A | 3.5 | 0 | 15 | 0 | 100% | 2105 | 2105 | 1915 | 1915 | 155 | 0.081 | |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6175 | 2105 | 6175 | 288 | 0.137 | 0.137 |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 288 | 0.137 | |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 0 | 1965 | 0 | 269 | 0.137 | |
| Mei Tin Road | N | | 3 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 6175 | 1785 | 5995 | 385 | 0.216 | 0.216 |
| | N | | 3 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 398 | 0.189 | |
| | N | | 3 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 398 | 0.189 | |
| Chik Wan Street | E | | 4 | C | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 345 | 0.193 | 0.193 |
| | E | | 4 | C | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 131 | 0.066 | |
| | E | | 4 | C | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 129 | 0.066 | |

Notes:

Traffic Flow (pcu / hr)

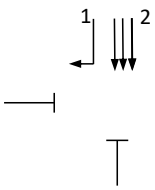



A.M. Check Phase

| | |
|---|---|
| εy | 0.546 |
| L (sec) | 15 |
| C (sec) | 90 |
| y pract. | 0.750 |
| R.C. (%) | 37% |

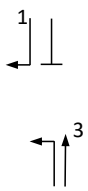
Stage / Phase Diagrams

A



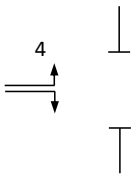

I/G = 6s

B




I/G = 6s

C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) Peak Hour | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) Peak Hour | Total Revised Saturation Flow (pcu/hr) Peak Hour | Peak Hour Flow (pcu/hr) | Peak Hour y Value | Peak Hour Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 15 | 0.008 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 4210 | 163 | 0.077 | 0.077 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 163 | 0.077 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 320 | 0.179 | 0.179 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 2105 | 4070 | 1960 | 3745 | 73 | 0.037 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 1965 | 0 | 1785 | 0 | 67 | 0.037 | |
| Pedestrian Phase | | | 3p | B,C | green time =68Gm+09Fm=77s | | | | | | | | | | | |
| | | | 4p | C | green time =28Gm+12Fm=40s | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr)

Left: 15
Straight: 325

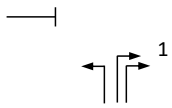
Right: 140
Left: 320

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.256 |
| L (sec) | 52 |
| C (sec) | 90 |
| y pract. | 0.380 |
| R.C. (%) | 48% |

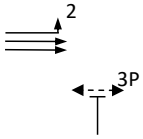
Stage / Phase Diagrams

A



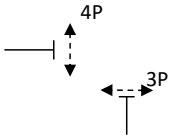

I/G = 3s

B




I/G = 6s

C All PED. (40s)




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2027 DESIGN TRAFFIC FLOWS**

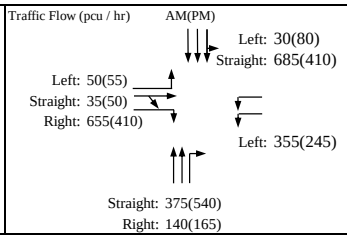
| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 100% | 2115 | 2115 | 1960 | 1960 | 1960 | 1960 | 50 | 0.026 | | 55 | 0.028 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 90% | 79% | 2255 | 4510 | 2110 | 2130 | 4070 | 4090 | 358 | 0.170 | 0.170 | 239 | 0.112 | 0.113 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 100% | 2255 | 0 | 1960 | 1960 | 0 | 0 | 332 | 0.169 | | 221 | 0.113 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 100% | 1915 | 3970 | 1665 | 1665 | 3505 | 3505 | 169 | 0.101 | | 116 | 0.070 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 100% | 2055 | 0 | 1840 | 1840 | 0 | 0 | 186 | 0.101 | | 129 | 0.070 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 0% | 1915 | 3970 | 1915 | 1915 | 3970 | 3970 | 181 | 0.094 | | 260 | 0.136 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 194 | 0.094 | | 280 | 0.136 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 100% | 2055 | 2055 | 1855 | 1855 | 1855 | 1855 | 140 | 0.075 | 0.075 | 165 | 0.089 | 0.089 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 13% | 52% | 1915 | 6025 | 1905 | 1875 | 6015 | 5985 | 226 | 0.119 | 0.119 | 154 | 0.082 | 0.082 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 244 | 0.119 | | 168 | 0.082 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 244 | 0.119 | | 168 | 0.082 | |

Pedestrian Phase

| | | | |
|---|---|---|---|
| 7p | A,B,D | green time =50Gm+08Fm=58s | |
| 8p | B,C,D | green time =49Gm+08Fm=57s | |
| 9p | B,C,D | green time =49Gm+08Fm=57s | |
| 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

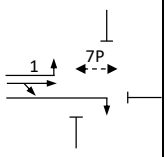



| A.M. Check Phase | |
|---|---|
| εy | 0.364 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 65% |

| P.M. Check Phase | |
|---|---|
| εy | 0.283 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 112% |

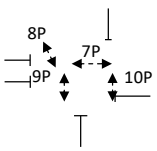
Stage / Phase Diagrams

Stage A



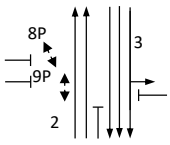

I/G = 5s

Stage B All PED. (25s)



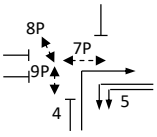

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 100% | 2105 | 0 | 1870 | 1870 | 0 | 0 | 90 | 0.048 | | 150 | 0.080 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 3975 | 3975 | 85 | 0.040 | | 95 | 0.045 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 250 | 0.137 | 0.137 | 580 | 0.319 | 0.319 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 100% | 1945 | 6135 | 1770 | 1770 | 5905 | 5885 | 307 | 0.174 | | 320 | 0.181 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 38% | 51% | 2085 | 0 | 2030 | 2010 | 0 | 0 | 352 | 0.173 | | 364 | 0.181 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 366 | 0.174 | | 381 | 0.181 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 4170 | 2085 | 2085 | 4170 | 4170 | 623 | 0.299 | 0.299 | 398 | 0.191 | 0.191 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 0 | 2085 | 2085 | 0 | 0 | 623 | 0.299 | | 398 | 0.191 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 90 | 0.047 | | 80 | 0.042 | |

Notes:

Traffic Flow (pcu / hr)

Right: 90(80)
Straight: 1245(795)
Left: free flow

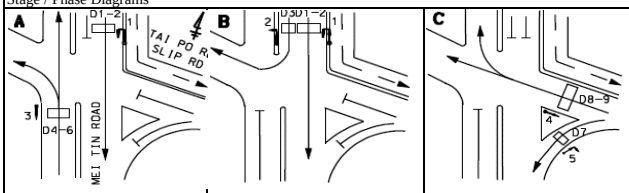
Right: 90(150)
Straight: 85(95)
Left: 250(580)

Left: 440(505)
Straight: 585(560)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.436 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 89% |

| P.M. Check Phase | |
|---|---|
| εy | 0.509 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 62% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 115 | 0.063 | | 110 | 0.060 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 8420 | 2105 | 2105 | 8300 | 8300 | 383 | 0.182 | 0.182 | 338 | 0.161 | 0.161 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 383 | 0.182 | | 338 | 0.161 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 383 | 0.182 | | 338 | 0.161 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 0 | 1985 | 1985 | 0 | 0 | 215 | 0.108 | | 115 | 0.058 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 288 | 0.147 | 0.147 | 291 | 0.148 | 0.148 |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 309 | 0.147 | | 312 | 0.148 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 309 | 0.147 | | 312 | 0.148 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 175 | 0.092 | | 60 | 0.032 | |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1890 | 1890 | 1890 | 1890 | 225 | 0.119 | | 310 | 0.164 | 0.164 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 67% | 91% | 2105 | 2105 | 2025 | 1995 | 2025 | 1995 | 285 | 0.141 | 0.141 | 225 | 0.113 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

Traffic Flow (pcu / hr) AM(PM)



Left: 115(110)
Straight: 1150(1015)
Right: 215(115)



Right: 190(205)
Straight: 95(20)
Left: 225(310)

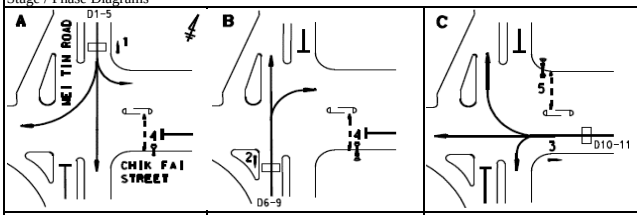


Straight: 905(915)
Right: 175(60)

| A.M. Check Phase | |
|---|---|
| εy | 0.469 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 69% |

| P.M. Check Phase | |
|---|---|
| εy | 0.473 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 68% |

Stage / Phase Diagrams




| I/G = 6s | I/G = 6s | I/G = 5s |
|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 100% | 2065 | 2065 | 2005 | 2005 | 2005 | 2005 | 460 | 0.229 | | 785 | 0.392 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 224 | 0.114 | 0.114 | 175 | 0.089 | 0.089 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 240 | 0.114 | | 187 | 0.089 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 240 | 0.114 | | 187 | 0.089 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6315 | 2105 | 2105 | 6315 | 6315 | 157 | 0.074 | | 148 | 0.070 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 157 | 0.074 | | 148 | 0.070 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 157 | 0.074 | | 148 | 0.070 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 264 | 0.133 | 0.133 | 216 | 0.109 | 0.109 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 261 | 0.133 | | 214 | 0.109 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 100% | 1965 | 4120 | 1830 | 1830 | 3865 | 3865 | 211 | 0.115 | 0.115 | 206 | 0.113 | 0.113 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 100% | 2155 | 0 | 2035 | 2035 | 0 | 0 | 234 | 0.115 | | 229 | 0.113 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 100% | 1965 | 3930 | 1855 | 1855 | 3685 | 3685 | 143 | 0.077 | | 204 | 0.110 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 100% | 1965 | 0 | 1830 | 1830 | 0 | 0 | 142 | 0.077 | | 201 | 0.110 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | P1 | A | green time =06Gm+15Fm=21s |
| | P2 | B | green time =17Gm+07Fm=24s |
| | P3 | B, C | green time =27Gm+09Fm=36s |
| | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

Left: 460(785)
Straight: 705(550)

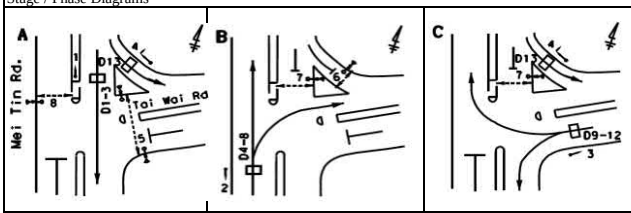
Right: 285(405)
Left: 445(435)

Straight: 470(445)
Right: 525(430)

| A.M. Check Phase | |
|---|---|
| εy | 0.362 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 124% |

| P.M. Check Phase | |
|---|---|
| εy | 0.311 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 161% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s |
|---|---|---|

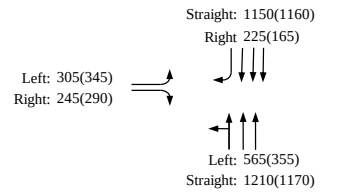
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 0 | 15 | 0 | 100% | 100% | 2105 | 2105 | 1915 | 1915 | 1915 | 1915 | 225 | 0.117 | | 165 | 0.086 | |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6175 | 2105 | 2105 | 6175 | 6175 | 392 | 0.186 | 0.186 | 395 | 0.188 | 0.188 |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 392 | 0.186 | | 395 | 0.188 | |
| | S | | 2 | A,B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 0 | 1965 | 1965 | 0 | 0 | 366 | 0.186 | | 369 | 0.188 | |
| Mei Tin Road | N | | 3 | B | 3.5 | 15 | 0 | 1 | 100% | 77% | 1965 | 6175 | 1785 | 1825 | 5995 | 6035 | 565 | 0.317 | 0.317 | 461 | 0.253 | 0.253 |
| | N | | 3 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 605 | 0.287 | | 532 | 0.253 | |
| | N | | 3 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 605 | 0.287 | | 532 | 0.253 | |
| Chik Wan Street | E | | 4 | C | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 305 | 0.171 | 0.171 | 345 | 0.193 | 0.193 |
| | E | | 4 | C | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 123 | 0.062 | | 146 | 0.074 | |
| | E | | 4 | C | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 122 | 0.062 | | 144 | 0.074 | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

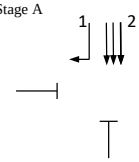



| A.M. Check Phase | |
|---|---|
| εy | 0.674 |
| L (sec) | 15 |
| C (sec) | 120 |
| y pract. | 0.788 |
| R.C. (%) | 17% |

| P.M. Check Phase | |
|---|---|
| εy | 0.441 |
| L (sec) | 15 |
| C (sec) | 120 |
| y pract. | 0.788 |
| R.C. (%) | 79% |

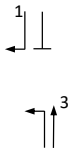
Stage / Phase Diagrams

Stage A



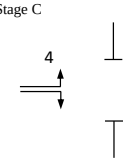

I/G = 6s

Stage B




I/G = 6s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 50 | 0.028 | | 55 | 0.031 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4210 | 4210 | 253 | 0.120 | 0.120 | 158 | 0.075 | 0.075 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 253 | 0.120 | | 158 | 0.075 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 370 | 0.207 | 0.207 | 480 | 0.269 | 0.269 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 4070 | 1960 | 1960 | 3745 | 3745 | 126 | 0.064 | | 102 | 0.052 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 100% | 1965 | 0 | 1785 | 1785 | 0 | 0 | 114 | 0.064 | | 93 | 0.052 | |
| Pedestrian Phase | | | 3p | B,C | green time =68Gm+09Fm=77s | | | | | | | | | | | | | | | | | |
| | | | 4p | C | green time =38Gm+12Fm=50s | | | | | | | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

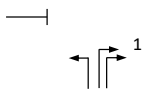
Left: 50(55)
Straight: 505(315)
Right: 240(195)
Left: 370(480)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.327 |
| L (sec) | 62 |
| C (sec) | 120 |
| y pract. | 0.435 |
| R.C. (%) | 33% |

| P.M. Check Phase | |
|---|---|
| εy | 0.344 |
| L (sec) | 62 |
| C (sec) | 120 |
| y pract. | 0.435 |
| R.C. (%) | 27% |

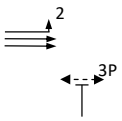
Stage / Phase Diagrams

Stage A



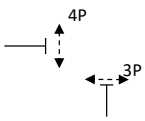

I/G = 3s

Stage B




I/G = 6s

Stage C All PED. (50s)




I/G = 5s

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction D (CM_p2).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-03-30
**Report generation date:** 31/3/2023 10:36:24

» (Default Analysis Set) - 2018 observed traffic flow, Ching Ming Festival Peak Hour
» (Default Analysis Set) - 2027 reference traffic flow, Ching Ming Festival Peak Hour
» (Default Analysis Set) - 2027 design traffic flow, Ching Ming Festival Peak Hour

## Summary of junction performance

| | Ching Ming Festival Peak Hour | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS |
| | A1 - 2018 observed traffic flow | | | |
| Stream B-AC | 0.26 | 9.48 | 0.21 | A |
| Stream C-A | - | - | - | - |
| Stream C-B | 0.01 | 6.46 | 0.01 | A |
| Stream A-B | - | - | - | - |
| Stream A-C | - | - | - | - |
| | A1 - 2027 design traffic flow | | | |
| Stream B-AC | 0.63 | 12.63 | 0.39 | B |
| Stream C-A | - | - | - | - |
| Stream C-B | 0.01 | 6.62 | 0.01 | A |
| Stream A-B | - | - | - | - |
| Stream A-C | - | - | - | - |
| | A1 - 2027 reference traffic flow | | | |
| Stream B-AC | 0.62 | 12.51 | 0.38 | B |
| Stream C-A | - | - | - | - |
| Stream C-B | 0.01 | 6.62 | 0.01 | A |
| Stream A-B | - | - | - | - |
| Stream A-C | - | - | - | - |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour " model duration: 13:30 - 14:30*
*"D2 - 2027 reference traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 14:30*
*"D3 - 2027 design traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 14:30*

*Run using Junctions 8.0.5.523 at 31/3/2023 10:36:22*

## File summary

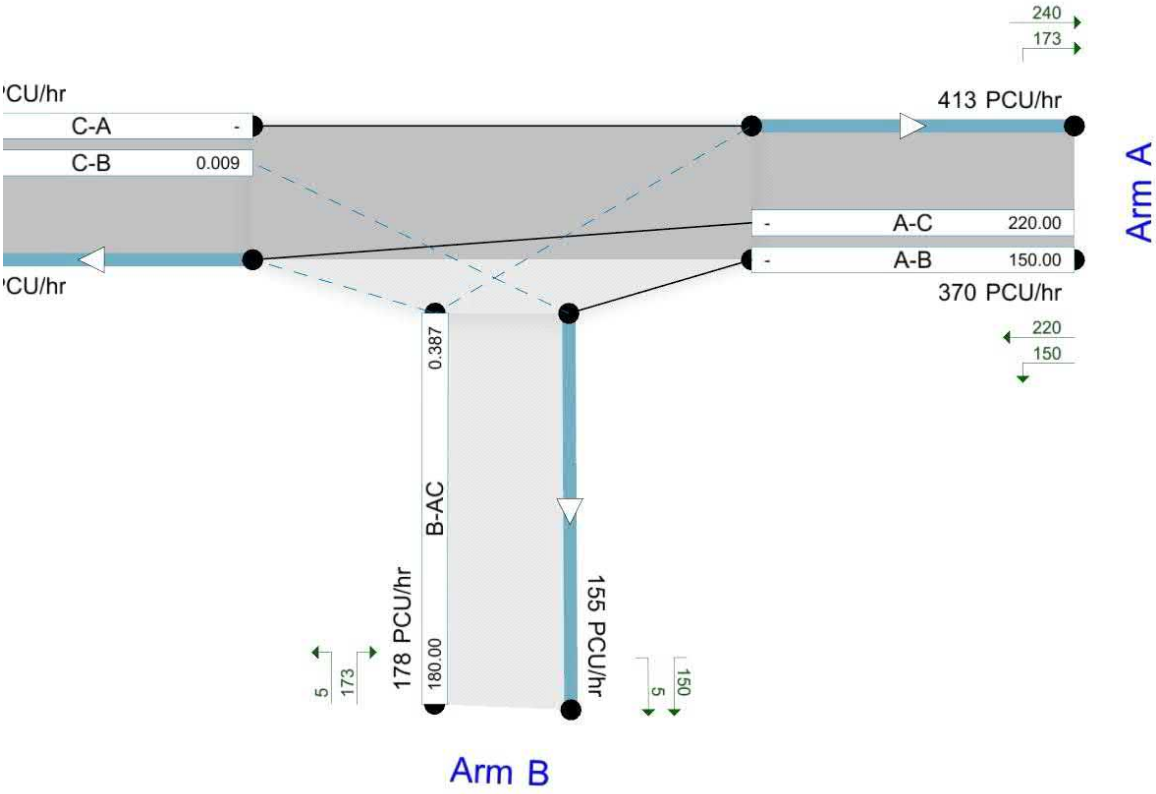
| | |
|---|---|
| **Title** | Tai Wai Temple |
| **Location** | Tai Wai |
| **Site Number** | |
| **Date** | 8/5/2017 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing modelled flow through junction (PCU/hr).
Streams (upstreams) show Total Demand (PCU/hr); Streams (downstreams) show RFC ()
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 "; Demand Set "D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# (Default Analysis Set) - 2018 observed traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 observed traffic flow, Ching Ming Festival Peak Hour | 2018 observed traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 9.34 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 275.00 | 100.000 |
| B | FLAT | ✓ | 100.00 | 100.000 |
| C | FLAT | ✓ | 210.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 85.000 | 190.000 |
| | B | 95.000 | 0.000 | 5.000 |
| | C | 205.000 | 5.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.31 | 0.69 |
| | B | 0.95 | 0.00 | 0.05 |
| | C | 0.98 | 0.02 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.21 | 9.48 | 0.26 | A |
| C-A | - | - | - | - |
| C-B | 0.01 | 6.46 | 0.01 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 98.96 | 0.00 | 479.70 | 0.208 | 0.26 | 9.430 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 4.96 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 99.99 | 0.00 | 479.69 | 0.208 | 0.26 | 9.480 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 479.69 | 0.208 | 0.26 | 9.480 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 479.69 | 0.208 | 0.26 | 9.480 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 reference traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Ching Ming Festival Peak Hour | 2027 reference traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 12.35 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| A | A | (untitled) | | Major |
| B | B | (untitled) | | Minor |
| C | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| 1 | B-C | 668.537 | 0.065 | 0.163 | - | - |
| 1 | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 365.00 | 100.000 |
| B | FLAT | ✓ | 180.00 | 100.000 |
| C | FLAT | ✓ | 230.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 155.000 | 210.000 |
| | B | 175.000 | 0.000 | 5.000 |
| | C | 225.000 | 5.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.42 | 0.58 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 0.98 | 0.02 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

### Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.38 | 12.51 | 0.62 | B |
| C-A | - | - | - | - |
| C-B | 0.01 | 6.62 | 0.01 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 180.00 | 177.55 | 0.00 | 467.77 | 0.385 | 0.61 | 12.306 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 4.96 | 0.00 | 549.18 | 0.009 | 0.01 | 6.614 | A |
| A-B | 155.00 | 155.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 180.00 | 179.97 | 0.00 | 467.76 | 0.385 | 0.62 | 12.507 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 549.18 | 0.009 | 0.01 | 6.614 | A |
| A-B | 155.00 | 155.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 180.00 | 179.99 | 0.00 | 467.76 | 0.385 | 0.62 | 12.509 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 549.18 | 0.009 | 0.01 | 6.617 | A |
| A-B | 155.00 | 155.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 180.00 | 180.00 | 0.00 | 467.76 | 0.385 | 0.62 | 12.509 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 549.18 | 0.009 | 0.01 | 6.617 | A |
| A-B | 155.00 | 155.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 design traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Ching Ming Festival Peak Hour | 2027 design traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 12.46 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 370.00 | 100.000 |
| B | FLAT | ✓ | 180.00 | 100.000 |
| C | FLAT | ✓ | 245.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 150.000 | 220.000 |
| | B | 175.000 | 0.000 | 5.000 |
| | C | 240.000 | 5.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.41 | 0.59 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 0.98 | 0.02 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.39 | 12.63 | 0.63 | B |
| C-A | - | - | - | - |
| C-B | 0.01 | 6.62 | 0.01 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 180.00 | 177.53 | 0.00 | 465.10 | 0.387 | 0.62 | 12.416 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 4.96 | 0.00 | 548.45 | 0.009 | 0.01 | 6.623 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 180.00 | 179.97 | 0.00 | 465.10 | 0.387 | 0.62 | 12.624 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 548.45 | 0.009 | 0.01 | 6.623 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 180.00 | 179.99 | 0.00 | 465.10 | 0.387 | 0.63 | 12.626 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 548.45 | 0.009 | 0.01 | 6.623 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

## Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 180.00 | 180.00 | 0.00 | 465.10 | 0.387 | 0.63 | 12.626 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 548.45 | 0.009 | 0.01 | 6.623 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction D (Weekday).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-04-04
**Report generation date:** 12/4/2023 14:09:54

» (Default Analysis Set) - 2027 reference traffic flow, Weekday AM Peak Hour
» (Default Analysis Set) - 2027 design traffic flow, Weekday AM Peak Hour
» (Default Analysis Set) - 2027 reference traffic flow, Weekday PM Peak Hour
» (Default Analysis Set) - 2027 design traffic flow, Weekday PM Peak Hour
» (Default Analysis Set) - 2021 observed traffic flow, Weekday AM Peak Hour
» (Default Analysis Set) - 2021 observed traffic flow, Weekday PM Peak Hour

## Summary of junction performance

| | Weekday AM Peak Hour | | | | Weekday PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| | A1 - 2021 observed traffic flow | | | | | | | |
| Stream B-AC | 0.55 | 12.38 | 0.35 | B | 0.28 | 10.10 | 0.22 | B |
| Stream C-A | - | - | - | - | - | - | - | - |
| Stream C-B | 0.00 | 0.00 | 0.00 | A | 0.00 | 0.00 | 0.00 | A |
| Stream A-B | - | - | - | - | - | - | - | - |
| Stream A-C | - | - | - | - | - | - | - | - |
| | A1 - 2027 design traffic flow | | | | | | | |
| Stream B-AC | 1.92 | 25.18 | 0.66 | D | 0.78 | 14.92 | 0.44 | B |
| Stream C-A | - | - | - | - | - | - | - | - |
| Stream C-B | 0.00 | 0.00 | 0.00 | A | 0.00 | 0.00 | 0.00 | A |
| Stream A-B | - | - | - | - | - | - | - | - |
| Stream A-C | - | - | - | - | - | - | - | - |
| | A1 - 2027 reference traffic flow | | | | | | | |
| Stream B-AC | 1.88 | 24.54 | 0.66 | C | 0.77 | 14.69 | 0.44 | B |
| Stream C-A | - | - | - | - | - | - | - | - |
| Stream C-B | 0.00 | 0.00 | 0.00 | A | 0.00 | 0.00 | 0.00 | A |
| Stream A-B | - | - | - | - | - | - | - | - |
| Stream A-C | - | - | - | - | - | - | - | - |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D2 - 2027 reference traffic flow, Weekday AM Peak Hour " model duration: 13:30 - 14:30*
*"D3 - 2027 design traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 14:30*
*"D4 - 2027 reference traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 14:30*
*"D5 - 2027 design traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 14:30*
*"D6 - 2021 observed traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 14:30*
*"D7 - 2021 observed traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 14:30*

*Run using Junctions 8.0.5.523 at 12/4/2023 14:09:52*

## File summary

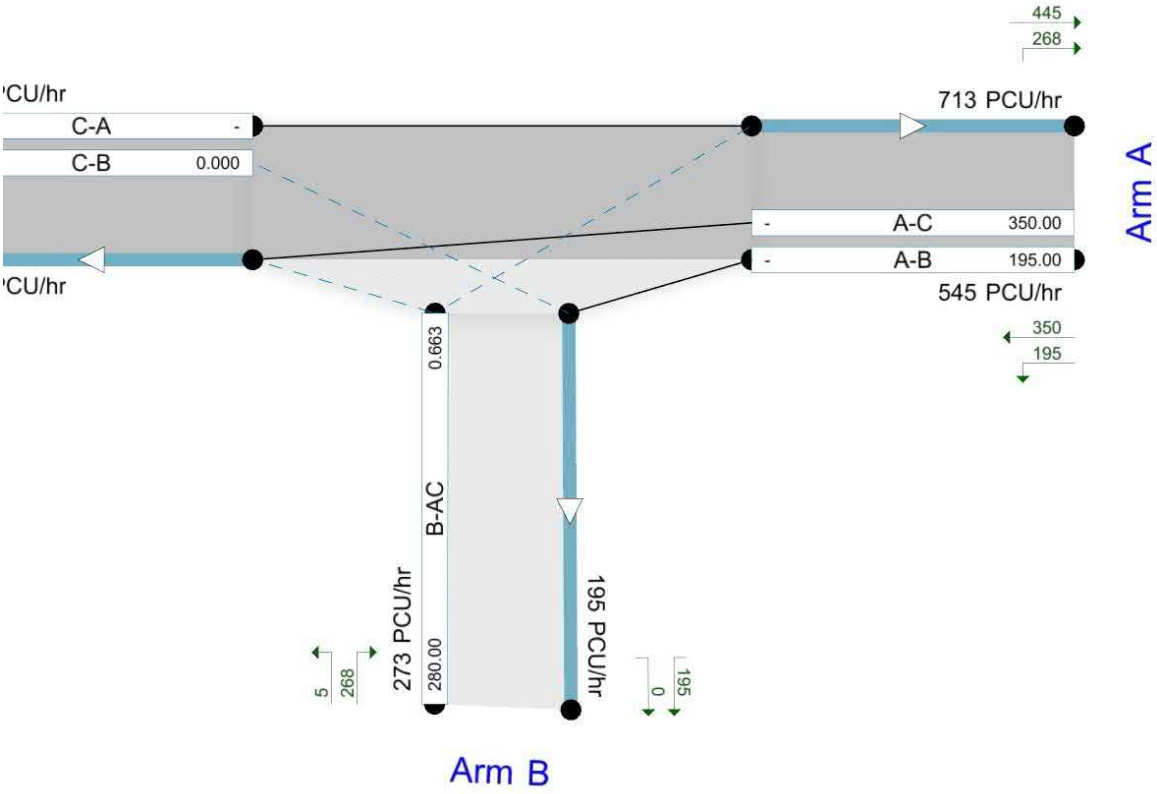
| | |
|---|---|
| **Title** | Tai Wai Temple |
| **Location** | Tai Wai |
| **Site Number** | |
| **Date** | 8/5/2017 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing modelled flow through junction (PCU/hr).
Streams (upstreams) show Total Demand (PCU/hr); Streams (downstreams) show RFC ()
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 "; Demand Set "D2 - 2027 reference traffic flow, Weekday AM Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# (Default Analysis Set) - 2027 reference traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday AM Peak Hour | 2027 reference traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 24.54 | C |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 530.00 | 100.000 |
| B | FLAT | ✓ | 280.00 | 100.000 |
| C | FLAT | ✓ | 430.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 195.000 | 335.000 |
| | B | 275.000 | 0.000 | 5.000 |
| | C | 430.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.37 | 0.63 |
| | B | 0.98 | 0.00 | 0.02 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.66 | 24.54 | 1.88 | C |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 280.00 | 272.89 | 0.00 | 426.38 | 0.657 | 1.78 | 22.536 | C |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.89 | 0.000 | 0.00 | 0.000 | A |
| A-B | 195.00 | 195.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 280.00 | 279.75 | 0.00 | 426.38 | 0.657 | 1.84 | 24.438 | C |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.89 | 0.000 | 0.00 | 0.000 | A |
| A-B | 195.00 | 195.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 280.00 | 279.91 | 0.00 | 426.38 | 0.657 | 1.86 | 24.511 | C |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.89 | 0.000 | 0.00 | 0.000 | A |
| A-B | 195.00 | 195.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 280.00 | 279.95 | 0.00 | 426.38 | 0.657 | 1.88 | 24.537 | C |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.89 | 0.000 | 0.00 | 0.000 | A |
| A-B | 195.00 | 195.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 design traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday AM Peak Hour | 2027 design traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 25.18 | D |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| A | A | (untitled) | | Major |
| B | B | (untitled) | | Minor |
| C | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| 1 | B-C | 668.537 | 0.065 | 0.163 | - | - |
| 1 | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 545.00 | 100.000 |
| B | FLAT | ✓ | 280.00 | 100.000 |
| C | FLAT | ✓ | 445.00 | 100.000 |

# Turning Proportions

#### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 195.000 | 350.000 |
| | B | 275.000 | 0.000 | 5.000 |
| | C | 445.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.36 | 0.64 |
| | B | 0.98 | 0.00 | 0.02 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.66 | 25.18 | 1.92 | D |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 280.00 | 272.72 | 0.00 | 422.64 | 0.663 | 1.82 | 23.037 | C |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 522.69 | 0.000 | 0.00 | 0.000 | A |
| A-B | 195.00 | 195.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 280.00 | 279.73 | 0.00 | 422.64 | 0.663 | 1.89 | 25.065 | D |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 522.69 | 0.000 | 0.00 | 0.000 | A |
| A-B | 195.00 | 195.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 280.00 | 279.90 | 0.00 | 422.64 | 0.663 | 1.91 | 25.146 | D |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 522.69 | 0.000 | 0.00 | 0.000 | A |
| A-B | 195.00 | 195.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 280.00 | 279.95 | 0.00 | 422.64 | 0.663 | 1.92 | 25.176 | D |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 522.69 | 0.000 | 0.00 | 0.000 | A |
| A-B | 195.00 | 195.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 reference traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday PM Peak Hour | 2027 reference traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 14.69 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 580.00 | 100.000 |
| B | FLAT | ✓ | 190.00 | 100.000 |
| C | FLAT | ✓ | 285.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 210.000 | 370.000 |
| | B | 185.000 | 0.000 | 5.000 |
| | C | 285.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.36 | 0.64 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.44 | 14.69 | 0.77 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 186.98 | 0.00 | 434.99 | 0.437 | 0.75 | 14.352 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 517.53 | 0.000 | 0.00 | 0.000 | A |
| A-B | 210.00 | 210.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.96 | 0.00 | 434.99 | 0.437 | 0.76 | 14.685 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 517.53 | 0.000 | 0.00 | 0.000 | A |
| A-B | 210.00 | 210.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.99 | 0.00 | 434.99 | 0.437 | 0.77 | 14.690 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 517.53 | 0.000 | 0.00 | 0.000 | A |
| A-B | 210.00 | 210.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.99 | 0.00 | 434.99 | 0.437 | 0.77 | 14.690 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 517.53 | 0.000 | 0.00 | 0.000 | A |
| A-B | 210.00 | 210.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 design traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday PM Peak Hour | 2027 design traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 14.92 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| 1 | B-C | 668.537 | 0.065 | 0.163 | - | - |
| 1 | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 595.00 | 100.000 |
| B | FLAT | ✓ | 190.00 | 100.000 |
| C | FLAT | ✓ | 300.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 210.000 | 385.000 |
| | B | 185.000 | 0.000 | 5.000 |
| | C | 300.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.35 | 0.65 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.44 | 14.92 | 0.78 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 186.94 | 0.00 | 431.25 | 0.441 | 0.77 | 14.562 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 515.32 | 0.000 | 0.00 | 0.000 | A |
| A-B | 210.00 | 210.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.96 | 0.00 | 431.25 | 0.441 | 0.78 | 14.912 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 515.32 | 0.000 | 0.00 | 0.000 | A |
| A-B | 210.00 | 210.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.98 | 0.00 | 431.25 | 0.441 | 0.78 | 14.918 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 515.32 | 0.000 | 0.00 | 0.000 | A |
| A-B | 210.00 | 210.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.99 | 0.00 | 431.25 | 0.441 | 0.78 | 14.918 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 515.32 | 0.000 | 0.00 | 0.000 | A |
| A-B | 210.00 | 210.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2021 observed traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday AM Peak Hour | 2021 observed traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 12.38 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| **A** | FLAT | ✓ | 350.00 | 100.000 |
| **B** | FLAT | ✓ | 160.00 | 100.000 |
| **C** | FLAT | ✓ | 360.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 70.000 | 280.000 |
| | B | 155.000 | 0.000 | 5.000 |
| | C | 360.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.20 | 0.80 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

### Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.35 | 12.38 | 0.55 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 157.84 | 0.00 | 450.83 | 0.355 | 0.54 | 12.201 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 159.98 | 0.00 | 450.83 | 0.355 | 0.54 | 12.375 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 159.99 | 0.00 | 450.83 | 0.355 | 0.55 | 12.377 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 160.00 | 0.00 | 450.83 | 0.355 | 0.55 | 12.377 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2021 observed traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday PM Peak Hour | 2021 observed traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 10.10 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 435.00 | 100.000 |
| B | FLAT | ✓ | 100.00 | 100.000 |
| C | FLAT | ✓ | 240.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 125.000 | 310.000 |
| | B | 95.000 | 0.000 | 5.000 |
| | C | 240.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.29 | 0.71 |
| | B | 0.95 | 0.00 | 0.05 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.22 | 10.10 | 0.28 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 98.89 | 0.00 | 456.53 | 0.219 | 0.28 | 10.035 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 99.99 | 0.00 | 456.53 | 0.219 | 0.28 | 10.096 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 456.53 | 0.219 | 0.28 | 10.096 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

## Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 456.53 | 0.219 | 0.28 | 10.096 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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**Filename:** Junction F (CM_p2).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-03-30
**Report generation date:** 31/3/2023 10:58:17

» 2018 observed traffic flow, Ching Ming Festival Peak Hour
» 2027 reference traffic flow, Ching Ming Festival Peak Hour
» 2027 design traffic flow, Ching Ming Festival Peak Hour

## Summary of junction performance

| | Ching Ming Festival Peak Hour | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS |
| | 2018 observed traffic flow | | | |
| Arm 1 | 0.22 | 1.36 | 0.18 | A |
| Arm 2 | 0.28 | 1.50 | 0.22 | A |
| Arm 3 | 0.51 | 1.64 | 0.34 | A |
| Arm 4 | 0.49 | 1.86 | 0.33 | A |
| | 2027 design traffic flow | | | |
| Arm 1 | 0.26 | 1.45 | 0.21 | A |
| Arm 2 | 0.39 | 1.67 | 0.28 | A |
| Arm 3 | 0.68 | 1.92 | 0.40 | A |
| Arm 4 | 0.68 | 2.21 | 0.40 | A |
| | 2027 reference traffic flow | | | |
| Arm 1 | 0.26 | 1.45 | 0.21 | A |
| Arm 2 | 0.39 | 1.66 | 0.28 | A |
| Arm 3 | 0.68 | 1.92 | 0.40 | A |
| Arm 4 | 0.67 | 2.21 | 0.40 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour " model duration: 13:30 - 15:00*
*"D2 - 2027 reference traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 31/3/2023 10:58:14*

## File summary

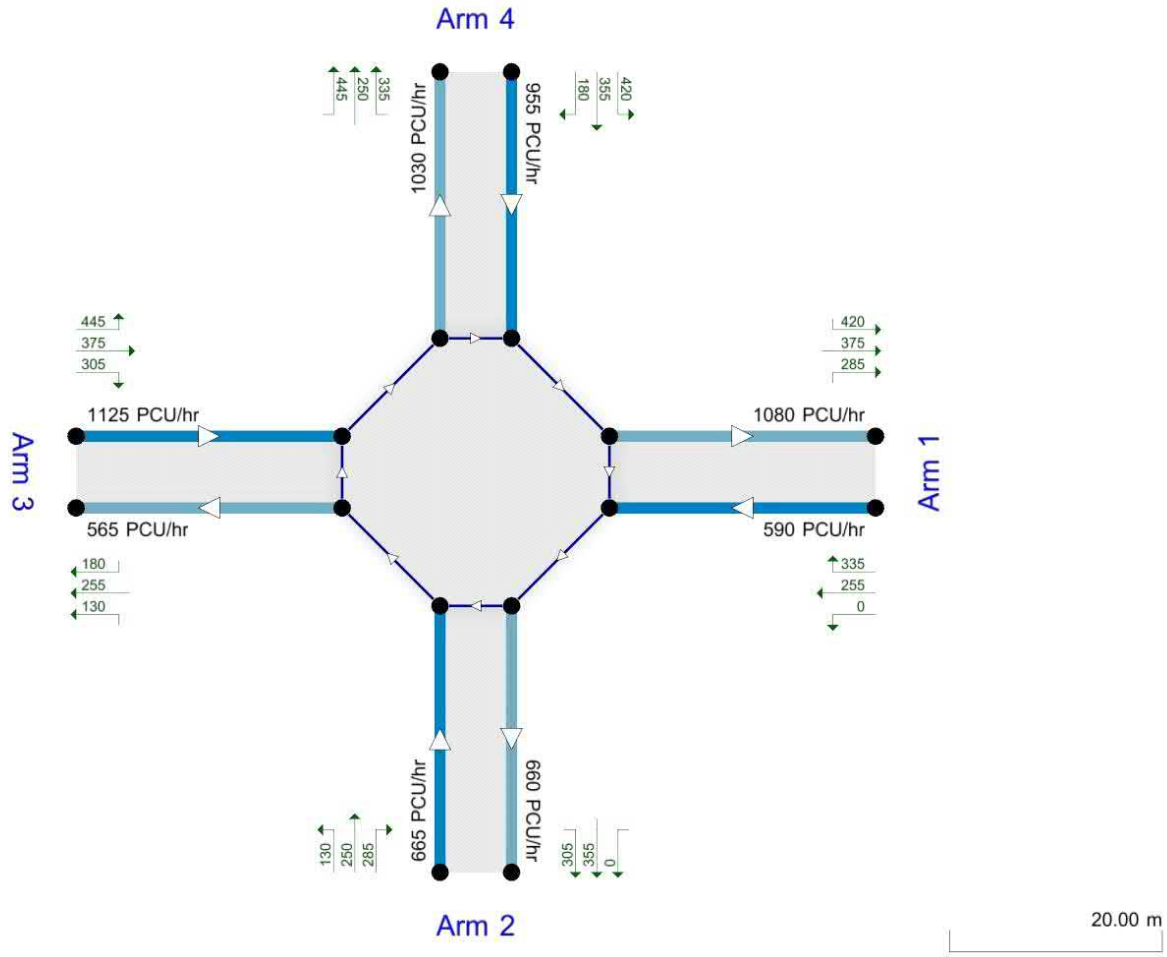
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2018 observed traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 observed traffic flow, Ching Ming Festival Peak Hour | 2018 observed traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.62 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Che Kung Mui Road WB | |
| **2** | 2 | Hung Mui Kuk Road | |
| **3** | 3 | Che Kung Mui Road EB | |
| **4** | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| **2** | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| **3** | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| **4** | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 590.00 | 100.000 |
| 2 | FLAT | ✓ | 665.00 | 100.000 |
| 3 | FLAT | ✓ | 1125.00 | 100.000 |
| 4 | FLAT | ✓ | 955.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 255.000 | 335.000 |
| | 2 | 285.000 | 0.000 | 130.000 | 250.000 |
| | 3 | 375.000 | 305.000 | 0.000 | 445.000 |
| | 4 | 420.000 | 355.000 | 180.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.43 | 0.57 |
| | 2 | 0.43 | 0.00 | 0.20 | 0.38 |
| | 3 | 0.33 | 0.27 | 0.00 | 0.40 |
| | 4 | 0.44 | 0.37 | 0.19 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.18 | 1.36 | 0.22 | A |
| 2 | 0.22 | 1.50 | 0.28 | A |
| 3 | 0.34 | 1.64 | 0.51 | A |
| 4 | 0.33 | 1.86 | 0.49 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 589.11 | 838.35 | 0.00 | 3233.12 | 0.182 | 0.22 | 1.361 | A |
| 2 | 665.00 | 663.89 | 768.74 | 0.00 | 3066.38 | 0.217 | 0.28 | 1.498 | A |
| 3 | 1125.00 | 1122.96 | 868.60 | 0.00 | 3323.24 | 0.339 | 0.51 | 1.634 | A |
| 4 | 955.00 | 953.04 | 963.29 | 0.00 | 2893.09 | 0.330 | 0.49 | 1.853 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

# 2027 reference traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Ching Ming Festival Peak Hour | 2027 reference traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.87 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 655.00 | 100.000 |
| 2 | FLAT | ✓ | 840.00 | 100.000 |
| 3 | FLAT | ✓ | 1270.00 | 100.000 |
| 4 | FLAT | ✓ | 1095.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 280.000 | 375.000 |
| | 2 | 390.000 | 0.000 | 140.000 | 310.000 |
| | 3 | 450.000 | 335.000 | 0.000 | 485.000 |
| | 4 | 470.000 | 430.000 | 195.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.43 | 0.57 |
| | 2 | 0.46 | 0.00 | 0.17 | 0.37 |
| | 3 | 0.35 | 0.26 | 0.00 | 0.38 |
| | 4 | 0.43 | 0.39 | 0.18 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.21 | 1.45 | 0.26 | A |
| 2 | 0.28 | 1.66 | 0.39 | A |
| 3 | 0.40 | 1.92 | 0.68 | A |
| 4 | 0.40 | 2.21 | 0.67 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 655.00 | 653.95 | 957.76 | 0.00 | 3134.51 | 0.209 | 0.26 | 1.451 | A |
| 2 | 840.00 | 838.45 | 848.47 | 0.00 | 3002.97 | 0.280 | 0.39 | 1.663 | A |
| 3 | 1270.00 | 1267.31 | 1073.11 | 0.00 | 3148.32 | 0.403 | 0.67 | 1.912 | A |
| 4 | 1095.00 | 1092.33 | 1172.61 | 0.00 | 2727.66 | 0.401 | 0.67 | 2.197 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 655.00 | 655.00 | 959.99 | 0.00 | 3132.67 | 0.209 | 0.26 | 1.452 | A |
| 2 | 840.00 | 840.00 | 850.00 | 0.00 | 3001.75 | 0.280 | 0.39 | 1.664 | A |
| 3 | 1270.00 | 1269.99 | 1075.00 | 0.00 | 3146.70 | 0.404 | 0.68 | 1.917 | A |
| 4 | 1095.00 | 1094.99 | 1174.99 | 0.00 | 2725.78 | 0.402 | 0.67 | 2.207 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 655.00 | 655.00 | 960.00 | 0.00 | 3132.67 | 0.209 | 0.26 | 1.452 | A |
| 2 | 840.00 | 840.00 | 850.00 | 0.00 | 3001.75 | 0.280 | 0.39 | 1.664 | A |
| 3 | 1270.00 | 1270.00 | 1075.00 | 0.00 | 3146.70 | 0.404 | 0.68 | 1.917 | A |
| 4 | 1095.00 | 1095.00 | 1175.00 | 0.00 | 2725.78 | 0.402 | 0.67 | 2.207 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 655.00 | 655.00 | 960.00 | 0.00 | 3132.67 | 0.209 | 0.26 | 1.452 | A |
| 2 | 840.00 | 840.00 | 850.00 | 0.00 | 3001.75 | 0.280 | 0.39 | 1.664 | A |
| 3 | 1270.00 | 1270.00 | 1075.00 | 0.00 | 3146.70 | 0.404 | 0.68 | 1.917 | A |
| 4 | 1095.00 | 1095.00 | 1175.00 | 0.00 | 2725.78 | 0.402 | 0.67 | 2.207 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 655.00 | 655.00 | 960.00 | 0.00 | 3132.67 | 0.209 | 0.26 | 1.452 | A |
| 2 | 840.00 | 840.00 | 850.00 | 0.00 | 3001.75 | 0.280 | 0.39 | 1.664 | A |
| 3 | 1270.00 | 1270.00 | 1075.00 | 0.00 | 3146.70 | 0.404 | 0.68 | 1.917 | A |
| 4 | 1095.00 | 1095.00 | 1175.00 | 0.00 | 2725.78 | 0.402 | 0.67 | 2.207 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 655.00 | 655.00 | 960.00 | 0.00 | 3132.67 | 0.209 | 0.26 | 1.452 | A |
| 2 | 840.00 | 840.00 | 850.00 | 0.00 | 3001.75 | 0.280 | 0.39 | 1.664 | A |
| 3 | 1270.00 | 1270.00 | 1075.00 | 0.00 | 3146.70 | 0.404 | 0.68 | 1.917 | A |
| 4 | 1095.00 | 1095.00 | 1175.00 | 0.00 | 2725.78 | 0.402 | 0.67 | 2.207 | A |

# 2027 design traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Ching Ming Festival Peak Hour | 2027 design traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.87 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 655.00 | 100.000 |
| 2 | FLAT | ✓ | 845.00 | 100.000 |
| 3 | FLAT | ✓ | 1270.00 | 100.000 |
| 4 | FLAT | ✓ | 1100.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 280.000 | 375.000 |
| | 2 | 390.000 | 0.000 | 140.000 | 315.000 |
| | 3 | 450.000 | 335.000 | 0.000 | 485.000 |
| | 4 | 470.000 | 435.000 | 195.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.43 | 0.57 |
| | 2 | 0.46 | 0.00 | 0.17 | 0.37 |
| | 3 | 0.35 | 0.26 | 0.00 | 0.38 |
| | 4 | 0.43 | 0.40 | 0.18 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.21 | 1.45 | 0.26 | A |
| 2 | 0.28 | 1.67 | 0.39 | A |
| 3 | 0.40 | 1.92 | 0.68 | A |
| 4 | 0.40 | 2.21 | 0.68 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 655.00 | 653.94 | 962.75 | 0.00 | 3130.40 | 0.209 | 0.26 | 1.453 | A |
| 2 | 845.00 | 843.44 | 848.47 | 0.00 | 3002.97 | 0.281 | 0.39 | 1.667 | A |
| 3 | 1270.00 | 1267.30 | 1078.09 | 0.00 | 3144.05 | 0.404 | 0.68 | 1.916 | A |
| 4 | 1100.00 | 1097.31 | 1172.61 | 0.00 | 2727.67 | 0.403 | 0.67 | 2.204 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 655.00 | 655.00 | 964.99 | 0.00 | 3128.54 | 0.209 | 0.26 | 1.454 | A |
| 2 | 845.00 | 845.00 | 850.00 | 0.00 | 3001.75 | 0.282 | 0.39 | 1.668 | A |
| 3 | 1270.00 | 1269.99 | 1080.00 | 0.00 | 3142.42 | 0.404 | 0.68 | 1.922 | A |
| 4 | 1100.00 | 1099.99 | 1174.99 | 0.00 | 2725.78 | 0.404 | 0.68 | 2.213 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 655.00 | 655.00 | 965.00 | 0.00 | 3128.54 | 0.209 | 0.26 | 1.454 | A |
| 2 | 845.00 | 845.00 | 850.00 | 0.00 | 3001.75 | 0.282 | 0.39 | 1.668 | A |
| 3 | 1270.00 | 1270.00 | 1080.00 | 0.00 | 3142.42 | 0.404 | 0.68 | 1.922 | A |
| 4 | 1100.00 | 1100.00 | 1175.00 | 0.00 | 2725.78 | 0.404 | 0.68 | 2.213 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 655.00 | 655.00 | 965.00 | 0.00 | 3128.54 | 0.209 | 0.26 | 1.454 | A |
| 2 | 845.00 | 845.00 | 850.00 | 0.00 | 3001.75 | 0.282 | 0.39 | 1.668 | A |
| 3 | 1270.00 | 1270.00 | 1080.00 | 0.00 | 3142.42 | 0.404 | 0.68 | 1.922 | A |
| 4 | 1100.00 | 1100.00 | 1175.00 | 0.00 | 2725.78 | 0.404 | 0.68 | 2.213 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 655.00 | 655.00 | 965.00 | 0.00 | 3128.54 | 0.209 | 0.26 | 1.454 | A |
| 2 | 845.00 | 845.00 | 850.00 | 0.00 | 3001.75 | 0.282 | 0.39 | 1.668 | A |
| 3 | 1270.00 | 1270.00 | 1080.00 | 0.00 | 3142.42 | 0.404 | 0.68 | 1.922 | A |
| 4 | 1100.00 | 1100.00 | 1175.00 | 0.00 | 2725.78 | 0.404 | 0.68 | 2.213 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 655.00 | 655.00 | 965.00 | 0.00 | 3128.54 | 0.209 | 0.26 | 1.454 | A |
| 2 | 845.00 | 845.00 | 850.00 | 0.00 | 3001.75 | 0.282 | 0.39 | 1.668 | A |
| 3 | 1270.00 | 1270.00 | 1080.00 | 0.00 | 3142.42 | 0.404 | 0.68 | 1.922 | A |
| 4 | 1100.00 | 1100.00 | 1175.00 | 0.00 | 2725.78 | 0.404 | 0.68 | 2.213 | A |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction F (Weekday).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-04-04
**Report generation date:** 12/4/2023 14:02:51

» 2027 reference traffic flow, Weekday AM Peak Hour
» 2027 design traffic flow, Weekday AM Peak Hour
» 2027 reference traffic flow, Weekday PM Peak Hour
» 2027 design traffic flow, Weekday PM Peak Hour
» 2021 observed traffic flow, Weekday AM Peak Hour
» 2021 observed traffic flow, Weekday PM Peak Hour

## Summary of junction performance

| | Weekday AM Peak Hour | | | | Weekday PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| **2021 observed traffic flow** | | | | | | | | |
| Arm 1 | 0.28 | 1.53 | 0.22 | A | 0.29 | 1.55 | 0.22 | A |
| Arm 2 | 0.38 | 1.71 | 0.28 | A | 0.39 | 1.73 | 0.28 | A |
| Arm 3 | 0.63 | 1.79 | 0.39 | A | 0.66 | 1.87 | 0.40 | A |
| Arm 4 | 0.75 | 2.20 | 0.43 | A | 0.74 | 2.17 | 0.42 | A |
| **2027 design traffic flow** | | | | | | | | |
| Arm 1 | 0.47 | 1.90 | 0.32 | A | 0.43 | 1.87 | 0.30 | A |
| Arm 2 | 0.70 | 2.24 | 0.41 | A | 0.66 | 2.19 | 0.40 | A |
| Arm 3 | 1.12 | 2.57 | 0.53 | A | 1.16 | 2.66 | 0.54 | A |
| Arm 4 | 1.45 | 3.38 | 0.59 | A | 1.38 | 3.25 | 0.58 | A |
| **2027 reference traffic flow** | | | | | | | | |
| Arm 1 | 0.47 | 1.89 | 0.32 | A | 0.43 | 1.86 | 0.30 | A |
| Arm 2 | 0.69 | 2.23 | 0.41 | A | 0.65 | 2.18 | 0.39 | A |
| Arm 3 | 1.11 | 2.55 | 0.53 | A | 1.15 | 2.65 | 0.54 | A |
| Arm 4 | 1.42 | 3.35 | 0.59 | A | 1.36 | 3.22 | 0.58 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D2 - 2027 reference traffic flow, Weekday AM Peak Hour " model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D4 - 2027 reference traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D5 - 2027 design traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D6 - 2021 observed traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D7 - 2021 observed traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 12/4/2023 14:02:48*

## File summary

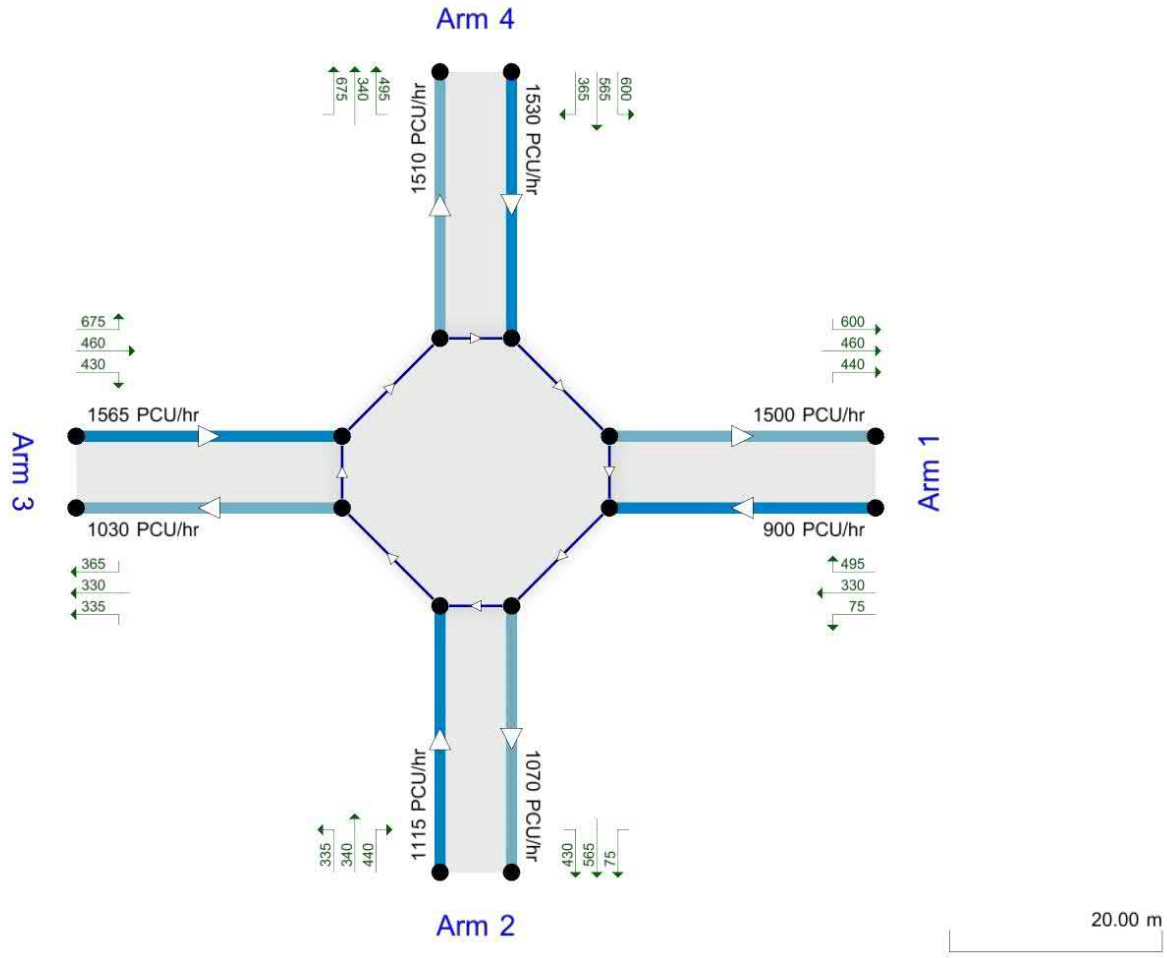
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D2 - 2027 reference traffic flow, Weekday AM Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2027 reference traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday AM Peak Hour | 2027 reference traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.60 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Che Kung Mui Road WB | |
| **2** | 2 | Hung Mui Kuk Road | |
| **3** | 3 | Che Kung Mui Road EB | |
| **4** | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| **2** | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| **3** | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| **4** | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 900.00 | 100.000 |
| 2 | FLAT | ✓ | 1115.00 | 100.000 |
| 3 | FLAT | ✓ | 1565.00 | 100.000 |
| 4 | FLAT | ✓ | 1530.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 75.000 | 330.000 | 495.000 |
| | 2 | 440.000 | 0.000 | 335.000 | 340.000 |
| | 3 | 460.000 | 430.000 | 0.000 | 675.000 |
| | 4 | 600.000 | 565.000 | 365.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.08 | 0.37 | 0.55 |
| | 2 | 0.39 | 0.00 | 0.30 | 0.30 |
| | 3 | 0.29 | 0.27 | 0.00 | 0.43 |
| | 4 | 0.39 | 0.37 | 0.24 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.32 | 1.89 | 0.47 | A |
| 2 | 0.41 | 2.23 | 0.69 | A |
| 3 | 0.53 | 2.55 | 1.11 | A |
| 4 | 0.59 | 3.35 | 1.42 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 900.00 | 898.12 | 1355.36 | 0.00 | 2806.21 | 0.321 | 0.47 | 1.884 | A |
| 2 | 1115.00 | 1112.26 | 1186.93 | 0.00 | 2733.77 | 0.408 | 0.69 | 2.216 | A |
| 3 | 1565.00 | 1560.60 | 1272.05 | 0.00 | 2978.15 | 0.525 | 1.10 | 2.533 | A |
| 4 | 1530.00 | 1524.36 | 1326.41 | 0.00 | 2606.12 | 0.587 | 1.41 | 3.310 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 900.00 | 899.99 | 1359.97 | 0.00 | 2802.40 | 0.321 | 0.47 | 1.891 | A |
| 2 | 1115.00 | 1114.99 | 1189.99 | 0.00 | 2731.34 | 0.408 | 0.69 | 2.226 | A |
| 3 | 1565.00 | 1564.98 | 1274.99 | 0.00 | 2975.63 | 0.526 | 1.11 | 2.551 | A |
| 4 | 1530.00 | 1529.96 | 1329.99 | 0.00 | 2603.30 | 0.588 | 1.42 | 3.353 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 900.00 | 900.00 | 1359.99 | 0.00 | 2802.39 | 0.321 | 0.47 | 1.891 | A |
| 2 | 1115.00 | 1115.00 | 1190.00 | 0.00 | 2731.33 | 0.408 | 0.69 | 2.226 | A |
| 3 | 1565.00 | 1564.99 | 1275.00 | 0.00 | 2975.62 | 0.526 | 1.11 | 2.551 | A |
| 4 | 1530.00 | 1529.99 | 1330.00 | 0.00 | 2603.29 | 0.588 | 1.42 | 3.353 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 900.00 | 900.00 | 1360.00 | 0.00 | 2802.38 | 0.321 | 0.47 | 1.891 | A |
| 2 | 1115.00 | 1115.00 | 1190.00 | 0.00 | 2731.33 | 0.408 | 0.69 | 2.226 | A |
| 3 | 1565.00 | 1565.00 | 1275.00 | 0.00 | 2975.62 | 0.526 | 1.11 | 2.551 | A |
| 4 | 1530.00 | 1530.00 | 1330.00 | 0.00 | 2603.29 | 0.588 | 1.42 | 3.353 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 900.00 | 900.00 | 1360.00 | 0.00 | 2802.38 | 0.321 | 0.47 | 1.891 | A |
| 2 | 1115.00 | 1115.00 | 1190.00 | 0.00 | 2731.33 | 0.408 | 0.69 | 2.226 | A |
| 3 | 1565.00 | 1565.00 | 1275.00 | 0.00 | 2975.62 | 0.526 | 1.11 | 2.551 | A |
| 4 | 1530.00 | 1530.00 | 1330.00 | 0.00 | 2603.29 | 0.588 | 1.42 | 3.353 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 900.00 | 900.00 | 1360.00 | 0.00 | 2802.38 | 0.321 | 0.47 | 1.891 | A |
| 2 | 1115.00 | 1115.00 | 1190.00 | 0.00 | 2731.33 | 0.408 | 0.69 | 2.226 | A |
| 3 | 1565.00 | 1565.00 | 1275.00 | 0.00 | 2975.62 | 0.526 | 1.11 | 2.551 | A |
| 4 | 1530.00 | 1530.00 | 1330.00 | 0.00 | 2603.29 | 0.588 | 1.42 | 3.353 | A |

# 2027 design traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday AM Peak Hour | 2027 design traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.62 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 900.00 | 100.000 |
| 2 | FLAT | ✓ | 1125.00 | 100.000 |
| 3 | FLAT | ✓ | 1565.00 | 100.000 |
| 4 | FLAT | ✓ | 1540.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 75.000 | 330.000 | 495.000 |
| | 2 | 440.000 | 0.000 | 335.000 | 350.000 |
| | 3 | 460.000 | 430.000 | 0.000 | 675.000 |
| | 4 | 600.000 | 575.000 | 365.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.08 | 0.37 | 0.55 |
| | 2 | 0.39 | 0.00 | 0.30 | 0.31 |
| | 3 | 0.29 | 0.27 | 0.00 | 0.43 |
| | 4 | 0.39 | 0.37 | 0.24 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.32 | 1.90 | 0.47 | A |
| 2 | 0.41 | 2.24 | 0.70 | A |
| 3 | 0.53 | 2.57 | 1.12 | A |
| 4 | 0.59 | 3.38 | 1.45 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 900.00 | 898.11 | 1365.29 | 0.00 | 2798.02 | 0.322 | 0.47 | 1.892 | A |
| 2 | 1125.00 | 1122.21 | 1186.91 | 0.00 | 2733.79 | 0.412 | 0.70 | 2.230 | A |
| 3 | 1565.00 | 1560.57 | 1282.00 | 0.00 | 2969.63 | 0.527 | 1.11 | 2.548 | A |
| 4 | 1540.00 | 1534.27 | 1326.39 | 0.00 | 2606.14 | 0.591 | 1.43 | 3.341 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 900.00 | 899.99 | 1369.97 | 0.00 | 2794.15 | 0.322 | 0.47 | 1.899 | A |
| 2 | 1125.00 | 1124.99 | 1189.99 | 0.00 | 2731.34 | 0.412 | 0.70 | 2.240 | A |
| 3 | 1565.00 | 1564.98 | 1284.99 | 0.00 | 2967.08 | 0.527 | 1.11 | 2.567 | A |
| 4 | 1540.00 | 1539.96 | 1329.99 | 0.00 | 2603.30 | 0.592 | 1.44 | 3.384 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 900.00 | 900.00 | 1369.99 | 0.00 | 2794.13 | 0.322 | 0.47 | 1.899 | A |
| 2 | 1125.00 | 1125.00 | 1190.00 | 0.00 | 2731.33 | 0.412 | 0.70 | 2.240 | A |
| 3 | 1565.00 | 1564.99 | 1285.00 | 0.00 | 2967.07 | 0.527 | 1.11 | 2.567 | A |
| 4 | 1540.00 | 1539.99 | 1330.00 | 0.00 | 2603.29 | 0.592 | 1.44 | 3.384 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 900.00 | 900.00 | 1370.00 | 0.00 | 2794.13 | 0.322 | 0.47 | 1.899 | A |
| 2 | 1125.00 | 1125.00 | 1190.00 | 0.00 | 2731.33 | 0.412 | 0.70 | 2.240 | A |
| 3 | 1565.00 | 1565.00 | 1285.00 | 0.00 | 2967.07 | 0.527 | 1.11 | 2.567 | A |
| 4 | 1540.00 | 1539.99 | 1330.00 | 0.00 | 2603.29 | 0.592 | 1.44 | 3.384 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 900.00 | 900.00 | 1370.00 | 0.00 | 2794.13 | 0.322 | 0.47 | 1.899 | A |
| 2 | 1125.00 | 1125.00 | 1190.00 | 0.00 | 2731.33 | 0.412 | 0.70 | 2.240 | A |
| 3 | 1565.00 | 1565.00 | 1285.00 | 0.00 | 2967.07 | 0.527 | 1.11 | 2.567 | A |
| 4 | 1540.00 | 1540.00 | 1330.00 | 0.00 | 2603.29 | 0.592 | 1.45 | 3.384 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 900.00 | 900.00 | 1370.00 | 0.00 | 2794.13 | 0.322 | 0.47 | 1.899 | A |
| 2 | 1125.00 | 1125.00 | 1190.00 | 0.00 | 2731.33 | 0.412 | 0.70 | 2.240 | A |
| 3 | 1565.00 | 1565.00 | 1285.00 | 0.00 | 2967.07 | 0.527 | 1.12 | 2.567 | A |
| 4 | 1540.00 | 1540.00 | 1330.00 | 0.00 | 2603.29 | 0.592 | 1.45 | 3.384 | A |

# 2027 reference traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday PM Peak Hour | 2027 reference traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.59 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 835.00 | 100.000 |
| 2 | FLAT | ✓ | 1070.00 | 100.000 |
| 3 | FLAT | ✓ | 1565.00 | 100.000 |
| 4 | FLAT | ✓ | 1515.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 30.000 | 260.000 | 545.000 |
| | 2 | 410.000 | 0.000 | 280.000 | 380.000 |
| | 3 | 555.000 | 330.000 | 0.000 | 680.000 |
| | 4 | 440.000 | 680.000 | 395.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.04 | 0.31 | 0.65 |
| | 2 | 0.38 | 0.00 | 0.26 | 0.36 |
| | 3 | 0.35 | 0.21 | 0.00 | 0.43 |
| | 4 | 0.29 | 0.45 | 0.26 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.30 | 1.86 | 0.43 | A |
| 2 | 0.39 | 2.18 | 0.65 | A |
| 3 | 0.54 | 2.65 | 1.15 | A |
| 4 | 0.58 | 3.22 | 1.36 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 835.00 | 833.28 | 1400.23 | 0.00 | 2769.17 | 0.302 | 0.43 | 1.857 | A |
| 2 | 1070.00 | 1067.43 | 1196.94 | 0.00 | 2725.81 | 0.393 | 0.64 | 2.168 | A |
| 3 | 1565.00 | 1560.43 | 1331.98 | 0.00 | 2926.89 | 0.535 | 1.14 | 2.626 | A |
| 4 | 1515.00 | 1509.63 | 1291.43 | 0.00 | 2633.77 | 0.575 | 1.34 | 3.186 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 835.00 | 834.99 | 1404.97 | 0.00 | 2765.25 | 0.302 | 0.43 | 1.864 | A |
| 2 | 1070.00 | 1069.99 | 1199.99 | 0.00 | 2723.39 | 0.393 | 0.65 | 2.177 | A |
| 3 | 1565.00 | 1564.98 | 1334.99 | 0.00 | 2924.31 | 0.535 | 1.15 | 2.647 | A |
| 4 | 1515.00 | 1514.97 | 1294.99 | 0.00 | 2630.96 | 0.576 | 1.35 | 3.225 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 835.00 | 835.00 | 1404.99 | 0.00 | 2765.23 | 0.302 | 0.43 | 1.864 | A |
| 2 | 1070.00 | 1070.00 | 1200.00 | 0.00 | 2723.38 | 0.393 | 0.65 | 2.177 | A |
| 3 | 1565.00 | 1564.99 | 1335.00 | 0.00 | 2924.30 | 0.535 | 1.15 | 2.647 | A |
| 4 | 1515.00 | 1514.99 | 1295.00 | 0.00 | 2630.95 | 0.576 | 1.35 | 3.225 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 835.00 | 835.00 | 1405.00 | 0.00 | 2765.23 | 0.302 | 0.43 | 1.864 | A |
| 2 | 1070.00 | 1070.00 | 1200.00 | 0.00 | 2723.38 | 0.393 | 0.65 | 2.177 | A |
| 3 | 1565.00 | 1565.00 | 1335.00 | 0.00 | 2924.30 | 0.535 | 1.15 | 2.647 | A |
| 4 | 1515.00 | 1515.00 | 1295.00 | 0.00 | 2630.95 | 0.576 | 1.35 | 3.225 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 835.00 | 835.00 | 1405.00 | 0.00 | 2765.23 | 0.302 | 0.43 | 1.864 | A |
| 2 | 1070.00 | 1070.00 | 1200.00 | 0.00 | 2723.38 | 0.393 | 0.65 | 2.177 | A |
| 3 | 1565.00 | 1565.00 | 1335.00 | 0.00 | 2924.30 | 0.535 | 1.15 | 2.647 | A |
| 4 | 1515.00 | 1515.00 | 1295.00 | 0.00 | 2630.95 | 0.576 | 1.36 | 3.225 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 835.00 | 835.00 | 1405.00 | 0.00 | 2765.23 | 0.302 | 0.43 | 1.864 | A |
| 2 | 1070.00 | 1070.00 | 1200.00 | 0.00 | 2723.38 | 0.393 | 0.65 | 2.177 | A |
| 3 | 1565.00 | 1565.00 | 1335.00 | 0.00 | 2924.30 | 0.535 | 1.15 | 2.647 | A |
| 4 | 1515.00 | 1515.00 | 1295.00 | 0.00 | 2630.95 | 0.576 | 1.36 | 3.225 | A |

# 2027 design traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday PM Peak Hour | 2027 design traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.61 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 835.00 | 100.000 |
| 2 | FLAT | ✓ | 1080.00 | 100.000 |
| 3 | FLAT | ✓ | 1565.00 | 100.000 |
| 4 | FLAT | ✓ | 1525.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 30.000 | 260.000 | 545.000 |
| | 2 | 410.000 | 0.000 | 280.000 | 390.000 |
| | 3 | 555.000 | 330.000 | 0.000 | 680.000 |
| | 4 | 440.000 | 690.000 | 395.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.04 | 0.31 | 0.65 |
| | 2 | 0.38 | 0.00 | 0.26 | 0.36 |
| | 3 | 0.35 | 0.21 | 0.00 | 0.43 |
| | 4 | 0.29 | 0.45 | 0.26 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.30 | 1.87 | 0.43 | A |
| 2 | 0.40 | 2.19 | 0.66 | A |
| 3 | 0.54 | 2.66 | 1.16 | A |
| 4 | 0.58 | 3.25 | 1.38 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 835.00 | 833.27 | 1410.15 | 0.00 | 2760.97 | 0.302 | 0.43 | 1.865 | A |
| 2 | 1080.00 | 1077.39 | 1196.92 | 0.00 | 2725.83 | 0.396 | 0.65 | 2.180 | A |
| 3 | 1565.00 | 1560.40 | 1341.93 | 0.00 | 2918.37 | 0.536 | 1.15 | 2.642 | A |
| 4 | 1525.00 | 1519.55 | 1291.41 | 0.00 | 2633.78 | 0.579 | 1.36 | 3.215 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 835.00 | 834.99 | 1414.97 | 0.00 | 2756.99 | 0.303 | 0.43 | 1.872 | A |
| 2 | 1080.00 | 1079.99 | 1199.99 | 0.00 | 2723.39 | 0.397 | 0.66 | 2.190 | A |
| 3 | 1565.00 | 1564.98 | 1344.99 | 0.00 | 2915.75 | 0.537 | 1.15 | 2.664 | A |
| 4 | 1525.00 | 1524.97 | 1294.98 | 0.00 | 2630.96 | 0.580 | 1.37 | 3.254 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 835.00 | 835.00 | 1414.99 | 0.00 | 2756.97 | 0.303 | 0.43 | 1.872 | A |
| 2 | 1080.00 | 1080.00 | 1200.00 | 0.00 | 2723.38 | 0.397 | 0.66 | 2.190 | A |
| 3 | 1565.00 | 1564.99 | 1345.00 | 0.00 | 2915.75 | 0.537 | 1.16 | 2.664 | A |
| 4 | 1525.00 | 1524.99 | 1295.00 | 0.00 | 2630.95 | 0.580 | 1.37 | 3.254 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 835.00 | 835.00 | 1415.00 | 0.00 | 2756.97 | 0.303 | 0.43 | 1.872 | A |
| 2 | 1080.00 | 1080.00 | 1200.00 | 0.00 | 2723.38 | 0.397 | 0.66 | 2.190 | A |
| 3 | 1565.00 | 1565.00 | 1345.00 | 0.00 | 2915.75 | 0.537 | 1.16 | 2.664 | A |
| 4 | 1525.00 | 1525.00 | 1295.00 | 0.00 | 2630.95 | 0.580 | 1.38 | 3.254 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 835.00 | 835.00 | 1415.00 | 0.00 | 2756.97 | 0.303 | 0.43 | 1.872 | A |
| 2 | 1080.00 | 1080.00 | 1200.00 | 0.00 | 2723.38 | 0.397 | 0.66 | 2.190 | A |
| 3 | 1565.00 | 1565.00 | 1345.00 | 0.00 | 2915.75 | 0.537 | 1.16 | 2.664 | A |
| 4 | 1525.00 | 1525.00 | 1295.00 | 0.00 | 2630.95 | 0.580 | 1.38 | 3.254 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 835.00 | 835.00 | 1415.00 | 0.00 | 2756.97 | 0.303 | 0.43 | 1.872 | A |
| 2 | 1080.00 | 1080.00 | 1200.00 | 0.00 | 2723.38 | 0.397 | 0.66 | 2.190 | A |
| 3 | 1565.00 | 1565.00 | 1345.00 | 0.00 | 2915.75 | 0.537 | 1.16 | 2.664 | A |
| 4 | 1525.00 | 1525.00 | 1295.00 | 0.00 | 2630.95 | 0.580 | 1.38 | 3.254 | A |

# 2021 observed traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday AM Peak Hour | 2021 observed traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.85 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 670.00 | 100.000 |
| 2 | FLAT | ✓ | 800.00 | 100.000 |
| 3 | FLAT | ✓ | 1270.00 | 100.000 |
| 4 | FLAT | ✓ | 1225.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 275.000 | 395.000 |
| | 2 | 295.000 | 0.000 | 280.000 | 225.000 |
| | 3 | 345.000 | 360.000 | 0.000 | 565.000 |
| | 4 | 490.000 | 430.000 | 305.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.41 | 0.59 |
| | 2 | 0.37 | 0.00 | 0.35 | 0.28 |
| | 3 | 0.27 | 0.28 | 0.00 | 0.44 |
| | 4 | 0.40 | 0.35 | 0.25 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.22 | 1.53 | 0.28 | A |
| 2 | 0.28 | 1.71 | 0.38 | A |
| 3 | 0.39 | 1.79 | 0.63 | A |
| 4 | 0.43 | 2.20 | 0.75 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 668.86 | 1092.50 | 0.00 | 3023.26 | 0.222 | 0.28 | 1.529 | A |
| 2 | 800.00 | 798.48 | 973.12 | 0.00 | 2903.82 | 0.276 | 0.38 | 1.710 | A |
| 3 | 1270.00 | 1267.49 | 913.34 | 0.00 | 3284.97 | 0.387 | 0.63 | 1.782 | A |
| 4 | 1225.00 | 1222.03 | 998.05 | 0.00 | 2865.62 | 0.427 | 0.74 | 2.187 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1094.99 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1269.99 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1224.99 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.195 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

# 2021 observed traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday PM Peak Hour | 2021 observed traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.88 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 670.00 | 100.000 |
| 2 | FLAT | ✓ | 805.00 | 100.000 |
| 3 | FLAT | ✓ | 1275.00 | 100.000 |
| 4 | FLAT | ✓ | 1220.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 220.000 | 450.000 |
| | 2 | 280.000 | 0.000 | 235.000 | 290.000 |
| | 3 | 430.000 | 275.000 | 0.000 | 570.000 |
| | 4 | 355.000 | 535.000 | 330.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.33 | 0.67 |
| | 2 | 0.35 | 0.00 | 0.29 | 0.36 |
| | 3 | 0.34 | 0.22 | 0.00 | 0.45 |
| | 4 | 0.29 | 0.44 | 0.27 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.22 | 1.55 | 0.29 | A |
| 2 | 0.28 | 1.73 | 0.39 | A |
| 3 | 0.40 | 1.87 | 0.66 | A |
| 4 | 0.42 | 2.17 | 0.74 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 668.85 | 1137.35 | 0.00 | 2986.23 | 0.224 | 0.29 | 1.553 | A |
| 2 | 805.00 | 803.46 | 998.05 | 0.00 | 2883.99 | 0.279 | 0.39 | 1.730 | A |
| 3 | 1275.00 | 1272.35 | 1018.13 | 0.00 | 3195.34 | 0.399 | 0.66 | 1.870 | A |
| 4 | 1220.00 | 1217.07 | 983.00 | 0.00 | 2877.51 | 0.424 | 0.73 | 2.164 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1139.99 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1274.99 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1219.99 | 985.00 | 0.00 | 2875.94 | 0.424 | 0.74 | 2.173 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction I (CM_p2).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-03-30
**Report generation date:** 31/3/2023 10:58:24

» 2018 observed traffic flow, Ching Ming Festival Peak Hour
» 2027 reference traffic flow, Ching Ming Festival Peak Hour
» 2027 design traffic flow, Ching Ming Festival Peak Hour

## Summary of junction performance

| | Ching Ming Festival Peak Hour | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS |
| | 2018 observed traffic flow | | | |
| Arm 2 | 0.15 | 1.28 | 0.13 | A |
| Arm 3 | 0.03 | 1.42 | 0.03 | A |
| Arm 4 | 0.09 | 1.50 | 0.08 | A |
| Arm 5 | 0.02 | 2.30 | 0.02 | A |
| | 2027 design traffic flow | | | |
| Arm 2 | 0.16 | 1.30 | 0.14 | A |
| Arm 3 | 0.03 | 1.44 | 0.03 | A |
| Arm 4 | 0.10 | 1.52 | 0.09 | A |
| Arm 5 | 0.02 | 2.33 | 0.02 | A |
| | 2027 reference traffic flow | | | |
| Arm 2 | 0.16 | 1.30 | 0.14 | A |
| Arm 3 | 0.03 | 1.44 | 0.03 | A |
| Arm 4 | 0.10 | 1.52 | 0.09 | A |
| Arm 5 | 0.02 | 2.33 | 0.02 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour " model duration: 13:30 - 15:00*
*"D2 - 2027 reference traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 31/3/2023 10:58:21*

## File summary

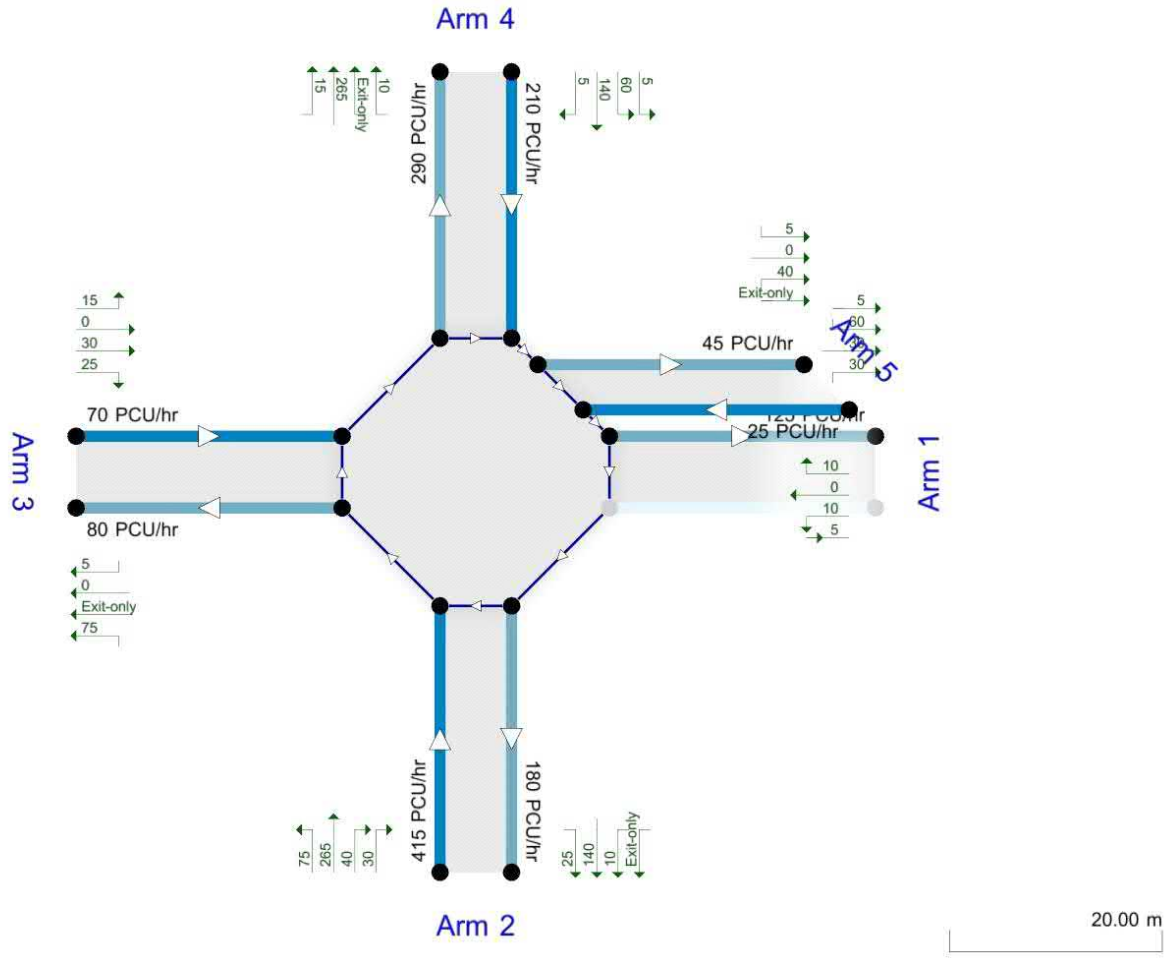
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2018 observed traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 observed traffic flow, Ching Ming Festival Peak Hour | 2018 observed traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.39 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| **2** | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| **3** | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| **4** | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| **5** | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 415.00 | 100.000 |
| 3 | FLAT | ✓ | 70.00 | 100.000 |
| 4 | FLAT | ✓ | 210.00 | 100.000 |
| 5 | FLAT | ✓ | 25.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 30.000 | 5.000 | 75.000 | 265.000 | 40.000 |
| | 3 | 30.000 | 25.000 | 0.000 | 15.000 | 0.000 |
| | 4 | 60.000 | 140.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 5.000 | 10.000 | 0.000 | 10.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.01 | 0.18 | 0.64 | 0.10 |
| | 3 | 0.43 | 0.36 | 0.00 | 0.21 | 0.00 |
| | 4 | 0.29 | 0.67 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.40 | 0.00 | 0.40 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.13 | 1.28 | 0.15 | A |
| 3 | 0.03 | 1.42 | 0.03 | A |
| 4 | 0.08 | 1.50 | 0.09 | A |
| 5 | 0.02 | 2.30 | 0.02 | A |

# Main Results for each time segment

## Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 414.41 | 14.97 | 0.00 | 3225.54 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 69.89 | 349.49 | 0.00 | 2609.27 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 209.65 | 129.81 | 0.00 | 2618.59 | 0.080 | 0.09 | 1.493 | A |
| 5 | 25.00 | 24.94 | 294.52 | 0.00 | 1591.18 | 0.016 | 0.02 | 2.298 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.496 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

# 2027 reference traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Ching Ming Festival Peak Hour | 2027 reference traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.41 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 455.00 | 100.000 |
| 3 | FLAT | ✓ | 75.00 | 100.000 |
| 4 | FLAT | ✓ | 230.00 | 100.000 |
| 5 | FLAT | ✓ | 25.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 35.000 | 5.000 | 80.000 | 290.000 | 45.000 |
| | 3 | 35.000 | 25.000 | 0.000 | 15.000 | 0.000 |
| | 4 | 65.000 | 155.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 5.000 | 10.000 | 0.000 | 10.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.08 | 0.01 | 0.18 | 0.64 | 0.10 |
| | 3 | 0.47 | 0.33 | 0.00 | 0.20 | 0.00 |
| | 4 | 0.28 | 0.67 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.40 | 0.00 | 0.40 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.14 | 1.30 | 0.16 | A |
| 3 | 0.03 | 1.44 | 0.03 | A |
| 4 | 0.09 | 1.52 | 0.10 | A |
| 5 | 0.02 | 2.33 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 455.00 | 454.34 | 14.97 | 0.00 | 3225.54 | 0.141 | 0.16 | 1.298 | A |
| 3 | 75.00 | 74.88 | 384.43 | 0.00 | 2578.49 | 0.029 | 0.03 | 1.437 | A |
| 4 | 230.00 | 229.61 | 144.78 | 0.00 | 2605.59 | 0.088 | 0.10 | 1.514 | A |
| 5 | 25.00 | 24.94 | 324.47 | 0.00 | 1570.97 | 0.016 | 0.02 | 2.328 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 455.00 | 455.00 | 15.00 | 0.00 | 3225.51 | 0.141 | 0.16 | 1.298 | A |
| 3 | 75.00 | 75.00 | 385.00 | 0.00 | 2578.00 | 0.029 | 0.03 | 1.437 | A |
| 4 | 230.00 | 230.00 | 145.00 | 0.00 | 2605.40 | 0.088 | 0.10 | 1.514 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 455.00 | 455.00 | 15.00 | 0.00 | 3225.51 | 0.141 | 0.16 | 1.298 | A |
| 3 | 75.00 | 75.00 | 385.00 | 0.00 | 2578.00 | 0.029 | 0.03 | 1.437 | A |
| 4 | 230.00 | 230.00 | 145.00 | 0.00 | 2605.40 | 0.088 | 0.10 | 1.514 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 455.00 | 455.00 | 15.00 | 0.00 | 3225.51 | 0.141 | 0.16 | 1.298 | A |
| 3 | 75.00 | 75.00 | 385.00 | 0.00 | 2578.00 | 0.029 | 0.03 | 1.437 | A |
| 4 | 230.00 | 230.00 | 145.00 | 0.00 | 2605.40 | 0.088 | 0.10 | 1.517 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 455.00 | 455.00 | 15.00 | 0.00 | 3225.51 | 0.141 | 0.16 | 1.298 | A |
| 3 | 75.00 | 75.00 | 385.00 | 0.00 | 2577.99 | 0.029 | 0.03 | 1.437 | A |
| 4 | 230.00 | 230.00 | 145.00 | 0.00 | 2605.40 | 0.088 | 0.10 | 1.514 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 455.00 | 455.00 | 15.00 | 0.00 | 3225.51 | 0.141 | 0.16 | 1.298 | A |
| 3 | 75.00 | 75.00 | 385.00 | 0.00 | 2577.99 | 0.029 | 0.03 | 1.437 | A |
| 4 | 230.00 | 230.00 | 145.00 | 0.00 | 2605.40 | 0.088 | 0.10 | 1.514 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

# 2027 design traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Ching Ming Festival Peak Hour | 2027 design traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.41 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| **2** | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| **3** | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| **4** | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| **5** | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 455.00 | 100.000 |
| 3 | FLAT | ✓ | 75.00 | 100.000 |
| 4 | FLAT | ✓ | 230.00 | 100.000 |
| 5 | FLAT | ✓ | 25.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 35.000 | 5.000 | 80.000 | 290.000 | 45.000 |
| | 3 | 35.000 | 25.000 | 0.000 | 15.000 | 0.000 |
| | 4 | 65.000 | 155.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 5.000 | 10.000 | 0.000 | 10.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.08 | 0.01 | 0.18 | 0.64 | 0.10 |
| | 3 | 0.47 | 0.33 | 0.00 | 0.20 | 0.00 |
| | 4 | 0.28 | 0.67 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.40 | 0.00 | 0.40 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.14 | 1.30 | 0.16 | A |
| 3 | 0.03 | 1.44 | 0.03 | A |
| 4 | 0.09 | 1.52 | 0.10 | A |
| 5 | 0.02 | 2.33 | 0.02 | A |

# Main Results for each time segment

## Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 455.00 | 454.34 | 14.97 | 0.00 | 3225.54 | 0.141 | 0.16 | 1.298 | A |
| 3 | 75.00 | 74.88 | 384.43 | 0.00 | 2578.49 | 0.029 | 0.03 | 1.437 | A |
| 4 | 230.00 | 229.61 | 144.78 | 0.00 | 2605.59 | 0.088 | 0.10 | 1.514 | A |
| 5 | 25.00 | 24.94 | 324.47 | 0.00 | 1570.97 | 0.016 | 0.02 | 2.328 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 455.00 | 455.00 | 15.00 | 0.00 | 3225.51 | 0.141 | 0.16 | 1.298 | A |
| 3 | 75.00 | 75.00 | 385.00 | 0.00 | 2578.00 | 0.029 | 0.03 | 1.437 | A |
| 4 | 230.00 | 230.00 | 145.00 | 0.00 | 2605.40 | 0.088 | 0.10 | 1.514 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 455.00 | 455.00 | 15.00 | 0.00 | 3225.51 | 0.141 | 0.16 | 1.298 | A |
| 3 | 75.00 | 75.00 | 385.00 | 0.00 | 2578.00 | 0.029 | 0.03 | 1.437 | A |
| 4 | 230.00 | 230.00 | 145.00 | 0.00 | 2605.40 | 0.088 | 0.10 | 1.514 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 455.00 | 455.00 | 15.00 | 0.00 | 3225.51 | 0.141 | 0.16 | 1.298 | A |
| 3 | 75.00 | 75.00 | 385.00 | 0.00 | 2578.00 | 0.029 | 0.03 | 1.437 | A |
| 4 | 230.00 | 230.00 | 145.00 | 0.00 | 2605.40 | 0.088 | 0.10 | 1.517 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 455.00 | 455.00 | 15.00 | 0.00 | 3225.51 | 0.141 | 0.16 | 1.298 | A |
| 3 | 75.00 | 75.00 | 385.00 | 0.00 | 2577.99 | 0.029 | 0.03 | 1.437 | A |
| 4 | 230.00 | 230.00 | 145.00 | 0.00 | 2605.40 | 0.088 | 0.10 | 1.514 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 455.00 | 455.00 | 15.00 | 0.00 | 3225.51 | 0.141 | 0.16 | 1.298 | A |
| 3 | 75.00 | 75.00 | 385.00 | 0.00 | 2577.99 | 0.029 | 0.03 | 1.437 | A |
| 4 | 230.00 | 230.00 | 145.00 | 0.00 | 2605.40 | 0.088 | 0.10 | 1.514 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction I (Weekday).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-04-04
**Report generation date:** 12/4/2023 14:11:28

» 2027 reference traffic flow, Weekday AM Peak Hour
» 2027 design traffic flow, Weekday AM Peak Hour
» 2027 reference traffic flow, Weekday PM Peak Hour
» 2027 design traffic flow, Weekday PM Peak Hour
» 2021 observed traffic flow, Weekday AM Peak Hour
» 2021 observed traffic flow, Weekday PM Peak Hour

## Summary of junction performance

| | Weekday AM Peak Hour | | | | Weekday PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| **2021 observed traffic flow** | | | | | | | | |
| Arm 2 | 0.10 | 1.23 | 0.09 | A | 0.10 | 1.23 | 0.09 | A |
| Arm 3 | 0.02 | 1.35 | 0.02 | A | 0.00 | 0.00 | 0.00 | A |
| Arm 4 | 0.09 | 1.47 | 0.08 | A | 0.08 | 1.44 | 0.08 | A |
| Arm 5 | 0.00 | 0.00 | 0.00 | A | 0.02 | 2.23 | 0.02 | A |
| **2027 design traffic flow** | | | | | | | | |
| Arm 2 | 0.12 | 1.25 | 0.11 | A | 0.12 | 1.25 | 0.11 | A |
| Arm 3 | 0.02 | 1.38 | 0.02 | A | 0.00 | 0.00 | 0.00 | A |
| Arm 4 | 0.11 | 1.50 | 0.10 | A | 0.10 | 1.46 | 0.09 | A |
| Arm 5 | 0.00 | 0.00 | 0.00 | A | 0.02 | 2.25 | 0.02 | A |
| **2027 reference traffic flow** | | | | | | | | |
| Arm 2 | 0.12 | 1.25 | 0.11 | A | 0.12 | 1.25 | 0.11 | A |
| Arm 3 | 0.02 | 1.38 | 0.02 | A | 0.00 | 0.00 | 0.00 | A |
| Arm 4 | 0.11 | 1.50 | 0.10 | A | 0.10 | 1.46 | 0.09 | A |
| Arm 5 | 0.00 | 0.00 | 0.00 | A | 0.02 | 2.25 | 0.02 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D2 - 2027 reference traffic flow, Weekday AM Peak Hour " model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D4 - 2027 reference traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D5 - 2027 design traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D6 - 2021 observed traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D7 - 2021 observed traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 12/4/2023 14:11:23*

## File summary

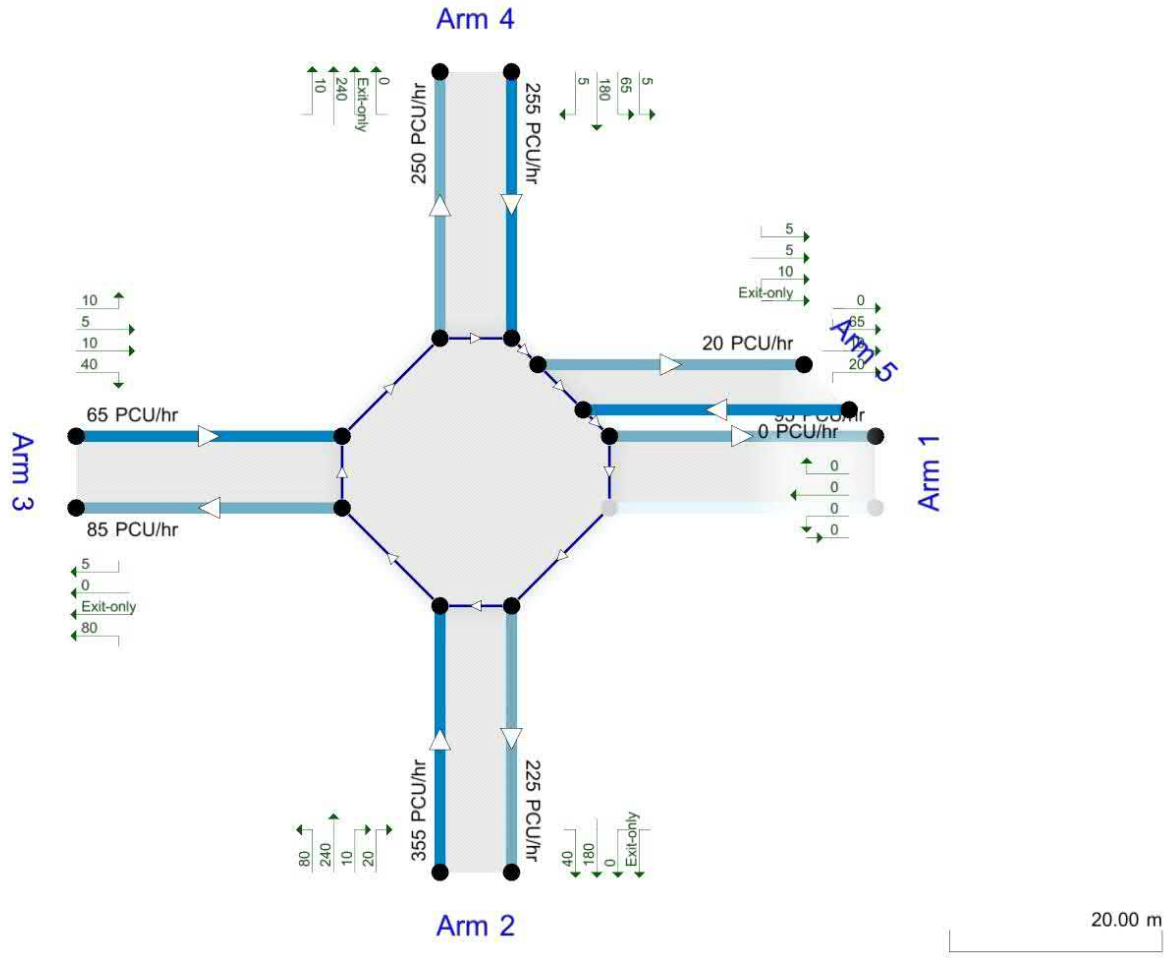
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - ";  Demand Set "D2 - 2027 reference traffic flow, Weekday AM Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2027 reference traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday AM Peak Hour | 2027 reference traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.36 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| **2** | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| **3** | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| **4** | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| **5** | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 355.00 | 100.000 |
| 3 | FLAT | ✓ | 65.00 | 100.000 |
| 4 | FLAT | ✓ | 255.00 | 100.000 |
| 5 | FLAT | ✓ | 0.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 20.000 | 5.000 | 80.000 | 240.000 | 10.000 |
| | 3 | 10.000 | 40.000 | 0.000 | 10.000 | 5.000 |
| | 4 | 65.000 | 180.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.06 | 0.01 | 0.23 | 0.68 | 0.03 |
| | 3 | 0.15 | 0.62 | 0.00 | 0.15 | 0.08 |
| | 4 | 0.25 | 0.71 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.11 | 1.25 | 0.12 | A |
| 3 | 0.02 | 1.38 | 0.02 | A |
| 4 | 0.10 | 1.50 | 0.11 | A |
| 5 | 0.00 | 0.00 | 0.00 | A |

# Main Results for each time segment

## Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 355.00 | 354.51 | 4.99 | 0.00 | 3235.01 | 0.110 | 0.12 | 1.249 | A |
| 3 | 65.00 | 64.90 | 274.62 | 0.00 | 2675.21 | 0.024 | 0.02 | 1.378 | A |
| 4 | 255.00 | 254.58 | 89.87 | 0.00 | 2653.26 | 0.096 | 0.11 | 1.500 | A |
| 5 | 0.00 | 0.00 | 324.47 | 0.00 | 1570.97 | 0.000 | 0.00 | 0.000 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 355.00 | 355.00 | 5.00 | 0.00 | 3235.00 | 0.110 | 0.12 | 1.249 | A |
| 3 | 65.00 | 65.00 | 275.00 | 0.00 | 2674.88 | 0.024 | 0.02 | 1.378 | A |
| 4 | 255.00 | 255.00 | 90.00 | 0.00 | 2653.15 | 0.096 | 0.11 | 1.500 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 355.00 | 355.00 | 5.00 | 0.00 | 3235.00 | 0.110 | 0.12 | 1.249 | A |
| 3 | 65.00 | 65.00 | 275.00 | 0.00 | 2674.88 | 0.024 | 0.02 | 1.380 | A |
| 4 | 255.00 | 255.00 | 90.00 | 0.00 | 2653.15 | 0.096 | 0.11 | 1.500 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 355.00 | 355.00 | 5.00 | 0.00 | 3235.00 | 0.110 | 0.12 | 1.249 | A |
| 3 | 65.00 | 65.00 | 275.00 | 0.00 | 2674.88 | 0.024 | 0.02 | 1.378 | A |
| 4 | 255.00 | 255.00 | 90.00 | 0.00 | 2653.15 | 0.096 | 0.11 | 1.500 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 355.00 | 355.00 | 5.00 | 0.00 | 3235.00 | 0.110 | 0.12 | 1.249 | A |
| 3 | 65.00 | 65.00 | 275.00 | 0.00 | 2674.88 | 0.024 | 0.02 | 1.378 | A |
| 4 | 255.00 | 255.00 | 90.00 | 0.00 | 2653.15 | 0.096 | 0.11 | 1.500 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 355.00 | 355.00 | 5.00 | 0.00 | 3235.00 | 0.110 | 0.12 | 1.249 | A |
| 3 | 65.00 | 65.00 | 275.00 | 0.00 | 2674.88 | 0.024 | 0.02 | 1.378 | A |
| 4 | 255.00 | 255.00 | 90.00 | 0.00 | 2653.15 | 0.096 | 0.11 | 1.502 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

# 2027 design traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday AM Peak Hour | 2027 design traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.36 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 355.00 | 100.000 |
| 3 | FLAT | ✓ | 65.00 | 100.000 |
| 4 | FLAT | ✓ | 255.00 | 100.000 |
| 5 | FLAT | ✓ | 0.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 20.000 | 5.000 | 80.000 | 240.000 | 10.000 |
| | 3 | 10.000 | 40.000 | 0.000 | 10.000 | 5.000 |
| | 4 | 65.000 | 180.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.06 | 0.01 | 0.23 | 0.68 | 0.03 |
| | 3 | 0.15 | 0.62 | 0.00 | 0.15 | 0.08 |
| | 4 | 0.25 | 0.71 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.11 | 1.25 | 0.12 | A |
| 3 | 0.02 | 1.38 | 0.02 | A |
| 4 | 0.10 | 1.50 | 0.11 | A |
| 5 | 0.00 | 0.00 | 0.00 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 355.00 | 354.51 | 4.99 | 0.00 | 3235.01 | 0.110 | 0.12 | 1.249 | A |
| 3 | 65.00 | 64.90 | 274.62 | 0.00 | 2675.21 | 0.024 | 0.02 | 1.378 | A |
| 4 | 255.00 | 254.58 | 89.87 | 0.00 | 2653.26 | 0.096 | 0.11 | 1.500 | A |
| 5 | 0.00 | 0.00 | 324.47 | 0.00 | 1570.97 | 0.000 | 0.00 | 0.000 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 355.00 | 355.00 | 5.00 | 0.00 | 3235.00 | 0.110 | 0.12 | 1.249 | A |
| 3 | 65.00 | 65.00 | 275.00 | 0.00 | 2674.88 | 0.024 | 0.02 | 1.378 | A |
| 4 | 255.00 | 255.00 | 90.00 | 0.00 | 2653.15 | 0.096 | 0.11 | 1.500 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 355.00 | 355.00 | 5.00 | 0.00 | 3235.00 | 0.110 | 0.12 | 1.249 | A |
| 3 | 65.00 | 65.00 | 275.00 | 0.00 | 2674.88 | 0.024 | 0.02 | 1.380 | A |
| 4 | 255.00 | 255.00 | 90.00 | 0.00 | 2653.15 | 0.096 | 0.11 | 1.500 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 355.00 | 355.00 | 5.00 | 0.00 | 3235.00 | 0.110 | 0.12 | 1.249 | A |
| 3 | 65.00 | 65.00 | 275.00 | 0.00 | 2674.88 | 0.024 | 0.02 | 1.378 | A |
| 4 | 255.00 | 255.00 | 90.00 | 0.00 | 2653.15 | 0.096 | 0.11 | 1.500 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 355.00 | 355.00 | 5.00 | 0.00 | 3235.00 | 0.110 | 0.12 | 1.249 | A |
| 3 | 65.00 | 65.00 | 275.00 | 0.00 | 2674.88 | 0.024 | 0.02 | 1.378 | A |
| 4 | 255.00 | 255.00 | 90.00 | 0.00 | 2653.15 | 0.096 | 0.11 | 1.500 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 355.00 | 355.00 | 5.00 | 0.00 | 3235.00 | 0.110 | 0.12 | 1.249 | A |
| 3 | 65.00 | 65.00 | 275.00 | 0.00 | 2674.88 | 0.024 | 0.02 | 1.378 | A |
| 4 | 255.00 | 255.00 | 90.00 | 0.00 | 2653.15 | 0.096 | 0.11 | 1.502 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

# 2027 reference traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday PM Peak Hour | 2027 reference traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.38 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 345.00 | 100.000 |
| 3 | FLAT | ✓ | 0.00 | 100.000 |
| 4 | FLAT | ✓ | 235.00 | 100.000 |
| 5 | FLAT | ✓ | 30.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 10.000 | 5.000 | 55.000 | 260.000 | 15.000 |
| | 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 4 | 30.000 | 195.000 | 0.000 | 0.000 | 10.000 |
| | 5 | 5.000 | 0.000 | 10.000 | 15.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.03 | 0.01 | 0.16 | 0.75 | 0.04 |
| | 3 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 4 | 0.13 | 0.83 | 0.00 | 0.00 | 0.04 |
| | 5 | 0.17 | 0.00 | 0.33 | 0.50 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.11 | 1.25 | 0.12 | A |
| 3 | 0.00 | 0.00 | 0.00 | A |
| 4 | 0.09 | 1.46 | 0.10 | A |
| 5 | 0.02 | 2.25 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 345.00 | 344.52 | 24.94 | 0.00 | 3216.08 | 0.107 | 0.12 | 1.253 | A |
| 3 | 0.00 | 0.00 | 304.56 | 0.00 | 2648.84 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 234.62 | 29.96 | 0.00 | 2705.28 | 0.087 | 0.09 | 1.456 | A |
| 5 | 30.00 | 29.93 | 239.62 | 0.00 | 1628.24 | 0.018 | 0.02 | 2.252 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 345.00 | 345.00 | 25.00 | 0.00 | 3216.02 | 0.107 | 0.12 | 1.253 | A |
| 3 | 0.00 | 0.00 | 305.00 | 0.00 | 2648.46 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 30.00 | 0.00 | 2705.24 | 0.087 | 0.10 | 1.456 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 345.00 | 345.00 | 25.00 | 0.00 | 3216.02 | 0.107 | 0.12 | 1.253 | A |
| 3 | 0.00 | 0.00 | 305.00 | 0.00 | 2648.46 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 30.00 | 0.00 | 2705.24 | 0.087 | 0.10 | 1.456 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 345.00 | 345.00 | 25.00 | 0.00 | 3216.02 | 0.107 | 0.12 | 1.253 | A |
| 3 | 0.00 | 0.00 | 305.00 | 0.00 | 2648.46 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 30.00 | 0.00 | 2705.24 | 0.087 | 0.10 | 1.456 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 345.00 | 345.00 | 25.00 | 0.00 | 3216.02 | 0.107 | 0.12 | 1.253 | A |
| 3 | 0.00 | 0.00 | 305.00 | 0.00 | 2648.46 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 30.00 | 0.00 | 2705.24 | 0.087 | 0.10 | 1.458 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.254 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 345.00 | 345.00 | 25.00 | 0.00 | 3216.02 | 0.107 | 0.12 | 1.255 | A |
| 3 | 0.00 | 0.00 | 305.00 | 0.00 | 2648.46 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 30.00 | 0.00 | 2705.24 | 0.087 | 0.10 | 1.458 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

# 2027 design traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday PM Peak Hour | 2027 design traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.38 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 345.00 | 100.000 |
| 3 | FLAT | ✓ | 0.00 | 100.000 |
| 4 | FLAT | ✓ | 235.00 | 100.000 |
| 5 | FLAT | ✓ | 30.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 10.000 | 5.000 | 55.000 | 260.000 | 15.000 |
| | 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 4 | 30.000 | 195.000 | 0.000 | 0.000 | 10.000 |
| | 5 | 5.000 | 0.000 | 10.000 | 15.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.03 | 0.01 | 0.16 | 0.75 | 0.04 |
| | 3 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 4 | 0.13 | 0.83 | 0.00 | 0.00 | 0.04 |
| | 5 | 0.17 | 0.00 | 0.33 | 0.50 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.11 | 1.25 | 0.12 | A |
| 3 | 0.00 | 0.00 | 0.00 | A |
| 4 | 0.09 | 1.46 | 0.10 | A |
| 5 | 0.02 | 2.25 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 345.00 | 344.52 | 24.94 | 0.00 | 3216.08 | 0.107 | 0.12 | 1.253 | A |
| 3 | 0.00 | 0.00 | 304.56 | 0.00 | 2648.84 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 234.62 | 29.96 | 0.00 | 2705.28 | 0.087 | 0.09 | 1.456 | A |
| 5 | 30.00 | 29.93 | 239.62 | 0.00 | 1628.24 | 0.018 | 0.02 | 2.252 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 345.00 | 345.00 | 25.00 | 0.00 | 3216.02 | 0.107 | 0.12 | 1.253 | A |
| 3 | 0.00 | 0.00 | 305.00 | 0.00 | 2648.46 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 30.00 | 0.00 | 2705.24 | 0.087 | 0.10 | 1.456 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 345.00 | 345.00 | 25.00 | 0.00 | 3216.02 | 0.107 | 0.12 | 1.253 | A |
| 3 | 0.00 | 0.00 | 305.00 | 0.00 | 2648.46 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 30.00 | 0.00 | 2705.24 | 0.087 | 0.10 | 1.456 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 345.00 | 345.00 | 25.00 | 0.00 | 3216.02 | 0.107 | 0.12 | 1.253 | A |
| 3 | 0.00 | 0.00 | 305.00 | 0.00 | 2648.46 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 30.00 | 0.00 | 2705.24 | 0.087 | 0.10 | 1.456 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 345.00 | 345.00 | 25.00 | 0.00 | 3216.02 | 0.107 | 0.12 | 1.253 | A |
| 3 | 0.00 | 0.00 | 305.00 | 0.00 | 2648.46 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 30.00 | 0.00 | 2705.24 | 0.087 | 0.10 | 1.458 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.254 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 345.00 | 345.00 | 25.00 | 0.00 | 3216.02 | 0.107 | 0.12 | 1.255 | A |
| 3 | 0.00 | 0.00 | 305.00 | 0.00 | 2648.46 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 30.00 | 0.00 | 2705.24 | 0.087 | 0.10 | 1.458 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

# 2021 observed traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday AM Peak Hour | 2021 observed traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.33 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 300.00 | 100.000 |
| 3 | FLAT | ✓ | 55.00 | 100.000 |
| 4 | FLAT | ✓ | 215.00 | 100.000 |
| 5 | FLAT | ✓ | 0.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 20.000 | 5.000 | 65.000 | 200.000 | 10.000 |
| | 3 | 10.000 | 35.000 | 0.000 | 10.000 | 0.000 |
| | 4 | 55.000 | 150.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.02 | 0.22 | 0.67 | 0.03 |
| | 3 | 0.18 | 0.64 | 0.00 | 0.18 | 0.00 |
| | 4 | 0.26 | 0.70 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.09 | 1.23 | 0.10 | A |
| 3 | 0.02 | 1.35 | 0.02 | A |
| 4 | 0.08 | 1.47 | 0.09 | A |
| 5 | 0.00 | 0.00 | 0.00 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 299.59 | 4.99 | 0.00 | 3235.01 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 54.92 | 234.68 | 0.00 | 2710.39 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 214.65 | 79.88 | 0.00 | 2661.93 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 279.56 | 0.00 | 1601.28 | 0.000 | 0.00 | 0.000 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.472 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

# 2021 observed traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday PM Peak Hour | 2021 observed traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.37 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 295.00 | 100.000 |
| 3 | FLAT | ✓ | 0.00 | 100.000 |
| 4 | FLAT | ✓ | 205.00 | 100.000 |
| 5 | FLAT | ✓ | 30.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 10.000 | 5.000 | 45.000 | 220.000 | 15.000 |
| | 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 4 | 25.000 | 165.000 | 5.000 | 0.000 | 10.000 |
| | 5 | 5.000 | 0.000 | 10.000 | 15.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.03 | 0.02 | 0.15 | 0.75 | 0.05 |
| | 3 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 4 | 0.12 | 0.80 | 0.02 | 0.00 | 0.05 |
| | 5 | 0.17 | 0.00 | 0.33 | 0.50 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.09 | 1.23 | 0.10 | A |
| 3 | 0.00 | 0.00 | 0.00 | A |
| 4 | 0.08 | 1.44 | 0.08 | A |
| 5 | 0.02 | 2.23 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 294.60 | 29.93 | 0.00 | 3211.34 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 264.62 | 0.00 | 2684.02 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 204.67 | 29.96 | 0.00 | 2705.28 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 29.93 | 209.67 | 0.00 | 1648.45 | 0.018 | 0.02 | 2.223 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.224 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.224 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.224 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.226 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.226 | A |

# Appendix 6

Traffic Management Plan

# Town Planning Study to Puguangming Temple

## Application for License for Columbarium Use

## Traffic Management Plan
## (Proposal - 2)

**Report**

**April 2023**

**CTA Consultants Limited**
**志達顧問有限公司**

# 1. INTRODUCTION

## 1.1 Objective

1.1.1 This Report is to present a Traffic Management Plan in accordance with Section 97 of the Private Columbaria Ordinance to facilitate the application for license.

1.1.2 This Management Plan covers those approved niches by TPB in 2022 (i.e. **1,779 niches**), together with the proposed niches submitting to TPB (i.e. **3,000 niches**), which gives a total of **4,779 niches**.

1.1.3 CTA Consultants Ltd. ("CTA") was therefore commissioned as the traffic consultant for preparing a Management Plan in supporting the proposal is technically feasible and acceptable. The plan focuses on the following areas:

i) Control of the incoming visitors in an acceptable level.

ii) Visitor Management.

iii) Contingency Plan in the event of fire or other emergency situations

## 1.2 Background

1.2.1 According to information provided by the client, the utilization of niches/tablets is summarized in **Table 1.1** below.

**Table 1.1 Summary of Utilization of Niches/Tablets**

| | No. of Niches/Tablets occupied in 2018 | No. of Niches/Tablets Approved in 2022 | This Application (Including the Approved 1,779 no. |
|---|---|---|---|
| **Niche** | 319 | 1,779 | **4,779** |
| **Tablet** | 345 | | **345** |

## 1.3 Visitor Flows in Ching Ming Festivals

*Ching Ming Festival, 2018*

a) To reveal the traffic conditions on the festival day, a pedestrian survey was conducted during Ching Ming Festival on 5 April 2018.

b) The Surveyed results are shown in **Table 1.2** and **1.3**

c) The total incoming/outgoing daily flow is **595 / 512 visitors** (based on 319 niches and 345 tablets)

d) The incoming/outgoing hourly peak flow is **181/146 visitors**. (based on 319 niches and 345 tablets)

## Table 1.2 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (15 mins Interval)

| 15 mins Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| 800 | 815 | 8 | 0 | 5 | 0 | 13 | 0 |
| 815 | 830 | 5 | 0 | 0 | 0 | 5 | 0 |
| 830 | 845 | 10 | 3 | 8 | 0 | 18 | 3 |
| 845 | 900 | 11 | 0 | 8 | 2 | 19 | 2 |
| 900 | 915 | 16 | 2 | 11 | 0 | 27 | 2 |
| 915 | 930 | 10 | 0 | 3 | 2 | 13 | 2 |
| 930 | 945 | 0 | 2 | 0 | 1 | 0 | 3 |
| 945 | 1000 | 3 | 0 | 8 | 3 | 11 | 3 |
| 1000 | 1015 | 13 | 5 | 8 | 5 | 21 | 10 |
| 1015 | 1030 | 6 | 0 | 7 | 5 | 13 | 5 |
| 1030 | 1045 | 13 | 10 | 6 | 8 | 19 | 18 |
| 1045 | 1100 | 11 | 2 | 12 | 0 | 23 | 2 |
| 1100 | 1115 | 18 | 6 | 21 | 4 | 39 | 10 |
| 1115 | 1130 | 26 | 23 | 24 | 17 | 50 | 40 |
| 1130 | 1145 | 40 | 10 | 21 | 16 | 61 | 26 |
| 1145 | 1200 | 23 | 19 | 8 | 9 | 31 | 28 |
| 1200 | 1215 | 19 | 21 | 16 | 13 | 35 | 34 |
| 1215 | 1230 | 16 | 13 | 2 | 21 | 18 | 34 |
| 1230 | 1245 | 6 | 8 | 10 | 5 | 16 | 13 |
| 1245 | 1300 | 10 | 35 | 3 | 21 | 13 | 56 |
| 1300 | 1315 | 8 | 29 | 8 | 12 | 16 | 41 |
| 1315 | 1330 | 13 | 0 | 10 | 10 | 23 | 10 |
| 1330 | 1345 | 0 | 26 | 6 | 13 | 6 | 39 |
| 1345 | 1400 | 0 | 6 | 5 | 8 | 5 | 14 |
| 1400 | 1415 | 3 | 5 | 7 | 5 | 10 | 10 |
| 1415 | 1430 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1430 | 1445 | 0 | 6 | 2 | 5 | 2 | 11 |
| 1445 | 1500 | 6 | 4 | 4 | 4 | 10 | 8 |
| 1500 | 1515 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1515 | 1530 | 3 | 5 | 7 | 3 | 10 | 8 |
| 1530 | 1545 | 10 | 6 | 8 | 4 | 18 | 10 |
| 1545 | 1600 | 3 | 7 | 10 | 3 | 13 | 10 |
| 1600 | 1615 | 0 | 3 | 0 | 0 | 0 | 3 |
| 1615 | 1635 | 3 | 7 | 3 | 3 | 6 | 10 |
| 1635 | 1645 | 3 | 2 | 2 | 4 | 5 | 6 |
| 1645 | 1700 | 0 | 8 | 0 | 5 | 0 | 13 |
| 1700 | 1715 | 0 | 9 | 0 | 7 | 0 | 16 |
| 1715 | 1730 | 0 | 4 | 0 | 2 | 0 | 6 |
| 1730 | 1745 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 1800 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | | **328** | **286** | **267** | **226** | **595** | **512** |

**Table 1.3 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (1 hour Interval)**

| 1 hour Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| **800** | **900** | 34 | 3 | 21 | 2 | 55 | 5 |
| **815** | **915** | 42 | 5 | 27 | 2 | 69 | 7 |
| **830** | **930** | 47 | 5 | 30 | 4 | 77 | 9 |
| **845** | **945** | 37 | 4 | 22 | 5 | 59 | 9 |
| **900** | **1000** | 29 | 4 | 22 | 6 | 51 | 10 |
| **915** | **1015** | 26 | 7 | 19 | 11 | 45 | 18 |
| **930** | **1030** | 22 | 7 | 23 | 14 | 45 | 21 |
| **945** | **1045** | 35 | 15 | 29 | 21 | 64 | 36 |
| **1000** | **1100** | 43 | 17 | 33 | 18 | 76 | 35 |
| **1015** | **1115** | 48 | 18 | 46 | 17 | 94 | 35 |
| **1030** | **1130** | 68 | 41 | 63 | 29 | 131 | 70 |
| **1045** | **1145** | 95 | 41 | **78** | 37 | 173 | 78 |
| **1100** | **1200** | 107 | 58 | 74 | 46 | **181** | 104 |
| **1115** | **1215** | **108** | 73 | 69 | 55 | 177 | 128 |
| **1130** | **1230** | 98 | 63 | 47 | 59 | 145 | 122 |
| **1145** | **1245** | 64 | 61 | 36 | 48 | 100 | 109 |
| **1200** | **1300** | 51 | 77 | 31 | **60** | 82 | 137 |
| **1215** | **1315** | 40 | 85 | 23 | 59 | 63 | 144 |
| **1230** | **1330** | 37 | 72 | 31 | 48 | 68 | 120 |
| **1245** | **1345** | 31 | **90** | 27 | 56 | 58 | **146** |
| **1300** | **1400** | 21 | 61 | 29 | 43 | 50 | 104 |
| **1315** | **1415** | 16 | 37 | 28 | 36 | 44 | 73 |
| **1330** | **1430** | 9 | 37 | 25 | 29 | 34 | 66 |
| **1345** | **1445** | 9 | 17 | 21 | 21 | 30 | 38 |
| **1400** | **1500** | 15 | 15 | 20 | 17 | 35 | 32 |
| **1415** | **1515** | 18 | 10 | 20 | 15 | 38 | 25 |
| **1430** | **1530** | 15 | 15 | 20 | 15 | 35 | 30 |
| **1445** | **1545** | 25 | 15 | 26 | 14 | 51 | 29 |
| **1500** | **1600** | 22 | 18 | 32 | 13 | 54 | 31 |
| **1515** | **1615** | 16 | 21 | 25 | 10 | 41 | 31 |
| **1530** | **1630** | 16 | 23 | 21 | 10 | 37 | 33 |
| **1545** | **1645** | 9 | 19 | 15 | 10 | 24 | 29 |
| **1600** | **1700** | 6 | 20 | 5 | 12 | 11 | 32 |
| **1615** | **1715** | 6 | 26 | 5 | 19 | 11 | 45 |
| **1630** | **1730** | 3 | 23 | 2 | 18 | 5 | 41 |
| **1645** | **1745** | 0 | 21 | 0 | 14 | 0 | 35 |
| **1700** | **1800** | 0 | 13 | 0 | 9 | 0 | 22 |

## 2. TRAFFIC & PUBLIC TRANSPORT ARRANGEMENT AND/OR MANAGEMENT

### 2.1 The Transport Plan

**The Plan consists of:**

**a) Admission Control**

- **Pre–Registration**
- **Implementation Period**

**b) Visitor Management**

**c) Contingency Plan in the event of fire or other emergency situations**

### 2.2 Traffic & Public Transport Arrangement and/or Management

#### 2.2.1 *Pre–Registration*

i) The Visitors coming to Puguangming Temple in Festival periods have to be restricted into 10 Sections, each section for 1 hour:

- From 8 am to 6 pm, each section will last for 1 hour.

ii) People coming for niches / tablets has to be **Pre–Registration**.

iii) Pre-Registration will be by both hotline booking and on-line booking.

iv) Each section will be restricted to maximum **250 people**, which is able to give a total of maximum **2,500 people a day**.

#### 2.2.2 *Implementation Period*

i) This Plan is to be executed on the Festival Day plus **3 weekends** before the festival day and **3 weekends** after the festival day.

#### 2.2.3 *Existing Footpath*

i) No car bus is allowed to access the site.

ii) As advised by AP, the EVA will not be necessary.

iii) Thus, the existing footpath will remain as present and the visitors will use this road to walk to the columbarium.

iv) The existing footpath is shown in **Figure FP 1**.

## 2.3 Pedestrian Management, Admission Control and Holding Capacity for Visitors

### 2.3.1 *Pedestrian Management and Admission Control*

i) The Management and Controlling Mechanism is as follows:

a) A Reception Area is placed at the entrance for management and advising the visitors to follow the visitor guidelines and rules before entering the columbarium

b) The staff of the Temple will divert all in-coming visitors to the holding area first before releasing them to the Columbarium Building

c) If the Columbarium Building is found over-crowded, the staff will let people to wait inside the holding area temporarily until the over-crowding is relieved

d) The Management and Controlling Mechanism is illustrated in **Figure TP 2.1**.

### 2.3.2 *Holding Capacity*

i) Referring to **Figure TP 2.2**, there will be 3 places (A, B and C) proposed forholding visitors to let them waiting for queuing before entering the building.

ii) **Figure TP 2.3** shows the conditions of the existing places.

iii) Base on the proposed Management Plan, , the maximum number of visitors to be held at any one time in the Temple during the festival days will be **250 persons**

iv) Holding Area Outside the Building

Holding area of about **717m$^2$** (Place A (657m$^2$) + Place B (60m$^2$**)** is provided as shown in **Figure TP 2.2**. These spaces can hold **1,195 visitors** as shown in the calculation below:

*Calculation of Person can be held in the Holding Area*
*Size of holding area = 717m$^2$*
*Space per person = 0.6m$^2$*
*Nos. of persons accommodated = 717 / 0.6*
*= 1,195 persons*

v) Holding Area Inside the Building

The GFA of the building (certified by AP "Chaterwealth Professional Limited") is 1,415.853. The UFA of the building as advised by Client is 975.92 $m^2$ (~69% of the GFA).

Assume the space that can hold the visitor is only 70% of the UFA, the space within the building available for visitors will then be 683 $m^2$. This space can hold **341 person** as shown in the calculation below:

*Calculation of Person can be held in the Columbarium building*
*UFA of Columbarium = 683 $m^2$*
*Space per person = 2 $m^2$*
*Nos. of person can be accommodated = 683 / 2*
*= 341 persons*

vi) The total number of people the Building can hold is

*1,195 + 341 = **1,536***

vii) The total number of people can be held in the Building is **1,536**, which is greater than the expected demand of **250** and is considered sufficient to meet the expected demand.

## 2.4 Contingency Plan in the event of fire or other emergency situations

2.4.1 The objective is to have a management plan that is able to allow visitors to have a safe arrangement during emergency situations, including in the event of fire.

2.4.2 Based on the discussion in Section 2.3.2, the expected maximum number of people held in the Temple will be **250**. The emergency plan is to try handle these people for emergency situation.

2.4.3 Three places are selected to be the "place of ultimate safe" as shown in **Figure TP 2.2.** Place A can hold **1,095** no. of visitors, while Place B and Place C can hold **100** and **125** no of visitors respectively. The total holding capacity is **1,320**. The assessment is illustrated in **Table 2.2** below:

**Table 2.2 Holding Capacity for Emergency**

| Place | Area (sq. m.) | Holding capacity (Area/0.6 sq. m.) | Remarks |
|---|---|---|---|
| A | 657 | 1,095 | **>250** Acceptable |
| B | 60 | 100 | |
| C | 75 | 125 | |
| | **Total** | **1,320** | |

2.4.4 The total number of people can be held in the places A, B and C is **1,320**, which is greater than the expected demand of **250** and is considered sufficient to meet the expected demand.

2.4.5 The discharge routes from places A, B and C are also shown in **Figure TP 2.4**. The places A, B and C are transit holding areas in the case when the exit to outside is not accessible.

2.4.6 The above calculation is only a theoretical maximum. In reality, people during emergency will leave the site as quickly as possible and people will not choose to stay in the premises. Therefore, the spaces provided during the emergency is much greater than the actual need.

## 3. SUMMARY

3.1 The followings are the summary of the this Traffic Management Plan:

i) The proposed management plan proposes visitors are come by a **Pre-registration Arrangement**.

ii) This Plan is to be executed on the **Festival Day** plus **3 weekends before** the festival day and **3 weekends after** the festival day.

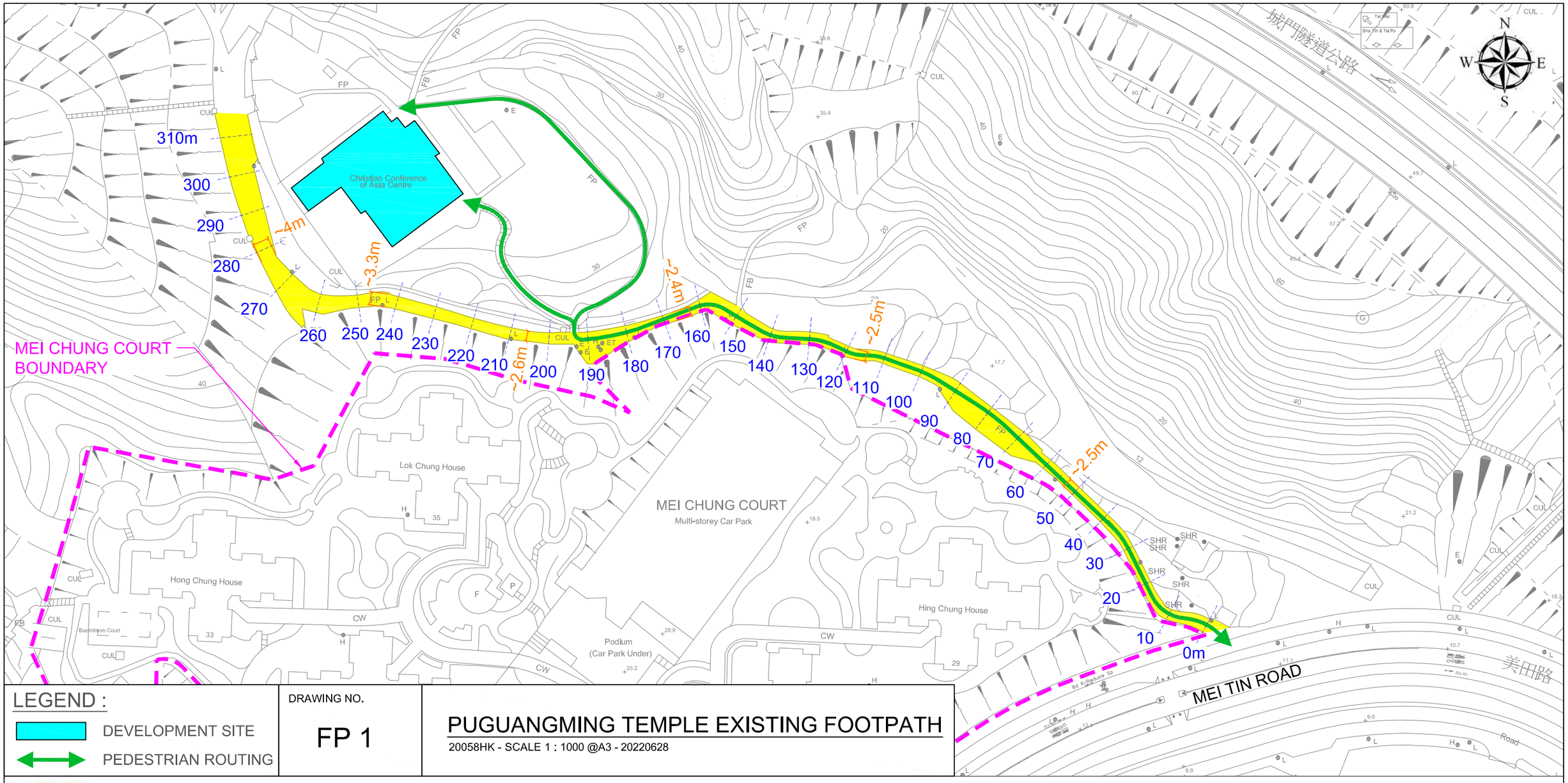
iii) The whole day will be divided into **10 sections**. Each section will only last for **one hour**, and each section will only allow **250 people** to come.

iv) Holding area, as shown in **Figure TP 2.2**, is provided at the Eastern and southern side of Puguangming Temple. This area is acting as a buffer area for:

a) Managing regulate people in entering the Columbarium, and

b) Holding people temporarily during the festival days when the columbarium building is found overcrowded.

v) Three places are designed for "*place of ultimate safe*" in the event of emergency. The arrangement is illustrated in **Figure TP 2.4**.




LEGEND :

DEVELOPMENT SITE

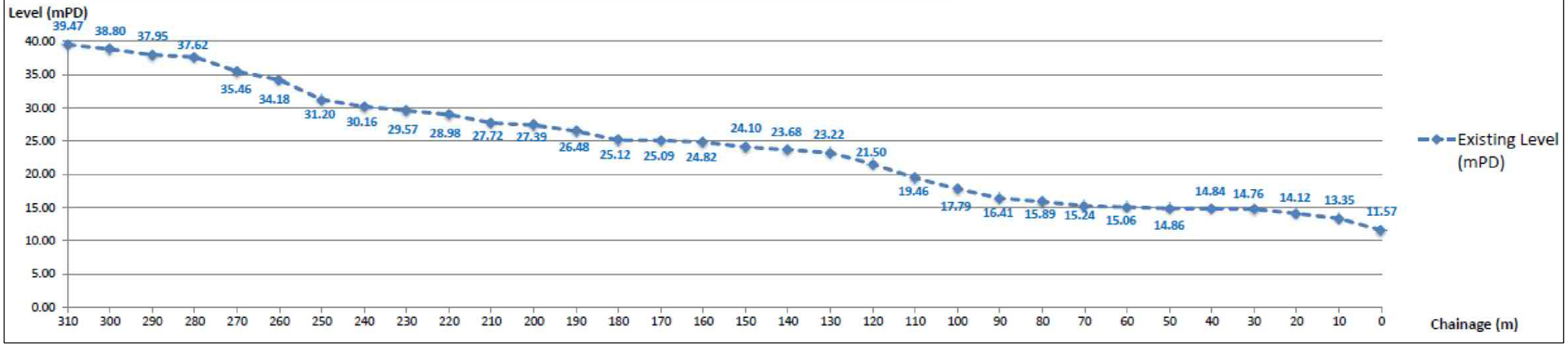
PEDESTRIAN ROUTING

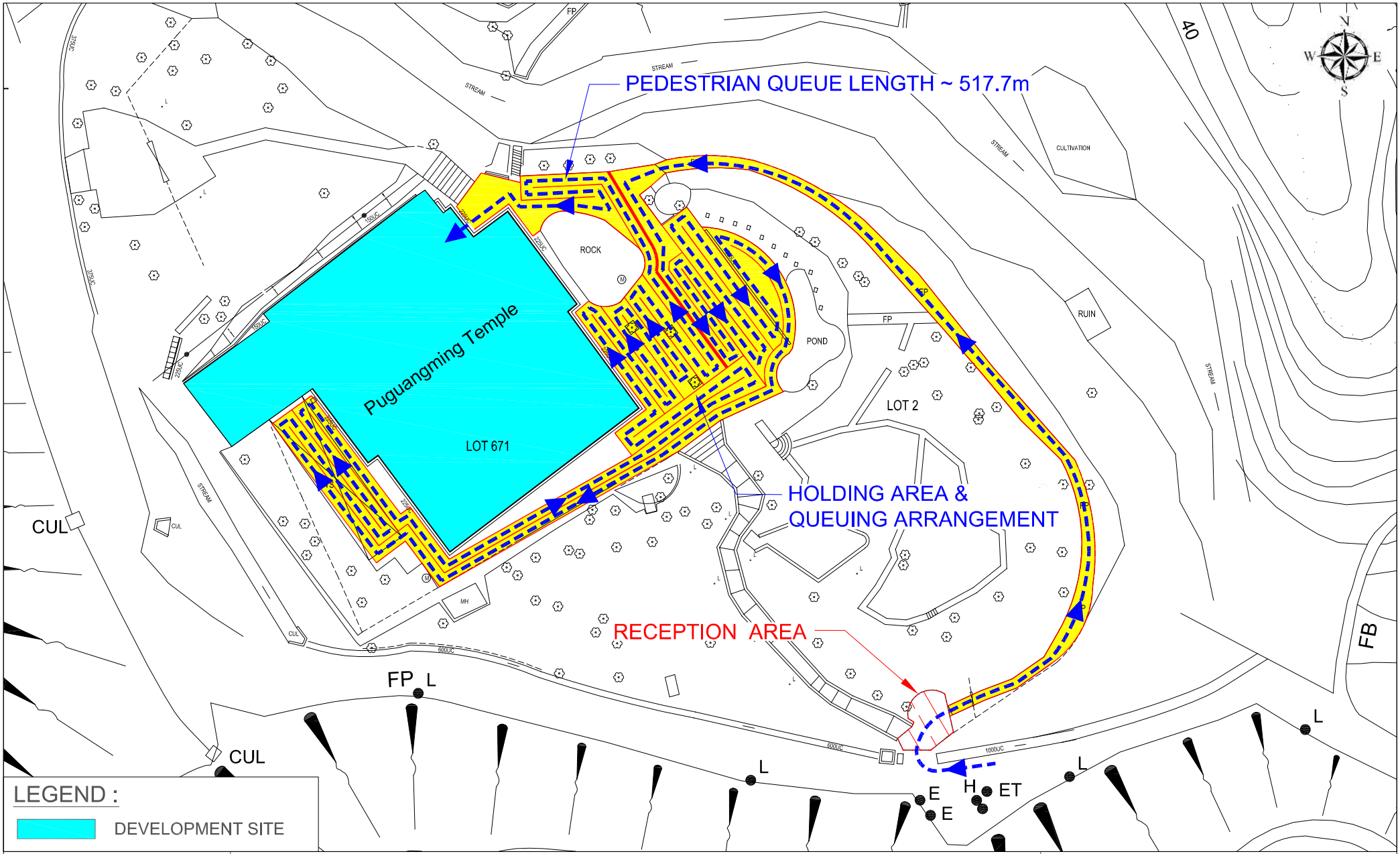
DRAWING NO.

FP 1

# PUGUANGMING TEMPLE EXISTING FOOTPATH

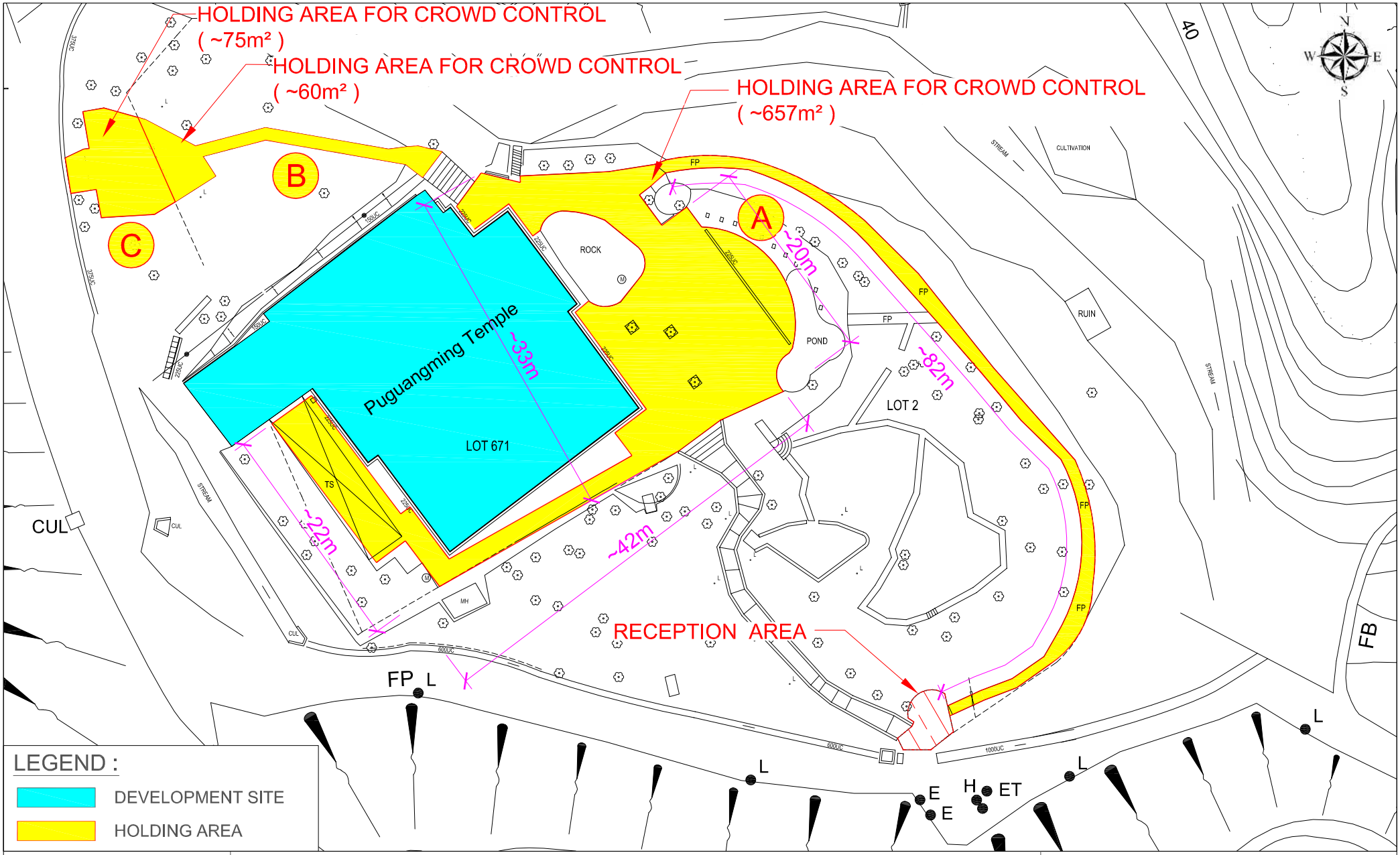
20058HK - SCALE 1 : 1000 @A3 - 20220628






| | | | |
|---|---|---|---|
| FIGURE NO.: TP 2.1 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan | | |
| PROJECT NO.: 20058HK | DRAWING TITLE: THE MANAGEMENT AND CONTROLLING MECHANISM | | |
| SCALE: 1 : 500 @ A4 | DATE: 17 FEB 2023 | | |

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| | |
|---|---|
| FIGURE NO.: TP 2.2 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXPECTED PEDESTRIAN ARRANGEMENT DURING FESTIVAL DAYS |
| SCALE: 1 : 500 @ A4 | DATE: 17 FEB 2023 |

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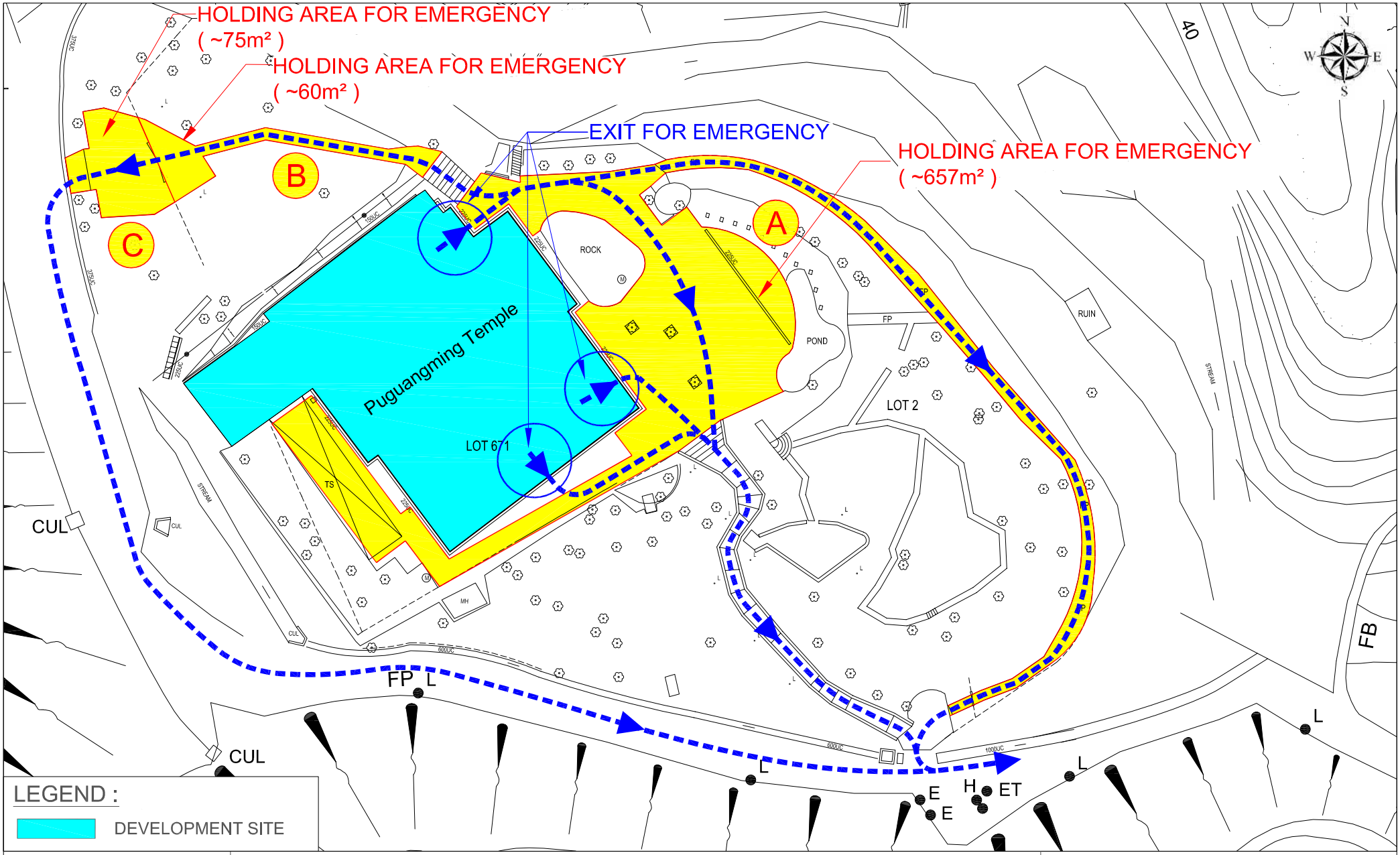


LEGEND :

DEVELOPMENT SITE

| | |
|---|---|
| FIGURE NO.: TP 2.3 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: SITE PHOTO OF EXISTING HOLDING AREA |
| SCALE: 1 : 1000 @A4 | DATE: 17 FEB 2023 |

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| | |
|---|---|
| FIGURE NO.: TP 2.4 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: PROPOSED ARRANGEMENT FOR "PLACE OF ULTIMATE SAFE" IN THE EVENT OF EMERGENCY |
| SCALE: 1 : 500 @A4 | DATE: 01 MAR 2023 |

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# Appendix 7

Sewerage Impact Assessment



# Section 12A Application for Rezoning from "Residential (Group B)" & "Green Belt" to "Other Specified Uses (Religious Institution with Columbarium)" Zone for Puguangming Temple and Columbarium (Proposal 2) at Lot Nos. 2 & 671 in D.D.181 in Tai Wai, Sha Tin, New Territories

## Sewerage Impact Assessment

Prepared for:

**Good Faith Limited**

Prepared by:
**Ramboll Hong Kong Limited**

Date:
**August 2021**

Reference Number:
**R5824_V2.2 - part 2 (16262)**

Prepared by: _____

Jonathan Law
Graduate Environmental Consultant

Approved by: _____

Tony Cheng
Senior Manager

**Ramboll Hong Kong Limited**
**21/F, BEA Harbour View Centre,**
**56 Gloucester Road, Wan Chai, Hong Kong**
Tel: (852) 3465 2888
Fax: (852) 3465 2899
Email: hkinfo@ramboll.com

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# Appendices

Appendix A Detailed Sewerage Impact Assessment Calculations
Appendix B Drainage Record Plan obtained from Drainage Services Department

# 1. Introduction

## 1.1 Background and Objectives

**1.1.1** Puguangming Temple site offers a place of congregation of Buddhists, which includes retreat centre and quarters for the dedicated masters, and also offers niches for their believers/followers.

**1.1.2** Puguangming Temple has been used as a Government, Institution and Community ("GIC) since at least 1950s. The last draft Sha Tin OZP No. S/ST/3 defined the site to be divided into partly residential (Group B) ("R(B)") and partly Green Belt ("GB"). Rezoning application to rectify the boundary as "Other Specified Uses (Religious Institution with Columbarium)" zone is in progress.

**1.1.3** Among the total number of niches (16,262) applied, some niches have been sold not to individual (14,483 out of 16,262), and this submission is prepared for supporting the planning application for these niches. However, the assessment is prepared based on the total number of niches (16,262) for assessing the cumulative impacts.

**1.1.4** The temple is absence of sewerage pipework for both the main building and building A & B. The need for sewerage system is expected for the extended religious service.

**1.1.5** Ramboll Hong Kong Limited has been appointed by the Good Faith Limited to conduct this Sewerage Impact Assessment (SIA).

## 1.2 Subject Site and its Environs

**1.2.1** The Subject Site comprises Lots 2 & 671 in DD181 near Pak Tin in Tai Wai, Sha Tin. It is located at the foothill of Needle Hill (Cham Shan) and on the slope beneath the elevated structure of Shing Mun Tunnel Road. The Site is located off any vehicular access road and bounded by vegetation and slope.

**1.2.2** Public housing and schools are situated downhill the subject site in Mei Tin Road. The SIA is to study the feasibility to connect the existing sewerage networking to the subject site.

**1.2.3** **Figure 1** shows the location of the Subject Site and its environs.

## 1.3 Rezoning Application

**1.3.1** Good Faith Limited is applying for rezoning the subject site from "Residential (Group B) (R(B)) and "Green Belt" (GB) to "Other Specified Uses (Religious Institution with Columbarium).

**1.3.2** The Temple is planned to offer 16,262 niches at the site.

# 2. Sewerage Impact Assessment

## 2.1 Scope of Work

**2.1.1** The aim of this study is to assess whether the capacity of the existing sewerage networking to the Subject Site is sufficient to cope with the sewage flow from the proposed development and existing development in the vicinity. Drainage Record Plans from the Drainage Services Department (DSD) were obtained for the information of sewerage impact assessment.

## 2.2 Existing Sewerage System

**2.2.1** According to the Drainage Record Plans**,** there are currently no public sewers connected to the proposed development. However, there are existing Ø300mm, Ø450mm sewers running downhill of the Subject Site (manhole reference no. FMH4039977 to FMH4039947), which are then connected to Ø600mm sewers running along Mei Tin Street (manhole reference no. FMH4039947 to FMH4039948) as shown on **Figure 2**.

**2.2.2** The existing sewer network in Pik Tin Street area discharges to the sewers along Mei Tin Street. The local contributing catchments are shown in **Figure 3**.

## 2.3 Assessment Criteria and Methodology

**2.3.1** Environmental Protection Department's (EPD's) Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning, Version 1 (GESF) is referred to estimate the quantity of the sewage generated from the proposed redevelopment and the existing development. Sewage flow parameters and global peaking factors in this document are adopted.

**2.3.2** According to the Table T-1 of GESF, the unit flow factor of Domestic Flow – Private R2 is 0.27 $m^3$/day and Traditional Village is 0.15 $m^3$/day.

**2.3.3** According to the Table T-2 of GESF, unit flow of student is 0.04 $m^3$/day and the unit flow of commercial employees is 0.08 $m^3$/day. For typical teachers and staff in school, the unit flow factors are 0.28 $m^3$/day for commercial employees and commercial activities J11. Regarding the employees worked in the kitchen of proposed development, the unit flow factor is 1.58 $m^3$/day for commercial activities J10.

**2.3.4** The Catchment Inflow Factor ($P_{CIF}$) for Sha Tin – 1.15 is used for catchment areas.

**2.3.5** The Gross Floor Area (GFA) of kitchen in the proposed development is 16.6 $m^2$.

**2.3.6** The average class size is adopted from the Educational Bureau's Student Enrolment Statistics 2015/16. The class size 29 is derived from dividing the total number of student enrolment by number of classes in 2015 (Table 4.1 A).

**2.3.7** With respect to the latest 2019 Population & Household Statistics (Summary Table 1), the average household size in Sha Tin District is 2.9 and is applied to the calculations in **Table 1** of **Appendix A**.

## 2.4 Wastewater Generated by the Proposed Development

**2.4.1** Wastewater arising from the proposed development will be primarily contributed by the visitors, staff, and dedicated masters of Puguangming Temple.

**2.4.2** During operational phase, there will be an online booking / reservation system to control the maximum number of visitors allowed per day. During the Festival periods or peak days, the maximum cumulative number of visitors of 4,000 per day based on the total of 16,262 niches has been adopted in the sewerage calculations. The number of visitors were advised based on the Traffic Impact Assessment of the total 16,262 niches.

**2.4.3** At the same time, the maximum number of staff for each day would be 20, and the maximum number of dedicated masters staying in the quarters would also be 20. The maximum number of volunteers for each day would be 100 according to the applicant.

**2.4.4** As such, the detailed calculations as shown in **Table 1** below (and in Table 2 of **Appendix A**) include the maximum number of visitors, staff, and dedicated masters.

**Table 1 Estimated Peak Flow**

| ***Calculation for Sewage Generation Rate of the Proposed Development*** | | | |
|---|---|---|---|
| **Proposed Development** | | | |
| 1. Columbarium | | | |
| 1a. Total number of visitors | = | 4000 | visitors/day (Festival days or peak days) |
| 1b. Design flow for visitor | = | 0.01 | $m^3$/day* |
| 1c. Sewage Generation rate | = | 40.0 | $m^3$/day |
| | | | |
| 2. Office | | | |
| 2a. Total number of employees | = | 20 | employees |
| 2b. Design flow for commercial employee | = | 80 | litre/employee/day -- (refer to Table T-2 of GESF – J6) |
| 2c. Sewage Generation rate | = | 1.6 | $m^3$/day |
| | | | |
| 3. Quarters / Retreat Centre | | | |
| 3a. Total number of employees | = | 20 | Employees |
| 3b. Design flow for commercial employee | = | 190 | litre/employee/day -- (refer to Table T-1 of GESF - Institutional and special class) |
| 3c. Sewage Generation rate | = | 3.8 | $m^3$/day |
| | | | |
| 4. Volunteers | | | |
| 4a. Total number of volunteers | = | 100 | volunteers/day |
| 4b. Design flow for volunteer | = | 80 | litre/employee/day -- (refer to Table T-2 of GESF – Commercial Employee) |
| 4c. Sewage Generation rate | = | 8.0 | m3/day |
| | | | |
| 5. Kitchen | | | |
| 5a. Assumed Area | = | 17 | $m^2$ |
| 5b. Assumed floor area per employee | = | 19.6 | $m^2$ per worker -- (refer to Table 8 of CIFSUS - Restaurants) |
| 5c. Total number of employees | = | 1 | employees |
| 5d. Design flow for commercial activities and employee | = | 1.58 | $m^3$/employee/day -- (refer to Table T-2 of GESF - J10) |
| 5e. Sewage Generation rate | = | 1.3 | $m^3$/day |

| *Calculation for Sewage Generation Rate of the Proposed Development* | | | |
|---|---|---|---|
| **Proposed Connection to New Terminal Manhole** | | | |
| Flow Rate | = | 54.7 | $m^3$/day |
| Contributing Population | = | 203 | persons |
| Peaking factor | = | 8 | Refer to Table T-5 of GESF for population <1,000 including stormwater allowance |
| Peak Flow | = | **5.1** | litre/sec |

Remark:
* The unit flow rate of the visitors adopted in the SIA has been updated with reference to the EIA report for Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery – Design and Construction, i.e. 0.01 $m^3$/d.

For the peak days, the maximum number of visitors in the columbarium found within Puguangming Temple will be around 4000 per day, based on the Traffic Impact Assessment prepared for the proposed columbarium, and it is assumed all visitors will visit the toilet which is more conservative than that adopted in the above mentioned EIA report.

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## 2.5 Assessment of Sewerage Impact

**2.5.1** Sewage generated from the proposed development will be discharged through proposed connection to the existing sewerage system, to sewer manhole no. FMH4039977, as shown in **Figure 2**.

**2.5.2** It is estimated that the capacity of the aforementioned pipe segments is sufficient to cater the sewage generated from the catchment area and from the proposed development (**Figure 3**).

**2.5.3** **Appendix A** shows the detailed calculation on the estimated hydraulic capacity of the existing sewer sections and the calculation of the amount of the sewage entering each segment of the said sewer network.

## 2.6 Discussion

**2.6.1** The potential sewerage impact due to the proposed development has been quantitatively addressed as shown in **Appendix A**. The average and peak flow rates from the proposed development are about 53.4 $m^3$/day and 4.9 litre/sec respectively.

**2.6.2** After calculating the appropriate invert levels as mentioned above, the estimated sewage flow from the proposed development has been compared with the capacity of the existing sewerage system to determine whether it has adequate spare capacity to accommodate the flow from the proposed connection and existing catchment areas.

**2.6.3** According to Table 3a, 3b of **Appendix A** (the sewage generation rate from the development upstream) and Table 3c of **Appendix A** (the sewage generation rate from the development downstream) comparing the sewage generation rate of the overall catchment with the hydraulic capacity of the public sewers, it is found that the existing sewerage system has sufficient capacity to cater the sewage generated from the proposed development and existing upstream developments.

**2.6.4** Concerning the discharge from the proposed development, the nearest existing sewage manhole (no. FMH4039977) are not located next to the subject site (shown in **Figure 2**) and connection to public sewerage are required, new polyethylene pipes will be used with pipe diameter of not less than 200mm in accordance with the minimum pipe size requirement under Sewerage Manual. The design of the proposed sewer will be submitted via the drainage plan submission during the detail design stage.

**2.6.5** However, no upgrading or improvement work of the existing sewerage system will therefore be required.

# 3. Overall Conclusion

**3.1.1** A rezoning is proposed at the Subject Site at at Lot Nos. 2 & 671 in DD181 in Tai Wai, Shatin. The potential sewerage impact has been quantitatively addressed.

**3.1.2** Based on the sewerage impact assessment results, it is found that the capacity of the existing sewers serving the area would be sufficient to cater for the sewage generation from the proposed development and the surrounding catchment areas. No upgrading or improvement works of the existing sewerage system will therefore be required.

**3.1.3** Proposed connection from the Puguangming temple to the sewer manhole no. FMH4039977 will be undertaken by the Project Proponent.

# FIGURES

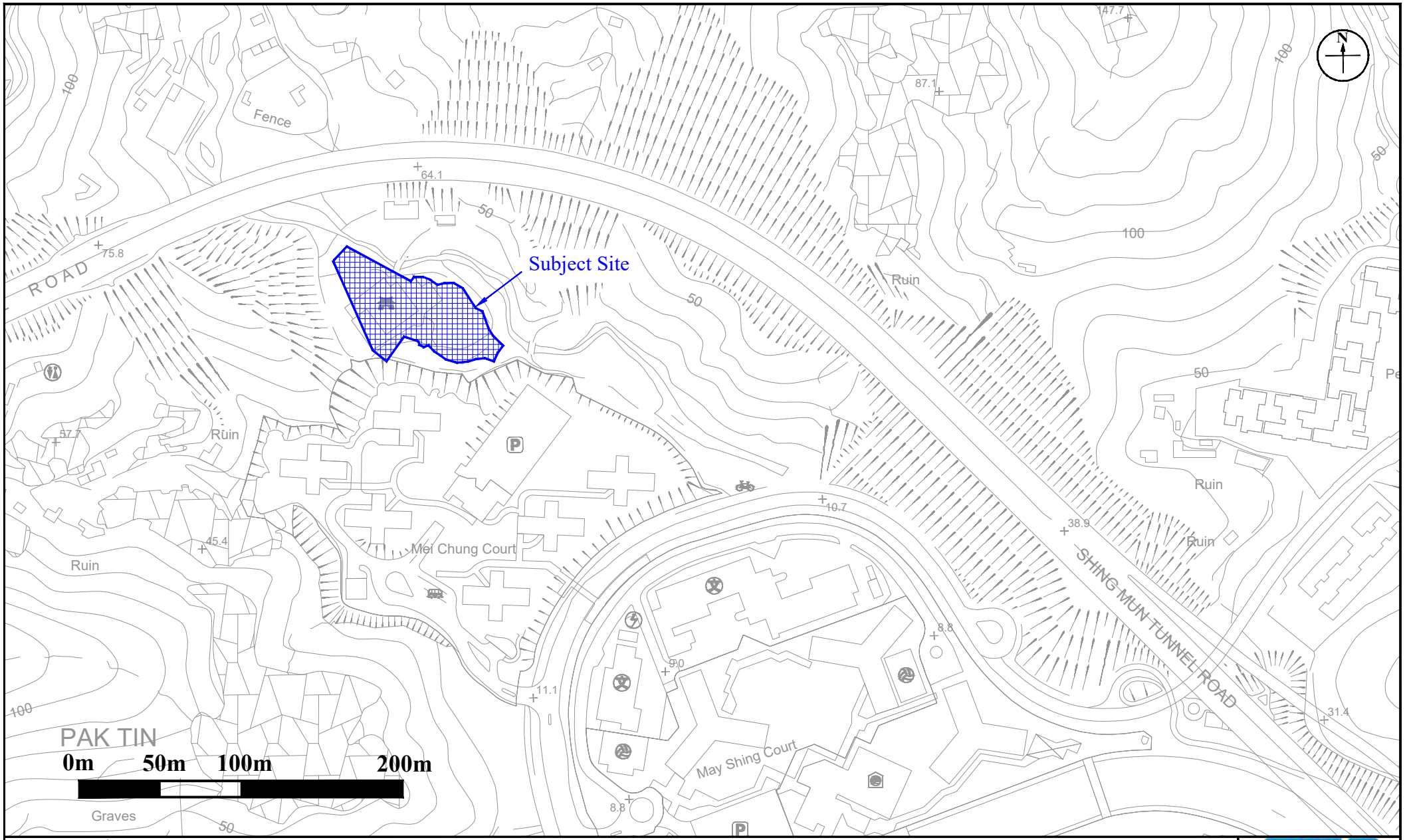



**Figure:** 1

**Title:** Subject Site and its Environs

**Project:** Section 12A Application for Rezoning from "Residential (Group B)" & "Green Belt" to "Other Specified Uses (Religious Institution with Columbarium)" Zone for Puguangming Temple and Columbarium (**Proposal 1**) at Lot Nos. 2 & 671 in D.D.181 in Tai Wai, Sha Tin, New Territories

RAMBOLL

| | |
|---|---|
| Drawn by: | VC |
| Checked by: | TC |
| Rev.: | 2.0 |
| Date: | Nov 2020 |

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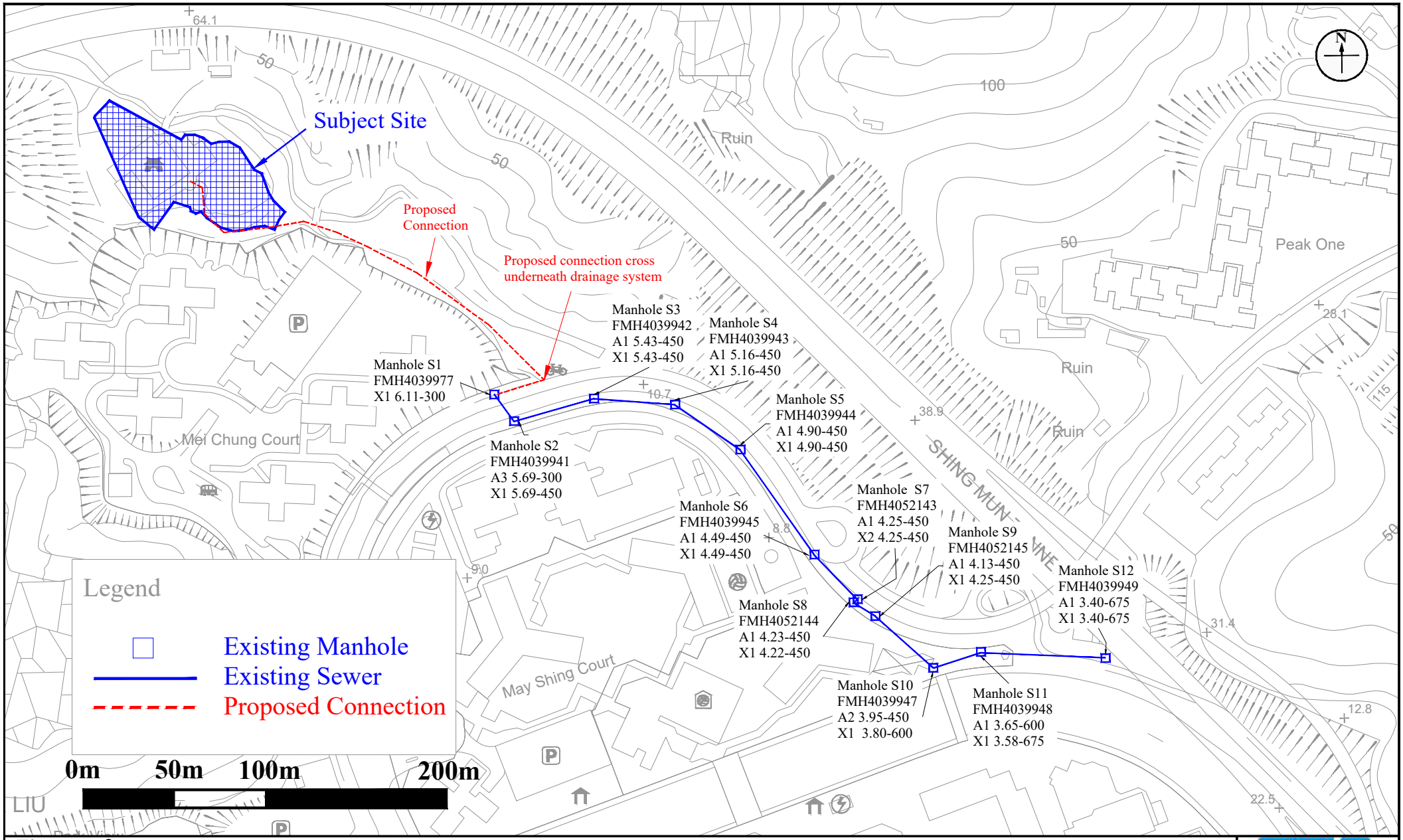



**Figure:** 2

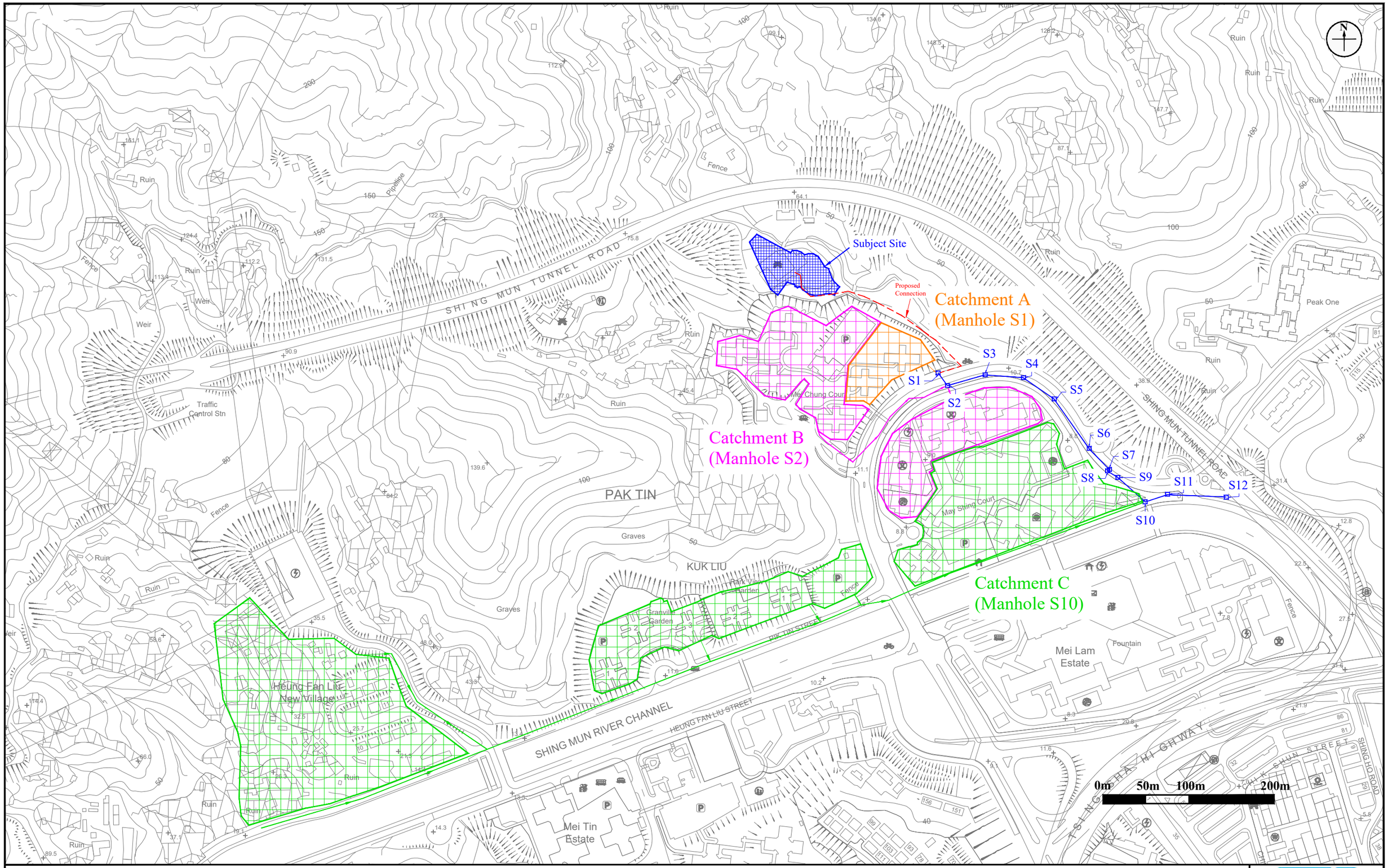
**Title:** Existing Sewer System in the vicinity of the Subject Site

**Project:** Section 12A Application for Rezoning from "Residential (Group B)" & "Green Belt" to "Other Specified Uses (Religious Institution with Columbarium)" Zone for Puguangming Temple and Columbarium (**Proposal 1**) at Lot Nos. 2 & 671 in D.D.181 in Tai Wai, Sha Tin, New Territories

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| Drawn by: | VC |
| Checked by: | TC |
| Rev.: | 2.0 |
| Date: | Nov 2020 |

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| | |
|---|---|
| **Figure:** 3 | RAMBOLL |
| **Title:** Existing Sewerage System and Catchment Areas in the Vicinity of the Subject Site | Drawn by: JL<br>Checked by: TC |
| **Project:** Section 12A Application for Rezoning from "Residential (Group B)" & "Green Belt" to "Other Specified Uses (Religious Institution with Columbarium)" Zone for Puguangming Temple and Columbarium (**Proposal 1**) at Lot Nos. 2 & 671 in D.D.181 in Tai Wai, Sha Tin, New Territories | Rev.: 2.1<br>Date: Mar 2021 |

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# APPENDIX A:
# DETAILED SEWERAGE IMPACT ASSESSMENT CALCULATIONS

*Table 1 Hydraulic Capacity of Existing Sewers at Mei Tin Road, Sha Tin*

| Segment | Manhole Reference | Manhole Reference | Pipe Dia. | Pipe Length | Invert Level 1 | Invert Level 2 | g | $k_s$ | s | v | V | Area | Q | Estimated Capacity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | m | mPD | mPD | $m/s^2$ | m | | $m^2/s$ | m/s | $m^2$ | $m^3/s$ | L/s |
| S1-S2 | FMH4039977 | FMH4039941 | 300 | 18.5 | 6.11 | 5.69 | 9.81 | 0.0030 | 0.023 | 0.000001 | 1.87 | 0.07 | 0.13 | 132 |
| S2-S3 | FMH4039941 | FMH4039942 | 450 | 45.9 | 5.69 | 5.43 | 9.81 | 0.0030 | 0.006 | 0.000001 | 1.22 | 0.16 | 0.19 | 195 |
| S3-S4 | FMH4039942 | FMH4039943 | 450 | 44.6 | 5.43 | 5.16 | 9.81 | 0.0030 | 0.006 | 0.000001 | 1.27 | 0.16 | 0.20 | 201 |
| S4-S5 | FMH4039943 | FMH4039944 | 450 | 44.0 | 5.16 | 4.90 | 9.81 | 0.0030 | 0.006 | 0.000001 | 1.25 | 0.16 | 0.20 | 199 |
| S5-S6 | FMH4039944 | FMH4039945 | 450 | 70.8 | 4.90 | 4.49 | 9.81 | 0.0030 | 0.006 | 0.000001 | 1.24 | 0.16 | 0.20 | 197 |
| S6-S7 | FMH4039945 | FMH4052143 | 450 | 34.5 | 4.49 | 4.25 | 9.81 | 0.0030 | 0.007 | 0.000001 | 1.36 | 0.16 | 0.22 | 216 |
| S7-S8 | FMH4052143 | FMH4052144 | 450 | 2.8 | 4.25 | 4.23 | 9.81 | 0.0030 | 0.007 | 0.000001 | 1.38 | 0.16 | 0.22 | 219 |
| S8-S9 | FMH4052144 | FMH4052145 | 450 | 14.2 | 4.22 | 4.13 | 9.81 | 0.0030 | 0.006 | 0.000001 | 1.30 | 0.16 | 0.21 | 206 |
| S9-S10 | FMH4052145 | FMH4039947 | 450 | 43.1 | 4.25 | 3.95 | 9.81 | 0.0030 | 0.007 | 0.000001 | 1.36 | 0.16 | 0.22 | 216 |
| S10-S11 | FMH4039947 | FMH4039948 | 600 | 27.6 | 3.80 | 3.65 | 9.81 | 0.0030 | 0.005 | 0.000001 | 1.45 | 0.28 | 0.41 | 410 |
| S11-S12 | FMH4039948 | FMH4039949 | 675 | 66.2 | 3.58 | 3.40 | 9.81 | 0.0030 | 0.003 | 0.000001 | 1.11 | 0.36 | 0.40 | 396 |

Remarks: (1) g=gravitational acceleration; $k_s$=equivalent sand roughness; s=gradient; v=kinematic viscosity of water; V=mean velocity

(2) The value of $k_s$ = 3mm is used for the calculation of slimed clayware sewer (based on Table 5: Recommended roughness values in Sewerage Manual)

(3) The value of velocity (V) is referred to the Tables for the hydraulic design of pipes, sewers and channels (8th edition)

(4) Equation used: $$V = -\sqrt{(8gDs)}\log\left(\frac{k_s}{3.7D} + \frac{2.51v}{D\sqrt{(2gDs)}}\right)$$

*Table 2 Calculation for Sewage Generation Rate of the Proposed Development at the Subject Site*

| **Proposed Development** | | | **Remarks** |
|---|---|---|---|
| **1. Columbarium** | | | |
| 1a. Total number of visitors | = | 4000 | visitors/day (Festival days or peak days) |
| 1b. Design flow for visitor | = | 0.01 | $m^3$/day* |
| 1c. Sewage Generation rate | = | 40.0 | $m^3$/day |
| **2. Office** | | | |
| 2a. Total number of employees | = | 20 | employees |
| 2b. Design flow for commercial employee | = | 80 | litre/employee/day -- (refer to Table T-2 of GESF - J6) |
| 2c. Sewage Generation rate | = | 1.6 | $m^3$/day |
| **3. Quarters / Retreat Centre** | | | |
| 3a. Total number of employees | = | 20 | employees |
| 3b. Design flow for commercial employee | = | 190 | litre/employee/day -- (refer to Table T-1 of GESF - Institutional and special class) |
| 3c. Sewage Generation rate | = | 3.8 | $m^3$/day |
| **4. Volunteers** | | | |
| 4a. Total number of volunteers | = | 100 | volunteers/day |
| 4b. Design flow for volunteer | = | 80 | litre/employee/day -- (refer to Table T-2 of GESF - Commercial Employee) |
| 4d. Sewage Generation rate | = | 8.0 | $m^3$/day |
| **5. Kitchen** | | | |
| 5a. Assumed Area | = | 17 | $m^2$ |
| 5b. Assumed floor area per employee | = | 19.6 | $m^2$ per worker -- (refer to Table 8 of CIFSUS - Restaurants) |
| 5c. Total number of employees | = | 1 | employees |
| 5d. Design flow for commercial activities and employee | = | 1.58 | $m^3$/employee/day -- (refer to Table T-2 of GESF - J10) |
| 5e. Sewage Generation rate | = | **1.3** | $m^3$/day |
| **Sub-Total Flow of Proposed Development** | | | |
| Flow Rate | = | 54.7 | $m^3$/day |
| Contributing Population | = | 203 | people |
| Peaking factor (P) | = | 8 | Refer to Table T-5 of GESF for population <1,000 including stormwater allowance |
| Peak Flow | = | **5.1** | litre/sec |

* The unit flow rate of the visitors adopted in the SIA has been updated with reference to the EIA report for Site Formation and Associated Infrastructural Works for Development of Columbarium, Crematorium and Related Facilities at Sandy Ridge Cemetery – Design and Construction, i.e. 0.01 $m^3$/d.
For the peak days, the maximum number of visitors in the columbarium found within Puguangming Temple will be around 4000 per day, based on the Traffic Impact Assessment prepared for the proposed columbarium, and it is assumed all visitors will visit the toilet which is more conservative than that adopted in the above mentioned EIA report.

*Table 3a Calculation for Sewage Generation Rate of the Existing Surrounding Building (Catchment A)*

**Catchment A**

**1. Mei Chung Court (Hing Chung House & Lai Chung House)**

| | | | |
|---|---|---|---|
| 1a. Total number of flat units | = | 620 | units |
| 1b. Total number of residents | = | 1798 | residents (refer to 2019 Population & Household Statistic - average household size of 2.9 in Shatin District) |
| 1c. Design flow | = | 270 | litre/person/day -- (Private R2 in Table T-1 of GESF) |
| 1d. Sewage Generation rate | = | 485.5 | $m^3$/day |

**Sub-total Catchment A**

| | | | |
|---|---|---|---|
| Flow Rate | = | 485.5 | $m^3$/day |
| Flow Rate with Catchment Inflow Factor for Sha Tin | = | 558.3 | $m^3$/day |
| Contributing Population | = | 2068 | people |
| Peaking factor (P) | = | 6 | Refer to Table T-5 of GESF for population 1,000 - 5,000 including stormwater allowance |
| Peak Flow | = | **38.8** | litre/sec |

**Total Flow at Manhole S1 (FMH4039977), Proposed Development and Catchment A**

| | | | |
|---|---|---|---|
| Flow Rate | = | 540.2 | $m^3$/day |
| Flow Rate with Catchment Inflow Factor for Sha Tin | = | 621.2 | $m^3$/day |
| Contributing Population | = | 2301 | people |
| Peaking factor (P) | = | 6 | Refer to Table T-5 of GESF for population 1,000 - 5,000 including stormwater allowance |
| Peak Flow | = | **43.1** | litre/sec |

*Table 3b Calculation for Sewage Generation Rate of the Existing Surrounding Building (Catchment B)*

**Catchment B**

**1. Free Methodist Mei Lam Primary School**

| | | | |
|---|---|---|---|
| 1a. Total number of teachers & staff | = | 36 | teachers & staff |
| 1b. Design flow for teachers & staff | = | 280 | litre/employee/day (refer to Table T-2 of GESF - J11) |
| 1c. Total number of students | = | 480 | students |
| 1d. Design flow for students | = | 40 | litre/person/day (refer to Table T-2 of GESF, School Student) |
| 1e. Sewage Generation rate | = | 29.3 | $m^3$/day |

**2. Lock Tao Secondary School**

| | | | |
|---|---|---|---|
| 2a. Total number of teachers & staff | = | 53 | teachers & staff |
| 2b. Design flow for teachers & staff | = | 280 | litre/employee/day (refer to Table T-2 of GESF - J11) |
| 2c. Total number of students | = | 522 | students (average class size 2005-2015, Education Bureau) average class size: 29 |
| 2d. Design flow for students | = | 40 | litre/person/day (refer to Table T-2 of GESF, School Student) |
| 2e. Sewage Generation rate | = | 35.7 | $m^3$/day |

**3. St. Margaret's Girls' College**

| | | | |
|---|---|---|---|
| 3a. Total number of teachers & staff | = | 22 | teachers & staff |
| 3b. Design flow for teachers & staff | = | 280 | litre/employee/day (refer to Table T-2 of GESF - J11) |
| 3c. Total number of students | = | 174 | students |
| 3d. Design flow for students | = | 40 | litre/person/day (refer to Table T-2 of GESF, School Student) |
| 3e. Sewage Generation rate | = | 13.1 | $m^3$/day |

**4. Mei Chung Court (Lok Chung House + Hong Chung House + Shing Chung House + Fu Chung House)**

| | | | |
|---|---|---|---|
| 4a. Total number of flat units | = | 1320 | units |
| 4b. Total number of residents | = | 3828 | residents (refer to 2019 Population & Household Statistic - average household size of 2.9 in Shatin District) |
| 4c. Design flow | = | 270 | litre/person/day -- (Private R2 in Table T-1 of GESF) |
| 4d. Sewage Generation rate | = | 1033.6 | $m^3$/day |

**Sub-total Catchment B**

| | | | |
|---|---|---|---|
| Flow Rate | = | 1111.7 | $m^3$/day |
| Flow Rate with Catchment Inflow Factor for Sha Tin | = | 1278.4 | $m^3$/day |
| Contributing Population | = | 4735 | people |
| Peaking factor (P) | = | 6 | Refer to Table T-5 of GESF for population 1,000 - 5,000 including stormwater allowance |
| Peak Flow | = | **88.8** | litre/sec |

**Total Flow at Manhole S2 (FMH4039941), Proposed Development and Catchment A-B**

| | | | |
|---|---|---|---|
| Flow Rate | = | 1651.9 | $m^3$/day |
| Flow Rate with Catchment Inflow Factor for Sha Tin | = | 1899.7 | $m^3$/day |
| Contributing Population | = | 7036 | people |
| Peaking factor (P) | = | 5 | Refer to Table T-5 of GESF for population 5,000-10,000 including stormwater allowance |
| Peak Flow | = | **109.9** | litre/sec |

*Table 3c Calculation for Sewage Generation Rate of the Existing Surrounding Building (Catchment C)*

**Catchment C**

**1. Mei Wai House**

| | | | |
|---|---|---|---|
| 1a. Total number of flat units | = | 1025 | units |
| 1b. Total number of residents | = | 2973 | residents (refer to 2019 Population & Household Statistic - average household size of 2.9 in Shatin District) |
| 1c. Design flow | = | 270 | litre/person/day -- (Private R2 in Table T-1 of GESF) |
| 1d. Sewage Generation rate | = | 802.6 | $m^3$/day |

**2. Mei Lam Sport Centre**

| | | | |
|---|---|---|---|
| 2a. Assumed Area | = | 1946 | $m^2$ |
| 2b. Assumed floor area per employee | = | 30.3 | $m^2$ per worker -- (refer to Table 8 of CIFSUS - Community, Social & Personal Services) |
| 2c. Total number of employees | = | 64 | employees |
| 2d. Design flow for commercial employee | = | 80 | litre/employee/day -- (refer to Table T-2 of GESF) |
| 2e. Design flow for commercial activities | = | 200 | litre/employee/day -- (refer to Table T-2 of GESF - J11) |
| 2f. Sewage Generation rate | = | 18.0 | $m^3$/day |

**3. Granville Garden**

| | | | |
|---|---|---|---|
| 3a. Total number of flat units | = | 666 | units |
| 3b. Total number of residents | = | 1931 | residents (refer to 2019 Population & Household Statistic - average household size of 2.9 in Shatin District) |
| 3c. Design flow | = | 270 | litre/person/day -- (Private R2 in Table T-1 of GESF) |
| 3d. Sewage Generation rate | = | 521.5 | $m^3$/day |

**4. Park View Garden**

| | | | |
|---|---|---|---|
| 4a. Total number of flat units | = | 430 | units |
| 4b. Total number of residents | = | 1247 | residents (refer to 2019 Population & Household Statistic - average household size of 2.9 in Shatin District) |
| 4c. Design flow | = | 270 | litre/person/day -- (Private R2 in Table T-1 of GESF) |
| 4d. Sewage Generation rate | = | 336.7 | $m^3$/day |

**5. Mei Pak Court**

| | | | |
|---|---|---|---|
| 5a. Total number of flat units | = | 288 | units |
| 5b. Total number of residents | = | 835 | residents (refer to 2019 Population & Household Statistic - average household size of 2.9 in Shatin District) |
| 5c. Design flow | = | 270 | litre/person/day -- (Private R2 in Table T-1 of GESF) |
| 5d. Sewage Generation rate | = | 225.5 | $m^3$/day |

**6. May Shing Court**

| | | | |
|---|---|---|---|
| 6a. Total number of flat units | = | 2192 | units |
| 6b. Total number of residents | = | 6357 | residents (refer to 2019 Population & Household Statistic - average household size of 2.9 in Shatin District) |
| 6c. Design flow | = | 270 | litre/person/day -- (Private R2 in Table T-1 of GESF) |
| 6d. Sewage Generation rate | = | 1716.3 | $m^3$/day |

**7. Heung Fan Liu New Village**

| | | | |
|---|---|---|---|
| 7a. Total number of flat units | = | 210 | units |
| 7b. Total number of residents | = | 609 | residents (refer to 2019 Population & Household Statistic - average household size of 2.9 in Shatin District) |
| 7c. Design flow | = | 150 | litre/person/day -- (Tranditional village in Table T-1 of GESF) |
| 7d. Sewage Generation rate | = | 91.4 | $m^3$/day |

**Sub-total Catchment C**

| | | | |
|---|---|---|---|
| Flow Rate | = | 3711.9 | $m^3$/day |
| Flow Rate with Catchment Inflow Factor for Sha Tin | = | 4268.7 | $m^3$/day |
| Contributing Population | = | 15810 | people |
| Peaking factor (P) | = | 4 | Refer to Table T-5 of GESF for population 10,000-50,000 including stormwater allowance |
| Peak Flow | = | **197.6** | litre/sec |

**Total Flow at Manhole S10 (FMH4039947), Proposed Development and Catchment A-C**

| | | | |
|---|---|---|---|
| Flow Rate | = | 5363.8 | $m^3$/day |
| Flow Rate with Catchment Inflow Factor for Sha Tin | = | 6168.4 | $m^3$/day |
| Contributing Population | = | 22846 | people |
| Peaking factor (P) | = | 4 | Refer to Table T-5 of GESF for population 10,000-50,000 including stormwater allowance |
| Peak Flow | = | **285.6** | litre/sec |

*Table 4 Comparision of the Hydraulic Capacity of Existing Sewers for Sewerage generated from the Proposed Development and Surrounding Catchment Areas*

| Segment | Pipe Dia. (mm) | Pipe Length (m) | Gradient | Estimated Capacity (L/s) | Estimated Flow including the Proposed Development only (L/s) | Contributed by the Proposed Development only (%) | Status | Estimated Flow including the Proposed Development and Catchment Areas (L/s) | Contributed by the Proposed Development and the Surrounding Catchment Areas (%) | Status |
|---|---|---|---|---|---|---|---|---|---|---|
| S1-S2 | 300 | 18.5 | 0.0227 | 132 | 5.1 | 3.8% | OK | 43.1 | 32.6% | OK |
| S2-S3 | 450 | 45.9 | 0.0057 | 195 | 5.1 | 2.6% | OK | 109.9 | 56.4% | OK |
| S3-S4 | 450 | 44.6 | 0.0061 | 201 | 5.1 | 2.5% | OK | 109.9 | 54.6% | OK |
| S4-S5 | 450 | 44.0 | 0.0059 | 199 | 5.1 | 2.5% | OK | 109.9 | 55.3% | OK |
| S5-S6 | 450 | 70.8 | 0.0058 | 197 | 5.1 | 2.6% | OK | 109.9 | 55.8% | OK |
| S6-S7 | 450 | 34.5 | 0.0070 | 216 | 5.1 | 2.3% | OK | 109.9 | 50.9% | OK |
| S7-S8 | 450 | 2.8 | 0.0071 | 219 | 5.1 | 2.3% | OK | 109.9 | 50.2% | OK |
| S8-S9 | 450 | 14.2 | 0.0063 | 206 | 5.1 | 2.5% | OK | 109.9 | 53.3% | OK |
| S9-S10 | 450 | 43.1 | 0.0070 | 216 | 5.1 | 2.3% | OK | 109.9 | 50.9% | OK |
| S10-S11 | 600 | 27.6 | 0.0054 | 410 | 5.1 | 1.2% | OK | 285.6 | 69.7% | OK |
| S11-S12 | 675 | 66.2 | 0.0027 | 396 | 5.1 | 1.3% | OK | 285.6 | 72.2% | OK |

# APPENDIX B:
# DRAINAGE RECORD PLANS OBTAINED FROM DRAINAGE SERVICES DEPARTMENT

N

SOF4001220
A1 9.36-600

Intake Chamber
SSH4005662
X1 7.00-2600x2200

SGJ4010483
IL 7.70

SCH4006487
X1 10.89-300

SMH4053012
CL 12.17
X1 10.08-600

SGJ4010484
IL 7.00

SGJ4009301
IL 7.40

SMH4053013
CL 11.46
A1 9.71-600
A2 300
X1 9.71-600

SMH4053016
CL 11.20
A1 9.87-300
X1 9.80-375

SMH4053017
CL 10.81
A1 9.30-375
X1 9.30-375

FMH4039977
CL 12.11
X1 6.11-300

SGJ4009300
IL 8.31

2 CELLS 2600x2200 B.C.

SMH4053015
CL 11.84
A1 10.54-225
X1 10.47-300

FMH4039942
CL 10.94
A1 5.43-450
X1 5.43-450

FMH4039943
CL 10.46
A1 5.16-450
X1 5.16-450

SCH4006488
X1 8.03-1200

SMH4053014
CL 12.35
X1 10.85-225

SMH4053018
A1 1200
A2 1200
X1 1200

FMH4039941
CL 11.78
A1 5.92-225
A2 5.64-300
A3 5.69-300
X1 5.69-450

SGJ4009302
IL 6.70

ZDA4002840

ZDA4002841

FMH4039940
CL 12.44
A1 6.14-300
X1 6.14-300

FTH4002600
X1 6.05-225

FMH4039944
CL 9.98
A1 4.90-450
X1 4.90-450

IL 5.96
IL 5.96

樂道中學
Lock Tao Secondary School

聖瑪加利女書院
St. Margaret's Girls' College

籃球場
Basketball Court

翠城閣
Foi Shing House

道路

EXISTING SEWER
EXISTING S.W.D.

SEWER ALIGNMENT AND LEVELS SHOWN ARE SUBJECT TO SITE VERIFICATION

PART OF DRG. NO.: ASW-15C-1
SCALE 1 : 500

16 JUN 2017

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1/4

EXISTING SEWER
EXISTING S.W.D.

SEWER ALIGNMENT AND LEVELS SHOWN ARE SUBJECT TO SITE VERIFICATION

PART OF DRG. NO. ESW215C-1
SCALE 1 : 500

16 JUN 2017

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826800N

826700N

836200E

836300E

836375E

SCH4006621
X1 8.31-300

SGJ4009303
IL 7.05

2 CELLS 2800x2200 R.C.

SGJ4019529

ZDA4002842

ZDA4002843

IL 5.08
IL 5.08

SMH4053480
CL 8.70
X1 5.91-900

SGJ4009304
IL 5.81

FMH4039945
CL 9.43
A1 4.49-450
X1 4.49-450

FMH4052143
CL 9.30
A1 4.25-450
X1 4.49-450
X2 4.25-450

FMH4052144
CL 9.30
A1 4.23-450
X1 4.22-450

FMH4052145
CL 9.30
A1 4.13-450
A2 3.95-450
X1 4.25-450

SCH4006497
X1 300

SMH4053122
CL 7.80
A1 300
X1 5.92-450

SCH4006498
X1 5.34-525

FMH4052135
CL 14.60
A1 13.65-300
X1 11.45-300

FMH4052136
CL 12.10
A1 11.20-300
X1 8.45-300

FMH4052138
CL 8.10
A1 8.40-300
X1 6.30-450

FMH4052131
CL 20.09
A1 18.60-300
A2 18.60-225
X1 17.15-300

FMH4052132
CL 17.30
A1 15.30-300
X1 15.11-300

FMH4052134
CL 17.30
A1 13.80-300
X1 13.80-300

FMH4052133
CL 15.10
A1 13.88-300
X1 13.88-300

FMH4052137
CL 9.20
A1 8.10-300
X1 6.60-300

L 5.96
L 5.96

Cycling Track

FP

CUL

城門隧道公路

2/4

826700N
836000E
836100E
826600N
826500N

EXISTING SEWER
EXISTING S.W.D.
ALIGNMENT AND LEVELS SHOWN SUBJECT TO SITE VERIFICATION
OF DRG. NO. 7-SW-15C-3
500

16 JUN 2017

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逸城閣
Yat Shing House

MAY SHING COURT

美林體育館
Mei Lam Sports Centre

多層停車場
Multi-storey Car Park

Basketball C

Road

道路

CW

排水口
Outfall

34000 Channel

FMH4039978
CL 8.60
A1 5.13-375
X1 5.03-450

FMH4039979
CL 7.90
A1 4.71-450
X1 4.71-450

SGJ4012714
IL 6.40

SGJ4012715

SMH4053022
CL 9.10
A1 8.54-525
X1 6.54-525

FMH4039981
CL 9.04
A1 225
A2 5.98-500
A3 5.94-375
X1 5.97-500
X2 5.94-375

SMH4053025
CL 8.56
A1 5.94-1350
X1 5.94-1350

7m DR

3/4

MEI TIN ROAD

SGJ4009305

SMH4053123
CL 8.52
A1 5.80-450
X1 5.80-450

SMH4053124
CL 7.90
A1 5.11-525
X1 5.11-625

FMH4052139
CL 8.00
A1 6.20-400
X1 6.19-400

SCH4006499
X1 5.52

FMH4052140
CL 8.00
A1 6.11-400
X1 6.10-400

FMH4052141
CL 8.00
A1 5.88-400
X1 4.35-400

DWF Interceptor
SDH4001365
CL 3.95
X1 3.95-150

FMH4039949
CL 7.20
A1 3.40-675
A2 4.30-400
X1 3.40-675

SMH4053125
CL 7.90
A1 525
X1 5.07-525

FMH4039948
CL 7.20
A1 3.65-600
X1 3.58-675

SMH4053126
CL 7.60
A1 525
X1 4.78-525

FMH4039950
A1 675
A2 150
X1 675

SGJ4012717
IL 4.50

SGJ4012718
IL 4.70

SGJ4012716

FMH4039947
CL 7.50
A1 3.95-450
A2 3.95-450
X1 3.80-600

SGJ4012719

2 CELLS 2800X2200 B.C.

2 CELLS 2600X2200 B.C.

34000 Channel

排水口
Outfall

城門河道

SHING MUN RI

斜路

Playground
遊樂場

Stand
看台

Mei Yeung House
美楊樓

Basketball Court
籃球場

Cycling Track

CW

Rood

道路

遊樂場
Playground

EXISTING SEWER
EXISTING S.W.D.

SEWER ALIGNMENT AND LEVELS SHOWN ARE SUBJECT TO SITE VERIFICATION

PART OF DRG NO. 7-SW-15C-3
SCALE 1:500

16 JUN 2017

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4/4

826700N
826600N
826500

PLANPLUS 思顧
CONSULTANCY 諮問

# Section 12A Application for Rezoning from "Residential (Group B)" & "Green Belt" to "Other Specified Uses (Religious Institution with Columbarium)" Zone for Puguangming Temple and Columbarium (Proposal 2) at Lot Nos. 2 & 671 in D.D.181 in Tai Wai, Sha Tin, New Territories

## Planning Application No. Y/ST/49

## Further Information 12

**June 2023**

Reference : PPC-PLG-10053b

## Responses-to-Comments

<table>
<tr><th>Item</th><th>Departmental Comments</th><th>Applicant's Responses</th></tr>
<tr><td colspan="3">1. Comments from Transport Department received on 16.5.2023</td></tr>
<tr><td>3.1</td><td>Our previous comment item 1 via memo ref. (NLLE0) dated 8 November 2022 in the same series remains valid.<br><br>Table 3.4 refers. The adoption of mean value of trip rate for Tai Wai Station Property Development is not justified and the trip generation/attraction for Tai Wai Station Property Development is underestimated by comparing with our record. Please review the trip generation/attraction to assess the traffic impact accordingly; and</td><td>Noted. Upper limited of trips rates were adopted for Tai Wai Station Property Development. Table 3.4 has been extracted for your easy reference. The assessment has been updated in the revised TIA report and all the junctions would operate with ample capacities in design year.<br><br>Table 3.4 Adopted Trip Gen. & Att. of Adjacent Developments<br><table>
<tr><th rowspan="3">Ref</th><th rowspan="3">Nos. of Units</th><th rowspan="3">Avg. Flat Size (m²)</th><th colspan="4">Adopted Trips (AM Peak)</th><th colspan="4">Adopted Trips (PM Peak)</th></tr>
<tr><th colspan="2">Trip Rate (pcu/hr/flat)</th><th colspan="2">Trips (pcu/hr)</th><th colspan="2">Trip Rate (pcu/hr/flat)</th><th colspan="2">Trips (pcu/hr)</th></tr>
<tr><th>Gen.</th><th>Att.</th><th>Gen.</th><th>Att.</th><th>Gen.</th><th>Att.</th><th>Gen.</th><th>Att.</th></tr>
<tr><td>A</td><td>1,325</td><td>39.4</td><td>0.1021</td><td>0.0709</td><td>135</td><td>94</td><td>0.0415</td><td>0.0464</td><td>55</td><td>61</td></tr>
<tr><td>B</td><td>216</td><td>55.6</td><td>0.0761</td><td>0.0573</td><td>16</td><td>12</td><td>0.0350</td><td>0.0451</td><td>8</td><td>10</td></tr>
<tr><td>C</td><td>288</td><td>50.3</td><td>0.0761</td><td>0.0573</td><td>22</td><td>17</td><td>0.0350</td><td>0.0451</td><td>10</td><td>13</td></tr>
<tr><td rowspan="4">D</td><td>3,090</td><td>61.6</td><td>0.1117</td><td>0.0729</td><td>345</td><td>225</td><td>0.0454</td><td>0.0551</td><td>140</td><td>170</td></tr>
<tr><td colspan="2" rowspan="2">Retail (GFA 62,000m²)</td><td colspan="2">(pcu/hr/100m² GFA)</td><td rowspan="2">205</td><td rowspan="2">207</td><td colspan="2">(pcu/hr/100m² GFA)</td><td rowspan="2">238</td><td rowspan="2">279</td></tr>
<tr><td>0.3307</td><td>0.3342</td><td>0.3839</td><td>0.4504</td></tr>
<tr><td colspan="2" rowspan="2">Post-secondary College (GFA 15,000m²)</td><td colspan="2">(pcu/hr)</td><td rowspan="2">53</td><td rowspan="2">57</td><td colspan="2">(pcu/hr)</td><td rowspan="2">37</td><td rowspan="2">17</td></tr>
<tr><td>53</td><td>57</td><td>37</td><td>17</td></tr>
<tr><td colspan="3">Subtotal</td><td>603</td><td>489</td><td colspan="2">Subtotal</td><td>415</td><td>466</td></tr>
</table>
1) Although Mei Ying Court and Mei Pak Court had been already completed in Year 2017, their trips are still added in assessment as conservative approach since they may not be fully occupied during the Year 2018 survey.<br>2) Upper limit of the TPDM trip rates is adopted for a conservative approach.</td></tr>
</table>

| | | |
|---|---|---|
| 3.2 | Our previous comment item 5 via memo ref. (NLLE0) dated 8 November 2022 in the same series remains valid.<br><br>Table 7.2 to 7.7 and Figure 7.3 refer. The pedestrian flow in Table 7.2 to 7.7 is found to be not consistent with Figure 7.3. For instance, the forecast pedestrian flow in Year 2027 Ching Ming Festival for footpath Section B is estimated to be 500 pedestrians per hour in Table 7.2 but is 600 pedestrians per hour in Figure 7.3. For footpath Section F, please review if the percentage of additional pedestrian should be 54% (i.e. 50% via footpath Section D + 4% via footpath Section E) instead of 50% in Table 7.5, 7.6 and 7.7. | Section B should be 500 people per hour. Pedestrian flow of **Figure 7.3** was updated.<br><br>Footpath Section F is also updated based on 54% in **Table 7.5**, **7.6** and **7.7** of the TIA report. |
| 4. | Please be advised that my comments are from traffic engineering point of view. As there are issues out of my purview, the applicant should separately seek comments from FEHD and other Government Departments on the Management Plan accordingly. | Noted. Comments from FEHD and other Government Departments would be sought. |
| **2. Comments from Lands Department received on 24.5.2023** | | |
| 3. | The applicant has replied our comments dated 21.4.2021 regarding the westernmost portion of the Puguangming Temple. The structure erected on westernmost portion of the Puguangming Temple is part of the structure erected on Lot No. 671 in D.D. 181 extending to the government land. Thus, our comments dated 21.4.2021 remain valid. | Noted. |
| 4. | The applicant has advised that all in-coming visitors will be diverted to the reception area and area of pedestrian queue length before allowing entry to Puguangmin Temple (Figure TP 2.1 refers). Portion of the reception area and area | Noted. We will cooperate with TD or other appropriate authority on how to enforce the proposed facilities if the application is approved by the Town Planning Board. |

| | | |
|---|---|---|
| | of pedestrian queue length fall outside the private lot of Lot No.2 and 671 in D.D. 181 and the on the unleased and unallocated government land. As mentioned in my previous relies in the subject application, any terms proposed to be incorporated into the land grant document are required to be land-related and enforceable. If the provision of reception area and area of pedestrian queue length is accepted and supported by the relevant government office(s), they may not be written into the lease through the mechanism of lease modification/ land exchange. You may wish to check with TD or other appropriate authority on how to enforce the proposed facilities if the application is approved by the Town Planning Board. | |
| **3. Comments from Fire Services Department received on 25.5.2023** | | |
| 1. | For the Consolidated R-to-C Table at Annex 2 of encl. (1), it was claimed that the contractor of land control team of LandsD had replaced the concrete blocks on the existing footpath by bollards. Nevertheless, during an on-site inspection on 12.5.2023 by this Department, it was noted that the concrete blocks at the subject footpath remained unchanged. The concrete blocks located the subject footpath shall be removed to avoid unnecessary hindrance for users. | Noted. We were previously informed that the estimated time of the replacement work will be about 3 months. The applicant has no objection to the bollards proposed by the Lands Department, which proactively took up responsibility for the replacement cost and the subsequent maintenance of the bollards. |

# Annex 1

Traffic Impact Assessment

# Puguangming Temple
# Application for License for Columbarium Use

# Traffic Impact Assessment
# (Proposal - 2)

## Report

**June 2023**

**CTA Consultants Limited**
**志達顧問有限公司**

# 1. INTRODUCTION

## 1.1 Background

1.1.1 CTA Consultants Limited ("CTA") is commissioned by the Applicant to carry out a Traffic Impact Assessment Report in supporting the Planning Application for increasing the number of niches in Puguangming Temple.

1.1.2 The Subject Site is located at Mei Tin Road, Tai Wai as shown in **Figure 1.1**. The Subject Site is at present a columbarium with niches/tablets.

1.1.3 **1,779 niches**, comply with the **Private Columbaria Ordinance (i.e. before the date of 30/6/2017**), was approved by TPB in 2022.

1.1.4 The applicant would like to apply for another **3,000 niches** that will give a total of **4,779 niches**.

1.1.5 According to information provided by the client, the utilization of niches/tablets in 2018 and the current status of the niches are summarized in **Table 1.1** below.

**Table 1.1 Summary of Utilization of Niches/Tablets**

| | No. of Niches/Tablets occupied in 2018 | No. of Niches/Tablets Approved in 2022 | This Application (Including the Approved 1,779 niches |
|---|---|---|---|
| **Niches** | 319 | 1,779 | **4,779** |
| **Tablets** | 345 | - | **345** |

## 1.2 Study Objectives

1.2.1 The main objectives of the study are as follows:

i) to assess the existing traffic conditions in the vicinity of the proposed columbarium development;

ii) to forecast traffic demands on the adjacent road network in the design year 2027 (i.e. Full operation year 2024 + 3 years);

iii) to estimate the likely traffic generated by the proposed development;

iv) to assess the impacts of traffic/ pedestrian generated by the temple in the vicinity;

v) to recommend improvement measures, if necessary, to alleviate any traffic problems on the road network.

## 1.3 Structure of the Report

1.3.1 Following this introductory chapter, there are 7 further chapters.

- **Chapter 2 – Existing Traffic Conditions**
- **Chapter 3 – Future Traffic Conditions**
- **Chapter 4 – Vehicular Traffic Impact Assessment**
- **Chapter 5 – Public Transport Demand**
- **Chapter 6 – Parking Provision**
- **Chapter 7 – Pedestrian Traffic Impact Assessment**
- **Chapter 8 – Summary and Conclusion**

# 2. EXISTING TRAFFIC CONDITIONS

## 2.1 Existing Road Network

2.1.1 The existing road network in the vicinity of the proposed Columbarium is shown in **Figure 2.1**. Visitors are mainly access through Mei Tin Road.

2.1.2 Mei Tin Road is a single 2-lane 2-way Local Road, connecting with Pik Tin Street and Tung Lo Wan Hill Road. It serves as road link providing access for the residential development at Tai Wai.

2.1.3 As shown in **Figure 2.1**, 9 junctions were identified to be critical for assessment of traffic impact due to the proposed Columbarium. They are listed in below **Table 2.1** and their existing junction layout arrangements are shown in **Figures 2.2** to **2.10** respectively.

**Table 2.1 Identified Critical Junctions**

| Ref. | Junction | Type | Figure No. |
|---|---|---|---|
| A | Mei Tin Road / Heung Fan Liu Street | Signal | **2.2** |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | **2.3** |
| C | Mei Tin Road / Chik Fai Street | Signal | **2.4** |
| D | Mei Tin Road / Pik Tin Street | Priority | **2.5** |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | **2.6** |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | Roundabout | **2.7** |
| G | Mei Tin Road / Chik Wan Street | Signal | **2.8** |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | **2.9** |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | Roundabout | **2.10** |

2.1.4 No transport facilities are at present provided in the Puguangming Temple, such as car park, loading/unloading and pick up/drop off space.

2.1.5 Therefore, people accessing the temple will use MTR / GMB /Bus / Taxi / Private Car + Walk

## 2.2 Public Transport Facilities

2.2.1 Puguangming Temple can be accessed by various types of public transports. The Subject Site is about 1,000m away from Tai Wai Railway Station. Therefore, some visitors may prefer to take GMB / buses to get access to the Subject Site.

2.2.2 The details of public transport facilities in the vicinity are shown in **Figure 2.11**. The existing Bus and GMB routes are summarized in **Table 2.2** below.

**Table 2.2 Existing Road-based Public Transport Services in the Vicinity**

| Service | Route | Origin - Destination | Services Day | Frequency (min) |
|---|---|---|---|---|
| Franchised Bus | 46P[1] | Mei Tin – Kwai Fong Railway Station | Mon to Sat, except Public Holiday | 10 – 30 |
| | 80 | Mei Lam – Kwun Tong Ferry | Mon to Sun | 7 – 20 |
| | 80A[1] | Mei Lam - Kwun Tong Ferry | Mon To Fri (except Public Holidays) | Two per day |
| | 81 | Wo Che - Jordan (West Kowloon Station) | Mon to Sun | 10 - 20 |
| | 81S[1] | Mei Tin Estate – Nathan Road (Public Square Street) | Mon to Fri, except Public Holiday | 30 |
| | 82B[1] | Mei Tin – Tai Wai Railway Station | Mon to Fri, except Public Holiday | Two per day |
| | 82K | Mei Lam – Wong Nai Tau | Mon to Sun | 30 – 40 |
| | 283 | Shatin Central – Mei Chung Court (Circular) | Mon to Sun | 10 – 15 |
| | 286P[1] | Mei Chung Court – Cheung Sha Wan | Mon to Fri, except Public Holiday | 15 |
| | 286X | Hin Keng – Sham Shui Po (Circular) | Mon to Sun | 12 – 20 |
| | 288C[1] | Shui Chuen O - Tai Wai Station | Mon to Fri, except Public Holiday | Two per day |
| | 985[1] | Mei Tin Estate (Mei Chi House) – Wan Chai (Hennessy Road) | Sat, except Public Holiday | 8 – 10 |
| | 985A[1] | Mei Tin Estate (Mei Chi House) - Wan Chai | Mon to Fri, except Public Holiday | 8 – 10 |
| | 989[1] | Sai Wan Ho - Fo Tan (Chun Yeung Estate) | Mon to Fri, except Public Holiday | Four per peak period |
| | NA41[1] | Shui Chuen O - Tai Wai Station - HZMB Hong Kong Port | Mon to Sun | One per day |
| GMB | 63A | Mei Chung Court – Tai Wai Station (Circular) | Mon to Sun | 3 – 7 |
| | 63B | Granville Garden – Tai Wai Station (Circular) | Mon to Sun | 6 – 10 |
| | 63K | Mei Tin Estate Public Transport Interchange – Tai Wai Station (Circular) | Mon to Sun | 3 – 7 |
| | 63S[2] | Mei Tin Estate Public Transport Interchange – Mong Kok (Circular) | Mon to Sun | 8 – 15 |

*Note:* [1] *Peak Hour Service only*

[2] *Night Time Service only*

## 2.3 Parking Facilities in the Vicinity

2.3.1 There are 3 numbers of multi-storey car parks in the vicinity of the Subject Site, namely Mei Chung Court, May Shing Court and Mei Lam.

2.3.2 The locations of the 3 car parks and pedestrian routing to the proposed columbarium are shown in **Figures 2.12** and **2.13**.

## 2.4 Traffic Survey

2.4.1 Due to the Social Distancing Rules under the effect of COVID-19, a maximum of 4 people in each group are allowed. Following this Rule, Puguangming Temple only allows a maximum of 4 people to stay at any rooms/apartment at any one time. Thus, it is believed that the no. of visitors and vehicles (between 2019 and 2022) to the temple would be much lower than normal situation.

2.4.2 To give a much more reasonable and reliable base for assessment, the previous traffic survey carried out in Year 2018 is adopted for this Report.

***Ching Ming Festival, 2018***

a) To reveal the traffic conditions on the festival day, a pedestrian survey was conducted during Ching Ming Festival on 5 April 2018.

b) The Surveyed results are shown in **Table 2.3** and **2.4**.

c) The total incoming/outgoing daily flow is **595/512 visitors**

d) The incoming/outgoing hourly peak flow is **181/146 visitors**

## Table 2.3 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (15 mins Interval)

| 15 mins Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| 800 | 815 | 8 | 0 | 5 | 0 | 13 | 0 |
| 815 | 830 | 5 | 0 | 0 | 0 | 5 | 0 |
| 830 | 845 | 10 | 3 | 8 | 0 | 18 | 3 |
| 845 | 900 | 11 | 0 | 8 | 2 | 19 | 2 |
| 900 | 915 | 16 | 2 | 11 | 0 | 27 | 2 |
| 915 | 930 | 10 | 0 | 3 | 2 | 13 | 2 |
| 930 | 945 | 0 | 2 | 0 | 1 | 0 | 3 |
| 945 | 1000 | 3 | 0 | 8 | 3 | 11 | 3 |
| 1000 | 1015 | 13 | 5 | 8 | 5 | 21 | 10 |
| 1015 | 1030 | 6 | 0 | 7 | 5 | 13 | 5 |
| 1030 | 1045 | 13 | 10 | 6 | 8 | 19 | 18 |
| 1045 | 1100 | 11 | 2 | 12 | 0 | 23 | 2 |
| 1100 | 1115 | 18 | 6 | 21 | 4 | 39 | 10 |
| 1115 | 1130 | 26 | 23 | 24 | 17 | 50 | 40 |
| 1130 | 1145 | 40 | 10 | 21 | 16 | 61 | 26 |
| 1145 | 1200 | 23 | 19 | 8 | 9 | 31 | 28 |
| 1200 | 1215 | 19 | 21 | 16 | 13 | 35 | 34 |
| 1215 | 1230 | 16 | 13 | 2 | 21 | 18 | 34 |
| 1230 | 1245 | 6 | 8 | 10 | 5 | 16 | 13 |
| 1245 | 1300 | 10 | 35 | 3 | 21 | 13 | 56 |
| 1300 | 1315 | 8 | 29 | 8 | 12 | 16 | 41 |
| 1315 | 1330 | 13 | 0 | 10 | 10 | 23 | 10 |
| 1330 | 1345 | 0 | 26 | 6 | 13 | 6 | 39 |
| 1345 | 1400 | 0 | 6 | 5 | 8 | 5 | 14 |
| 1400 | 1415 | 3 | 5 | 7 | 5 | 10 | 10 |
| 1415 | 1430 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1430 | 1445 | 0 | 6 | 2 | 5 | 2 | 11 |
| 1445 | 1500 | 6 | 4 | 4 | 4 | 10 | 8 |
| 1500 | 1515 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1515 | 1530 | 3 | 5 | 7 | 3 | 10 | 8 |
| 1530 | 1545 | 10 | 6 | 8 | 4 | 18 | 10 |
| 1545 | 1600 | 3 | 7 | 10 | 3 | 13 | 10 |
| 1600 | 1615 | 0 | 3 | 0 | 0 | 0 | 3 |
| 1615 | 1635 | 3 | 7 | 3 | 3 | 6 | 10 |
| 1635 | 1645 | 3 | 2 | 2 | 4 | 5 | 6 |
| 1645 | 1700 | 0 | 8 | 0 | 5 | 0 | 13 |
| 1700 | 1715 | 0 | 9 | 0 | 7 | 0 | 16 |
| 1715 | 1730 | 0 | 4 | 0 | 2 | 0 | 6 |
| 1730 | 1745 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 1800 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | | **328** | **286** | **267** | **226** | **595** | **512** |

**Table 2.4 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (1 hour Interval)**

| 1 hour Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| **800** | **900** | 34 | 3 | 21 | 2 | 55 | 5 |
| **815** | **915** | 42 | 5 | 27 | 2 | 69 | 7 |
| **830** | **930** | 47 | 5 | 30 | 4 | 77 | 9 |
| **845** | **945** | 37 | 4 | 22 | 5 | 59 | 9 |
| **900** | **1000** | 29 | 4 | 22 | 6 | 51 | 10 |
| **915** | **1015** | 26 | 7 | 19 | 11 | 45 | 18 |
| **930** | **1030** | 22 | 7 | 23 | 14 | 45 | 21 |
| **945** | **1045** | 35 | 15 | 29 | 21 | 64 | 36 |
| **1000** | **1100** | 43 | 17 | 33 | 18 | 76 | 35 |
| **1015** | **1115** | 48 | 18 | 46 | 17 | 94 | 35 |
| **1030** | **1130** | 68 | 41 | 63 | 29 | 131 | 70 |
| **1045** | **1145** | 95 | 41 | **78** | 37 | 173 | 78 |
| **1100** | **1200** | 107 | 58 | 74 | 46 | **181** | 104 |
| **1115** | **1215** | **108** | 73 | 69 | 55 | 177 | 128 |
| **1130** | **1230** | 98 | 63 | 47 | 59 | 145 | 122 |
| **1145** | **1245** | 64 | 61 | 36 | 48 | 100 | 109 |
| **1200** | **1300** | 51 | 77 | 31 | **60** | 82 | 137 |
| **1215** | **1315** | 40 | 85 | 23 | 59 | 63 | 144 |
| **1230** | **1330** | 37 | 72 | 31 | 48 | 68 | 120 |
| **1245** | **1345** | 31 | **90** | 27 | 56 | 58 | **146** |
| **1300** | **1400** | 21 | 61 | 29 | 43 | 50 | 104 |
| **1315** | **1415** | 16 | 37 | 28 | 36 | 44 | 73 |
| **1330** | **1430** | 9 | 37 | 25 | 29 | 34 | 66 |
| **1345** | **1445** | 9 | 17 | 21 | 21 | 30 | 38 |
| **1400** | **1500** | 15 | 15 | 20 | 17 | 35 | 32 |
| **1415** | **1515** | 18 | 10 | 20 | 15 | 38 | 25 |
| **1430** | **1530** | 15 | 15 | 20 | 15 | 35 | 30 |
| **1445** | **1545** | 25 | 15 | 26 | 14 | 51 | 29 |
| **1500** | **1600** | 22 | 18 | 32 | 13 | 54 | 31 |
| **1515** | **1615** | 16 | 21 | 25 | 10 | 41 | 31 |
| **1530** | **1630** | 16 | 23 | 21 | 10 | 37 | 33 |
| **1545** | **1645** | 9 | 19 | 15 | 10 | 24 | 29 |
| **1600** | **1700** | 6 | 20 | 5 | 12 | 11 | 32 |
| **1615** | **1715** | 6 | 26 | 5 | 19 | 11 | 45 |
| **1630** | **1730** | 3 | 23 | 2 | 18 | 5 | 41 |
| **1645** | **1745** | 0 | 21 | 0 | 14 | 0 | 35 |
| **1700** | **1800** | 0 | 13 | 0 | 9 | 0 | 22 |

e) The expected visitor trips on festival days are derived based on the trip rates applied to the proposed number of Niches/Tablets as follows:

**Table 2.5 Expected Visitor Trips (Without implantation of Traffic Management Plan)**

| Existing | | Approved | | This Application (Including the Approved 1,779 no. | |
|---|---|---|---|---|---|
| **No. of Niches** | **Peak Flow (ped/hr)** | **No. of Niches** | **Flow (ped/hr)** | **No. of Niches** | **Flow (ped/hr)** |
| 319 | 108 | 1,779 | 602 | **4,779** | **1.617** |

## 2.5 Traffic Flows at Ching Ming Festival

2.5.1 Traffic surveys in the form of manual classified counts were also conducted at the above-mentioned critical junctions in **Table 2.1**. The 2018 observed traffic flows are shown in **Figure 2.14**. Existing operational performance of the critical junctions are listed in **Table 2.7** below.

## 2.6 Traffic Flows at Weekday

2.6.1 Traffic surveys in the form of manual classified counts were also conducted at the above-mentioned critical junctions in **Table 2.1** on normal weekday. The 2021 observed traffic flows are shown in **Figure 2.15**.

2.6.2 Due to the COVID-19, the surveyed traffic flows may be much less that of the normal conditions. Therefore, additional surveys are carried at the ATC Core station 5002 (at Shatin Road) to try to find out "corrected" factor. **Table 2.6** gives the surveyed results as compared to the ATC Core station 5002.

**Table 2.6 Derivation of COVID-19 Factor**

| | Weekday Flow (Veh/hr) | | | | |
|---|---|---|---|---|---|
| | South Bound | | North Bound | | Total |
| | AM Peak | PM Peak | AM Peak | PM Peak | |
| **ATC Core station 5002 (Year 2018)** | 2,730 | 2,400 | 2,470 | 2,280 | - |
| **Growth Factor Flow from 2018 to 2021 (1)** | 2,813 | 2,473 | 2,545 | 2,349 | **10,179** |
| **Surveyed Flow** | 2,482 | 2,297 | 2,084 | 2,201 | **9,064** |
| **COVID-19 Factor** | | | | | **1.12** |

*Note (1): The growth factor = **1.0%** (please refer to **Section 3.3**)*

*(2): ATC 2019 not adopted due to the traffic flows may affected by public meetings and social events in Year 2019*

2.6.3 The COVID-19 Factor of **1.12** is then applied to the surveyed traffic flows in **Figure 2.15** to give the COVID-19 corrected surveyed traffic flows shown in **Figure 2.16** for the use in the later section of this report. Existing operational performance of the critical junctions are listed in **Table 2.7** below.

**Table 2.7 Operational Performance of Identified Critical Junctions in Observed Year**

| Ref. | Junction | Method of Control | Year 2018 (Observed) RC/DFC[(1)] | Year 2021 (COVID-19 Corrected) RC/DFC[(1)] | |
|---|---|---|---|---|---|
| | | | Festival Day | Weekday | |
| | | | Peak | AM Peak | PM Peak |
| A | Mei Tin Road / Heung Fan Liu Street | Signal | >+100% | +85% | >+100% |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | >+100% | >+100% | +79% |
| C | Mei Tin Road / Chik Fai Street | Signal | +60% | +90% | +86% |
| D | Mei Tin Road / Pik Tin Street | Priority | 0.21 | 0.35 | 0.22 |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | >+100% | >+100% | >+100% |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | Roundabout | 0.34 | 0.43 | 0.42 |
| G | Mei Tin Road / Chik Wan Street | Signal | >+100% | +60% | +97% |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | >+100% | +84% | +70% |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | Roundabout | 0.13 | 0.09 | 0.09 |

*Note: (1) RC = Reserve Capacity for signal junction*

*DFC = Design Ratio of Flow to Capacity for Priority Junction or Roundabout*

2.6.4 The assessment results in **Table 2.7** indicate that all critical junctions are at present operating with ample capacities.

# 3. FUTURE TRAFFIC CONDITIONS

## 3.1 The proposed Management Plan

3.1.1 The columbarium will be operated under a Management Plan "**Traffic Management Plan**" submitted separately.

3.1.2 The plan will base on a Pre-registration arrangement. The arrangement is as follows:

a) Pre–Registration

i) The Visitors coming to Puguangming Temple in Festival periods has to be restricted into 10 Sections, each section for 1 hour:

ii) From 8 am to 6 pm, each section will last for 1 hour.

iii) People coming has to be **Pre–Registration**.

iv) Each section will be restricted to **250 people**, which is able to give a total of **2,500 people a day**.

b) Implementation Period

i) This Plan is to be executed on the Ching Ming and Chung Yeung Festival Day plus **3 weekends before the festival day** and **3 weekends after the festival day**.

3.1.3 The proposed **250 people per hour** is much less than the expected no. of people of **602** per hour for the approved 1,779 no. of niches as shown in **Table 2.5.**

## 3.2 Design year

3.2.1 It is anticipated that the proposed columbarium will be in full operation in 2024. In order to assess the impact of the development related traffic on the local road network, it is necessary to forecast the traffic flows for 2027, the adopted design year (3 years beyond full operation year). This is also the strategic study year currently adopted by the Hong Kong Government for the overall long-term planning of Hong Kong's transport system.

## 3.3 Reference Traffic Flows

3.3.1 To estimate the 2027 reference traffic flows (without the proposed development) during peak festival days in the local road network, an appropriate growth factor has to be identified for the area in the first instance.

3.3.2 The following approaches have been adopted in order to derive a growth factor in this district.

*Historical Trend*

3.3.3 Numerous of traffic count stations are located in the vicinity of the proposed development. The traffic counts reported in the Annual Traffic Census (ATC), which is published by Transport Department, over a period of six years, i.e. 2014 to 2019 are summarized in **Table 3.1**.

**Table 3.1 Historical Traffic Data from Annual Traffic Census (ATC)**

| ATC Stn | Road Name | Annual Average Daily Traffic (AADT) | | | | | | Avg. Annual Growth Rate |
|---|---|---|---|---|---|---|---|---|
| | | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| 5417 | Mei Tin Road (Che Kung Miu Road - Tsuen Nam Road) | 35,750 | 38,760 | 39,340* | 39,450* | 39,600* | 41,140 | 2.85% |
| 5212 | Hung Mui Kuk Road Che Kung Miu Road - Tin Sam Street) | 27,250 | 27,880* | 28,300* | 28,370* | 32,110* | 31,140 | 2.70% |
| 5449 | Tai Po Rd – Tai Wai (Shing Ho Rd – Mei Tin Rd) | 9,770 | 9,120 | 9,220* | 9,160* | 9,310* | 7,860 | -4.26% |
| 5617 | Mei Tin Rd (Tai Po Rd – Tai Wai – Tsuen Nam Rd) | 30,830* | 28,730 | 28,760 | 28,840* | 28,940* | 28,190* | -1.77% |
| 6012 | Hung Mui Kuk Road (Lion Rock Tunnel Road - Tin Sam Street) | 30,320* | 31,010* | 31,480* | 32,240 | 33,620 | 33,590* | 2.07% |
| 6614 | Pik Tin St (Mei Tin Rd – End) | 2,890 | 3,020 | 3,000 | 2,910 | 2,640 | 3,050 | 1.08% |
| **TOTAL** | | **73,810** | **71,880** | **72,460** | **73,150** | **74,510** | **72,690** | **-0.31%** |

***Note: *AADT estimated by Growth factor***

*2019-Based TPEDM planning data*

3.3.4 Reference has also been made to the "2019-Based TPEDM planning data" published by Planning Department for years 2019 and 2031. The average annual growth rates in terms of population and employment from 2019 to 2031 are shown in **Table 3.2**.

**Table 3.2 2019-based Population and Employment Growth from 2019 to 2031**

| Sha Tin District | | | | |
|---|---|---|---|---|
| Data | Year | | | Average Annual Growth Rate |
| | 2019 | 2026 | 2031 | |
| **Population** | 483,000 | 493,750 | 461,100 | -0.39% |
| **Employment** | 200,050 | 186,250 | 179,400 | -0.90% |
| **Total** | **683,050** | **680,000** | **640,500** | **-0.53%** |

3.3.5 From **Table 3.2**, it is found that the average annual growth rates of population and employment in Sha Tin from year 2019 to 2031 are -0.53% per annum.

*Adopted Growth Rate*

3.3.6 A.A.D.T. of ATC indicates that the traffic flows in the local road network have an decreasing trend with annual growth rate of -0.31% during past years 2014 - 2019.

3.3.7 Whilst, the planning data indicates that the population and employment in the area are expected to develop with annual growth rate of -0.53% from 2019 to 2031.

3.3.8 For a conservative approach, the annual growth rate of **+1.0%** p.a. is adopted, which represents the strategic growth of traffic on the main roads in Tai Wai. It is deemed sufficient to allow any unexpected future growth as a result of some changes related to land use or redevelopment in the area.

## 3.4 Traffic Generations of Adjacent New Developments

3.4.1 To fully reflect the growth traffic, trip generation of the future vicinity developments have been considered. According to information from Town Planning Board and on-site observation, 4 numbers of approved/ constructed residential developments located at Tai Wai Area have been included in this TIA study. The locations are shown in **Figure 3.1**. and tabled in Table 3.3 below:

**Table 3.3 Adjacent Developments**

| Ref | Development | GFA ($m^2$) | Nos. of Units | Avg. Flat Size ($m^2$) |
|---|---|---|---|---|
| A | Residential Dev at Various Lots in D.D. 181, Heung Fan Liu | 52,156 | 1,325 | 39.4 |
| B | Mei Ying Court | ~12,000 | 216 | 55.6 |
| C | Mei Pak Court | ~14,500 | 288 | 50.3 |
| D | Tai Wai Station Property Development | Residential: 190,480<br>Retail: 62,000<br>Post-secondary College: 15,000 | 3,090 | 61.6 |

3.4.2 The estimation on trip generations and attractions of the adjacent residential development is based on the information from the application. **Table 3.4** shows the summary of the AM and PM Peak Hour trip of those planned developments.

**Table 3.4 Adopted Trip Gen. & Att. of Adjacent Developments**

| Ref | Nos. of Units | Avg. Flat Size ($m^2$) | Adopted Trips (AM Peak) | | | | Adopted Trips (PM Peak) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Trip Rate (pcu/hr/flat) | | Trips (pcu/hr) | | Trip Rate (pcu/hr/flat) | | Trips (pcu/hr) | |
| | | | Gen. | Att. | Gen. | Att. | Gen. | Att. | Gen. | Att. |
| A | 1,325 | 39.4 | 0.1021 | 0.0709 | **135** | **94** | 0.0415 | 0.0464 | **55** | **61** |
| B | 216 | 55.6 | 0.0761 | 0.0573 | **16** | **12** | 0.0350 | 0.0451 | **8** | **10** |
| C | 288 | 50.3 | 0.0761 | 0.0573 | **22** | **17** | 0.0350 | 0.0451 | **10** | **13** |
| D | 3,090 | 61.6 | 0.1117 | 0.0729 | **345** | **225** | 0.0454 | 0.0551 | **140** | **170** |
| D | Retail (GFA 62,000$m^2$) | | (pcu/hr/100$m^2$ GFA) | | **205** | **207** | (pcu/hr/100$m^2$ GFA) | | **238** | **279** |
| | | | 0.3307 | 0.3342 | | | 0.3839 | 0.4504 | | |
| D | Post-secondary College (GFA 15,000$m^2$) | | (pcu/hr) | | **53** | **57** | (pcu/hr) | | **37** | **17** |
| | | | 53 | 57 | | | 37 | 17 | | |
| | ***Subtotal*** | | | | ***603*** | ***489*** | ***Subtotal*** | | ***415*** | ***466*** |

*1) Although Mei Ying Court and Mei Pak Court had been already completed in Year 2017, their trips are still added in assessment as conservative approach since they may not be fully occupied during the Year 2018 survey.*
*2) Upper limit of the TPDM trip rates is adopted for a conservative approach.*

3.4.3 For conservative approach, the traffic generation/ attraction of adjacent development during PM peak hour on normal weekdays is included in the 2027 reference traffic flows. The reference traffic in year 2027 is derived following the equation below:

**2027 Reference Flows (Without Proposed Development)** = **2018 Observed Flows (Ching Ming Festival)** x **Adopted Growth Factor (i.e. +1.0% p.a. for 9 years[(1)])** + **Traffic Flows of Adjacent Planned Development (i.e. Sites A+B+C+D)**

**2027 Reference Flows (Without Proposed Development)** = **2021 Observed Flows (Weekday)** x **Adopted Growth Factor (i.e. +1.0% p.a. for 6 years[(1)])** + **Traffic Flows of Adjacent Planned Development (i.e. Sites A+B+C+D)**

3.4.4 The 2027 reference traffic flows are presented in **Figures 3.2** and **3.3**.

## 3.5 Traffic Generations and Attractions of Proposed Columbarium Development

3.5.1 Based on the pre-registration arrangement and allowable no. of visitors is 250 visitors per hour for 10 sections a day.

3.5.2 As mentioned in the Traffic Management Plan, the Expected Visitors under the management plan is shown in **Table 3.5**.

**Table 3.5 Expected Visitor Trip under the Management Plan**

| Date | Visitor | Peak hour flow (ppl/hr) | |
|---|---|---|---|
| | | In | out |
| **Festival Days** | 10 Sections<br>Each 1 hr = 250 | 250 | 250 |
| | Daily = 2,500 | | |

***Modal Split***

3.5.3 A modal split survey has been conducted on the existing columbarium users and shown in **Table 3.6**.

**Table 3.6 Modal Split for Visitors to the Proposed Columbarium**

| Transport Mode | Attraction/ Generation |
|---|---|
| Franchised Bus | 26% |
| GMB | 27% |
| Car | 15% |
| Taxi | 19% |
| Walk | 13% |
| **Total** | 100% |

***Assessment on Public Transport***

3.5.4 Based on the peak hour person trips in **Tables 2.3** and **2.4**, the Net increase of visitors would be 250 - 181 = **69 visitors in AM Peak (entering the Site)** and 250 - 146 = **104 visitors in Noon/PM Peak (leaving the Site)**. And also based on the modal split in **Table 3.5**, the net increase of peak hour person trips by different modes of transports are derived in **Table 3.7**.

**Table 3.7 Net Increase of Peak Hour Person Trips of the Proposed Columbarium**

| Transport Mode | Peak Hour Person Trips | | |
|---|---|---|---|
| | Modal Split | Peak Attraction (To Temple) | Peak Generation (Leaving Temple) |
| Franchised Bus | 26% | 18 | 27 |
| GMB | 27% | 19 | 29 |
| Car | 15% | 11 | 16 |
| Taxi | 19% | 14 | 20 |
| Walk | 13% | 7 | 12 |
| **Total** | **100%** | **69** | **104** |

3.5.5 By applying the assumed vehicle capacity for different transport modes to peak hour person trips for trip generations for conservative approach, the **net** increase of peak hour traffic flows (in pcu/hr) generated by proposed columbarium are shown in **Table 3.8**.

**Table 3.8 Net Increase of Traffic Generation and Attraction of the Proposed Columbarium**

| Transport Mode | Occupancy (in person) | Peak Hour Trip Generations | |
|---|---|---|---|
| | | Peak Attraction (To Temple) | Peak Generation (Leaving Temple) |
| Franchised Bus | 120 | 0 | 0 |
| GMB | 19 | 0 | 0 |
| Car | 3 | 4 | 6 |
| Taxi | 3 | 5 | 7 |
| **Total** | - | **9** | **13** |

*Remarks:* *(1) Demand of Franchised Bus& GMB could be satisfied by existing services (refer to Chapter 5)*
*(2) The average occupancy of a private car assumes 3 persons*
*(3) The average occupancy of a taxi assumes 3 passengers*

3.5.6 Therefore, the estimated peak hour traffic generation of the proposed columbarium in festival day will be **9 pcus in** / **13 pcus out**.

3.5.7 It is understood that the visitors would mostly come to the columbarium during the Ching Ming/Chung Yeung festival and the weekends before/after these festival days. The visitors coming to columbarium during weekdays would not be high. The trips of in weekday would be lower than festival days/ weekend. Therefore, **15 pcus in** / **15 pcus out** would be adopted as the traffic generation of the proposed columbarium in normal weekday.

## 3.6 Design Traffic Forecast

3.6.1 The traffic generated from the proposed development was then assigned to the road network. After that, the development traffic flows were then superimposed onto the 2027 reference traffic flows (without proposed development) as shown in **Figures 3.2** and **3.3** to derive the 2027 design traffic forecasts (with proposed columbarium).

**2027 Design Flows (with proposed developments)** = **2027 Reference Flows (without Proposed Development)** + **Proposed Columbarium Traffic**

3.6.2 The 2027 peak hour design traffic flows (with proposed Puguangming Temple) are shown in **Figures 3.4** and **3.5**.

# 4. VEHICULAR TRAFFIC IMPACT ASSESSMENT

## 4.1 Operational Assessment

4.1.1 Based on the design traffic flows in **Figures 3.4** and **3.5**, a junction capacity assessment is carried out for the key junctions and the results of the assessment are summarized in **Tables 4.1** and **4.2** below.

**Table 4.1 Junction Performance of Critical Junctions in Reference Year 2027 (Without Proposed Columbarium)**

| Ref. | Junction | Method of Control | Year 2027 RC/DFC (1) | | |
|---|---|---|---|---|---|
| | | | Festival Day | Weekday | |
| | | | Peak | AM Peak | PM Peak |
| A | Mei Tin Road / Heung Fan Liu Street | Signal | >+100% | +56% | >+100% |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | >+100% | +86% | +64% |
| C | Mei Tin Road / Chik Fai Street | Signal | +40% | +68% | +61% |
| D | Mei Tin Road / Pik Tin Street | Priority | 0.25 | 0.44 | 0.26 |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | >+100% | >+100% | >+100% |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | R/A | 0.46 | 0.63 | 0.64 |
| G | Mei Tin Road / Chik Wan Street | Signal | +89% | +43% | +68% |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | +58% | +28% | +28% |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | R/A | 0.15 | 0.12 | 0.12 |

*Note: (1) RC = Reserve Capacity for signal junction*
*DFC = Design Ratio of Flow to Capacity for Priority Junction or Roundabout*

**Table 4.2 Junction Performance of Critical Junctions in Design Year 2027 (With Proposed Columbarium)**

| Ref. | Junction | Method of Control | Year 2027 RC/DFC (1) | | |
|---|---|---|---|---|---|
| | | | Festival Day | Weekday | |
| | | | Peak | AM Peak | PM Peak |
| A | Mei Tin Road / Heung Fan Liu Street | Signal | >+100% | +55% | >+100% |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | >+100% | +85% | +63% |
| C | Mei Tin Road / Chik Fai Street | Signal | +40% | +67% | +60% |
| D | Mei Tin Road / Pik Tin Street | Priority | 0.26 | 0.44 | 0.26 |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | >+100% | >+100% | >+100% |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | R/A | 0.46 | 0.64 | 0.64 |
| G | Mei Tin Road / Chik Wan Street | Signal | +89% | +43% | +67% |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | +58% | +28% | +28% |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | R/A | 0.15 | 0.12 | 0.12 |

*Note: (1) RC = Reserve Capacity for signal junction*
*DFC = Design Ratio of Flow to Capacity for Priority Junction or Roundabout*

4.1.2 Based on the assessment presented in **Tables 4.1** and **4.2**, the junctions will be operating with reasonable spare capacities in year 2027 with the full occupation of the proposed columbarium during Ching Ming Festival and weekday.

# 5. PUBLIC TRANSPORT DEMAND

## 5.1 Survey on Existing Public Transport Service

5.1.1 The proposed development is not close to MTR station and the public transport service is not comprehensive. A preliminary and localized public transport survey was carried out at the existing bus/GMB stops on Mei Tin Road and Mei Chung Court as illustrated in **Figure 5.1**.

5.1.2 The survey was carried out from 09:00am to 17:00pm of during Ching Ming Festival in 2018. The findings are presented in the **Table 5.1** below.

**Table 5.1 Observed Occupancy of Public Transport in the Vicinity**

| Duration | Direction | Routes | Observed Trips | Max. Utilization Rate | Average Utilization Rate | Occupancy (passenger) | Surplus Capacity (passenger) |
|---|---|---|---|---|---|---|---|
| **Peak Hour** | **Northbound (To Mei Shing Court)** | | | | | | |
| | Franchised Bus | 283 | 6 | 65% | 50% | 360 | 360 |
| | Minibus | 63A | 18 | 85% | 70% | 202 | 86 |
| **Peak Hour** | **Southbound (To Tai Wai)** | | | | | | |
| | Franchised Bus | 283 | 4 | 50% | 45% | 216 | 264 |
| | Minibus | 63A | 20 | 80% | 75% | 240 | 80 |

*Remarks:* *(1) Full capacity of 120 passengers for Franchised Bus is assumed.*

*(2) Full capacity of 16 passengers for Minibus is assumed.*

5.1.3 The surveyed result indicates that there are surplus capacities for the existing public transport services during the peak hours in Ching Ming Festival 2018.

## 5.2 Assessment on Public Transport Demand

*Proposed Columbarium*

5.2.1 From **Table 3.7**, the peak hour person trips during Ching Ming Festival have been estimated. The expected demand of public transport services during peak hour is calculated and presented in **Table 5.2**.

**Table 5.2 Expected Net Increase Demand of Public Transport Services due to the Proposed Columbarium in Design Year 2027**

| Transport Mode | | Pedestrian Trips during Peak Hour (1-way)(1) | Transport Modal Split | Expected Net Increase Demand of Proposed Development During Peak Hour (passenger) |
|---|---|---|---|---|
| Peak Hour | **Northbound (To Mei Shing Court)** | | | |
| | Franchised Bus | 250 - 181 = 69 | 26% | 69 x 26% = 18 |
| | Minibus | 69 | 27% | 69 x 27% = 19 |
| Peak Hour | **Southbound (To Tai Wai)** | | | |
| | Franchised Bus | 250 - 146 = 104 | 26% | 104 x 26% = 27 |
| | Minibus | 104 | 27% | 104 x 27% = 29 |

*(1) Refer to Section 3.5*

*Adjacent Developments*

5.2.2 As derived from **Section 3.2**, an annual growth rate of **+1.0%** has been adopted to estimate the future growth of traffic and population in the district. For conservative approach, the same annual growth rate is applied to estimate the future public transport demand due to adjacent developments in design year 2027.

5.2.3 The calculation of future public transport demand in the vicinity is summarized in **Table 5.3** below:

**Table 5.3 Expected Public Transport Demand due to Adjacent Development in Design Year 2027**

| Duration | Direction | Routes | Existing Occupancy (passenger) | Future Occupancy (passenger) |
|---|---|---|---|---|
| **Peak Hour** | **Northbound (To Mei Shing Court)** | | | |
| | Franchised Bus | 283 | 360 | 394* |
| | Minibus | 63A | 202 | 221* |
| **Peak Hour** | **Southbound (To Tai Wai)** | | | |
| | Franchised Bus | 283 | 216 | 236* |
| | Minibus | 63A | 240 | 262* |

*Note: *Future occupancy in 2027 is derived from existing occupancy (2018) with +1% growth rate.*

5.2.4 The expected demand of public transport services due to the proposed development is shown in **Table 5.4**.

**Table 5.4 Expected Occupancy of Public Transport in Design Year 2027**

| Duration | Direction | Routes | Full Capacity [A] | 2027 Expected Occupancy (passenger) (1% growth p.a.) (1)(2) [B] | Surplus Capacity (passenger) (1)(2)(3) [A] – [B] | Demand (Satisfied or Not) (4) |
|---|---|---|---|---|---|---|
| Peak Hour | **Northbound (To Mei Shing Court)** | | | | | |
| | Franchised Bus | 283 | 120 x 6 = 720 | 394 | 720 - 394 = 326 | 31 (✓) |
| | Minibus | 63A | 16 x 18 = 288 | 221 | 288 - 221 + (19 - 16) x 18 = 67 + 54 = 121 | 32 (✓) |
| Peak Hour | **Southbound (To Tai Wai)** | | | | | |
| | Franchised Bus | 283 | 120 x 4 = 480 | 236 | 244 | 40 (✓) |
| | Minibus | 63A | 16 x 20 = 320 | 262 | 320 - 262 + (19 - 16) x 20 = 118 | 42 (✓) |

*Remarks:* *(1) Full capacity of 120 passengers for Franchised Bus is assumed.*

*(2) Full capacity of 16 passengers for Minibus is assumed.*

*(3) Full capacity of 19 passengers for Minibus is observed to be used in 2021.*

*(4) From Table 5.2*

5.2.5 Based on the result from above **Table 5.4**, it is indicated that the existing public transport services of Franchised Bus and GMB are with ample reserve capacity to meet the demand due to the proposed development in design year 2027.

# 6. PARKING PROVISION

## 6.1 Existing Parking Situation

6.1.1 Due to site constraints, no transport facilities are provided in the Puguangming Temple, such as car parking space, loading/unloading and pick up/drop off space.

6.1.2 According to the survey, it is revealed that a peak hour of 6 car parks is required by the columbarium visitors in Chung Yeung Festival 2018. They have parked their cars in the adjacent car parks (as mentioned in **Section 2.3**).

6.1.3 The majority of visitors use Mei Chung Court Carpark. Therefore, a survey on parking space occupancy has been conducted at Mei Chung Court Carpark and presented in **Appendix 1**.

6.1.4 It is shown in **Appendix 1** that there are **17** nos. surplus hourly private car parking spaces during the peak hour from 13:30pm to 14:30pm at Mei Ching Court for the public.

**Table 6.1 Parking Utilization at Mei Chung Court Carpark during Ching Ming Festival**

| Time | Total Hourly Carpark Spaces | No. of Surplus Parking Spaces |
|---|---|---|
| 0900-1000 | 37 | 24 |
| 1000-1100 | 37 | 23 |
| 1100-1200 | 37 | 21 |
| 1200-1300 | 37 | 20 |
| 1300-1400 | 37 | 17 |
| 1400-1500 | 37 | 17 |
| 1500-1600 | 37 | 16 |
| 1600-1700 | 37 | 16 |

## 6.2 Future Parking Demand

6.2.1 Based on the estimated traffic attraction of private cars derived in **Table 3.8**, the parking demand for the proposed columbarium during peak hours in festival days is analysed and presented in the calculation below and **Table 6.2**.

- Parking survey indicated a demand of 6 parking spaces for 181 visitors per hour.
- For a 250 visitors per hour, the parking demand will then be
  = (6/181) x 250
  = 8.3 parking spaces (say **9 parking spaces**)

**Table 6.2 Future Parking Demand of Proposed Columbarium**

| Expected Parking Space Demand | Surplus Hourly Parking Space | Demand Satisfied or Not |
|---|---|---|
| 9 | = 17*(1-1%)$^{9}$<br>= 16 | ✓ |

6.2.2 From **Table 6.2**, there are sufficient private car hourly parking spaces in Mei Chung Court to cater for the future demand due to proposed columbarium.

# 7. PEDESTRIAN TRAFFIC IMPACT ASSESSMENT

## 7.1 Visitor Flows in Design Year

7.1.1 To assess the existing footpath during the Festival Days, the pedestrian flow data is estimated based on the pedestrian survey conducted during Ching Ming Festival on 5 April 2018 with about 664 niches/tablets being sold and occupied.

7.1.2 According to **Table 3.4**, there will be a peak flow of **500 visitors** (250 + 250, 2-way flows) per hour traveling to/from Puguangming Temple via the existing footpath in the future.

## 7.2 LOS Assessment on Design Year

7.2.1 In order to ensure a desirable walking environment along the access, the concept of Level-of-Service (LOS) has been applied. LOS directly relates to the pedestrian comfort and ease with which pedestrians proceed along the walkway.

7.2.2 The Break Points of LOS levels are determined on the basis of flow rate, pedestrian spacing, and the probabilities of conflict at various concentrations. These standards with relevant descriptions are summarized in **Table 7.1**.

**Table 7.1 LOS Standard Criteria**

| LOS | Flow Rate (ped/min/m) | Pedestrian Space ($m^2$/p) | Description |
|---|---|---|---|
| A | ≤16 | >5.6 | Pedestrians freely select walking speed and conflicts between pedestrians are unlikely. |
| B | ≤23 | >3.7 – 5.6 | Pedestrians freely select walking speed and bypass other pedestrians in primarily one directional flows. Minor conflicts will occur where reverse direction or crossing movements exist, requiring slightly lowering mean pedestrian speeds and potential volumes. |
| C | ≤33 | >2.2 – 3.7 | Pedestrians are restricted in selecting walking speed and bypass other pedestrians. Conflicts are highly likely to occur where reverse direction or crossing movements exist, requiring frequent adjustment of speed and direction. |
| D | ≤49 | >1.4 – 2.2 | Most pedestrians would have their normal walking speed restricted and reduced. Multiple conflicts with other pedestrians will occur where pedestrian are involved in reverse-flow and crossing movements. |

| LOS | Flow Rate (ped/min/m) | Pedestrian Space ($m^2$/p) | Description |
|---|---|---|---|
| E | ≤75 | >0.75 – 1.4 | Virtually all pedestrians would have their normal walking speeds restricted, requiring frequent adjustment of gait. At the lower range, forward progress would only be made by shuffling. Insufficient area would be available to bypass slower-moving pedestrians. Extreme difficulties for pedestrians attempting reverse-flow and cross-flow movements. |
| F | Varies | ≤0.75 | All pedestrian walking speeds are extremely restricted and forward progress can only be made by shuffling. Frequent and unavoidable contact with other pedestrians will occur. Reverse or crossing movements would be virtually impossible. |

*Source: Chapter 10, Volume 6 of Transport Planning and Design Manual (T.P.D.M.)/Chapter 11 of Highways Capacity Manual 2000.*

7.2.3 For the width as shown in **Figures 7.1** and **7.2** and based on the figures given in **Table 3.4**, the total number of person-trips using the existing footpath and vicinity footpaths is shown in **Figure 7.3** and the assessment are given in **Tables 7.2 to 7.10**.

**Table 7.2 Person-trips Assessment (Ching Ming Festival)**

| Section | Actual Width (m) | Effective Width (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr) | Peak Flow Rate (ped/min/m) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| B | 2.4 | 1.9(1) | 177+128 = 305(4) | 305 | 500(5) – 305 = 195 (100%) | 500(5) | 4.39 | A | √ |
| C | 3.3 | 2.8(1) | 250 | 250 x 1.01^9 = 275 | 195 x 46% = 90 (46%) | 275 + 90 = 365 | 2.17 | A | √ |
| D | 3.5 | 3(1) | 320 | 350 | 100 (50%) | 450 | 2.5 | A | √ |
| E | 3.5 | 3(1) | 135 | 150 | 10 (4%) | 160 | 0.89 | A | √ |
| G | 4.2 | 3.7(1) | 285 | 310 | 90 (46%) | 400 | 1.8 | A | √ |
| H | 3.8 | 3.3(1) | 425 | 465 | 100 (50%) | 565 | 2.85 | A | √ |
| I | 4.3 | 3.8(1) | 480 | 525 | 55 (28%) | 580 | 2.54 | A | √ |
| J | 5.2 | 4.7(1) | 50 | 55 | 10 (4%) | 65 | 0.23 | A | √ |

*Note: (1) 0.5m deduced from wall/fence; 1m deduced from shop*

*(2) Growth by 1% for 9 years*

*(3) √: Acceptable*

*(4) From Table 2.4, In/out flow of 11:15 – 12:15*

*(5) Restricted under management plan*

## Table 7.3 Person-trips Assessment (Weekday AM)

| Section | Actual Width (m) | Effective Width (m) (1) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(2) | Peak Flow Rate (ped/min/ m) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| B | 2.4 | 1.9 | 5 | 5 | 75 – 5 = 70 (100%) | 5 x 4,779/319 = 75(4) | 0.48 | A | √ |
| C | 3.3 | 2.8 | 25 | 25 | 70 x 46% = 30 (46%) | 25 + 30 = 55 | 0.66 | A | √ |
| D | 3.5 | 3 | 10 | 10 | 35 (50%) | 45 | 0.33 | A | √ |
| E | 3.5 | 3 | 10 | 10 | 5 (4%) | 15 | 0.25 | A | √ |
| G | 4.2 | 3.7 | 170 | 185 | 30 (46%) | 215 | 0.08 | A | √ |
| H | 3.8 | 3.3 | 325 | 355 | 35 (50%) | 390 | 0.97 | A | √ |
| I | 4.3 | 3.8 | 475 | 520 | 20 (28%) | 540 | 1.97 | A | √ |
| J | 5.2 | 4.7 | 50 | 55 | 5 (4%) | 60 | 2.37 | A | √ |

***Note:*** *(1) 0.5m deduced from wall/fence; 1m deduced from shop*

*(2) Growth by 1%*

*(3) √: Acceptable*

*(4) Ratio of niches (existing 319 & total 4,779)*

## Table 7.4 Person-trips Assessment (Weekday PM)

| Section | Actual Width (m) | Effective Width (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(2) | Peak Flow Rate (ped/min/ m) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| B | 2.4 | 1.9(1) | 15 | 15 | 225 – 15 = 210 (100%) | 15 x 4,779/319 = 225(4) | 1.97 | A | √ |
| C | 3.3 | 2.8(1) | 60 | 65 | 95 (46%) | 65 + 95 = 160 | 0.95 | A | √ |
| D | 3.5 | 3(1) | 20 | 20 | 105 (50%) | 125 | 0.69 | A | √ |
| E | 3.5 | 3(1) | 15 | 15 | 10 (4%) | 25 | 0.14 | A | √ |
| G | 4.2 | 3.7(1) | 65 | 70 | 95 (46%) | 165 | 0.74 | A | √ |
| H | 3.8 | 3.3(1) | 405 | 445 | 105 (50%) | 550 | 2.78 | A | √ |
| I | 4.3 | 3.8(1) | 465 | 510 | 60 (28%) | 570 | 2.5 | A | √ |
| J | 5.2 | 4.7(1) | 20 | 20 | 10 (4%) | 30 | 0.11 | A | √ |

***Note:*** *(1) 0.5m deduced from wall/fence; 1m deduced from shop*

*(2) Growth by 1%*

*(3) √: Acceptable*

*(4) Ratio of niches (existing 319 & total 4,779)*

## Table 7.5 V/C Ratio of Critical Crossing (Ching Ming Festival)

| Section | Lateral Width of Ped. Crossing (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Pedestrian Crossing Capacity(2) (ped/hr) | V/C | Remark (3) |
|---|---|---|---|---|---|---|---|---|
| F | 4 | 160 | 160 x 1.01^9 = 175 | 195 x 54% = 105 (54%) | 175 + 105 = 280 | Pedestrian Crossing Capacity(3) PC = 1900*1/4*4 = 1900 | 0.15 | √ |
| G2 | 3.6 | 60 | 65 | 10 (4%) | 75 | 1710 (Capacity)(3) | 0.04 | √ |
| H2 | 3.5 | 425 | 465 | 100 (50%) | 565 | 1665 (Capacity)(3) | 0.34 | √ |
| I2 | 3.5 | 160 | 175 | 40 (21%) | 215 | Pedestrian Crossing Capacity PC = 1900*25/90*3.5 = 1845 | 0.12 | √ |

***Note***: *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 1/4 of the "cycle time" was used by the pedestrian*

*(3) √: Acceptable*

## Table 7.6 V/C Ratio of Critical Crossing (Weekday AM)

| Section | Lateral Width of Ped. Crossing (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Pedestrian Crossing Capacity(2) (ped/hr) | V/C | Remark (3) |
|---|---|---|---|---|---|---|---|---|
| F | 4 | 5 | 5 x 1.01^9 = 5 | 70 x 54% = 40 (54%) | 5 + 40 = 45 | Pedestrian Crossing Capacity(4) PC = 1900*1/4*4 = 1900 | 0.02 | √ |
| G2 | 3.6 | 55 | 60 | 5 (4%) | 65 | 1710 (Capacity)(4) | 0.04 | √ |
| H2 | 3.5 | 325 | 355 | 35 (50%) | 390 | 1665 (Capacity)(4) | 0.23 | √ |
| I2 | 3.5 | 150 | 165 | 15 (21%) | 180 | Pedestrian Crossing Capacity PC = 1900*25/90*3.5 = 1845 | 0.10 | √ |

***Note***: *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 1/4 of the "cycle time" was used by the pedestrian*

*(3) √: Acceptable*

## Table 7.7 V/C Ratio of Critical Crossing (Weekday PM)

| Section | Lateral Width of Ped. Crossing (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Pedestrian Crossing Capacity(2) (ped/hr) | V/C | Remark (3) |
|---|---|---|---|---|---|---|---|---|
| F | 4 | 20 | 20 x 1.01^9 = 20 | 210 x 54% = 115 (54%) | 20 + 115 = 135 | Pedestrian Crossing Capacity(4) PC = 1900*1/4*4 = 1900 | 0.07 | √ |
| G2 | 3.6 | 35 | 40 | 10 (4%) | 50 | 1710 (Capacity)(4) | 0.03 | √ |
| H2 | 3.5 | 405 | 445 | 105 (50%) | 550 | 1665 (Capacity)(4) | 0.33 | √ |
| I2 | 3.5 | 140 | 155 | 45 (21%) | 200 | Pedestrian Crossing Capacity PC = 1900*25/90* 3.5 = 1845 | 0.11 | √ |

*Note:* *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 1/4 of the "cycle time" was used by the pedestrian*

*(3) √: Acceptable*

## Table 7.8 Waiting Area of Critical Crossing (Ching Ming Festival)

| Section | Waiting Space Area ($m^2$) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2 | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Waiting Pedestrian (ped/cycle) (2) | Avg. Ped. Space(3) ($m^2$/ped) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| F | 7 | 160 | 160 x 1.01^9 = 175 | 195 x 54% = 105 (54%) | 175 + 105 = 280 | 280/40 x 0.75 = 5 | 1.40 | A | √ |
| G2 | 8 | 60 | 65 | 10 (4%) | 75 | 1 | 8.00 | A | √ |
| H2 | 30 | 425 | 465 | 100 (50%) | 565 | 11 | 2.73 | A | √ |
| I2 | 25 | 160 | 175 | 40 (21%) | 215 | 4 | 6.25 | A | √ |

*Note:* *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 90s "cycle time", "No. of cycle" = 3600/90 = 40, 3/4 of the "cycle time" was pedestrian waiting time*

*Waiting Pedestrian = Two-way Ped. Flow x Red Time Proportion / No. of Cycle*

*(3) √: Acceptable*

**Table 7.9 Waiting Area of Critical Crossing (Weekday AM)**

| Section | Waiting Space Area ($m^2$) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2 | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Waiting Pedestrian (ped/cycle) (2) | Avg. Ped. Space(3) ($m^2$/ped) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| F | 7 | 5 | 5 x 1.01^9 = 5 | 70 x 54% = 40 (54%) | 5 + 40 = 45 | 45/40 x 0.75 = 1 | 7.00 | A | √ |
| G2 | 8 | 55 | 60 | 10 (4%) | 65 | 1 | 8.00 | A | √ |
| H2 | 30 | 325 | 355 | 35 (50%) | 390 | 7 | 4.29 | A | √ |
| I2 | 25 | 150 | 165 | 15 (21%) | 180 | 3 | 8.33 | A | √ |

**Table 7.10 Waiting Area of Critical Crossing (Weekday PM)**

| Section | Waiting Space Area ($m^2$) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2 | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Waiting Pedestrian (ped/cycle) (2) | Avg. Ped. Space(3) ($m^2$/ped) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| F | 7 | 20 | 20 x 1.01^9 = 20 | 210 x 54% = 115 (54%) | 20 + 115 = 135 | 135/40 x 0.75 = 3 | 2.33 | A | √ |
| G2 | 8 | 35 | 40 | 10 (4%) | 50 | 1 | 8.00 | A | √ |
| H2 | 30 | 405 | 445 | 105 (50%) | 550 | 10 | 3.00 | A | √ |
| I2 | 25 | 140 | 155 | 45 (21%) | 200 | 3 | 6.25 | A | √ |

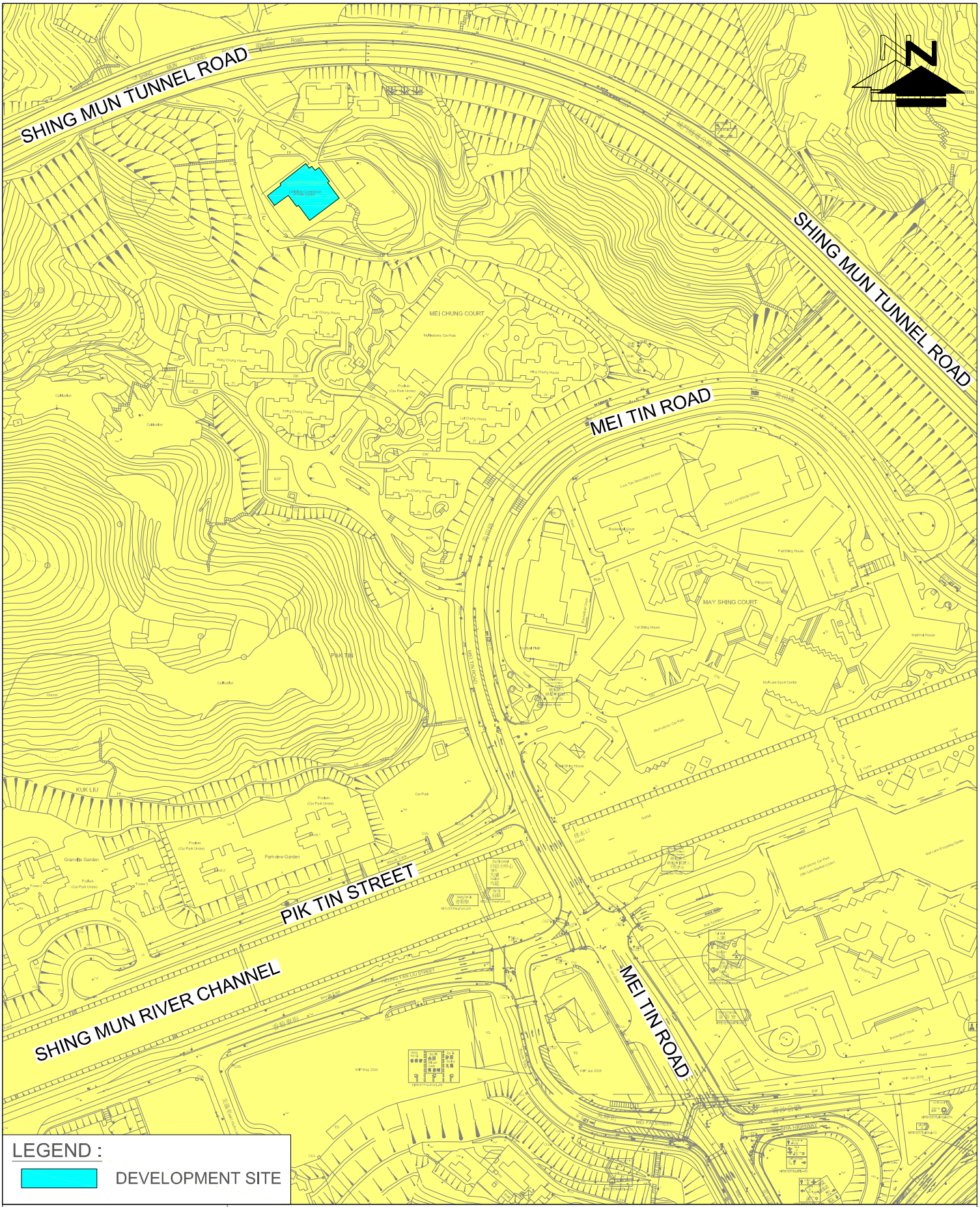
7.2.4 Based on the above calculation and assessment, LOS A or low V/C ratio could be achieved, which is considered acceptable in traffic engineering points of view.

# 8. SUMMARY AND CONCLUSION

8.1.1 From the traffic forecast based on traffic survey during 2018 Ching Ming Festival, and the assessment results of the junction capacity in the vicinity, it indicates that there will not be significant adverse impact caused by the full occupation of **5,124 niches/tablets** (4,779 niches + 345 tablets) during Ching Ming Festival in the design year 2027.

8.1.2 The impacts on the adjacent road networks have been assessed. All of these are found to be technically feasible and acceptable.

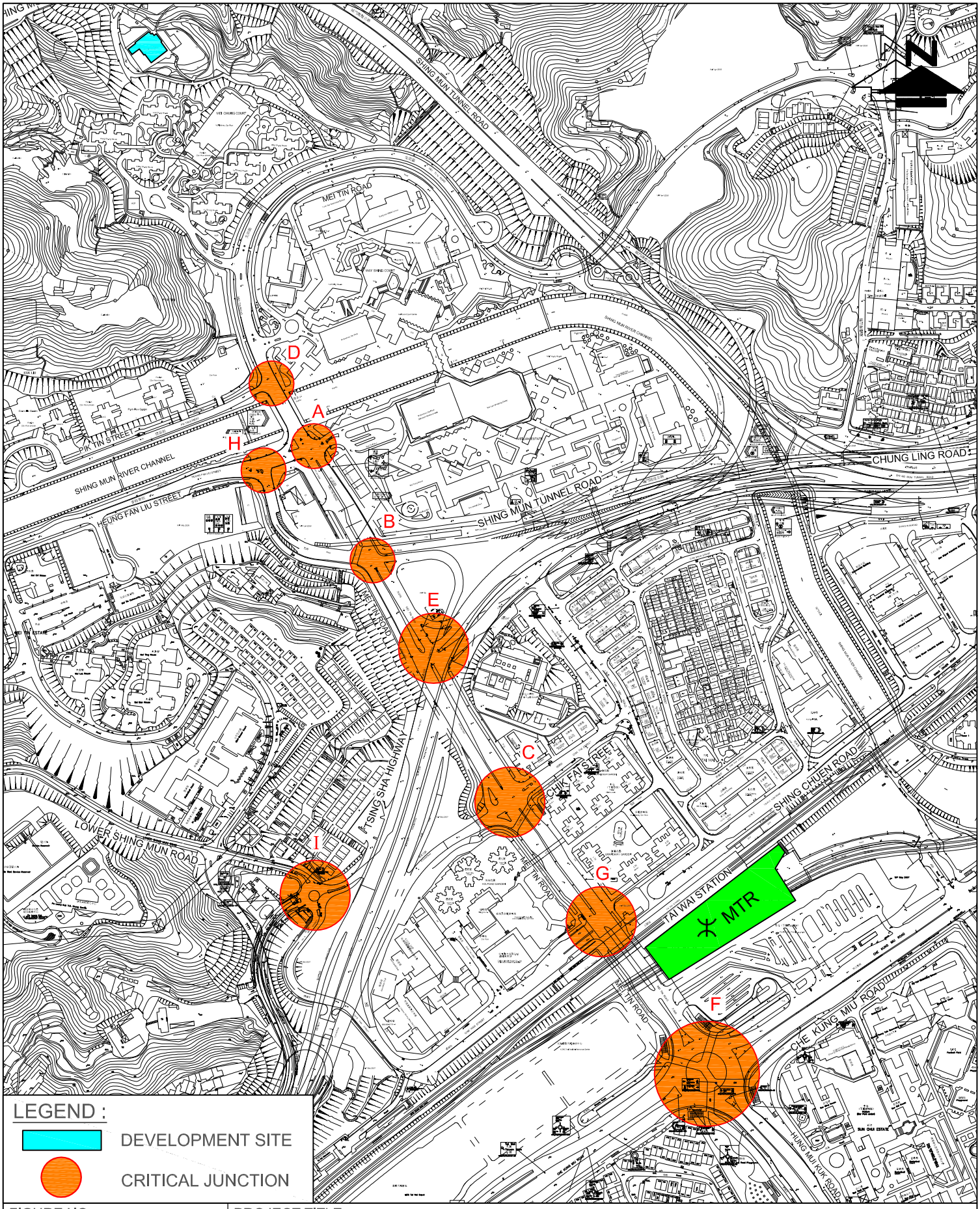
8.1.3 Therefore, the proposed scheme of Puguangminig Temple is considered to be acceptable from the traffic and transportation Point of view.



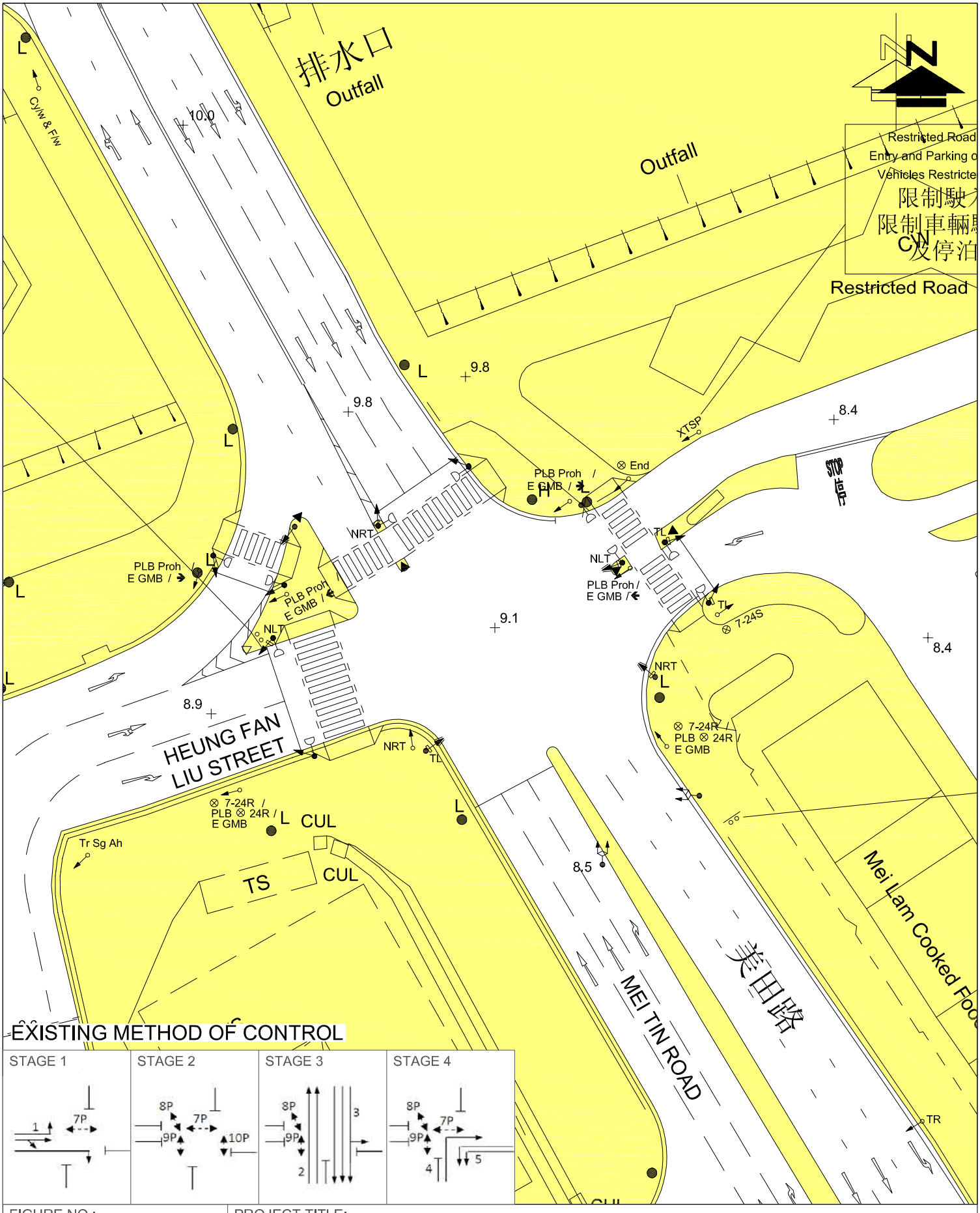

LEGEND :

DEVELOPMENT SITE

| | |
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| SCALE: 1 : 3000 (IN A4 SIZE) / DATE: 23 OCT 2020 | CTA Consultants Limited 志達顧問有限公司 |



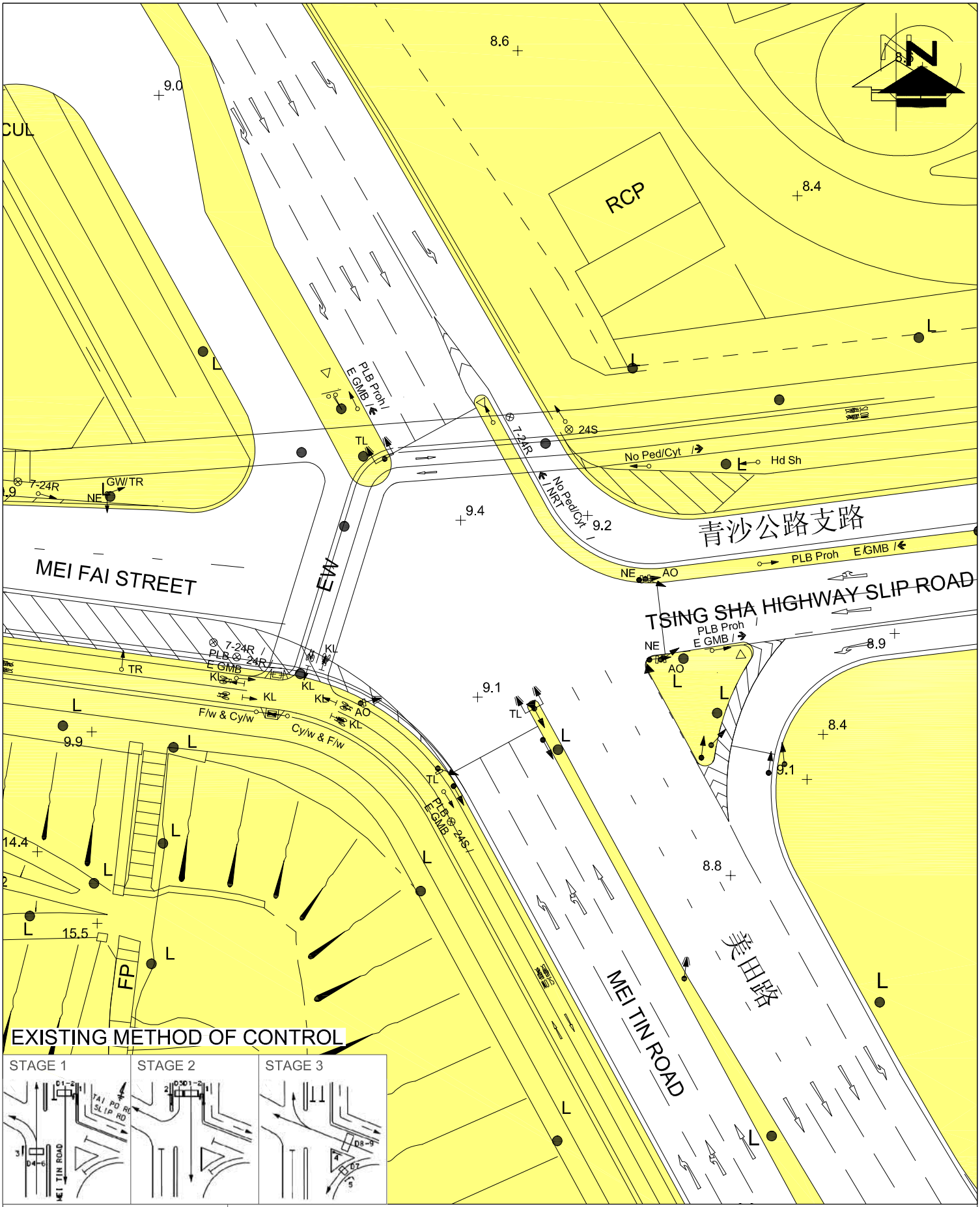

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| PROJECT NO.: 20058HK | DRAWING TITLE: KEY JUNCTIONS AND EXISTING ROAD NETWORK |
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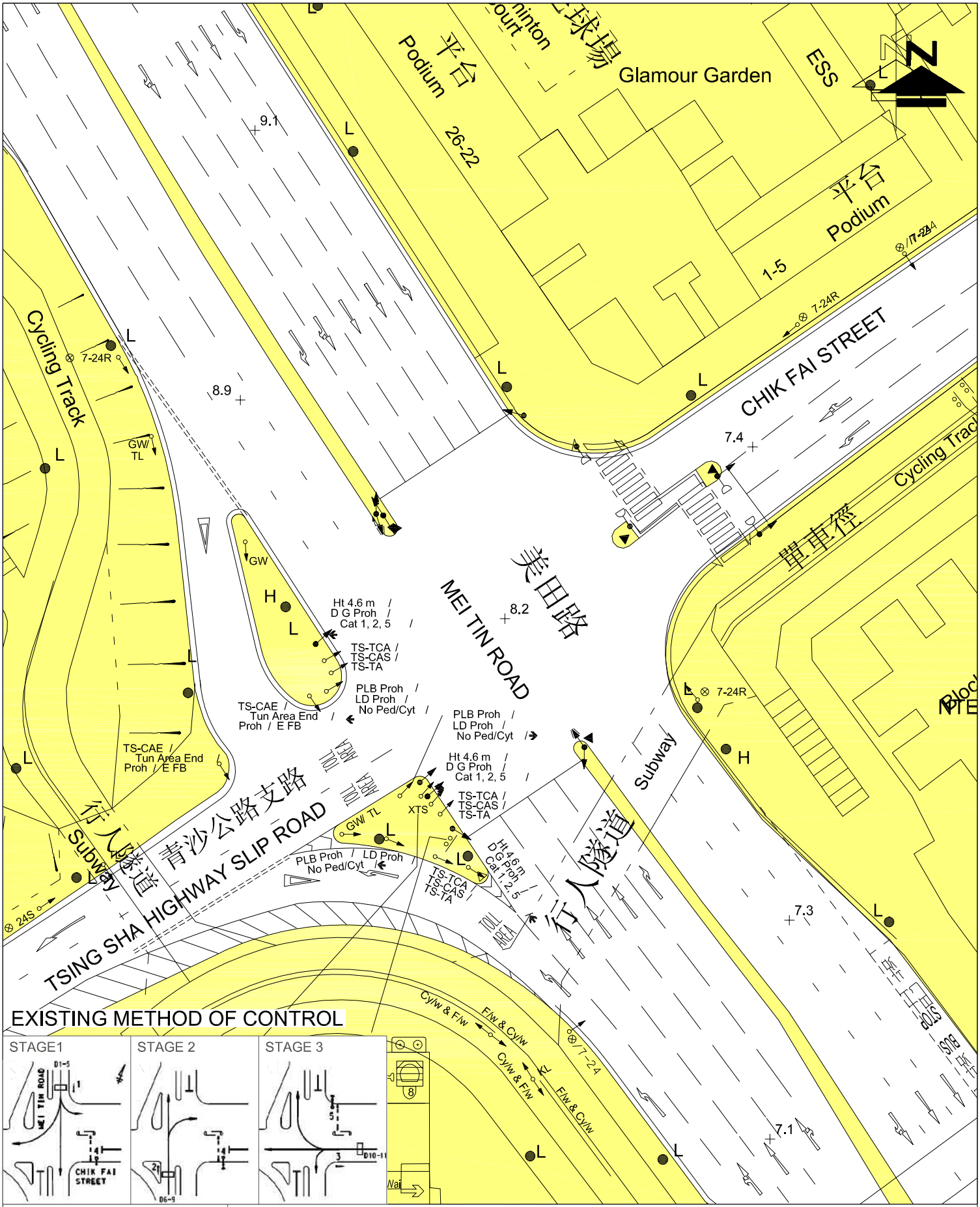

## EXISTING METHOD OF CONTROL



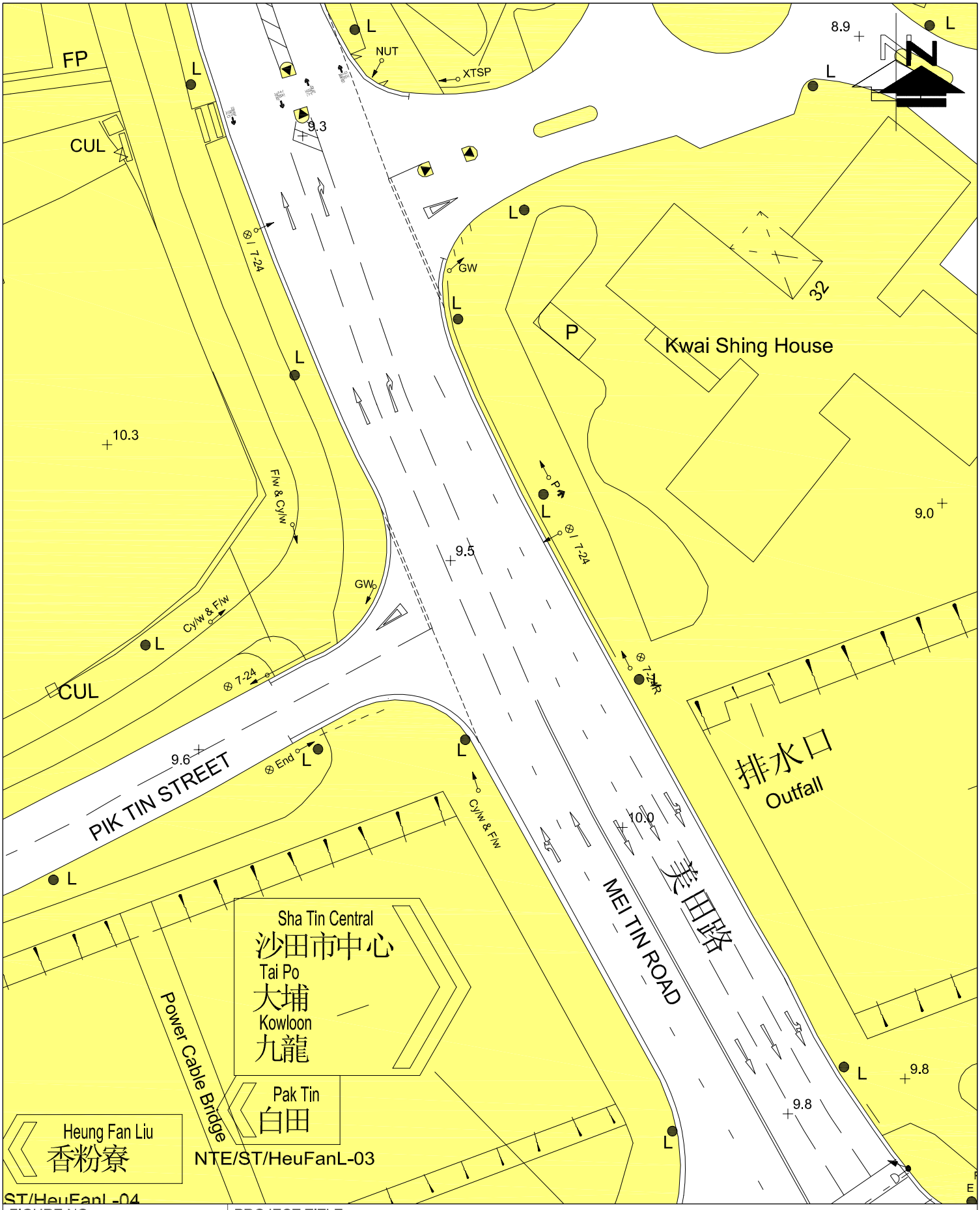

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| FIGURE NO.: 2.2 | PROJECT TITLE: Application for License for Puguangming Temple |
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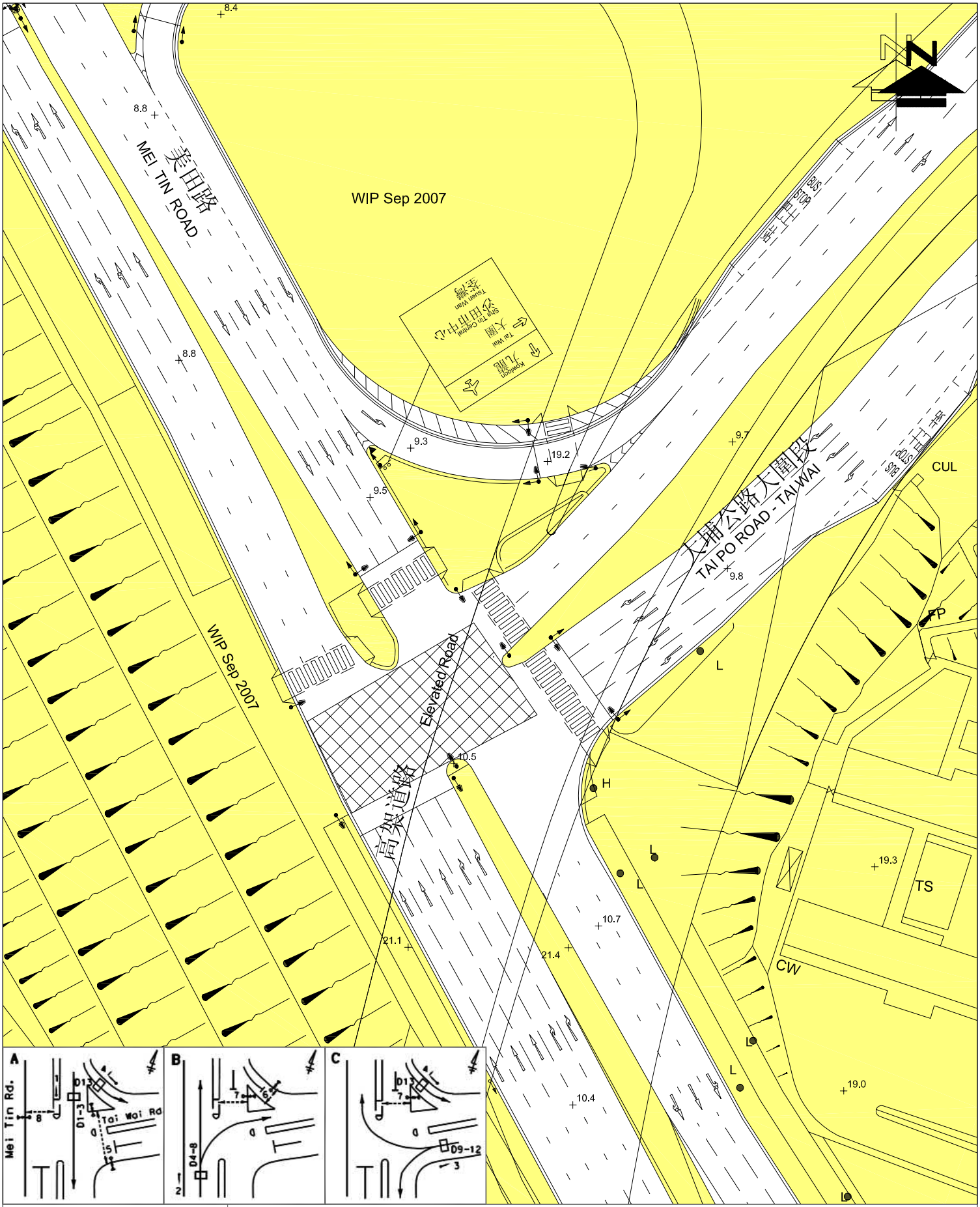

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| FIGURE NO.: 2.3 | PROJECT TITLE: Application for License for Puguangming Temple |
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| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |




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| FIGURE NO.: 2.4 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / CHIK FAI STREET (C) |
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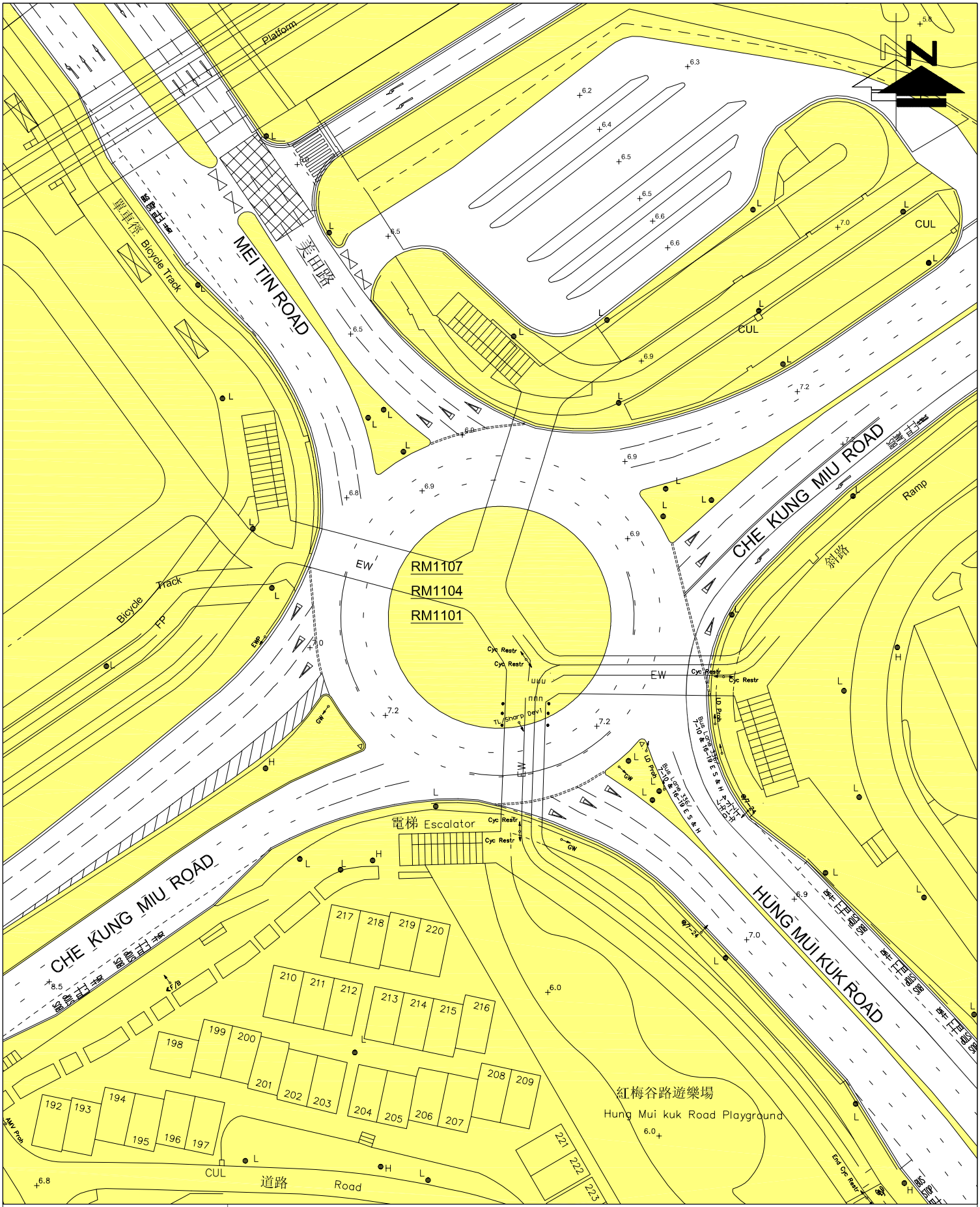



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| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 23 OCT 2020 | CTA Consultants Limited 志達顧問有限公司 |



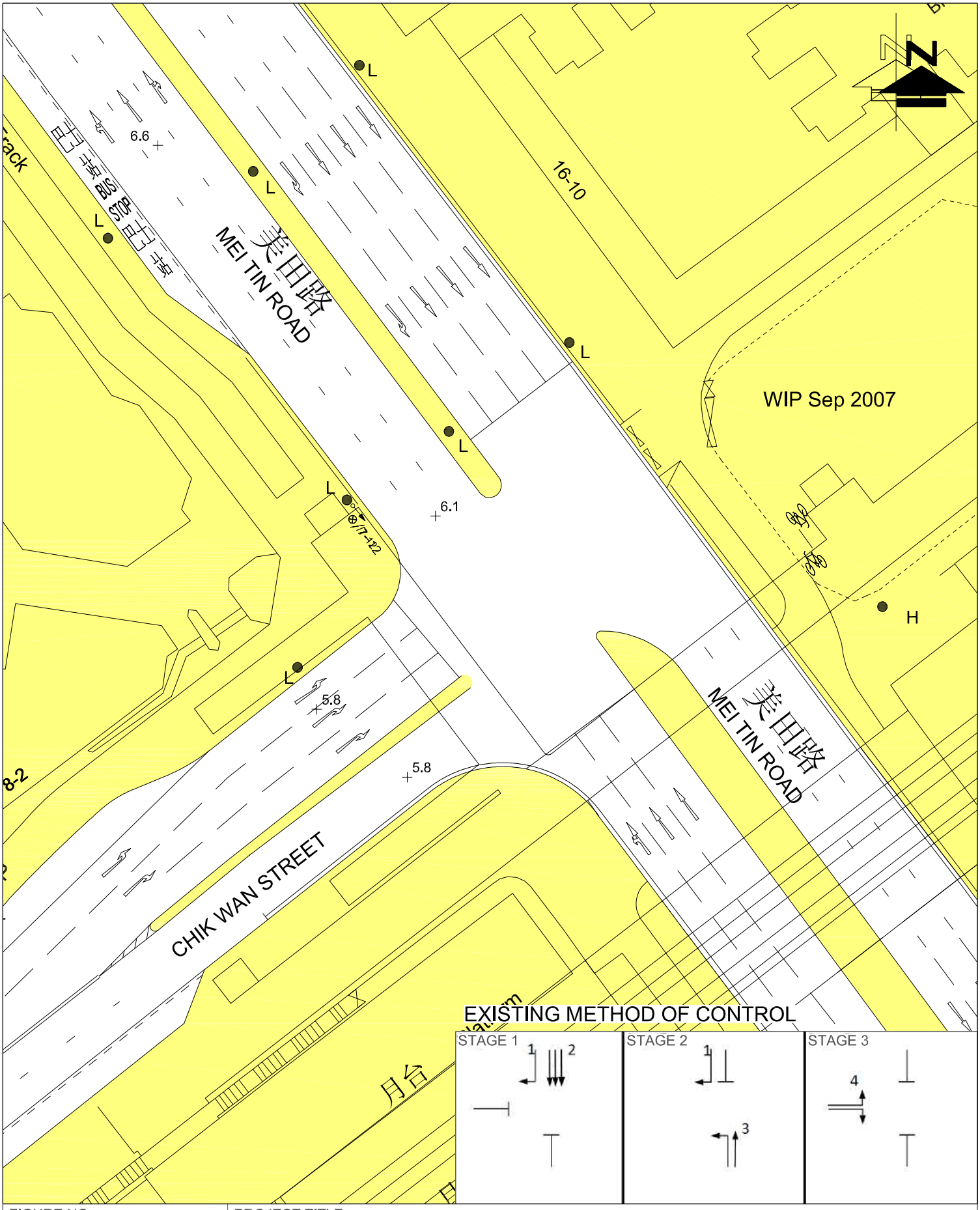

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| SCALE: 1 : 700 (IN A4 SIZE) | DATE: 12 NOV 2021 |

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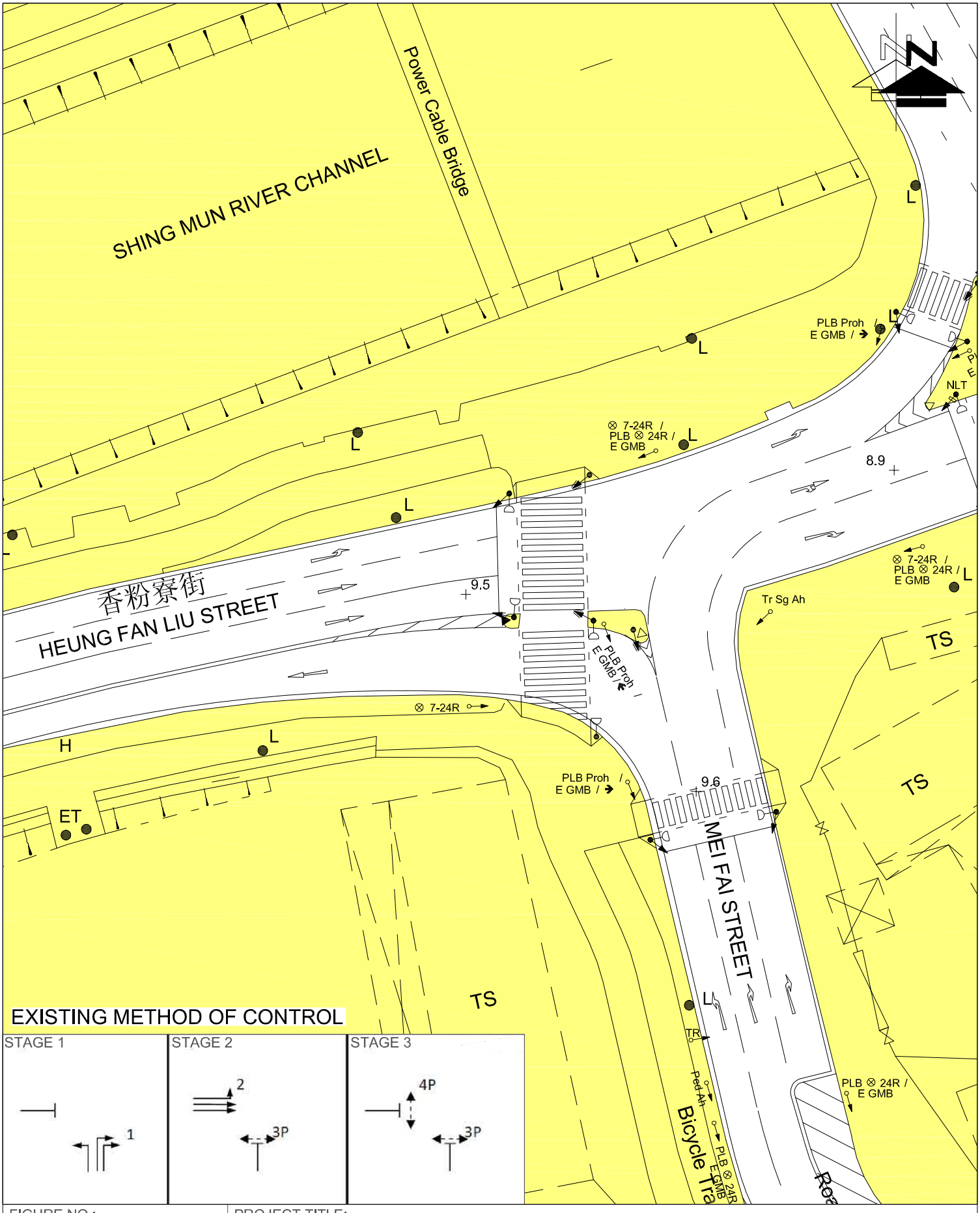



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| FIGURE NO.: 2.7 | PROJECT TITLE: Application for License for Puguangming Temple |
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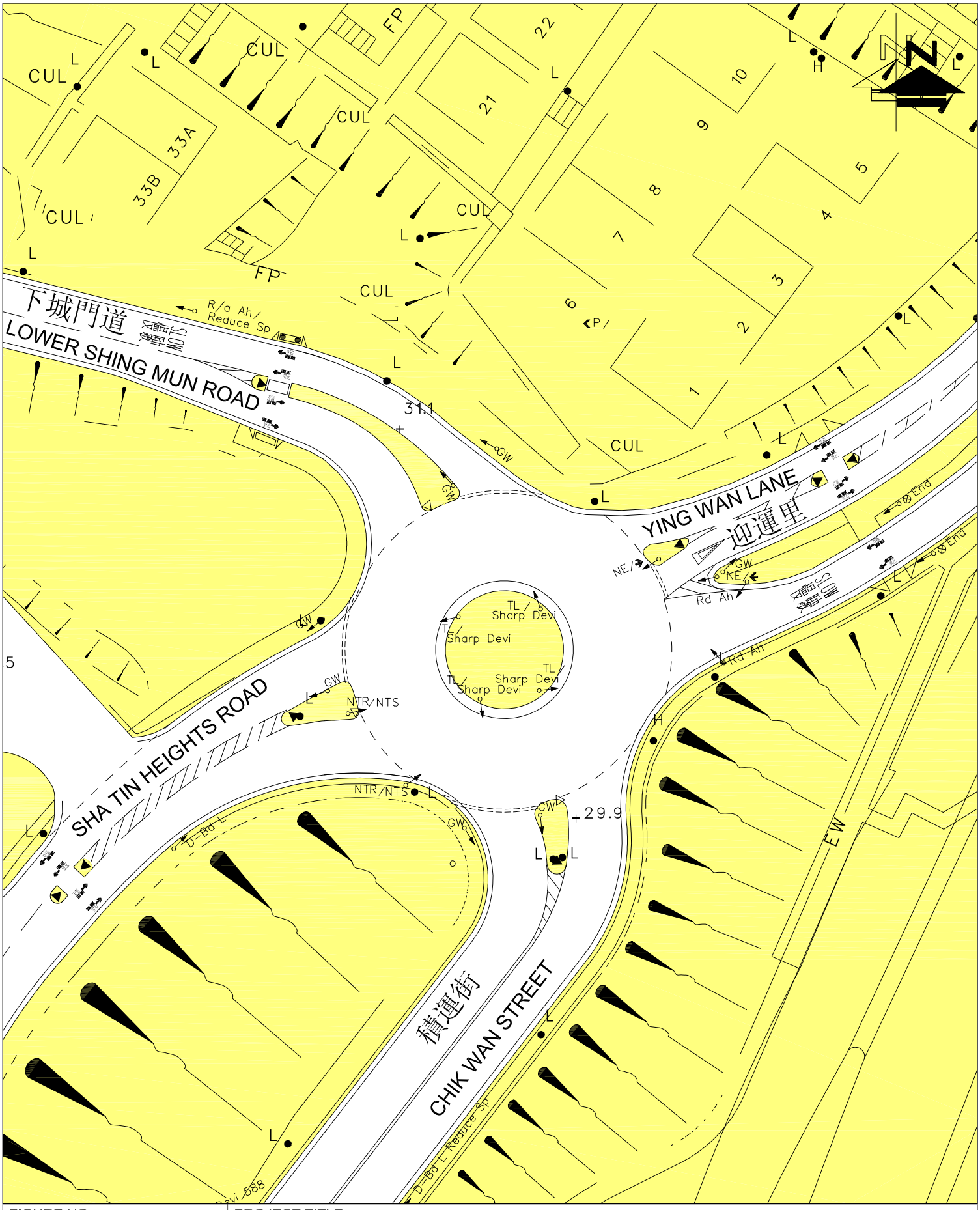
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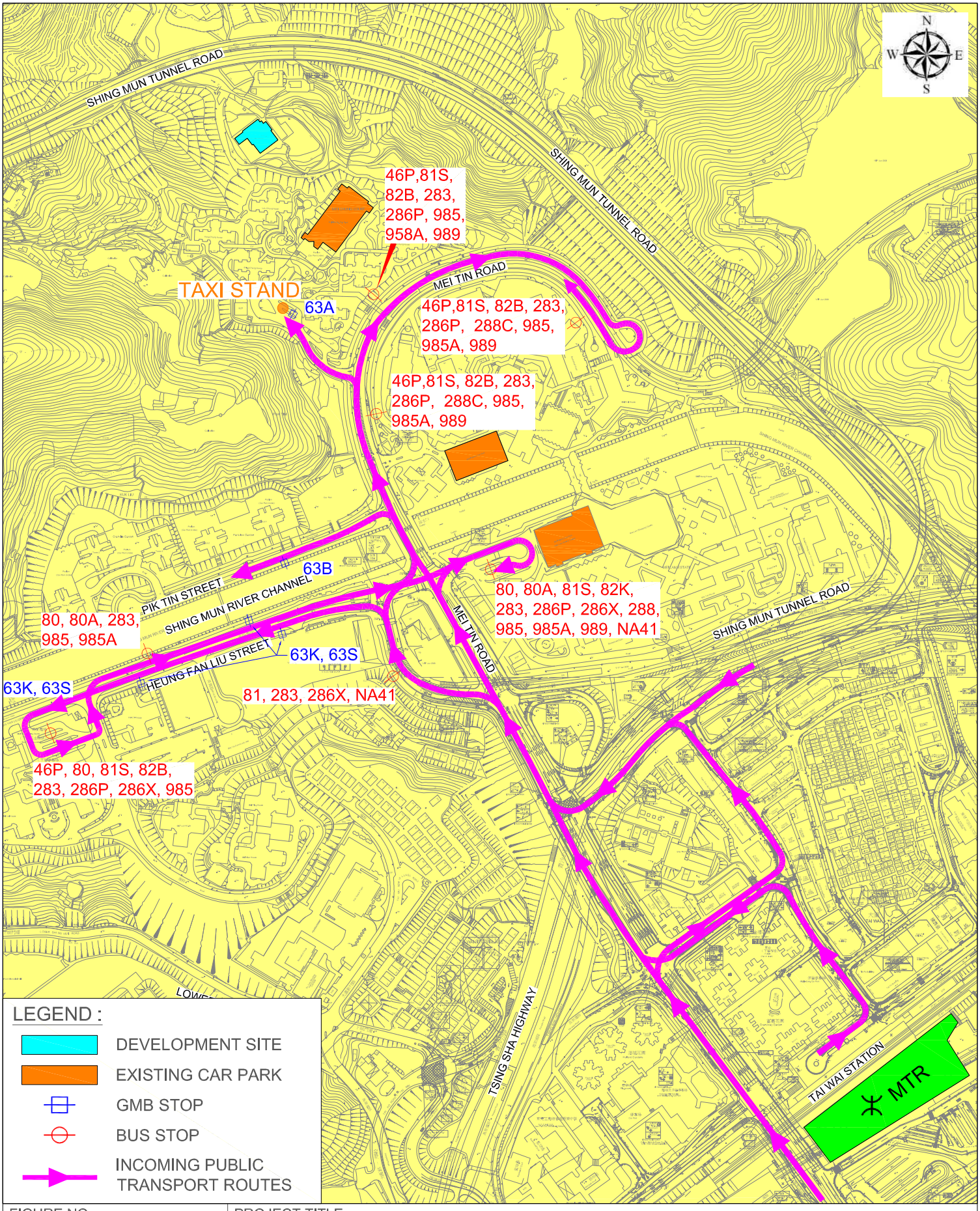

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| FIGURE NO.: 2.9 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF HEUNG FAN LIU STREET / MEI FAI STREET (H) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 03 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |

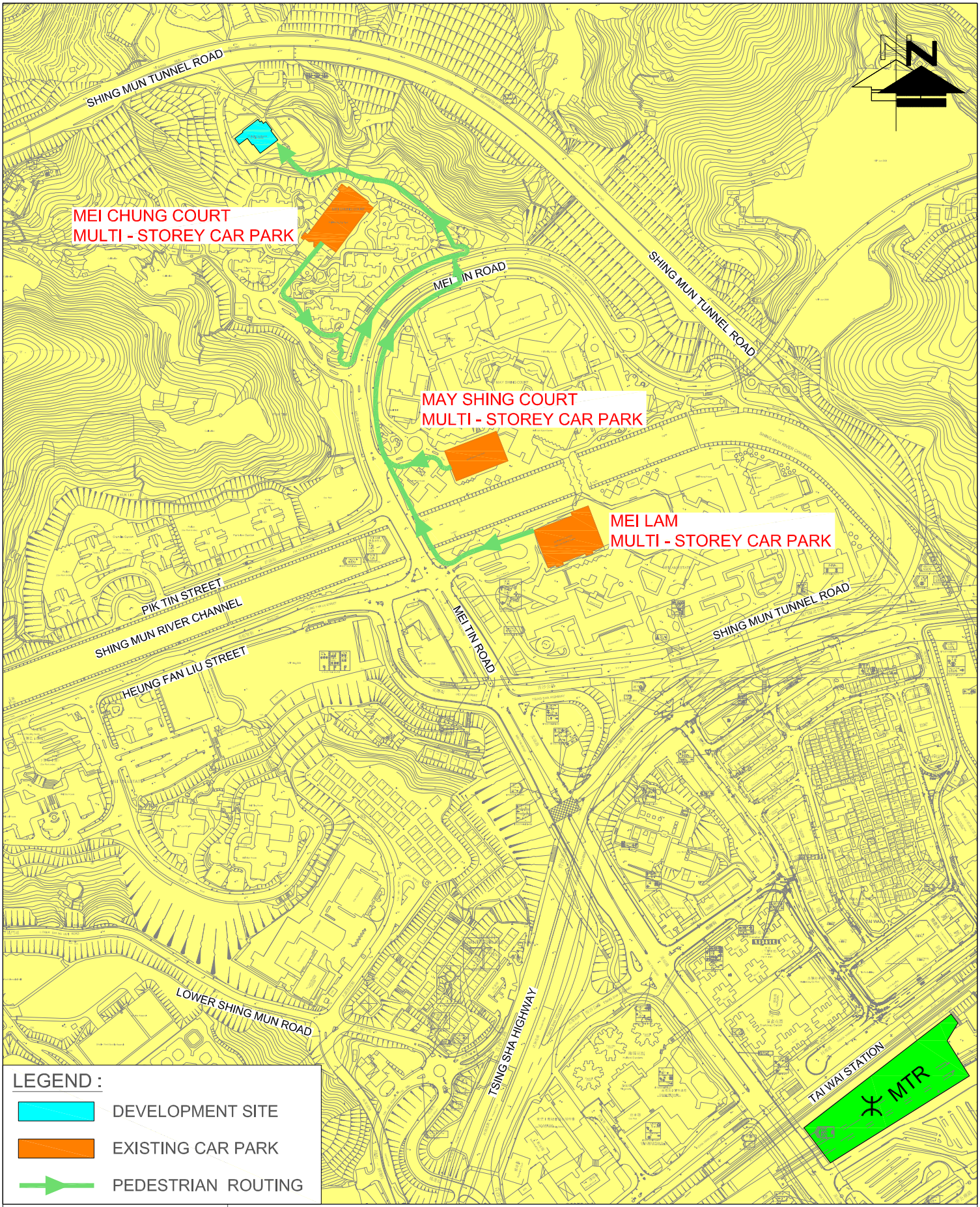



| | |
|---|---|
| FIGURE NO.: 2.10 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF SHA TIN HEIGHTS ROAD / LOWER SHING MUN ROAD ROUNDABOUT (I) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 23 APR 2021 | CTA Consultants Limited 志達顧問有限公司 |



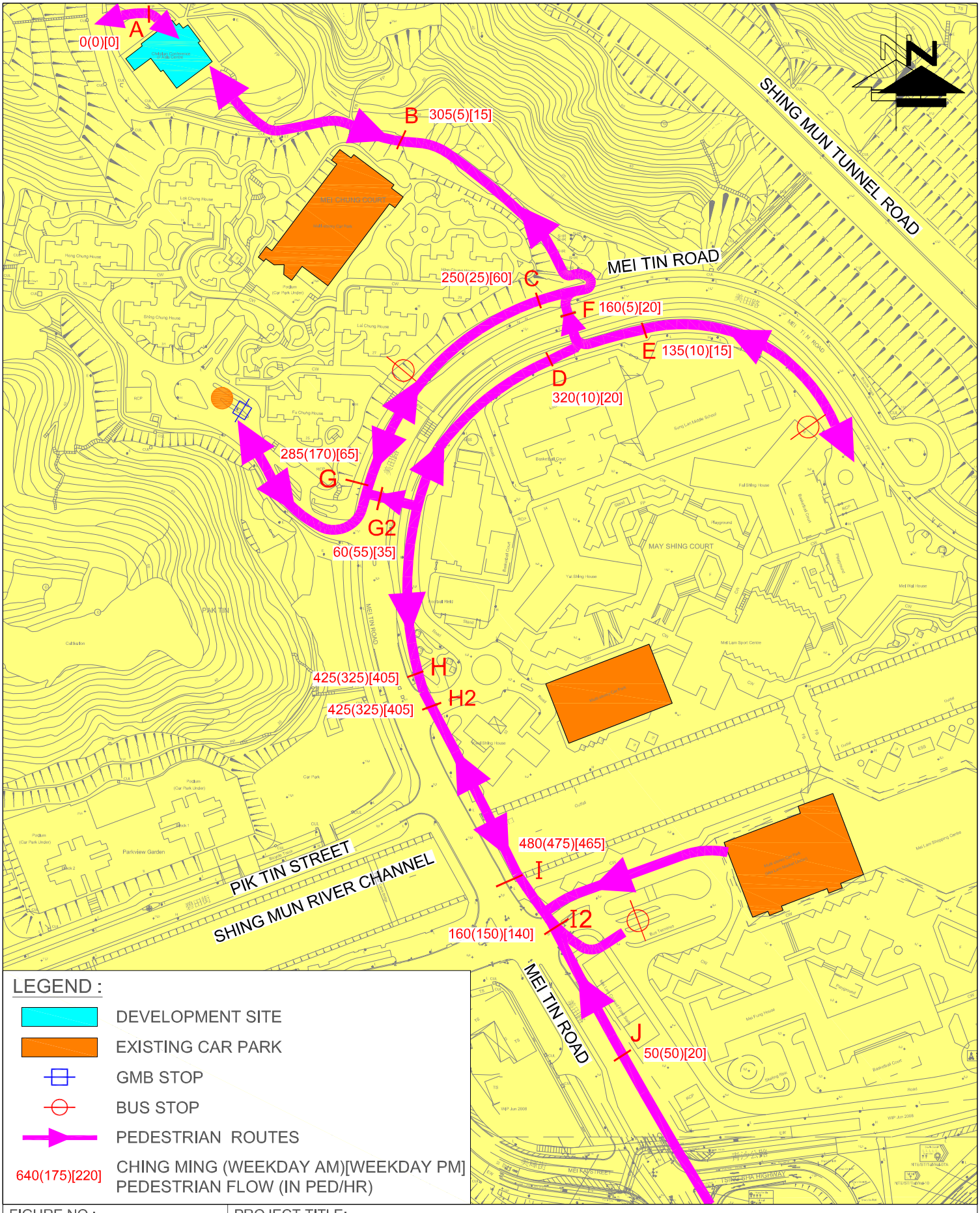

| | |
|---|---|
| FIGURE NO.: 2.11 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: PUBLIC TRANSPORT FACILITIES IN THE VICINITY |
| SCALE: 1 : 5000 @ A4 | DATE: 01 MAR 2023 |

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| | |
|---|---|
| FIGURE NO.: 2.12 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: PARKING FACILITIES IN THE VICINITY |
| SCALE: 1 : 5000 @A4 | DATE: 21 APR 2021 |

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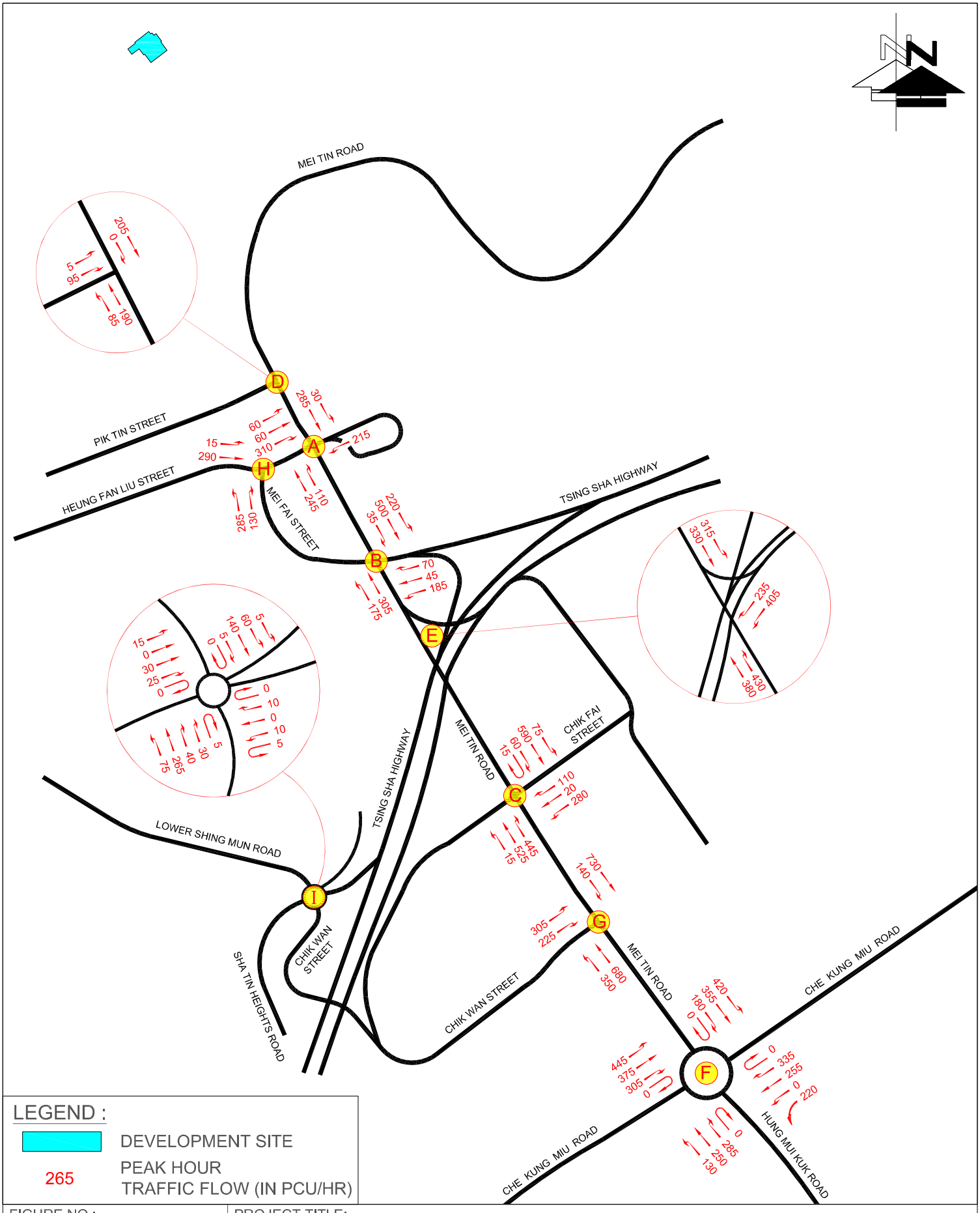



## LEGEND :

- DEVELOPMENT SITE
- EXISTING CAR PARK
- GMB STOP
- BUS STOP
- PEDESTRIAN ROUTES
- 640(175)[220] CHING MING (WEEKDAY AM)[WEEKDAY PM] PEDESTRIAN FLOW (IN PED/HR)

| | |
|---|---|
| FIGURE NO.: 2.13 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2018 OBSERVED PEDESTRIAN FLOWS |
| SCALE: 1 : 2500 @ A4 | DATE: 01 MAR 2023 |

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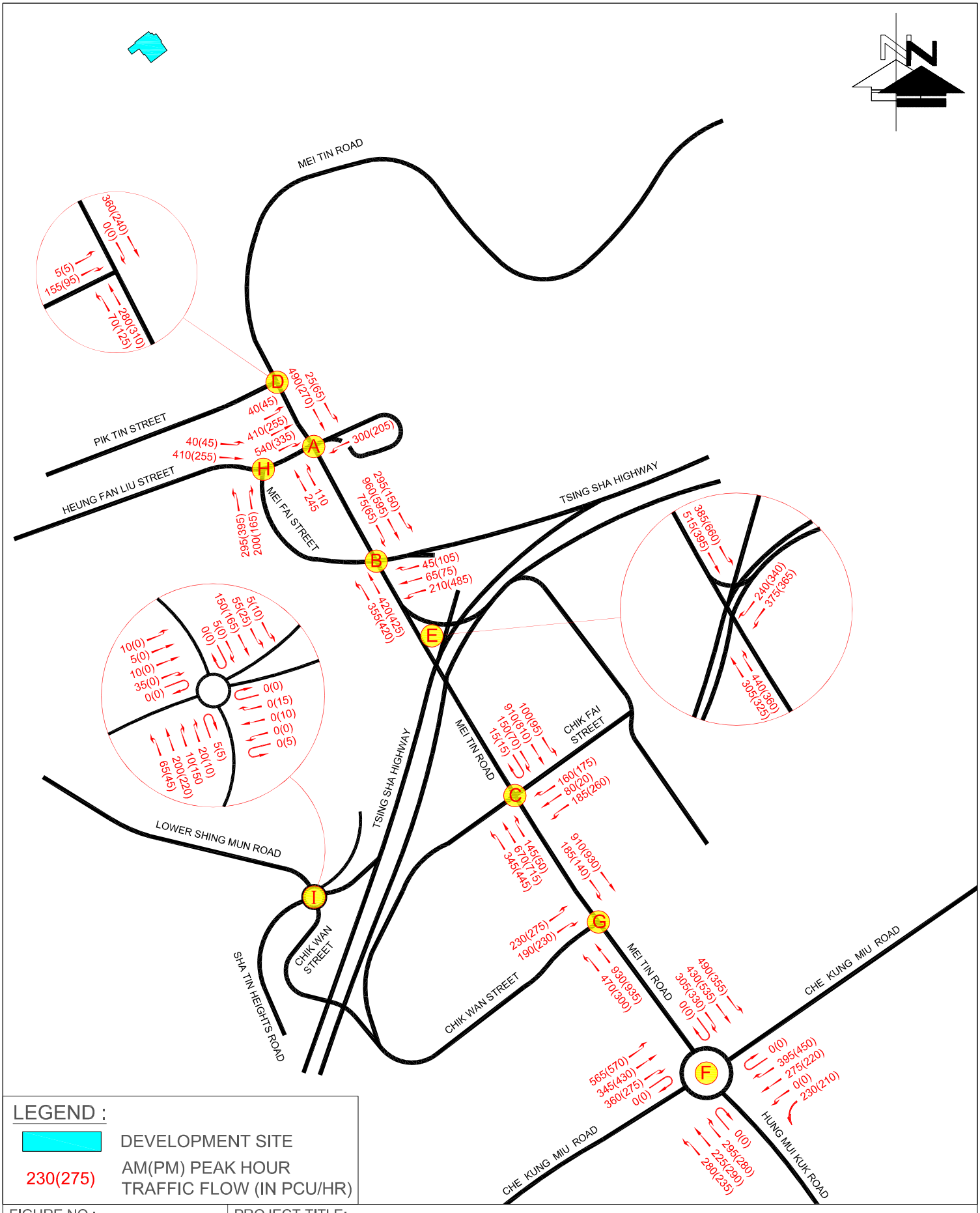

LEGEND :

DEVELOPMENT SITE

265 PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 2.14 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2018 OBSERVED TRAFFIC FLOWS (CHING MING FESTIVAL) |
| SCALE: 1 : 5500 (IN A4 SIZE) | DATE: 15 JUN 2021 |

CTA Consultants Limited 志達顧問有限公司

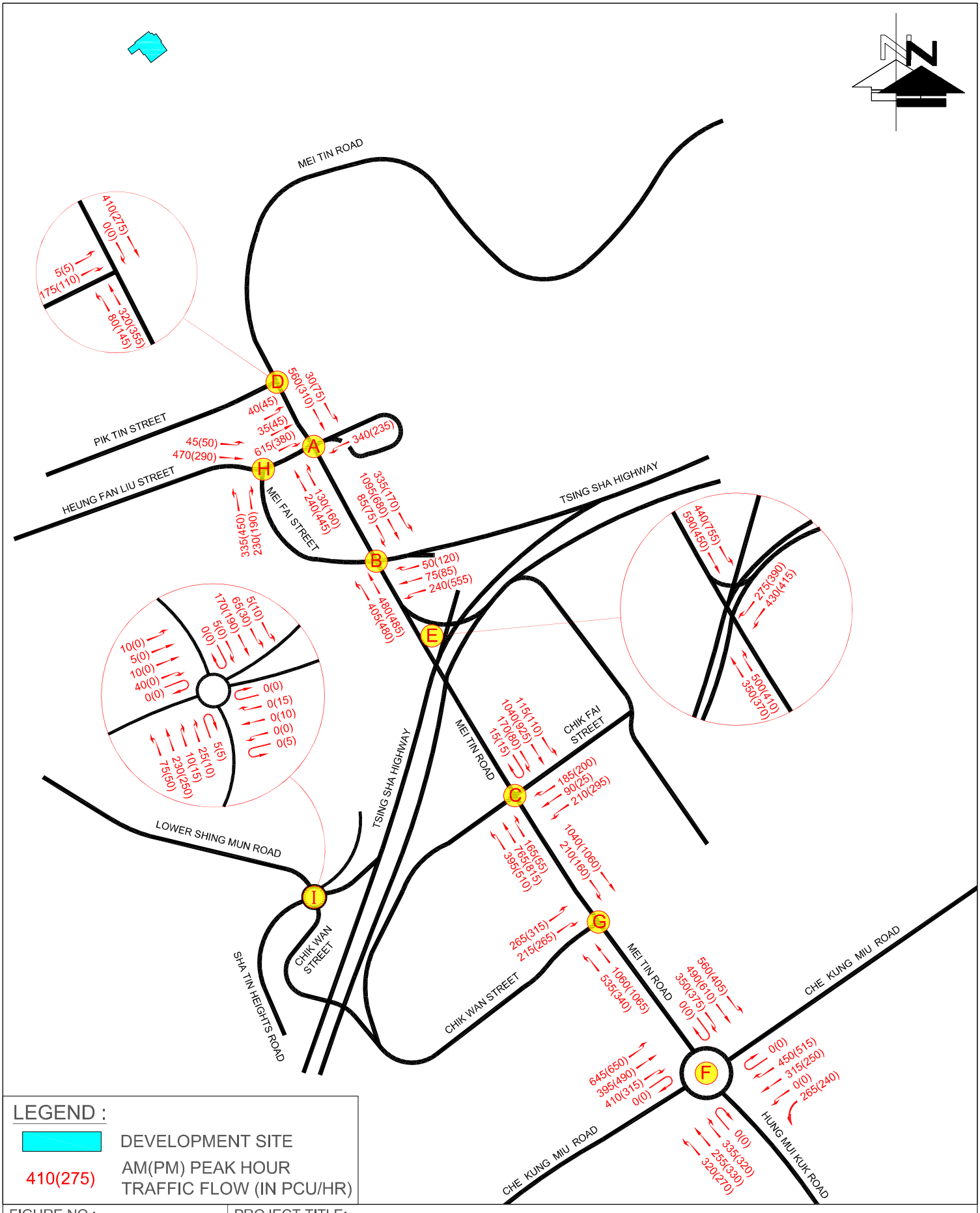



LEGEND :

DEVELOPMENT SITE

230(275) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 2.15 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2021 OBSERVED TRAFFIC FLOWS (WEEKDAY) |
| SCALE: 1 : 5500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |




LEGEND :

DEVELOPMENT SITE

410(275) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 2.16 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY) |
| SCALE: 1 : 5500 (IN A4 SIZE) / DATE: 15 JUN 2021 | CTA Consultants Limited 志達顧問有限公司 |



PRIVATE RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 181, HEUNG FAN LIU, SHA TIN



MEI PARK COURT



TAI WAI STATION PROPERTY DEVELOPMENT



MEI YING COURT

SHING MUN TUNNEL ROAD

PIK TIN STREET

SHING MUN RIVER CHANNEL

HEUNG FAN LIU STREET

MEI TIN ROAD

TSING SHA HIGHWAY

TAI WAI STATION

A

B

C

D

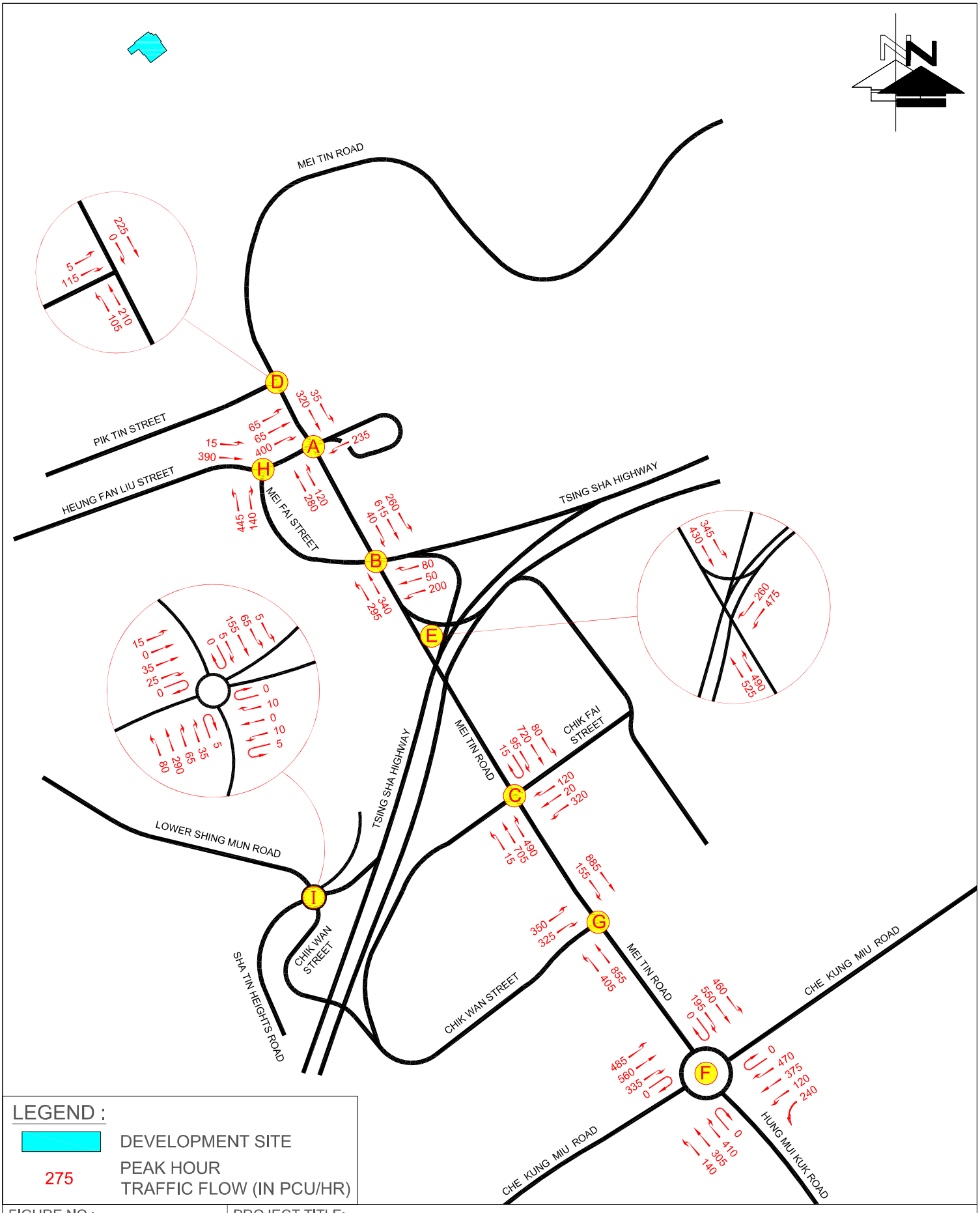
N

LEGEND :

DEVELOPMENT SITE

| | |
|---|---|
| FIGURE NO.: 3.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: FUTURE ADJACENT DEVELOPMENT AT TAI WAI |
| SCALE: 1 : 7000 (IN A4 SIZE) | DATE: 23 OCT 2020 |

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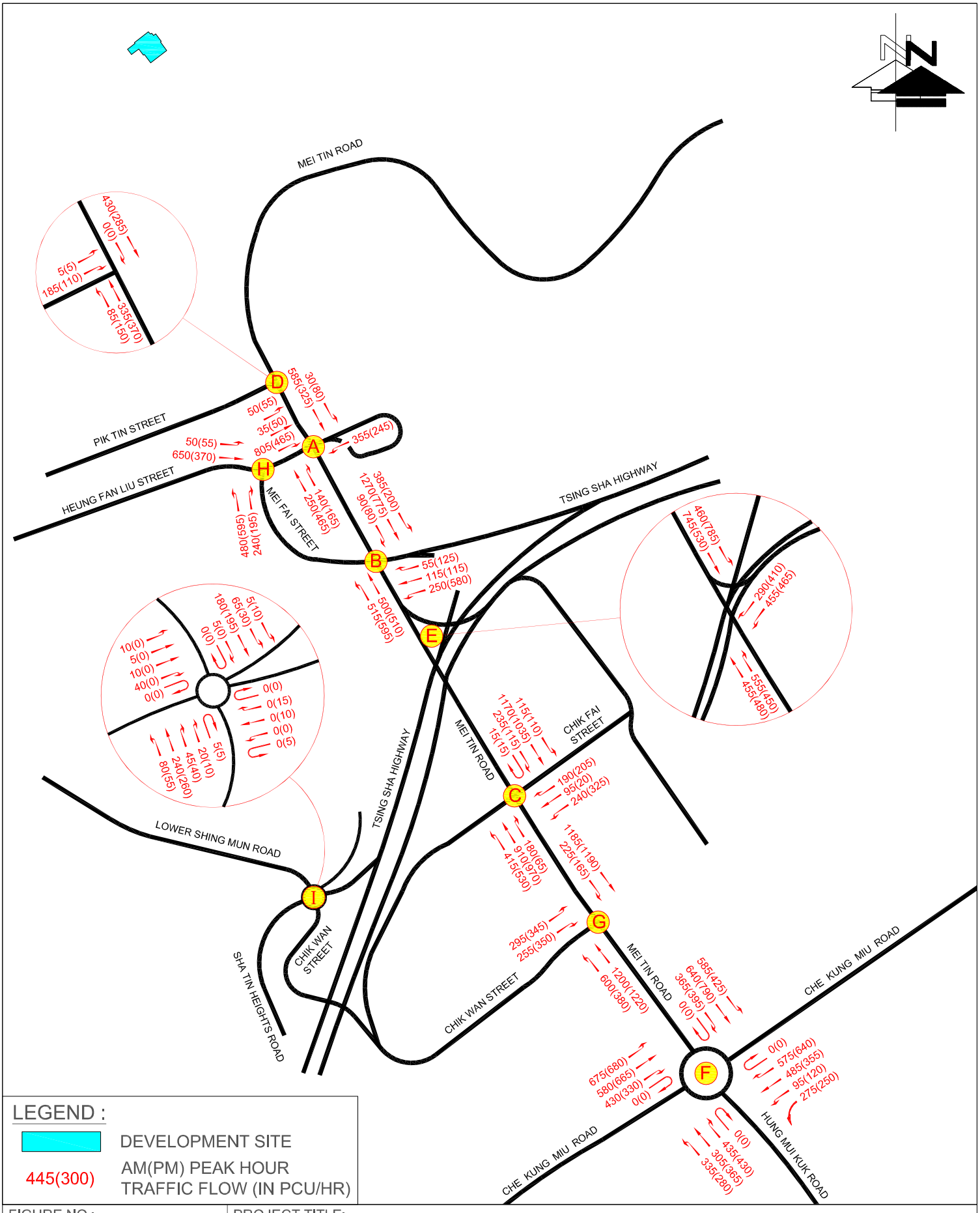



LEGEND :

DEVELOPMENT SITE

275 PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.2 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 REFERENCE TRAFFIC FLOWS (CHING MING FESTIVAL) |
| SCALE: N.T.S. @A4 / DATE: 1 JUN 2023 | CTA Consultants Limited 志達顧問有限公司 |

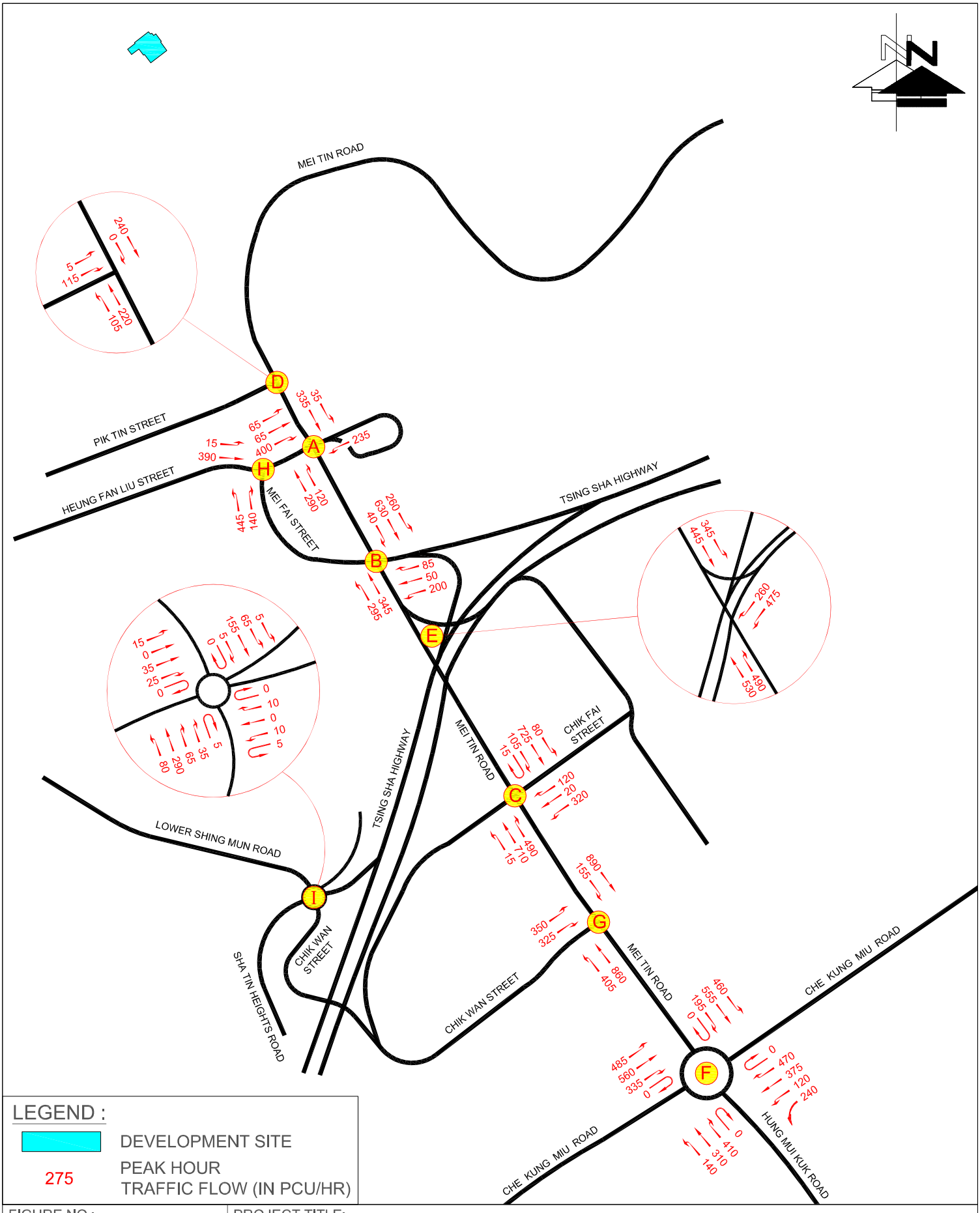



LEGEND :

DEVELOPMENT SITE

445(300) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.3 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 REFERENCE TRAFFIC FLOWS (WEEKDAY) |
| SCALE: N.T.S. @A4 / DATE: 1 JUN 2023 | CTA Consultants Limited 志達顧問有限公司 |

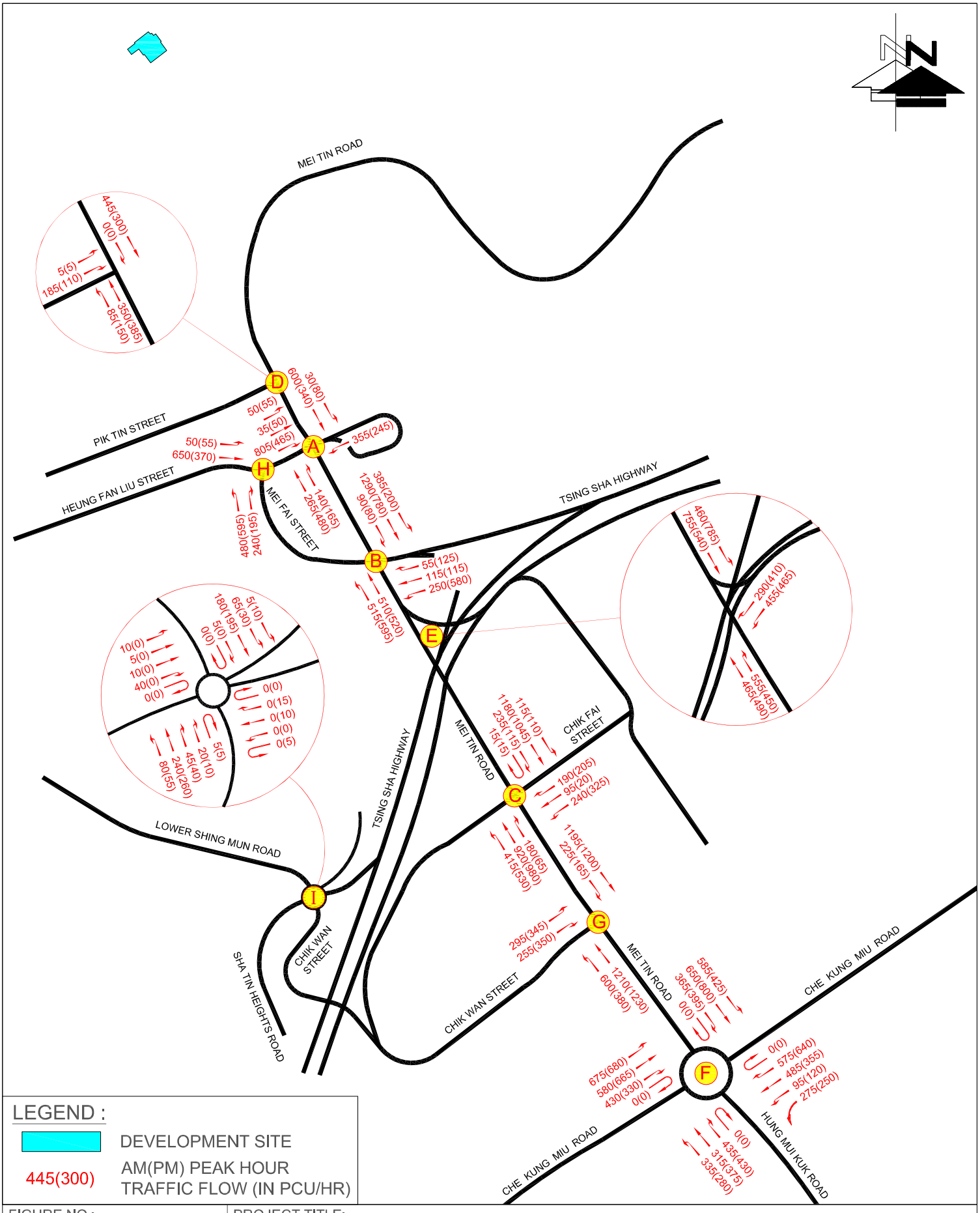



LEGEND :

DEVELOPMENT SITE

275 PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.4 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 DESIGN TRAFFIC FLOWS (CHING MING FESTIVAL) |
| SCALE: N.T.S. @A4 / DATE: 1 JUN 2023 | CTA Consultants Limited 志達顧問有限公司 |

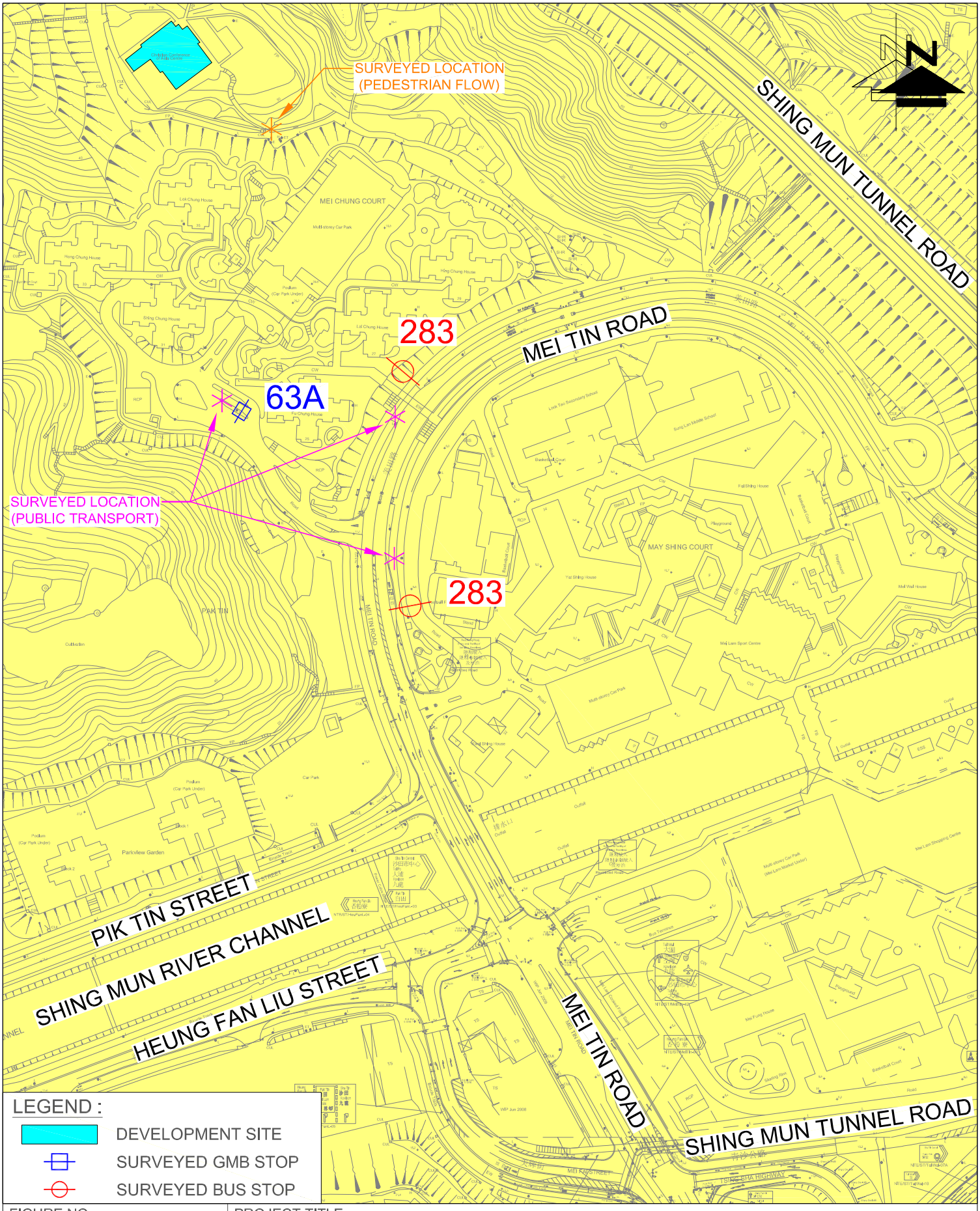



LEGEND :

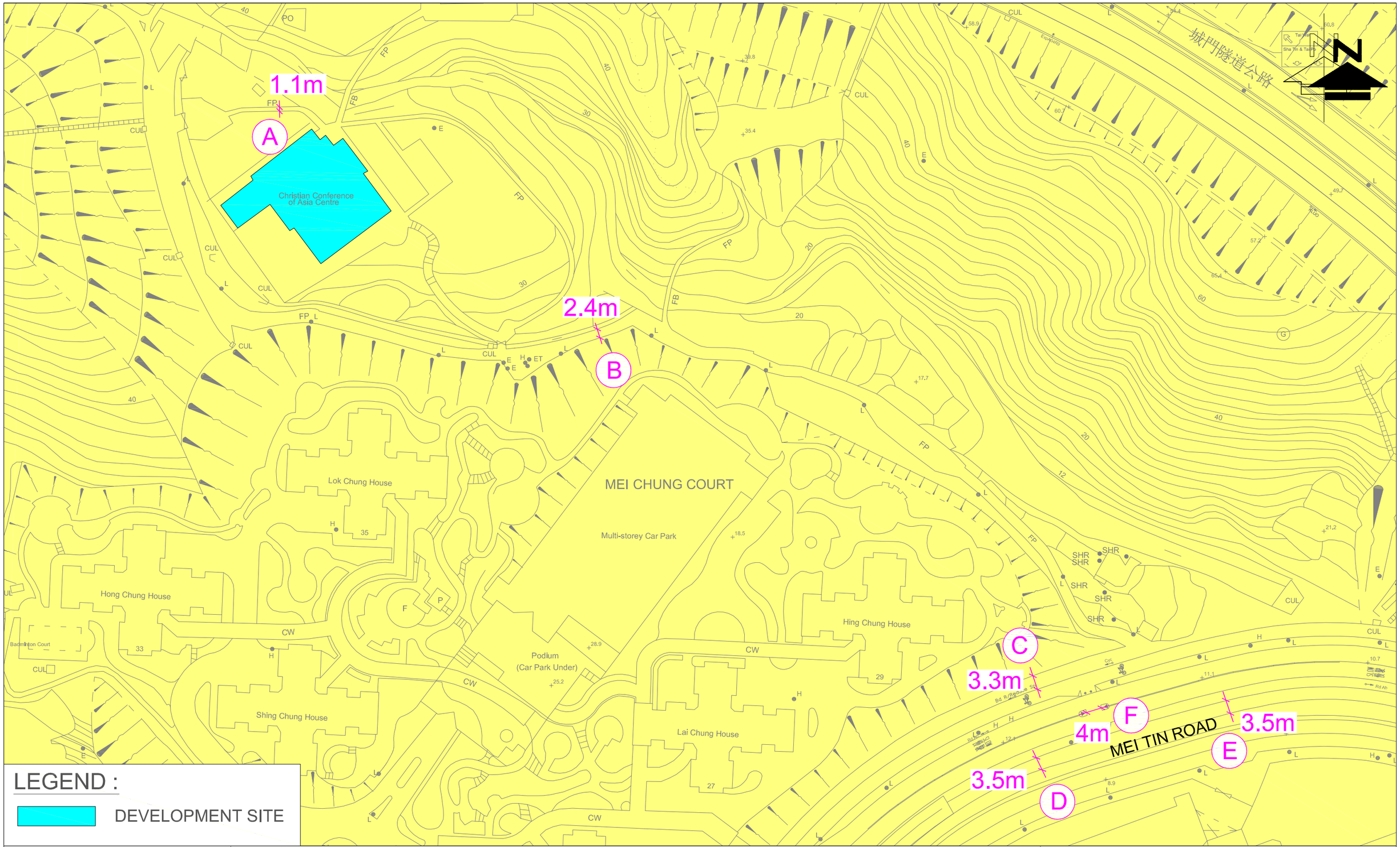
DEVELOPMENT SITE

445(300) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.5 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 DESIGN TRAFFIC FLOWS (WEEKDAY) |
| SCALE: N.T.S. @A4 / DATE: 1 JUN 2023 | CTA Consultants Limited 志達顧問有限公司 |




| | |
|---|---|
| FIGURE NO.: 5.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: SURVEYED LOCATION PLAN |
| SCALE: 1 : 2500 (IN A4 SIZE) / DATE: 23 OCT 2020 | CTA Consultants Limited 志達顧問有限公司 |

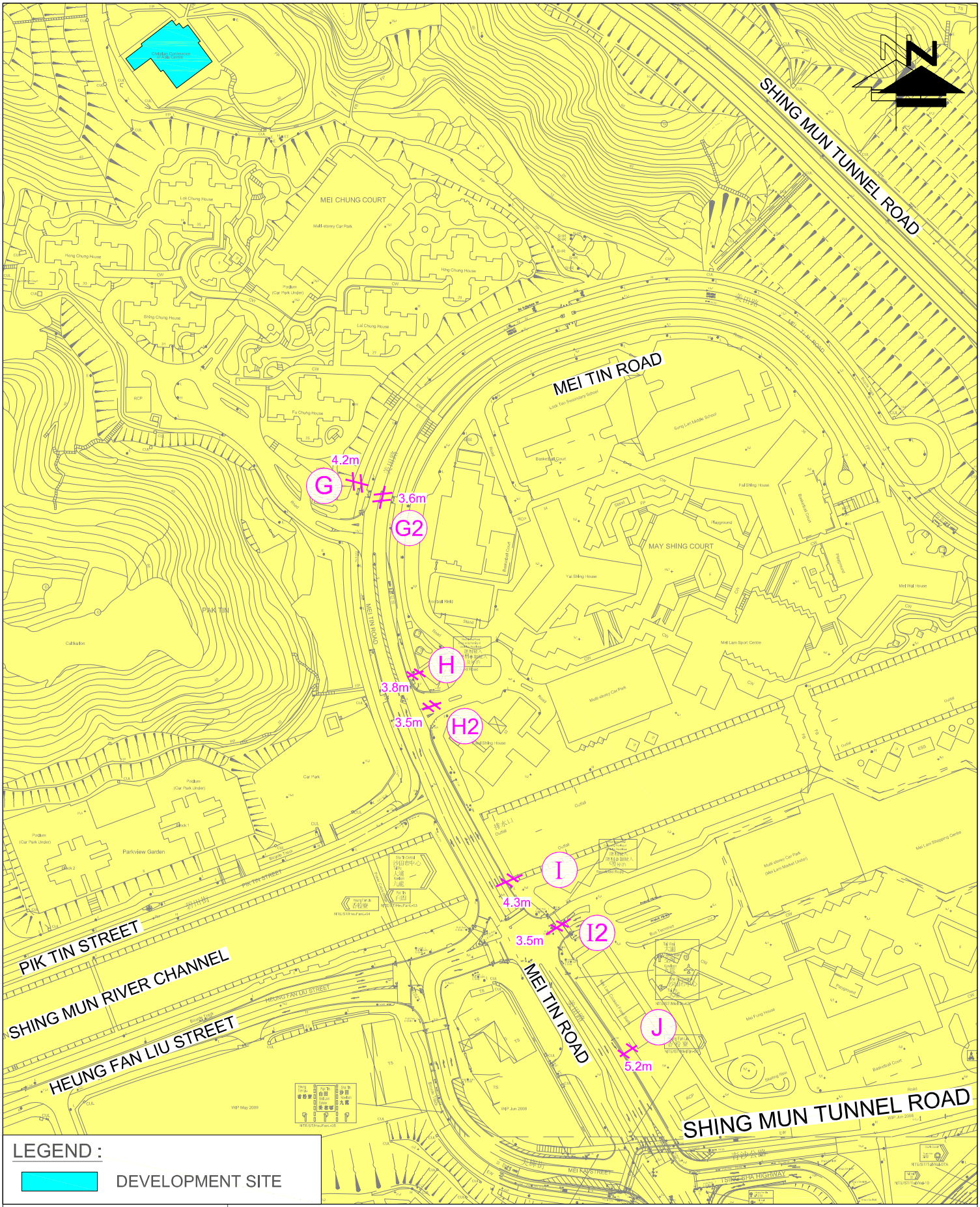



LEGEND :

DEVELOPMENT SITE

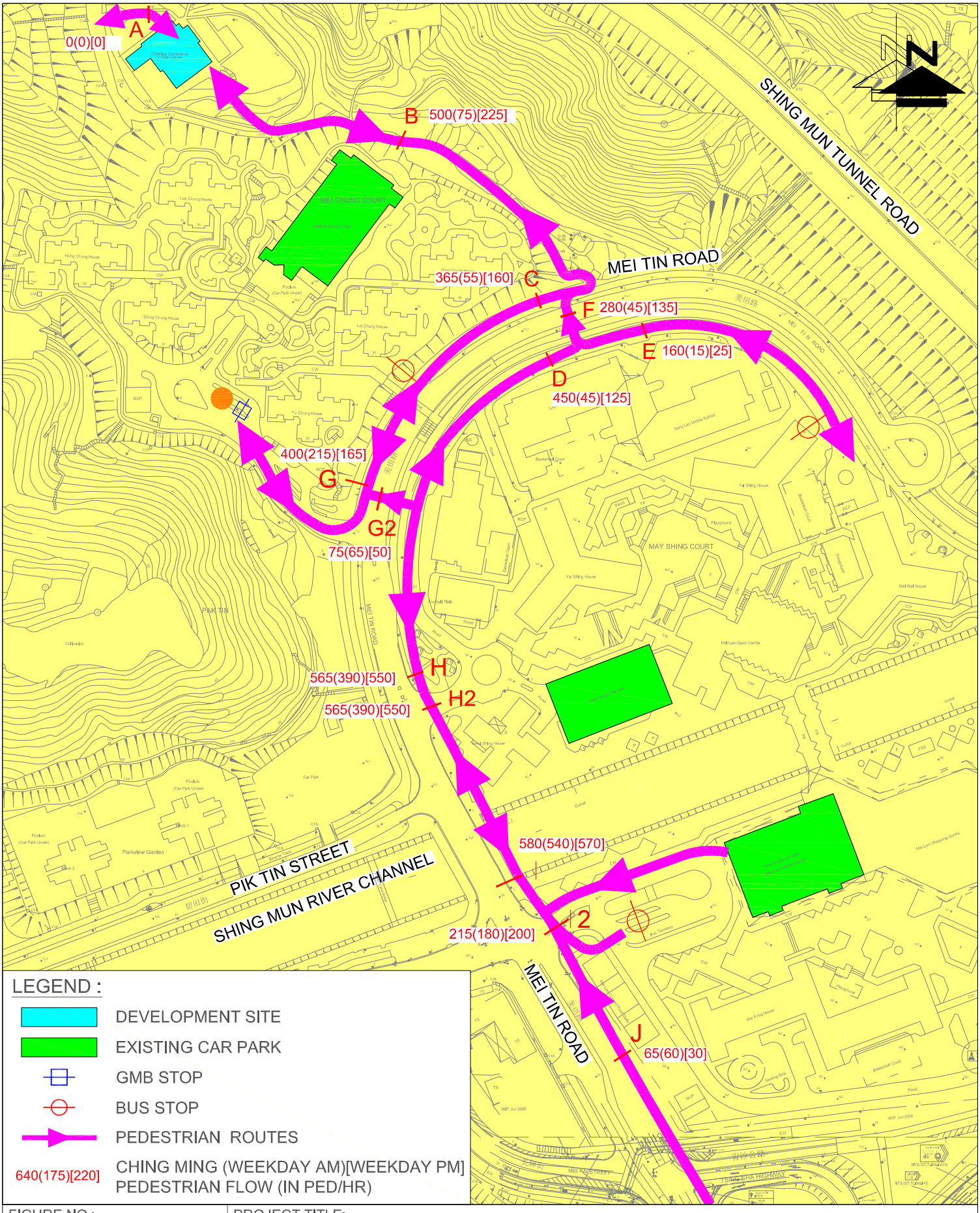
| | |
|---|---|
| FIGURE NO.: 7.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: INDEX PLAN OF CRITICAL SECTIONS - 1 |
| SCALE: 1 : 800 (IN A3 SIZE) / DATE: 29 JUN 2022 | |

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| | |
|---|---|
| FIGURE NO.: 7.2 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: INDEX PLAN OF CRITICAL SECTIONS - 2 |
| SCALE: 1 : 2500 @ A4 | DATE: 10 NOV 2021 |

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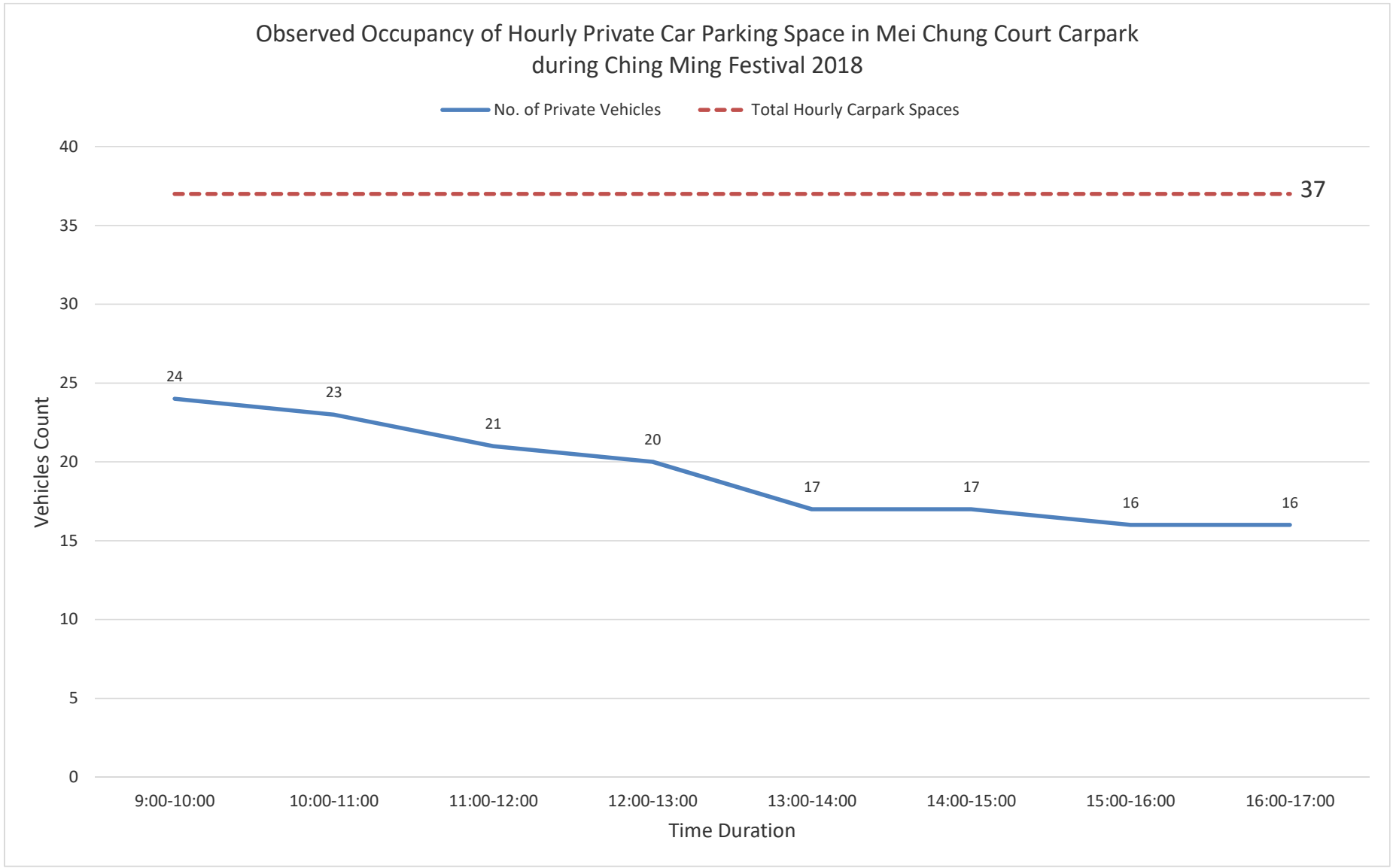



| | |
|---|---|
| FIGURE NO.: 7.3 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 DESIGN PEDESTRIAN FLOWS |
| SCALE: 1 : 2500 @ A4 | DATE: 30 MAY 2023 |

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# Appendix 1

# Parking Survey


Observed Occupancy of Hourly Private Car Parking Space in Mei Chung Court Carpark during Ching Ming Festival 2018
No. of Private Vehicles
Total Hourly Carpark Spaces
Vehicles Count
Time Duration
40
35
30
25
20
15
10
5
0
37
24
23
21
20
17
17
16
16
9:00-10:00
10:00-11:00
11:00-12:00
12:00-13:00
13:00-14:00
14:00-15:00
15:00-16:00
16:00-17:00

# Appendix 2

# Junction Calculation Sheets

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**

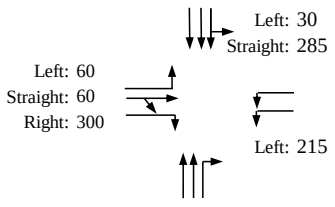
Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 2115 | 2115 | 1960 | 1960 | 60 | 0.031 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 68% | 2255 | 4510 | 2145 | 4105 | 188 | 0.088 | 0.088 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 2255 | 0 | 1960 | 0 | 172 | 0.088 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 1915 | 3970 | 1665 | 3505 | 102 | 0.061 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 2055 | 0 | 1840 | 0 | 113 | 0.061 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 1915 | 3970 | 1915 | 3970 | 118 | 0.062 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 127 | 0.062 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 2055 | 2055 | 1855 | 1855 | 110 | 0.059 | 0.059 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 30% | 1915 | 6025 | 1890 | 6000 | 99 | 0.053 | 0.053 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 108 | 0.052 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 108 | 0.052 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | 7p | A,B,D | green time =50Gm+08Fm=58s | |
| | 8p | B,C,D | green time =49Gm+08Fm=57s | |
| | 9p | B,C,D | green time =49Gm+08Fm=57s | |
| | 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr)

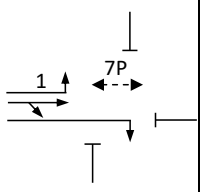



A.M. Check Phase

| | |
|---|---|
| εy | 0.200 |
| L (sec) | 40 |
| C (sec) | 90 |
| y pract. | 0.500 |
| R.C. (%) | 151% |

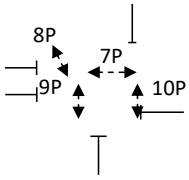
Stage / Phase Diagrams

Stage A



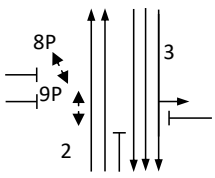

I/G = 5s

Stage B All PED. (25s)



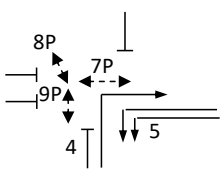

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

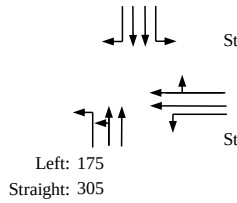
Junction: **(B) Tsing Sha Highway/ Mei Tin Road**

Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 2105 | 0 | 1870 | 0 | 70 | 0.037 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 3975 | 45 | 0.021 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 185 | 0.102 | 0.102 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 1945 | 6135 | 1770 | 5930 | 143 | 0.081 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 19% | 2085 | 0 | 2055 | 0 | 166 | 0.081 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 170 | 0.081 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 4170 | 2085 | 4170 | 250 | 0.120 | 0.120 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 0 | 2085 | 0 | 250 | 0.120 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 35 | 0.018 | |

Notes:

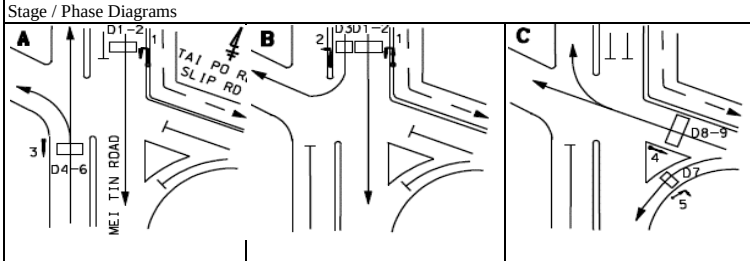
Traffic Flow (pcu / hr)




Peak Hour Check Phase

| | |
|---|---|
| εy | 0.222 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 261% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

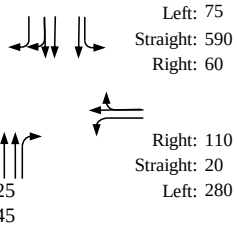
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 75 | 0.041 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 8420 | 2105 | 8300 | 197 | 0.093 | 0.093 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 197 | 0.093 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 2105 | 0 | 2105 | 0 | 197 | 0.093 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 2105 | 0 | 1985 | 0 | 60 | 0.030 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 167 | 0.085 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 179 | 0.085 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 179 | 0.085 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 445 | 0.234 | 0.234 |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 1965 | 1965 | 1890 | 1890 | 280 | 0.148 | 0.148 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 85% | 2105 | 2105 | 2005 | 2005 | 130 | 0.065 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

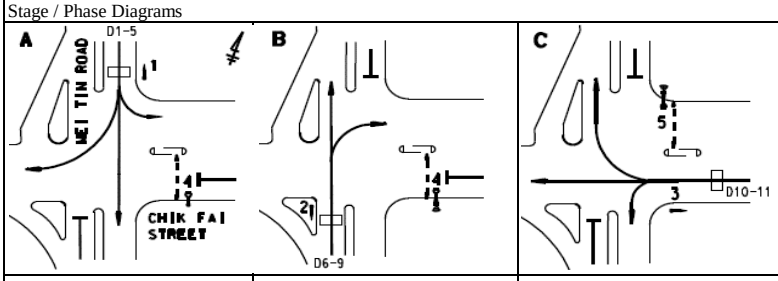
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.476 |
| L (sec) | 14 |
| C (sec) | 90 |
| y pract. | 0.760 |
| R.C. (%) | 60% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**

Description: **2018 OBSERVED TRAFFIC FLOWS**

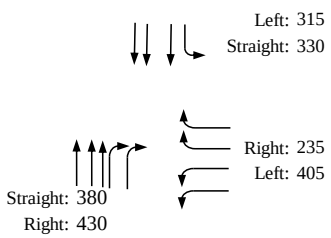
| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 2065 | 2065 | 2005 | 2005 | 315 | 0.157 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 105 | 0.053 | 0.053 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 112 | 0.053 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 112 | 0.053 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6315 | 2105 | 6315 | 127 | 0.060 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 127 | 0.060 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 127 | 0.060 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 216 | 0.109 | 0.109 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 214 | 0.109 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 1965 | 4120 | 1830 | 3865 | 192 | 0.105 | 0.105 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 2155 | 0 | 2035 | 0 | 213 | 0.105 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 1965 | 3930 | 1855 | 3685 | 118 | 0.064 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 1965 | 0 | 1830 | 0 | 117 | 0.064 | |

Pedestrian Phase

| | | | |
|---|---|---|---|
| P1 | A | green time =06Gm+15Fm=21s | |
| P2 | B | green time =17Gm+07Fm=24s | |
| P3 | B, C | green time =27Gm+09Fm=36s | |
| P4 | A | green time =05Gm+10Fm=15s | |

Notes:

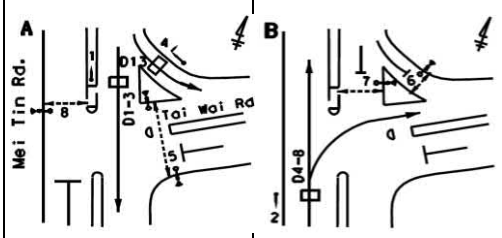
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.267 |
| L (sec) | 12 |
| C (sec) | 90 |
| y pract. | 0.780 |
| R.C. (%) | 192% |

Stage / Phase Diagrams




| | | |
|---|---|---|
| I/G = 5s | I/G = 5s | I/G = 5s |

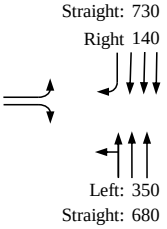
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 2105 | 2105 | 1915 | 1915 | 140 | 0.073 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6175 | 2105 | 6175 | 249 | 0.118 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 249 | 0.118 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 1965 | 0 | 1965 | 0 | 232 | 0.118 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 6175 | 1785 | 5995 | 350 | 0.196 | 0.196 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 340 | 0.162 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 340 | 0.162 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 305 | 0.171 | 0.171 |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 113 | 0.057 | |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 112 | 0.057 | |

Notes:

Traffic Flow (pcu / hr)

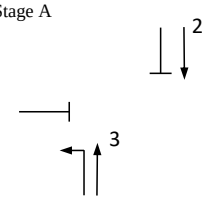



A.M. Check Phase

| | |
|---|---|
| εy | 0.367 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 118% |

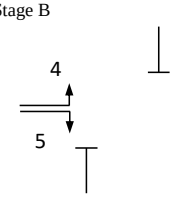
Stage / Phase Diagrams

Stage A



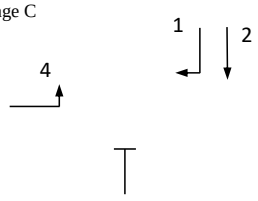

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**

Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 15 | 0.008 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 4210 | 145 | 0.069 | 0.069 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 145 | 0.069 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 285 | 0.160 | 0.160 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 2105 | 4070 | 1960 | 3745 | 68 | 0.035 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 1965 | 0 | 1785 | 0 | 62 | 0.035 | |
| Pedestrian Phase | | | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | |
| | | | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr)

Left: 15
Straight: 290

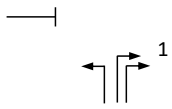
Right: 130
Left: 285

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.229 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 136% |

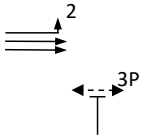
Stage / Phase Diagrams

A



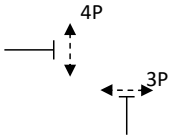

I/G = 3s

B




I/G = 6s

C




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

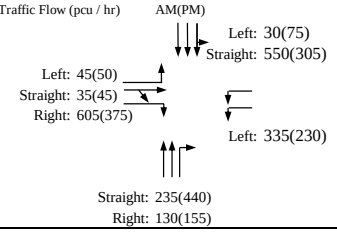
Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 45 | 0.025 | | 50 | 0.027 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 89% | 79% | 2255 | 4510 | 2115 | 2130 | 4075 | 4090 | 332 | 0.157 | 0.157 | 219 | 0.103 | 0.103 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 100% | 2255 | 0 | 1960 | 1960 | 0 | 0 | 308 | 0.157 | | 201 | 0.103 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 100% | 1915 | 3970 | 1665 | 1665 | 3505 | 3505 | 159 | 0.096 | | 109 | 0.066 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 100% | 2055 | 0 | 1840 | 1840 | 0 | 0 | 176 | 0.096 | | 121 | 0.066 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 0% | 1915 | 3970 | 1915 | 1915 | 3970 | 3970 | 113 | 0.059 | | 212 | 0.111 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 122 | 0.059 | | 228 | 0.111 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 100% | 2055 | 2055 | 1855 | 1855 | 1855 | 1855 | 130 | 0.070 | 0.070 | 155 | 0.084 | 0.084 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 16% | 63% | 1915 | 6025 | 1905 | 1870 | 6015 | 5980 | 184 | 0.096 | 0.096 | 119 | 0.064 | 0.064 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 198 | 0.096 | | 131 | 0.064 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 198 | 0.096 | | 131 | 0.064 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | 7p | A,B,D | green time =50Gm+08Fm=58s | |
| | 8p | B,C,D | green time =49Gm+08Fm=57s | |
| | 9p | B,C,D | green time =49Gm+08Fm=57s | |
| | 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

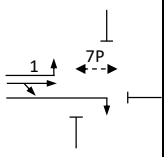



| A.M. Check Phase | |
|---|---|
| εy | 0.324 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 85% |

| P.M. Check Phase | |
|---|---|
| εy | 0.250 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 140% |

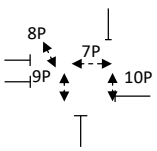
Stage / Phase Diagrams

Stage A



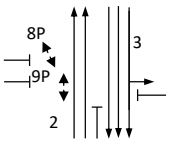

I/G = 5s

Stage B All PED. (25s)



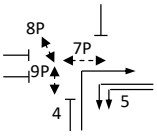

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 84% | 100% | 2105 | 0 | 1905 | 1870 | 0 | 0 | 59 | 0.031 | | 120 | 0.064 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4010 | 3975 | 66 | 0.031 | | 85 | 0.040 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 235 | 0.129 | 0.129 | 545 | 0.299 | 0.299 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 100% | 1945 | 6135 | 1770 | 1770 | 5890 | 5875 | 261 | 0.148 | | 286 | 0.162 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 47% | 57% | 2085 | 0 | 2015 | 2000 | 0 | 0 | 298 | 0.148 | | 323 | 0.162 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 311 | 0.148 | | 340 | 0.162 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 4170 | 2085 | 2085 | 4170 | 4170 | 540 | 0.259 | 0.259 | 335 | 0.161 | 0.161 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 0 | 2085 | 2085 | 0 | 0 | 540 | 0.259 | | 335 | 0.161 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 85 | 0.045 | | 75 | 0.039 | |

Notes:

Traffic Flow (pcu / hr)

Right: 85(75)
Straight: 1080(670)
Left: free flow

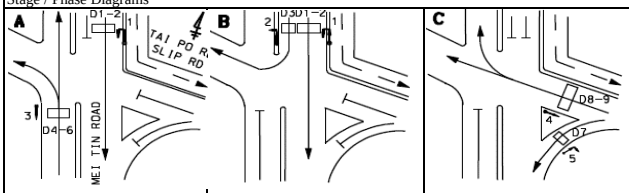
Right: 50(120)
Straight: 75(85)
Left: 235(545)

Left: 400(470)
Straight: 470(480)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.388 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 113% |

| P.M. Check Phase | |
|---|---|
| εy | 0.460 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 79% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

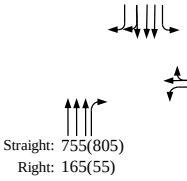
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 110 | 0.060 | | 105 | 0.058 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 8420 | 2105 | 2105 | 8300 | 8300 | 342 | 0.162 | 0.162 | 303 | 0.144 | 0.144 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 342 | 0.162 | | 303 | 0.144 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 342 | 0.162 | | 303 | 0.144 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 0 | 1985 | 1985 | 0 | 0 | 170 | 0.086 | | 80 | 0.040 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 240 | 0.122 | 0.122 | 256 | 0.130 | 0.130 |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 274 | 0.130 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 274 | 0.130 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 165 | 0.087 | | 55 | 0.029 | |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1890 | 1890 | 1890 | 1890 | 210 | 0.111 | | 290 | 0.153 | 0.153 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 67% | 91% | 2105 | 2105 | 2025 | 1995 | 2025 | 1995 | 270 | 0.133 | 0.133 | 215 | 0.108 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

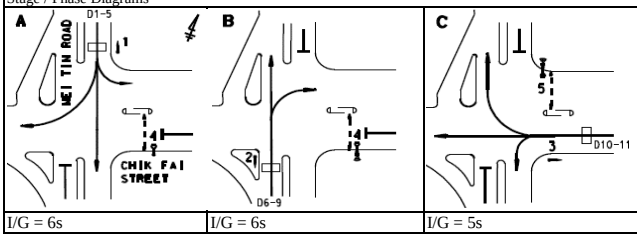
Traffic Flow (pcu / hr) AM(PM)




| A.M. Check Phase | |
|---|---|
| εy | 0.418 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 90% |

| P.M. Check Phase | |
|---|---|
| εy | 0.428 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 86% |

Stage / Phase Diagrams




| I/G = 6s | I/G = 6s | I/G = 5s |
|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 100% | 2065 | 2065 | 2005 | 2005 | 2005 | 2005 | 435 | 0.217 | | 740 | 0.369 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 185 | 0.094 | 0.094 | 142 | 0.072 | 0.072 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 198 | 0.094 | | 152 | 0.072 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 198 | 0.094 | | 152 | 0.072 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6315 | 2105 | 2105 | 6315 | 6315 | 115 | 0.055 | | 122 | 0.058 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 115 | 0.055 | | 122 | 0.058 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 115 | 0.055 | | 122 | 0.058 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 249 | 0.125 | 0.125 | 204 | 0.103 | 0.103 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 246 | 0.125 | | 201 | 0.103 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 100% | 1965 | 4120 | 1830 | 1830 | 3865 | 3865 | 199 | 0.109 | 0.109 | 194 | 0.106 | 0.106 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 100% | 2155 | 0 | 2035 | 2035 | 0 | 0 | 221 | 0.109 | | 216 | 0.106 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 100% | 1965 | 3930 | 1855 | 1855 | 3685 | 3685 | 136 | 0.073 | | 191 | 0.103 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 100% | 1965 | 0 | 1830 | 1830 | 0 | 0 | 134 | 0.073 | | 189 | 0.103 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | P1 | A | green time =06Gm+15Fm=21s |
| | P2 | B | green time =17Gm+07Fm=24s |
| | P3 | B, C | green time =27Gm+09Fm=36s |
| | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

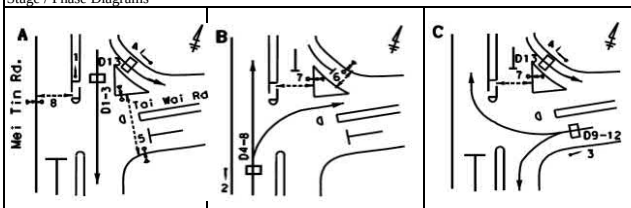
Left: 435(740)
Straight: 580(445)

Right: 270(380)
Left: 420(410)
Straight: 345(365)
Right: 495(405)

| A.M. Check Phase | |
|---|---|
| εy | 0.328 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 147% |

| P.M. Check Phase | |
|---|---|
| εy | 0.281 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 188% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s |
|---|---|---|

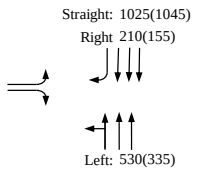
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 100% | 2105 | 2105 | 1915 | 1915 | 1915 | 1915 | 210 | 0.110 | 0.110 | 155 | 0.081 | 0.081 |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6175 | 2105 | 2105 | 6175 | 6175 | 349 | 0.166 | | 356 | 0.169 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 349 | 0.166 | | 356 | 0.169 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 0 | 1965 | 1965 | 0 | 0 | 326 | 0.166 | | 333 | 0.169 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 80% | 1965 | 6175 | 1785 | 1820 | 5995 | 6030 | 530 | 0.297 | 0.297 | 418 | 0.230 | 0.230 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 523 | 0.248 | | 484 | 0.230 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 523 | 0.248 | | 484 | 0.230 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 260 | 0.146 | | 310 | 0.174 | |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 108 | 0.054 | 0.054 | 131 | 0.066 | 0.066 |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 107 | 0.054 | | 129 | 0.066 | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

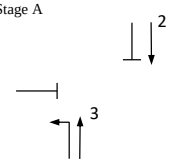



| A.M. Check Phase | |
|---|---|
| εy | 0.461 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 60% |

| P.M. Check Phase | |
|---|---|
| εy | 0.377 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 97% |

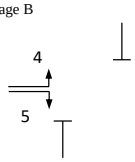
Stage / Phase Diagrams

Stage A



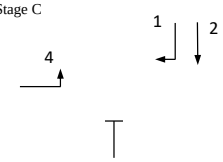

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 45 | 0.025 | | 50 | 0.028 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4210 | 4210 | 230 | 0.109 | 0.109 | 143 | 0.068 | 0.068 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 230 | 0.109 | | 143 | 0.068 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 330 | 0.185 | 0.185 | 445 | 0.249 | 0.249 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 4070 | 1960 | 1960 | 3745 | 3745 | 118 | 0.060 | | 97 | 0.049 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 100% | 1965 | 0 | 1785 | 1785 | 0 | 0 | 107 | 0.060 | | 88 | 0.049 | |
| Pedestrian Phase | | | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | | | | | | | |
| | | | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | | | | | | | |

Notes:

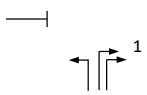
Traffic Flow (pcu / hr) AM(PM)

Left: 45(50)
Straight: 460(285)
Right: 225(185)
Left: 330(445)

| Peak Hour Check Phase | | P.M. Check Phase | |
|---|---|---|---|
| εy | 0.294 | εy | 0.317 |
| L (sec) | 36 | L (sec) | 36 |
| C (sec) | 90 | C (sec) | 90 |
| y pract. | 0.540 | y pract. | 0.540 |
| R.C. (%) | 84% | R.C. (%) | 70% |

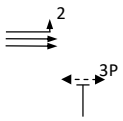
Stage / Phase Diagrams

Stage A



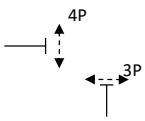

I/G = 3s

Stage B




I/G = 6s

Stage C




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**

Description: **2027 REFERENCE TRAFFIC FLOWS**

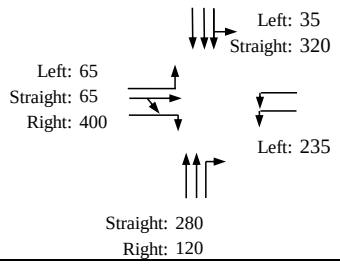
| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 2115 | 2115 | 1960 | 1960 | 65 | 0.033 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 73% | 2255 | 4510 | 2140 | 4100 | 243 | 0.113 | 0.113 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 2255 | 0 | 1960 | 0 | 222 | 0.113 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 1915 | 3970 | 1665 | 3505 | 112 | 0.067 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 2055 | 0 | 1840 | 0 | 123 | 0.067 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 1915 | 3970 | 1915 | 3970 | 135 | 0.071 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 145 | 0.071 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 2055 | 2055 | 1855 | 1855 | 120 | 0.065 | 0.065 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 31% | 1915 | 6025 | 1890 | 6000 | 112 | 0.059 | 0.059 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 122 | 0.059 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 122 | 0.059 | |

Pedestrian Phase

| | | | |
|---|---|---|---|
| 7p | A,B,D | green time =50Gm+08Fm=58s | |
| 8p | B,C,D | green time =49Gm+08Fm=57s | |
| 9p | B,C,D | green time =49Gm+08Fm=57s | |
| 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr)

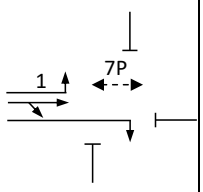



A.M. Check Phase

| | |
|---|---|
| εy | 0.237 |
| L (sec) | 40 |
| C (sec) | 90 |
| y pract. | 0.500 |
| R.C. (%) | 111% |

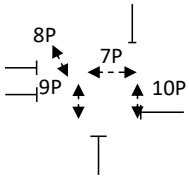
Stage / Phase Diagrams

Stage A



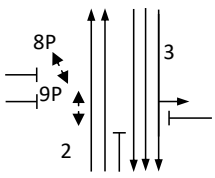

I/G = 5s

Stage B All PED. (25s)



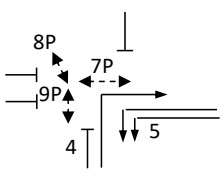

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**

Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 2105 | 0 | 1870 | 0 | 80 | 0.043 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 3975 | 80 | 0.038 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 200 | 0.110 | 0.110 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 1945 | 6135 | 1770 | 5890 | 191 | 0.108 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 48% | 2085 | 0 | 2015 | 0 | 217 | 0.108 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 227 | 0.108 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 4170 | 2085 | 4170 | 308 | 0.147 | 0.147 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 0 | 2085 | 0 | 308 | 0.147 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 40 | 0.021 | |

Notes:

Traffic Flow (pcu / hr)

Right: 40
Straight: 615
Left: free flow

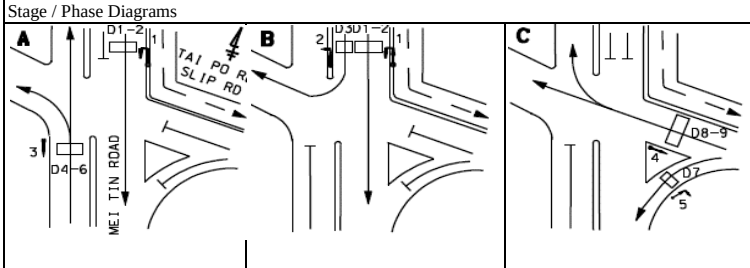
Right: 80
Straight: 80
Left: 200

Left: 295
Straight: 340

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.257 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 211% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 6s | I/G = 7s | | |
|---|---|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

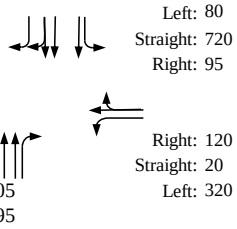
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) Peak Hour | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) Peak Hour | Total Revised Saturation Flow (pcu/hr) Peak Hour | Peak Hour Flow (pcu/hr) | Peak Hour y Value | Peak Hour Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 80 | 0.044 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 8420 | 2105 | 8300 | 240 | 0.114 | 0.114 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 240 | 0.114 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 2105 | 0 | 2105 | 0 | 240 | 0.114 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 2105 | 0 | 1985 | 0 | 95 | 0.048 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 224 | 0.114 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 240 | 0.114 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 240 | 0.114 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 495 | 0.261 | 0.261 |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 1965 | 1965 | 1890 | 1890 | 320 | 0.169 | 0.169 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 86% | 2105 | 2105 | 2000 | 2000 | 140 | 0.070 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

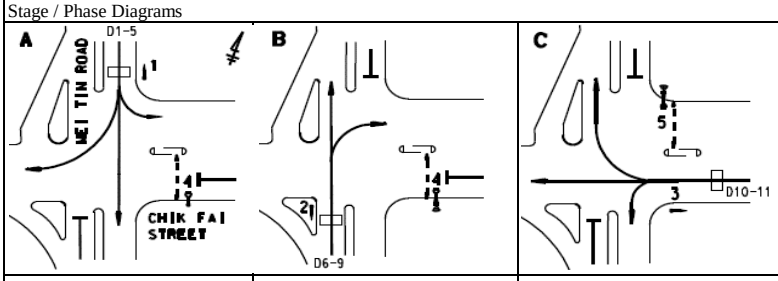
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.544 |
| L (sec) | 14 |
| C (sec) | 90 |
| y pract. | 0.760 |
| R.C. (%) | 40% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**

Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 2065 | 2065 | 2005 | 2005 | 345 | 0.172 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 137 | 0.070 | 0.070 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 147 | 0.070 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 147 | 0.070 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6315 | 2105 | 6315 | 175 | 0.083 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 175 | 0.083 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 175 | 0.083 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 247 | 0.124 | 0.124 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 243 | 0.124 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 1965 | 4120 | 1830 | 3865 | 225 | 0.123 | 0.123 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 2155 | 0 | 2035 | 0 | 250 | 0.123 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 1965 | 3930 | 1855 | 3685 | 131 | 0.071 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 1965 | 0 | 1830 | 0 | 129 | 0.071 | |

| | | | | |
|---|---|---|---|---|
| Pedestrian Phase | | P1 | A | green time =06Gm+15Fm=21s |
| | | P2 | B | green time =17Gm+07Fm=24s |
| | | P3 | B, C | green time =27Gm+09Fm=36s |
| | | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr)

Left: 345
Straight: 430

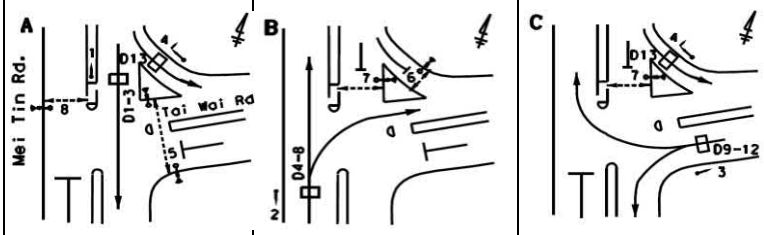
Right: 260
Left: 475

Straight: 525
Right: 490

A.M. Check Phase

| | |
|---|---|
| εy | 0.317 |
| L (sec) | 12 |
| C (sec) | 90 |
| y pract. | 0.780 |
| R.C. (%) | 146% |

Stage / Phase Diagrams




| | | |
|---|---|---|
| I/G = 5s | I/G = 5s | I/G = 5s |

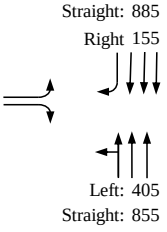
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 2105 | 2105 | 1915 | 1915 | 155 | 0.081 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6175 | 2105 | 6175 | 302 | 0.143 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 302 | 0.143 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 1965 | 0 | 1965 | 0 | 282 | 0.143 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 6175 | 1785 | 5995 | 405 | 0.227 | 0.227 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 428 | 0.203 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 428 | 0.203 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 350 | 0.196 | 0.196 |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 164 | 0.082 | |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 161 | 0.082 | |

Notes:

Traffic Flow (pcu / hr)

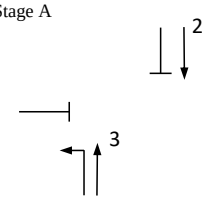



A.M. Check Phase

| | |
|---|---|
| εy | 0.423 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 89% |

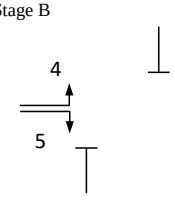
Stage / Phase Diagrams

Stage A



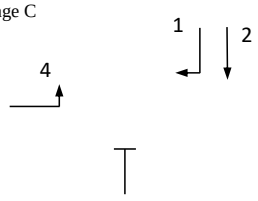

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 15 | 0.008 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 4210 | 195 | 0.093 | 0.093 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 195 | 0.093 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 445 | 0.249 | 0.249 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 2105 | 4070 | 1960 | 3745 | 73 | 0.037 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 1965 | 0 | 1785 | 0 | 67 | 0.037 | |
| Pedestrian Phase | | | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | |
| | | | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr)

Left: 15
Straight: 390

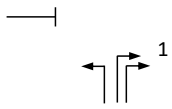
Right: 140
Left: 445

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.342 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 58% |

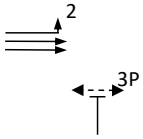
Stage / Phase Diagrams

A



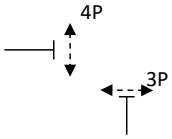

I/G = 3s

B




I/G = 6s

C




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 50 | 0.027 | | 55 | 0.030 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 92% | 81% | 2255 | 4510 | 2110 | 2125 | 4070 | 4085 | 435 | 0.206 | 0.206 | 268 | 0.126 | 0.126 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 100% | 2255 | 0 | 1960 | 1960 | 0 | 0 | 405 | 0.206 | | 247 | 0.126 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 100% | 1915 | 3970 | 1665 | 1665 | 3505 | 3505 | 169 | 0.101 | | 116 | 0.070 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 100% | 2055 | 0 | 1840 | 1840 | 0 | 0 | 186 | 0.101 | | 129 | 0.070 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 0% | 1915 | 3970 | 1915 | 1915 | 3970 | 3970 | 121 | 0.063 | | 224 | 0.117 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 129 | 0.063 | | 241 | 0.117 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 100% | 2055 | 2055 | 1855 | 1855 | 1855 | 1855 | 140 | 0.075 | 0.075 | 165 | 0.089 | 0.089 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 15% | 63% | 1915 | 6025 | 1905 | 1870 | 6015 | 5980 | 195 | 0.102 | 0.102 | 127 | 0.068 | 0.068 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 210 | 0.102 | | 139 | 0.068 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 210 | 0.102 | | 139 | 0.068 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | 7p | A,B,D | green time =50Gm+08Fm=58s |
| | 8p | B,C,D | green time =49Gm+08Fm=57s |
| | 9p | B,C,D | green time =49Gm+08Fm=57s |
| | 10p | B | green time =17Gm+08Fm=25s |

Notes:

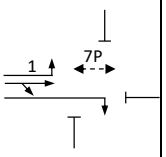
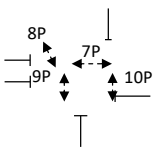
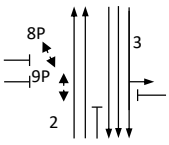
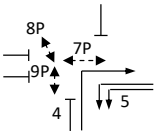
Traffic Flow (pcu / hr) AM(PM)

Left: 30(80)
Straight: 585(325)
Left: 50(55)
Straight: 35(50)
Right: 805(465)
Left: 355(245)
Straight: 250(465)
Right: 140(165)

| A.M. Check Phase | |
|---|---|
| εy | 0.384 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 56% |

| P.M. Check Phase | |
|---|---|
| εy | 0.283 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 112% |

Stage / Phase Diagrams

| Stage A | Stage B All PED. (25s) | Stage C | Stage D |
|---|---|---|---|
|   |   |   |   |
| I/G = 5s | I/G = 4s | I/G = 3s | I/G = 6s |

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 67% | 100% | 2105 | 0 | 1940 | 1870 | 0 | 0 | 82 | 0.042 | | 125 | 0.067 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4045 | 3975 | 88 | 0.042 | | 115 | 0.055 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 250 | 0.137 | 0.137 | 580 | 0.319 | 0.319 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 100% | 1945 | 6135 | 1770 | 1770 | 5870 | 5855 | 306 | 0.173 | | 334 | 0.189 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 61% | 70% | 2085 | 0 | 1995 | 1980 | 0 | 0 | 345 | 0.173 | | 374 | 0.189 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 364 | 0.173 | | 397 | 0.189 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 4170 | 2085 | 2085 | 4170 | 4170 | 638 | 0.306 | 0.306 | 383 | 0.183 | 0.183 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 0 | 2085 | 2085 | 0 | 0 | 638 | 0.306 | | 383 | 0.183 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 90 | 0.047 | | 80 | 0.042 | |

Notes:

Traffic Flow (pcu / hr)

Right: 90(80)
Straight: 1275(765)
Left: free flow

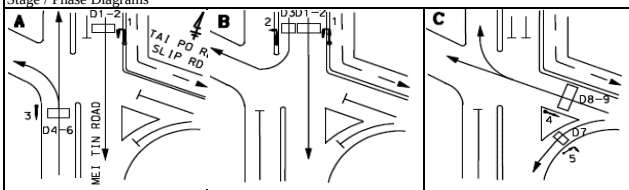
Right: 55(125)
Straight: 115(115)
Left: 250(580)

Left: 515(595)
Straight: 500(510)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.443 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 86% |

| P.M. Check Phase | |
|---|---|
| εy | 0.502 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 64% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

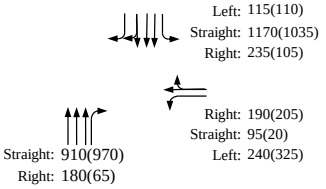
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 115 | 0.063 | | 110 | 0.060 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 8420 | 2105 | 2105 | 8300 | 8300 | 390 | 0.185 | 0.185 | 345 | 0.164 | 0.164 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 390 | 0.185 | | 345 | 0.164 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 390 | 0.185 | | 345 | 0.164 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 0 | 1985 | 1985 | 0 | 0 | 235 | 0.118 | | 105 | 0.053 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 290 | 0.147 | 0.147 | 309 | 0.157 | 0.157 |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 310 | 0.147 | | 331 | 0.157 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 310 | 0.147 | | 331 | 0.157 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 180 | 0.095 | | 65 | 0.034 | |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1890 | 1890 | 1890 | 1890 | 240 | 0.127 | | 325 | 0.172 | 0.172 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 67% | 91% | 2105 | 2105 | 2025 | 1995 | 2025 | 1995 | 285 | 0.141 | 0.141 | 225 | 0.113 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

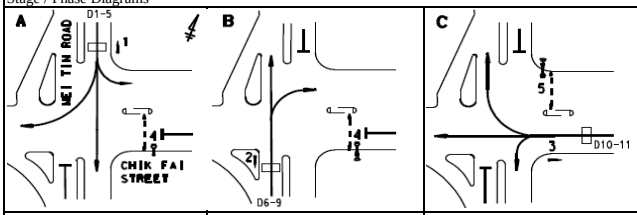
Traffic Flow (pcu / hr) AM(PM)




| A.M. Check Phase | |
|---|---|
| εy | 0.473 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 68% |

| P.M. Check Phase | |
|---|---|
| εy | 0.493 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 61% |

Stage / Phase Diagrams




| I/G = 6s | I/G = 6s | I/G = 5s |
|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 100% | 2065 | 2065 | 2005 | 2005 | 2005 | 2005 | 460 | 0.229 | | 785 | 0.392 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 237 | 0.121 | 0.121 | 169 | 0.086 | 0.086 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 254 | 0.121 | | 181 | 0.086 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 254 | 0.121 | | 181 | 0.086 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6315 | 2105 | 2105 | 6315 | 6315 | 152 | 0.072 | | 160 | 0.076 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 152 | 0.072 | | 160 | 0.076 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 152 | 0.072 | | 160 | 0.076 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 279 | 0.141 | 0.141 | 226 | 0.114 | 0.114 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 276 | 0.141 | | 224 | 0.114 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 100% | 1965 | 4120 | 1830 | 1830 | 3865 | 3865 | 215 | 0.118 | 0.118 | 220 | 0.120 | 0.120 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 100% | 2155 | 0 | 2035 | 2035 | 0 | 0 | 240 | 0.118 | | 245 | 0.120 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 100% | 1965 | 3930 | 1855 | 1855 | 3685 | 3685 | 146 | 0.079 | | 204 | 0.110 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 100% | 1965 | 0 | 1830 | 1830 | 0 | 0 | 144 | 0.079 | | 201 | 0.110 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | P1 | A | green time =06Gm+15Fm=21s |
| | P2 | B | green time =17Gm+07Fm=24s |
| | P3 | B, C | green time =27Gm+09Fm=36s |
| | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

Left: 460(785)
Straight: 745(530)

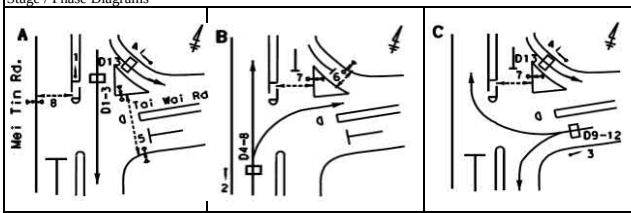
Right: 290(405)
Left: 455(465)

Straight: 455(480)
Right: 555(450)

| A.M. Check Phase | |
|---|---|
| εy | 0.379 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 114% |

| P.M. Check Phase | |
|---|---|
| εy | 0.320 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 153% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s |
|---|---|---|

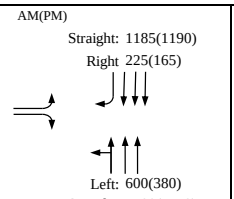
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 100% | 2105 | 2105 | 1915 | 1915 | 1915 | 1915 | 225 | 0.117 | 0.117 | 165 | 0.086 | 0.086 |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6175 | 2105 | 2105 | 6175 | 6175 | 404 | 0.192 | | 406 | 0.193 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 404 | 0.192 | | 406 | 0.193 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 0 | 1965 | 1965 | 0 | 0 | 377 | 0.192 | | 379 | 0.193 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 79% | 1965 | 6175 | 1785 | 1820 | 5995 | 6030 | 600 | 0.336 | 0.336 | 483 | 0.266 | 0.266 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 600 | 0.285 | | 558 | 0.265 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 600 | 0.285 | | 558 | 0.265 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 295 | 0.165 | | 340 | 0.190 | |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 128 | 0.065 | 0.065 | 179 | 0.090 | 0.090 |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 127 | 0.065 | | 176 | 0.090 | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

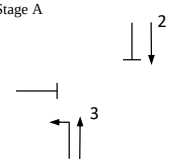



| A.M. Check Phase | |
|---|---|
| εy | 0.518 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 43% |

| P.M. Check Phase | |
|---|---|
| εy | 0.442 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 68% |

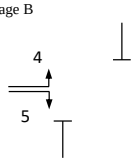
Stage / Phase Diagrams

Stage A



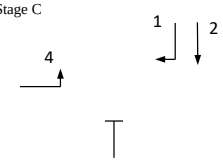

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 50 | 0.028 | | 55 | 0.031 | |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4210 | 4210 | 325 | 0.154 | 0.154 | 185 | 0.088 | 0.088 |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 325 | 0.154 | | 185 | 0.088 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 480 | 0.269 | 0.269 | 595 | 0.333 | 0.333 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 4070 | 1960 | 1960 | 3745 | 3745 | 126 | 0.064 | | 102 | 0.052 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 100% | 1965 | 0 | 1785 | 1785 | 0 | 0 | 114 | 0.064 | | 93 | 0.052 | |
| Pedestrian Phase | | ⇢ | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | | | | | | | |
| | | ⇢ | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | | | | | | | |

Notes:

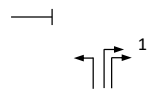
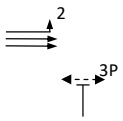
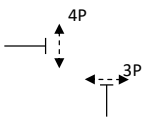
Traffic Flow (pcu / hr) AM(PM)

Left: 50(55)
Straight: 650(370)
Right: 240(195)
Left: 480(595)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.423 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 28% |

| P.M. Check Phase | |
|---|---|
| εy | 0.421 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 28% |

Stage / Phase Diagrams

| Stage A | Stage B | Stage C |
|---|---|---|
|   |   |   |
| I/G = 3s | I/G = 6s | I/G = 5s |

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

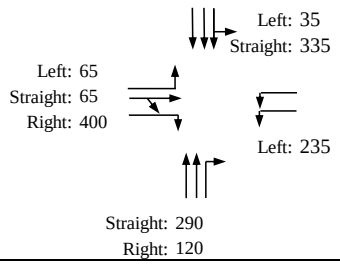
Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 2115 | 2115 | 1960 | 1960 | 65 | 0.033 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 73% | 2255 | 4510 | 2140 | 4100 | 243 | 0.113 | 0.113 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 2255 | 0 | 1960 | 0 | 222 | 0.113 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 1915 | 3970 | 1665 | 3505 | 112 | 0.067 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 2055 | 0 | 1840 | 0 | 123 | 0.067 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 1915 | 3970 | 1915 | 3970 | 140 | 0.073 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 150 | 0.073 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 2055 | 2055 | 1855 | 1855 | 120 | 0.065 | 0.065 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 30% | 1915 | 6025 | 1895 | 6005 | 117 | 0.062 | 0.062 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 127 | 0.062 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 127 | 0.062 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | 7p | A,B,D | green time =50Gm+08Fm=58s | |
| | 8p | B,C,D | green time =49Gm+08Fm=57s | |
| | 9p | B,C,D | green time =49Gm+08Fm=57s | |
| | 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr)

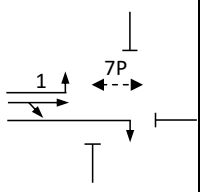



A.M. Check Phase

| | |
|---|---|
| εy | 0.240 |
| L (sec) | 40 |
| C (sec) | 90 |
| y pract. | 0.500 |
| R.C. (%) | 108% |

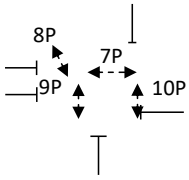
Stage / Phase Diagrams

Stage A



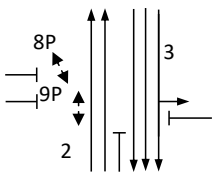

I/G = 5s

Stage B All PED. (25s)



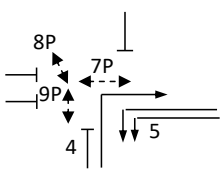

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

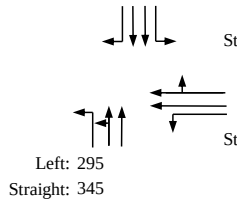
Junction: **(B) Tsing Sha Highway/ Mei Tin Road**

Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 2105 | 0 | 1870 | 0 | 85 | 0.045 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 3975 | 80 | 0.038 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 200 | 0.110 | 0.110 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 1945 | 6135 | 1770 | 5890 | 192 | 0.109 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 47% | 2085 | 0 | 2015 | 0 | 219 | 0.109 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 229 | 0.109 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 4170 | 2085 | 4170 | 315 | 0.151 | 0.151 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 0 | 2085 | 0 | 315 | 0.151 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 40 | 0.021 | |

Notes:

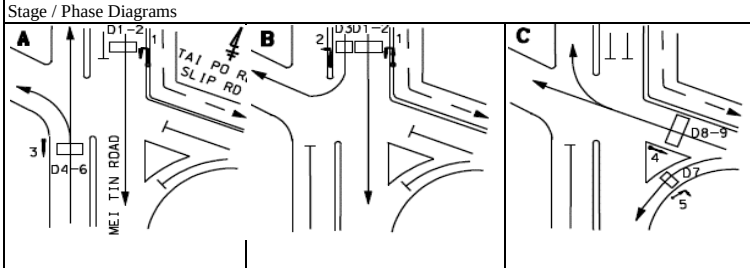
Traffic Flow (pcu / hr)




Peak Hour Check Phase

| | |
|---|---|
| εy | 0.261 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 207% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 80 | 0.044 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 8420 | 2105 | 8300 | 242 | 0.115 | 0.115 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 242 | 0.115 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 2105 | 0 | 2105 | 0 | 242 | 0.115 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 2105 | 0 | 1985 | 0 | 105 | 0.053 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 226 | 0.115 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 242 | 0.115 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 242 | 0.115 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 495 | 0.261 | 0.261 |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 1965 | 1965 | 1890 | 1890 | 320 | 0.169 | 0.169 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 86% | 2105 | 2105 | 2000 | 2000 | 140 | 0.070 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

Traffic Flow (pcu / hr)



Left: 80
Straight: 725
Right: 105



Right: 120
Straight: 20
Left: 320

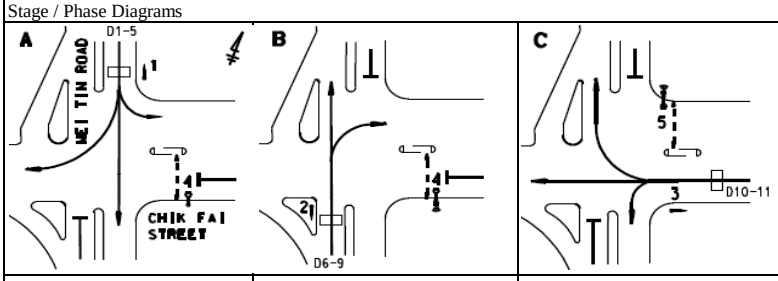


Straight: 710
Right: 495

A.M. Check Phase

| | |
|---|---|
| εy | 0.545 |
| L (sec) | 14 |
| C (sec) | 90 |
| y pract. | 0.760 |
| R.C. (%) | 40% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**

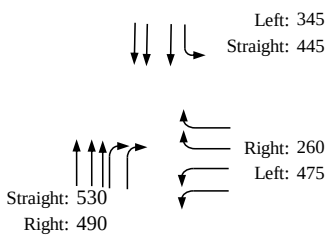
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 2065 | 2065 | 2005 | 2005 | 345 | 0.172 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 142 | 0.072 | 0.072 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 152 | 0.072 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 152 | 0.072 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6315 | 2105 | 6315 | 177 | 0.084 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 177 | 0.084 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 177 | 0.084 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 247 | 0.124 | 0.124 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 243 | 0.124 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 1965 | 4120 | 1830 | 3865 | 225 | 0.123 | 0.123 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 2155 | 0 | 2035 | 0 | 250 | 0.123 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 1965 | 3930 | 1855 | 3685 | 131 | 0.071 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 1965 | 0 | 1830 | 0 | 129 | 0.071 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | P1 | A | green time =06Gm+15Fm=21s | |
| | P2 | B | green time =17Gm+07Fm=24s | |
| | P3 | B, C | green time =27Gm+09Fm=36s | |
| | P4 | A | green time =05Gm+10Fm=15s | |

Notes:

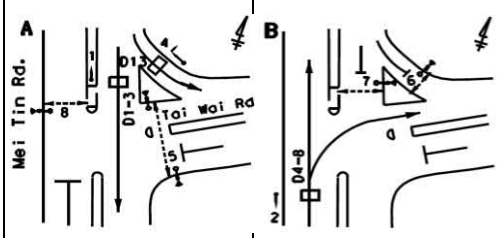
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.319 |
| L (sec) | 12 |
| C (sec) | 90 |
| y pract. | 0.780 |
| R.C. (%) | 144% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s | | |
|---|---|---|---|---|

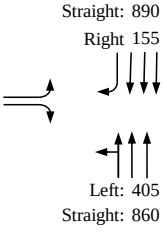
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 2105 | 2105 | 1915 | 1915 | 155 | 0.081 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6175 | 2105 | 6175 | 303 | 0.144 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 303 | 0.144 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 1965 | 0 | 1965 | 0 | 283 | 0.144 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 6175 | 1785 | 5995 | 405 | 0.227 | 0.227 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 430 | 0.204 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 430 | 0.204 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 350 | 0.196 | 0.196 |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 164 | 0.082 | |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 161 | 0.082 | |

Notes:

Traffic Flow (pcu / hr)

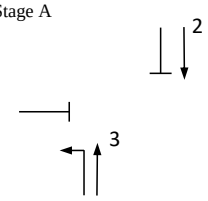



A.M. Check Phase

| | |
|---|---|
| εy | 0.423 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 89% |

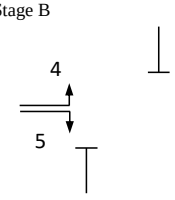
Stage / Phase Diagrams

Stage A



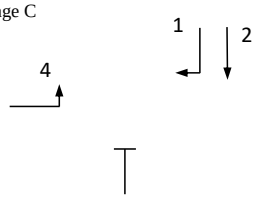

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) Peak Hour | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) Peak Hour | Total Revised Saturation Flow (pcu/hr) Peak Hour | Peak Hour Flow (pcu/hr) | Peak Hour y Value | Peak Hour Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 15 | 0.008 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 4210 | 195 | 0.093 | 0.093 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 195 | 0.093 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 445 | 0.249 | 0.249 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 2105 | 4070 | 1960 | 3745 | 73 | 0.037 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 1965 | 0 | 1785 | 0 | 67 | 0.037 | |
| Pedestrian Phase | | | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | |
| | | | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr)

Left: 15
Straight: 390

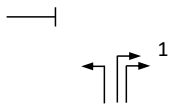
Right: 140
Left: 445

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.342 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 58% |

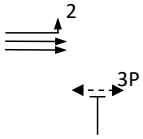
Stage / Phase Diagrams

A



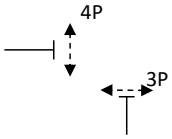

I/G = 3s

B




I/G = 6s

C




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

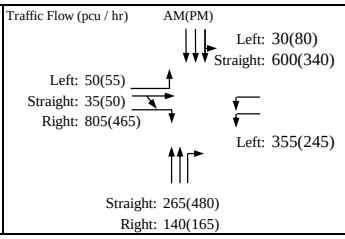
Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 50 | 0.027 | | 55 | 0.030 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 92% | 81% | 2255 | 4510 | 2110 | 2125 | 4070 | 4085 | 435 | 0.206 | 0.206 | 268 | 0.126 | 0.126 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 100% | 2255 | 0 | 1960 | 1960 | 0 | 0 | 405 | 0.206 | | 247 | 0.126 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 100% | 1915 | 3970 | 1665 | 1665 | 3505 | 3505 | 169 | 0.101 | | 116 | 0.070 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 100% | 2055 | 0 | 1840 | 1840 | 0 | 0 | 186 | 0.101 | | 129 | 0.070 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 0% | 1915 | 3970 | 1915 | 1915 | 3970 | 3970 | 128 | 0.067 | | 232 | 0.121 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 137 | 0.067 | | 248 | 0.121 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 100% | 2055 | 2055 | 1855 | 1855 | 1855 | 1855 | 140 | 0.075 | 0.075 | 165 | 0.089 | 0.089 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 15% | 61% | 1915 | 6025 | 1905 | 1870 | 6015 | 5980 | 199 | 0.105 | 0.105 | 131 | 0.070 | 0.070 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 215 | 0.105 | | 144 | 0.070 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 215 | 0.105 | | 144 | 0.070 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | 7p | A,B,D | green time =50Gm+08Fm=58s |
| | 8p | B,C,D | green time =49Gm+08Fm=57s |
| | 9p | B,C,D | green time =49Gm+08Fm=57s |
| | 10p | B | green time =17Gm+08Fm=25s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

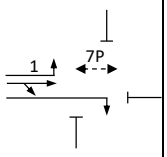



| A.M. Check Phase | |
|---|---|
| εy | 0.387 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 55% |

| P.M. Check Phase | |
|---|---|
| εy | 0.285 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 110% |

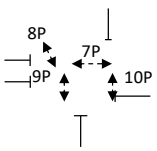
Stage / Phase Diagrams

Stage A



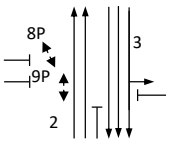

I/G = 5s

Stage B All PED. (25s)



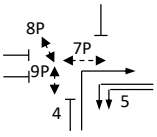

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 72% | 100% | 2105 | 0 | 1930 | 1870 | 0 | 0 | 84 | 0.043 | | 130 | 0.070 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4035 | 3975 | 91 | 0.043 | | 115 | 0.055 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 250 | 0.137 | 0.137 | 580 | 0.319 | 0.319 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 100% | 1945 | 6135 | 1770 | 1770 | 5870 | 5860 | 309 | 0.175 | | 337 | 0.190 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 59% | 68% | 2085 | 0 | 1995 | 1985 | 0 | 0 | 349 | 0.175 | | 377 | 0.190 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 367 | 0.175 | | 401 | 0.190 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 4170 | 2085 | 2085 | 4170 | 4170 | 645 | 0.309 | 0.309 | 390 | 0.187 | 0.187 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 0 | 2085 | 2085 | 0 | 0 | 645 | 0.309 | | 390 | 0.187 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 90 | 0.047 | | 80 | 0.042 | |

Notes:

Traffic Flow (pcu / hr)

Right: 90(80)
Straight: 1290(780)
Left: free flow

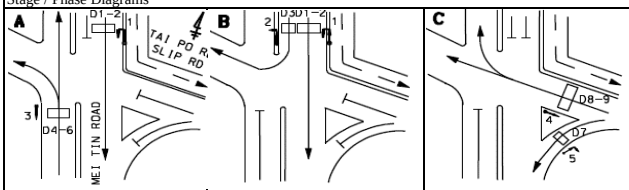
Right: 60(130)
Straight: 115(115)
Left: 250(580)

Left: 515(595)
Straight: 510(520)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.447 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 85% |

| P.M. Check Phase | |
|---|---|
| εy | 0.506 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 63% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

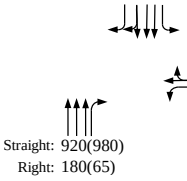
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 115 | 0.063 | | 110 | 0.060 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 8420 | 2105 | 2105 | 8300 | 8300 | 393 | 0.187 | 0.187 | 348 | 0.165 | 0.165 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 393 | 0.187 | | 348 | 0.165 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 393 | 0.187 | | 348 | 0.165 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 0 | 1985 | 1985 | 0 | 0 | 240 | 0.121 | | 110 | 0.055 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 293 | 0.149 | 0.149 | 312 | 0.159 | 0.159 |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 314 | 0.149 | | 334 | 0.159 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 314 | 0.149 | | 334 | 0.159 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 180 | 0.095 | | 65 | 0.034 | |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1890 | 1890 | 1890 | 1890 | 240 | 0.127 | | 325 | 0.172 | 0.172 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 67% | 91% | 2105 | 2105 | 2025 | 1995 | 2025 | 1995 | 285 | 0.141 | 0.141 | 225 | 0.113 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

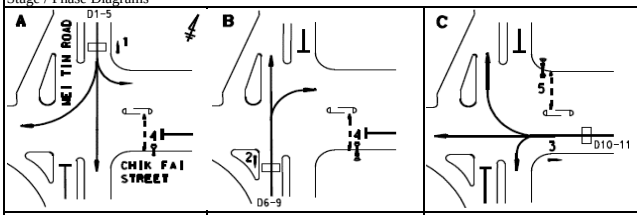
Traffic Flow (pcu / hr) AM(PM)




| A.M. Check Phase | |
|---|---|
| εy | 0.477 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 67% |

| P.M. Check Phase | |
|---|---|
| εy | 0.496 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 60% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 100% | 2065 | 2065 | 2005 | 2005 | 2005 | 2005 | 460 | 0.229 | | 785 | 0.392 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 240 | 0.122 | 0.122 | 172 | 0.087 | 0.087 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 184 | 0.087 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 184 | 0.087 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6315 | 2105 | 2105 | 6315 | 6315 | 155 | 0.074 | | 163 | 0.078 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 155 | 0.074 | | 163 | 0.078 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 155 | 0.074 | | 163 | 0.078 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 279 | 0.141 | 0.141 | 226 | 0.114 | 0.114 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 276 | 0.141 | | 224 | 0.114 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 100% | 1965 | 4120 | 1830 | 1830 | 3865 | 3865 | 215 | 0.118 | 0.118 | 220 | 0.120 | 0.120 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 100% | 2155 | 0 | 2035 | 2035 | 0 | 0 | 240 | 0.118 | | 245 | 0.120 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 100% | 1965 | 3930 | 1855 | 1855 | 3685 | 3685 | 146 | 0.079 | | 204 | 0.110 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 100% | 1965 | 0 | 1830 | 1830 | 0 | 0 | 144 | 0.079 | | 201 | 0.110 | |

| | | | | |
|---|---|---|---|---|
| Pedestrian Phase | | P1 | A | green time =06Gm+15Fm=21s |
| | | P2 | B | green time =17Gm+07Fm=24s |
| | | P3 | B, C | green time =27Gm+09Fm=36s |
| | | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

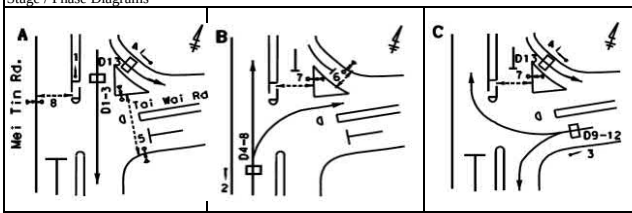
Left: 460(785)
Straight: 755(540)

Right: 290(405)
Left: 455(465)
Straight: 465(490)
Right: 555(450)

| A.M. Check Phase | |
|---|---|
| εy | 0.381 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 113% |

| P.M. Check Phase | |
|---|---|
| εy | 0.322 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 152% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s |
|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 100% | 2105 | 2105 | 1915 | 1915 | 1915 | 1915 | 225 | 0.117 | 0.117 | 165 | 0.086 | 0.086 |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6175 | 2105 | 2105 | 6175 | 6175 | 407 | 0.194 | | 409 | 0.194 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 407 | 0.194 | | 409 | 0.194 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 0 | 1965 | 1965 | 0 | 0 | 380 | 0.194 | | 382 | 0.194 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 78% | 1965 | 6175 | 1785 | 1825 | 5995 | 6035 | 600 | 0.336 | 0.336 | 486 | 0.267 | 0.267 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 605 | 0.287 | | 562 | 0.267 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 605 | 0.287 | | 562 | 0.267 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 295 | 0.165 | | 340 | 0.190 | |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 128 | 0.065 | 0.065 | 179 | 0.090 | 0.090 |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 127 | 0.065 | | 176 | 0.090 | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

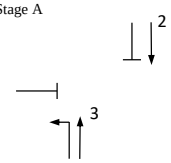
Straight: 1195(1200)
Right 225(165)
Left: 295(340)
Right: 255(355)
Left: 600(380)
Straight: 1210(1230)

| A.M. Check Phase | |
|---|---|
| εy | 0.518 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 43% |

| P.M. Check Phase | |
|---|---|
| εy | 0.443 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 67% |

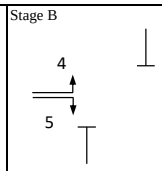
Stage / Phase Diagrams

Stage A



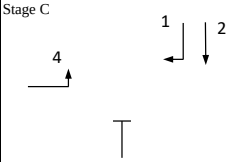

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | → | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 50 | 0.028 | | 55 | 0.031 | |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4210 | 4210 | 325 | 0.154 | 0.154 | 185 | 0.088 | 0.088 |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 325 | 0.154 | | 185 | 0.088 | |
| Mei Fai Street | N | ↰ | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 480 | 0.269 | 0.269 | 595 | 0.333 | 0.333 |
| | N | ↱ | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 4070 | 1960 | 1960 | 3745 | 3745 | 126 | 0.064 | | 102 | 0.052 | |
| | N | ↱ | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 100% | 1965 | 0 | 1785 | 1785 | 0 | 0 | 114 | 0.064 | | 93 | 0.052 | |

Pedestrian Phase
3p B,C Min. green time =11Gm+11Fm=22s
4p C Min. green time =11Gm+13Fm=24s

Notes:

Traffic Flow (pcu / hr) AM(PM)

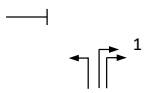
Left: 50(55)
Straight: 650(370)
Right: 240(195)
Left: 480(595)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.423 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 28% |

| P.M. Check Phase | |
|---|---|
| εy | 0.421 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 28% |

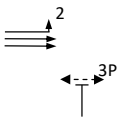
Stage / Phase Diagrams

Stage A



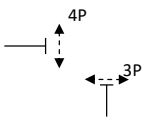

I/G = 3s

Stage B




I/G = 6s

Stage C




I/G = 5s

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]
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**Filename:** Junction D (CM_p2).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:01:15

» (Default Analysis Set) - 2018 observed traffic flow, Ching Ming Festival Peak Hour
» (Default Analysis Set) - 2027 reference traffic flow, Ching Ming Festival Peak Hour
» (Default Analysis Set) - 2027 design traffic flow, Ching Ming Festival Peak Hour

## Summary of junction performance

| | Ching Ming Festival Peak Hour | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS |
| | A1 - 2018 observed traffic flow | | | |
| Stream B-AC | 0.26 | 9.48 | 0.21 | A |
| Stream C-A | - | - | - | - |
| Stream C-B | 0.01 | 6.46 | 0.01 | A |
| Stream A-B | - | - | - | - |
| Stream A-C | - | - | - | - |
| | A1 - 2027 design traffic flow | | | |
| Stream B-AC | 0.34 | 10.30 | 0.26 | B |
| Stream C-A | - | - | - | - |
| Stream C-B | 0.01 | 6.54 | 0.01 | A |
| Stream A-B | - | - | - | - |
| Stream A-C | - | - | - | - |
| | A1 - 2027 reference traffic flow | | | |
| Stream B-AC | 0.34 | 10.21 | 0.25 | B |
| Stream C-A | - | - | - | - |
| Stream C-B | 0.01 | 6.53 | 0.01 | A |
| Stream A-B | - | - | - | - |
| Stream A-C | - | - | - | - |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour " model duration: 13:30 - 14:30*
*"D2 - 2027 reference traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 14:30*
*"D3 - 2027 design traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 14:30*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:01:14*

## File summary

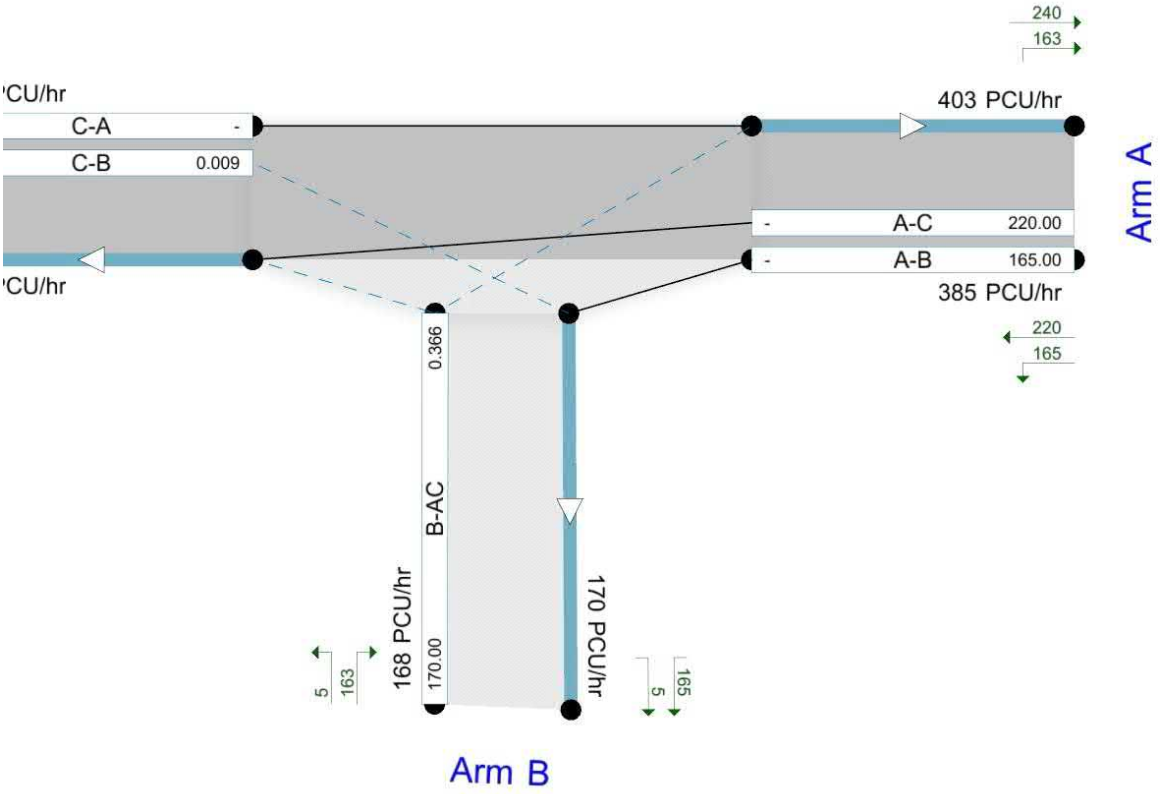
| | |
|---|---|
| **Title** | Tai Wai Temple |
| **Location** | Tai Wai |
| **Site Number** | |
| **Date** | 8/5/2017 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing modelled flow through junction (PCU/hr).
Streams (upstreams) show Total Demand (PCU/hr); Streams (downstreams) show RFC ()
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 "; Demand Set "D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# (Default Analysis Set) - 2018 observed traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 observed traffic flow, Ching Ming Festival Peak Hour | 2018 observed traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 9.34 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 275.00 | 100.000 |
| B | FLAT | ✓ | 100.00 | 100.000 |
| C | FLAT | ✓ | 210.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 85.000 | 190.000 |
| | B | 95.000 | 0.000 | 5.000 |
| | C | 205.000 | 5.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.31 | 0.69 |
| | B | 0.95 | 0.00 | 0.05 |
| | C | 0.98 | 0.02 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.21 | 9.48 | 0.26 | A |
| C-A | - | - | - | - |
| C-B | 0.01 | 6.46 | 0.01 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 98.96 | 0.00 | 479.70 | 0.208 | 0.26 | 9.430 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 4.96 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 99.99 | 0.00 | 479.69 | 0.208 | 0.26 | 9.480 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 479.69 | 0.208 | 0.26 | 9.480 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 479.69 | 0.208 | 0.26 | 9.480 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 reference traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Ching Ming Festival Peak Hour | 2027 reference traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 10.06 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| A | A | (untitled) | | Major |
| B | B | (untitled) | | Minor |
| C | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| 1 | B-C | 668.537 | 0.065 | 0.163 | - | - |
| 1 | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 315.00 | 100.000 |
| B | FLAT | ✓ | 120.00 | 100.000 |
| C | FLAT | ✓ | 230.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 105.000 | 210.000 |
| | B | 115.000 | 0.000 | 5.000 |
| | C | 225.000 | 5.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.33 | 0.67 |
| | B | 0.96 | 0.00 | 0.04 |
| | C | 0.98 | 0.02 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

### Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.25 | 10.21 | 0.34 | B |
| C-A | - | - | - | - |
| C-B | 0.01 | 6.53 | 0.01 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 118.66 | 0.00 | 472.50 | 0.254 | 0.34 | 10.136 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 4.96 | 0.00 | 556.55 | 0.009 | 0.01 | 6.526 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 119.99 | 0.00 | 472.49 | 0.254 | 0.34 | 10.212 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 556.55 | 0.009 | 0.01 | 6.526 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 120.00 | 0.00 | 472.49 | 0.254 | 0.34 | 10.212 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 556.55 | 0.009 | 0.01 | 6.526 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 120.00 | 0.00 | 472.49 | 0.254 | 0.34 | 10.212 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 556.55 | 0.009 | 0.01 | 6.526 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 design traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Ching Ming Festival Peak Hour | 2027 design traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 10.15 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 325.00 | 100.000 |
| B | FLAT | ✓ | 120.00 | 100.000 |
| C | FLAT | ✓ | 245.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 105.000 | 220.000 |
| | B | 115.000 | 0.000 | 5.000 |
| | C | 240.000 | 5.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.32 | 0.68 |
| | B | 0.96 | 0.00 | 0.04 |
| | C | 0.98 | 0.02 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.26 | 10.30 | 0.34 | B |
| C-A | - | - | - | - |
| C-B | 0.01 | 6.54 | 0.01 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 118.65 | 0.00 | 469.54 | 0.256 | 0.34 | 10.222 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 4.96 | 0.00 | 555.07 | 0.009 | 0.01 | 6.543 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 119.99 | 0.00 | 469.53 | 0.256 | 0.34 | 10.299 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 555.07 | 0.009 | 0.01 | 6.543 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 120.00 | 0.00 | 469.53 | 0.256 | 0.34 | 10.299 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 555.07 | 0.009 | 0.01 | 6.543 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

## Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 120.00 | 0.00 | 469.53 | 0.256 | 0.34 | 10.299 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 555.07 | 0.009 | 0.01 | 6.543 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction D (Weekday).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:07:01

» (Default Analysis Set) - 2027 reference traffic flow, Weekday AM Peak Hour
» (Default Analysis Set) - 2027 design traffic flow, Weekday AM Peak Hour
» (Default Analysis Set) - 2027 reference traffic flow, Weekday PM Peak Hour
» (Default Analysis Set) - 2027 design traffic flow, Weekday PM Peak Hour
» (Default Analysis Set) - 2021 observed traffic flow, Weekday AM Peak Hour
» (Default Analysis Set) - 2021 observed traffic flow, Weekday PM Peak Hour

## Summary of junction performance

| | Weekday AM Peak Hour | | | | Weekday PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| | A1 - 2021 observed traffic flow | | | | | | | |
| Stream B-AC | 0.55 | 12.38 | 0.35 | B | 0.28 | 10.10 | 0.22 | B |
| Stream C-A | - | - | - | - | - | - | - | - |
| Stream C-B | 0.00 | 0.00 | 0.00 | A | 0.00 | 0.00 | 0.00 | A |
| Stream A-B | - | - | - | - | - | - | - | - |
| Stream A-C | - | - | - | - | - | - | - | - |
| | A1 - 2027 design traffic flow | | | | | | | |
| Stream B-AC | 0.78 | 14.97 | 0.44 | B | 0.36 | 11.18 | 0.26 | B |
| Stream C-A | - | - | - | - | - | - | - | - |
| Stream C-B | 0.00 | 0.00 | 0.00 | A | 0.00 | 0.00 | 0.00 | A |
| Stream A-B | - | - | - | - | - | - | - | - |
| Stream A-C | - | - | - | - | - | - | - | - |
| | A1 - 2027 reference traffic flow | | | | | | | |
| Stream B-AC | 0.77 | 14.74 | 0.44 | B | 0.35 | 11.05 | 0.26 | B |
| Stream C-A | - | - | - | - | - | - | - | - |
| Stream C-B | 0.00 | 0.00 | 0.00 | A | 0.00 | 0.00 | 0.00 | A |
| Stream A-B | - | - | - | - | - | - | - | - |
| Stream A-C | - | - | - | - | - | - | - | - |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D2 - 2027 reference traffic flow, Weekday AM Peak Hour " model duration: 13:30 - 14:30*
*"D3 - 2027 design traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 14:30*
*"D4 - 2027 reference traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 14:30*
*"D5 - 2027 design traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 14:30*
*"D6 - 2021 observed traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 14:30*
*"D7 - 2021 observed traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 14:30*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:06:59*

## File summary

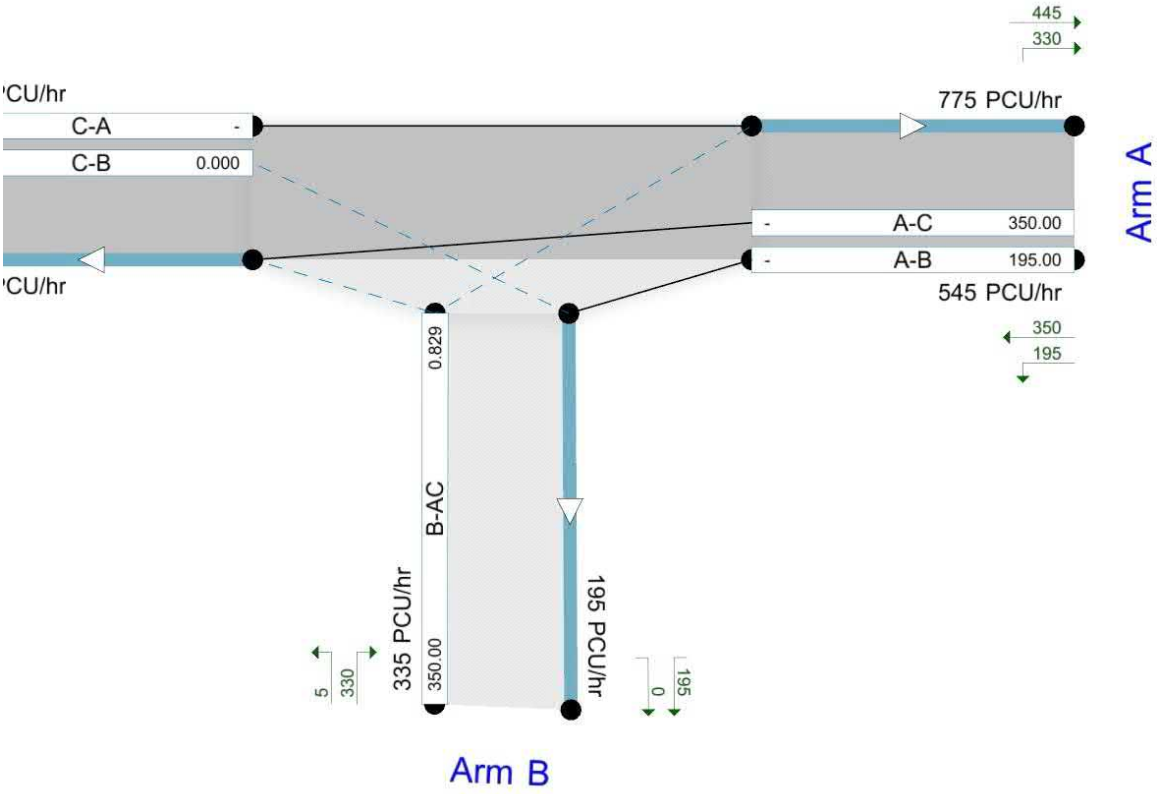
| | |
|---|---|
| **Title** | Tai Wai Temple |
| **Location** | Tai Wai |
| **Site Number** | |
| **Date** | 8/5/2017 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing modelled flow through junction (PCU/hr).
Streams (upstreams) show Total Demand (PCU/hr); Streams (downstreams) show RFC ()
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 "; Demand Set "D2 - 2027 reference traffic flow, Weekday AM Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# (Default Analysis Set) - 2027 reference traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday AM Peak Hour | 2027 reference traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 14.74 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 420.00 | 100.000 |
| B | FLAT | ✓ | 190.00 | 100.000 |
| C | FLAT | ✓ | 430.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 85.000 | 335.000 |
| | B | 185.000 | 0.000 | 5.000 |
| | C | 430.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.20 | 0.80 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.44 | 14.74 | 0.77 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 186.97 | 0.00 | 434.15 | 0.438 | 0.76 | 14.398 | B |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 541.09 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.96 | 0.00 | 434.15 | 0.438 | 0.77 | 14.735 | B |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 541.09 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.99 | 0.00 | 434.15 | 0.438 | 0.77 | 14.741 | B |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 541.09 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.99 | 0.00 | 434.15 | 0.438 | 0.77 | 14.741 | B |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 541.09 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 design traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday AM Peak Hour | 2027 design traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 14.97 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| A | A | (untitled) | | Major |
| B | B | (untitled) | | Minor |
| C | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| 1 | B-C | 668.537 | 0.065 | 0.163 | - | - |
| 1 | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 435.00 | 100.000 |
| B | FLAT | ✓ | 190.00 | 100.000 |
| C | FLAT | ✓ | 445.00 | 100.000 |

# Turning Proportions

#### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 85.000 | 350.000 |
| | B | 185.000 | 0.000 | 5.000 |
| | C | 445.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.20 | 0.80 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.44 | 14.97 | 0.78 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 186.93 | 0.00 | 430.41 | 0.441 | 0.77 | 14.610 | B |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.96 | 0.00 | 430.41 | 0.441 | 0.78 | 14.964 | B |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.98 | 0.00 | 430.41 | 0.441 | 0.78 | 14.970 | B |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.99 | 0.00 | 430.41 | 0.441 | 0.78 | 14.970 | B |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 reference traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday PM Peak Hour | 2027 reference traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 11.05 | B |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 520.00 | 100.000 |
| B | FLAT | ✓ | 115.00 | 100.000 |
| C | FLAT | ✓ | 285.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 150.000 | 370.000 |
| | B | 110.000 | 0.000 | 5.000 |
| | C | 285.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.29 | 0.71 |
| | B | 0.96 | 0.00 | 0.04 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.26 | 11.05 | 0.35 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 113.61 | 0.00 | 440.71 | 0.261 | 0.35 | 10.961 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 526.37 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 114.99 | 0.00 | 440.71 | 0.261 | 0.35 | 11.052 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 526.37 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 115.00 | 0.00 | 440.71 | 0.261 | 0.35 | 11.052 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 526.37 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 115.00 | 0.00 | 440.71 | 0.261 | 0.35 | 11.052 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 526.37 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 design traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday PM Peak Hour | 2027 design traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 11.18 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| 1 | B-C | 668.537 | 0.065 | 0.163 | - | - |
| 1 | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 535.00 | 100.000 |
| B | FLAT | ✓ | 115.00 | 100.000 |
| C | FLAT | ✓ | 300.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 150.000 | 385.000 |
| | B | 110.000 | 0.000 | 5.000 |
| | C | 300.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.28 | 0.72 |
| | B | 0.96 | 0.00 | 0.04 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.26 | 11.18 | 0.36 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 113.59 | 0.00 | 436.98 | 0.263 | 0.35 | 11.086 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.16 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 114.99 | 0.00 | 436.98 | 0.263 | 0.35 | 11.180 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.16 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 115.00 | 0.00 | 436.98 | 0.263 | 0.36 | 11.180 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.16 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 115.00 | 0.00 | 436.98 | 0.263 | 0.36 | 11.180 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.16 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2021 observed traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday AM Peak Hour | 2021 observed traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 12.38 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| **A** | FLAT | ✓ | 350.00 | 100.000 |
| **B** | FLAT | ✓ | 160.00 | 100.000 |
| **C** | FLAT | ✓ | 360.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 70.000 | 280.000 |
| | B | 155.000 | 0.000 | 5.000 |
| | C | 360.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.20 | 0.80 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

### Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.35 | 12.38 | 0.55 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 157.84 | 0.00 | 450.83 | 0.355 | 0.54 | 12.201 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 159.98 | 0.00 | 450.83 | 0.355 | 0.54 | 12.375 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 159.99 | 0.00 | 450.83 | 0.355 | 0.55 | 12.377 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 160.00 | 0.00 | 450.83 | 0.355 | 0.55 | 12.377 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2021 observed traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday PM Peak Hour | 2021 observed traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 10.10 | B |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 435.00 | 100.000 |
| B | FLAT | ✓ | 100.00 | 100.000 |
| C | FLAT | ✓ | 240.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 125.000 | 310.000 |
| | B | 95.000 | 0.000 | 5.000 |
| | C | 240.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.29 | 0.71 |
| | B | 0.95 | 0.00 | 0.05 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.22 | 10.10 | 0.28 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 98.89 | 0.00 | 456.53 | 0.219 | 0.28 | 10.035 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 99.99 | 0.00 | 456.53 | 0.219 | 0.28 | 10.096 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 456.53 | 0.219 | 0.28 | 10.096 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

## Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 456.53 | 0.219 | 0.28 | 10.096 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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**Filename:** Junction F (CM_p2).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:01:49

» 2018 observed traffic flow, Ching Ming Festival Peak Hour
» 2027 reference traffic flow, Ching Ming Festival Peak Hour
» 2027 design traffic flow, Ching Ming Festival Peak Hour

## Summary of junction performance

| | Ching Ming Festival Peak Hour | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS |
| | 2018 observed traffic flow | | | |
| Arm 1 | 0.22 | 1.36 | 0.18 | A |
| Arm 2 | 0.28 | 1.50 | 0.22 | A |
| Arm 3 | 0.51 | 1.64 | 0.34 | A |
| Arm 4 | 0.49 | 1.86 | 0.33 | A |
| | 2027 design traffic flow | | | |
| Arm 1 | 0.47 | 1.75 | 0.32 | A |
| Arm 2 | 0.43 | 1.81 | 0.30 | A |
| Arm 3 | 0.83 | 2.16 | 0.45 | A |
| Arm 4 | 0.86 | 2.55 | 0.46 | A |
| | 2027 reference traffic flow | | | |
| Arm 1 | 0.47 | 1.74 | 0.32 | A |
| Arm 2 | 0.43 | 1.81 | 0.30 | A |
| Arm 3 | 0.83 | 2.16 | 0.45 | A |
| Arm 4 | 0.85 | 2.54 | 0.46 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour " model duration: 13:30 - 15:00*
*"D2 - 2027 reference traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:01:47*

## File summary

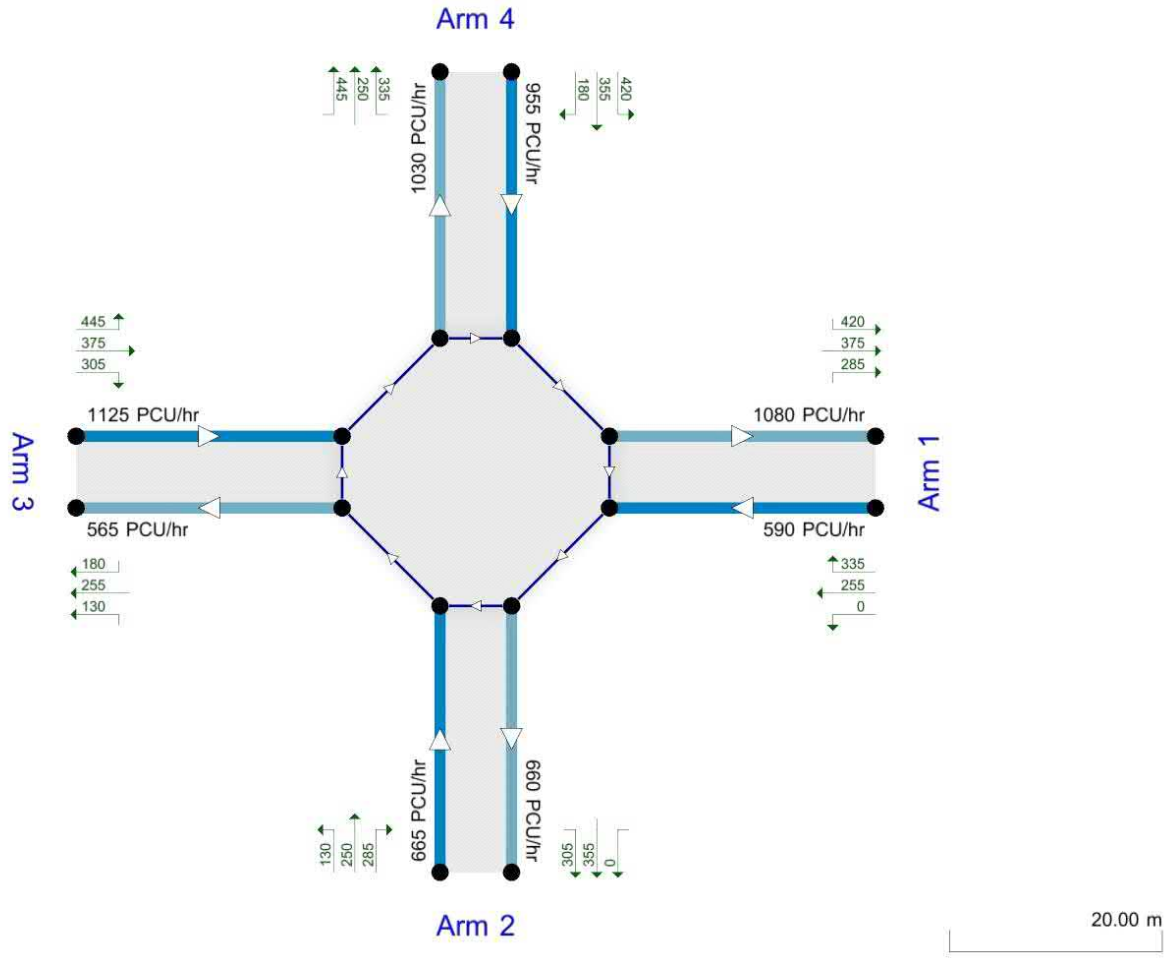
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2018 observed traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 observed traffic flow, Ching Ming Festival Peak Hour | 2018 observed traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.62 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Che Kung Mui Road WB | |
| **2** | 2 | Hung Mui Kuk Road | |
| **3** | 3 | Che Kung Mui Road EB | |
| **4** | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| **2** | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| **3** | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| **4** | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 590.00 | 100.000 |
| 2 | FLAT | ✓ | 665.00 | 100.000 |
| 3 | FLAT | ✓ | 1125.00 | 100.000 |
| 4 | FLAT | ✓ | 955.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 255.000 | 335.000 |
| | 2 | 285.000 | 0.000 | 130.000 | 250.000 |
| | 3 | 375.000 | 305.000 | 0.000 | 445.000 |
| | 4 | 420.000 | 355.000 | 180.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.43 | 0.57 |
| | 2 | 0.43 | 0.00 | 0.20 | 0.38 |
| | 3 | 0.33 | 0.27 | 0.00 | 0.40 |
| | 4 | 0.44 | 0.37 | 0.19 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.18 | 1.36 | 0.22 | A |
| 2 | 0.22 | 1.50 | 0.28 | A |
| 3 | 0.34 | 1.64 | 0.51 | A |
| 4 | 0.33 | 1.86 | 0.49 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 589.11 | 838.35 | 0.00 | 3233.12 | 0.182 | 0.22 | 1.361 | A |
| 2 | 665.00 | 663.89 | 768.74 | 0.00 | 3066.38 | 0.217 | 0.28 | 1.498 | A |
| 3 | 1125.00 | 1122.96 | 868.60 | 0.00 | 3323.24 | 0.339 | 0.51 | 1.634 | A |
| 4 | 955.00 | 953.04 | 963.29 | 0.00 | 2893.09 | 0.330 | 0.49 | 1.853 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

# 2027 reference traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Ching Ming Festival Peak Hour | 2027 reference traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.10 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 970.00 | 100.000 |
| 2 | FLAT | ✓ | 855.00 | 100.000 |
| 3 | FLAT | ✓ | 1380.00 | 100.000 |
| 4 | FLAT | ✓ | 1205.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 5.000 | 120.000 | 375.000 | 470.000 |
| | 2 | 410.000 | 0.000 | 140.000 | 305.000 |
| | 3 | 560.000 | 335.000 | 0.000 | 485.000 |
| | 4 | 460.000 | 550.000 | 195.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.01 | 0.12 | 0.39 | 0.48 |
| | 2 | 0.48 | 0.00 | 0.16 | 0.36 |
| | 3 | 0.41 | 0.24 | 0.00 | 0.35 |
| | 4 | 0.38 | 0.46 | 0.16 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.32 | 1.74 | 0.47 | A |
| 2 | 0.30 | 1.81 | 0.43 | A |
| 3 | 0.45 | 2.16 | 0.83 | A |
| 4 | 0.46 | 2.54 | 0.85 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 968.13 | 1077.11 | 0.00 | 3035.97 | 0.320 | 0.47 | 1.738 | A |
| 2 | 855.00 | 853.29 | 1042.81 | 0.00 | 2848.40 | 0.300 | 0.43 | 1.802 | A |
| 3 | 1380.00 | 1376.71 | 1187.65 | 0.00 | 3050.34 | 0.452 | 0.82 | 2.146 | A |
| 4 | 1205.00 | 1201.61 | 1307.04 | 0.00 | 2621.43 | 0.460 | 0.85 | 2.529 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1079.99 | 0.00 | 3033.59 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1044.99 | 0.00 | 2846.66 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1379.99 | 1189.99 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1204.99 | 1309.99 | 0.00 | 2619.10 | 0.460 | 0.85 | 2.545 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1080.00 | 0.00 | 3033.58 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1045.00 | 0.00 | 2846.66 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1380.00 | 1190.00 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1205.00 | 1310.00 | 0.00 | 2619.09 | 0.460 | 0.85 | 2.545 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1080.00 | 0.00 | 3033.58 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1045.00 | 0.00 | 2846.66 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1380.00 | 1190.00 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1205.00 | 1310.00 | 0.00 | 2619.09 | 0.460 | 0.85 | 2.545 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1080.00 | 0.00 | 3033.58 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1045.00 | 0.00 | 2846.66 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1380.00 | 1190.00 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1205.00 | 1310.00 | 0.00 | 2619.09 | 0.460 | 0.85 | 2.545 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1080.00 | 0.00 | 3033.58 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1045.00 | 0.00 | 2846.65 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1380.00 | 1190.00 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1205.00 | 1310.00 | 0.00 | 2619.09 | 0.460 | 0.85 | 2.545 | A |

# 2027 design traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Ching Ming Festival Peak Hour | 2027 design traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.11 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 970.00 | 100.000 |
| 2 | FLAT | ✓ | 860.00 | 100.000 |
| 3 | FLAT | ✓ | 1380.00 | 100.000 |
| 4 | FLAT | ✓ | 1210.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 5.000 | 120.000 | 375.000 | 470.000 |
| | 2 | 410.000 | 0.000 | 140.000 | 310.000 |
| | 3 | 560.000 | 335.000 | 0.000 | 485.000 |
| | 4 | 460.000 | 555.000 | 195.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.01 | 0.12 | 0.39 | 0.48 |
| | 2 | 0.48 | 0.00 | 0.16 | 0.36 |
| | 3 | 0.41 | 0.24 | 0.00 | 0.35 |
| | 4 | 0.38 | 0.46 | 0.16 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.32 | 1.75 | 0.47 | A |
| 2 | 0.30 | 1.81 | 0.43 | A |
| 3 | 0.45 | 2.16 | 0.83 | A |
| 4 | 0.46 | 2.55 | 0.86 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 968.12 | 1082.08 | 0.00 | 3031.86 | 0.320 | 0.47 | 1.742 | A |
| 2 | 860.00 | 858.27 | 1042.81 | 0.00 | 2848.40 | 0.302 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1376.70 | 1192.64 | 0.00 | 3046.07 | 0.453 | 0.82 | 2.151 | A |
| 4 | 1210.00 | 1206.59 | 1307.03 | 0.00 | 2621.44 | 0.462 | 0.85 | 2.538 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1084.99 | 0.00 | 3029.46 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1044.99 | 0.00 | 2846.66 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1379.99 | 1194.99 | 0.00 | 3044.06 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1209.99 | 1309.99 | 0.00 | 2619.10 | 0.462 | 0.86 | 2.554 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1085.00 | 0.00 | 3029.45 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1045.00 | 0.00 | 2846.66 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1380.00 | 1195.00 | 0.00 | 3044.05 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1210.00 | 1310.00 | 0.00 | 2619.09 | 0.462 | 0.86 | 2.554 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1085.00 | 0.00 | 3029.45 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1045.00 | 0.00 | 2846.66 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1380.00 | 1195.00 | 0.00 | 3044.05 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1210.00 | 1310.00 | 0.00 | 2619.09 | 0.462 | 0.86 | 2.554 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1085.00 | 0.00 | 3029.45 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1045.00 | 0.00 | 2846.66 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1380.00 | 1195.00 | 0.00 | 3044.05 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1210.00 | 1310.00 | 0.00 | 2619.09 | 0.462 | 0.86 | 2.554 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1085.00 | 0.00 | 3029.45 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1045.00 | 0.00 | 2846.65 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1380.00 | 1195.00 | 0.00 | 3044.05 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1210.00 | 1310.00 | 0.00 | 2619.09 | 0.462 | 0.86 | 2.554 | A |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction F (Weekday).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:07:31

» 2027 reference traffic flow, Weekday AM Peak Hour
» 2027 design traffic flow, Weekday AM Peak Hour
» 2027 reference traffic flow, Weekday PM Peak Hour
» 2027 design traffic flow, Weekday PM Peak Hour
» 2021 observed traffic flow, Weekday AM Peak Hour
» 2021 observed traffic flow, Weekday PM Peak Hour

## Summary of junction performance

| | Weekday AM Peak Hour | | | | Weekday PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| **2021 observed traffic flow** | | | | | | | | |
| Arm 1 | 0.28 | 1.53 | 0.22 | A | 0.29 | 1.55 | 0.22 | A |
| Arm 2 | 0.38 | 1.71 | 0.28 | A | 0.39 | 1.73 | 0.28 | A |
| Arm 3 | 0.63 | 1.79 | 0.39 | A | 0.66 | 1.87 | 0.40 | A |
| Arm 4 | 0.75 | 2.20 | 0.43 | A | 0.74 | 2.17 | 0.42 | A |
| **2027 design traffic flow** | | | | | | | | |
| Arm 1 | 0.73 | 2.28 | 0.42 | A | 0.72 | 2.32 | 0.42 | A |
| Arm 2 | 0.74 | 2.47 | 0.43 | A | 0.73 | 2.42 | 0.42 | A |
| Arm 3 | 1.35 | 2.88 | 0.57 | A | 1.45 | 3.12 | 0.59 | A |
| Arm 4 | 1.75 | 3.94 | 0.64 | A | 1.78 | 3.96 | 0.64 | A |
| **2027 reference traffic flow** | | | | | | | | |
| Arm 1 | 0.73 | 2.28 | 0.42 | A | 0.71 | 2.31 | 0.42 | A |
| Arm 2 | 0.73 | 2.46 | 0.42 | A | 0.72 | 2.40 | 0.42 | A |
| Arm 3 | 1.34 | 2.87 | 0.57 | A | 1.44 | 3.09 | 0.59 | A |
| Arm 4 | 1.73 | 3.92 | 0.63 | A | 1.75 | 3.92 | 0.64 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D2 - 2027 reference traffic flow, Weekday AM Peak Hour " model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D4 - 2027 reference traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D5 - 2027 design traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D6 - 2021 observed traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D7 - 2021 observed traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:07:27*

## File summary

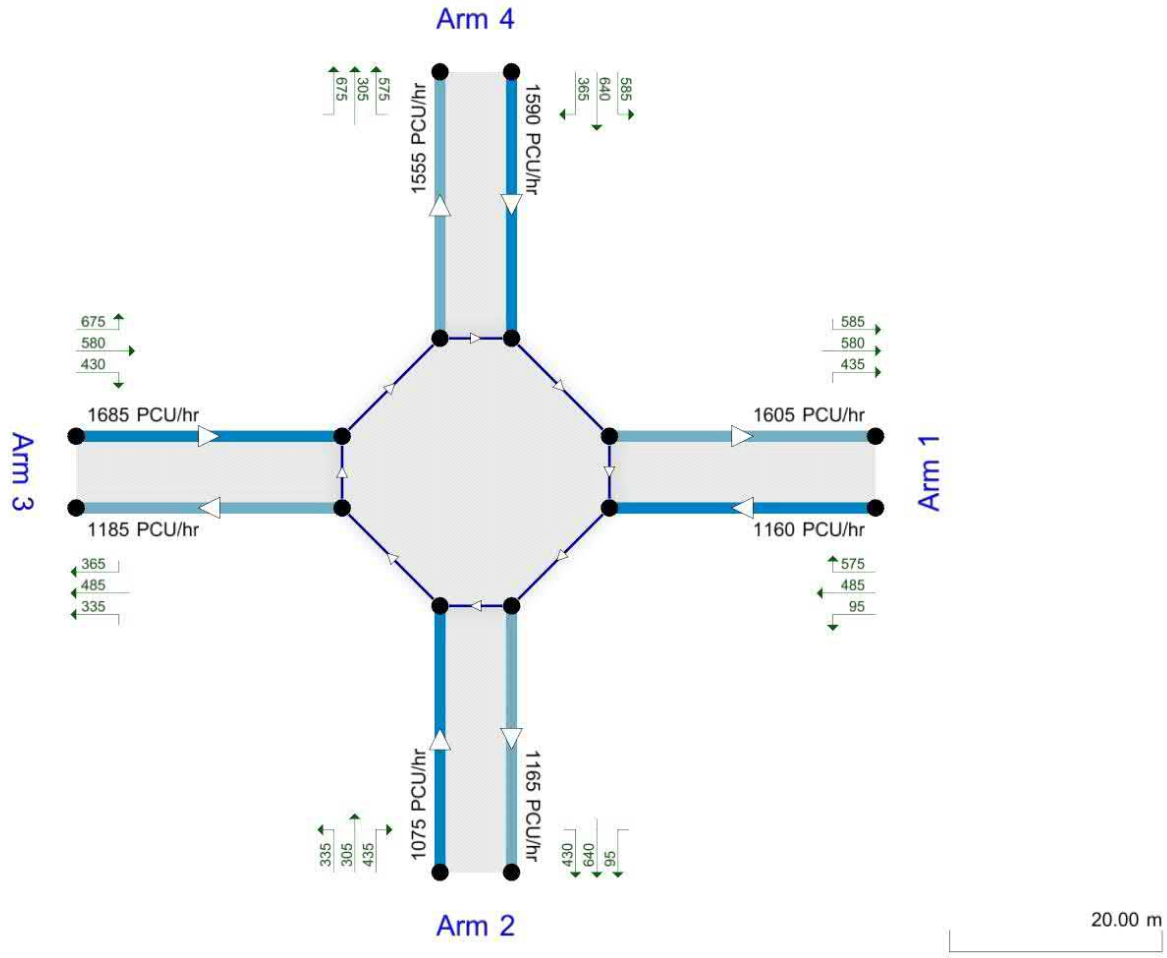
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D2 - 2027 reference traffic flow, Weekday AM Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2027 reference traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday AM Peak Hour | 2027 reference traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.97 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Che Kung Mui Road WB | |
| **2** | 2 | Hung Mui Kuk Road | |
| **3** | 3 | Che Kung Mui Road EB | |
| **4** | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| **2** | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| **3** | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| **4** | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 1160.00 | 100.000 |
| 2 | FLAT | ✓ | 1075.00 | 100.000 |
| 3 | FLAT | ✓ | 1685.00 | 100.000 |
| 4 | FLAT | ✓ | 1590.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 5.000 | 95.000 | 485.000 | 575.000 |
| | 2 | 435.000 | 0.000 | 335.000 | 305.000 |
| | 3 | 580.000 | 430.000 | 0.000 | 675.000 |
| | 4 | 585.000 | 640.000 | 365.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.08 | 0.42 | 0.50 |
| | 2 | 0.40 | 0.00 | 0.31 | 0.28 |
| | 3 | 0.34 | 0.26 | 0.00 | 0.40 |
| | 4 | 0.37 | 0.40 | 0.23 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.42 | 2.28 | 0.73 | A |
| 2 | 0.42 | 2.46 | 0.73 | A |
| 3 | 0.57 | 2.87 | 1.34 | A |
| 4 | 0.63 | 3.92 | 1.73 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1157.09 | 1429.33 | 0.00 | 2745.14 | 0.423 | 0.73 | 2.263 | A |
| 2 | 1075.00 | 1072.09 | 1425.76 | 0.00 | 2543.82 | 0.423 | 0.73 | 2.440 | A |
| 3 | 1685.00 | 1679.67 | 1316.54 | 0.00 | 2940.09 | 0.573 | 1.33 | 2.845 | A |
| 4 | 1590.00 | 1583.18 | 1445.61 | 0.00 | 2511.92 | 0.633 | 1.70 | 3.849 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1159.99 | 1434.95 | 0.00 | 2740.49 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1074.99 | 1429.97 | 0.00 | 2540.47 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1684.97 | 1319.98 | 0.00 | 2937.14 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1589.94 | 1449.98 | 0.00 | 2508.47 | 0.634 | 1.72 | 3.919 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1160.00 | 1434.99 | 0.00 | 2740.46 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1075.00 | 1429.99 | 0.00 | 2540.45 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1684.99 | 1320.00 | 0.00 | 2937.13 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1589.98 | 1449.99 | 0.00 | 2508.46 | 0.634 | 1.72 | 3.919 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1160.00 | 1434.99 | 0.00 | 2740.46 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1075.00 | 1430.00 | 0.00 | 2540.45 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1685.00 | 1320.00 | 0.00 | 2937.13 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1589.99 | 1450.00 | 0.00 | 2508.46 | 0.634 | 1.73 | 3.919 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1160.00 | 1435.00 | 0.00 | 2740.46 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1075.00 | 1430.00 | 0.00 | 2540.45 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1685.00 | 1320.00 | 0.00 | 2937.13 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1590.00 | 1450.00 | 0.00 | 2508.45 | 0.634 | 1.73 | 3.919 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1160.00 | 1435.00 | 0.00 | 2740.46 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1075.00 | 1430.00 | 0.00 | 2540.45 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1685.00 | 1320.00 | 0.00 | 2937.13 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1590.00 | 1450.00 | 0.00 | 2508.45 | 0.634 | 1.73 | 3.919 | A |

# 2027 design traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday AM Peak Hour | 2027 design traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.98 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 1155.00 | 100.000 |
| 2 | FLAT | ✓ | 1085.00 | 100.000 |
| 3 | FLAT | ✓ | 1685.00 | 100.000 |
| 4 | FLAT | ✓ | 1600.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 95.000 | 485.000 | 575.000 |
| | 2 | 435.000 | 0.000 | 335.000 | 315.000 |
| | 3 | 580.000 | 430.000 | 0.000 | 675.000 |
| | 4 | 585.000 | 650.000 | 365.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.08 | 0.42 | 0.50 |
| | 2 | 0.40 | 0.00 | 0.31 | 0.29 |
| | 3 | 0.34 | 0.26 | 0.00 | 0.40 |
| | 4 | 0.37 | 0.41 | 0.23 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.42 | 2.28 | 0.73 | A |
| 2 | 0.43 | 2.47 | 0.74 | A |
| 3 | 0.57 | 2.88 | 1.35 | A |
| 4 | 0.64 | 3.94 | 1.75 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1152.09 | 1439.25 | 0.00 | 2736.94 | 0.422 | 0.73 | 2.268 | A |
| 2 | 1085.00 | 1082.05 | 1420.76 | 0.00 | 2547.80 | 0.426 | 0.74 | 2.450 | A |
| 3 | 1685.00 | 1679.65 | 1321.51 | 0.00 | 2935.84 | 0.574 | 1.34 | 2.854 | A |
| 4 | 1600.00 | 1593.09 | 1440.61 | 0.00 | 2515.87 | 0.636 | 1.73 | 3.873 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1154.99 | 1444.95 | 0.00 | 2732.23 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1084.99 | 1424.97 | 0.00 | 2544.44 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1684.97 | 1324.98 | 0.00 | 2932.87 | 0.575 | 1.34 | 2.884 | A |
| 4 | 1600.00 | 1599.94 | 1444.98 | 0.00 | 2512.42 | 0.637 | 1.74 | 3.945 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1155.00 | 1444.99 | 0.00 | 2732.21 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1085.00 | 1424.99 | 0.00 | 2544.43 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1684.99 | 1325.00 | 0.00 | 2932.86 | 0.575 | 1.35 | 2.884 | A |
| 4 | 1600.00 | 1599.98 | 1444.99 | 0.00 | 2512.41 | 0.637 | 1.75 | 3.945 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1155.00 | 1444.99 | 0.00 | 2732.20 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1085.00 | 1425.00 | 0.00 | 2544.42 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1685.00 | 1325.00 | 0.00 | 2932.86 | 0.575 | 1.35 | 2.884 | A |
| 4 | 1600.00 | 1599.99 | 1445.00 | 0.00 | 2512.41 | 0.637 | 1.75 | 3.945 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1155.00 | 1445.00 | 0.00 | 2732.20 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1085.00 | 1425.00 | 0.00 | 2544.42 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1685.00 | 1325.00 | 0.00 | 2932.85 | 0.575 | 1.35 | 2.884 | A |
| 4 | 1600.00 | 1600.00 | 1445.00 | 0.00 | 2512.41 | 0.637 | 1.75 | 3.945 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1155.00 | 1445.00 | 0.00 | 2732.20 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1085.00 | 1425.00 | 0.00 | 2544.42 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1685.00 | 1325.00 | 0.00 | 2932.85 | 0.575 | 1.35 | 2.884 | A |
| 4 | 1600.00 | 1600.00 | 1445.00 | 0.00 | 2512.41 | 0.637 | 1.75 | 3.945 | A |

# 2027 reference traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday PM Peak Hour | 2027 reference traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 3.04 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 1115.00 | 100.000 |
| 2 | FLAT | ✓ | 1075.00 | 100.000 |
| 3 | FLAT | ✓ | 1675.00 | 100.000 |
| 4 | FLAT | ✓ | 1610.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 120.000 | 355.000 | 640.000 |
| | 2 | 430.000 | 0.000 | 280.000 | 365.000 |
| | 3 | 665.000 | 330.000 | 0.000 | 680.000 |
| | 4 | 425.000 | 790.000 | 395.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.11 | 0.32 | 0.57 |
| | 2 | 0.40 | 0.00 | 0.26 | 0.34 |
| | 3 | 0.40 | 0.20 | 0.00 | 0.41 |
| | 4 | 0.26 | 0.49 | 0.25 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.42 | 2.31 | 0.71 | A |
| 2 | 0.42 | 2.40 | 0.72 | A |
| 3 | 0.59 | 3.09 | 1.44 | A |
| 4 | 0.64 | 3.92 | 1.75 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1112.16 | 1508.80 | 0.00 | 2679.52 | 0.416 | 0.71 | 2.293 | A |
| 2 | 1075.00 | 1072.15 | 1385.77 | 0.00 | 2575.62 | 0.417 | 0.71 | 2.391 | A |
| 3 | 1675.00 | 1669.31 | 1431.26 | 0.00 | 2841.96 | 0.589 | 1.42 | 3.055 | A |
| 4 | 1610.00 | 1603.10 | 1420.48 | 0.00 | 2531.78 | 0.636 | 1.73 | 3.848 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1114.99 | 1514.95 | 0.00 | 2674.44 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1074.99 | 1389.97 | 0.00 | 2572.28 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1674.96 | 1434.98 | 0.00 | 2838.78 | 0.590 | 1.43 | 3.092 | A |
| 4 | 1610.00 | 1609.94 | 1424.97 | 0.00 | 2528.23 | 0.637 | 1.74 | 3.920 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1514.99 | 0.00 | 2674.41 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1075.00 | 1389.99 | 0.00 | 2572.26 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1674.99 | 1435.00 | 0.00 | 2838.77 | 0.590 | 1.43 | 3.092 | A |
| 4 | 1610.00 | 1609.98 | 1424.99 | 0.00 | 2528.22 | 0.637 | 1.75 | 3.920 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1514.99 | 0.00 | 2674.40 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1075.00 | 1390.00 | 0.00 | 2572.26 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1675.00 | 1435.00 | 0.00 | 2838.76 | 0.590 | 1.44 | 3.092 | A |
| 4 | 1610.00 | 1609.99 | 1425.00 | 0.00 | 2528.21 | 0.637 | 1.75 | 3.920 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1515.00 | 0.00 | 2674.40 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1075.00 | 1390.00 | 0.00 | 2572.26 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1675.00 | 1435.00 | 0.00 | 2838.76 | 0.590 | 1.44 | 3.092 | A |
| 4 | 1610.00 | 1610.00 | 1425.00 | 0.00 | 2528.21 | 0.637 | 1.75 | 3.920 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1515.00 | 0.00 | 2674.40 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1075.00 | 1390.00 | 0.00 | 2572.26 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1675.00 | 1435.00 | 0.00 | 2838.76 | 0.590 | 1.44 | 3.092 | A |
| 4 | 1610.00 | 1610.00 | 1425.00 | 0.00 | 2528.21 | 0.637 | 1.75 | 3.920 | A |

# 2027 design traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday PM Peak Hour | 2027 design traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 3.07 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 1115.00 | 100.000 |
| 2 | FLAT | ✓ | 1085.00 | 100.000 |
| 3 | FLAT | ✓ | 1675.00 | 100.000 |
| 4 | FLAT | ✓ | 1620.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 120.000 | 355.000 | 640.000 |
| | 2 | 430.000 | 0.000 | 280.000 | 375.000 |
| | 3 | 665.000 | 330.000 | 0.000 | 680.000 |
| | 4 | 425.000 | 800.000 | 395.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.11 | 0.32 | 0.57 |
| | 2 | 0.40 | 0.00 | 0.26 | 0.35 |
| | 3 | 0.40 | 0.20 | 0.00 | 0.41 |
| | 4 | 0.26 | 0.49 | 0.24 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.42 | 2.32 | 0.72 | A |
| 2 | 0.42 | 2.42 | 0.73 | A |
| 3 | 0.59 | 3.12 | 1.45 | A |
| 4 | 0.64 | 3.96 | 1.78 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1112.15 | 1518.69 | 0.00 | 2671.35 | 0.417 | 0.71 | 2.305 | A |
| 2 | 1085.00 | 1082.10 | 1385.74 | 0.00 | 2575.65 | 0.421 | 0.72 | 2.407 | A |
| 3 | 1675.00 | 1669.26 | 1441.21 | 0.00 | 2833.45 | 0.591 | 1.43 | 3.077 | A |
| 4 | 1620.00 | 1612.98 | 1420.44 | 0.00 | 2531.81 | 0.640 | 1.76 | 3.889 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1114.99 | 1524.95 | 0.00 | 2666.18 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1084.99 | 1389.97 | 0.00 | 2572.28 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1674.96 | 1444.98 | 0.00 | 2830.22 | 0.592 | 1.44 | 3.115 | A |
| 4 | 1620.00 | 1619.94 | 1424.97 | 0.00 | 2528.23 | 0.641 | 1.77 | 3.963 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1524.98 | 0.00 | 2666.15 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1085.00 | 1389.99 | 0.00 | 2572.26 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1674.99 | 1445.00 | 0.00 | 2830.21 | 0.592 | 1.45 | 3.115 | A |
| 4 | 1620.00 | 1619.98 | 1424.99 | 0.00 | 2528.22 | 0.641 | 1.78 | 3.963 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1524.99 | 0.00 | 2666.15 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1085.00 | 1390.00 | 0.00 | 2572.26 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1675.00 | 1445.00 | 0.00 | 2830.21 | 0.592 | 1.45 | 3.115 | A |
| 4 | 1620.00 | 1619.99 | 1425.00 | 0.00 | 2528.21 | 0.641 | 1.78 | 3.963 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1525.00 | 0.00 | 2666.14 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1085.00 | 1390.00 | 0.00 | 2572.26 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1675.00 | 1445.00 | 0.00 | 2830.21 | 0.592 | 1.45 | 3.115 | A |
| 4 | 1620.00 | 1620.00 | 1425.00 | 0.00 | 2528.21 | 0.641 | 1.78 | 3.963 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1525.00 | 0.00 | 2666.14 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1085.00 | 1390.00 | 0.00 | 2572.26 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1675.00 | 1445.00 | 0.00 | 2830.21 | 0.592 | 1.45 | 3.115 | A |
| 4 | 1620.00 | 1620.00 | 1425.00 | 0.00 | 2528.21 | 0.641 | 1.78 | 3.963 | A |

# 2021 observed traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday AM Peak Hour | 2021 observed traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.85 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 670.00 | 100.000 |
| 2 | FLAT | ✓ | 800.00 | 100.000 |
| 3 | FLAT | ✓ | 1270.00 | 100.000 |
| 4 | FLAT | ✓ | 1225.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 275.000 | 395.000 |
| | 2 | 295.000 | 0.000 | 280.000 | 225.000 |
| | 3 | 345.000 | 360.000 | 0.000 | 565.000 |
| | 4 | 490.000 | 430.000 | 305.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.41 | 0.59 |
| | 2 | 0.37 | 0.00 | 0.35 | 0.28 |
| | 3 | 0.27 | 0.28 | 0.00 | 0.44 |
| | 4 | 0.40 | 0.35 | 0.25 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.22 | 1.53 | 0.28 | A |
| 2 | 0.28 | 1.71 | 0.38 | A |
| 3 | 0.39 | 1.79 | 0.63 | A |
| 4 | 0.43 | 2.20 | 0.75 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 668.86 | 1092.50 | 0.00 | 3023.26 | 0.222 | 0.28 | 1.529 | A |
| 2 | 800.00 | 798.48 | 973.12 | 0.00 | 2903.82 | 0.276 | 0.38 | 1.710 | A |
| 3 | 1270.00 | 1267.49 | 913.34 | 0.00 | 3284.97 | 0.387 | 0.63 | 1.782 | A |
| 4 | 1225.00 | 1222.03 | 998.05 | 0.00 | 2865.62 | 0.427 | 0.74 | 2.187 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1094.99 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1269.99 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1224.99 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.195 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

# 2021 observed traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday PM Peak Hour | 2021 observed traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.88 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 670.00 | 100.000 |
| 2 | FLAT | ✓ | 805.00 | 100.000 |
| 3 | FLAT | ✓ | 1275.00 | 100.000 |
| 4 | FLAT | ✓ | 1220.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 220.000 | 450.000 |
| | 2 | 280.000 | 0.000 | 235.000 | 290.000 |
| | 3 | 430.000 | 275.000 | 0.000 | 570.000 |
| | 4 | 355.000 | 535.000 | 330.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.33 | 0.67 |
| | 2 | 0.35 | 0.00 | 0.29 | 0.36 |
| | 3 | 0.34 | 0.22 | 0.00 | 0.45 |
| | 4 | 0.29 | 0.44 | 0.27 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.22 | 1.55 | 0.29 | A |
| 2 | 0.28 | 1.73 | 0.39 | A |
| 3 | 0.40 | 1.87 | 0.66 | A |
| 4 | 0.42 | 2.17 | 0.74 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 668.85 | 1137.35 | 0.00 | 2986.23 | 0.224 | 0.29 | 1.553 | A |
| 2 | 805.00 | 803.46 | 998.05 | 0.00 | 2883.99 | 0.279 | 0.39 | 1.730 | A |
| 3 | 1275.00 | 1272.35 | 1018.13 | 0.00 | 3195.34 | 0.399 | 0.66 | 1.870 | A |
| 4 | 1220.00 | 1217.07 | 983.00 | 0.00 | 2877.51 | 0.424 | 0.73 | 2.164 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1139.99 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1274.99 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1219.99 | 985.00 | 0.00 | 2875.94 | 0.424 | 0.74 | 2.173 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction I (CM_p2).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:02:00

» 2018 observed traffic flow, Ching Ming Festival Peak Hour
» 2027 reference traffic flow, Ching Ming Festival Peak Hour
» 2027 design traffic flow, Ching Ming Festival Peak Hour

## Summary of junction performance

| | Ching Ming Festival Peak Hour | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS |
| | 2018 observed traffic flow | | | |
| Arm 2 | 0.15 | 1.28 | 0.13 | A |
| Arm 3 | 0.03 | 1.42 | 0.03 | A |
| Arm 4 | 0.09 | 1.50 | 0.08 | A |
| Arm 5 | 0.02 | 2.30 | 0.02 | A |
| | 2027 design traffic flow | | | |
| Arm 2 | 0.17 | 1.31 | 0.15 | A |
| Arm 3 | 0.03 | 1.45 | 0.03 | A |
| Arm 4 | 0.10 | 1.53 | 0.09 | A |
| Arm 5 | 0.02 | 2.33 | 0.02 | A |
| | 2027 reference traffic flow | | | |
| Arm 2 | 0.17 | 1.31 | 0.15 | A |
| Arm 3 | 0.03 | 1.45 | 0.03 | A |
| Arm 4 | 0.10 | 1.53 | 0.09 | A |
| Arm 5 | 0.02 | 2.33 | 0.02 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour " model duration: 13:30 - 15:00*
*"D2 - 2027 reference traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:01:57*

## File summary

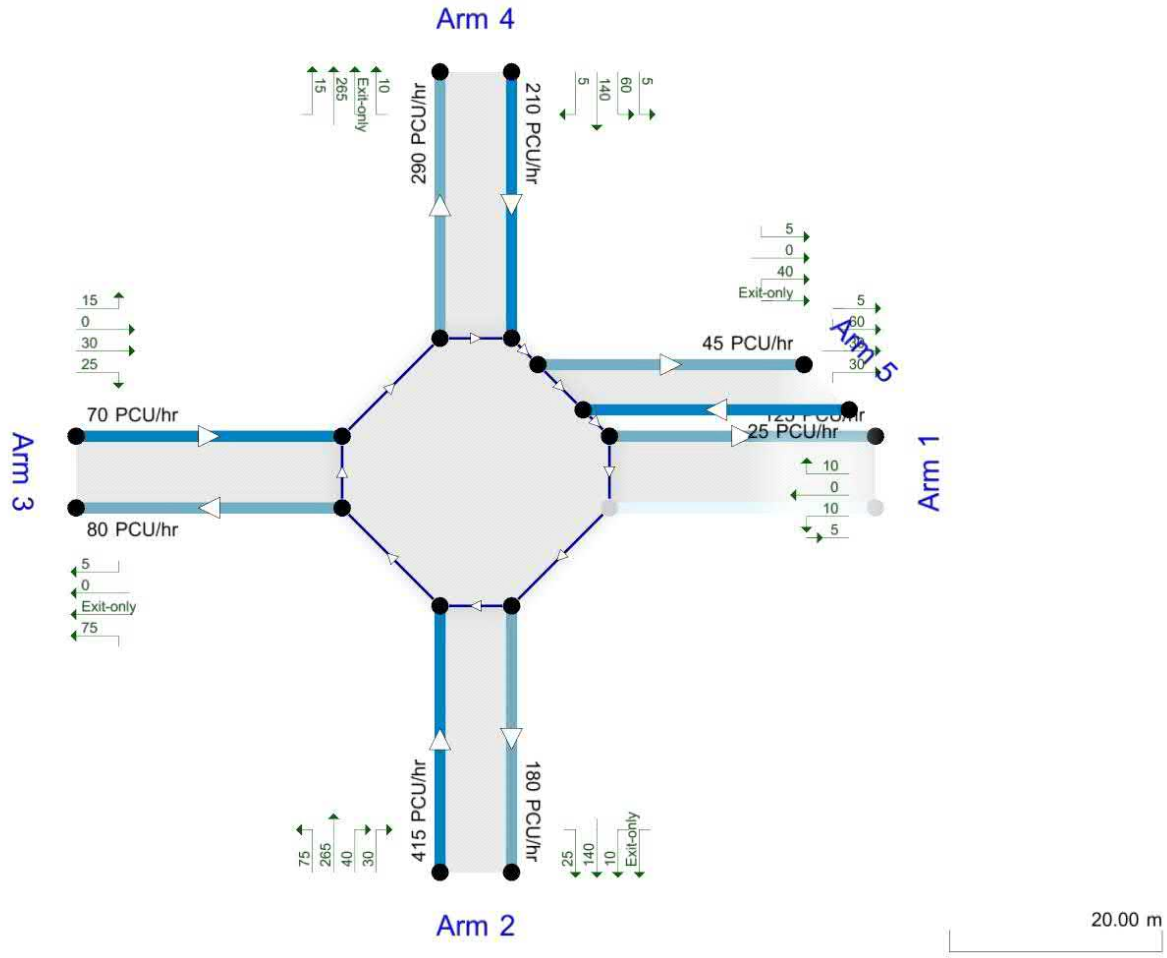
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2018 observed traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 observed traffic flow, Ching Ming Festival Peak Hour | 2018 observed traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.39 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| **2** | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| **3** | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| **4** | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| **5** | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 415.00 | 100.000 |
| 3 | FLAT | ✓ | 70.00 | 100.000 |
| 4 | FLAT | ✓ | 210.00 | 100.000 |
| 5 | FLAT | ✓ | 25.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 30.000 | 5.000 | 75.000 | 265.000 | 40.000 |
| | 3 | 30.000 | 25.000 | 0.000 | 15.000 | 0.000 |
| | 4 | 60.000 | 140.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 5.000 | 10.000 | 0.000 | 10.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.01 | 0.18 | 0.64 | 0.10 |
| | 3 | 0.43 | 0.36 | 0.00 | 0.21 | 0.00 |
| | 4 | 0.29 | 0.67 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.40 | 0.00 | 0.40 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.13 | 1.28 | 0.15 | A |
| 3 | 0.03 | 1.42 | 0.03 | A |
| 4 | 0.08 | 1.50 | 0.09 | A |
| 5 | 0.02 | 2.30 | 0.02 | A |

# Main Results for each time segment

## Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 414.41 | 14.97 | 0.00 | 3225.54 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 69.89 | 349.49 | 0.00 | 2609.27 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 209.65 | 129.81 | 0.00 | 2618.59 | 0.080 | 0.09 | 1.493 | A |
| 5 | 25.00 | 24.94 | 294.52 | 0.00 | 1591.18 | 0.016 | 0.02 | 2.298 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.496 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

# 2027 reference traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Ching Ming Festival Peak Hour | 2027 reference traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.42 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 475.00 | 100.000 |
| 3 | FLAT | ✓ | 75.00 | 100.000 |
| 4 | FLAT | ✓ | 230.00 | 100.000 |
| 5 | FLAT | ✓ | 25.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 35.000 | 5.000 | 80.000 | 290.000 | 65.000 |
| | 3 | 35.000 | 25.000 | 0.000 | 15.000 | 0.000 |
| | 4 | 65.000 | 155.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 5.000 | 10.000 | 0.000 | 10.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.01 | 0.17 | 0.61 | 0.14 |
| | 3 | 0.47 | 0.33 | 0.00 | 0.20 | 0.00 |
| | 4 | 0.28 | 0.67 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.40 | 0.00 | 0.40 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.15 | 1.31 | 0.17 | A |
| 3 | 0.03 | 1.45 | 0.03 | A |
| 4 | 0.09 | 1.53 | 0.10 | A |
| 5 | 0.02 | 2.33 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 474.31 | 14.97 | 0.00 | 3225.54 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 74.88 | 404.40 | 0.00 | 2560.91 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 229.61 | 164.75 | 0.00 | 2588.25 | 0.089 | 0.10 | 1.525 | A |
| 5 | 25.00 | 24.94 | 324.46 | 0.00 | 1570.98 | 0.016 | 0.02 | 2.328 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.450 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.528 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.310 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

# 2027 design traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Ching Ming Festival Peak Hour | 2027 design traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.42 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| **2** | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| **3** | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| **4** | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| **5** | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 475.00 | 100.000 |
| 3 | FLAT | ✓ | 75.00 | 100.000 |
| 4 | FLAT | ✓ | 230.00 | 100.000 |
| 5 | FLAT | ✓ | 25.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 35.000 | 5.000 | 80.000 | 290.000 | 65.000 |
| | 3 | 35.000 | 25.000 | 0.000 | 15.000 | 0.000 |
| | 4 | 65.000 | 155.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 5.000 | 10.000 | 0.000 | 10.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.01 | 0.17 | 0.61 | 0.14 |
| | 3 | 0.47 | 0.33 | 0.00 | 0.20 | 0.00 |
| | 4 | 0.28 | 0.67 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.40 | 0.00 | 0.40 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.15 | 1.31 | 0.17 | A |
| 3 | 0.03 | 1.45 | 0.03 | A |
| 4 | 0.09 | 1.53 | 0.10 | A |
| 5 | 0.02 | 2.33 | 0.02 | A |

# Main Results for each time segment

## Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 474.31 | 14.97 | 0.00 | 3225.54 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 74.88 | 404.40 | 0.00 | 2560.91 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 229.61 | 164.75 | 0.00 | 2588.25 | 0.089 | 0.10 | 1.525 | A |
| 5 | 25.00 | 24.94 | 324.46 | 0.00 | 1570.98 | 0.016 | 0.02 | 2.328 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.450 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.528 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.310 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction I (Weekday).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:09:19

» 2027 reference traffic flow, Weekday AM Peak Hour
» 2027 design traffic flow, Weekday AM Peak Hour
» 2027 reference traffic flow, Weekday PM Peak Hour
» 2027 design traffic flow, Weekday PM Peak Hour
» 2021 observed traffic flow, Weekday AM Peak Hour
» 2021 observed traffic flow, Weekday PM Peak Hour

## Summary of junction performance

| | Weekday AM Peak Hour | | | | Weekday PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| **2021 observed traffic flow** | | | | | | | | |
| Arm 2 | 0.10 | 1.23 | 0.09 | A | 0.10 | 1.23 | 0.09 | A |
| Arm 3 | 0.02 | 1.35 | 0.02 | A | 0.00 | 0.00 | 0.00 | A |
| Arm 4 | 0.09 | 1.47 | 0.08 | A | 0.08 | 1.44 | 0.08 | A |
| Arm 5 | 0.00 | 0.00 | 0.00 | A | 0.02 | 2.23 | 0.02 | A |
| **2027 design traffic flow** | | | | | | | | |
| Arm 2 | 0.14 | 1.26 | 0.12 | A | 0.13 | 1.27 | 0.12 | A |
| Arm 3 | 0.03 | 1.40 | 0.02 | A | 0.00 | 0.00 | 0.00 | A |
| Arm 4 | 0.11 | 1.52 | 0.10 | A | 0.10 | 1.47 | 0.09 | A |
| Arm 5 | 0.00 | 0.00 | 0.00 | A | 0.02 | 2.25 | 0.02 | A |
| **2027 reference traffic flow** | | | | | | | | |
| Arm 2 | 0.14 | 1.26 | 0.12 | A | 0.13 | 1.27 | 0.12 | A |
| Arm 3 | 0.03 | 1.40 | 0.02 | A | 0.00 | 0.00 | 0.00 | A |
| Arm 4 | 0.11 | 1.52 | 0.10 | A | 0.10 | 1.47 | 0.09 | A |
| Arm 5 | 0.00 | 0.00 | 0.00 | A | 0.02 | 2.25 | 0.02 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D2 - 2027 reference traffic flow, Weekday AM Peak Hour " model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D4 - 2027 reference traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D5 - 2027 design traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D6 - 2021 observed traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D7 - 2021 observed traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:09:15*

## File summary

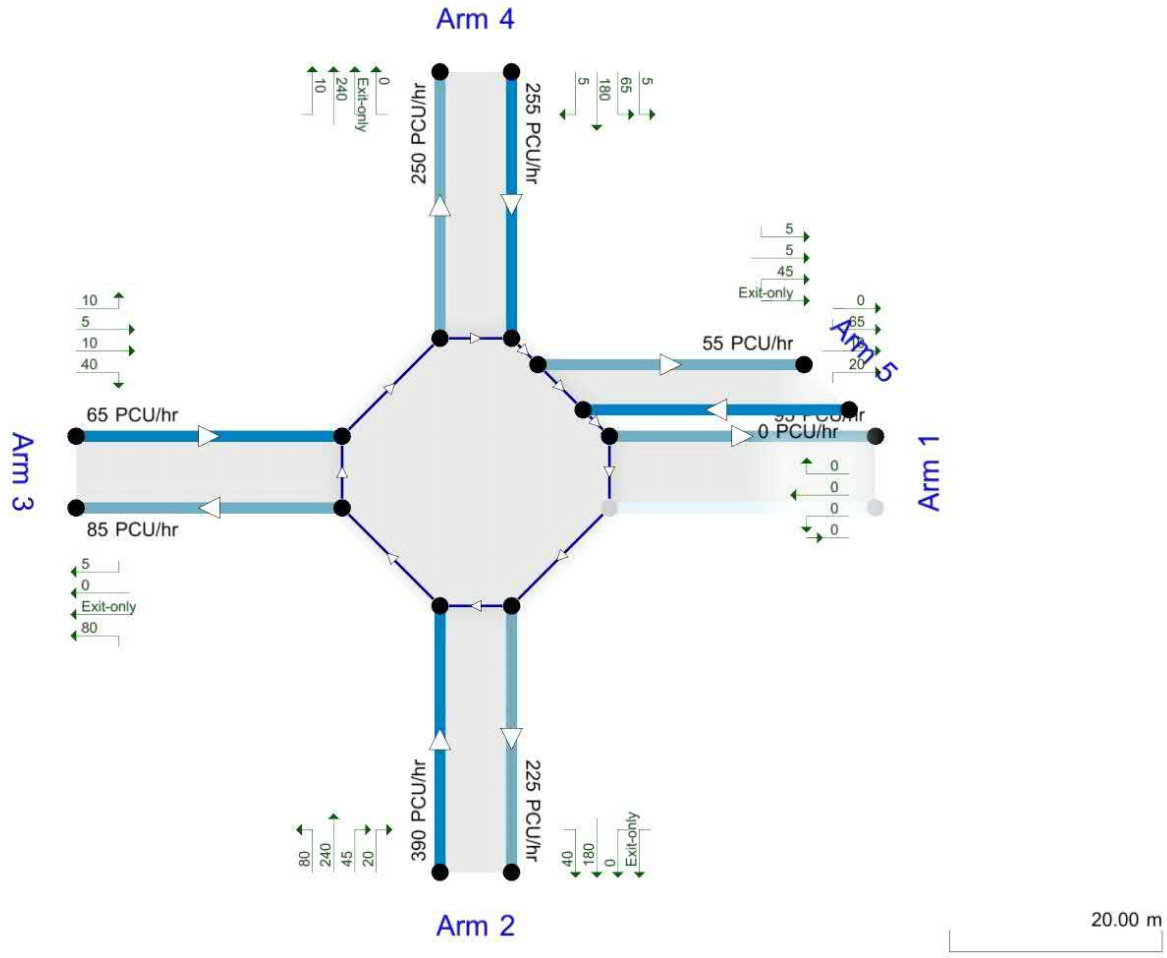
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D2 - 2027 reference traffic flow, Weekday AM Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2027 reference traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday AM Peak Hour | 2027 reference traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.37 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| **2** | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| **3** | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| **4** | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| **5** | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 390.00 | 100.000 |
| 3 | FLAT | ✓ | 65.00 | 100.000 |
| 4 | FLAT | ✓ | 255.00 | 100.000 |
| 5 | FLAT | ✓ | 0.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 20.000 | 5.000 | 80.000 | 240.000 | 45.000 |
| | 3 | 10.000 | 40.000 | 0.000 | 10.000 | 5.000 |
| | 4 | 65.000 | 180.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.05 | 0.01 | 0.21 | 0.62 | 0.12 |
| | 3 | 0.15 | 0.62 | 0.00 | 0.15 | 0.08 |
| | 4 | 0.25 | 0.71 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.12 | 1.26 | 0.14 | A |
| 3 | 0.02 | 1.40 | 0.03 | A |
| 4 | 0.10 | 1.52 | 0.11 | A |
| 5 | 0.00 | 0.00 | 0.00 | A |

# Main Results for each time segment

## Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 389.45 | 4.99 | 0.00 | 3235.01 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 64.90 | 309.56 | 0.00 | 2644.44 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 254.57 | 124.82 | 0.00 | 2622.92 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 324.47 | 0.00 | 1570.97 | 0.000 | 0.00 | 0.000 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.397 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

# 2027 design traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday AM Peak Hour | 2027 design traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.37 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 390.00 | 100.000 |
| 3 | FLAT | ✓ | 65.00 | 100.000 |
| 4 | FLAT | ✓ | 255.00 | 100.000 |
| 5 | FLAT | ✓ | 0.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 20.000 | 5.000 | 80.000 | 240.000 | 45.000 |
| | 3 | 10.000 | 40.000 | 0.000 | 10.000 | 5.000 |
| | 4 | 65.000 | 180.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.05 | 0.01 | 0.21 | 0.62 | 0.12 |
| | 3 | 0.15 | 0.62 | 0.00 | 0.15 | 0.08 |
| | 4 | 0.25 | 0.71 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.12 | 1.26 | 0.14 | A |
| 3 | 0.02 | 1.40 | 0.03 | A |
| 4 | 0.10 | 1.52 | 0.11 | A |
| 5 | 0.00 | 0.00 | 0.00 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 389.45 | 4.99 | 0.00 | 3235.01 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 64.90 | 309.56 | 0.00 | 2644.44 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 254.57 | 124.82 | 0.00 | 2622.92 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 324.47 | 0.00 | 1570.97 | 0.000 | 0.00 | 0.000 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.397 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

# 2027 reference traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday PM Peak Hour | 2027 reference traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.39 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 370.00 | 100.000 |
| 3 | FLAT | ✓ | 0.00 | 100.000 |
| 4 | FLAT | ✓ | 235.00 | 100.000 |
| 5 | FLAT | ✓ | 30.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 10.000 | 5.000 | 55.000 | 260.000 | 40.000 |
| | 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 4 | 30.000 | 195.000 | 0.000 | 0.000 | 10.000 |
| | 5 | 5.000 | 0.000 | 10.000 | 15.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.03 | 0.01 | 0.15 | 0.70 | 0.11 |
| | 3 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 4 | 0.13 | 0.83 | 0.00 | 0.00 | 0.04 |
| | 5 | 0.17 | 0.00 | 0.33 | 0.50 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.12 | 1.27 | 0.13 | A |
| 3 | 0.00 | 0.00 | 0.00 | A |
| 4 | 0.09 | 1.47 | 0.10 | A |
| 5 | 0.02 | 2.25 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 369.48 | 24.94 | 0.00 | 3216.08 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 329.52 | 0.00 | 2626.86 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 234.62 | 54.92 | 0.00 | 2683.60 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 29.93 | 239.61 | 0.00 | 1628.24 | 0.018 | 0.02 | 2.252 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.266 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

# 2027 design traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday PM Peak Hour | 2027 design traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.39 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 370.00 | 100.000 |
| 3 | FLAT | ✓ | 0.00 | 100.000 |
| 4 | FLAT | ✓ | 235.00 | 100.000 |
| 5 | FLAT | ✓ | 30.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 10.000 | 5.000 | 55.000 | 260.000 | 40.000 |
| | 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 4 | 30.000 | 195.000 | 0.000 | 0.000 | 10.000 |
| | 5 | 5.000 | 0.000 | 10.000 | 15.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.03 | 0.01 | 0.15 | 0.70 | 0.11 |
| | 3 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 4 | 0.13 | 0.83 | 0.00 | 0.00 | 0.04 |
| | 5 | 0.17 | 0.00 | 0.33 | 0.50 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.12 | 1.27 | 0.13 | A |
| 3 | 0.00 | 0.00 | 0.00 | A |
| 4 | 0.09 | 1.47 | 0.10 | A |
| 5 | 0.02 | 2.25 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 369.48 | 24.94 | 0.00 | 3216.08 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 329.52 | 0.00 | 2626.86 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 234.62 | 54.92 | 0.00 | 2683.60 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 29.93 | 239.61 | 0.00 | 1628.24 | 0.018 | 0.02 | 2.252 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.266 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

# 2021 observed traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday AM Peak Hour | 2021 observed traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.33 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 300.00 | 100.000 |
| 3 | FLAT | ✓ | 55.00 | 100.000 |
| 4 | FLAT | ✓ | 215.00 | 100.000 |
| 5 | FLAT | ✓ | 0.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 20.000 | 5.000 | 65.000 | 200.000 | 10.000 |
| | 3 | 10.000 | 35.000 | 0.000 | 10.000 | 0.000 |
| | 4 | 55.000 | 150.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.02 | 0.22 | 0.67 | 0.03 |
| | 3 | 0.18 | 0.64 | 0.00 | 0.18 | 0.00 |
| | 4 | 0.26 | 0.70 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.09 | 1.23 | 0.10 | A |
| 3 | 0.02 | 1.35 | 0.02 | A |
| 4 | 0.08 | 1.47 | 0.09 | A |
| 5 | 0.00 | 0.00 | 0.00 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 299.59 | 4.99 | 0.00 | 3235.01 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 54.92 | 234.68 | 0.00 | 2710.39 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 214.65 | 79.88 | 0.00 | 2661.93 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 279.56 | 0.00 | 1601.28 | 0.000 | 0.00 | 0.000 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.472 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

# 2021 observed traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday PM Peak Hour | 2021 observed traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.37 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 295.00 | 100.000 |
| 3 | FLAT | ✓ | 0.00 | 100.000 |
| 4 | FLAT | ✓ | 205.00 | 100.000 |
| 5 | FLAT | ✓ | 30.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 10.000 | 5.000 | 45.000 | 220.000 | 15.000 |
| | 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 4 | 25.000 | 165.000 | 5.000 | 0.000 | 10.000 |
| | 5 | 5.000 | 0.000 | 10.000 | 15.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.03 | 0.02 | 0.15 | 0.75 | 0.05 |
| | 3 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 4 | 0.12 | 0.80 | 0.02 | 0.00 | 0.05 |
| | 5 | 0.17 | 0.00 | 0.33 | 0.50 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.09 | 1.23 | 0.10 | A |
| 3 | 0.00 | 0.00 | 0.00 | A |
| 4 | 0.08 | 1.44 | 0.08 | A |
| 5 | 0.02 | 2.23 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 294.60 | 29.93 | 0.00 | 3211.34 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 264.62 | 0.00 | 2684.02 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 204.67 | 29.96 | 0.00 | 2705.28 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 29.93 | 209.67 | 0.00 | 1648.45 | 0.018 | 0.02 | 2.223 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.224 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.224 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.224 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.226 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.226 | A |

PLANPLUS 思顧
CONSULTANCY 諮問

# Section 12A Application for Rezoning from "Residential (Group B)" & "Green Belt" to "Other Specified Uses (Religious Institution with Columbarium)" Zone for Puguangming Temple and Columbarium (Proposal 2) at Lot Nos. 2 & 671 in D.D.181 in Tai Wai, Sha Tin, New Territories

## Planning Application No. Y/ST/49

## Further Information 13

**June 2023**

Reference : PPC-PLG-10053b

## Responses-to-Comments

<table>
<tr><th>Item</th><th>Departmental Comments</th><th>Applicant's Responses</th></tr>
<tr><td colspan="3">1. Comments from Transport Department received on 19.6.2023</td></tr>
<tr><td>2.</td><td>In the absence of FEHD's confirmation, I have assessed the application based on the number and types of the niches in the information pack provided to TD in November 2017 (the Information Pack). Our findings are:<br><br><table><tr><td></td><td>Sold Niche</td><td>Interred Niche</td><td>Unsold Niche</td></tr><tr><td>This application</td><td>1,779</td><td>319</td><td>3,000</td></tr><tr><td>Information Pack</td><td>14,540</td><td>320</td><td>1,722</td></tr></table></td><td>Noted.</td></tr>
<tr><td>3.</td><td>As the captioned application includes sold niches and unsold niches, I have the following comments on the Traffic Impact Assessment (TIA) report from traffic engineering point of view:-<br><br>1. Our previous comment item 1 via memo ref. (NMXSS) dated 10 May 2023 in the same series remains valid.<br><br>Table 3.4 refers. The sub-total trip generation/attraction for the adjacent development is found underestimated by comparing the total of the individual trip generation. For instance, the trip generation is calculated to be 776 pcu/hr (= 135 +16 +22+ 345 + 205 +53) instead of 603 pcu/hr. please review the trip generation/attraction and hence the traffic impact arising from the columbarium and adjacent development; and</td><td>Please note that the subtotal of the trips mentioned in Table 3.4 refers to <u>Development D only</u> (For instance: 345 + 205 + 53 = 603 pcu/hr for AM peak generation). Therefore, the trips of all adjacent developments A to D (For instance: 135(A) + 16(B) + 22(C) + 603(D) = 776 pcu/hr for AM peak generation) were already used and the assessment is not underestimated. A row for trips of all adjacent developments is added for your easy reference.</td></tr>
</table>

<table>
<tr>
<td></td>
<td>2. Please provide management plan for record and consistency purpose.</td>
<td>
Table 3.4 Adopted Trip Gen. & Att. of Adjacent Developments
<table>
<tr><th rowspan="3">Ref</th><th rowspan="3">Nos. of Units</th><th rowspan="3">Avg. Flat Size (m²)</th><th colspan="4">Adopted Trips (AM Peak)</th><th colspan="4">Adopted Trips (PM Peak)</th></tr>
<tr><th colspan="2">Trip Rate (pcu/hr/flat)</th><th colspan="2">Trips (pcu/hr)</th><th colspan="2">Trip Rate (pcu/hr/flat)</th><th colspan="2">Trips (pcu/hr)</th></tr>
<tr><th>Gen.</th><th>Att.</th><th>Gen.</th><th>Att.</th><th>Gen.</th><th>Att.</th><th>Gen.</th><th>Att.</th></tr>
<tr><td>A</td><td>1,325</td><td>39.4</td><td>0.1021</td><td>0.0709</td><td>135</td><td>94</td><td>0.0415</td><td>0.0464</td><td>55</td><td>61</td></tr>
<tr><td>B</td><td>216</td><td>55.6</td><td>0.0761</td><td>0.0573</td><td>16</td><td>12</td><td>0.0350</td><td>0.0451</td><td>8</td><td>10</td></tr>
<tr><td>C</td><td>288</td><td>50.3</td><td>0.0761</td><td>0.0573</td><td>22</td><td>17</td><td>0.0350</td><td>0.0451</td><td>10</td><td>13</td></tr>
<tr><td rowspan="4">D</td><td>3,090</td><td>61.6</td><td>0.1117</td><td>0.0729</td><td>345</td><td>225</td><td>0.0454</td><td>0.0551</td><td>140</td><td>170</td></tr>
<tr><td colspan="2" rowspan="2">Retail (GFA 62,000m²)</td><td colspan="2">(pcu/hr/100m² GFA)</td><td rowspan="2">205</td><td rowspan="2">207</td><td colspan="2">(pcu/hr/100m² GFA)</td><td rowspan="2">238</td><td rowspan="2">279</td></tr>
<tr><td>0.3307</td><td>0.3342</td><td>0.3839</td><td>0.4504</td></tr>
<tr><td colspan="2" rowspan="2">Post-secondary College (GFA 15,000m²)</td><td colspan="2">(pcu/hr)</td><td rowspan="2">53</td><td rowspan="2">57</td><td colspan="2">(pcu/hr)</td><td rowspan="2">37</td><td rowspan="2">17</td></tr>
<tr><td>53</td><td>57</td><td>37</td><td>17</td></tr>
<tr><td colspan="2">Subtotal of D</td><td>603</td><td>489</td><td colspan="2">Subtotal of D</td><td>415</td><td>466</td></tr>
<tr><td colspan="5">Total</td><td>776</td><td>612</td><td colspan="2">Total</td><td>488</td><td>550</td></tr>
</table>
1) Although Mei Ying Court and Mei Pak Court had been already completed in Year 2017, their trips are still added in assessment as conservative approach since they may not be fully occupied during the Year 2018 survey.<br>
2) Upper limit of the TPDM trip rates is adopted for a conservative approach.<br><br>
As TD's comments are not related to or affected the traffic management plan submitted in April 2023, same management plan (Annex 1 refers) will be submitted together with this R to C and revised TIA (Annex 2 refers) for your record and consistency purpose.
</td>
</tr>
<tr>
<td>4.</td>
<td>Please be advised that my comments are from traffic engineering point of view. As there are issues out of my purview, the applicant should separately seek comments from FEHD and other Government Departments on the Management Plan accordingly.</td>
<td>Noted. Comments from FEHD and other Government Departments would be sought.</td>
</tr>
</table>

| **2. Comments from Food and Environmental Hygiene Department received on 20.6.2023** | | |
|---|---|---|
| 1. | It is noted that the total number of unsold niches (3,000) as specified in table 4.3 in this Further Information 10 does not tally with that under our SI application (Covering only niches unsold as at 30 June 2017). The SI application of the subject PC is still under processing as the applicant has not submitted some documents. | The applicant has submitted a document to update the total number of unsold niches for the SI application (**Annex 3** refers). |

# Annex 1

Traffic Management Plan

# Town Planning Study to Puguangming Temple

## Application for License for Columbarium Use

## Traffic Management Plan
## (Proposal - 2)

**Report**

**April 2023**

**CTA Consultants Limited**
**志達顧問有限公司**

# 1. INTRODUCTION

## 1.1 Objective

1.1.1 This Report is to present a Traffic Management Plan in accordance with Section 97 of the Private Columbaria Ordinance to facilitate the application for license.

1.1.2 This Management Plan covers those approved niches by TPB in 2022 (i.e. **1,779 niches**), together with the proposed niches submitting to TPB (i.e. **3,000 niches**), which gives a total of **4,779 niches**.

1.1.3 CTA Consultants Ltd. ("CTA") was therefore commissioned as the traffic consultant for preparing a Management Plan in supporting the proposal is technically feasible and acceptable. The plan focuses on the following areas:

i) Control of the incoming visitors in an acceptable level.

ii) Visitor Management.

iii) Contingency Plan in the event of fire or other emergency situations

## 1.2 Background

1.2.1 According to information provided by the client, the utilization of niches/tablets is summarized in **Table 1.1** below.

**Table 1.1 Summary of Utilization of Niches/Tablets**

| | No. of Niches/Tablets occupied in 2018 | No. of Niches/Tablets Approved in 2022 | This Application (Including the Approved 1,779 no. |
|---|---|---|---|
| **Niche** | 319 | 1,779 | **4,779** |
| **Tablet** | 345 | | **345** |

## 1.3 Visitor Flows in Ching Ming Festivals

*Ching Ming Festival, 2018*

a) To reveal the traffic conditions on the festival day, a pedestrian survey was conducted during Ching Ming Festival on 5 April 2018.

b) The Surveyed results are shown in **Table 1.2** and **1.3**

c) The total incoming/outgoing daily flow is **595 / 512 visitors** (based on 319 niches and 345 tablets)

d) The incoming/outgoing hourly peak flow is **181/146 visitors**. (based on 319 niches and 345 tablets)

## Table 1.2 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (15 mins Interval)

| 15 mins Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| 800 | 815 | 8 | 0 | 5 | 0 | 13 | 0 |
| 815 | 830 | 5 | 0 | 0 | 0 | 5 | 0 |
| 830 | 845 | 10 | 3 | 8 | 0 | 18 | 3 |
| 845 | 900 | 11 | 0 | 8 | 2 | 19 | 2 |
| 900 | 915 | 16 | 2 | 11 | 0 | 27 | 2 |
| 915 | 930 | 10 | 0 | 3 | 2 | 13 | 2 |
| 930 | 945 | 0 | 2 | 0 | 1 | 0 | 3 |
| 945 | 1000 | 3 | 0 | 8 | 3 | 11 | 3 |
| 1000 | 1015 | 13 | 5 | 8 | 5 | 21 | 10 |
| 1015 | 1030 | 6 | 0 | 7 | 5 | 13 | 5 |
| 1030 | 1045 | 13 | 10 | 6 | 8 | 19 | 18 |
| 1045 | 1100 | 11 | 2 | 12 | 0 | 23 | 2 |
| 1100 | 1115 | 18 | 6 | 21 | 4 | 39 | 10 |
| 1115 | 1130 | 26 | 23 | 24 | 17 | 50 | 40 |
| 1130 | 1145 | 40 | 10 | 21 | 16 | 61 | 26 |
| 1145 | 1200 | 23 | 19 | 8 | 9 | 31 | 28 |
| 1200 | 1215 | 19 | 21 | 16 | 13 | 35 | 34 |
| 1215 | 1230 | 16 | 13 | 2 | 21 | 18 | 34 |
| 1230 | 1245 | 6 | 8 | 10 | 5 | 16 | 13 |
| 1245 | 1300 | 10 | 35 | 3 | 21 | 13 | 56 |
| 1300 | 1315 | 8 | 29 | 8 | 12 | 16 | 41 |
| 1315 | 1330 | 13 | 0 | 10 | 10 | 23 | 10 |
| 1330 | 1345 | 0 | 26 | 6 | 13 | 6 | 39 |
| 1345 | 1400 | 0 | 6 | 5 | 8 | 5 | 14 |
| 1400 | 1415 | 3 | 5 | 7 | 5 | 10 | 10 |
| 1415 | 1430 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1430 | 1445 | 0 | 6 | 2 | 5 | 2 | 11 |
| 1445 | 1500 | 6 | 4 | 4 | 4 | 10 | 8 |
| 1500 | 1515 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1515 | 1530 | 3 | 5 | 7 | 3 | 10 | 8 |
| 1530 | 1545 | 10 | 6 | 8 | 4 | 18 | 10 |
| 1545 | 1600 | 3 | 7 | 10 | 3 | 13 | 10 |
| 1600 | 1615 | 0 | 3 | 0 | 0 | 0 | 3 |
| 1615 | 1635 | 3 | 7 | 3 | 3 | 6 | 10 |
| 1635 | 1645 | 3 | 2 | 2 | 4 | 5 | 6 |
| 1645 | 1700 | 0 | 8 | 0 | 5 | 0 | 13 |
| 1700 | 1715 | 0 | 9 | 0 | 7 | 0 | 16 |
| 1715 | 1730 | 0 | 4 | 0 | 2 | 0 | 6 |
| 1730 | 1745 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 1800 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | | **328** | **286** | **267** | **226** | **595** | **512** |

**Table 1.3 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (1 hour Interval)**

| 1 hour Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| **800** | **900** | 34 | 3 | 21 | 2 | 55 | 5 |
| **815** | **915** | 42 | 5 | 27 | 2 | 69 | 7 |
| **830** | **930** | 47 | 5 | 30 | 4 | 77 | 9 |
| **845** | **945** | 37 | 4 | 22 | 5 | 59 | 9 |
| **900** | **1000** | 29 | 4 | 22 | 6 | 51 | 10 |
| **915** | **1015** | 26 | 7 | 19 | 11 | 45 | 18 |
| **930** | **1030** | 22 | 7 | 23 | 14 | 45 | 21 |
| **945** | **1045** | 35 | 15 | 29 | 21 | 64 | 36 |
| **1000** | **1100** | 43 | 17 | 33 | 18 | 76 | 35 |
| **1015** | **1115** | 48 | 18 | 46 | 17 | 94 | 35 |
| **1030** | **1130** | 68 | 41 | 63 | 29 | 131 | 70 |
| **1045** | **1145** | 95 | 41 | **78** | 37 | 173 | 78 |
| **1100** | **1200** | 107 | 58 | 74 | 46 | **181** | 104 |
| **1115** | **1215** | **108** | 73 | 69 | 55 | 177 | 128 |
| **1130** | **1230** | 98 | 63 | 47 | 59 | 145 | 122 |
| **1145** | **1245** | 64 | 61 | 36 | 48 | 100 | 109 |
| **1200** | **1300** | 51 | 77 | 31 | **60** | 82 | 137 |
| **1215** | **1315** | 40 | 85 | 23 | 59 | 63 | 144 |
| **1230** | **1330** | 37 | 72 | 31 | 48 | 68 | 120 |
| **1245** | **1345** | 31 | **90** | 27 | 56 | 58 | **146** |
| **1300** | **1400** | 21 | 61 | 29 | 43 | 50 | 104 |
| **1315** | **1415** | 16 | 37 | 28 | 36 | 44 | 73 |
| **1330** | **1430** | 9 | 37 | 25 | 29 | 34 | 66 |
| **1345** | **1445** | 9 | 17 | 21 | 21 | 30 | 38 |
| **1400** | **1500** | 15 | 15 | 20 | 17 | 35 | 32 |
| **1415** | **1515** | 18 | 10 | 20 | 15 | 38 | 25 |
| **1430** | **1530** | 15 | 15 | 20 | 15 | 35 | 30 |
| **1445** | **1545** | 25 | 15 | 26 | 14 | 51 | 29 |
| **1500** | **1600** | 22 | 18 | 32 | 13 | 54 | 31 |
| **1515** | **1615** | 16 | 21 | 25 | 10 | 41 | 31 |
| **1530** | **1630** | 16 | 23 | 21 | 10 | 37 | 33 |
| **1545** | **1645** | 9 | 19 | 15 | 10 | 24 | 29 |
| **1600** | **1700** | 6 | 20 | 5 | 12 | 11 | 32 |
| **1615** | **1715** | 6 | 26 | 5 | 19 | 11 | 45 |
| **1630** | **1730** | 3 | 23 | 2 | 18 | 5 | 41 |
| **1645** | **1745** | 0 | 21 | 0 | 14 | 0 | 35 |
| **1700** | **1800** | 0 | 13 | 0 | 9 | 0 | 22 |

## 2. TRAFFIC & PUBLIC TRANSPORT ARRANGEMENT AND/OR MANAGEMENT

### 2.1 The Transport Plan

**The Plan consists of:**

**a) Admission Control**

- **Pre–Registration**
- **Implementation Period**

**b) Visitor Management**

**c) Contingency Plan in the event of fire or other emergency situations**

### 2.2 Traffic & Public Transport Arrangement and/or Management

#### 2.2.1 *Pre–Registration*

i) The Visitors coming to Puguangming Temple in Festival periods have to be restricted into 10 Sections, each section for 1 hour:

- From 8 am to 6 pm, each section will last for 1 hour.

ii) People coming for niches / tablets has to be **Pre–Registration**.

iii) Pre-Registration will be by both hotline booking and on-line booking.

iv) Each section will be restricted to maximum **250 people**, which is able to give a total of maximum **2,500 people a day**.

#### 2.2.2 *Implementation Period*

i) This Plan is to be executed on the Festival Day plus **3 weekends** before the festival day and **3 weekends** after the festival day.

#### 2.2.3 *Existing Footpath*

i) No car bus is allowed to access the site.

ii) As advised by AP, the EVA will not be necessary.

iii) Thus, the existing footpath will remain as present and the visitors will use this road to walk to the columbarium.

iv) The existing footpath is shown in **Figure FP 1**.

## 2.3 Pedestrian Management, Admission Control and Holding Capacity for Visitors

### 2.3.1 *Pedestrian Management and Admission Control*

i) The Management and Controlling Mechanism is as follows:

a) A Reception Area is placed at the entrance for management and advising the visitors to follow the visitor guidelines and rules before entering the columbarium

b) The staff of the Temple will divert all in-coming visitors to the holding area first before releasing them to the Columbarium Building

c) If the Columbarium Building is found over-crowded, the staff will let people to wait inside the holding area temporarily until the over-crowding is relieved

d) The Management and Controlling Mechanism is illustrated in **Figure TP 2.1**.

### 2.3.2 *Holding Capacity*

i) Referring to **Figure TP 2.2**, there will be 3 places (A, B and C) proposed forholding visitors to let them waiting for queuing before entering the building.

ii) **Figure TP 2.3** shows the conditions of the existing places.

iii) Base on the proposed Management Plan, , the maximum number of visitors to be held at any one time in the Temple during the festival days will be **250 persons**

iv) Holding Area Outside the Building

Holding area of about **717m$^2$** (Place A (657m$^2$) + Place B (60m$^2$**)** is provided as shown in **Figure TP 2.2**. These spaces can hold **1,195 visitors** as shown in the calculation below:

*Calculation of Person can be held in the Holding Area*
*Size of holding area = 717m$^2$*
*Space per person = 0.6m$^2$*
*Nos. of persons accommodated = 717 / 0.6*
*= 1,195 persons*

v) Holding Area Inside the Building

The GFA of the building (certified by AP "Chaterwealth Professional Limited") is 1,415.853. The UFA of the building as advised by Client is 975.92 $m^2$ (~69% of the GFA).

Assume the space that can hold the visitor is only 70% of the UFA, the space within the building available for visitors will then be 683 $m^2$. This space can hold **341 person** as shown in the calculation below:

*Calculation of Person can be held in the Columbarium building*
*UFA of Columbarium = 683 $m^2$*
*Space per person = 2 $m^2$*
*Nos. of person can be accommodated = 683 / 2*
*= 341 persons*

vi) The total number of people the Building can hold is

*1,195 + 341 = **1,536***

vii) The total number of people can be held in the Building is **1,536**, which is greater than the expected demand of **250** and is considered sufficient to meet the expected demand.

## 2.4 Contingency Plan in the event of fire or other emergency situations

2.4.1 The objective is to have a management plan that is able to allow visitors to have a safe arrangement during emergency situations, including in the event of fire.

2.4.2 Based on the discussion in Section 2.3.2, the expected maximum number of people held in the Temple will be **250**. The emergency plan is to try handle these people for emergency situation.

2.4.3 Three places are selected to be the "place of safe" as shown in **Figure TP 2.2**. Place A can hold **1,095** no. of visitors, while Place B and Place C can hold **100** and **125** no of visitors respectively. The total holding capacity is **1,320**. The assessment is illustrated in **Table 2.2** below:

**Table 2.2 Holding Capacity for Emergency**

| Place | Area (sq. m.) | Holding capacity (Area/0.6 sq. m.) | Remarks |
|---|---|---|---|
| A | 657 | 1,095 | **>250** Acceptable |
| B | 60 | 100 | |
| C | 75 | 125 | |
| | **Total** | **1,320** | |

2.4.4 The total number of people can be held in the places A, B and C is **1,320**, which is greater than the expected demand of **250** and is considered sufficient to meet the expected demand.

2.4.5 The discharge routes from places A, B and C are also shown in **Figure TP 2.4**. The places A, B and C are transit holding areas in the case when the exit to outside is not accessible.

2.4.6 The above calculation is only a theoretical maximum. In reality, people during emergency will leave the site as quickly as possible and people will not choose to stay in the premises. Therefore, the spaces provided during the emergency is much greater than the actual need.

## 3. SUMMARY

3.1 The followings are the summary of the this Traffic Management Plan:

i) The proposed management plan proposes visitors are come by a **Pre-registration Arrangement**.

ii) This Plan is to be executed on the **Festival Day** plus **3 weekends before** the festival day and **3 weekends after** the festival day.

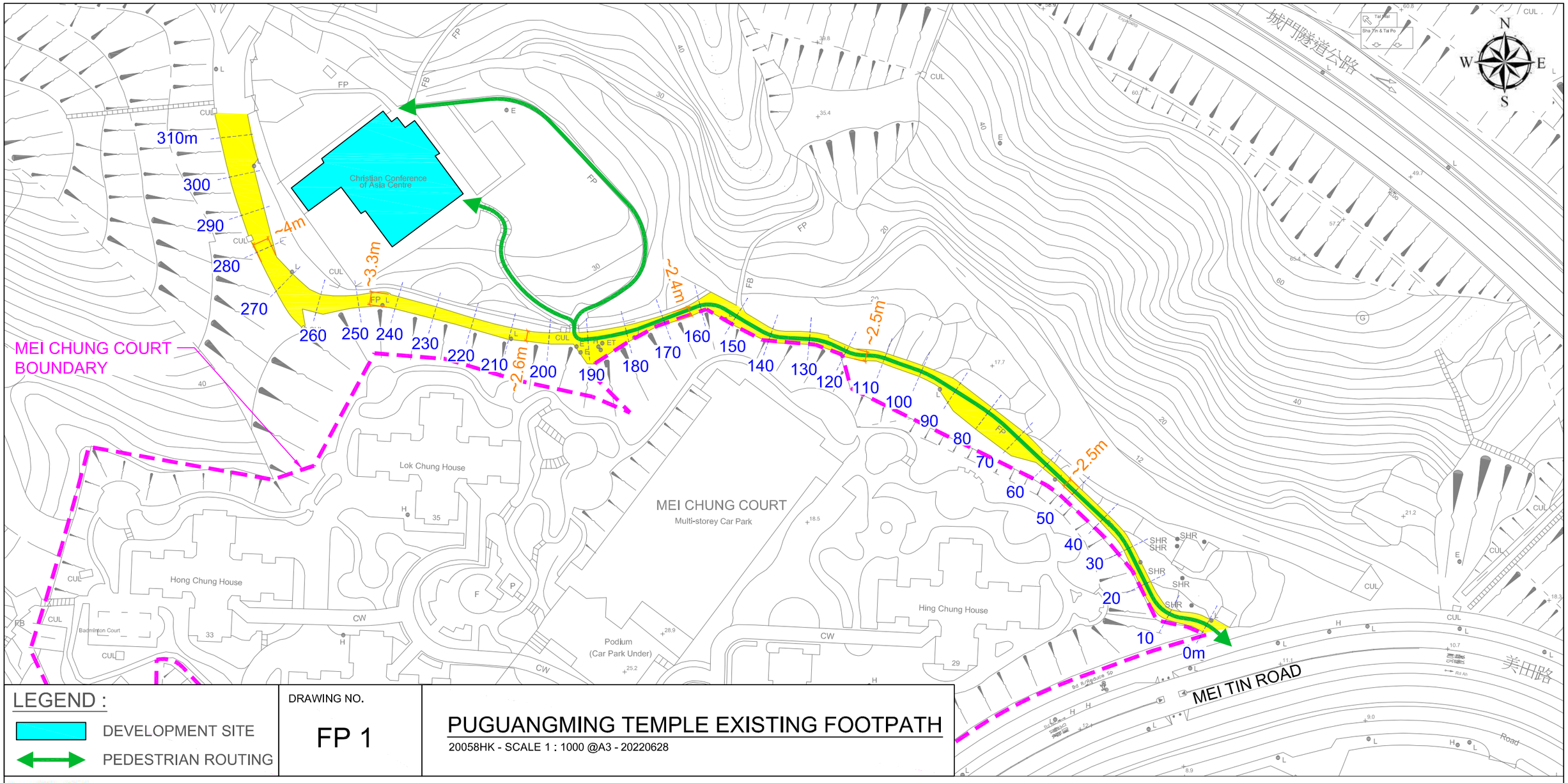
iii) The whole day will be divided into **10 sections**. Each section will only last for **one hour**, and each section will only allow **250 people** to come.

iv) Holding area, as shown in **Figure TP 2.2**, is provided at the Eastern and southern side of Puguangming Temple. This area is acting as a buffer area for:

a) Managing regulate people in entering the Columbarium, and

b) Holding people temporarily during the festival days when the columbarium building is found overcrowded.

v) Three places are designed for "*place of ultimate safe*" in the event of emergency. The arrangement is illustrated in **Figure TP 2.4**.




LEGEND :

DEVELOPMENT SITE

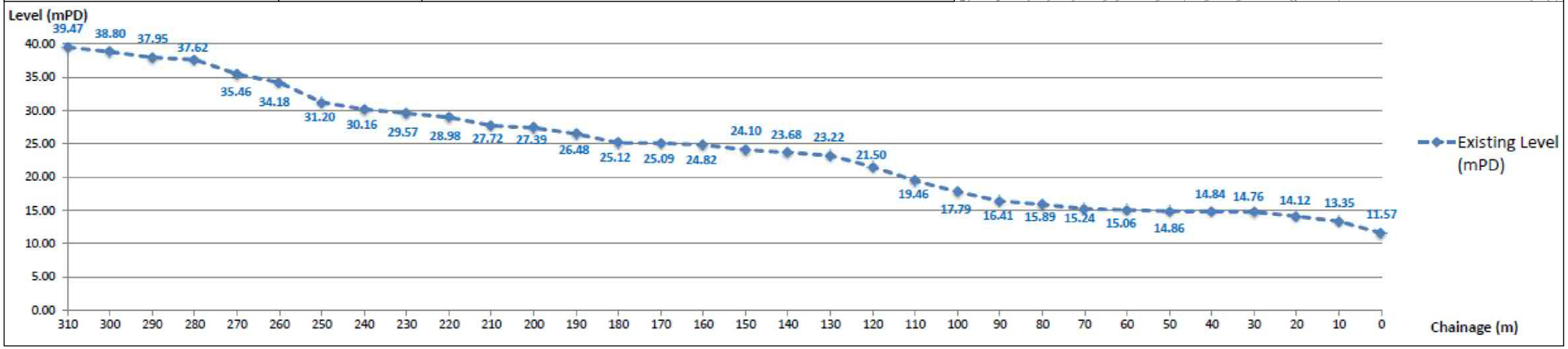
PEDESTRIAN ROUTING

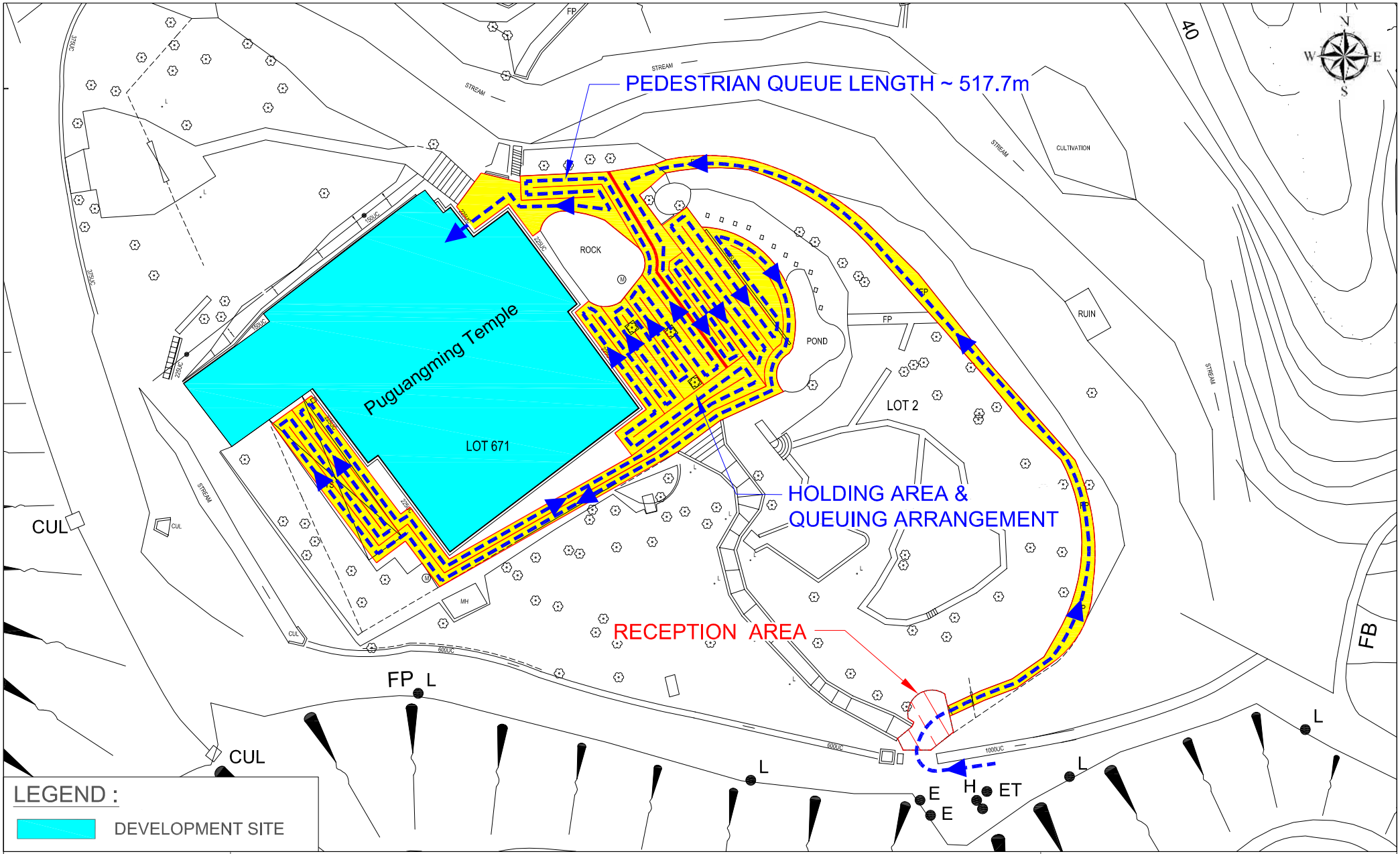
DRAWING NO.

FP 1

# PUGUANGMING TEMPLE EXISTING FOOTPATH

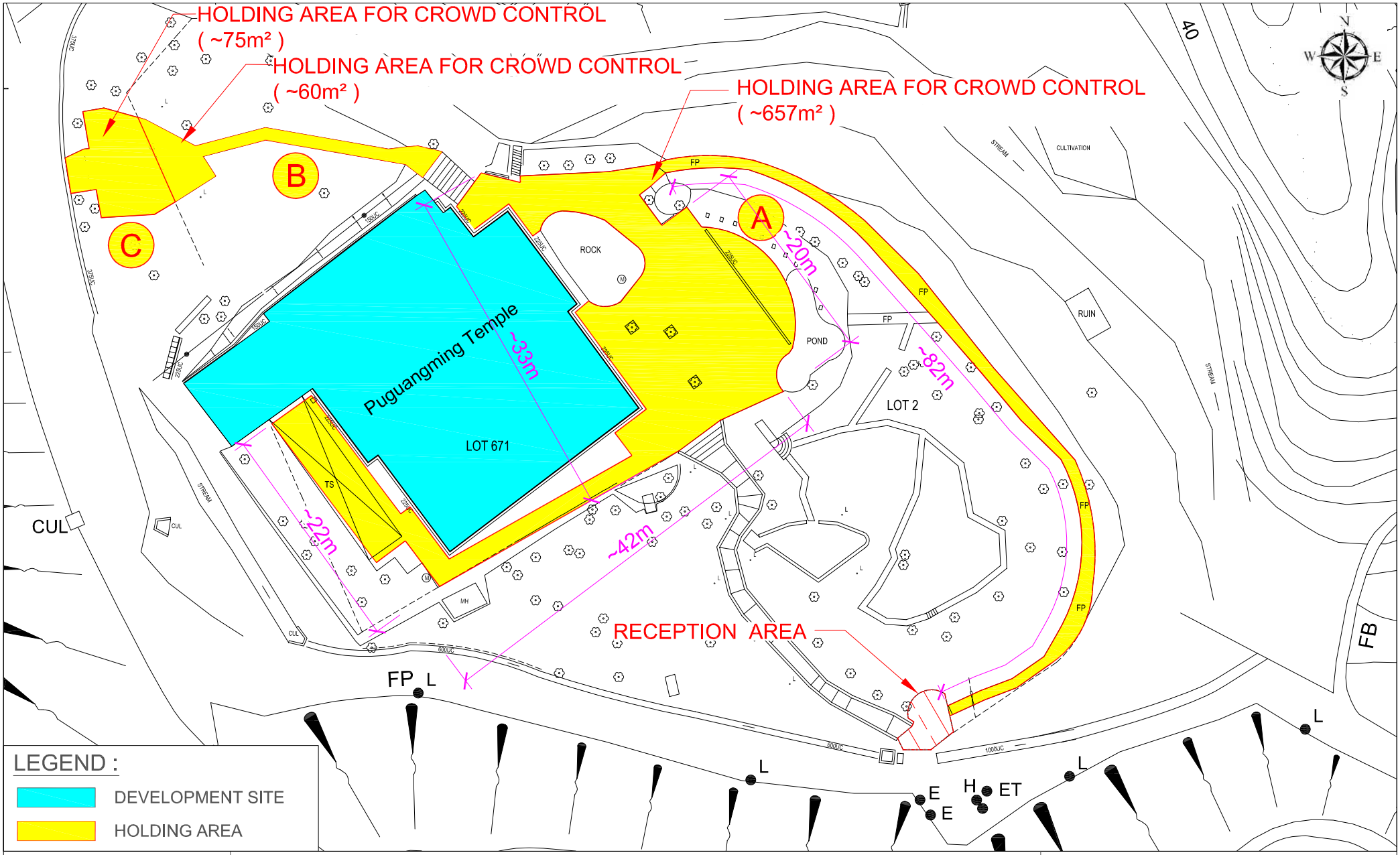
20058HK - SCALE 1 : 1000 @A3 - 20220628






| | | | |
|---|---|---|---|
| FIGURE NO.: TP 2.1 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan | | |
| PROJECT NO.: 20058HK | DRAWING TITLE: THE MANAGEMENT AND CONTROLLING MECHANISM | | |
| SCALE: 1 : 500 @ A4 | DATE: 17 FEB 2023 | | |

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| | |
|---|---|
| FIGURE NO.: TP 2.2 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXPECTED PEDESTRIAN ARRANGEMENT DURING FESTIVAL DAYS |
| SCALE: 1 : 500 @ A4 | DATE: 17 FEB 2023 |

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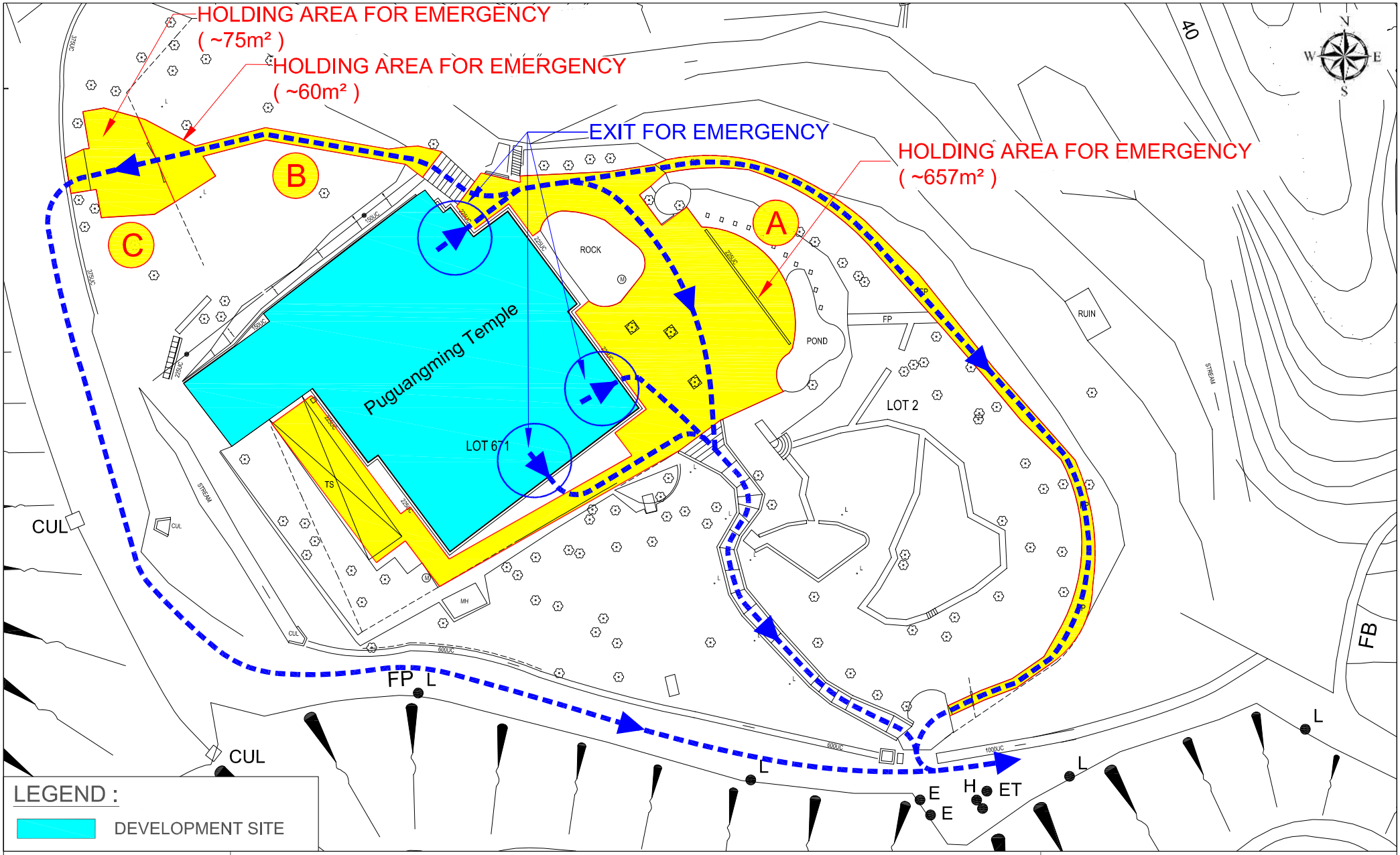


LEGEND :

DEVELOPMENT SITE

| | |
|---|---|
| FIGURE NO.: TP 2.3 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: SITE PHOTO OF EXISTING HOLDING AREA |
| SCALE: 1 : 1000 @A4 | DATE: 17 FEB 2023 |

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| | |
|---|---|
| FIGURE NO.: TP 2.4 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: PROPOSED ARRANGEMENT FOR "PLACE OF ULTIMATE SAFE" IN THE EVENT OF EMERGENCY |
| SCALE: 1 : 500 @A4 | DATE: 01 MAR 2023 |

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# Annex 2

Revised Traffic Impact Assessment report

# Puguangming Temple
# Application for License for Columbarium Use

# Traffic Impact Assessment
# (Proposal - 2)

## Report

**June 2023**

**CTA Consultants Limited**
**志達顧問有限公司**

# 1. INTRODUCTION

## 1.1 Background

1.1.1 CTA Consultants Limited ("CTA") is commissioned by the Applicant to carry out a Traffic Impact Assessment Report in supporting the Planning Application for increasing the number of niches in Puguangming Temple.

1.1.2 The Subject Site is located at Mei Tin Road, Tai Wai as shown in **Figure 1.1**. The Subject Site is at present a columbarium with niches/tablets.

1.1.3 **1,779 niches**, comply with the **Private Columbaria Ordinance (i.e. before the date of 30/6/2017**), was approved by TPB in 2022.

1.1.4 The applicant would like to apply for another **3,000 niches** that will give a total of **4,779 niches**.

1.1.5 According to information provided by the client, the utilization of niches/tablets in 2018 and the current status of the niches are summarized in **Table 1.1** below.

**Table 1.1 Summary of Utilization of Niches/Tablets**

| | No. of Niches/Tablets occupied in 2018 | No. of Niches/Tablets Approved in 2022 | This Application (Including the Approved 1,779 niches |
|---|---|---|---|
| **Niches** | 319 | 1,779 | **4,779** |
| **Tablets** | 345 | - | **345** |

## 1.2 Study Objectives

1.2.1 The main objectives of the study are as follows:

i) to assess the existing traffic conditions in the vicinity of the proposed columbarium development;

ii) to forecast traffic demands on the adjacent road network in the design year 2027 (i.e. Full operation year 2024 + 3 years);

iii) to estimate the likely traffic generated by the proposed development;

iv) to assess the impacts of traffic/ pedestrian generated by the temple in the vicinity;

v) to recommend improvement measures, if necessary, to alleviate any traffic problems on the road network.

## 1.3 Structure of the Report

1.3.1 Following this introductory chapter, there are 7 further chapters.

- **Chapter 2 – Existing Traffic Conditions**
- **Chapter 3 – Future Traffic Conditions**
- **Chapter 4 – Vehicular Traffic Impact Assessment**
- **Chapter 5 – Public Transport Demand**
- **Chapter 6 – Parking Provision**
- **Chapter 7 – Pedestrian Traffic Impact Assessment**
- **Chapter 8 – Summary and Conclusion**

# 2. EXISTING TRAFFIC CONDITIONS

## 2.1 Existing Road Network

2.1.1 The existing road network in the vicinity of the proposed Columbarium is shown in **Figure 2.1**. Visitors are mainly access through Mei Tin Road.

2.1.2 Mei Tin Road is a single 2-lane 2-way Local Road, connecting with Pik Tin Street and Tung Lo Wan Hill Road. It serves as road link providing access for the residential development at Tai Wai.

2.1.3 As shown in **Figure 2.1**, 9 junctions were identified to be critical for assessment of traffic impact due to the proposed Columbarium. They are listed in below **Table 2.1** and their existing junction layout arrangements are shown in **Figures 2.2** to **2.10** respectively.

**Table 2.1 Identified Critical Junctions**

| Ref. | Junction | Type | Figure No. |
|---|---|---|---|
| A | Mei Tin Road / Heung Fan Liu Street | Signal | **2.2** |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | **2.3** |
| C | Mei Tin Road / Chik Fai Street | Signal | **2.4** |
| D | Mei Tin Road / Pik Tin Street | Priority | **2.5** |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | **2.6** |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | Roundabout | **2.7** |
| G | Mei Tin Road / Chik Wan Street | Signal | **2.8** |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | **2.9** |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | Roundabout | **2.10** |

2.1.4 No transport facilities are at present provided in the Puguangming Temple, such as car park, loading/unloading and pick up/drop off space.

2.1.5 Therefore, people accessing the temple will use MTR / GMB /Bus / Taxi / Private Car + Walk

## 2.2 Public Transport Facilities

2.2.1 Puguangming Temple can be accessed by various types of public transports. The Subject Site is about 1,000m away from Tai Wai Railway Station. Therefore, some visitors may prefer to take GMB / buses to get access to the Subject Site.

2.2.2 The details of public transport facilities in the vicinity are shown in **Figure 2.11**. The existing Bus and GMB routes are summarized in **Table 2.2** below.

**Table 2.2 Existing Road-based Public Transport Services in the Vicinity**

| Service | Route | Origin - Destination | Services Day | Frequency (min) |
|---|---|---|---|---|
| Franchised Bus | 46P[1] | Mei Tin – Kwai Fong Railway Station | Mon to Sat, except Public Holiday | 10 – 30 |
| | 80 | Mei Lam – Kwun Tong Ferry | Mon to Sun | 7 – 20 |
| | 80A[1] | Mei Lam - Kwun Tong Ferry | Mon To Fri (except Public Holidays) | Two per day |
| | 81 | Wo Che - Jordan (West Kowloon Station) | Mon to Sun | 10 - 20 |
| | 81S[1] | Mei Tin Estate – Nathan Road (Public Square Street) | Mon to Fri, except Public Holiday | 30 |
| | 82B[1] | Mei Tin – Tai Wai Railway Station | Mon to Fri, except Public Holiday | Two per day |
| | 82K | Mei Lam – Wong Nai Tau | Mon to Sun | 30 – 40 |
| | 283 | Shatin Central – Mei Chung Court (Circular) | Mon to Sun | 10 – 15 |
| | 286P[1] | Mei Chung Court – Cheung Sha Wan | Mon to Fri, except Public Holiday | 15 |
| | 286X | Hin Keng – Sham Shui Po (Circular) | Mon to Sun | 12 – 20 |
| | 288C[1] | Shui Chuen O - Tai Wai Station | Mon to Fri, except Public Holiday | Two per day |
| | 985[1] | Mei Tin Estate (Mei Chi House) – Wan Chai (Hennessy Road) | Sat, except Public Holiday | 8 – 10 |
| | 985A[1] | Mei Tin Estate (Mei Chi House) - Wan Chai | Mon to Fri, except Public Holiday | 8 – 10 |
| | 989[1] | Sai Wan Ho - Fo Tan (Chun Yeung Estate) | Mon to Fri, except Public Holiday | Four per peak period |
| | NA41[1] | Shui Chuen O - Tai Wai Station - HZMB Hong Kong Port | Mon to Sun | One per day |
| GMB | 63A | Mei Chung Court – Tai Wai Station (Circular) | Mon to Sun | 3 – 7 |
| | 63B | Granville Garden – Tai Wai Station (Circular) | Mon to Sun | 6 – 10 |
| | 63K | Mei Tin Estate Public Transport Interchange – Tai Wai Station (Circular) | Mon to Sun | 3 – 7 |
| | 63S[2] | Mei Tin Estate Public Transport Interchange – Mong Kok (Circular) | Mon to Sun | 8 – 15 |

*Note:* [1] *Peak Hour Service only*

[2] *Night Time Service only*

## 2.3 Parking Facilities in the Vicinity

2.3.1 There are 3 numbers of multi-storey car parks in the vicinity of the Subject Site, namely Mei Chung Court, May Shing Court and Mei Lam.

2.3.2 The locations of the 3 car parks and pedestrian routing to the proposed columbarium are shown in **Figures 2.12** and **2.13**.

## 2.4 Traffic Survey

2.4.1 Due to the Social Distancing Rules under the effect of COVID-19, a maximum of 4 people in each group are allowed. Following this Rule, Puguangming Temple only allows a maximum of 4 people to stay at any rooms/apartment at any one time. Thus, it is believed that the no. of visitors and vehicles (between 2019 and 2022) to the temple would be much lower than normal situation.

2.4.2 To give a much more reasonable and reliable base for assessment, the previous traffic survey carried out in Year 2018 is adopted for this Report.

***Ching Ming Festival, 2018***

a) To reveal the traffic conditions on the festival day, a pedestrian survey was conducted during Ching Ming Festival on 5 April 2018.

b) The Surveyed results are shown in **Table 2.3** and **2.4**.

c) The total incoming/outgoing daily flow is **595/512 visitors**

d) The incoming/outgoing hourly peak flow is **181/146 visitors**

## Table 2.3 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (15 mins Interval)

| 15 mins Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| 800 | 815 | 8 | 0 | 5 | 0 | 13 | 0 |
| 815 | 830 | 5 | 0 | 0 | 0 | 5 | 0 |
| 830 | 845 | 10 | 3 | 8 | 0 | 18 | 3 |
| 845 | 900 | 11 | 0 | 8 | 2 | 19 | 2 |
| 900 | 915 | 16 | 2 | 11 | 0 | 27 | 2 |
| 915 | 930 | 10 | 0 | 3 | 2 | 13 | 2 |
| 930 | 945 | 0 | 2 | 0 | 1 | 0 | 3 |
| 945 | 1000 | 3 | 0 | 8 | 3 | 11 | 3 |
| 1000 | 1015 | 13 | 5 | 8 | 5 | 21 | 10 |
| 1015 | 1030 | 6 | 0 | 7 | 5 | 13 | 5 |
| 1030 | 1045 | 13 | 10 | 6 | 8 | 19 | 18 |
| 1045 | 1100 | 11 | 2 | 12 | 0 | 23 | 2 |
| 1100 | 1115 | 18 | 6 | 21 | 4 | 39 | 10 |
| 1115 | 1130 | 26 | 23 | 24 | 17 | 50 | 40 |
| 1130 | 1145 | 40 | 10 | 21 | 16 | 61 | 26 |
| 1145 | 1200 | 23 | 19 | 8 | 9 | 31 | 28 |
| 1200 | 1215 | 19 | 21 | 16 | 13 | 35 | 34 |
| 1215 | 1230 | 16 | 13 | 2 | 21 | 18 | 34 |
| 1230 | 1245 | 6 | 8 | 10 | 5 | 16 | 13 |
| 1245 | 1300 | 10 | 35 | 3 | 21 | 13 | 56 |
| 1300 | 1315 | 8 | 29 | 8 | 12 | 16 | 41 |
| 1315 | 1330 | 13 | 0 | 10 | 10 | 23 | 10 |
| 1330 | 1345 | 0 | 26 | 6 | 13 | 6 | 39 |
| 1345 | 1400 | 0 | 6 | 5 | 8 | 5 | 14 |
| 1400 | 1415 | 3 | 5 | 7 | 5 | 10 | 10 |
| 1415 | 1430 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1430 | 1445 | 0 | 6 | 2 | 5 | 2 | 11 |
| 1445 | 1500 | 6 | 4 | 4 | 4 | 10 | 8 |
| 1500 | 1515 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1515 | 1530 | 3 | 5 | 7 | 3 | 10 | 8 |
| 1530 | 1545 | 10 | 6 | 8 | 4 | 18 | 10 |
| 1545 | 1600 | 3 | 7 | 10 | 3 | 13 | 10 |
| 1600 | 1615 | 0 | 3 | 0 | 0 | 0 | 3 |
| 1615 | 1635 | 3 | 7 | 3 | 3 | 6 | 10 |
| 1635 | 1645 | 3 | 2 | 2 | 4 | 5 | 6 |
| 1645 | 1700 | 0 | 8 | 0 | 5 | 0 | 13 |
| 1700 | 1715 | 0 | 9 | 0 | 7 | 0 | 16 |
| 1715 | 1730 | 0 | 4 | 0 | 2 | 0 | 6 |
| 1730 | 1745 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 1800 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | | **328** | **286** | **267** | **226** | **595** | **512** |

**Table 2.4 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (1 hour Interval)**

| 1 hour Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| **800** | **900** | 34 | 3 | 21 | 2 | 55 | 5 |
| **815** | **915** | 42 | 5 | 27 | 2 | 69 | 7 |
| **830** | **930** | 47 | 5 | 30 | 4 | 77 | 9 |
| **845** | **945** | 37 | 4 | 22 | 5 | 59 | 9 |
| **900** | **1000** | 29 | 4 | 22 | 6 | 51 | 10 |
| **915** | **1015** | 26 | 7 | 19 | 11 | 45 | 18 |
| **930** | **1030** | 22 | 7 | 23 | 14 | 45 | 21 |
| **945** | **1045** | 35 | 15 | 29 | 21 | 64 | 36 |
| **1000** | **1100** | 43 | 17 | 33 | 18 | 76 | 35 |
| **1015** | **1115** | 48 | 18 | 46 | 17 | 94 | 35 |
| **1030** | **1130** | 68 | 41 | 63 | 29 | 131 | 70 |
| **1045** | **1145** | 95 | 41 | **78** | 37 | 173 | 78 |
| **1100** | **1200** | 107 | 58 | 74 | 46 | **181** | 104 |
| **1115** | **1215** | **108** | 73 | 69 | 55 | 177 | 128 |
| **1130** | **1230** | 98 | 63 | 47 | 59 | 145 | 122 |
| **1145** | **1245** | 64 | 61 | 36 | 48 | 100 | 109 |
| **1200** | **1300** | 51 | 77 | 31 | **60** | 82 | 137 |
| **1215** | **1315** | 40 | 85 | 23 | 59 | 63 | 144 |
| **1230** | **1330** | 37 | 72 | 31 | 48 | 68 | 120 |
| **1245** | **1345** | 31 | **90** | 27 | 56 | 58 | **146** |
| **1300** | **1400** | 21 | 61 | 29 | 43 | 50 | 104 |
| **1315** | **1415** | 16 | 37 | 28 | 36 | 44 | 73 |
| **1330** | **1430** | 9 | 37 | 25 | 29 | 34 | 66 |
| **1345** | **1445** | 9 | 17 | 21 | 21 | 30 | 38 |
| **1400** | **1500** | 15 | 15 | 20 | 17 | 35 | 32 |
| **1415** | **1515** | 18 | 10 | 20 | 15 | 38 | 25 |
| **1430** | **1530** | 15 | 15 | 20 | 15 | 35 | 30 |
| **1445** | **1545** | 25 | 15 | 26 | 14 | 51 | 29 |
| **1500** | **1600** | 22 | 18 | 32 | 13 | 54 | 31 |
| **1515** | **1615** | 16 | 21 | 25 | 10 | 41 | 31 |
| **1530** | **1630** | 16 | 23 | 21 | 10 | 37 | 33 |
| **1545** | **1645** | 9 | 19 | 15 | 10 | 24 | 29 |
| **1600** | **1700** | 6 | 20 | 5 | 12 | 11 | 32 |
| **1615** | **1715** | 6 | 26 | 5 | 19 | 11 | 45 |
| **1630** | **1730** | 3 | 23 | 2 | 18 | 5 | 41 |
| **1645** | **1745** | 0 | 21 | 0 | 14 | 0 | 35 |
| **1700** | **1800** | 0 | 13 | 0 | 9 | 0 | 22 |

e) The expected visitor trips on festival days are derived based on the trip rates applied to the proposed number of Niches/Tablets as follows:

**Table 2.5 Expected Visitor Trips (Without implantation of Traffic Management Plan)**

| Existing | | Approved | | This Application (Including the Approved 1,779 no. | |
|---|---|---|---|---|---|
| **No. of Niches** | **Peak Flow (ped/hr)** | **No. of Niches** | **Flow (ped/hr)** | **No. of Niches** | **Flow (ped/hr)** |
| 319 | 108 | 1,779 | 602 | **4,779** | **1.617** |

## 2.5 Traffic Flows at Ching Ming Festival

2.5.1 Traffic surveys in the form of manual classified counts were also conducted at the above-mentioned critical junctions in **Table 2.1**. The 2018 observed traffic flows are shown in **Figure 2.14**. Existing operational performance of the critical junctions are listed in **Table 2.7** below.

## 2.6 Traffic Flows at Weekday

2.6.1 Traffic surveys in the form of manual classified counts were also conducted at the above-mentioned critical junctions in **Table 2.1** on normal weekday. The 2021 observed traffic flows are shown in **Figure 2.15**.

2.6.2 Due to the COVID-19, the surveyed traffic flows may be much less that of the normal conditions. Therefore, additional surveys are carried at the ATC Core station 5002 (at Shatin Road) to try to find out "corrected" factor. **Table 2.6** gives the surveyed results as compared to the ATC Core station 5002.

**Table 2.6 Derivation of COVID-19 Factor**

| | Weekday Flow (Veh/hr) | | | | |
|---|---|---|---|---|---|
| | South Bound | | North Bound | | Total |
| | AM Peak | PM Peak | AM Peak | PM Peak | |
| **ATC Core station 5002 (Year 2018)** | 2,730 | 2,400 | 2,470 | 2,280 | - |
| **Growth Factor Flow from 2018 to 2021 (1)** | 2,813 | 2,473 | 2,545 | 2,349 | **10,179** |
| **Surveyed Flow** | 2,482 | 2,297 | 2,084 | 2,201 | **9,064** |
| **COVID-19 Factor** | | | | | **1.12** |

*Note (1): The growth factor = **1.0%** (please refer to **Section 3.3**)*

*(2): ATC 2019 not adopted due to the traffic flows may affected by public meetings and social events in Year 2019*

2.6.3 The COVID-19 Factor of **1.12** is then applied to the surveyed traffic flows in **Figure 2.15** to give the COVID-19 corrected surveyed traffic flows shown in **Figure 2.16** for the use in the later section of this report. Existing operational performance of the critical junctions are listed in **Table 2.7** below.

**Table 2.7 Operational Performance of Identified Critical Junctions in Observed Year**

| Ref. | Junction | Method of Control | Year 2018 (Observed) RC/DFC[(1)] | Year 2021 (COVID-19 Corrected) RC/DFC[(1)] | |
|---|---|---|---|---|---|
| | | | Festival Day | Weekday | |
| | | | Peak | AM Peak | PM Peak |
| A | Mei Tin Road / Heung Fan Liu Street | Signal | >+100% | +85% | >+100% |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | >+100% | >+100% | +79% |
| C | Mei Tin Road / Chik Fai Street | Signal | +60% | +90% | +86% |
| D | Mei Tin Road / Pik Tin Street | Priority | 0.21 | 0.35 | 0.22 |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | >+100% | >+100% | >+100% |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | Roundabout | 0.34 | 0.43 | 0.42 |
| G | Mei Tin Road / Chik Wan Street | Signal | >+100% | +60% | +97% |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | >+100% | +84% | +70% |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | Roundabout | 0.13 | 0.09 | 0.09 |

*Note: (1) RC = Reserve Capacity for signal junction*

*DFC = Design Ratio of Flow to Capacity for Priority Junction or Roundabout*

2.6.4 The assessment results in **Table 2.7** indicate that all critical junctions are at present operating with ample capacities.

# 3. FUTURE TRAFFIC CONDITIONS

## 3.1 The proposed Management Plan

3.1.1 The columbarium will be operated under a Management Plan "**Traffic Management Plan**" submitted separately.

3.1.2 The plan will base on a Pre-registration arrangement. The arrangement is as follows:

a) Pre–Registration

i) The Visitors coming to Puguangming Temple in Festival periods has to be restricted into 10 Sections, each section for 1 hour:

ii) From 8 am to 6 pm, each section will last for 1 hour.

iii) People coming has to be **Pre–Registration**.

iv) Each section will be restricted to **250 people**, which is able to give a total of **2,500 people a day**.

b) Implementation Period

i) This Plan is to be executed on the Ching Ming and Chung Yeung Festival Day plus **3 weekends before the festival day** and **3 weekends after the festival day**.

3.1.3 The proposed **250 people per hour** is much less than the expected no. of people of **602** per hour for the approved 1,779 no. of niches as shown in **Table 2.5.**

## 3.2 Design year

3.2.1 It is anticipated that the proposed columbarium will be in full operation in 2024. In order to assess the impact of the development related traffic on the local road network, it is necessary to forecast the traffic flows for 2027, the adopted design year (3 years beyond full operation year). This is also the strategic study year currently adopted by the Hong Kong Government for the overall long-term planning of Hong Kong's transport system.

## 3.3 Reference Traffic Flows

3.3.1 To estimate the 2027 reference traffic flows (without the proposed development) during peak festival days in the local road network, an appropriate growth factor has to be identified for the area in the first instance.

3.3.2 The following approaches have been adopted in order to derive a growth factor in this district.

*Historical Trend*

3.3.3 Numerous of traffic count stations are located in the vicinity of the proposed development. The traffic counts reported in the Annual Traffic Census (ATC), which is published by Transport Department, over a period of six years, i.e. 2014 to 2019 are summarized in **Table 3.1**.

**Table 3.1 Historical Traffic Data from Annual Traffic Census (ATC)**

| ATC Stn | Road Name | Annual Average Daily Traffic (AADT) | | | | | | Avg. Annual Growth Rate |
|---|---|---|---|---|---|---|---|---|
| | | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| 5417 | Mei Tin Road (Che Kung Miu Road - Tsuen Nam Road) | 35,750 | 38,760 | 39,340* | 39,450* | 39,600* | 41,140 | 2.85% |
| 5212 | Hung Mui Kuk Road Che Kung Miu Road - Tin Sam Street) | 27,250 | 27,880* | 28,300* | 28,370* | 32,110* | 31,140 | 2.70% |
| 5449 | Tai Po Rd – Tai Wai (Shing Ho Rd – Mei Tin Rd) | 9,770 | 9,120 | 9,220* | 9,160* | 9,310* | 7,860 | -4.26% |
| 5617 | Mei Tin Rd (Tai Po Rd – Tai Wai – Tsuen Nam Rd) | 30,830* | 28,730 | 28,760 | 28,840* | 28,940* | 28,190* | -1.77% |
| 6012 | Hung Mui Kuk Road (Lion Rock Tunnel Road - Tin Sam Street) | 30,320* | 31,010* | 31,480* | 32,240 | 33,620 | 33,590* | 2.07% |
| 6614 | Pik Tin St (Mei Tin Rd – End) | 2,890 | 3,020 | 3,000 | 2,910 | 2,640 | 3,050 | 1.08% |
| **TOTAL** | | **73,810** | **71,880** | **72,460** | **73,150** | **74,510** | **72,690** | **-0.31%** |

***Note: *AADT estimated by Growth factor***

*2019-Based TPEDM planning data*

3.3.4 Reference has also been made to the "2019-Based TPEDM planning data" published by Planning Department for years 2019 and 2031. The average annual growth rates in terms of population and employment from 2019 to 2031 are shown in **Table 3.2**.

**Table 3.2 2019-based Population and Employment Growth from 2019 to 2031**

| Sha Tin District | | | | |
|---|---|---|---|---|
| Data | Year | | | Average Annual Growth Rate |
| | 2019 | 2026 | 2031 | |
| **Population** | 483,000 | 493,750 | 461,100 | -0.39% |
| **Employment** | 200,050 | 186,250 | 179,400 | -0.90% |
| **Total** | **683,050** | **680,000** | **640,500** | **-0.53%** |

3.3.5 From **Table 3.2**, it is found that the average annual growth rates of population and employment in Sha Tin from year 2019 to 2031 are -0.53% per annum.

*Adopted Growth Rate*

3.3.6 A.A.D.T. of ATC indicates that the traffic flows in the local road network have an decreasing trend with annual growth rate of -0.31% during past years 2014 - 2019.

3.3.7 Whilst, the planning data indicates that the population and employment in the area are expected to develop with annual growth rate of -0.53% from 2019 to 2031.

3.3.8 For a conservative approach, the annual growth rate of **+1.0%** p.a. is adopted, which represents the strategic growth of traffic on the main roads in Tai Wai. It is deemed sufficient to allow any unexpected future growth as a result of some changes related to land use or redevelopment in the area.

## 3.4 Traffic Generations of Adjacent New Developments

3.4.1 To fully reflect the growth traffic, trip generation of the future vicinity developments have been considered. According to information from Town Planning Board and on-site observation, 4 numbers of approved/ constructed residential developments located at Tai Wai Area have been included in this TIA study. The locations are shown in **Figure 3.1**. and tabled in Table 3.3 below:

**Table 3.3 Adjacent Developments**

| Ref | Development | GFA ($m^2$) | Nos. of Units | Avg. Flat Size ($m^2$) |
|---|---|---|---|---|
| A | Residential Dev at Various Lots in D.D. 181, Heung Fan Liu | 52,156 | 1,325 | 39.4 |
| B | Mei Ying Court | ~12,000 | 216 | 55.6 |
| C | Mei Pak Court | ~14,500 | 288 | 50.3 |
| D | Tai Wai Station Property Development | Residential: 190,480<br>Retail: 62,000<br>Post-secondary College: 15,000 | 3,090 | 61.6 |

3.4.2 The estimation on trip generations and attractions of the adjacent residential development is based on the information from the application. **Table 3.4** shows the summary of the AM and PM Peak Hour trip of those planned developments.

**Table 3.4 Adopted Trip Gen. & Att. of Adjacent Developments**

| Ref | Nos. of Units | Avg. Flat Size ($m^2$) | Adopted Trips (AM Peak) | | | | Adopted Trips (PM Peak) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Trip Rate (pcu/hr/flat) | | Trips (pcu/hr) | | Trip Rate (pcu/hr/flat) | | Trips (pcu/hr) | |
| | | | Gen. | Att. | Gen. | Att. | Gen. | Att. | Gen. | Att. |
| A | 1,325 | 39.4 | 0.1021 | 0.0709 | **135** | **94** | 0.0415 | 0.0464 | **55** | **61** |
| B | 216 | 55.6 | 0.0761 | 0.0573 | **16** | **12** | 0.0350 | 0.0451 | **8** | **10** |
| C | 288 | 50.3 | 0.0761 | 0.0573 | **22** | **17** | 0.0350 | 0.0451 | **10** | **13** |
| D | 3,090 | 61.6 | 0.1117 | 0.0729 | **345** | **225** | 0.0454 | 0.0551 | **140** | **170** |
| D | Retail (GFA 62,000$m^2$) | | (pcu/hr/100$m^2$ GFA) | | **205** | **207** | (pcu/hr/100$m^2$ GFA) | | **238** | **279** |
| | | | 0.3307 | 0.3342 | | | 0.3839 | 0.4504 | | |
| D | Post-secondary College (GFA 15,000$m^2$) | | (pcu/hr) | | **53** | **57** | (pcu/hr) | | **37** | **17** |
| | | | 53 | 57 | | | 37 | 17 | | |
| | ***Subtotal of D*** | | | | ***603*** | ***489*** | ***Subtotal of D*** | | ***415*** | ***466*** |
| **Total** | | | | | **776** | **612** | **Total** | | **488** | **550** |

*1) Although Mei Ying Court and Mei Pak Court had been already completed in Year 2017, their trips are still added in assessment as conservative approach since they may not be fully occupied during the Year 2018 survey.*
*2) Upper limit of the TPDM trip rates is adopted for a conservative approach.*

3.4.3 For conservative approach, the traffic generation/ attraction of adjacent development during PM peak hour on normal weekdays is included in the 2027 reference traffic flows. The reference traffic in year 2027 is derived following the equation below:

**2027 Reference Flows (Without Proposed Development)** = **2018 Observed Flows (Ching Ming Festival)** x **Adopted Growth Factor (i.e. +1.0% p.a. for 9 years[(1)])** + **Traffic Flows of Adjacent Planned Development (i.e. Sites A+B+C+D)**

**2027 Reference Flows (Without Proposed Development)** = **2021 Observed Flows (Weekday)** x **Adopted Growth Factor (i.e. +1.0% p.a. for 6 years[(1)])** + **Traffic Flows of Adjacent Planned Development (i.e. Sites A+B+C+D)**

3.4.4 The 2027 reference traffic flows are presented in **Figures 3.2** and **3.3**.

## 3.5 Traffic Generations and Attractions of Proposed Columbarium Development

3.5.1 Based on the pre-registration arrangement and allowable no. of visitors is 250 visitors per hour for 10 sections a day.

3.5.2 As mentioned in the Traffic Management Plan, the Expected Visitors under the management plan is shown in **Table 3.5**.

**Table 3.5 Expected Visitor Trip under the Management Plan**

| Date | Visitor | Peak hour flow (ppl/hr) | |
|---|---|---|---|
| | | In | out |
| **Festival Days** | 10 Sections<br>Each 1 hr = 250 | 250 | 250 |
| | Daily = 2,500 | | |

***Modal Split***

3.5.3 A modal split survey has been conducted on the existing columbarium users and shown in **Table 3.6**.

**Table 3.6 Modal Split for Visitors to the Proposed Columbarium**

| Transport Mode | Attraction/ Generation |
|---|---|
| Franchised Bus | 26% |
| GMB | 27% |
| Car | 15% |
| Taxi | 19% |
| Walk | 13% |
| **Total** | 100% |

***Assessment on Public Transport***

3.5.4 Based on the peak hour person trips in **Tables 2.3** and **2.4**, the Net increase of visitors would be 250 - 181 = **69 visitors in AM Peak (entering the Site)** and 250 - 146 = **104 visitors in Noon/PM Peak (leaving the Site)**. And also based on the modal split in **Table 3.5**, the net increase of peak hour person trips by different modes of transports are derived in **Table 3.7**.

**Table 3.7 Net Increase of Peak Hour Person Trips of the Proposed Columbarium**

| Transport Mode | Peak Hour Person Trips | | |
|---|---|---|---|
| | Modal Split | Peak Attraction (To Temple) | Peak Generation (Leaving Temple) |
| Franchised Bus | 26% | 18 | 27 |
| GMB | 27% | 19 | 29 |
| Car | 15% | 11 | 16 |
| Taxi | 19% | 14 | 20 |
| Walk | 13% | 7 | 12 |
| **Total** | **100%** | **69** | **104** |

3.5.5 By applying the assumed vehicle capacity for different transport modes to peak hour person trips for trip generations for conservative approach, the **net** increase of peak hour traffic flows (in pcu/hr) generated by proposed columbarium are shown in **Table 3.8**.

**Table 3.8 Net Increase of Traffic Generation and Attraction of the Proposed Columbarium**

| Transport Mode | Occupancy (in person) | Peak Hour Trip Generations | |
|---|---|---|---|
| | | Peak Attraction (To Temple) | Peak Generation (Leaving Temple) |
| Franchised Bus | 120 | 0 | 0 |
| GMB | 19 | 0 | 0 |
| Car | 3 | 4 | 6 |
| Taxi | 3 | 5 | 7 |
| **Total** | - | **9** | **13** |

*Remarks:* *(1) Demand of Franchised Bus& GMB could be satisfied by existing services (refer to Chapter 5)*
*(2) The average occupancy of a private car assumes 3 persons*
*(3) The average occupancy of a taxi assumes 3 passengers*

3.5.6 Therefore, the estimated peak hour traffic generation of the proposed columbarium in festival day will be **9 pcus in** / **13 pcus out**.

3.5.7 It is understood that the visitors would mostly come to the columbarium during the Ching Ming/Chung Yeung festival and the weekends before/after these festival days. The visitors coming to columbarium during weekdays would not be high. The trips of in weekday would be lower than festival days/ weekend. Therefore, **15 pcus in** / **15 pcus out** would be adopted as the traffic generation of the proposed columbarium in normal weekday.

## 3.6 Design Traffic Forecast

3.6.1 The traffic generated from the proposed development was then assigned to the road network. After that, the development traffic flows were then superimposed onto the 2027 reference traffic flows (without proposed development) as shown in **Figures 3.2** and **3.3** to derive the 2027 design traffic forecasts (with proposed columbarium).

**2027 Design Flows (with proposed developments)** = **2027 Reference Flows (without Proposed Development)** + **Proposed Columbarium Traffic**

3.6.2 The 2027 peak hour design traffic flows (with proposed Puguangming Temple) are shown in **Figures 3.4** and **3.5**.

# 4. VEHICULAR TRAFFIC IMPACT ASSESSMENT

## 4.1 Operational Assessment

4.1.1 Based on the design traffic flows in **Figures 3.4** and **3.5**, a junction capacity assessment is carried out for the key junctions and the results of the assessment are summarized in **Tables 4.1** and **4.2** below.

**Table 4.1 Junction Performance of Critical Junctions in Reference Year 2027 (Without Proposed Columbarium)**

| Ref. | Junction | Method of Control | Year 2027 RC/DFC (1) | | |
|---|---|---|---|---|---|
| | | | Festival Day | Weekday | |
| | | | Peak | AM Peak | PM Peak |
| A | Mei Tin Road / Heung Fan Liu Street | Signal | >+100% | +56% | >+100% |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | >+100% | +86% | +64% |
| C | Mei Tin Road / Chik Fai Street | Signal | +40% | +68% | +61% |
| D | Mei Tin Road / Pik Tin Street | Priority | 0.25 | 0.44 | 0.26 |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | >+100% | >+100% | >+100% |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | R/A | 0.46 | 0.63 | 0.64 |
| G | Mei Tin Road / Chik Wan Street | Signal | +89% | +43% | +68% |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | +58% | +28% | +28% |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | R/A | 0.15 | 0.12 | 0.12 |

*Note: (1) RC = Reserve Capacity for signal junction*
*DFC = Design Ratio of Flow to Capacity for Priority Junction or Roundabout*

**Table 4.2 Junction Performance of Critical Junctions in Design Year 2027 (With Proposed Columbarium)**

| Ref. | Junction | Method of Control | Year 2027 RC/DFC (1) | | |
|---|---|---|---|---|---|
| | | | Festival Day | Weekday | |
| | | | Peak | AM Peak | PM Peak |
| A | Mei Tin Road / Heung Fan Liu Street | Signal | >+100% | +55% | >+100% |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | >+100% | +85% | +63% |
| C | Mei Tin Road / Chik Fai Street | Signal | +40% | +67% | +60% |
| D | Mei Tin Road / Pik Tin Street | Priority | 0.26 | 0.44 | 0.26 |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | >+100% | >+100% | >+100% |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | R/A | 0.46 | 0.64 | 0.64 |
| G | Mei Tin Road / Chik Wan Street | Signal | +89% | +43% | +67% |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | +58% | +28% | +28% |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | R/A | 0.15 | 0.12 | 0.12 |

*Note: (1) RC = Reserve Capacity for signal junction*
*DFC = Design Ratio of Flow to Capacity for Priority Junction or Roundabout*

4.1.2 Based on the assessment presented in **Tables 4.1** and **4.2**, the junctions will be operating with reasonable spare capacities in year 2027 with the full occupation of the proposed columbarium during Ching Ming Festival and weekday.

# 5. PUBLIC TRANSPORT DEMAND

## 5.1 Survey on Existing Public Transport Service

5.1.1 The proposed development is not close to MTR station and the public transport service is not comprehensive. A preliminary and localized public transport survey was carried out at the existing bus/GMB stops on Mei Tin Road and Mei Chung Court as illustrated in **Figure 5.1**.

5.1.2 The survey was carried out from 09:00am to 17:00pm of during Ching Ming Festival in 2018. The findings are presented in the **Table 5.1** below.

**Table 5.1 Observed Occupancy of Public Transport in the Vicinity**

| Duration | Direction | Routes | Observed Trips | Max. Utilization Rate | Average Utilization Rate | Occupancy (passenger) | Surplus Capacity (passenger) |
|---|---|---|---|---|---|---|---|
| **Peak Hour** | **Northbound (To Mei Shing Court)** | | | | | | |
| | Franchised Bus | 283 | 6 | 65% | 50% | 360 | 360 |
| | Minibus | 63A | 18 | 85% | 70% | 202 | 86 |
| **Peak Hour** | **Southbound (To Tai Wai)** | | | | | | |
| | Franchised Bus | 283 | 4 | 50% | 45% | 216 | 264 |
| | Minibus | 63A | 20 | 80% | 75% | 240 | 80 |

*Remarks:* *(1) Full capacity of 120 passengers for Franchised Bus is assumed.*

*(2) Full capacity of 16 passengers for Minibus is assumed.*

5.1.3 The surveyed result indicates that there are surplus capacities for the existing public transport services during the peak hours in Ching Ming Festival 2018.

## 5.2 Assessment on Public Transport Demand

*Proposed Columbarium*

5.2.1 From **Table 3.7**, the peak hour person trips during Ching Ming Festival have been estimated. The expected demand of public transport services during peak hour is calculated and presented in **Table 5.2**.

**Table 5.2 Expected Net Increase Demand of Public Transport Services due to the Proposed Columbarium in Design Year 2027**

| Transport Mode | | Pedestrian Trips during Peak Hour (1-way)(1) | Transport Modal Split | Expected Net Increase Demand of Proposed Development During Peak Hour (passenger) |
|---|---|---|---|---|
| Peak Hour | **Northbound (To Mei Shing Court)** | | | |
| | Franchised Bus | 250 - 181 = 69 | 26% | 69 x 26% = 18 |
| | Minibus | 69 | 27% | 69 x 27% = 19 |
| Peak Hour | **Southbound (To Tai Wai)** | | | |
| | Franchised Bus | 250 - 146 = 104 | 26% | 104 x 26% = 27 |
| | Minibus | 104 | 27% | 104 x 27% = 29 |

*(1) Refer to Section 3.5*

*Adjacent Developments*

5.2.2 As derived from **Section 3.2**, an annual growth rate of **+1.0%** has been adopted to estimate the future growth of traffic and population in the district. For conservative approach, the same annual growth rate is applied to estimate the future public transport demand due to adjacent developments in design year 2027.

5.2.3 The calculation of future public transport demand in the vicinity is summarized in **Table 5.3** below:

**Table 5.3 Expected Public Transport Demand due to Adjacent Development in Design Year 2027**

| Duration | Direction | Routes | Existing Occupancy (passenger) | Future Occupancy (passenger) |
|---|---|---|---|---|
| **Peak Hour** | **Northbound (To Mei Shing Court)** | | | |
| | Franchised Bus | 283 | 360 | 394* |
| | Minibus | 63A | 202 | 221* |
| **Peak Hour** | **Southbound (To Tai Wai)** | | | |
| | Franchised Bus | 283 | 216 | 236* |
| | Minibus | 63A | 240 | 262* |

*Note: *Future occupancy in 2027 is derived from existing occupancy (2018) with +1% growth rate.*

5.2.4 The expected demand of public transport services due to the proposed development is shown in **Table 5.4**.

**Table 5.4 Expected Occupancy of Public Transport in Design Year 2027**

| Duration | Direction | Routes | Full Capacity [A] | 2027 Expected Occupancy (passenger) (1% growth p.a.) (1)(2) [B] | Surplus Capacity (passenger) (1)(2)(3) [A] – [B] | Demand (Satisfied or Not) (4) |
|---|---|---|---|---|---|---|
| Peak Hour | **Northbound (To Mei Shing Court)** | | | | | |
| | Franchised Bus | 283 | 120 x 6 = 720 | 394 | 720 - 394 = 326 | 31 (✓) |
| | Minibus | 63A | 16 x 18 = 288 | 221 | 288 - 221 + (19 - 16) x 18 = 67 + 54 = 121 | 32 (✓) |
| Peak Hour | **Southbound (To Tai Wai)** | | | | | |
| | Franchised Bus | 283 | 120 x 4 = 480 | 236 | 244 | 40 (✓) |
| | Minibus | 63A | 16 x 20 = 320 | 262 | 320 - 262 + (19 - 16) x 20 = 118 | 42 (✓) |

*Remarks:* *(1) Full capacity of 120 passengers for Franchised Bus is assumed.*

*(2) Full capacity of 16 passengers for Minibus is assumed.*

*(3) Full capacity of 19 passengers for Minibus is observed to be used in 2021.*

*(4) From Table 5.2*

5.2.5 Based on the result from above **Table 5.4**, it is indicated that the existing public transport services of Franchised Bus and GMB are with ample reserve capacity to meet the demand due to the proposed development in design year 2027.

# 6. PARKING PROVISION

## 6.1 Existing Parking Situation

6.1.1 Due to site constraints, no transport facilities are provided in the Puguangming Temple, such as car parking space, loading/unloading and pick up/drop off space.

6.1.2 According to the survey, it is revealed that a peak hour of 6 car parks is required by the columbarium visitors in Chung Yeung Festival 2018. They have parked their cars in the adjacent car parks (as mentioned in **Section 2.3**).

6.1.3 The majority of visitors use Mei Chung Court Carpark. Therefore, a survey on parking space occupancy has been conducted at Mei Chung Court Carpark and presented in **Appendix 1**.

6.1.4 It is shown in **Appendix 1** that there are **17** nos. surplus hourly private car parking spaces during the peak hour from 13:30pm to 14:30pm at Mei Ching Court for the public.

**Table 6.1 Parking Utilization at Mei Chung Court Carpark during Ching Ming Festival**

| Time | Total Hourly Carpark Spaces | No. of Surplus Parking Spaces |
|---|---|---|
| 0900-1000 | 37 | 24 |
| 1000-1100 | 37 | 23 |
| 1100-1200 | 37 | 21 |
| 1200-1300 | 37 | 20 |
| 1300-1400 | 37 | 17 |
| 1400-1500 | 37 | 17 |
| 1500-1600 | 37 | 16 |
| 1600-1700 | 37 | 16 |

## 6.2 Future Parking Demand

6.2.1 Based on the estimated traffic attraction of private cars derived in **Table 3.8**, the parking demand for the proposed columbarium during peak hours in festival days is analysed and presented in the calculation below and **Table 6.2**.

- Parking survey indicated a demand of 6 parking spaces for 181 visitors per hour.
- For a 250 visitors per hour, the parking demand will then be
  = (6/181) x 250
  = 8.3 parking spaces (say **9 parking spaces**)

**Table 6.2 Future Parking Demand of Proposed Columbarium**

| Expected Parking Space Demand | Surplus Hourly Parking Space | Demand Satisfied or Not |
|---|---|---|
| 9 | = 17*(1-1%)$^{9}$<br>= 16 | ✓ |

6.2.2 From **Table 6.2**, there are sufficient private car hourly parking spaces in Mei Chung Court to cater for the future demand due to proposed columbarium.

# 7. PEDESTRIAN TRAFFIC IMPACT ASSESSMENT

## 7.1 Visitor Flows in Design Year

7.1.1 To assess the existing footpath during the Festival Days, the pedestrian flow data is estimated based on the pedestrian survey conducted during Ching Ming Festival on 5 April 2018 with about 664 niches/tablets being sold and occupied.

7.1.2 According to **Table 3.4**, there will be a peak flow of **500 visitors** (250 + 250, 2-way flows) per hour traveling to/from Puguangming Temple via the existing footpath in the future.

## 7.2 LOS Assessment on Design Year

7.2.1 In order to ensure a desirable walking environment along the access, the concept of Level-of-Service (LOS) has been applied. LOS directly relates to the pedestrian comfort and ease with which pedestrians proceed along the walkway.

7.2.2 The Break Points of LOS levels are determined on the basis of flow rate, pedestrian spacing, and the probabilities of conflict at various concentrations. These standards with relevant descriptions are summarized in **Table 7.1**.

**Table 7.1 LOS Standard Criteria**

| LOS | Flow Rate (ped/min/m) | Pedestrian Space ($m^2$/p) | Description |
|---|---|---|---|
| A | ≤16 | >5.6 | Pedestrians freely select walking speed and conflicts between pedestrians are unlikely. |
| B | ≤23 | >3.7 – 5.6 | Pedestrians freely select walking speed and bypass other pedestrians in primarily one directional flows. Minor conflicts will occur where reverse direction or crossing movements exist, requiring slightly lowering mean pedestrian speeds and potential volumes. |
| C | ≤33 | >2.2 – 3.7 | Pedestrians are restricted in selecting walking speed and bypass other pedestrians. Conflicts are highly likely to occur where reverse direction or crossing movements exist, requiring frequent adjustment of speed and direction. |
| D | ≤49 | >1.4 – 2.2 | Most pedestrians would have their normal walking speed restricted and reduced. Multiple conflicts with other pedestrians will occur where pedestrian are involved in reverse-flow and crossing movements. |

| LOS | Flow Rate (ped/min/m) | Pedestrian Space ($m^2$/p) | Description |
|---|---|---|---|
| E | ≤75 | >0.75 – 1.4 | Virtually all pedestrians would have their normal walking speeds restricted, requiring frequent adjustment of gait. At the lower range, forward progress would only be made by shuffling. Insufficient area would be available to bypass slower-moving pedestrians. Extreme difficulties for pedestrians attempting reverse-flow and cross-flow movements. |
| F | Varies | ≤0.75 | All pedestrian walking speeds are extremely restricted and forward progress can only be made by shuffling. Frequent and unavoidable contact with other pedestrians will occur. Reverse or crossing movements would be virtually impossible. |

*Source: Chapter 10, Volume 6 of Transport Planning and Design Manual (T.P.D.M.)/Chapter 11 of Highways Capacity Manual 2000.*

7.2.3 For the width as shown in **Figures 7.1** and **7.2** and based on the figures given in **Table 3.4**, the total number of person-trips using the existing footpath and vicinity footpaths is shown in **Figure 7.3** and the assessment are given in **Tables 7.2 to 7.10**.

**Table 7.2 Person-trips Assessment (Ching Ming Festival)**

| Section | Actual Width (m) | Effective Width (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr) | Peak Flow Rate (ped/min/m) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| B | 2.4 | 1.9(1) | 177+128 = 305(4) | 305 | 500(5) – 305 = 195 (100%) | 500(5) | 4.39 | A | √ |
| C | 3.3 | 2.8(1) | 250 | 250 x 1.01^9 = 275 | 195 x 46% = 90 (46%) | 275 + 90 = 365 | 2.17 | A | √ |
| D | 3.5 | 3(1) | 320 | 350 | 100 (50%) | 450 | 2.5 | A | √ |
| E | 3.5 | 3(1) | 135 | 150 | 10 (4%) | 160 | 0.89 | A | √ |
| G | 4.2 | 3.7(1) | 285 | 310 | 90 (46%) | 400 | 1.8 | A | √ |
| H | 3.8 | 3.3(1) | 425 | 465 | 100 (50%) | 565 | 2.85 | A | √ |
| I | 4.3 | 3.8(1) | 480 | 525 | 55 (28%) | 580 | 2.54 | A | √ |
| J | 5.2 | 4.7(1) | 50 | 55 | 10 (4%) | 65 | 0.23 | A | √ |

*Note: (1) 0.5m deduced from wall/fence; 1m deduced from shop*

*(2) Growth by 1% for 9 years*

*(3) √: Acceptable*

*(4) From Table 2.4, In/out flow of 11:15 – 12:15*

*(5) Restricted under management plan*

## Table 7.3 Person-trips Assessment (Weekday AM)

| Section | Actual Width (m) | Effective Width (m) (1) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(2) | Peak Flow Rate (ped/min/ m) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| B | 2.4 | 1.9 | 5 | 5 | 75 – 5 = 70 (100%) | 5 x 4,779/319 = 75(4) | 0.48 | A | √ |
| C | 3.3 | 2.8 | 25 | 25 | 70 x 46% = 30 (46%) | 25 + 30 = 55 | 0.66 | A | √ |
| D | 3.5 | 3 | 10 | 10 | 35 (50%) | 45 | 0.33 | A | √ |
| E | 3.5 | 3 | 10 | 10 | 5 (4%) | 15 | 0.25 | A | √ |
| G | 4.2 | 3.7 | 170 | 185 | 30 (46%) | 215 | 0.08 | A | √ |
| H | 3.8 | 3.3 | 325 | 355 | 35 (50%) | 390 | 0.97 | A | √ |
| I | 4.3 | 3.8 | 475 | 520 | 20 (28%) | 540 | 1.97 | A | √ |
| J | 5.2 | 4.7 | 50 | 55 | 5 (4%) | 60 | 2.37 | A | √ |

***Note:*** *(1) 0.5m deduced from wall/fence; 1m deduced from shop*

*(2) Growth by 1%*

*(3) √: Acceptable*

*(4) Ratio of niches (existing 319 & total 4,779)*

## Table 7.4 Person-trips Assessment (Weekday PM)

| Section | Actual Width (m) | Effective Width (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(2) | Peak Flow Rate (ped/min/ m) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| B | 2.4 | 1.9(1) | 15 | 15 | 225 – 15 = 210 (100%) | 15 x 4,779/319 = 225(4) | 1.97 | A | √ |
| C | 3.3 | 2.8(1) | 60 | 65 | 95 (46%) | 65 + 95 = 160 | 0.95 | A | √ |
| D | 3.5 | 3(1) | 20 | 20 | 105 (50%) | 125 | 0.69 | A | √ |
| E | 3.5 | 3(1) | 15 | 15 | 10 (4%) | 25 | 0.14 | A | √ |
| G | 4.2 | 3.7(1) | 65 | 70 | 95 (46%) | 165 | 0.74 | A | √ |
| H | 3.8 | 3.3(1) | 405 | 445 | 105 (50%) | 550 | 2.78 | A | √ |
| I | 4.3 | 3.8(1) | 465 | 510 | 60 (28%) | 570 | 2.5 | A | √ |
| J | 5.2 | 4.7(1) | 20 | 20 | 10 (4%) | 30 | 0.11 | A | √ |

***Note:*** *(1) 0.5m deduced from wall/fence; 1m deduced from shop*

*(2) Growth by 1%*

*(3) √: Acceptable*

*(4) Ratio of niches (existing 319 & total 4,779)*

## Table 7.5 V/C Ratio of Critical Crossing (Ching Ming Festival)

| Section | Lateral Width of Ped. Crossing (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Pedestrian Crossing Capacity(2) (ped/hr) | V/C | Remark (3) |
|---|---|---|---|---|---|---|---|---|
| F | 4 | 160 | 160 x 1.01^9 = 175 | 195 x 54% = 105 (54%) | 175 + 105 = 280 | Pedestrian Crossing Capacity(3) PC = 1900*1/4*4 = 1900 | 0.15 | √ |
| G2 | 3.6 | 60 | 65 | 10 (4%) | 75 | 1710 (Capacity)(3) | 0.04 | √ |
| H2 | 3.5 | 425 | 465 | 100 (50%) | 565 | 1665 (Capacity)(3) | 0.34 | √ |
| I2 | 3.5 | 160 | 175 | 40 (21%) | 215 | Pedestrian Crossing Capacity PC = 1900*25/90*3.5 = 1845 | 0.12 | √ |

***Note***: *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 1/4 of the "cycle time" was used by the pedestrian*

*(3) √: Acceptable*

## Table 7.6 V/C Ratio of Critical Crossing (Weekday AM)

| Section | Lateral Width of Ped. Crossing (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Pedestrian Crossing Capacity(2) (ped/hr) | V/C | Remark (3) |
|---|---|---|---|---|---|---|---|---|
| F | 4 | 5 | 5 x 1.01^9 = 5 | 70 x 54% = 40 (54%) | 5 + 40 = 45 | Pedestrian Crossing Capacity(4) PC = 1900*1/4*4 = 1900 | 0.02 | √ |
| G2 | 3.6 | 55 | 60 | 5 (4%) | 65 | 1710 (Capacity)(4) | 0.04 | √ |
| H2 | 3.5 | 325 | 355 | 35 (50%) | 390 | 1665 (Capacity)(4) | 0.23 | √ |
| I2 | 3.5 | 150 | 165 | 15 (21%) | 180 | Pedestrian Crossing Capacity PC = 1900*25/90*3.5 = 1845 | 0.10 | √ |

***Note***: *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 1/4 of the "cycle time" was used by the pedestrian*

*(3) √: Acceptable*

## Table 7.7 V/C Ratio of Critical Crossing (Weekday PM)

| Section | Lateral Width of Ped. Crossing (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Pedestrian Crossing Capacity(2) (ped/hr) | V/C | Remark (3) |
|---|---|---|---|---|---|---|---|---|
| F | 4 | 20 | 20 x 1.01^9 = 20 | 210 x 54% = 115 (54%) | 20 + 115 = 135 | Pedestrian Crossing Capacity(4) PC = 1900*1/4*4 = 1900 | 0.07 | √ |
| G2 | 3.6 | 35 | 40 | 10 (4%) | 50 | 1710 (Capacity)(4) | 0.03 | √ |
| H2 | 3.5 | 405 | 445 | 105 (50%) | 550 | 1665 (Capacity)(4) | 0.33 | √ |
| I2 | 3.5 | 140 | 155 | 45 (21%) | 200 | Pedestrian Crossing Capacity PC = 1900*25/90* 3.5 = 1845 | 0.11 | √ |

*Note:* *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 1/4 of the "cycle time" was used by the pedestrian*

*(3) √: Acceptable*

## Table 7.8 Waiting Area of Critical Crossing (Ching Ming Festival)

| Section | Waiting Space Area ($m^2$) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2 | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Waiting Pedestrian (ped/cycle) (2) | Avg. Ped. Space(3) ($m^2$/ped) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| F | 7 | 160 | 160 x 1.01^9 = 175 | 195 x 54% = 105 (54%) | 175 + 105 = 280 | 280/40 x 0.75 = 5 | 1.40 | A | √ |
| G2 | 8 | 60 | 65 | 10 (4%) | 75 | 1 | 8.00 | A | √ |
| H2 | 30 | 425 | 465 | 100 (50%) | 565 | 11 | 2.73 | A | √ |
| I2 | 25 | 160 | 175 | 40 (21%) | 215 | 4 | 6.25 | A | √ |

*Note:* *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 90s "cycle time", "No. of cycle" = 3600/90 = 40, 3/4 of the "cycle time" was pedestrian waiting time*

*Waiting Pedestrian = Two-way Ped. Flow x Red Time Proportion / No. of Cycle*

*(3) √: Acceptable*

**Table 7.9 Waiting Area of Critical Crossing (Weekday AM)**

| Section | Waiting Space Area ($m^2$) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2 | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Waiting Pedestrian (ped/cycle) (2) | Avg. Ped. Space(3) ($m^2$/ped) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| F | 7 | 5 | 5 x 1.01^9 = 5 | 70 x 54% = 40 (54%) | 5 + 40 = 45 | 45/40 x 0.75 = 1 | 7.00 | A | √ |
| G2 | 8 | 55 | 60 | 10 (4%) | 65 | 1 | 8.00 | A | √ |
| H2 | 30 | 325 | 355 | 35 (50%) | 390 | 7 | 4.29 | A | √ |
| I2 | 25 | 150 | 165 | 15 (21%) | 180 | 3 | 8.33 | A | √ |

**Table 7.10 Waiting Area of Critical Crossing (Weekday PM)**

| Section | Waiting Space Area ($m^2$) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2 | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Waiting Pedestrian (ped/cycle) (2) | Avg. Ped. Space(3) ($m^2$/ped) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| F | 7 | 20 | 20 x 1.01^9 = 20 | 210 x 54% = 115 (54%) | 20 + 115 = 135 | 135/40 x 0.75 = 3 | 2.33 | A | √ |
| G2 | 8 | 35 | 40 | 10 (4%) | 50 | 1 | 8.00 | A | √ |
| H2 | 30 | 405 | 445 | 105 (50%) | 550 | 10 | 3.00 | A | √ |
| I2 | 25 | 140 | 155 | 45 (21%) | 200 | 3 | 6.25 | A | √ |

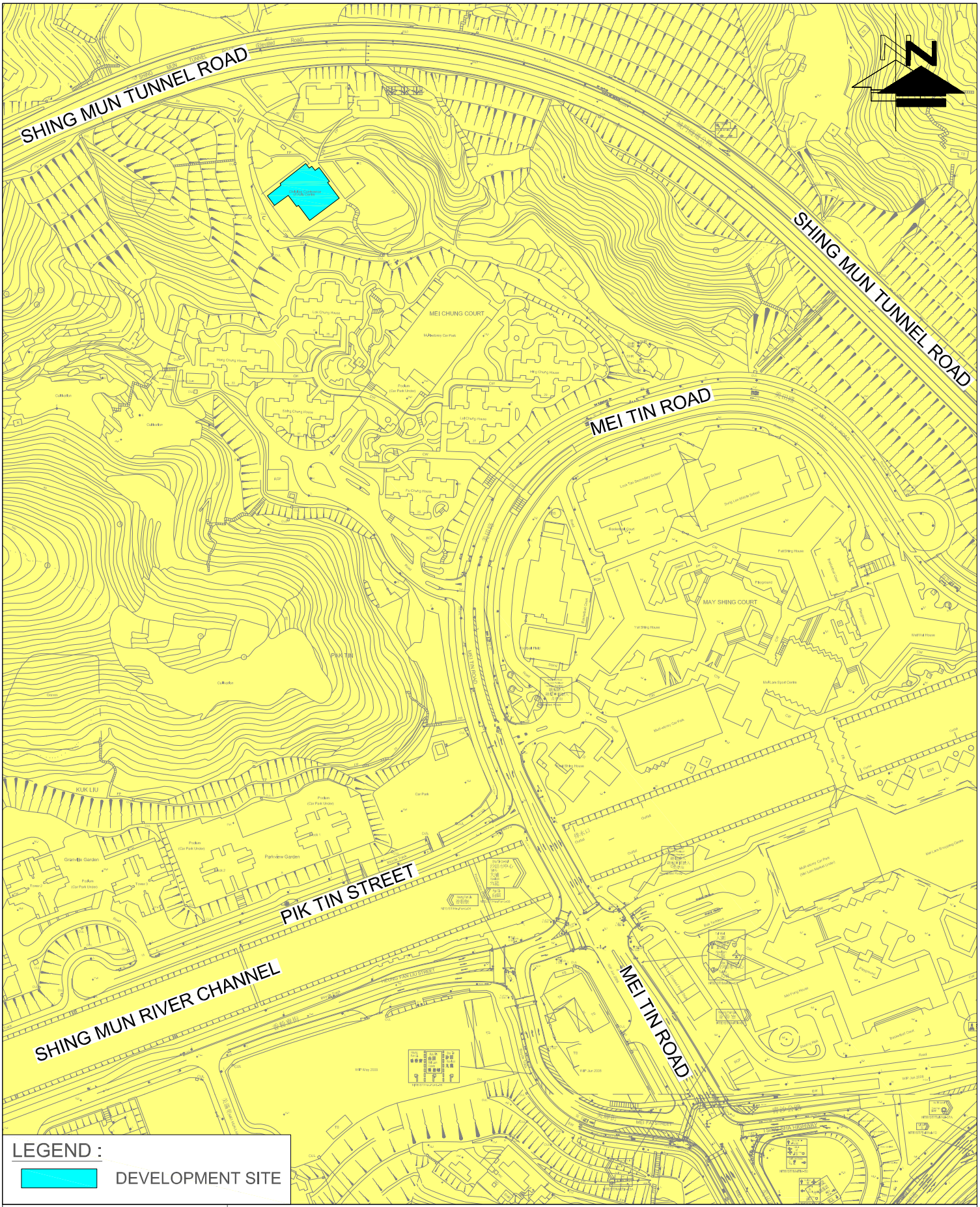
7.2.4 Based on the above calculation and assessment, LOS A or low V/C ratio could be achieved, which is considered acceptable in traffic engineering points of view.

# 8. SUMMARY AND CONCLUSION

8.1.1 From the traffic forecast based on traffic survey during 2018 Ching Ming Festival, and the assessment results of the junction capacity in the vicinity, it indicates that there will not be significant adverse impact caused by the full occupation of **5,124 niches/tablets** (4,779 niches + 345 tablets) during Ching Ming Festival in the design year 2027.

8.1.2 The impacts on the adjacent road networks have been assessed. All of these are found to be technically feasible and acceptable.

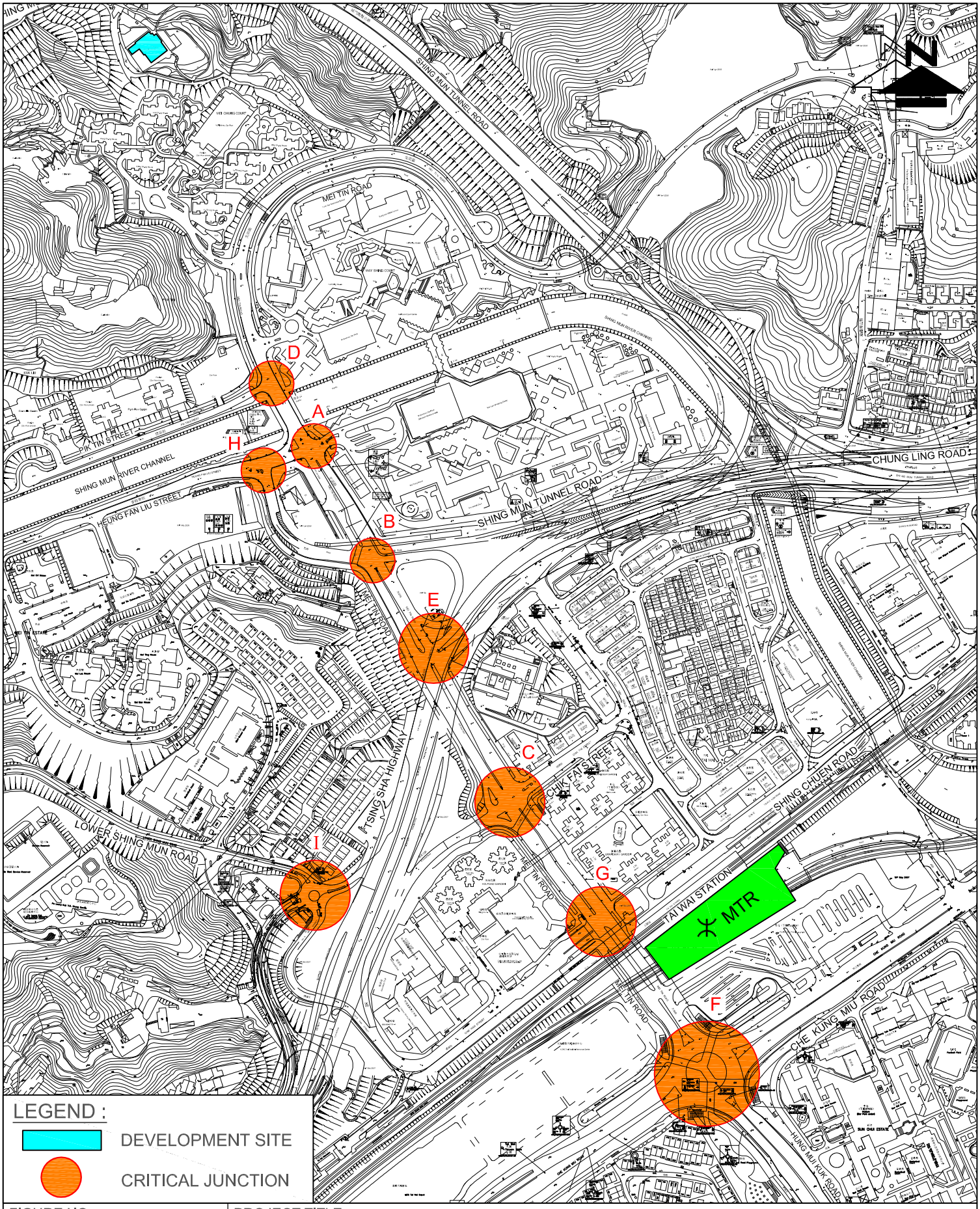
8.1.3 Therefore, the proposed scheme of Puguangminig Temple is considered to be acceptable from the traffic and transportation Point of view.



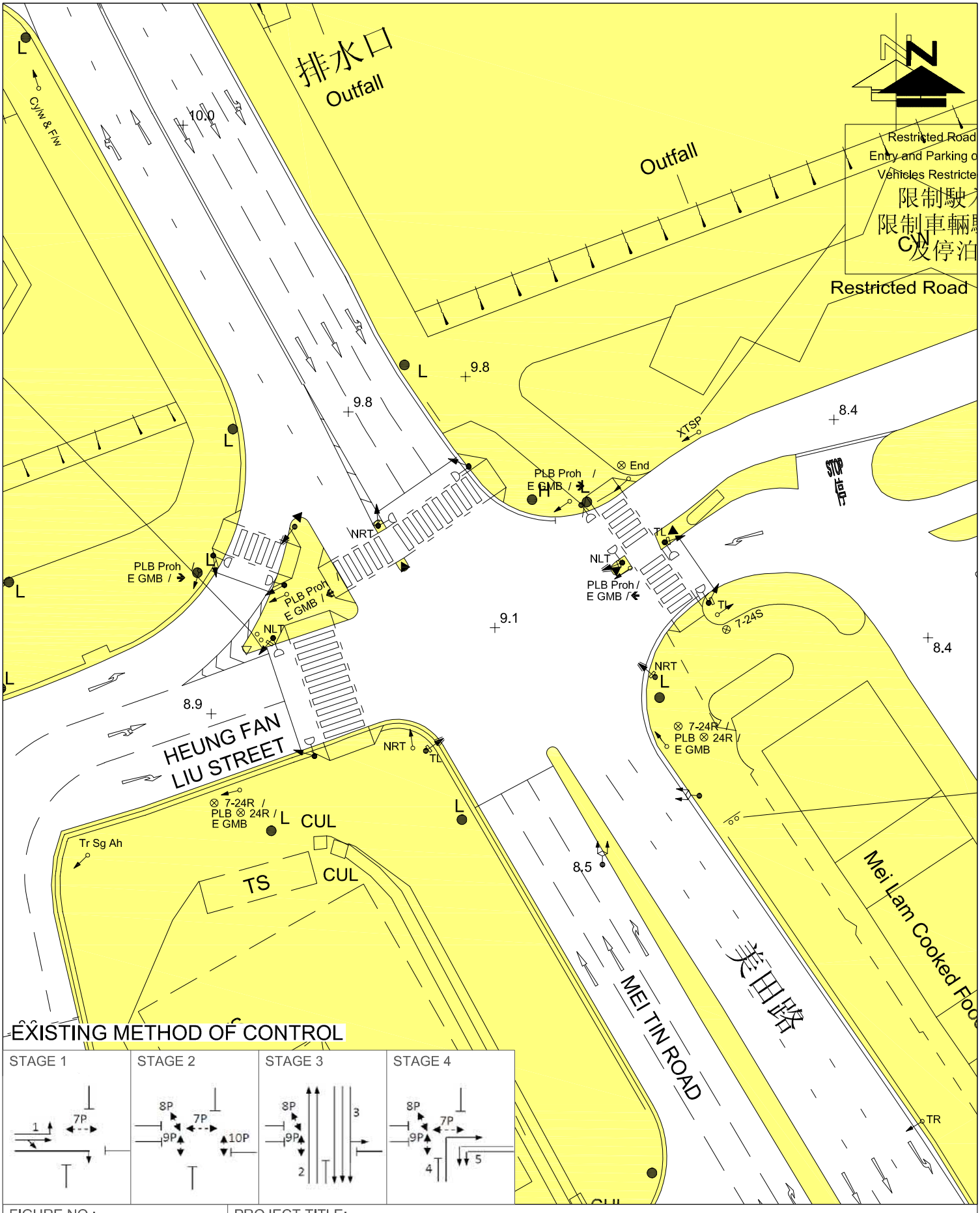

LEGEND :

DEVELOPMENT SITE

| | |
|---|---|
| FIGURE NO.: 1.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: SITE LOCATION PLAN |
| SCALE: 1 : 3000 (IN A4 SIZE) / DATE: 23 OCT 2020 | CTA Consultants Limited 志達顧問有限公司 |



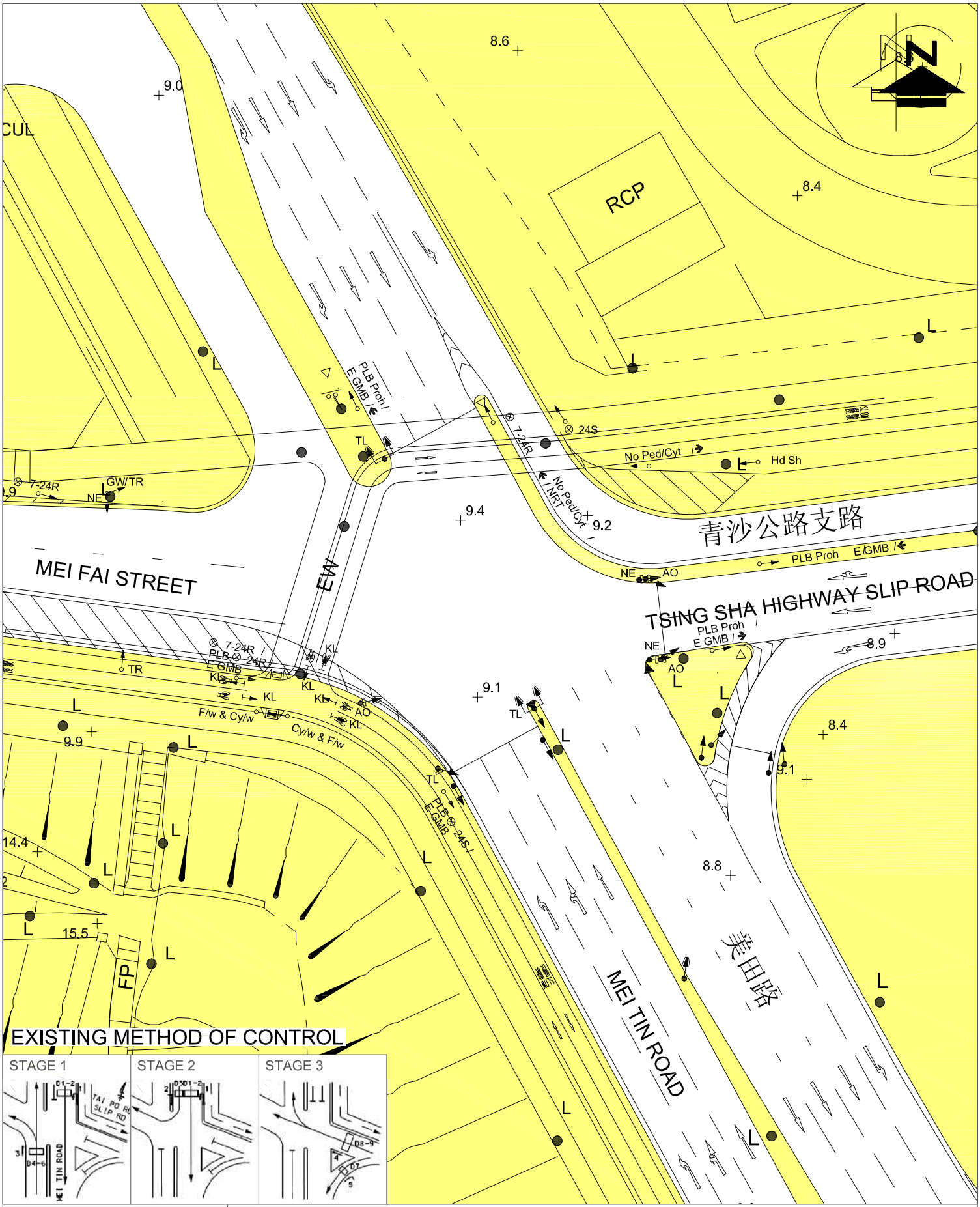

| | |
|---|---|
| FIGURE NO.: 2.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: KEY JUNCTIONS AND EXISTING ROAD NETWORK |
| SCALE: 1 : 5500 (IN A4 SIZE) / DATE: 21 APR 2021 | CTA Consultants Limited 志達顧問有限公司 |



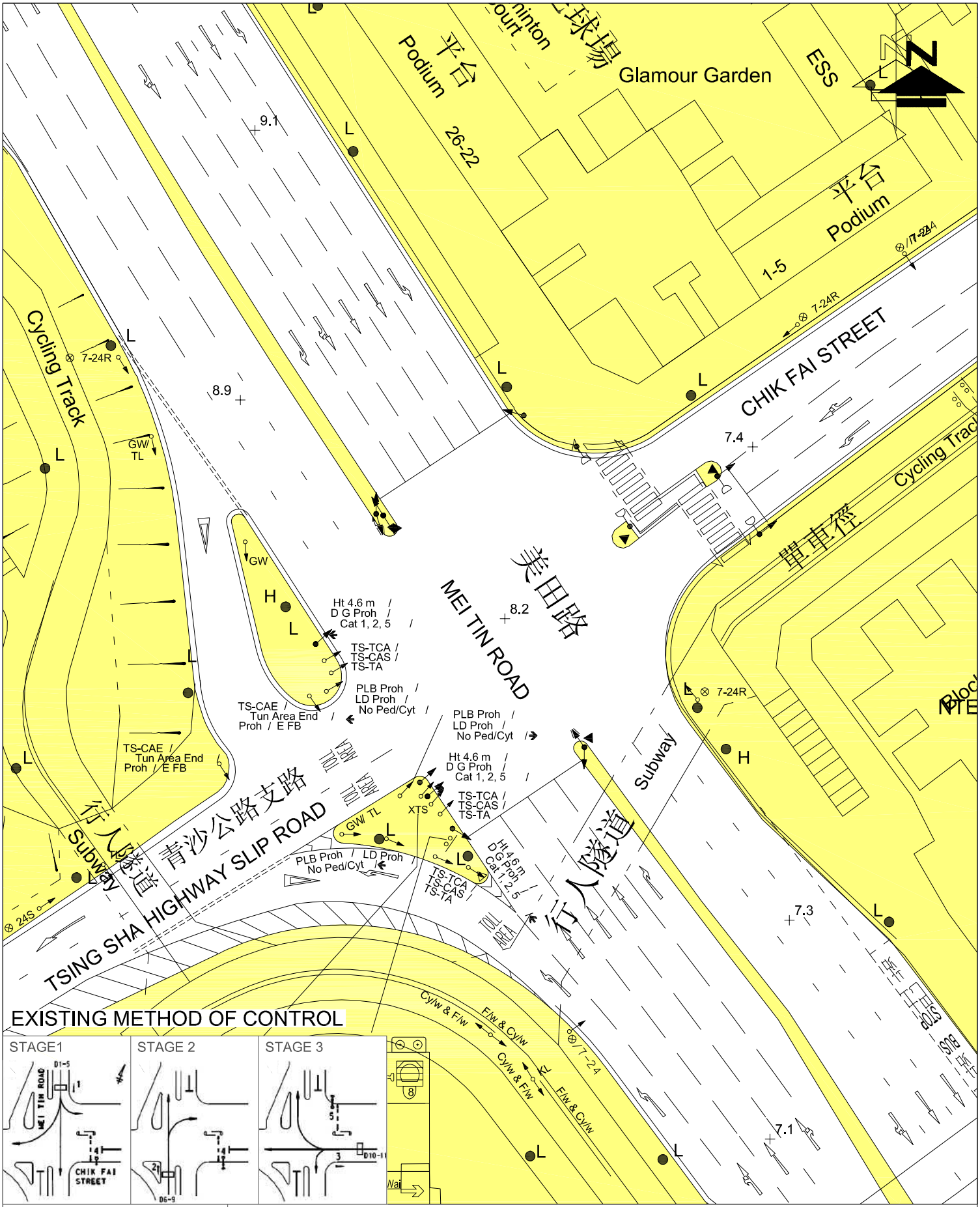

## EXISTING METHOD OF CONTROL



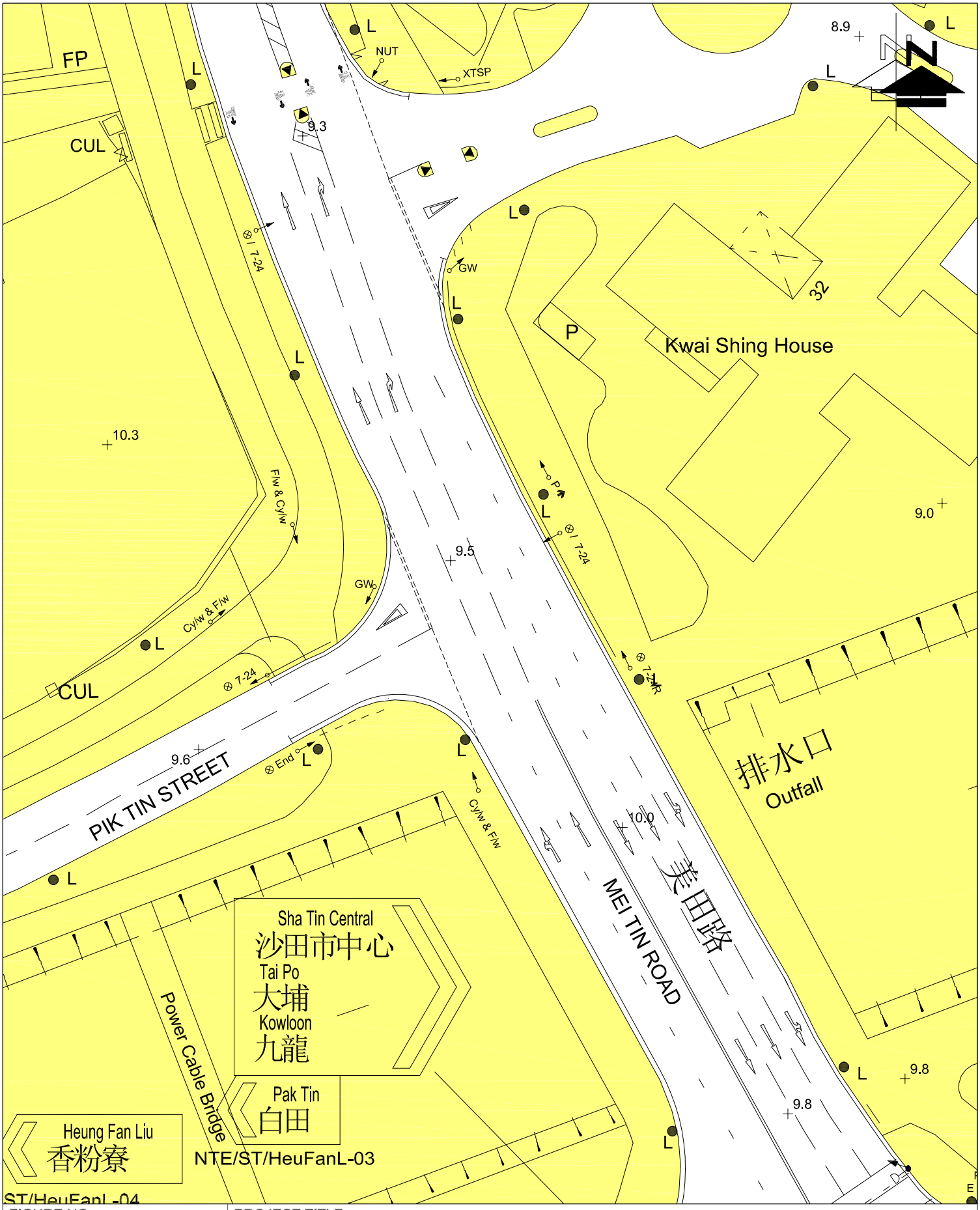

| | |
|---|---|
| FIGURE NO.: 2.2 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / HEUNG FAN LIU STREET (A) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |



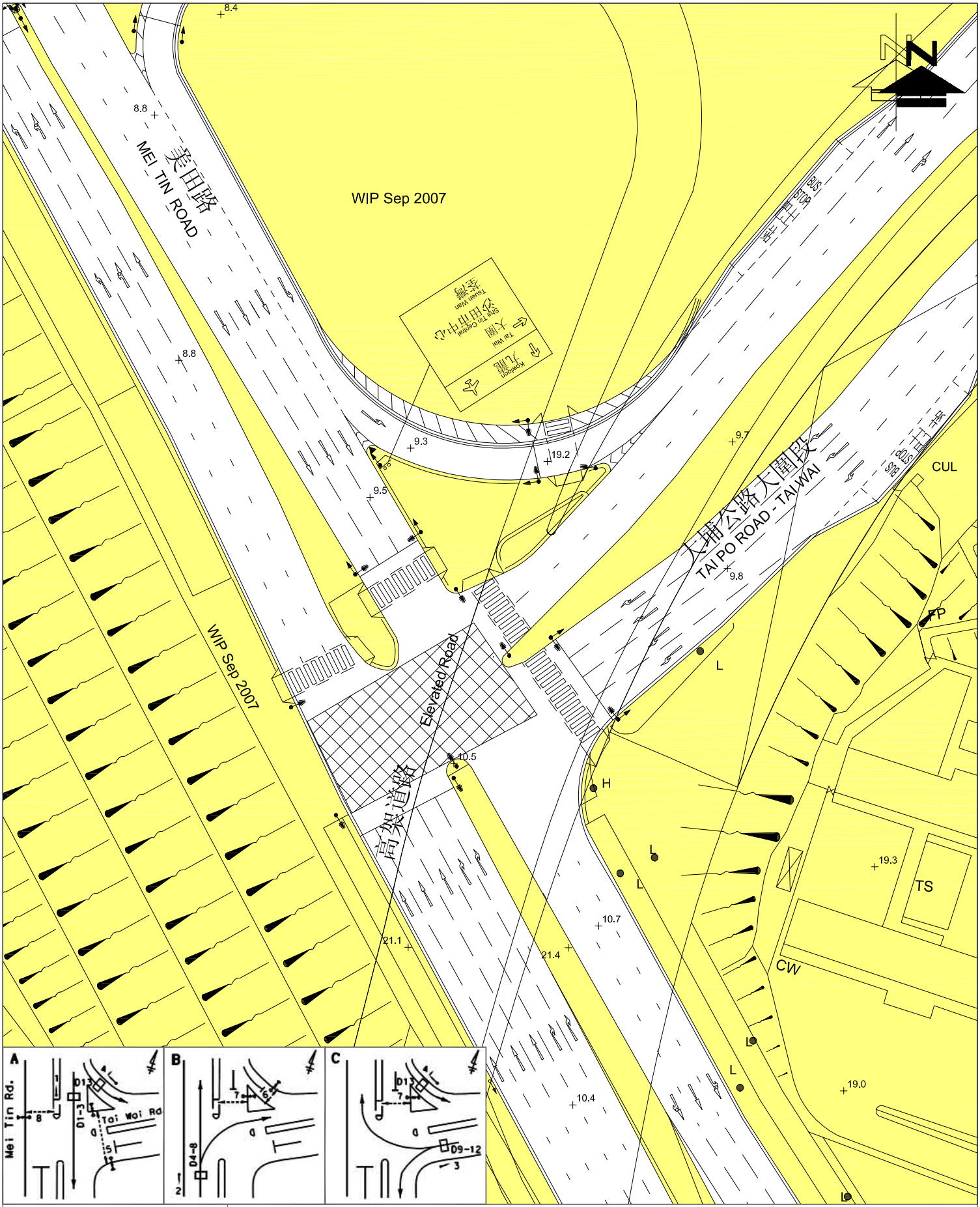

| | |
|---|---|
| FIGURE NO.: 2.3 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / TSING SHA HIGHWAY SLIP ROAD (B) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |




| | |
|---|---|
| FIGURE NO.: 2.4 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / CHIK FAI STREET (C) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |

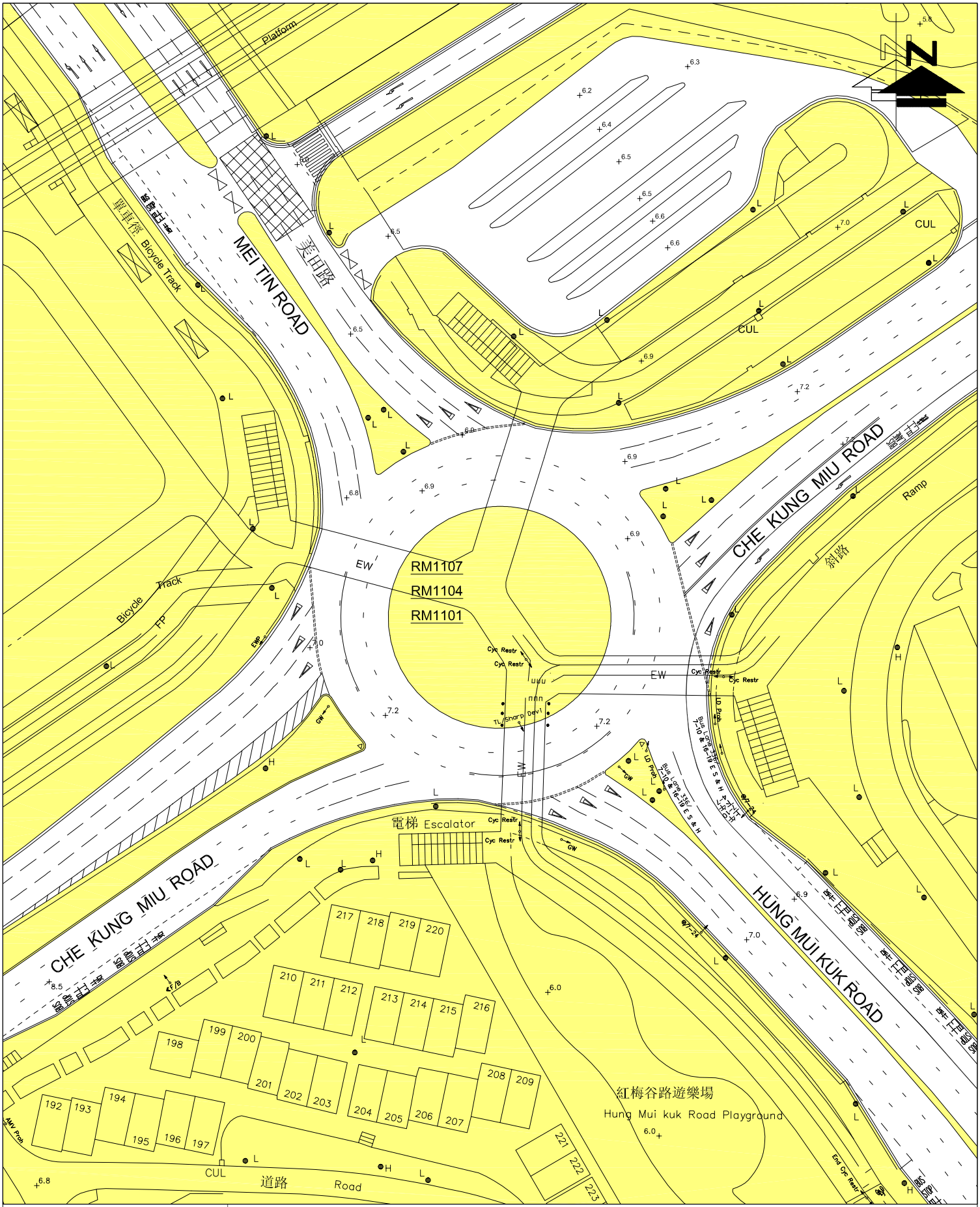



| | |
|---|---|
| FIGURE NO.: 2.5 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / PIK TIN STREET (D) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 23 OCT 2020 | CTA Consultants Limited 志達顧問有限公司 |



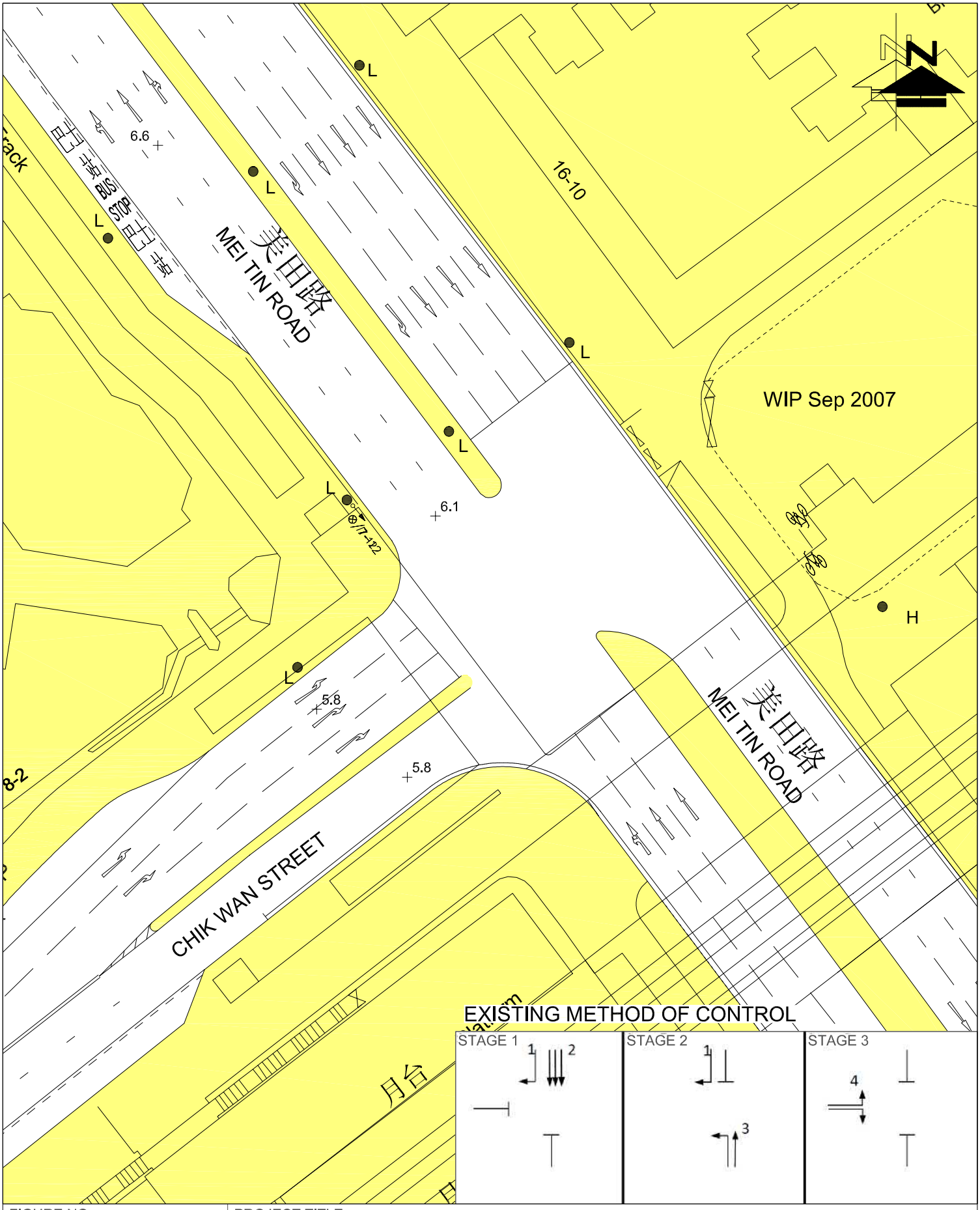

| | |
|---|---|
| FIGURE NO.: 2.6 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TAI PO ROAD - TAI WAI / MEI TIN ROAD (E) |
| SCALE: 1 : 700 (IN A4 SIZE) | DATE: 12 NOV 2021 |

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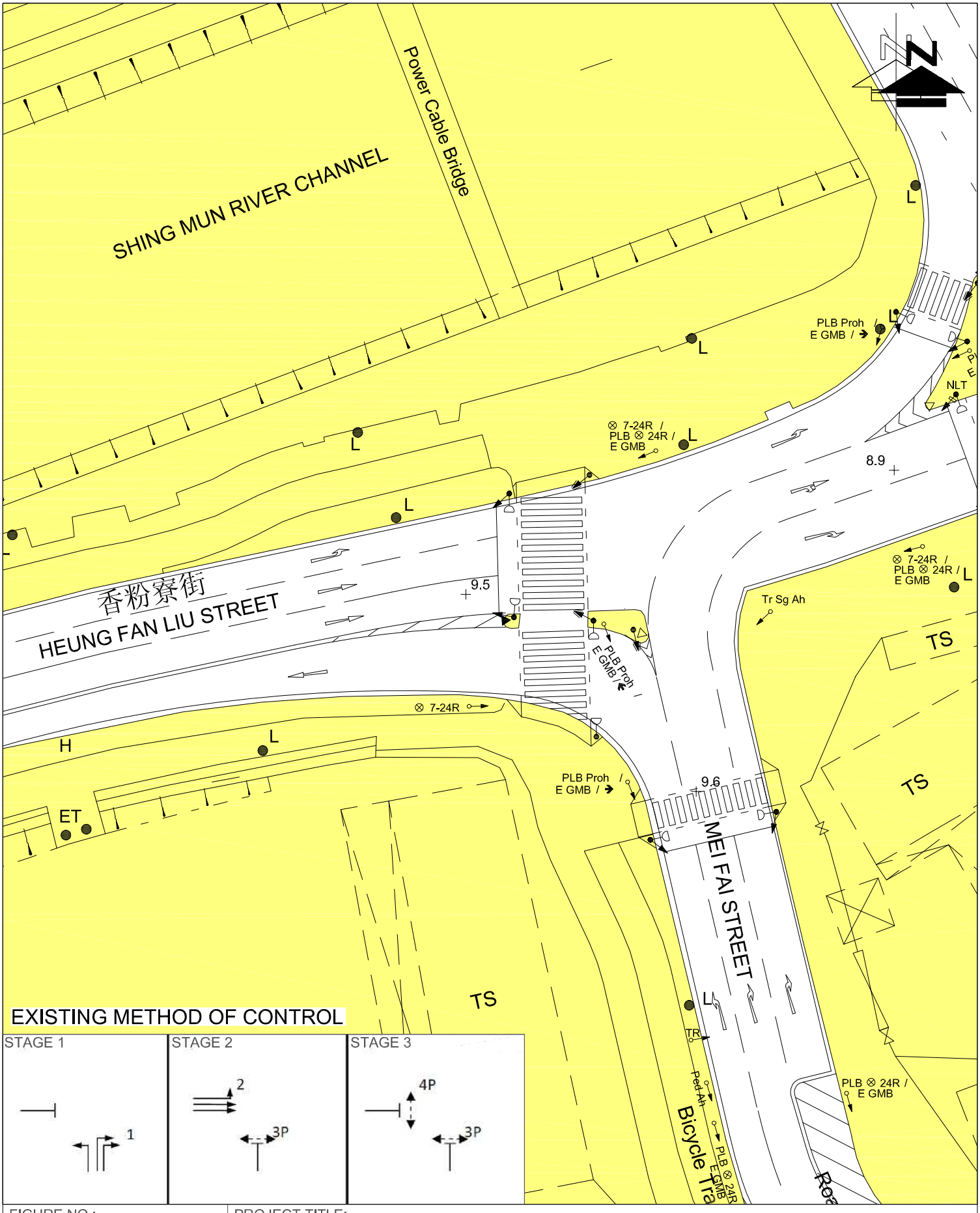



| | |
|---|---|
| FIGURE NO.: 2.7 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / HUNG MUI KUK ROAD / CHE KUNG MIU ROAD (F) |
| SCALE: 1 : 1000 (IN A4 SIZE) | DATE: 11 MAY 2021 |

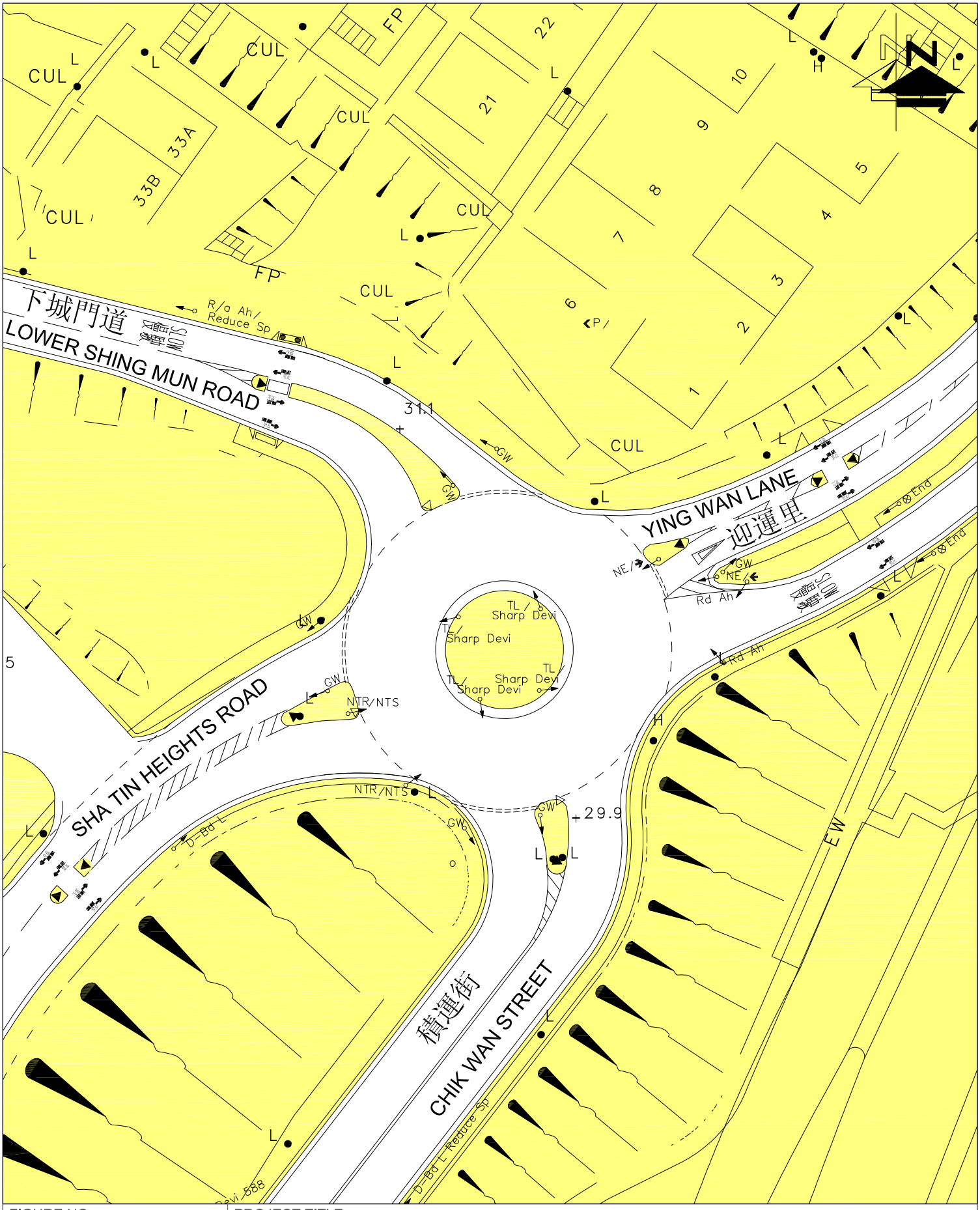
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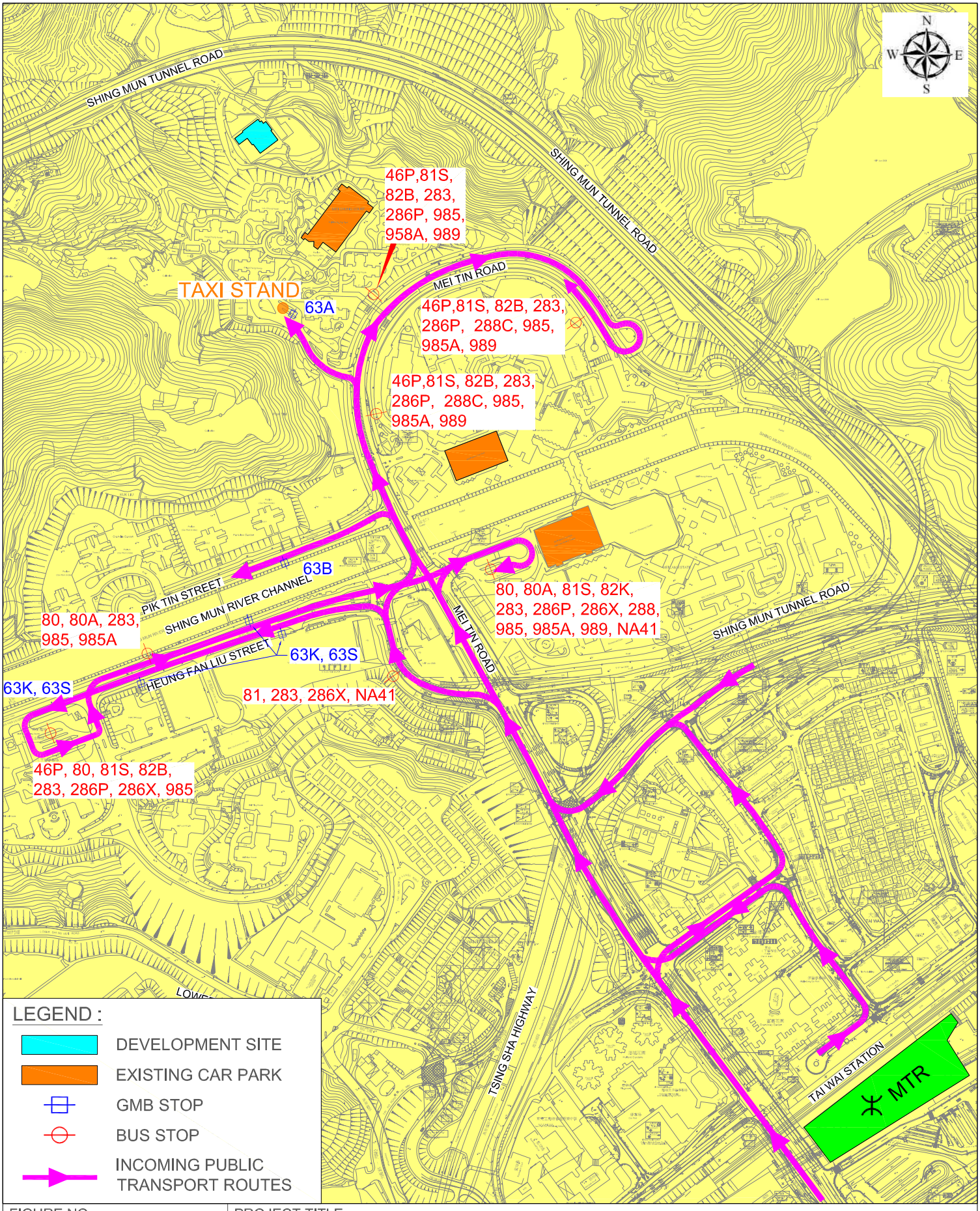

| | |
|---|---|
| FIGURE NO.: 2.8 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / CHIK WAN STREET (G) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |




| | |
|---|---|
| FIGURE NO.: 2.9 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF HEUNG FAN LIU STREET / MEI FAI STREET (H) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 03 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |

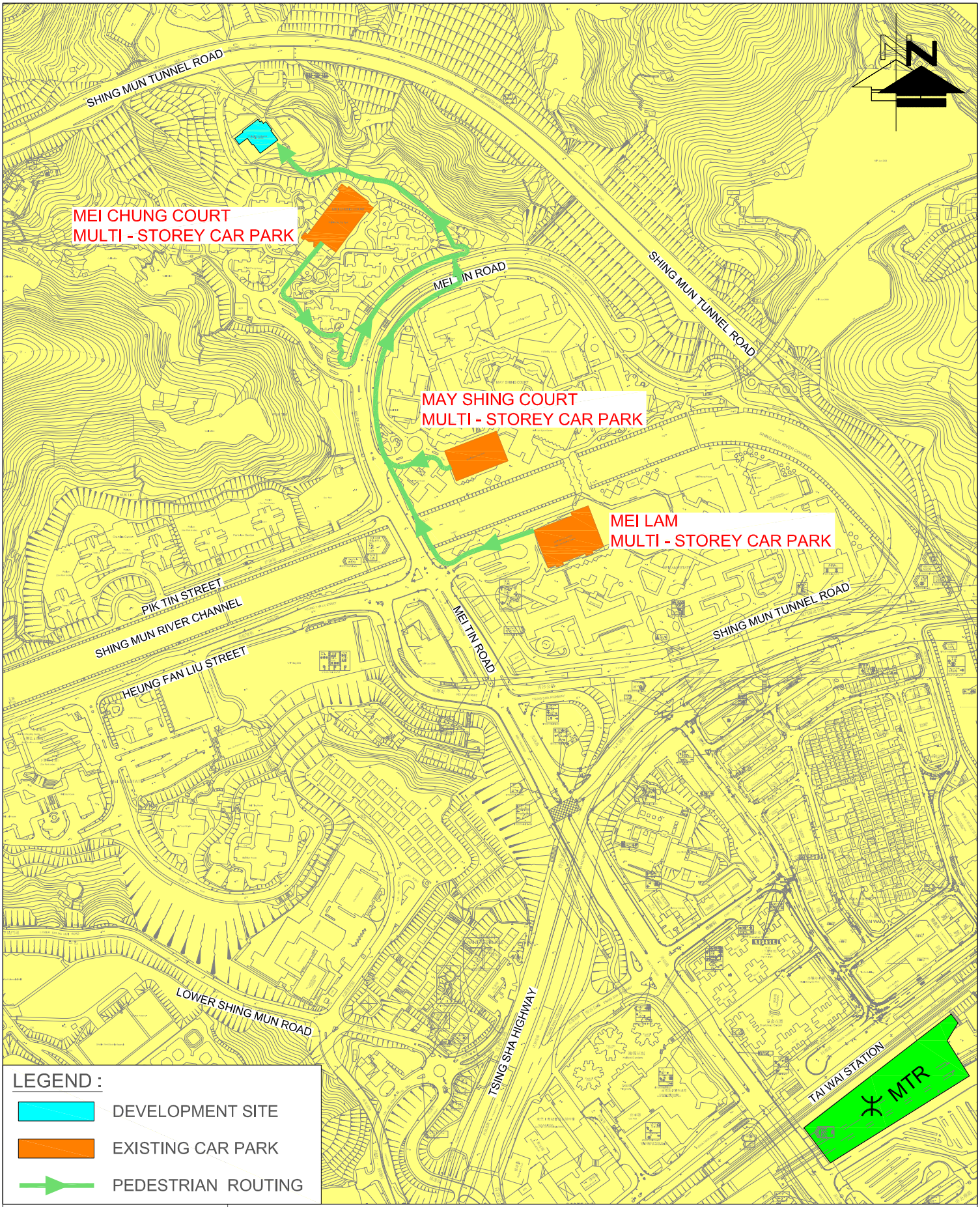



| | |
|---|---|
| FIGURE NO.: 2.10 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF SHA TIN HEIGHTS ROAD / LOWER SHING MUN ROAD ROUNDABOUT (I) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 23 APR 2021 | CTA Consultants Limited 志達顧問有限公司 |



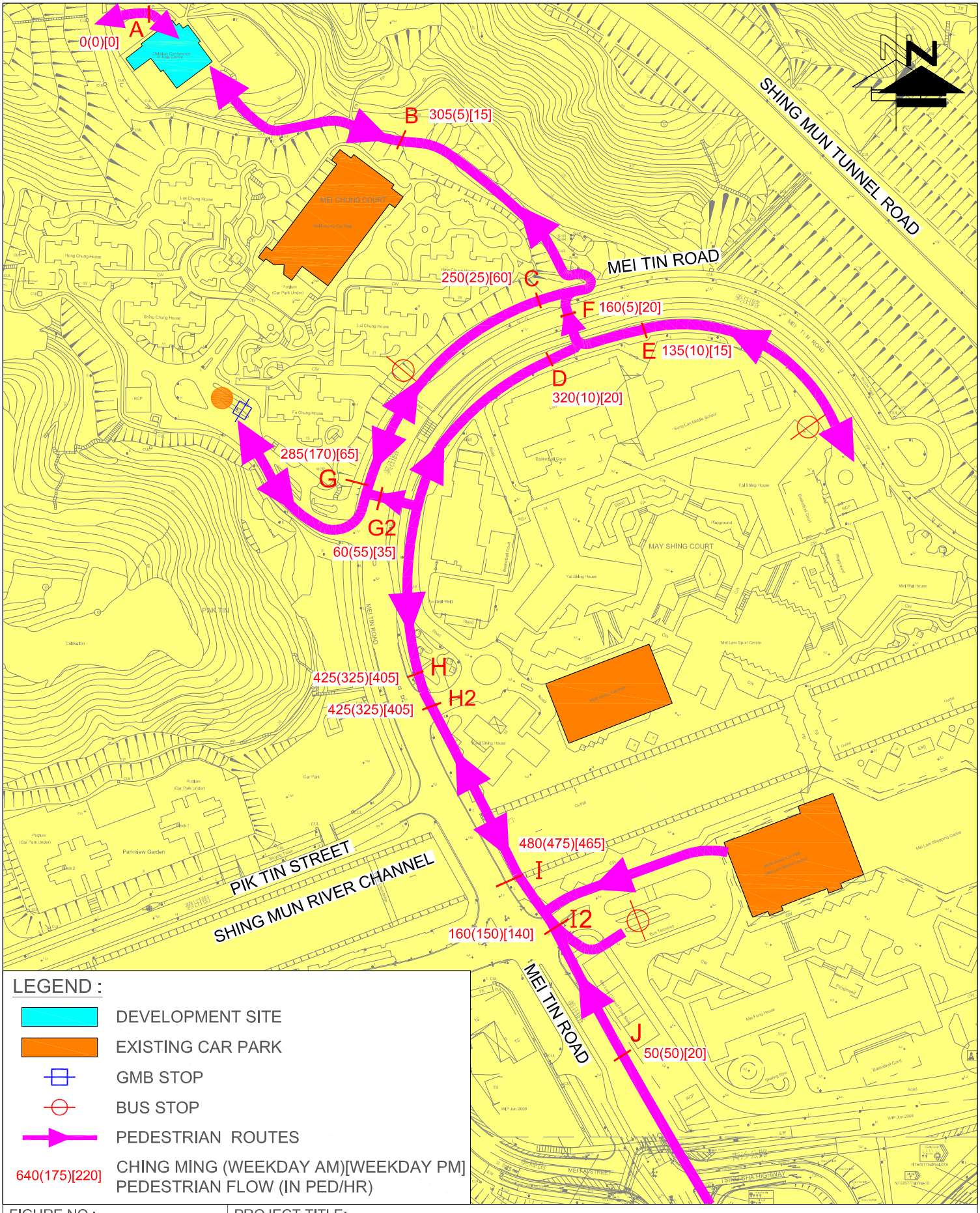

| | |
|---|---|
| FIGURE NO.: 2.11 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: PUBLIC TRANSPORT FACILITIES IN THE VICINITY |
| SCALE: 1 : 5000 @ A4 | DATE: 01 MAR 2023 |

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| | |
|---|---|
| FIGURE NO.: 2.12 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: PARKING FACILITIES IN THE VICINITY |
| SCALE: 1 : 5000 @A4 | DATE: 21 APR 2021 |

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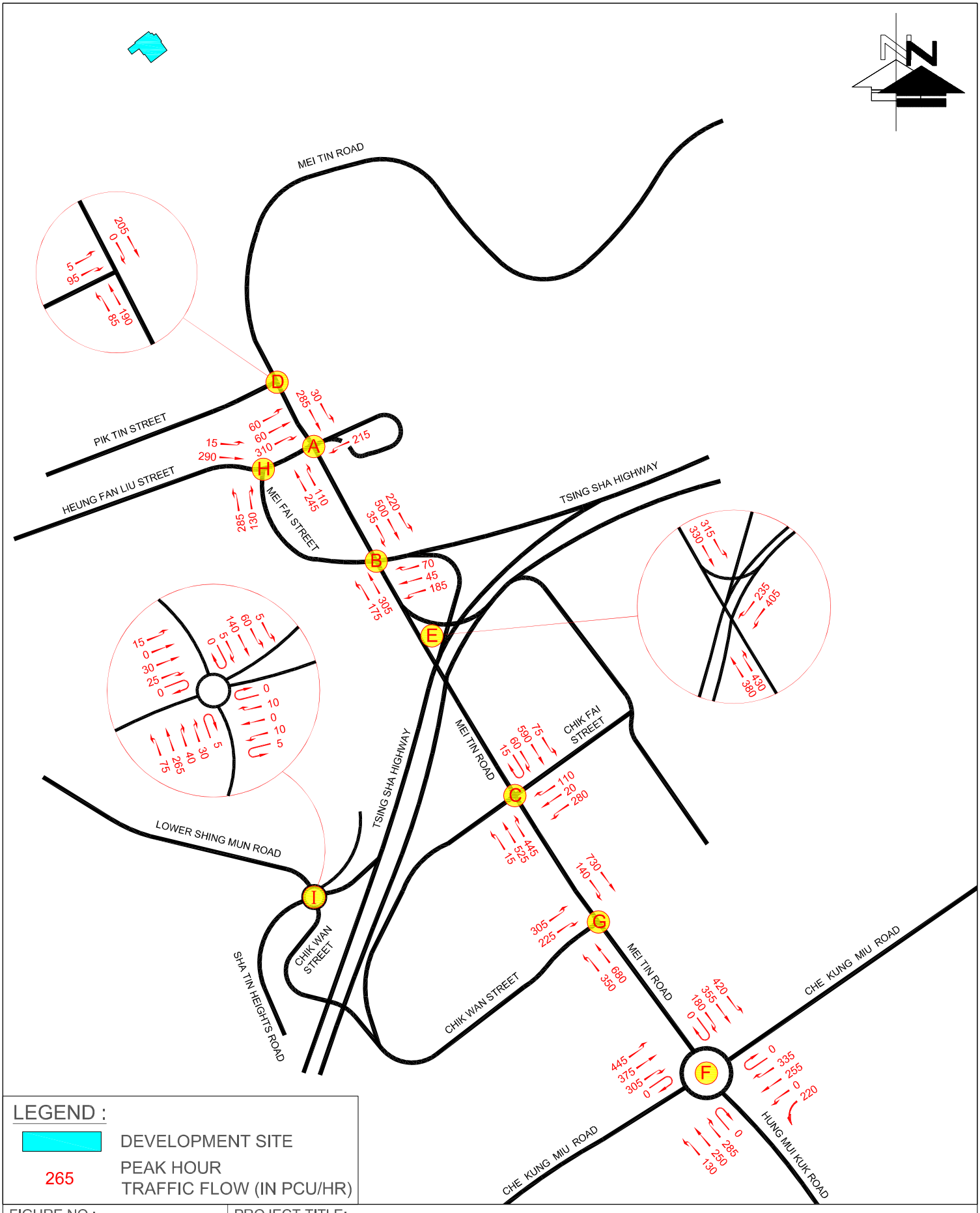



## LEGEND :

- DEVELOPMENT SITE
- EXISTING CAR PARK
- GMB STOP
- BUS STOP
- PEDESTRIAN ROUTES
- 640(175)[220] CHING MING (WEEKDAY AM)[WEEKDAY PM] PEDESTRIAN FLOW (IN PED/HR)

| | |
|---|---|
| FIGURE NO.: 2.13 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2018 OBSERVED PEDESTRIAN FLOWS |
| SCALE: 1 : 2500 @ A4 | DATE: 01 MAR 2023 |

CTA Consultants Limited 志達顧問有限公司



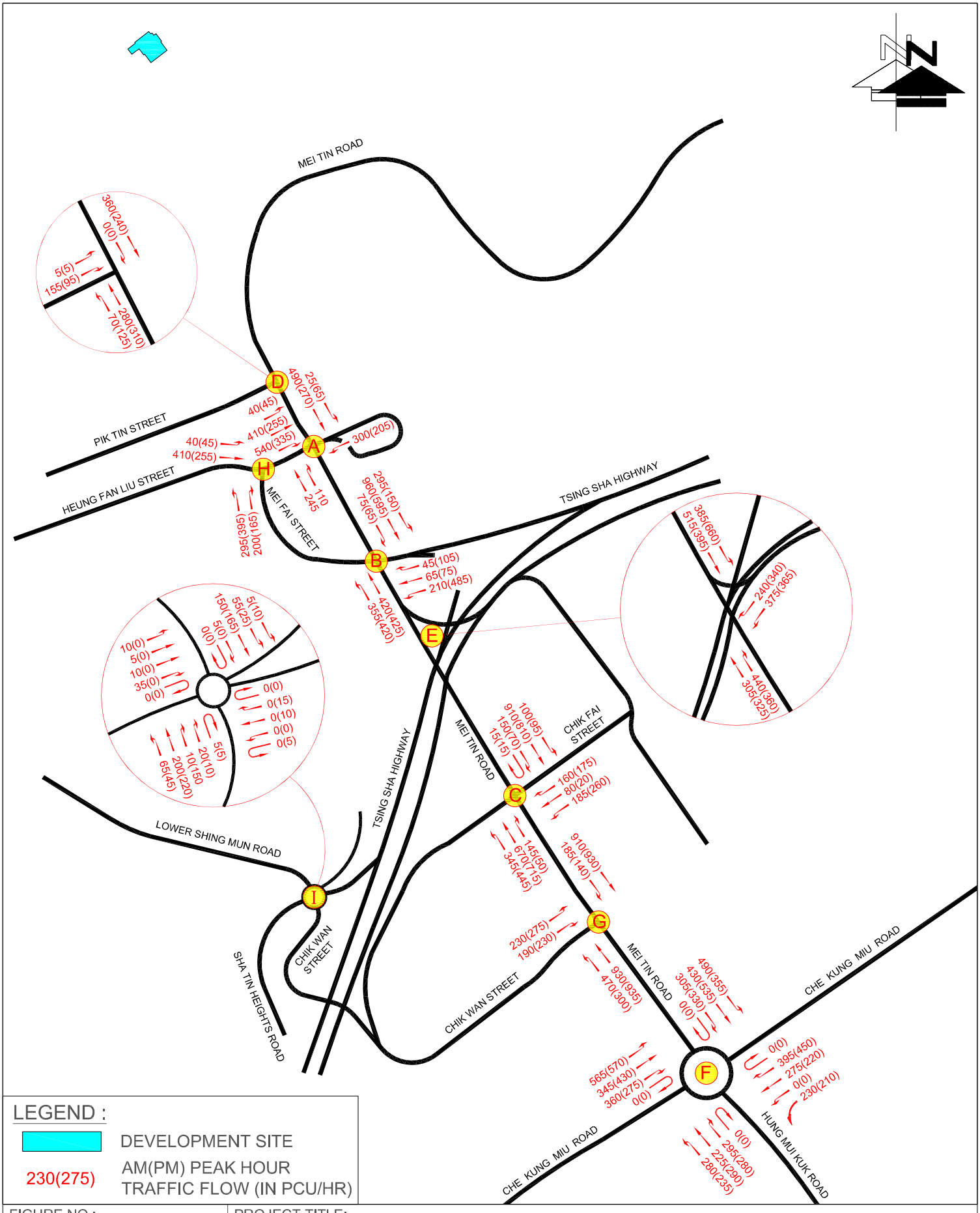

LEGEND :

DEVELOPMENT SITE

265 PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 2.14 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2018 OBSERVED TRAFFIC FLOWS (CHING MING FESTIVAL) |
| SCALE: 1 : 5500 (IN A4 SIZE) | DATE: 15 JUN 2021 |

CTA Consultants Limited 志達顧問有限公司

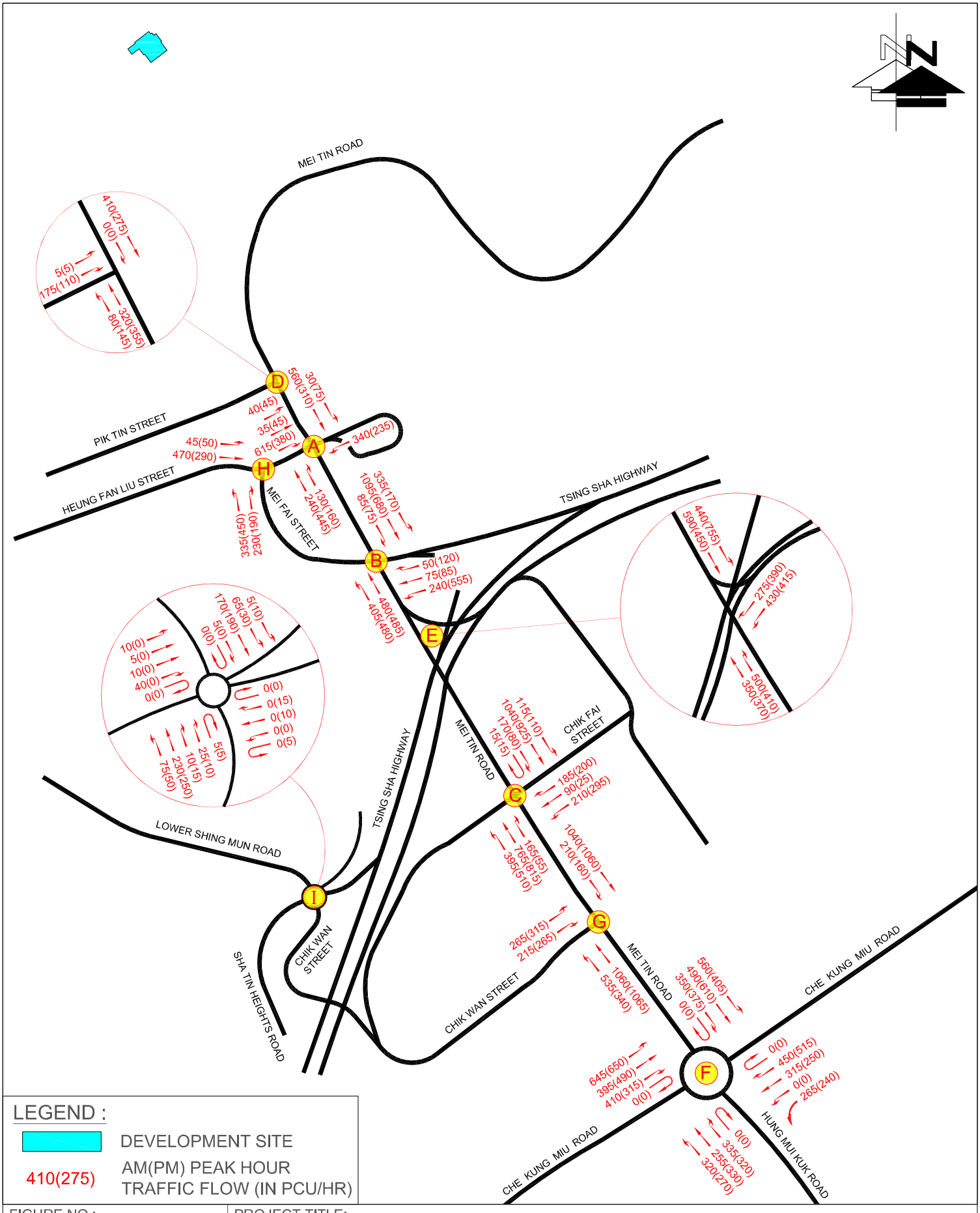



LEGEND :

DEVELOPMENT SITE

230(275) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 2.15 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2021 OBSERVED TRAFFIC FLOWS (WEEKDAY) |
| SCALE: 1 : 5500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |




LEGEND :

DEVELOPMENT SITE

410(275) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 2.16 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY) |
| SCALE: 1 : 5500 (IN A4 SIZE) / DATE: 15 JUN 2021 | CTA Consultants Limited 志達顧問有限公司 |



PRIVATE RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 181, HEUNG FAN LIU, SHA TIN



MEI PARK COURT



TAI WAI STATION PROPERTY DEVELOPMENT



MEI YING COURT

SHING MUN TUNNEL ROAD

PIK TIN STREET

SHING MUN RIVER CHANNEL

HEUNG FAN LIU STREET

MEI TIN ROAD

TSING SHA HIGHWAY

TAI WAI STATION

A

B

C

D

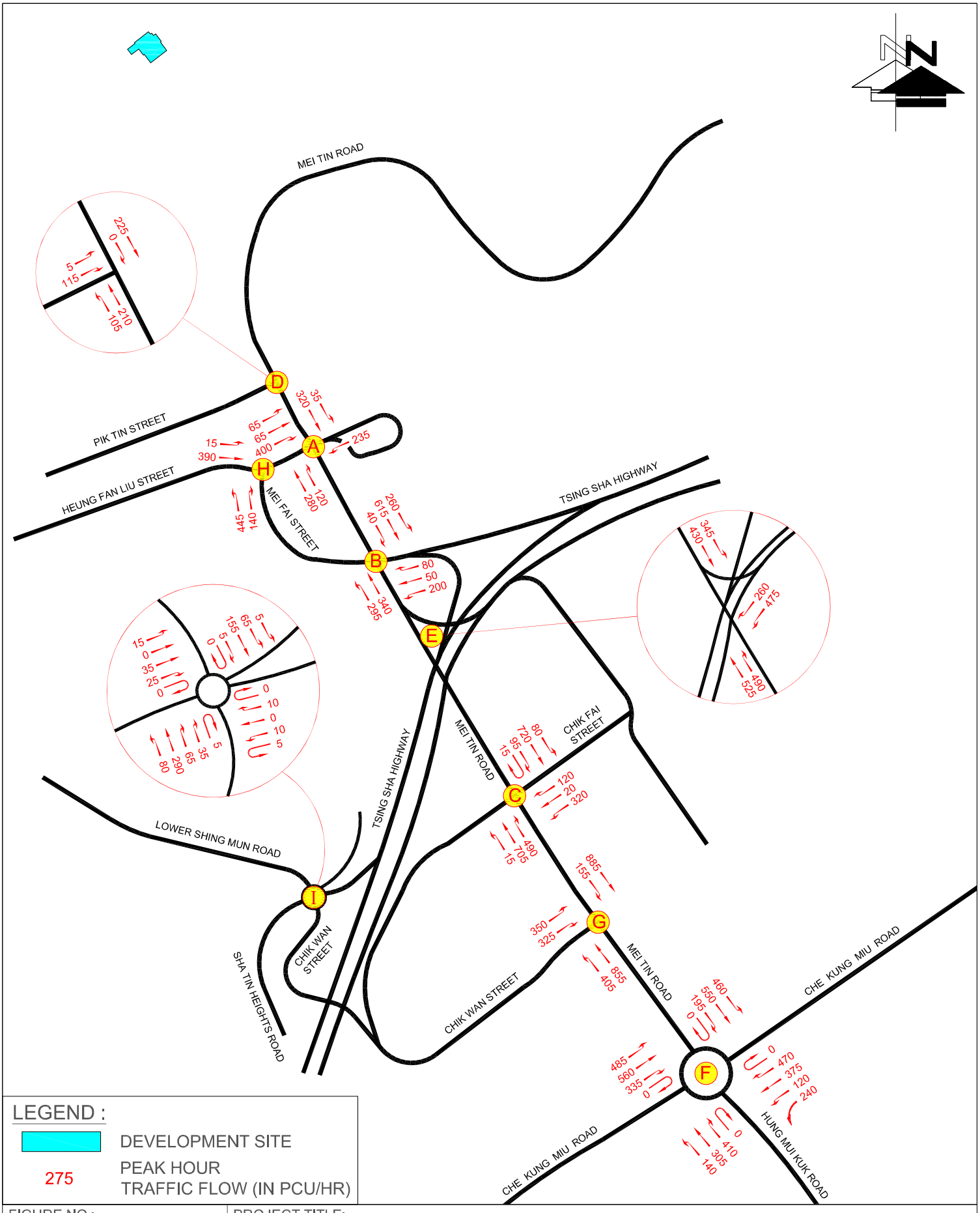
N

LEGEND :

DEVELOPMENT SITE

| | |
|---|---|
| FIGURE NO.: 3.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: FUTURE ADJACENT DEVELOPMENT AT TAI WAI |
| SCALE: 1 : 7000 (IN A4 SIZE) | DATE: 23 OCT 2020 |

CTA Consultants Limited
志達顧問有限公司

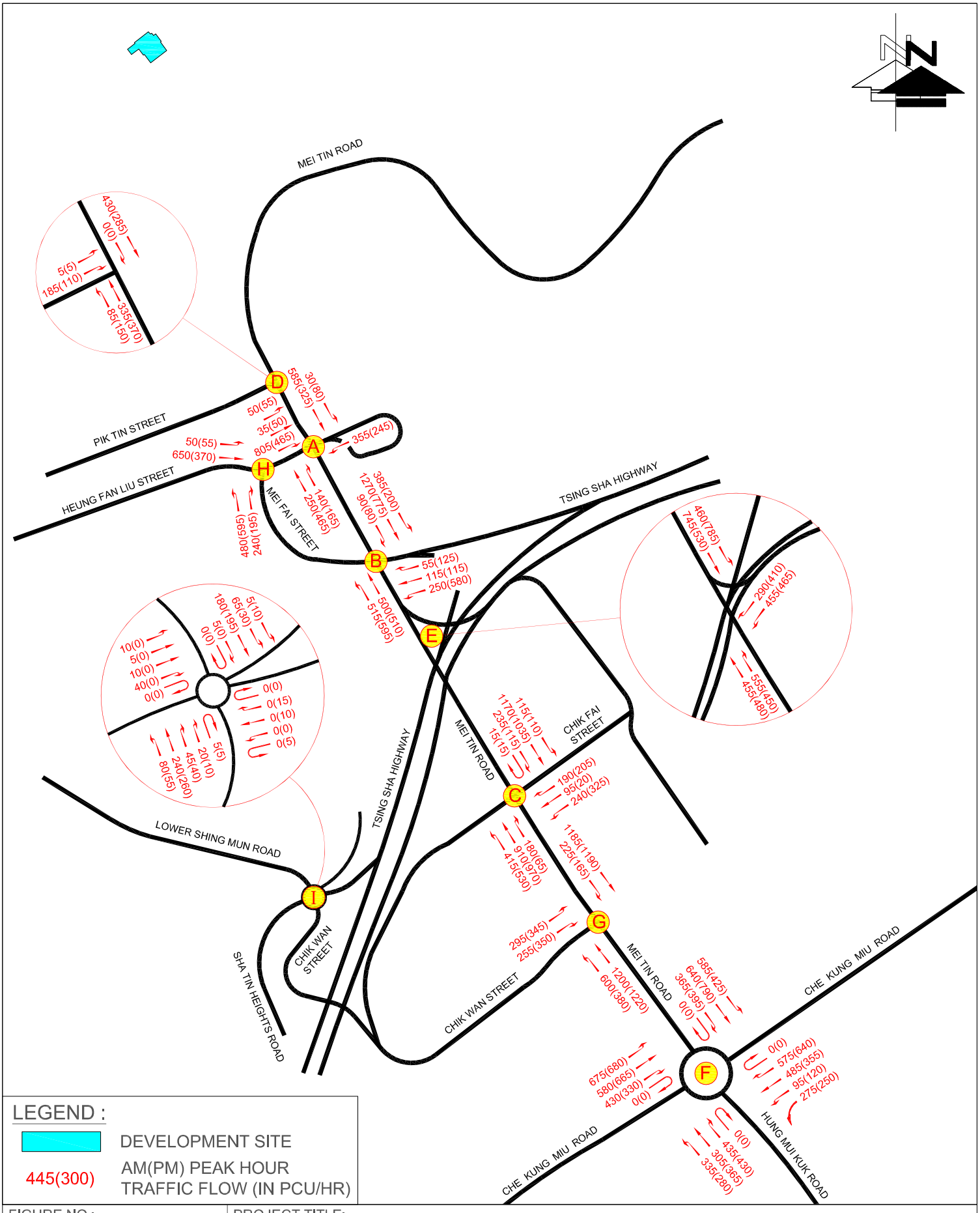



LEGEND :

DEVELOPMENT SITE

275 PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.2 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 REFERENCE TRAFFIC FLOWS (CHING MING FESTIVAL) |
| SCALE: N.T.S. @A4 / DATE: 1 JUN 2023 | CTA Consultants Limited 志達顧問有限公司 |

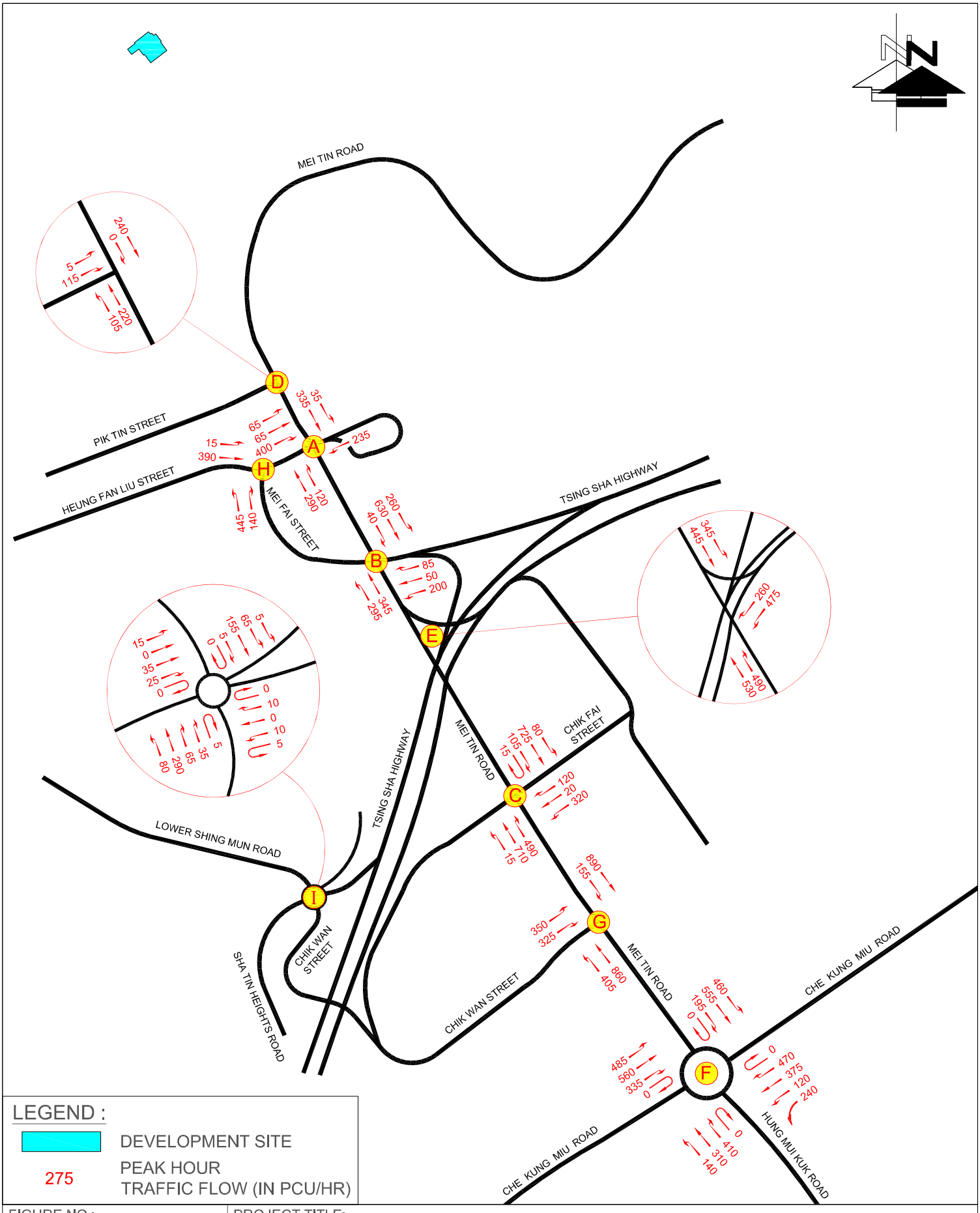



LEGEND :

DEVELOPMENT SITE

445(300) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.3 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 REFERENCE TRAFFIC FLOWS (WEEKDAY) |
| SCALE: N.T.S. @A4 / DATE: 1 JUN 2023 | CTA Consultants Limited 志達顧問有限公司 |

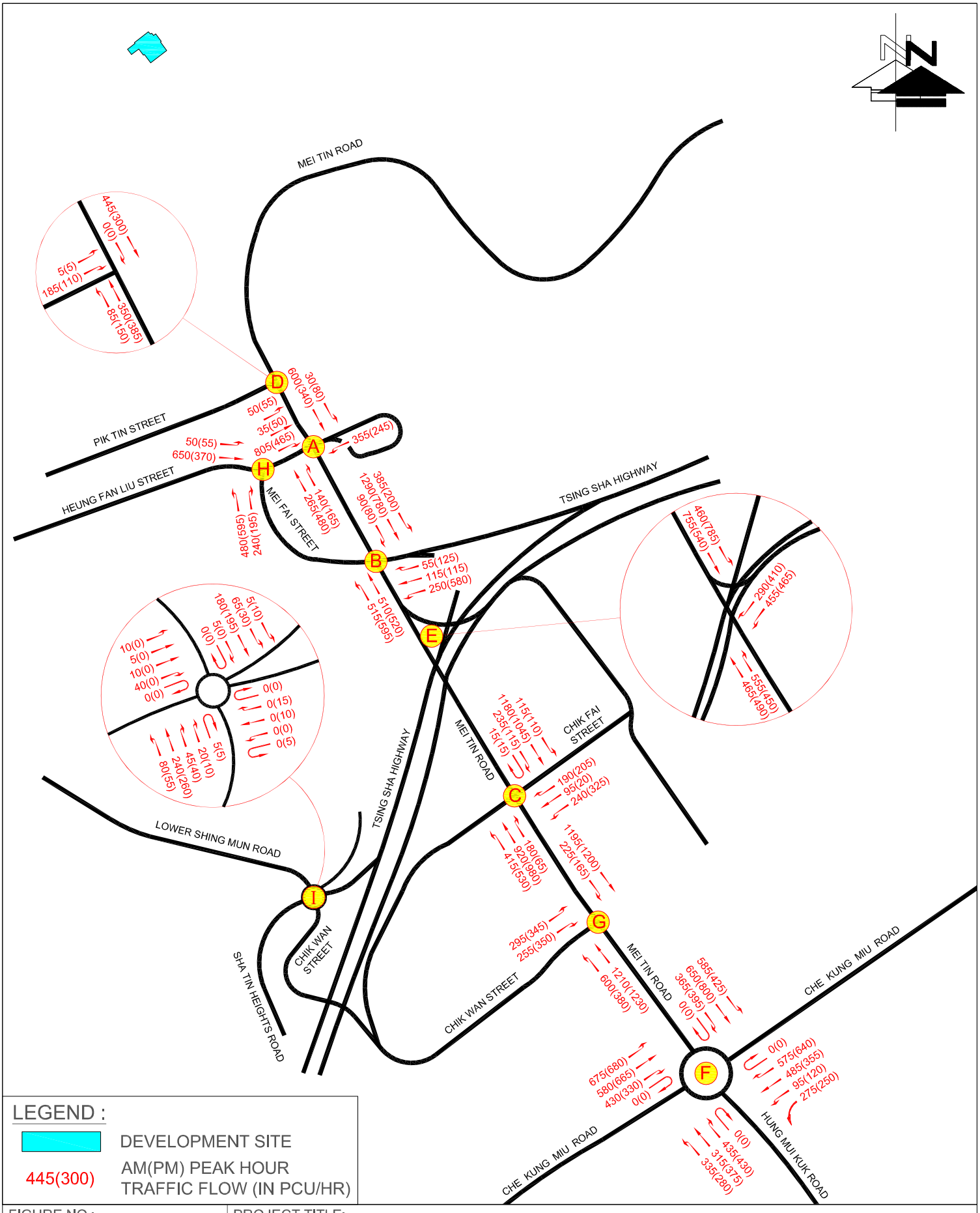



LEGEND :

DEVELOPMENT SITE

275 PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.4 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 DESIGN TRAFFIC FLOWS (CHING MING FESTIVAL) |
| SCALE: N.T.S. @A4 / DATE: 1 JUN 2023 | CTA Consultants Limited 志達顧問有限公司 |

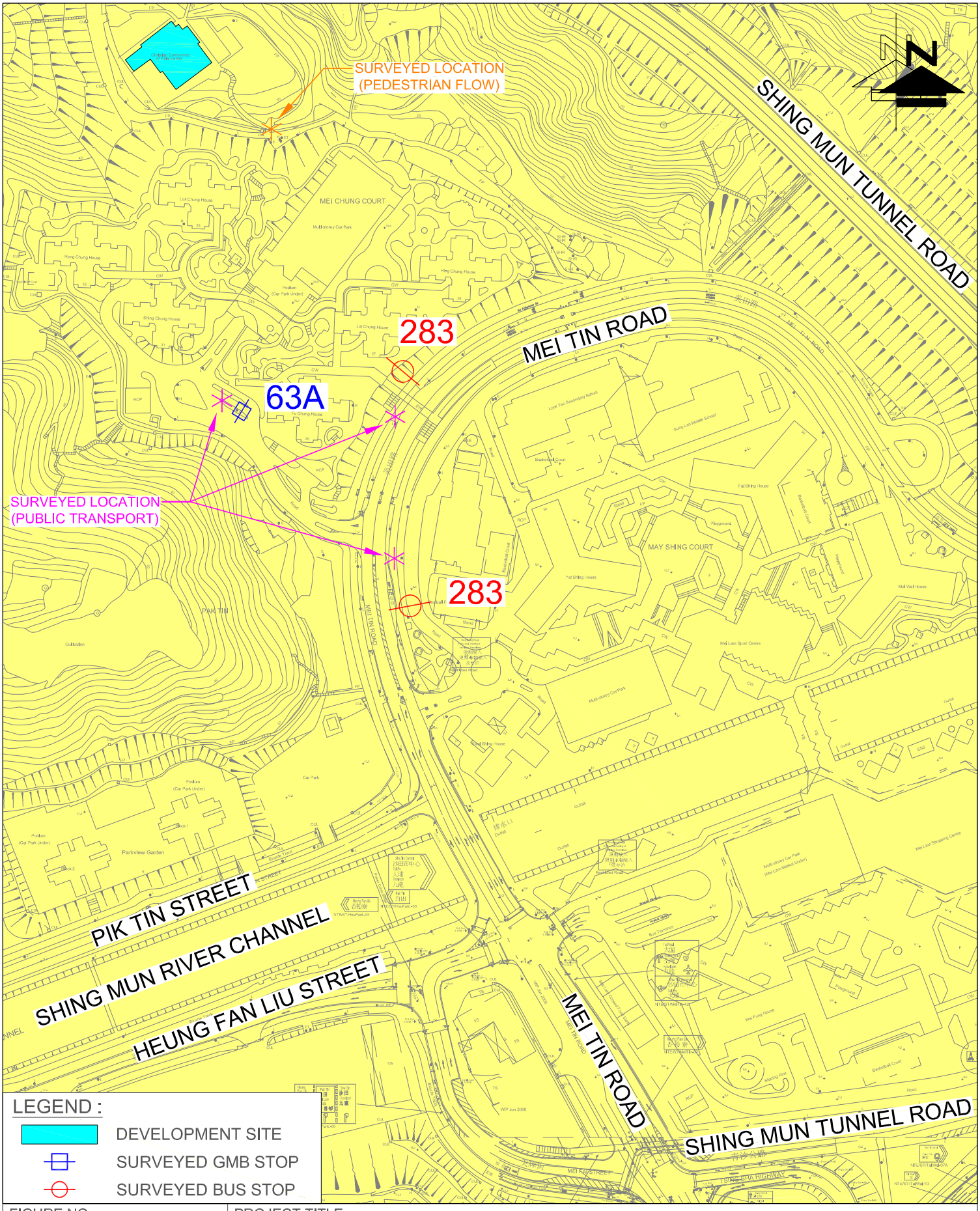



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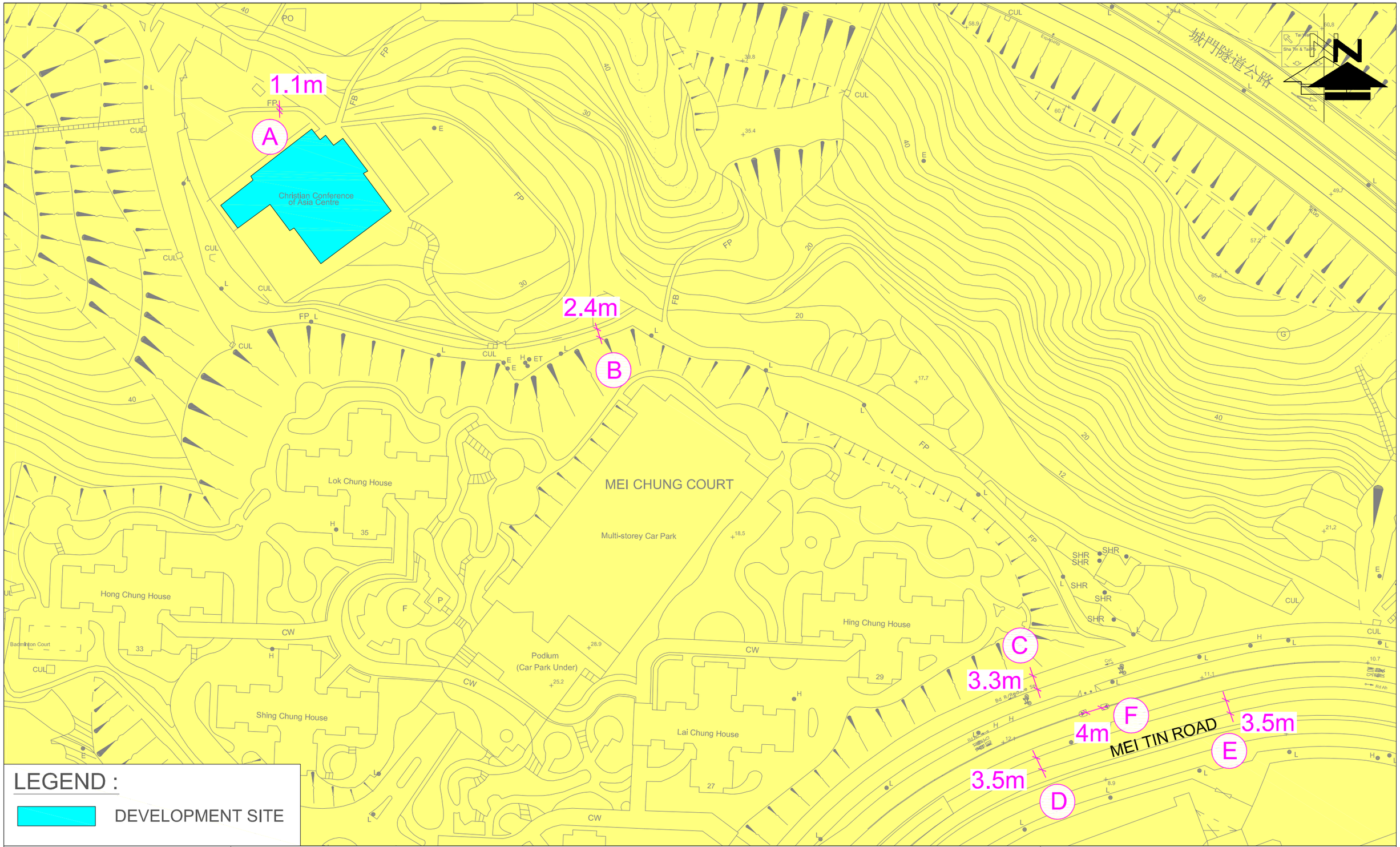
DEVELOPMENT SITE

445(300) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.5 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 DESIGN TRAFFIC FLOWS (WEEKDAY) |
| SCALE: N.T.S. @A4 / DATE: 1 JUN 2023 | CTA Consultants Limited 志達顧問有限公司 |




| | |
|---|---|
| FIGURE NO.: 5.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: SURVEYED LOCATION PLAN |
| SCALE: 1 : 2500 (IN A4 SIZE) / DATE: 23 OCT 2020 | CTA Consultants Limited 志達顧問有限公司 |

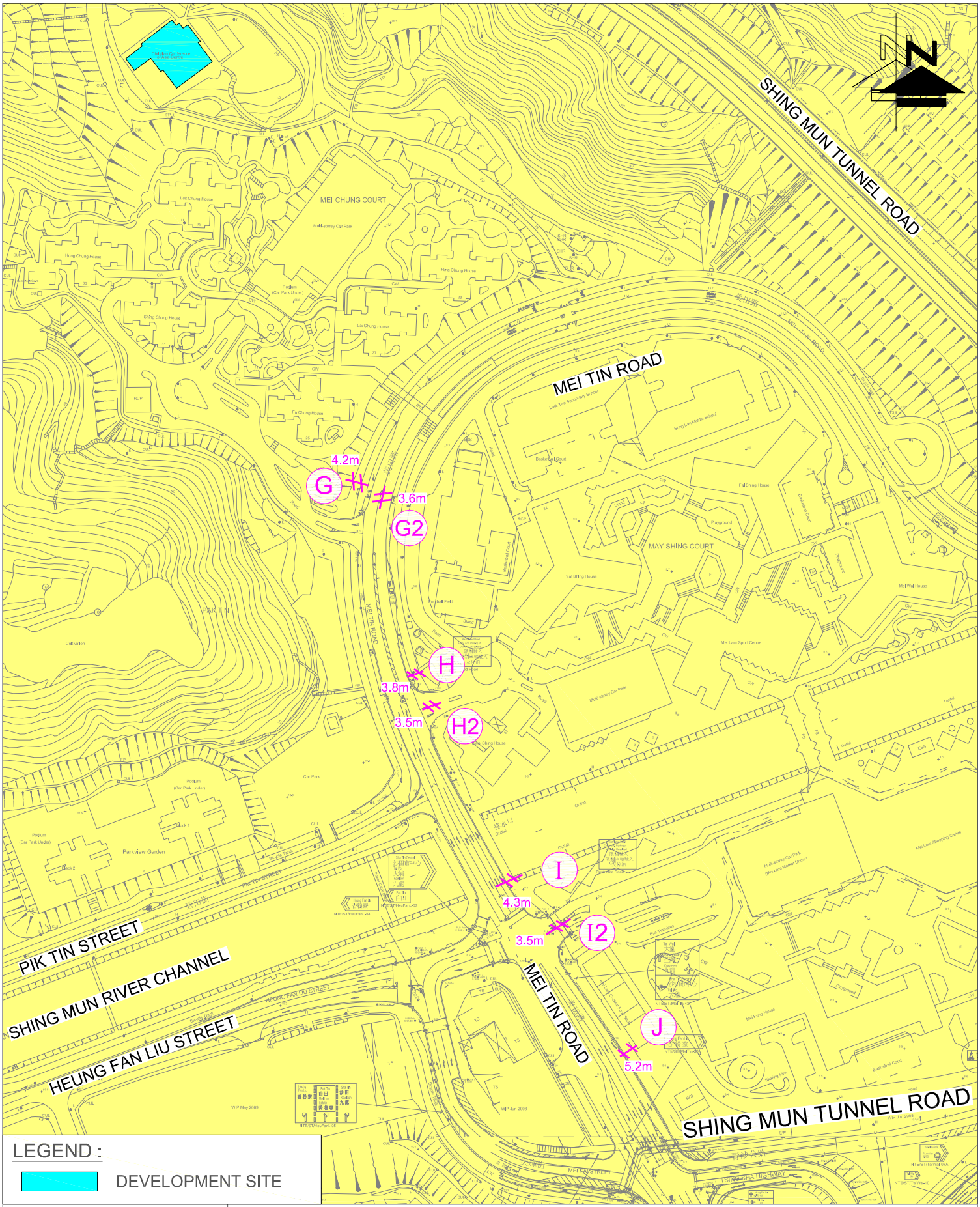



LEGEND :

DEVELOPMENT SITE

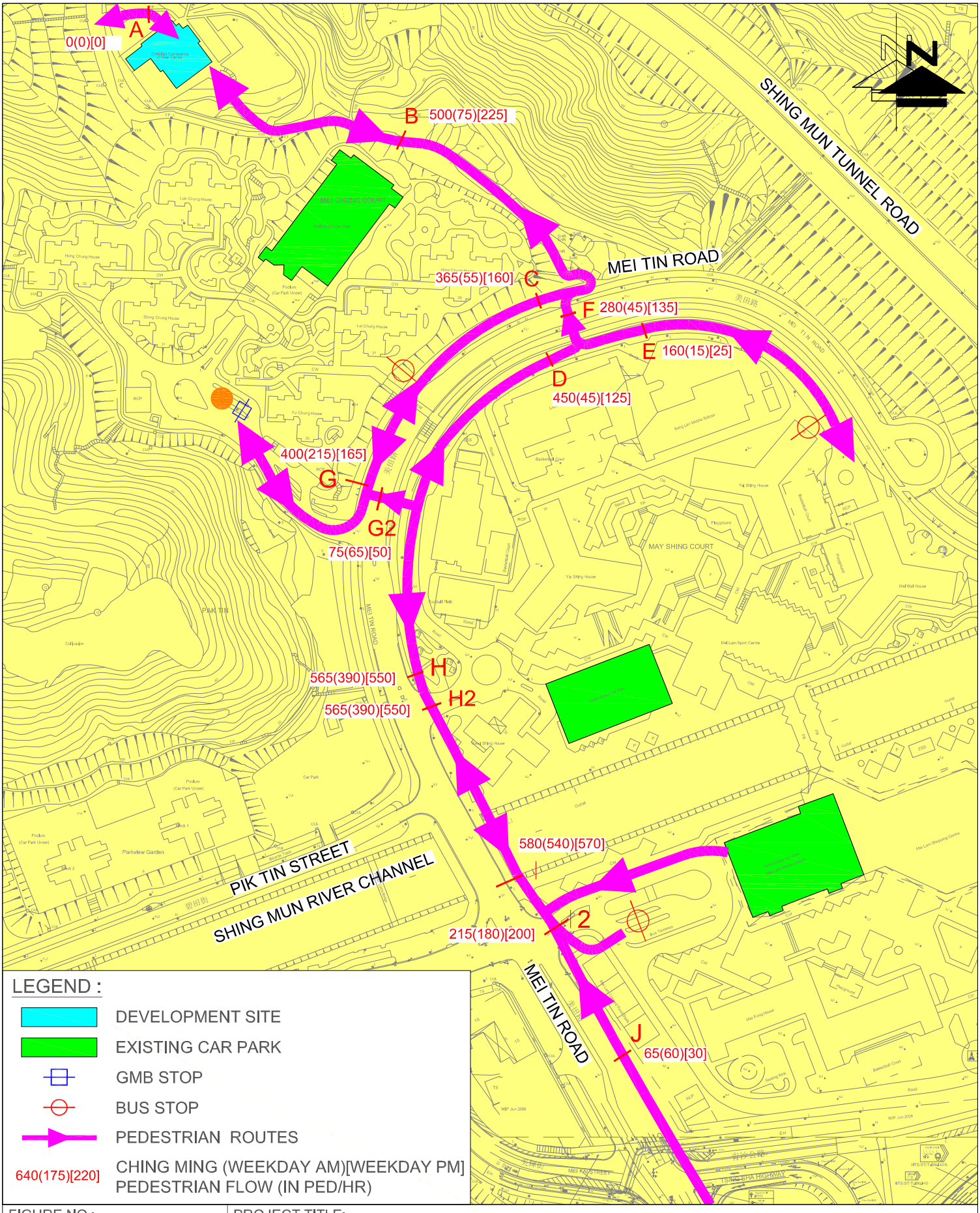
| | |
|---|---|
| FIGURE NO.: 7.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: INDEX PLAN OF CRITICAL SECTIONS - 1 |
| SCALE: 1 : 800 (IN A3 SIZE) / DATE: 29 JUN 2022 | |

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| | |
|---|---|
| FIGURE NO.: 7.2 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: INDEX PLAN OF CRITICAL SECTIONS - 2 |
| SCALE: 1 : 2500 @ A4 | DATE: 10 NOV 2021 |

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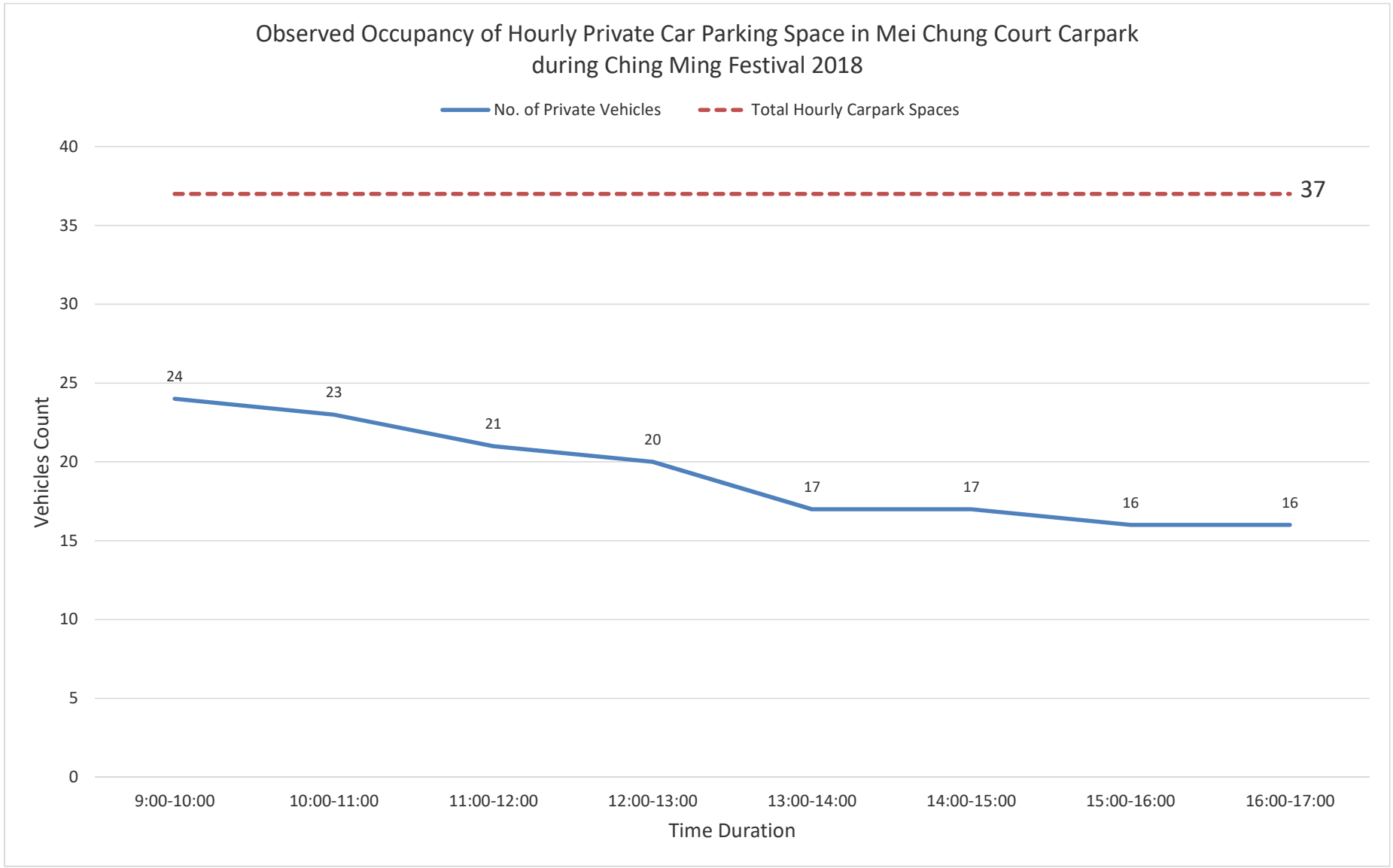



| | |
|---|---|
| FIGURE NO.: 7.3 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 DESIGN PEDESTRIAN FLOWS |
| SCALE: 1 : 2500 @ A4 | DATE: 30 MAY 2023 |

CTA Consultants Limited
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# Appendix 1

# Parking Survey


Observed Occupancy of Hourly Private Car Parking Space in Mei Chung Court Carpark during Ching Ming Festival 2018
No. of Private Vehicles
Total Hourly Carpark Spaces
Vehicles Count
Time Duration
40
35
30
25
20
15
10
5
0
37
24
23
21
20
17
17
16
16
9:00-10:00
10:00-11:00
11:00-12:00
12:00-13:00
13:00-14:00
14:00-15:00
15:00-16:00
16:00-17:00

# Appendix 2

# Junction Calculation Sheets

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**

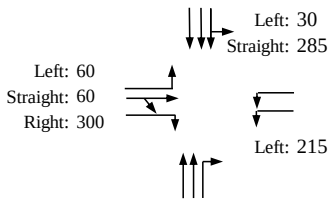
Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 2115 | 2115 | 1960 | 1960 | 60 | 0.031 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 68% | 2255 | 4510 | 2145 | 4105 | 188 | 0.088 | 0.088 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 2255 | 0 | 1960 | 0 | 172 | 0.088 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 1915 | 3970 | 1665 | 3505 | 102 | 0.061 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 2055 | 0 | 1840 | 0 | 113 | 0.061 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 1915 | 3970 | 1915 | 3970 | 118 | 0.062 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 127 | 0.062 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 2055 | 2055 | 1855 | 1855 | 110 | 0.059 | 0.059 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 30% | 1915 | 6025 | 1890 | 6000 | 99 | 0.053 | 0.053 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 108 | 0.052 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 108 | 0.052 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | 7p | A,B,D | green time =50Gm+08Fm=58s | |
| | 8p | B,C,D | green time =49Gm+08Fm=57s | |
| | 9p | B,C,D | green time =49Gm+08Fm=57s | |
| | 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr)

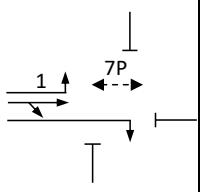



A.M. Check Phase

| | |
|---|---|
| εy | 0.200 |
| L (sec) | 40 |
| C (sec) | 90 |
| y pract. | 0.500 |
| R.C. (%) | 151% |

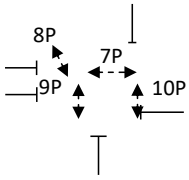
Stage / Phase Diagrams

Stage A



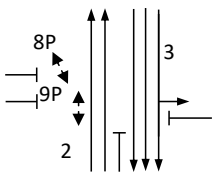

I/G = 5s

Stage B All PED. (25s)



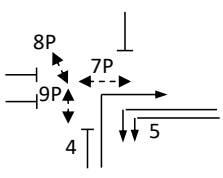

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

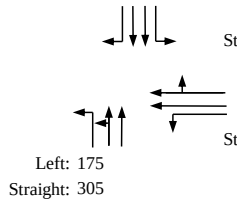
Junction: **(B) Tsing Sha Highway/ Mei Tin Road**

Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 2105 | 0 | 1870 | 0 | 70 | 0.037 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 3975 | 45 | 0.021 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 185 | 0.102 | 0.102 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 1945 | 6135 | 1770 | 5930 | 143 | 0.081 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 19% | 2085 | 0 | 2055 | 0 | 166 | 0.081 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 170 | 0.081 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 4170 | 2085 | 4170 | 250 | 0.120 | 0.120 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 0 | 2085 | 0 | 250 | 0.120 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 35 | 0.018 | |

Notes:

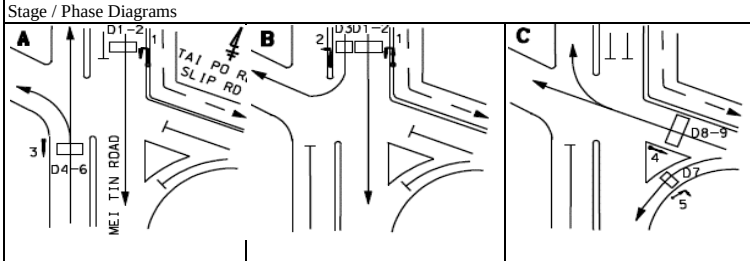
Traffic Flow (pcu / hr)




Peak Hour Check Phase

| | |
|---|---|
| εy | 0.222 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 261% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

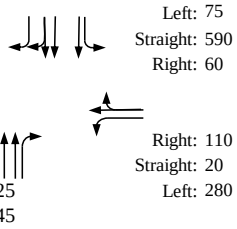
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 75 | 0.041 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 8420 | 2105 | 8300 | 197 | 0.093 | 0.093 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 197 | 0.093 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 2105 | 0 | 2105 | 0 | 197 | 0.093 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 2105 | 0 | 1985 | 0 | 60 | 0.030 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 167 | 0.085 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 179 | 0.085 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 179 | 0.085 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 445 | 0.234 | 0.234 |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 1965 | 1965 | 1890 | 1890 | 280 | 0.148 | 0.148 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 85% | 2105 | 2105 | 2005 | 2005 | 130 | 0.065 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

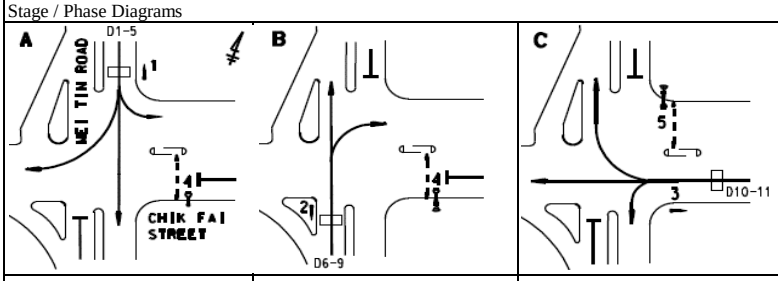
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.476 |
| L (sec) | 14 |
| C (sec) | 90 |
| y pract. | 0.760 |
| R.C. (%) | 60% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**

Description: **2018 OBSERVED TRAFFIC FLOWS**

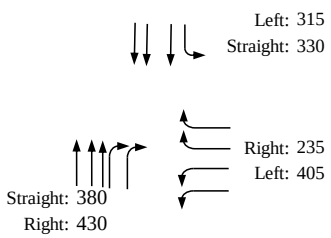
| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 2065 | 2065 | 2005 | 2005 | 315 | 0.157 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 105 | 0.053 | 0.053 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 112 | 0.053 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 112 | 0.053 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6315 | 2105 | 6315 | 127 | 0.060 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 127 | 0.060 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 127 | 0.060 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 216 | 0.109 | 0.109 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 214 | 0.109 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 1965 | 4120 | 1830 | 3865 | 192 | 0.105 | 0.105 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 2155 | 0 | 2035 | 0 | 213 | 0.105 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 1965 | 3930 | 1855 | 3685 | 118 | 0.064 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 1965 | 0 | 1830 | 0 | 117 | 0.064 | |

Pedestrian Phase

| | | | |
|---|---|---|---|
| P1 | A | green time =06Gm+15Fm=21s | |
| P2 | B | green time =17Gm+07Fm=24s | |
| P3 | B, C | green time =27Gm+09Fm=36s | |
| P4 | A | green time =05Gm+10Fm=15s | |

Notes:

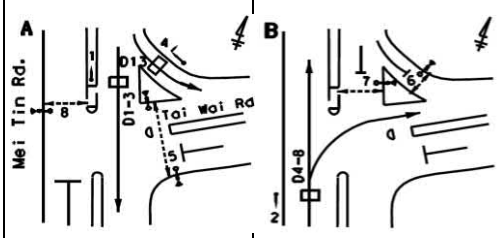
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.267 |
| L (sec) | 12 |
| C (sec) | 90 |
| y pract. | 0.780 |
| R.C. (%) | 192% |

Stage / Phase Diagrams




| | | |
|---|---|---|
| I/G = 5s | I/G = 5s | I/G = 5s |

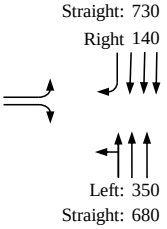
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 2105 | 2105 | 1915 | 1915 | 140 | 0.073 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6175 | 2105 | 6175 | 249 | 0.118 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 249 | 0.118 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 1965 | 0 | 1965 | 0 | 232 | 0.118 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 6175 | 1785 | 5995 | 350 | 0.196 | 0.196 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 340 | 0.162 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 340 | 0.162 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 305 | 0.171 | 0.171 |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 113 | 0.057 | |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 112 | 0.057 | |

Notes:

Traffic Flow (pcu / hr)

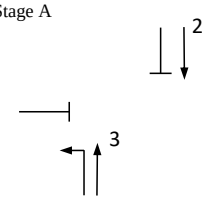



A.M. Check Phase

| | |
|---|---|
| εy | 0.367 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 118% |

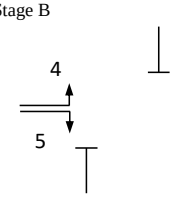
Stage / Phase Diagrams

Stage A



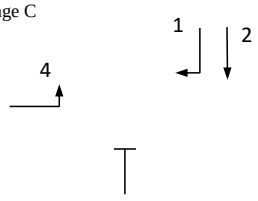

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**

Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 15 | 0.008 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 4210 | 145 | 0.069 | 0.069 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 145 | 0.069 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 285 | 0.160 | 0.160 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 2105 | 4070 | 1960 | 3745 | 68 | 0.035 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 1965 | 0 | 1785 | 0 | 62 | 0.035 | |
| Pedestrian Phase | | | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | |
| | | | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr)

Left: 15
Straight: 290

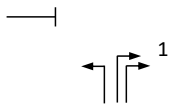
Right: 130
Left: 285

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.229 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 136% |

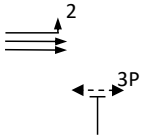
Stage / Phase Diagrams

A



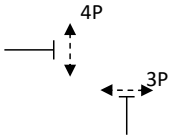

I/G = 3s

B




I/G = 6s

C




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

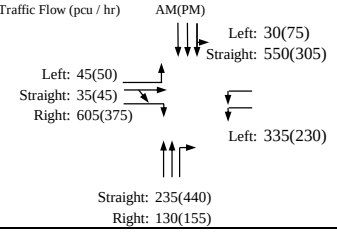
Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 45 | 0.025 | | 50 | 0.027 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 89% | 79% | 2255 | 4510 | 2115 | 2130 | 4075 | 4090 | 332 | 0.157 | 0.157 | 219 | 0.103 | 0.103 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 100% | 2255 | 0 | 1960 | 1960 | 0 | 0 | 308 | 0.157 | | 201 | 0.103 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 100% | 1915 | 3970 | 1665 | 1665 | 3505 | 3505 | 159 | 0.096 | | 109 | 0.066 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 100% | 2055 | 0 | 1840 | 1840 | 0 | 0 | 176 | 0.096 | | 121 | 0.066 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 0% | 1915 | 3970 | 1915 | 1915 | 3970 | 3970 | 113 | 0.059 | | 212 | 0.111 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 122 | 0.059 | | 228 | 0.111 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 100% | 2055 | 2055 | 1855 | 1855 | 1855 | 1855 | 130 | 0.070 | 0.070 | 155 | 0.084 | 0.084 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 16% | 63% | 1915 | 6025 | 1905 | 1870 | 6015 | 5980 | 184 | 0.096 | 0.096 | 119 | 0.064 | 0.064 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 198 | 0.096 | | 131 | 0.064 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 198 | 0.096 | | 131 | 0.064 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | 7p | A,B,D | green time =50Gm+08Fm=58s | |
| | 8p | B,C,D | green time =49Gm+08Fm=57s | |
| | 9p | B,C,D | green time =49Gm+08Fm=57s | |
| | 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

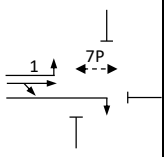



| A.M. Check Phase | |
|---|---|
| εy | 0.324 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 85% |

| P.M. Check Phase | |
|---|---|
| εy | 0.250 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 140% |

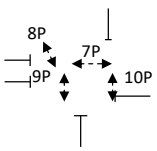
Stage / Phase Diagrams

Stage A



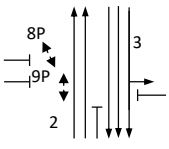

I/G = 5s

Stage B All PED. (25s)



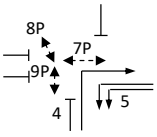

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 84% | 100% | 2105 | 0 | 1905 | 1870 | 0 | 0 | 59 | 0.031 | | 120 | 0.064 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4010 | 3975 | 66 | 0.031 | | 85 | 0.040 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 235 | 0.129 | 0.129 | 545 | 0.299 | 0.299 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 100% | 1945 | 6135 | 1770 | 1770 | 5890 | 5875 | 261 | 0.148 | | 286 | 0.162 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 47% | 57% | 2085 | 0 | 2015 | 2000 | 0 | 0 | 298 | 0.148 | | 323 | 0.162 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 311 | 0.148 | | 340 | 0.162 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 4170 | 2085 | 2085 | 4170 | 4170 | 540 | 0.259 | 0.259 | 335 | 0.161 | 0.161 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 0 | 2085 | 2085 | 0 | 0 | 540 | 0.259 | | 335 | 0.161 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 85 | 0.045 | | 75 | 0.039 | |

Notes:

Traffic Flow (pcu / hr)

Right: 85(75)
Straight: 1080(670)
Left: free flow

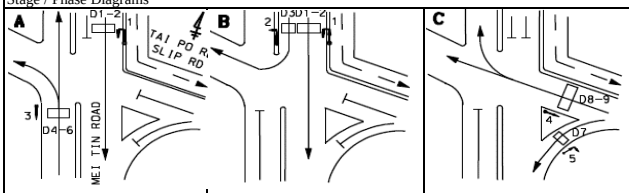
Right: 50(120)
Straight: 75(85)
Left: 235(545)

Left: 400(470)
Straight: 470(480)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.388 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 113% |

| P.M. Check Phase | |
|---|---|
| εy | 0.460 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 79% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

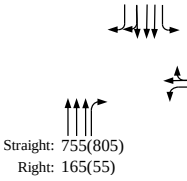
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 110 | 0.060 | | 105 | 0.058 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 8420 | 2105 | 2105 | 8300 | 8300 | 342 | 0.162 | 0.162 | 303 | 0.144 | 0.144 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 342 | 0.162 | | 303 | 0.144 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 342 | 0.162 | | 303 | 0.144 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 0 | 1985 | 1985 | 0 | 0 | 170 | 0.086 | | 80 | 0.040 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 240 | 0.122 | 0.122 | 256 | 0.130 | 0.130 |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 274 | 0.130 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 274 | 0.130 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 165 | 0.087 | | 55 | 0.029 | |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1890 | 1890 | 1890 | 1890 | 210 | 0.111 | | 290 | 0.153 | 0.153 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 67% | 91% | 2105 | 2105 | 2025 | 1995 | 2025 | 1995 | 270 | 0.133 | 0.133 | 215 | 0.108 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

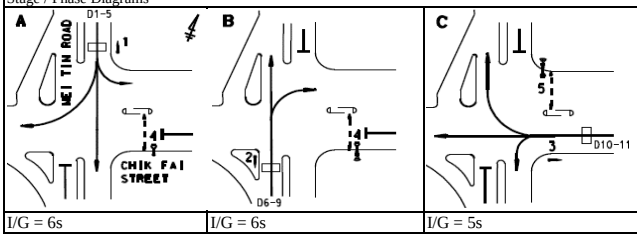
Traffic Flow (pcu / hr) AM(PM)




| A.M. Check Phase | |
|---|---|
| εy | 0.418 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 90% |

| P.M. Check Phase | |
|---|---|
| εy | 0.428 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 86% |

Stage / Phase Diagrams




| I/G = 6s | I/G = 6s | I/G = 5s |
|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 100% | 2065 | 2065 | 2005 | 2005 | 2005 | 2005 | 435 | 0.217 | | 740 | 0.369 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 185 | 0.094 | 0.094 | 142 | 0.072 | 0.072 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 198 | 0.094 | | 152 | 0.072 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 198 | 0.094 | | 152 | 0.072 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6315 | 2105 | 2105 | 6315 | 6315 | 115 | 0.055 | | 122 | 0.058 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 115 | 0.055 | | 122 | 0.058 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 115 | 0.055 | | 122 | 0.058 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 249 | 0.125 | 0.125 | 204 | 0.103 | 0.103 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 246 | 0.125 | | 201 | 0.103 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 100% | 1965 | 4120 | 1830 | 1830 | 3865 | 3865 | 199 | 0.109 | 0.109 | 194 | 0.106 | 0.106 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 100% | 2155 | 0 | 2035 | 2035 | 0 | 0 | 221 | 0.109 | | 216 | 0.106 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 100% | 1965 | 3930 | 1855 | 1855 | 3685 | 3685 | 136 | 0.073 | | 191 | 0.103 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 100% | 1965 | 0 | 1830 | 1830 | 0 | 0 | 134 | 0.073 | | 189 | 0.103 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | P1 | A | green time =06Gm+15Fm=21s |
| | P2 | B | green time =17Gm+07Fm=24s |
| | P3 | B, C | green time =27Gm+09Fm=36s |
| | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

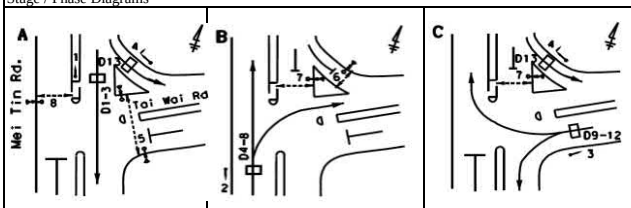
Left: 435(740)
Straight: 580(445)

Right: 270(380)
Left: 420(410)
Straight: 345(365)
Right: 495(405)

| A.M. Check Phase | |
|---|---|
| εy | 0.328 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 147% |

| P.M. Check Phase | |
|---|---|
| εy | 0.281 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 188% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s |
|---|---|---|

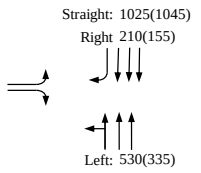
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 100% | 2105 | 2105 | 1915 | 1915 | 1915 | 1915 | 210 | 0.110 | 0.110 | 155 | 0.081 | 0.081 |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6175 | 2105 | 2105 | 6175 | 6175 | 349 | 0.166 | | 356 | 0.169 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 349 | 0.166 | | 356 | 0.169 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 0 | 1965 | 1965 | 0 | 0 | 326 | 0.166 | | 333 | 0.169 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 80% | 1965 | 6175 | 1785 | 1820 | 5995 | 6030 | 530 | 0.297 | 0.297 | 418 | 0.230 | 0.230 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 523 | 0.248 | | 484 | 0.230 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 523 | 0.248 | | 484 | 0.230 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 260 | 0.146 | | 310 | 0.174 | |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 108 | 0.054 | 0.054 | 131 | 0.066 | 0.066 |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 107 | 0.054 | | 129 | 0.066 | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

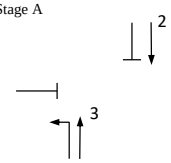



| A.M. Check Phase | |
|---|---|
| εy | 0.461 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 60% |

| P.M. Check Phase | |
|---|---|
| εy | 0.377 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 97% |

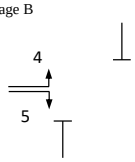
Stage / Phase Diagrams

Stage A



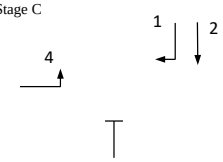

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 45 | 0.025 | | 50 | 0.028 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4210 | 4210 | 230 | 0.109 | 0.109 | 143 | 0.068 | 0.068 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 230 | 0.109 | | 143 | 0.068 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 330 | 0.185 | 0.185 | 445 | 0.249 | 0.249 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 4070 | 1960 | 1960 | 3745 | 3745 | 118 | 0.060 | | 97 | 0.049 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 100% | 1965 | 0 | 1785 | 1785 | 0 | 0 | 107 | 0.060 | | 88 | 0.049 | |
| Pedestrian Phase | | | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | | | | | | | |
| | | | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | | | | | | | |

Notes:

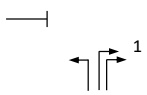
Traffic Flow (pcu / hr) AM(PM)

Left: 45(50)
Straight: 460(285)
Right: 225(185)
Left: 330(445)

| Peak Hour Check Phase | | P.M. Check Phase | |
|---|---|---|---|
| εy | 0.294 | εy | 0.317 |
| L (sec) | 36 | L (sec) | 36 |
| C (sec) | 90 | C (sec) | 90 |
| y pract. | 0.540 | y pract. | 0.540 |
| R.C. (%) | 84% | R.C. (%) | 70% |

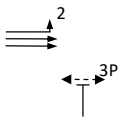
Stage / Phase Diagrams

Stage A



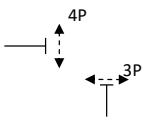

I/G = 3s

Stage B




I/G = 6s

Stage C




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**

Description: **2027 REFERENCE TRAFFIC FLOWS**

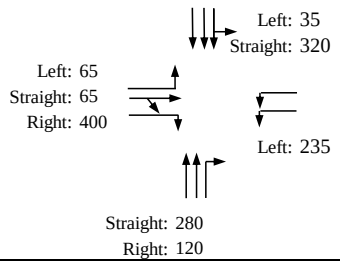
| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 2115 | 2115 | 1960 | 1960 | 65 | 0.033 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 73% | 2255 | 4510 | 2140 | 4100 | 243 | 0.113 | 0.113 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 2255 | 0 | 1960 | 0 | 222 | 0.113 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 1915 | 3970 | 1665 | 3505 | 112 | 0.067 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 2055 | 0 | 1840 | 0 | 123 | 0.067 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 1915 | 3970 | 1915 | 3970 | 135 | 0.071 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 145 | 0.071 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 2055 | 2055 | 1855 | 1855 | 120 | 0.065 | 0.065 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 31% | 1915 | 6025 | 1890 | 6000 | 112 | 0.059 | 0.059 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 122 | 0.059 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 122 | 0.059 | |

Pedestrian Phase

| | | | |
|---|---|---|---|
| 7p | A,B,D | green time =50Gm+08Fm=58s | |
| 8p | B,C,D | green time =49Gm+08Fm=57s | |
| 9p | B,C,D | green time =49Gm+08Fm=57s | |
| 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr)

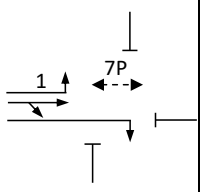



A.M. Check Phase

| | |
|---|---|
| εy | 0.237 |
| L (sec) | 40 |
| C (sec) | 90 |
| y pract. | 0.500 |
| R.C. (%) | 111% |

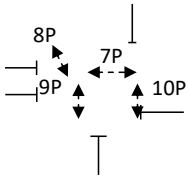
Stage / Phase Diagrams

Stage A



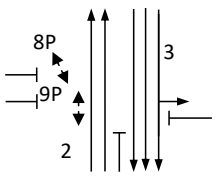

I/G = 5s

Stage B All PED. (25s)



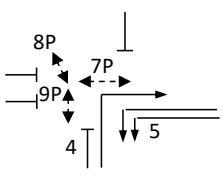

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**

Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 2105 | 0 | 1870 | 0 | 80 | 0.043 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 3975 | 80 | 0.038 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 200 | 0.110 | 0.110 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 1945 | 6135 | 1770 | 5890 | 191 | 0.108 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 48% | 2085 | 0 | 2015 | 0 | 217 | 0.108 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 227 | 0.108 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 4170 | 2085 | 4170 | 308 | 0.147 | 0.147 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 0 | 2085 | 0 | 308 | 0.147 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 40 | 0.021 | |

Notes:

Traffic Flow (pcu / hr)

Right: 40
Straight: 615
Left: free flow

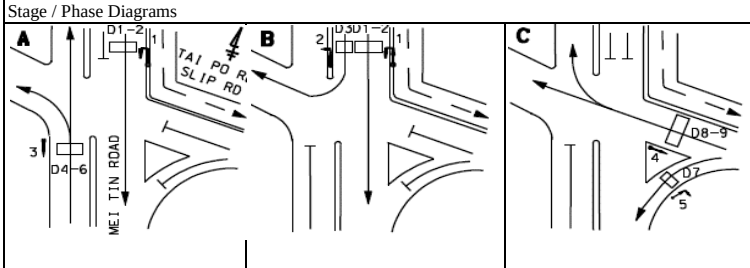
Right: 80
Straight: 80
Left: 200

Left: 295
Straight: 340

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.257 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 211% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 6s | I/G = 7s | | |
|---|---|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

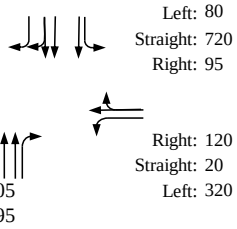
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) Peak Hour | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) Peak Hour | Total Revised Saturation Flow (pcu/hr) Peak Hour | Peak Hour Flow (pcu/hr) | Peak Hour y Value | Peak Hour Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 80 | 0.044 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 8420 | 2105 | 8300 | 240 | 0.114 | 0.114 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 240 | 0.114 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 2105 | 0 | 2105 | 0 | 240 | 0.114 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 2105 | 0 | 1985 | 0 | 95 | 0.048 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 224 | 0.114 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 240 | 0.114 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 240 | 0.114 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 495 | 0.261 | 0.261 |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 1965 | 1965 | 1890 | 1890 | 320 | 0.169 | 0.169 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 86% | 2105 | 2105 | 2000 | 2000 | 140 | 0.070 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

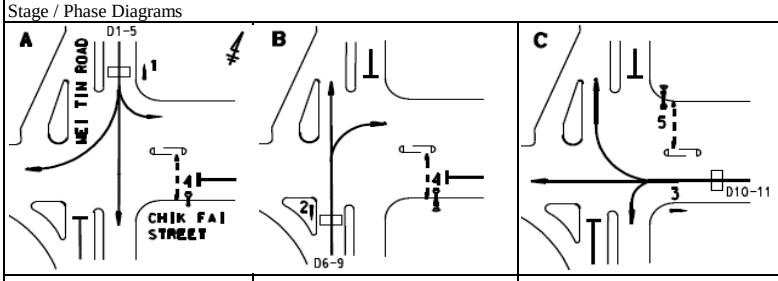
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.544 |
| L (sec) | 14 |
| C (sec) | 90 |
| y pract. | 0.760 |
| R.C. (%) | 40% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**

Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 2065 | 2065 | 2005 | 2005 | 345 | 0.172 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 137 | 0.070 | 0.070 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 147 | 0.070 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 147 | 0.070 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6315 | 2105 | 6315 | 175 | 0.083 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 175 | 0.083 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 175 | 0.083 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 247 | 0.124 | 0.124 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 243 | 0.124 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 1965 | 4120 | 1830 | 3865 | 225 | 0.123 | 0.123 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 2155 | 0 | 2035 | 0 | 250 | 0.123 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 1965 | 3930 | 1855 | 3685 | 131 | 0.071 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 1965 | 0 | 1830 | 0 | 129 | 0.071 | |

| | | | | |
|---|---|---|---|---|
| Pedestrian Phase | | P1 | A | green time =06Gm+15Fm=21s |
| | | P2 | B | green time =17Gm+07Fm=24s |
| | | P3 | B, C | green time =27Gm+09Fm=36s |
| | | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr)

Left: 345
Straight: 430

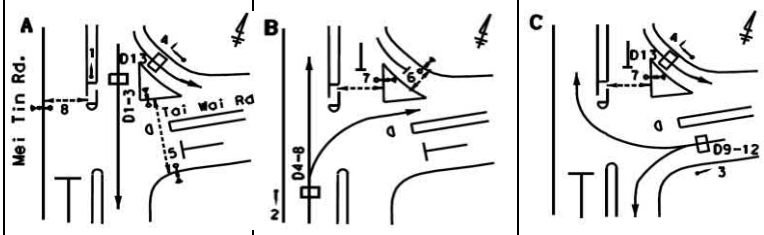
Right: 260
Left: 475

Straight: 525
Right: 490

A.M. Check Phase

| | |
|---|---|
| εy | 0.317 |
| L (sec) | 12 |
| C (sec) | 90 |
| y pract. | 0.780 |
| R.C. (%) | 146% |

Stage / Phase Diagrams




| | | |
|---|---|---|
| I/G = 5s | I/G = 5s | I/G = 5s |

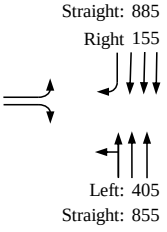
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 2105 | 2105 | 1915 | 1915 | 155 | 0.081 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6175 | 2105 | 6175 | 302 | 0.143 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 302 | 0.143 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 1965 | 0 | 1965 | 0 | 282 | 0.143 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 6175 | 1785 | 5995 | 405 | 0.227 | 0.227 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 428 | 0.203 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 428 | 0.203 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 350 | 0.196 | 0.196 |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 164 | 0.082 | |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 161 | 0.082 | |

Notes:

Traffic Flow (pcu / hr)

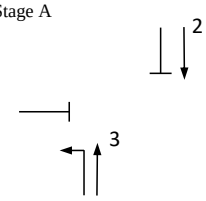



A.M. Check Phase

| | |
|---|---|
| εy | 0.423 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 89% |

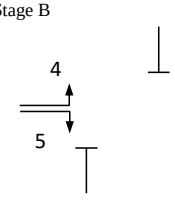
Stage / Phase Diagrams

Stage A



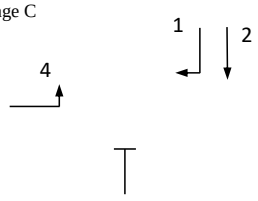

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 15 | 0.008 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 4210 | 195 | 0.093 | 0.093 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 195 | 0.093 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 445 | 0.249 | 0.249 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 2105 | 4070 | 1960 | 3745 | 73 | 0.037 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 1965 | 0 | 1785 | 0 | 67 | 0.037 | |
| Pedestrian Phase | | | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | |
| | | | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr)

Left: 15
Straight: 390

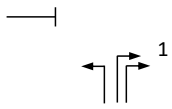
Right: 140
Left: 445

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.342 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 58% |

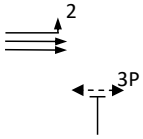
Stage / Phase Diagrams

A



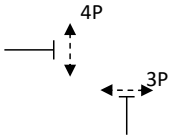

I/G = 3s

B




I/G = 6s

C




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 50 | 0.027 | | 55 | 0.030 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 92% | 81% | 2255 | 4510 | 2110 | 2125 | 4070 | 4085 | 435 | 0.206 | 0.206 | 268 | 0.126 | 0.126 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 100% | 2255 | 0 | 1960 | 1960 | 0 | 0 | 405 | 0.206 | | 247 | 0.126 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 100% | 1915 | 3970 | 1665 | 1665 | 3505 | 3505 | 169 | 0.101 | | 116 | 0.070 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 100% | 2055 | 0 | 1840 | 1840 | 0 | 0 | 186 | 0.101 | | 129 | 0.070 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 0% | 1915 | 3970 | 1915 | 1915 | 3970 | 3970 | 121 | 0.063 | | 224 | 0.117 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 129 | 0.063 | | 241 | 0.117 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 100% | 2055 | 2055 | 1855 | 1855 | 1855 | 1855 | 140 | 0.075 | 0.075 | 165 | 0.089 | 0.089 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 15% | 63% | 1915 | 6025 | 1905 | 1870 | 6015 | 5980 | 195 | 0.102 | 0.102 | 127 | 0.068 | 0.068 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 210 | 0.102 | | 139 | 0.068 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 210 | 0.102 | | 139 | 0.068 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | 7p | A,B,D | green time =50Gm+08Fm=58s |
| | 8p | B,C,D | green time =49Gm+08Fm=57s |
| | 9p | B,C,D | green time =49Gm+08Fm=57s |
| | 10p | B | green time =17Gm+08Fm=25s |

Notes:

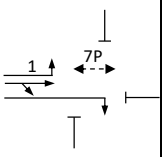
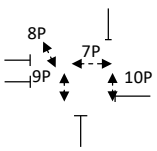
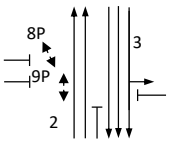
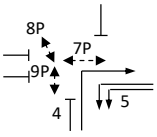
Traffic Flow (pcu / hr) AM(PM)

Left: 30(80)
Straight: 585(325)
Left: 50(55)
Straight: 35(50)
Right: 805(465)
Left: 355(245)
Straight: 250(465)
Right: 140(165)

| A.M. Check Phase | |
|---|---|
| εy | 0.384 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 56% |

| P.M. Check Phase | |
|---|---|
| εy | 0.283 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 112% |

Stage / Phase Diagrams

| Stage A | Stage B All PED. (25s) | Stage C | Stage D |
|---|---|---|---|
|   |   |   |   |
| I/G = 5s | I/G = 4s | I/G = 3s | I/G = 6s |

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 67% | 100% | 2105 | 0 | 1940 | 1870 | 0 | 0 | 82 | 0.042 | | 125 | 0.067 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4045 | 3975 | 88 | 0.042 | | 115 | 0.055 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 250 | 0.137 | 0.137 | 580 | 0.319 | 0.319 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 100% | 1945 | 6135 | 1770 | 1770 | 5870 | 5855 | 306 | 0.173 | | 334 | 0.189 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 61% | 70% | 2085 | 0 | 1995 | 1980 | 0 | 0 | 345 | 0.173 | | 374 | 0.189 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 364 | 0.173 | | 397 | 0.189 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 4170 | 2085 | 2085 | 4170 | 4170 | 638 | 0.306 | 0.306 | 383 | 0.183 | 0.183 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 0 | 2085 | 2085 | 0 | 0 | 638 | 0.306 | | 383 | 0.183 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 90 | 0.047 | | 80 | 0.042 | |

Notes:

Traffic Flow (pcu / hr)

Right: 90(80)
Straight: 1275(765)
Left: free flow

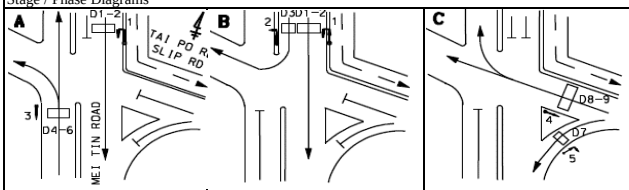
Right: 55(125)
Straight: 115(115)
Left: 250(580)

Left: 515(595)
Straight: 500(510)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.443 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 86% |

| P.M. Check Phase | |
|---|---|
| εy | 0.502 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 64% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

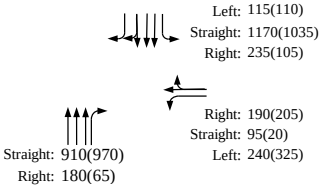
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 115 | 0.063 | | 110 | 0.060 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 8420 | 2105 | 2105 | 8300 | 8300 | 390 | 0.185 | 0.185 | 345 | 0.164 | 0.164 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 390 | 0.185 | | 345 | 0.164 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 390 | 0.185 | | 345 | 0.164 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 0 | 1985 | 1985 | 0 | 0 | 235 | 0.118 | | 105 | 0.053 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 290 | 0.147 | 0.147 | 309 | 0.157 | 0.157 |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 310 | 0.147 | | 331 | 0.157 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 310 | 0.147 | | 331 | 0.157 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 180 | 0.095 | | 65 | 0.034 | |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1890 | 1890 | 1890 | 1890 | 240 | 0.127 | | 325 | 0.172 | 0.172 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 67% | 91% | 2105 | 2105 | 2025 | 1995 | 2025 | 1995 | 285 | 0.141 | 0.141 | 225 | 0.113 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

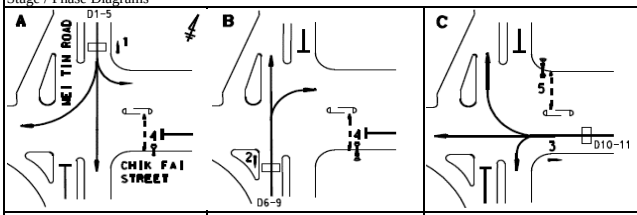
Traffic Flow (pcu / hr) AM(PM)




| A.M. Check Phase | |
|---|---|
| εy | 0.473 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 68% |

| P.M. Check Phase | |
|---|---|
| εy | 0.493 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 61% |

Stage / Phase Diagrams




| I/G = 6s | I/G = 6s | I/G = 5s |
|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 100% | 2065 | 2065 | 2005 | 2005 | 2005 | 2005 | 460 | 0.229 | | 785 | 0.392 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 237 | 0.121 | 0.121 | 169 | 0.086 | 0.086 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 254 | 0.121 | | 181 | 0.086 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 254 | 0.121 | | 181 | 0.086 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6315 | 2105 | 2105 | 6315 | 6315 | 152 | 0.072 | | 160 | 0.076 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 152 | 0.072 | | 160 | 0.076 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 152 | 0.072 | | 160 | 0.076 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 279 | 0.141 | 0.141 | 226 | 0.114 | 0.114 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 276 | 0.141 | | 224 | 0.114 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 100% | 1965 | 4120 | 1830 | 1830 | 3865 | 3865 | 215 | 0.118 | 0.118 | 220 | 0.120 | 0.120 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 100% | 2155 | 0 | 2035 | 2035 | 0 | 0 | 240 | 0.118 | | 245 | 0.120 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 100% | 1965 | 3930 | 1855 | 1855 | 3685 | 3685 | 146 | 0.079 | | 204 | 0.110 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 100% | 1965 | 0 | 1830 | 1830 | 0 | 0 | 144 | 0.079 | | 201 | 0.110 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | P1 | A | green time =06Gm+15Fm=21s |
| | P2 | B | green time =17Gm+07Fm=24s |
| | P3 | B, C | green time =27Gm+09Fm=36s |
| | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

Left: 460(785)
Straight: 745(530)

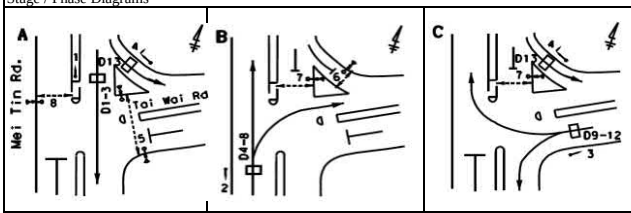
Right: 290(405)
Left: 455(465)

Straight: 455(480)
Right: 555(450)

| A.M. Check Phase | |
|---|---|
| εy | 0.379 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 114% |

| P.M. Check Phase | |
|---|---|
| εy | 0.320 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 153% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s |
|---|---|---|

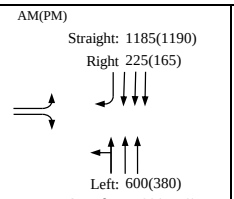
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 100% | 2105 | 2105 | 1915 | 1915 | 1915 | 1915 | 225 | 0.117 | 0.117 | 165 | 0.086 | 0.086 |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6175 | 2105 | 2105 | 6175 | 6175 | 404 | 0.192 | | 406 | 0.193 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 404 | 0.192 | | 406 | 0.193 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 0 | 1965 | 1965 | 0 | 0 | 377 | 0.192 | | 379 | 0.193 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 79% | 1965 | 6175 | 1785 | 1820 | 5995 | 6030 | 600 | 0.336 | 0.336 | 483 | 0.266 | 0.266 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 600 | 0.285 | | 558 | 0.265 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 600 | 0.285 | | 558 | 0.265 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 295 | 0.165 | | 340 | 0.190 | |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 128 | 0.065 | 0.065 | 179 | 0.090 | 0.090 |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 127 | 0.065 | | 176 | 0.090 | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

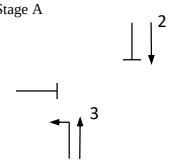



| A.M. Check Phase | |
|---|---|
| εy | 0.518 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 43% |

| P.M. Check Phase | |
|---|---|
| εy | 0.442 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 68% |

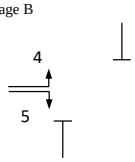
Stage / Phase Diagrams

Stage A



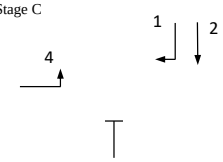

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 50 | 0.028 | | 55 | 0.031 | |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4210 | 4210 | 325 | 0.154 | 0.154 | 185 | 0.088 | 0.088 |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 325 | 0.154 | | 185 | 0.088 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 480 | 0.269 | 0.269 | 595 | 0.333 | 0.333 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 4070 | 1960 | 1960 | 3745 | 3745 | 126 | 0.064 | | 102 | 0.052 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 100% | 1965 | 0 | 1785 | 1785 | 0 | 0 | 114 | 0.064 | | 93 | 0.052 | |
| Pedestrian Phase | | ⇢ | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | | | | | | | |
| | | ⇢ | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | | | | | | | |

Notes:

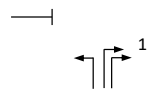
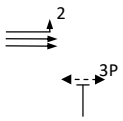
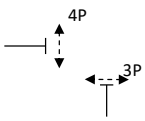
Traffic Flow (pcu / hr) AM(PM)

Left: 50(55)
Straight: 650(370)
Right: 240(195)
Left: 480(595)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.423 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 28% |

| P.M. Check Phase | |
|---|---|
| εy | 0.421 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 28% |

Stage / Phase Diagrams

| Stage A | Stage B | Stage C |
|---|---|---|
|   |   |   |
| I/G = 3s | I/G = 6s | I/G = 5s |

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

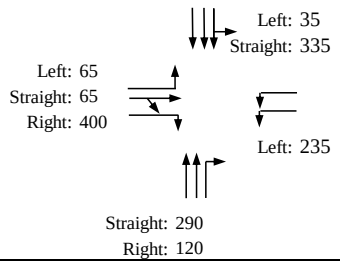
Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 2115 | 2115 | 1960 | 1960 | 65 | 0.033 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 73% | 2255 | 4510 | 2140 | 4100 | 243 | 0.113 | 0.113 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 2255 | 0 | 1960 | 0 | 222 | 0.113 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 1915 | 3970 | 1665 | 3505 | 112 | 0.067 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 2055 | 0 | 1840 | 0 | 123 | 0.067 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 1915 | 3970 | 1915 | 3970 | 140 | 0.073 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 150 | 0.073 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 2055 | 2055 | 1855 | 1855 | 120 | 0.065 | 0.065 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 30% | 1915 | 6025 | 1895 | 6005 | 117 | 0.062 | 0.062 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 127 | 0.062 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 127 | 0.062 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | 7p | A,B,D | green time =50Gm+08Fm=58s | |
| | 8p | B,C,D | green time =49Gm+08Fm=57s | |
| | 9p | B,C,D | green time =49Gm+08Fm=57s | |
| | 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr)

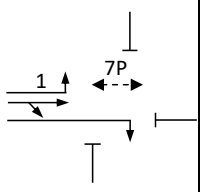



A.M. Check Phase

| | |
|---|---|
| εy | 0.240 |
| L (sec) | 40 |
| C (sec) | 90 |
| y pract. | 0.500 |
| R.C. (%) | 108% |

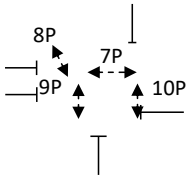
Stage / Phase Diagrams

Stage A



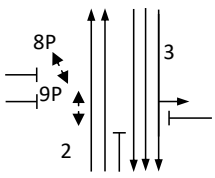

I/G = 5s

Stage B All PED. (25s)



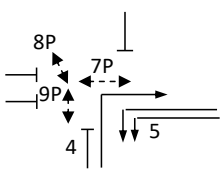

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

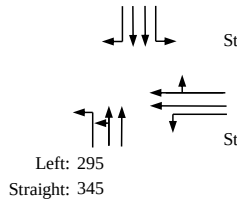
Junction: **(B) Tsing Sha Highway/ Mei Tin Road**

Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 2105 | 0 | 1870 | 0 | 85 | 0.045 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 3975 | 80 | 0.038 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 200 | 0.110 | 0.110 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 1945 | 6135 | 1770 | 5890 | 192 | 0.109 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 47% | 2085 | 0 | 2015 | 0 | 219 | 0.109 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 229 | 0.109 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 4170 | 2085 | 4170 | 315 | 0.151 | 0.151 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 0 | 2085 | 0 | 315 | 0.151 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 40 | 0.021 | |

Notes:

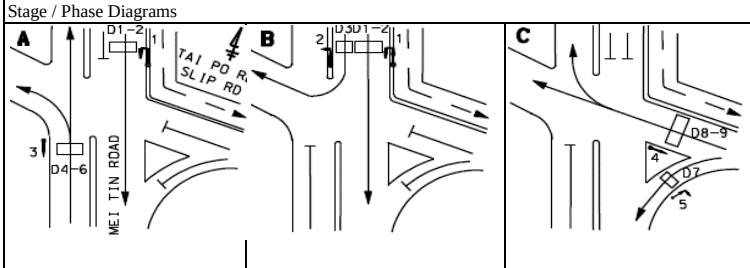
Traffic Flow (pcu / hr)




Peak Hour Check Phase

| | |
|---|---|
| εy | 0.261 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 207% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 80 | 0.044 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 8420 | 2105 | 8300 | 242 | 0.115 | 0.115 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 242 | 0.115 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 2105 | 0 | 2105 | 0 | 242 | 0.115 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 2105 | 0 | 1985 | 0 | 105 | 0.053 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 226 | 0.115 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 242 | 0.115 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 242 | 0.115 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 495 | 0.261 | 0.261 |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 1965 | 1965 | 1890 | 1890 | 320 | 0.169 | 0.169 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 86% | 2105 | 2105 | 2000 | 2000 | 140 | 0.070 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

Traffic Flow (pcu / hr)



Left: 80
Straight: 725
Right: 105



Right: 120
Straight: 20
Left: 320

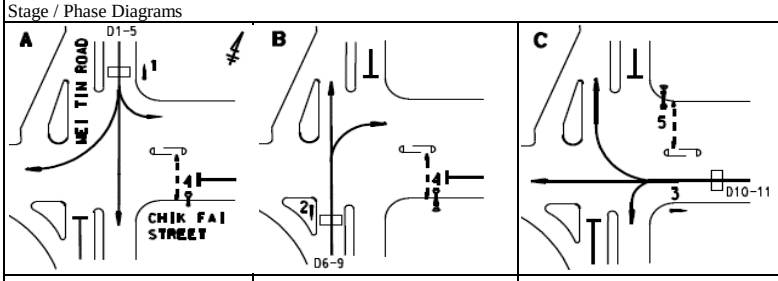


Straight: 710
Right: 495

A.M. Check Phase

| | |
|---|---|
| εy | 0.545 |
| L (sec) | 14 |
| C (sec) | 90 |
| y pract. | 0.760 |
| R.C. (%) | 40% |

Stage / Phase Diagrams




| | | |
|---|---|---|
| I/G = 6s | I/G = 6s | I/G = 5s |

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**

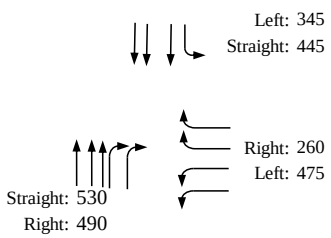
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 2065 | 2065 | 2005 | 2005 | 345 | 0.172 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 142 | 0.072 | 0.072 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 152 | 0.072 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 152 | 0.072 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6315 | 2105 | 6315 | 177 | 0.084 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 177 | 0.084 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 177 | 0.084 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 247 | 0.124 | 0.124 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 243 | 0.124 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 1965 | 4120 | 1830 | 3865 | 225 | 0.123 | 0.123 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 2155 | 0 | 2035 | 0 | 250 | 0.123 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 1965 | 3930 | 1855 | 3685 | 131 | 0.071 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 1965 | 0 | 1830 | 0 | 129 | 0.071 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | P1 | A | green time =06Gm+15Fm=21s | |
| | P2 | B | green time =17Gm+07Fm=24s | |
| | P3 | B, C | green time =27Gm+09Fm=36s | |
| | P4 | A | green time =05Gm+10Fm=15s | |

Notes:

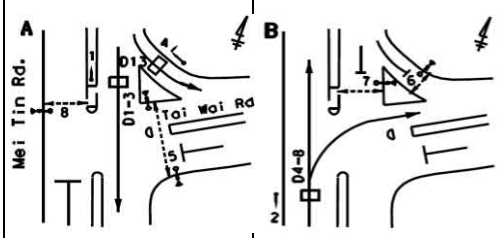
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.319 |
| L (sec) | 12 |
| C (sec) | 90 |
| y pract. | 0.780 |
| R.C. (%) | 144% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s | | |
|---|---|---|---|---|

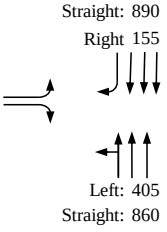
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 2105 | 2105 | 1915 | 1915 | 155 | 0.081 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6175 | 2105 | 6175 | 303 | 0.144 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 303 | 0.144 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 1965 | 0 | 1965 | 0 | 283 | 0.144 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 6175 | 1785 | 5995 | 405 | 0.227 | 0.227 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 430 | 0.204 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 430 | 0.204 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 350 | 0.196 | 0.196 |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 164 | 0.082 | |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 161 | 0.082 | |

Notes:

Traffic Flow (pcu / hr)

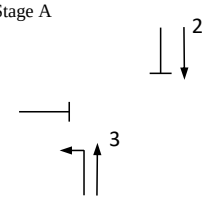



A.M. Check Phase

| | |
|---|---|
| εy | 0.423 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 89% |

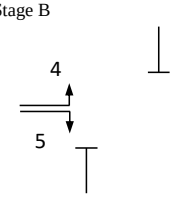
Stage / Phase Diagrams

Stage A



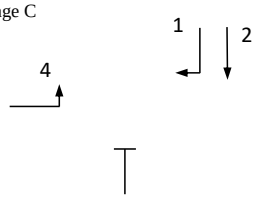

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) Peak Hour | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) Peak Hour | Total Revised Saturation Flow (pcu/hr) Peak Hour | Peak Hour Flow (pcu/hr) | Peak Hour y Value | Peak Hour Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 15 | 0.008 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 4210 | 195 | 0.093 | 0.093 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 195 | 0.093 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 445 | 0.249 | 0.249 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 2105 | 4070 | 1960 | 3745 | 73 | 0.037 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 1965 | 0 | 1785 | 0 | 67 | 0.037 | |
| Pedestrian Phase | | | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | |
| | | | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr)

Left: 15
Straight: 390

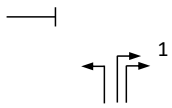
Right: 140
Left: 445

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.342 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 58% |

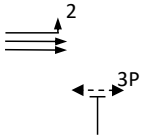
Stage / Phase Diagrams

A



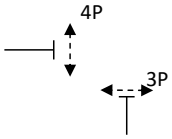

I/G = 3s

B




I/G = 6s

C




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

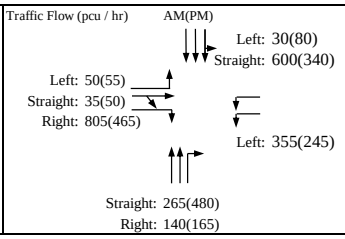
Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 50 | 0.027 | | 55 | 0.030 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 92% | 81% | 2255 | 4510 | 2110 | 2125 | 4070 | 4085 | 435 | 0.206 | 0.206 | 268 | 0.126 | 0.126 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 100% | 2255 | 0 | 1960 | 1960 | 0 | 0 | 405 | 0.206 | | 247 | 0.126 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 100% | 1915 | 3970 | 1665 | 1665 | 3505 | 3505 | 169 | 0.101 | | 116 | 0.070 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 100% | 2055 | 0 | 1840 | 1840 | 0 | 0 | 186 | 0.101 | | 129 | 0.070 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 0% | 1915 | 3970 | 1915 | 1915 | 3970 | 3970 | 128 | 0.067 | | 232 | 0.121 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 137 | 0.067 | | 248 | 0.121 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 100% | 2055 | 2055 | 1855 | 1855 | 1855 | 1855 | 140 | 0.075 | 0.075 | 165 | 0.089 | 0.089 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 15% | 61% | 1915 | 6025 | 1905 | 1870 | 6015 | 5980 | 199 | 0.105 | 0.105 | 131 | 0.070 | 0.070 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 215 | 0.105 | | 144 | 0.070 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 215 | 0.105 | | 144 | 0.070 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | 7p | A,B,D | green time =50Gm+08Fm=58s |
| | 8p | B,C,D | green time =49Gm+08Fm=57s |
| | 9p | B,C,D | green time =49Gm+08Fm=57s |
| | 10p | B | green time =17Gm+08Fm=25s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

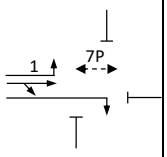



| A.M. Check Phase | |
|---|---|
| εy | 0.387 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 55% |

| P.M. Check Phase | |
|---|---|
| εy | 0.285 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 110% |

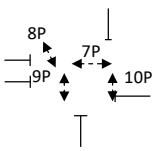
Stage / Phase Diagrams

Stage A



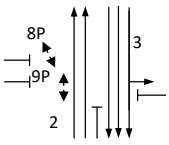

I/G = 5s

Stage B All PED. (25s)



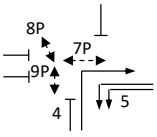

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 72% | 100% | 2105 | 0 | 1930 | 1870 | 0 | 0 | 84 | 0.043 | | 130 | 0.070 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4035 | 3975 | 91 | 0.043 | | 115 | 0.055 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 250 | 0.137 | 0.137 | 580 | 0.319 | 0.319 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 100% | 1945 | 6135 | 1770 | 1770 | 5870 | 5860 | 309 | 0.175 | | 337 | 0.190 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 59% | 68% | 2085 | 0 | 1995 | 1985 | 0 | 0 | 349 | 0.175 | | 377 | 0.190 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 367 | 0.175 | | 401 | 0.190 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 4170 | 2085 | 2085 | 4170 | 4170 | 645 | 0.309 | 0.309 | 390 | 0.187 | 0.187 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 0 | 2085 | 2085 | 0 | 0 | 645 | 0.309 | | 390 | 0.187 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 90 | 0.047 | | 80 | 0.042 | |

Notes:

Traffic Flow (pcu / hr)

Right: 90(80)
Straight: 1290(780)
Left: free flow

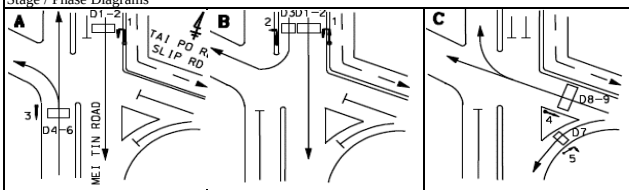
Right: 60(130)
Straight: 115(115)
Left: 250(580)

Left: 515(595)
Straight: 510(520)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.447 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 85% |

| P.M. Check Phase | |
|---|---|
| εy | 0.506 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 63% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

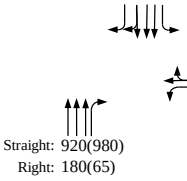
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 115 | 0.063 | | 110 | 0.060 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 8420 | 2105 | 2105 | 8300 | 8300 | 393 | 0.187 | 0.187 | 348 | 0.165 | 0.165 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 393 | 0.187 | | 348 | 0.165 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 393 | 0.187 | | 348 | 0.165 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 0 | 1985 | 1985 | 0 | 0 | 240 | 0.121 | | 110 | 0.055 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 293 | 0.149 | 0.149 | 312 | 0.159 | 0.159 |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 314 | 0.149 | | 334 | 0.159 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 314 | 0.149 | | 334 | 0.159 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 180 | 0.095 | | 65 | 0.034 | |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1890 | 1890 | 1890 | 1890 | 240 | 0.127 | | 325 | 0.172 | 0.172 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 67% | 91% | 2105 | 2105 | 2025 | 1995 | 2025 | 1995 | 285 | 0.141 | 0.141 | 225 | 0.113 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

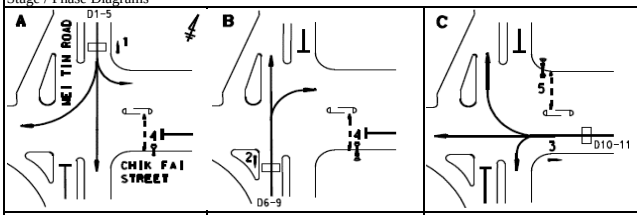
Traffic Flow (pcu / hr) AM(PM)




| A.M. Check Phase | |
|---|---|
| εy | 0.477 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 67% |

| P.M. Check Phase | |
|---|---|
| εy | 0.496 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 60% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 100% | 2065 | 2065 | 2005 | 2005 | 2005 | 2005 | 460 | 0.229 | | 785 | 0.392 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 240 | 0.122 | 0.122 | 172 | 0.087 | 0.087 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 184 | 0.087 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 184 | 0.087 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6315 | 2105 | 2105 | 6315 | 6315 | 155 | 0.074 | | 163 | 0.078 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 155 | 0.074 | | 163 | 0.078 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 155 | 0.074 | | 163 | 0.078 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 279 | 0.141 | 0.141 | 226 | 0.114 | 0.114 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 276 | 0.141 | | 224 | 0.114 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 100% | 1965 | 4120 | 1830 | 1830 | 3865 | 3865 | 215 | 0.118 | 0.118 | 220 | 0.120 | 0.120 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 100% | 2155 | 0 | 2035 | 2035 | 0 | 0 | 240 | 0.118 | | 245 | 0.120 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 100% | 1965 | 3930 | 1855 | 1855 | 3685 | 3685 | 146 | 0.079 | | 204 | 0.110 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 100% | 1965 | 0 | 1830 | 1830 | 0 | 0 | 144 | 0.079 | | 201 | 0.110 | |

| | | | | |
|---|---|---|---|---|
| Pedestrian Phase | | P1 | A | green time =06Gm+15Fm=21s |
| | | P2 | B | green time =17Gm+07Fm=24s |
| | | P3 | B, C | green time =27Gm+09Fm=36s |
| | | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

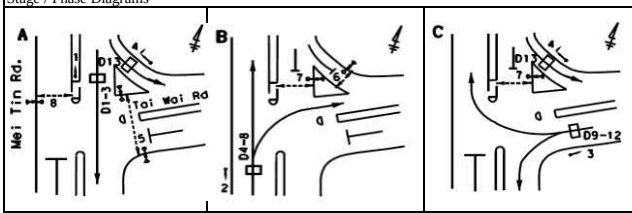
Left: 460(785)
Straight: 755(540)

Right: 290(405)
Left: 455(465)
Straight: 465(490)
Right: 555(450)

| A.M. Check Phase | |
|---|---|
| εy | 0.381 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 113% |

| P.M. Check Phase | |
|---|---|
| εy | 0.322 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 152% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s |
|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 100% | 2105 | 2105 | 1915 | 1915 | 1915 | 1915 | 225 | 0.117 | 0.117 | 165 | 0.086 | 0.086 |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6175 | 2105 | 2105 | 6175 | 6175 | 407 | 0.194 | | 409 | 0.194 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 407 | 0.194 | | 409 | 0.194 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 0 | 1965 | 1965 | 0 | 0 | 380 | 0.194 | | 382 | 0.194 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 78% | 1965 | 6175 | 1785 | 1825 | 5995 | 6035 | 600 | 0.336 | 0.336 | 486 | 0.267 | 0.267 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 605 | 0.287 | | 562 | 0.267 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 605 | 0.287 | | 562 | 0.267 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 295 | 0.165 | | 340 | 0.190 | |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 128 | 0.065 | 0.065 | 179 | 0.090 | 0.090 |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 127 | 0.065 | | 176 | 0.090 | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

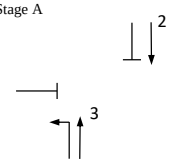
Straight: 1195(1200)
Right 225(165)
Left: 295(340)
Right: 255(355)
Left: 600(380)
Straight: 1210(1230)

| A.M. Check Phase | |
|---|---|
| εy | 0.518 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 43% |

| P.M. Check Phase | |
|---|---|
| εy | 0.443 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 67% |

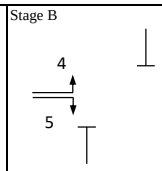
Stage / Phase Diagrams

Stage A



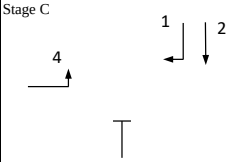

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | → | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 50 | 0.028 | | 55 | 0.031 | |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4210 | 4210 | 325 | 0.154 | 0.154 | 185 | 0.088 | 0.088 |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 325 | 0.154 | | 185 | 0.088 | |
| Mei Fai Street | N | ↰ | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 480 | 0.269 | 0.269 | 595 | 0.333 | 0.333 |
| | N | ↱ | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 4070 | 1960 | 1960 | 3745 | 3745 | 126 | 0.064 | | 102 | 0.052 | |
| | N | ↱ | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 100% | 1965 | 0 | 1785 | 1785 | 0 | 0 | 114 | 0.064 | | 93 | 0.052 | |

Pedestrian Phase
3p B,C Min. green time =11Gm+11Fm=22s
4p C Min. green time =11Gm+13Fm=24s

Notes:

Traffic Flow (pcu / hr) AM(PM)

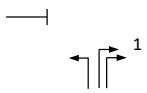
Left: 50(55)
Straight: 650(370)
Right: 240(195)
Left: 480(595)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.423 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 28% |

| P.M. Check Phase | |
|---|---|
| εy | 0.421 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 28% |

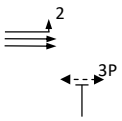
Stage / Phase Diagrams

Stage A



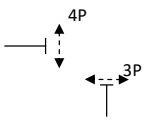

I/G = 3s

Stage B




I/G = 6s

Stage C




I/G = 5s

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]
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Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

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**Filename:** Junction D (CM_p2).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:01:15

» (Default Analysis Set) - 2018 observed traffic flow, Ching Ming Festival Peak Hour
» (Default Analysis Set) - 2027 reference traffic flow, Ching Ming Festival Peak Hour
» (Default Analysis Set) - 2027 design traffic flow, Ching Ming Festival Peak Hour

## Summary of junction performance

| | Ching Ming Festival Peak Hour | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS |
| | A1 - 2018 observed traffic flow | | | |
| Stream B-AC | 0.26 | 9.48 | 0.21 | A |
| Stream C-A | - | - | - | - |
| Stream C-B | 0.01 | 6.46 | 0.01 | A |
| Stream A-B | - | - | - | - |
| Stream A-C | - | - | - | - |
| | A1 - 2027 design traffic flow | | | |
| Stream B-AC | 0.34 | 10.30 | 0.26 | B |
| Stream C-A | - | - | - | - |
| Stream C-B | 0.01 | 6.54 | 0.01 | A |
| Stream A-B | - | - | - | - |
| Stream A-C | - | - | - | - |
| | A1 - 2027 reference traffic flow | | | |
| Stream B-AC | 0.34 | 10.21 | 0.25 | B |
| Stream C-A | - | - | - | - |
| Stream C-B | 0.01 | 6.53 | 0.01 | A |
| Stream A-B | - | - | - | - |
| Stream A-C | - | - | - | - |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour " model duration: 13:30 - 14:30*
*"D2 - 2027 reference traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 14:30*
*"D3 - 2027 design traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 14:30*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:01:14*

## File summary

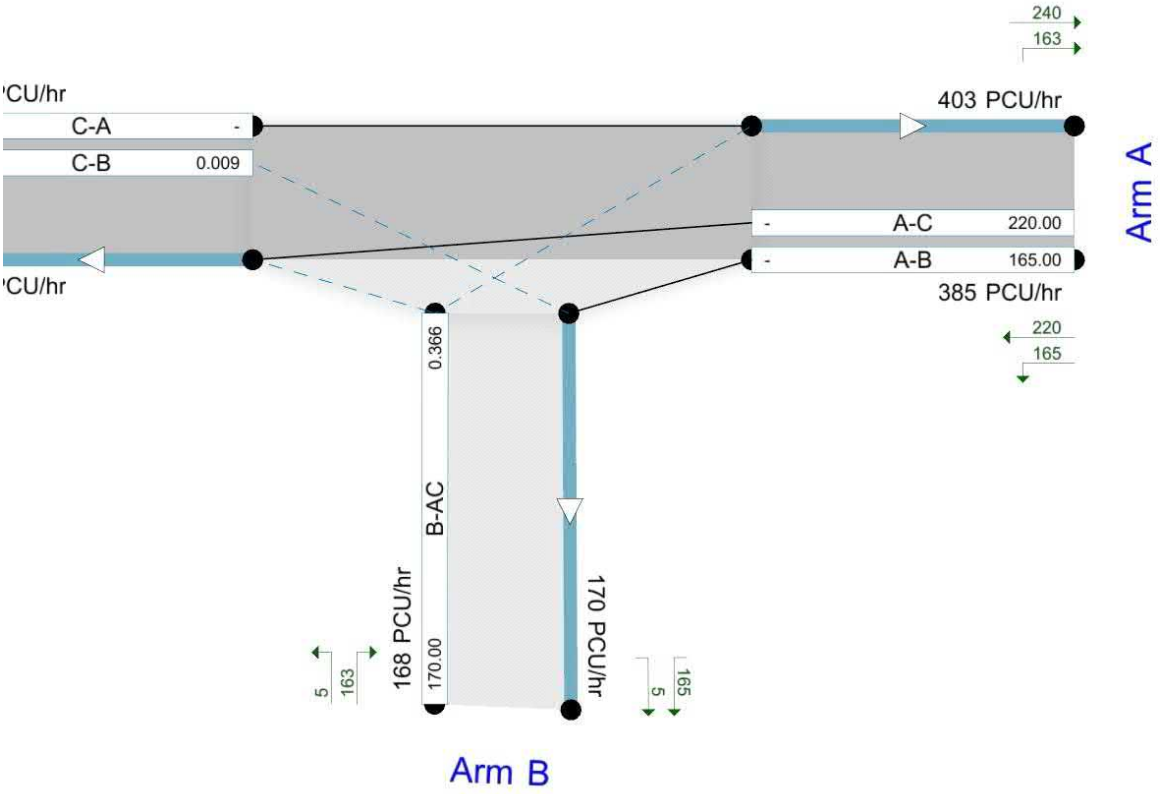
| | |
|---|---|
| **Title** | Tai Wai Temple |
| **Location** | Tai Wai |
| **Site Number** | |
| **Date** | 8/5/2017 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing modelled flow through junction (PCU/hr).
Streams (upstreams) show Total Demand (PCU/hr); Streams (downstreams) show RFC ()
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 "; Demand Set "D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# (Default Analysis Set) - 2018 observed traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 observed traffic flow, Ching Ming Festival Peak Hour | 2018 observed traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 9.34 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 275.00 | 100.000 |
| B | FLAT | ✓ | 100.00 | 100.000 |
| C | FLAT | ✓ | 210.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 85.000 | 190.000 |
| | B | 95.000 | 0.000 | 5.000 |
| | C | 205.000 | 5.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.31 | 0.69 |
| | B | 0.95 | 0.00 | 0.05 |
| | C | 0.98 | 0.02 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.21 | 9.48 | 0.26 | A |
| C-A | - | - | - | - |
| C-B | 0.01 | 6.46 | 0.01 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 98.96 | 0.00 | 479.70 | 0.208 | 0.26 | 9.430 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 4.96 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 99.99 | 0.00 | 479.69 | 0.208 | 0.26 | 9.480 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 479.69 | 0.208 | 0.26 | 9.480 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 479.69 | 0.208 | 0.26 | 9.480 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 reference traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Ching Ming Festival Peak Hour | 2027 reference traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 10.06 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| A | A | (untitled) | | Major |
| B | B | (untitled) | | Minor |
| C | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| 1 | B-C | 668.537 | 0.065 | 0.163 | - | - |
| 1 | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 315.00 | 100.000 |
| B | FLAT | ✓ | 120.00 | 100.000 |
| C | FLAT | ✓ | 230.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 105.000 | 210.000 |
| | B | 115.000 | 0.000 | 5.000 |
| | C | 225.000 | 5.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.33 | 0.67 |
| | B | 0.96 | 0.00 | 0.04 |
| | C | 0.98 | 0.02 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

### Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.25 | 10.21 | 0.34 | B |
| C-A | - | - | - | - |
| C-B | 0.01 | 6.53 | 0.01 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 118.66 | 0.00 | 472.50 | 0.254 | 0.34 | 10.136 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 4.96 | 0.00 | 556.55 | 0.009 | 0.01 | 6.526 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 119.99 | 0.00 | 472.49 | 0.254 | 0.34 | 10.212 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 556.55 | 0.009 | 0.01 | 6.526 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 120.00 | 0.00 | 472.49 | 0.254 | 0.34 | 10.212 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 556.55 | 0.009 | 0.01 | 6.526 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 120.00 | 0.00 | 472.49 | 0.254 | 0.34 | 10.212 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 556.55 | 0.009 | 0.01 | 6.526 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 design traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Ching Ming Festival Peak Hour | 2027 design traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 10.15 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 325.00 | 100.000 |
| B | FLAT | ✓ | 120.00 | 100.000 |
| C | FLAT | ✓ | 245.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 105.000 | 220.000 |
| | B | 115.000 | 0.000 | 5.000 |
| | C | 240.000 | 5.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.32 | 0.68 |
| | B | 0.96 | 0.00 | 0.04 |
| | C | 0.98 | 0.02 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.26 | 10.30 | 0.34 | B |
| C-A | - | - | - | - |
| C-B | 0.01 | 6.54 | 0.01 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 118.65 | 0.00 | 469.54 | 0.256 | 0.34 | 10.222 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 4.96 | 0.00 | 555.07 | 0.009 | 0.01 | 6.543 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 119.99 | 0.00 | 469.53 | 0.256 | 0.34 | 10.299 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 555.07 | 0.009 | 0.01 | 6.543 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 120.00 | 0.00 | 469.53 | 0.256 | 0.34 | 10.299 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 555.07 | 0.009 | 0.01 | 6.543 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

## Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 120.00 | 0.00 | 469.53 | 0.256 | 0.34 | 10.299 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 555.07 | 0.009 | 0.01 | 6.543 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]
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**Filename:** Junction D (Weekday).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:07:01

» (Default Analysis Set) - 2027 reference traffic flow, Weekday AM Peak Hour
» (Default Analysis Set) - 2027 design traffic flow, Weekday AM Peak Hour
» (Default Analysis Set) - 2027 reference traffic flow, Weekday PM Peak Hour
» (Default Analysis Set) - 2027 design traffic flow, Weekday PM Peak Hour
» (Default Analysis Set) - 2021 observed traffic flow, Weekday AM Peak Hour
» (Default Analysis Set) - 2021 observed traffic flow, Weekday PM Peak Hour

## Summary of junction performance

| | Weekday AM Peak Hour | | | | Weekday PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| | A1 - 2021 observed traffic flow | | | | | | | |
| Stream B-AC | 0.55 | 12.38 | 0.35 | B | 0.28 | 10.10 | 0.22 | B |
| Stream C-A | - | - | - | - | - | - | - | - |
| Stream C-B | 0.00 | 0.00 | 0.00 | A | 0.00 | 0.00 | 0.00 | A |
| Stream A-B | - | - | - | - | - | - | - | - |
| Stream A-C | - | - | - | - | - | - | - | - |
| | A1 - 2027 design traffic flow | | | | | | | |
| Stream B-AC | 0.78 | 14.97 | 0.44 | B | 0.36 | 11.18 | 0.26 | B |
| Stream C-A | - | - | - | - | - | - | - | - |
| Stream C-B | 0.00 | 0.00 | 0.00 | A | 0.00 | 0.00 | 0.00 | A |
| Stream A-B | - | - | - | - | - | - | - | - |
| Stream A-C | - | - | - | - | - | - | - | - |
| | A1 - 2027 reference traffic flow | | | | | | | |
| Stream B-AC | 0.77 | 14.74 | 0.44 | B | 0.35 | 11.05 | 0.26 | B |
| Stream C-A | - | - | - | - | - | - | - | - |
| Stream C-B | 0.00 | 0.00 | 0.00 | A | 0.00 | 0.00 | 0.00 | A |
| Stream A-B | - | - | - | - | - | - | - | - |
| Stream A-C | - | - | - | - | - | - | - | - |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D2 - 2027 reference traffic flow, Weekday AM Peak Hour " model duration: 13:30 - 14:30*
*"D3 - 2027 design traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 14:30*
*"D4 - 2027 reference traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 14:30*
*"D5 - 2027 design traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 14:30*
*"D6 - 2021 observed traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 14:30*
*"D7 - 2021 observed traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 14:30*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:06:59*

## File summary

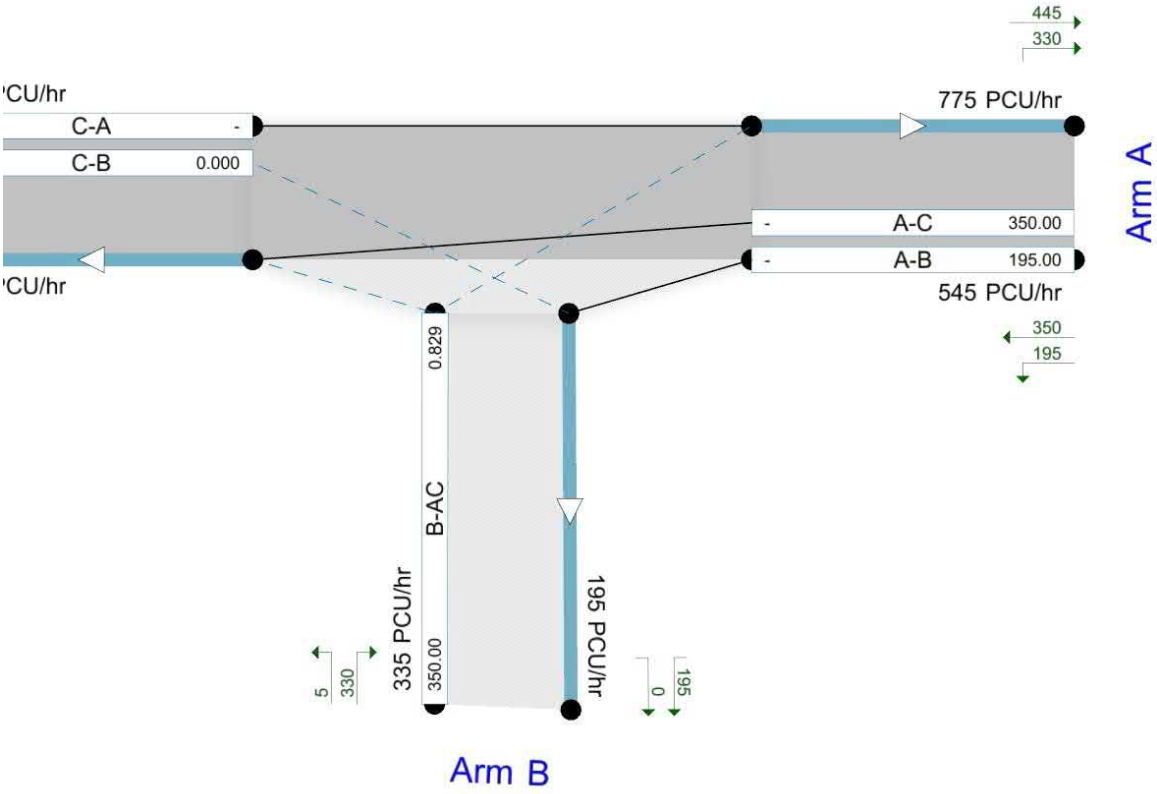
| | |
|---|---|
| **Title** | Tai Wai Temple |
| **Location** | Tai Wai |
| **Site Number** | |
| **Date** | 8/5/2017 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing modelled flow through junction (PCU/hr).
Streams (upstreams) show Total Demand (PCU/hr); Streams (downstreams) show RFC ()
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 "; Demand Set "D2 - 2027 reference traffic flow, Weekday AM Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# (Default Analysis Set) - 2027 reference traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday AM Peak Hour | 2027 reference traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 14.74 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 420.00 | 100.000 |
| B | FLAT | ✓ | 190.00 | 100.000 |
| C | FLAT | ✓ | 430.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 85.000 | 335.000 |
| | B | 185.000 | 0.000 | 5.000 |
| | C | 430.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.20 | 0.80 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.44 | 14.74 | 0.77 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 186.97 | 0.00 | 434.15 | 0.438 | 0.76 | 14.398 | B |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 541.09 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.96 | 0.00 | 434.15 | 0.438 | 0.77 | 14.735 | B |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 541.09 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.99 | 0.00 | 434.15 | 0.438 | 0.77 | 14.741 | B |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 541.09 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.99 | 0.00 | 434.15 | 0.438 | 0.77 | 14.741 | B |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 541.09 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 design traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday AM Peak Hour | 2027 design traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 14.97 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| A | A | (untitled) | | Major |
| B | B | (untitled) | | Minor |
| C | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| 1 | B-C | 668.537 | 0.065 | 0.163 | - | - |
| 1 | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 435.00 | 100.000 |
| B | FLAT | ✓ | 190.00 | 100.000 |
| C | FLAT | ✓ | 445.00 | 100.000 |

# Turning Proportions

#### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 85.000 | 350.000 |
| | B | 185.000 | 0.000 | 5.000 |
| | C | 445.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.20 | 0.80 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.44 | 14.97 | 0.78 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 186.93 | 0.00 | 430.41 | 0.441 | 0.77 | 14.610 | B |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.96 | 0.00 | 430.41 | 0.441 | 0.78 | 14.964 | B |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.98 | 0.00 | 430.41 | 0.441 | 0.78 | 14.970 | B |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.99 | 0.00 | 430.41 | 0.441 | 0.78 | 14.970 | B |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 reference traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday PM Peak Hour | 2027 reference traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 11.05 | B |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 520.00 | 100.000 |
| B | FLAT | ✓ | 115.00 | 100.000 |
| C | FLAT | ✓ | 285.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 150.000 | 370.000 |
| | B | 110.000 | 0.000 | 5.000 |
| | C | 285.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.29 | 0.71 |
| | B | 0.96 | 0.00 | 0.04 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.26 | 11.05 | 0.35 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 113.61 | 0.00 | 440.71 | 0.261 | 0.35 | 10.961 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 526.37 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 114.99 | 0.00 | 440.71 | 0.261 | 0.35 | 11.052 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 526.37 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 115.00 | 0.00 | 440.71 | 0.261 | 0.35 | 11.052 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 526.37 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 115.00 | 0.00 | 440.71 | 0.261 | 0.35 | 11.052 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 526.37 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 design traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday PM Peak Hour | 2027 design traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 11.18 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| 1 | B-C | 668.537 | 0.065 | 0.163 | - | - |
| 1 | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 535.00 | 100.000 |
| B | FLAT | ✓ | 115.00 | 100.000 |
| C | FLAT | ✓ | 300.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 150.000 | 385.000 |
| | B | 110.000 | 0.000 | 5.000 |
| | C | 300.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.28 | 0.72 |
| | B | 0.96 | 0.00 | 0.04 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.26 | 11.18 | 0.36 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 113.59 | 0.00 | 436.98 | 0.263 | 0.35 | 11.086 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.16 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 114.99 | 0.00 | 436.98 | 0.263 | 0.35 | 11.180 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.16 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 115.00 | 0.00 | 436.98 | 0.263 | 0.36 | 11.180 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.16 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 115.00 | 0.00 | 436.98 | 0.263 | 0.36 | 11.180 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.16 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2021 observed traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday AM Peak Hour | 2021 observed traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 12.38 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| **A** | FLAT | ✓ | 350.00 | 100.000 |
| **B** | FLAT | ✓ | 160.00 | 100.000 |
| **C** | FLAT | ✓ | 360.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 70.000 | 280.000 |
| | B | 155.000 | 0.000 | 5.000 |
| | C | 360.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.20 | 0.80 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

### Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.35 | 12.38 | 0.55 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 157.84 | 0.00 | 450.83 | 0.355 | 0.54 | 12.201 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 159.98 | 0.00 | 450.83 | 0.355 | 0.54 | 12.375 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 159.99 | 0.00 | 450.83 | 0.355 | 0.55 | 12.377 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 160.00 | 0.00 | 450.83 | 0.355 | 0.55 | 12.377 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2021 observed traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday PM Peak Hour | 2021 observed traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 10.10 | B |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 435.00 | 100.000 |
| B | FLAT | ✓ | 100.00 | 100.000 |
| C | FLAT | ✓ | 240.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 125.000 | 310.000 |
| | B | 95.000 | 0.000 | 5.000 |
| | C | 240.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.29 | 0.71 |
| | B | 0.95 | 0.00 | 0.05 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.22 | 10.10 | 0.28 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 98.89 | 0.00 | 456.53 | 0.219 | 0.28 | 10.035 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 99.99 | 0.00 | 456.53 | 0.219 | 0.28 | 10.096 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 456.53 | 0.219 | 0.28 | 10.096 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

## Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 456.53 | 0.219 | 0.28 | 10.096 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction F (CM_p2).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:01:49

» 2018 observed traffic flow, Ching Ming Festival Peak Hour
» 2027 reference traffic flow, Ching Ming Festival Peak Hour
» 2027 design traffic flow, Ching Ming Festival Peak Hour

## Summary of junction performance

| | Ching Ming Festival Peak Hour | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS |
| | 2018 observed traffic flow | | | |
| Arm 1 | 0.22 | 1.36 | 0.18 | A |
| Arm 2 | 0.28 | 1.50 | 0.22 | A |
| Arm 3 | 0.51 | 1.64 | 0.34 | A |
| Arm 4 | 0.49 | 1.86 | 0.33 | A |
| | 2027 design traffic flow | | | |
| Arm 1 | 0.47 | 1.75 | 0.32 | A |
| Arm 2 | 0.43 | 1.81 | 0.30 | A |
| Arm 3 | 0.83 | 2.16 | 0.45 | A |
| Arm 4 | 0.86 | 2.55 | 0.46 | A |
| | 2027 reference traffic flow | | | |
| Arm 1 | 0.47 | 1.74 | 0.32 | A |
| Arm 2 | 0.43 | 1.81 | 0.30 | A |
| Arm 3 | 0.83 | 2.16 | 0.45 | A |
| Arm 4 | 0.85 | 2.54 | 0.46 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour " model duration: 13:30 - 15:00*
*"D2 - 2027 reference traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:01:47*

## File summary

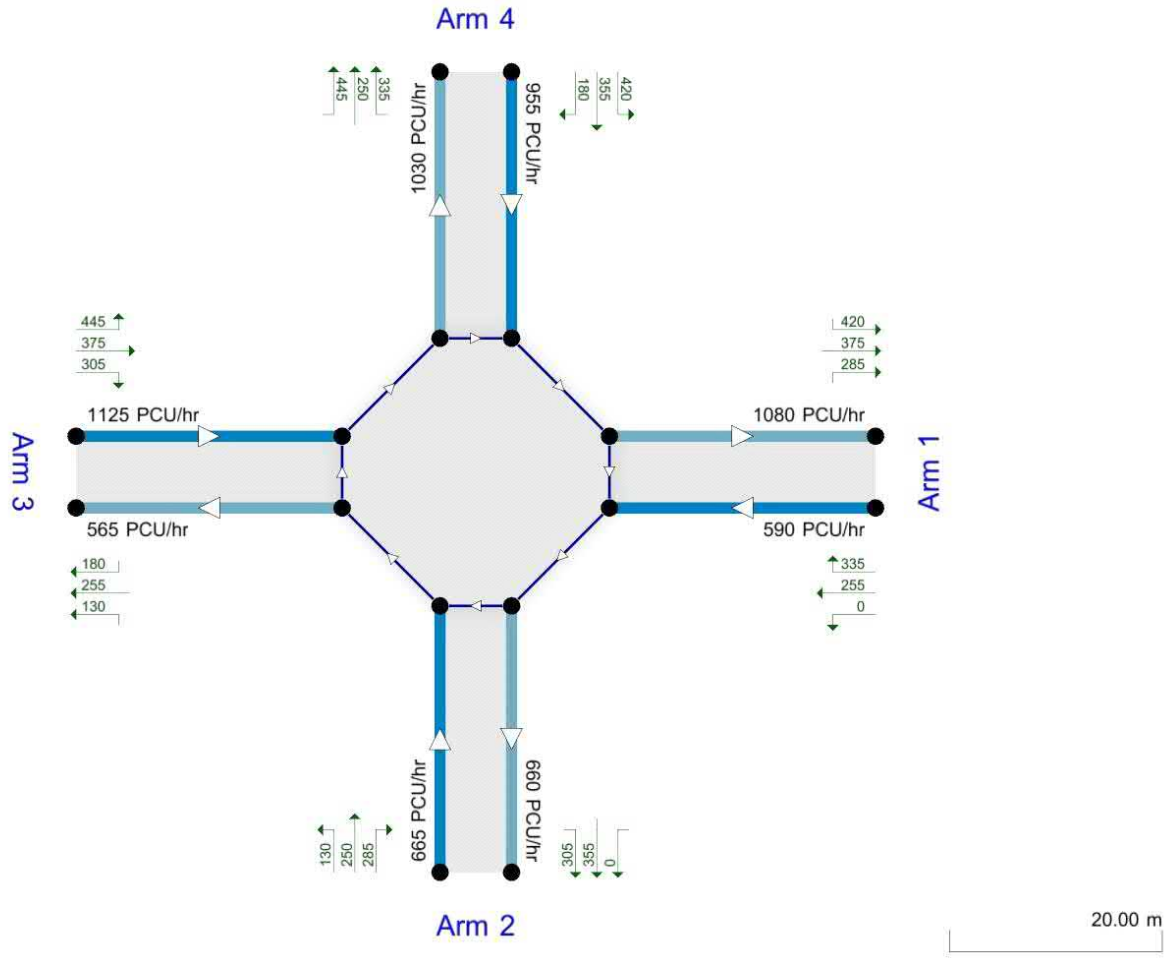
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2018 observed traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 observed traffic flow, Ching Ming Festival Peak Hour | 2018 observed traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.62 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Che Kung Mui Road WB | |
| **2** | 2 | Hung Mui Kuk Road | |
| **3** | 3 | Che Kung Mui Road EB | |
| **4** | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| **2** | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| **3** | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| **4** | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 590.00 | 100.000 |
| 2 | FLAT | ✓ | 665.00 | 100.000 |
| 3 | FLAT | ✓ | 1125.00 | 100.000 |
| 4 | FLAT | ✓ | 955.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 255.000 | 335.000 |
| | 2 | 285.000 | 0.000 | 130.000 | 250.000 |
| | 3 | 375.000 | 305.000 | 0.000 | 445.000 |
| | 4 | 420.000 | 355.000 | 180.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.43 | 0.57 |
| | 2 | 0.43 | 0.00 | 0.20 | 0.38 |
| | 3 | 0.33 | 0.27 | 0.00 | 0.40 |
| | 4 | 0.44 | 0.37 | 0.19 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.18 | 1.36 | 0.22 | A |
| 2 | 0.22 | 1.50 | 0.28 | A |
| 3 | 0.34 | 1.64 | 0.51 | A |
| 4 | 0.33 | 1.86 | 0.49 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 589.11 | 838.35 | 0.00 | 3233.12 | 0.182 | 0.22 | 1.361 | A |
| 2 | 665.00 | 663.89 | 768.74 | 0.00 | 3066.38 | 0.217 | 0.28 | 1.498 | A |
| 3 | 1125.00 | 1122.96 | 868.60 | 0.00 | 3323.24 | 0.339 | 0.51 | 1.634 | A |
| 4 | 955.00 | 953.04 | 963.29 | 0.00 | 2893.09 | 0.330 | 0.49 | 1.853 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

# 2027 reference traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Ching Ming Festival Peak Hour | 2027 reference traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.10 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 970.00 | 100.000 |
| 2 | FLAT | ✓ | 855.00 | 100.000 |
| 3 | FLAT | ✓ | 1380.00 | 100.000 |
| 4 | FLAT | ✓ | 1205.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 5.000 | 120.000 | 375.000 | 470.000 |
| | 2 | 410.000 | 0.000 | 140.000 | 305.000 |
| | 3 | 560.000 | 335.000 | 0.000 | 485.000 |
| | 4 | 460.000 | 550.000 | 195.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.01 | 0.12 | 0.39 | 0.48 |
| | 2 | 0.48 | 0.00 | 0.16 | 0.36 |
| | 3 | 0.41 | 0.24 | 0.00 | 0.35 |
| | 4 | 0.38 | 0.46 | 0.16 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.32 | 1.74 | 0.47 | A |
| 2 | 0.30 | 1.81 | 0.43 | A |
| 3 | 0.45 | 2.16 | 0.83 | A |
| 4 | 0.46 | 2.54 | 0.85 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 968.13 | 1077.11 | 0.00 | 3035.97 | 0.320 | 0.47 | 1.738 | A |
| 2 | 855.00 | 853.29 | 1042.81 | 0.00 | 2848.40 | 0.300 | 0.43 | 1.802 | A |
| 3 | 1380.00 | 1376.71 | 1187.65 | 0.00 | 3050.34 | 0.452 | 0.82 | 2.146 | A |
| 4 | 1205.00 | 1201.61 | 1307.04 | 0.00 | 2621.43 | 0.460 | 0.85 | 2.529 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1079.99 | 0.00 | 3033.59 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1044.99 | 0.00 | 2846.66 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1379.99 | 1189.99 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1204.99 | 1309.99 | 0.00 | 2619.10 | 0.460 | 0.85 | 2.545 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1080.00 | 0.00 | 3033.58 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1045.00 | 0.00 | 2846.66 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1380.00 | 1190.00 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1205.00 | 1310.00 | 0.00 | 2619.09 | 0.460 | 0.85 | 2.545 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1080.00 | 0.00 | 3033.58 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1045.00 | 0.00 | 2846.66 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1380.00 | 1190.00 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1205.00 | 1310.00 | 0.00 | 2619.09 | 0.460 | 0.85 | 2.545 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1080.00 | 0.00 | 3033.58 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1045.00 | 0.00 | 2846.66 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1380.00 | 1190.00 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1205.00 | 1310.00 | 0.00 | 2619.09 | 0.460 | 0.85 | 2.545 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1080.00 | 0.00 | 3033.58 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1045.00 | 0.00 | 2846.65 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1380.00 | 1190.00 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1205.00 | 1310.00 | 0.00 | 2619.09 | 0.460 | 0.85 | 2.545 | A |

# 2027 design traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Ching Ming Festival Peak Hour | 2027 design traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.11 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 970.00 | 100.000 |
| 2 | FLAT | ✓ | 860.00 | 100.000 |
| 3 | FLAT | ✓ | 1380.00 | 100.000 |
| 4 | FLAT | ✓ | 1210.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 5.000 | 120.000 | 375.000 | 470.000 |
| | 2 | 410.000 | 0.000 | 140.000 | 310.000 |
| | 3 | 560.000 | 335.000 | 0.000 | 485.000 |
| | 4 | 460.000 | 555.000 | 195.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.01 | 0.12 | 0.39 | 0.48 |
| | 2 | 0.48 | 0.00 | 0.16 | 0.36 |
| | 3 | 0.41 | 0.24 | 0.00 | 0.35 |
| | 4 | 0.38 | 0.46 | 0.16 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.32 | 1.75 | 0.47 | A |
| 2 | 0.30 | 1.81 | 0.43 | A |
| 3 | 0.45 | 2.16 | 0.83 | A |
| 4 | 0.46 | 2.55 | 0.86 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 968.12 | 1082.08 | 0.00 | 3031.86 | 0.320 | 0.47 | 1.742 | A |
| 2 | 860.00 | 858.27 | 1042.81 | 0.00 | 2848.40 | 0.302 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1376.70 | 1192.64 | 0.00 | 3046.07 | 0.453 | 0.82 | 2.151 | A |
| 4 | 1210.00 | 1206.59 | 1307.03 | 0.00 | 2621.44 | 0.462 | 0.85 | 2.538 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1084.99 | 0.00 | 3029.46 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1044.99 | 0.00 | 2846.66 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1379.99 | 1194.99 | 0.00 | 3044.06 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1209.99 | 1309.99 | 0.00 | 2619.10 | 0.462 | 0.86 | 2.554 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1085.00 | 0.00 | 3029.45 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1045.00 | 0.00 | 2846.66 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1380.00 | 1195.00 | 0.00 | 3044.05 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1210.00 | 1310.00 | 0.00 | 2619.09 | 0.462 | 0.86 | 2.554 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1085.00 | 0.00 | 3029.45 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1045.00 | 0.00 | 2846.66 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1380.00 | 1195.00 | 0.00 | 3044.05 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1210.00 | 1310.00 | 0.00 | 2619.09 | 0.462 | 0.86 | 2.554 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1085.00 | 0.00 | 3029.45 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1045.00 | 0.00 | 2846.66 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1380.00 | 1195.00 | 0.00 | 3044.05 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1210.00 | 1310.00 | 0.00 | 2619.09 | 0.462 | 0.86 | 2.554 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1085.00 | 0.00 | 3029.45 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1045.00 | 0.00 | 2846.65 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1380.00 | 1195.00 | 0.00 | 3044.05 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1210.00 | 1310.00 | 0.00 | 2619.09 | 0.462 | 0.86 | 2.554 | A |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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**Filename:** Junction F (Weekday).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:07:31

» 2027 reference traffic flow, Weekday AM Peak Hour
» 2027 design traffic flow, Weekday AM Peak Hour
» 2027 reference traffic flow, Weekday PM Peak Hour
» 2027 design traffic flow, Weekday PM Peak Hour
» 2021 observed traffic flow, Weekday AM Peak Hour
» 2021 observed traffic flow, Weekday PM Peak Hour

## Summary of junction performance

| | Weekday AM Peak Hour | | | | Weekday PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| **2021 observed traffic flow** | | | | | | | | |
| Arm 1 | 0.28 | 1.53 | 0.22 | A | 0.29 | 1.55 | 0.22 | A |
| Arm 2 | 0.38 | 1.71 | 0.28 | A | 0.39 | 1.73 | 0.28 | A |
| Arm 3 | 0.63 | 1.79 | 0.39 | A | 0.66 | 1.87 | 0.40 | A |
| Arm 4 | 0.75 | 2.20 | 0.43 | A | 0.74 | 2.17 | 0.42 | A |
| **2027 design traffic flow** | | | | | | | | |
| Arm 1 | 0.73 | 2.28 | 0.42 | A | 0.72 | 2.32 | 0.42 | A |
| Arm 2 | 0.74 | 2.47 | 0.43 | A | 0.73 | 2.42 | 0.42 | A |
| Arm 3 | 1.35 | 2.88 | 0.57 | A | 1.45 | 3.12 | 0.59 | A |
| Arm 4 | 1.75 | 3.94 | 0.64 | A | 1.78 | 3.96 | 0.64 | A |
| **2027 reference traffic flow** | | | | | | | | |
| Arm 1 | 0.73 | 2.28 | 0.42 | A | 0.71 | 2.31 | 0.42 | A |
| Arm 2 | 0.73 | 2.46 | 0.42 | A | 0.72 | 2.40 | 0.42 | A |
| Arm 3 | 1.34 | 2.87 | 0.57 | A | 1.44 | 3.09 | 0.59 | A |
| Arm 4 | 1.73 | 3.92 | 0.63 | A | 1.75 | 3.92 | 0.64 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D2 - 2027 reference traffic flow, Weekday AM Peak Hour " model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D4 - 2027 reference traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D5 - 2027 design traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D6 - 2021 observed traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D7 - 2021 observed traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:07:27*

## File summary

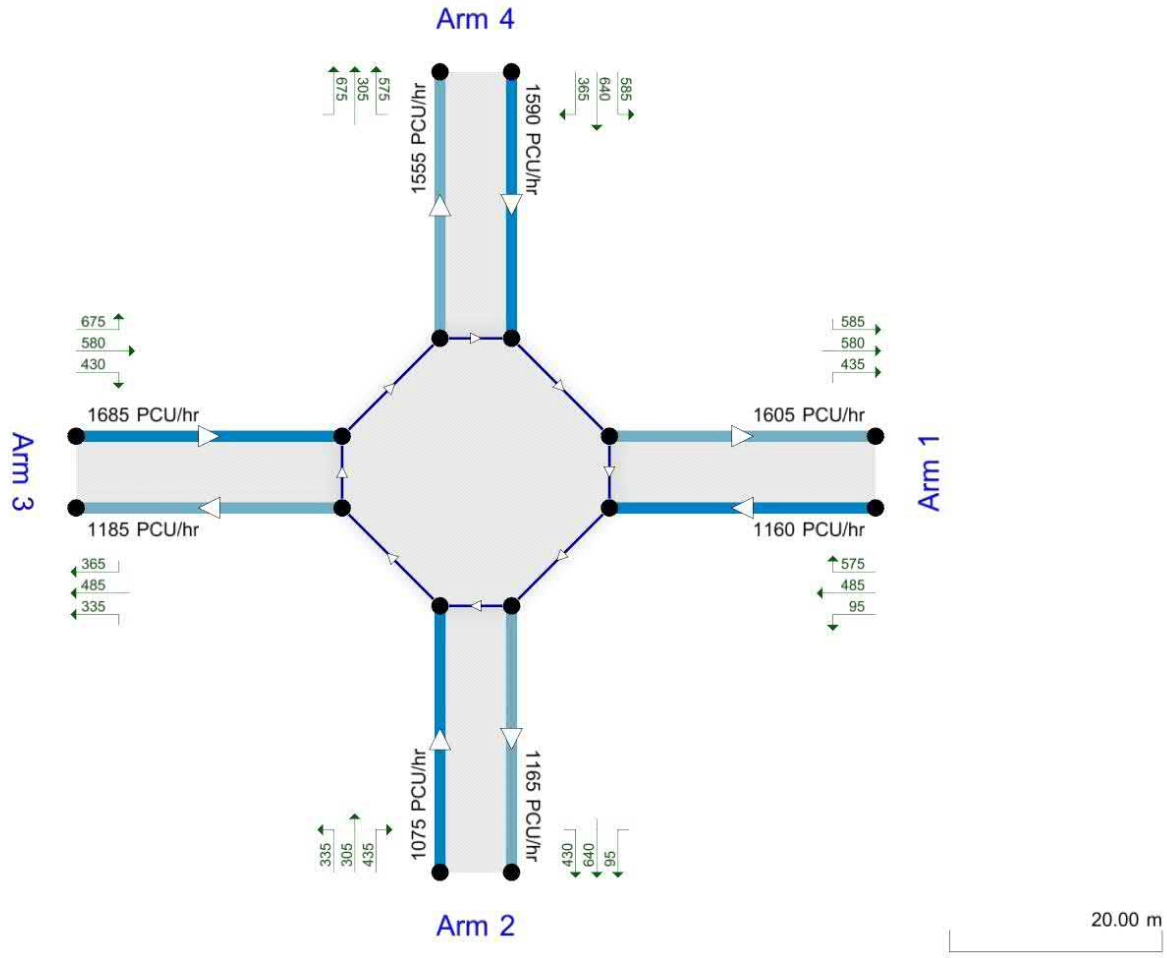
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D2 - 2027 reference traffic flow, Weekday AM Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2027 reference traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday AM Peak Hour | 2027 reference traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.97 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Che Kung Mui Road WB | |
| **2** | 2 | Hung Mui Kuk Road | |
| **3** | 3 | Che Kung Mui Road EB | |
| **4** | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| **2** | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| **3** | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| **4** | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 1160.00 | 100.000 |
| 2 | FLAT | ✓ | 1075.00 | 100.000 |
| 3 | FLAT | ✓ | 1685.00 | 100.000 |
| 4 | FLAT | ✓ | 1590.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 5.000 | 95.000 | 485.000 | 575.000 |
| | 2 | 435.000 | 0.000 | 335.000 | 305.000 |
| | 3 | 580.000 | 430.000 | 0.000 | 675.000 |
| | 4 | 585.000 | 640.000 | 365.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.08 | 0.42 | 0.50 |
| | 2 | 0.40 | 0.00 | 0.31 | 0.28 |
| | 3 | 0.34 | 0.26 | 0.00 | 0.40 |
| | 4 | 0.37 | 0.40 | 0.23 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.42 | 2.28 | 0.73 | A |
| 2 | 0.42 | 2.46 | 0.73 | A |
| 3 | 0.57 | 2.87 | 1.34 | A |
| 4 | 0.63 | 3.92 | 1.73 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1157.09 | 1429.33 | 0.00 | 2745.14 | 0.423 | 0.73 | 2.263 | A |
| 2 | 1075.00 | 1072.09 | 1425.76 | 0.00 | 2543.82 | 0.423 | 0.73 | 2.440 | A |
| 3 | 1685.00 | 1679.67 | 1316.54 | 0.00 | 2940.09 | 0.573 | 1.33 | 2.845 | A |
| 4 | 1590.00 | 1583.18 | 1445.61 | 0.00 | 2511.92 | 0.633 | 1.70 | 3.849 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1159.99 | 1434.95 | 0.00 | 2740.49 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1074.99 | 1429.97 | 0.00 | 2540.47 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1684.97 | 1319.98 | 0.00 | 2937.14 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1589.94 | 1449.98 | 0.00 | 2508.47 | 0.634 | 1.72 | 3.919 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1160.00 | 1434.99 | 0.00 | 2740.46 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1075.00 | 1429.99 | 0.00 | 2540.45 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1684.99 | 1320.00 | 0.00 | 2937.13 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1589.98 | 1449.99 | 0.00 | 2508.46 | 0.634 | 1.72 | 3.919 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1160.00 | 1434.99 | 0.00 | 2740.46 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1075.00 | 1430.00 | 0.00 | 2540.45 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1685.00 | 1320.00 | 0.00 | 2937.13 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1589.99 | 1450.00 | 0.00 | 2508.46 | 0.634 | 1.73 | 3.919 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1160.00 | 1435.00 | 0.00 | 2740.46 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1075.00 | 1430.00 | 0.00 | 2540.45 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1685.00 | 1320.00 | 0.00 | 2937.13 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1590.00 | 1450.00 | 0.00 | 2508.45 | 0.634 | 1.73 | 3.919 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1160.00 | 1435.00 | 0.00 | 2740.46 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1075.00 | 1430.00 | 0.00 | 2540.45 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1685.00 | 1320.00 | 0.00 | 2937.13 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1590.00 | 1450.00 | 0.00 | 2508.45 | 0.634 | 1.73 | 3.919 | A |

# 2027 design traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday AM Peak Hour | 2027 design traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.98 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 1155.00 | 100.000 |
| 2 | FLAT | ✓ | 1085.00 | 100.000 |
| 3 | FLAT | ✓ | 1685.00 | 100.000 |
| 4 | FLAT | ✓ | 1600.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 95.000 | 485.000 | 575.000 |
| | 2 | 435.000 | 0.000 | 335.000 | 315.000 |
| | 3 | 580.000 | 430.000 | 0.000 | 675.000 |
| | 4 | 585.000 | 650.000 | 365.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.08 | 0.42 | 0.50 |
| | 2 | 0.40 | 0.00 | 0.31 | 0.29 |
| | 3 | 0.34 | 0.26 | 0.00 | 0.40 |
| | 4 | 0.37 | 0.41 | 0.23 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.42 | 2.28 | 0.73 | A |
| 2 | 0.43 | 2.47 | 0.74 | A |
| 3 | 0.57 | 2.88 | 1.35 | A |
| 4 | 0.64 | 3.94 | 1.75 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1152.09 | 1439.25 | 0.00 | 2736.94 | 0.422 | 0.73 | 2.268 | A |
| 2 | 1085.00 | 1082.05 | 1420.76 | 0.00 | 2547.80 | 0.426 | 0.74 | 2.450 | A |
| 3 | 1685.00 | 1679.65 | 1321.51 | 0.00 | 2935.84 | 0.574 | 1.34 | 2.854 | A |
| 4 | 1600.00 | 1593.09 | 1440.61 | 0.00 | 2515.87 | 0.636 | 1.73 | 3.873 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1154.99 | 1444.95 | 0.00 | 2732.23 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1084.99 | 1424.97 | 0.00 | 2544.44 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1684.97 | 1324.98 | 0.00 | 2932.87 | 0.575 | 1.34 | 2.884 | A |
| 4 | 1600.00 | 1599.94 | 1444.98 | 0.00 | 2512.42 | 0.637 | 1.74 | 3.945 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1155.00 | 1444.99 | 0.00 | 2732.21 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1085.00 | 1424.99 | 0.00 | 2544.43 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1684.99 | 1325.00 | 0.00 | 2932.86 | 0.575 | 1.35 | 2.884 | A |
| 4 | 1600.00 | 1599.98 | 1444.99 | 0.00 | 2512.41 | 0.637 | 1.75 | 3.945 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1155.00 | 1444.99 | 0.00 | 2732.20 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1085.00 | 1425.00 | 0.00 | 2544.42 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1685.00 | 1325.00 | 0.00 | 2932.86 | 0.575 | 1.35 | 2.884 | A |
| 4 | 1600.00 | 1599.99 | 1445.00 | 0.00 | 2512.41 | 0.637 | 1.75 | 3.945 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1155.00 | 1445.00 | 0.00 | 2732.20 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1085.00 | 1425.00 | 0.00 | 2544.42 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1685.00 | 1325.00 | 0.00 | 2932.85 | 0.575 | 1.35 | 2.884 | A |
| 4 | 1600.00 | 1600.00 | 1445.00 | 0.00 | 2512.41 | 0.637 | 1.75 | 3.945 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1155.00 | 1445.00 | 0.00 | 2732.20 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1085.00 | 1425.00 | 0.00 | 2544.42 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1685.00 | 1325.00 | 0.00 | 2932.85 | 0.575 | 1.35 | 2.884 | A |
| 4 | 1600.00 | 1600.00 | 1445.00 | 0.00 | 2512.41 | 0.637 | 1.75 | 3.945 | A |

# 2027 reference traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday PM Peak Hour | 2027 reference traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 3.04 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 1115.00 | 100.000 |
| 2 | FLAT | ✓ | 1075.00 | 100.000 |
| 3 | FLAT | ✓ | 1675.00 | 100.000 |
| 4 | FLAT | ✓ | 1610.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 120.000 | 355.000 | 640.000 |
| | 2 | 430.000 | 0.000 | 280.000 | 365.000 |
| | 3 | 665.000 | 330.000 | 0.000 | 680.000 |
| | 4 | 425.000 | 790.000 | 395.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.11 | 0.32 | 0.57 |
| | 2 | 0.40 | 0.00 | 0.26 | 0.34 |
| | 3 | 0.40 | 0.20 | 0.00 | 0.41 |
| | 4 | 0.26 | 0.49 | 0.25 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.42 | 2.31 | 0.71 | A |
| 2 | 0.42 | 2.40 | 0.72 | A |
| 3 | 0.59 | 3.09 | 1.44 | A |
| 4 | 0.64 | 3.92 | 1.75 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1112.16 | 1508.80 | 0.00 | 2679.52 | 0.416 | 0.71 | 2.293 | A |
| 2 | 1075.00 | 1072.15 | 1385.77 | 0.00 | 2575.62 | 0.417 | 0.71 | 2.391 | A |
| 3 | 1675.00 | 1669.31 | 1431.26 | 0.00 | 2841.96 | 0.589 | 1.42 | 3.055 | A |
| 4 | 1610.00 | 1603.10 | 1420.48 | 0.00 | 2531.78 | 0.636 | 1.73 | 3.848 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1114.99 | 1514.95 | 0.00 | 2674.44 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1074.99 | 1389.97 | 0.00 | 2572.28 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1674.96 | 1434.98 | 0.00 | 2838.78 | 0.590 | 1.43 | 3.092 | A |
| 4 | 1610.00 | 1609.94 | 1424.97 | 0.00 | 2528.23 | 0.637 | 1.74 | 3.920 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1514.99 | 0.00 | 2674.41 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1075.00 | 1389.99 | 0.00 | 2572.26 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1674.99 | 1435.00 | 0.00 | 2838.77 | 0.590 | 1.43 | 3.092 | A |
| 4 | 1610.00 | 1609.98 | 1424.99 | 0.00 | 2528.22 | 0.637 | 1.75 | 3.920 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1514.99 | 0.00 | 2674.40 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1075.00 | 1390.00 | 0.00 | 2572.26 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1675.00 | 1435.00 | 0.00 | 2838.76 | 0.590 | 1.44 | 3.092 | A |
| 4 | 1610.00 | 1609.99 | 1425.00 | 0.00 | 2528.21 | 0.637 | 1.75 | 3.920 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1515.00 | 0.00 | 2674.40 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1075.00 | 1390.00 | 0.00 | 2572.26 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1675.00 | 1435.00 | 0.00 | 2838.76 | 0.590 | 1.44 | 3.092 | A |
| 4 | 1610.00 | 1610.00 | 1425.00 | 0.00 | 2528.21 | 0.637 | 1.75 | 3.920 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1515.00 | 0.00 | 2674.40 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1075.00 | 1390.00 | 0.00 | 2572.26 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1675.00 | 1435.00 | 0.00 | 2838.76 | 0.590 | 1.44 | 3.092 | A |
| 4 | 1610.00 | 1610.00 | 1425.00 | 0.00 | 2528.21 | 0.637 | 1.75 | 3.920 | A |

# 2027 design traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday PM Peak Hour | 2027 design traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 3.07 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 1115.00 | 100.000 |
| 2 | FLAT | ✓ | 1085.00 | 100.000 |
| 3 | FLAT | ✓ | 1675.00 | 100.000 |
| 4 | FLAT | ✓ | 1620.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 120.000 | 355.000 | 640.000 |
| | 2 | 430.000 | 0.000 | 280.000 | 375.000 |
| | 3 | 665.000 | 330.000 | 0.000 | 680.000 |
| | 4 | 425.000 | 800.000 | 395.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.11 | 0.32 | 0.57 |
| | 2 | 0.40 | 0.00 | 0.26 | 0.35 |
| | 3 | 0.40 | 0.20 | 0.00 | 0.41 |
| | 4 | 0.26 | 0.49 | 0.24 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.42 | 2.32 | 0.72 | A |
| 2 | 0.42 | 2.42 | 0.73 | A |
| 3 | 0.59 | 3.12 | 1.45 | A |
| 4 | 0.64 | 3.96 | 1.78 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1112.15 | 1518.69 | 0.00 | 2671.35 | 0.417 | 0.71 | 2.305 | A |
| 2 | 1085.00 | 1082.10 | 1385.74 | 0.00 | 2575.65 | 0.421 | 0.72 | 2.407 | A |
| 3 | 1675.00 | 1669.26 | 1441.21 | 0.00 | 2833.45 | 0.591 | 1.43 | 3.077 | A |
| 4 | 1620.00 | 1612.98 | 1420.44 | 0.00 | 2531.81 | 0.640 | 1.76 | 3.889 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1114.99 | 1524.95 | 0.00 | 2666.18 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1084.99 | 1389.97 | 0.00 | 2572.28 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1674.96 | 1444.98 | 0.00 | 2830.22 | 0.592 | 1.44 | 3.115 | A |
| 4 | 1620.00 | 1619.94 | 1424.97 | 0.00 | 2528.23 | 0.641 | 1.77 | 3.963 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1524.98 | 0.00 | 2666.15 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1085.00 | 1389.99 | 0.00 | 2572.26 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1674.99 | 1445.00 | 0.00 | 2830.21 | 0.592 | 1.45 | 3.115 | A |
| 4 | 1620.00 | 1619.98 | 1424.99 | 0.00 | 2528.22 | 0.641 | 1.78 | 3.963 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1524.99 | 0.00 | 2666.15 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1085.00 | 1390.00 | 0.00 | 2572.26 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1675.00 | 1445.00 | 0.00 | 2830.21 | 0.592 | 1.45 | 3.115 | A |
| 4 | 1620.00 | 1619.99 | 1425.00 | 0.00 | 2528.21 | 0.641 | 1.78 | 3.963 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1525.00 | 0.00 | 2666.14 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1085.00 | 1390.00 | 0.00 | 2572.26 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1675.00 | 1445.00 | 0.00 | 2830.21 | 0.592 | 1.45 | 3.115 | A |
| 4 | 1620.00 | 1620.00 | 1425.00 | 0.00 | 2528.21 | 0.641 | 1.78 | 3.963 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1525.00 | 0.00 | 2666.14 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1085.00 | 1390.00 | 0.00 | 2572.26 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1675.00 | 1445.00 | 0.00 | 2830.21 | 0.592 | 1.45 | 3.115 | A |
| 4 | 1620.00 | 1620.00 | 1425.00 | 0.00 | 2528.21 | 0.641 | 1.78 | 3.963 | A |

# 2021 observed traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday AM Peak Hour | 2021 observed traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.85 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 670.00 | 100.000 |
| 2 | FLAT | ✓ | 800.00 | 100.000 |
| 3 | FLAT | ✓ | 1270.00 | 100.000 |
| 4 | FLAT | ✓ | 1225.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 275.000 | 395.000 |
| | 2 | 295.000 | 0.000 | 280.000 | 225.000 |
| | 3 | 345.000 | 360.000 | 0.000 | 565.000 |
| | 4 | 490.000 | 430.000 | 305.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.41 | 0.59 |
| | 2 | 0.37 | 0.00 | 0.35 | 0.28 |
| | 3 | 0.27 | 0.28 | 0.00 | 0.44 |
| | 4 | 0.40 | 0.35 | 0.25 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.22 | 1.53 | 0.28 | A |
| 2 | 0.28 | 1.71 | 0.38 | A |
| 3 | 0.39 | 1.79 | 0.63 | A |
| 4 | 0.43 | 2.20 | 0.75 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 668.86 | 1092.50 | 0.00 | 3023.26 | 0.222 | 0.28 | 1.529 | A |
| 2 | 800.00 | 798.48 | 973.12 | 0.00 | 2903.82 | 0.276 | 0.38 | 1.710 | A |
| 3 | 1270.00 | 1267.49 | 913.34 | 0.00 | 3284.97 | 0.387 | 0.63 | 1.782 | A |
| 4 | 1225.00 | 1222.03 | 998.05 | 0.00 | 2865.62 | 0.427 | 0.74 | 2.187 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1094.99 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1269.99 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1224.99 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.195 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

# 2021 observed traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday PM Peak Hour | 2021 observed traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.88 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 670.00 | 100.000 |
| 2 | FLAT | ✓ | 805.00 | 100.000 |
| 3 | FLAT | ✓ | 1275.00 | 100.000 |
| 4 | FLAT | ✓ | 1220.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 220.000 | 450.000 |
| | 2 | 280.000 | 0.000 | 235.000 | 290.000 |
| | 3 | 430.000 | 275.000 | 0.000 | 570.000 |
| | 4 | 355.000 | 535.000 | 330.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.33 | 0.67 |
| | 2 | 0.35 | 0.00 | 0.29 | 0.36 |
| | 3 | 0.34 | 0.22 | 0.00 | 0.45 |
| | 4 | 0.29 | 0.44 | 0.27 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.22 | 1.55 | 0.29 | A |
| 2 | 0.28 | 1.73 | 0.39 | A |
| 3 | 0.40 | 1.87 | 0.66 | A |
| 4 | 0.42 | 2.17 | 0.74 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 668.85 | 1137.35 | 0.00 | 2986.23 | 0.224 | 0.29 | 1.553 | A |
| 2 | 805.00 | 803.46 | 998.05 | 0.00 | 2883.99 | 0.279 | 0.39 | 1.730 | A |
| 3 | 1275.00 | 1272.35 | 1018.13 | 0.00 | 3195.34 | 0.399 | 0.66 | 1.870 | A |
| 4 | 1220.00 | 1217.07 | 983.00 | 0.00 | 2877.51 | 0.424 | 0.73 | 2.164 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1139.99 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1274.99 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1219.99 | 985.00 | 0.00 | 2875.94 | 0.424 | 0.74 | 2.173 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction I (CM_p2).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:02:00

» 2018 observed traffic flow, Ching Ming Festival Peak Hour
» 2027 reference traffic flow, Ching Ming Festival Peak Hour
» 2027 design traffic flow, Ching Ming Festival Peak Hour

## Summary of junction performance

| | Ching Ming Festival Peak Hour | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS |
| | 2018 observed traffic flow | | | |
| Arm 2 | 0.15 | 1.28 | 0.13 | A |
| Arm 3 | 0.03 | 1.42 | 0.03 | A |
| Arm 4 | 0.09 | 1.50 | 0.08 | A |
| Arm 5 | 0.02 | 2.30 | 0.02 | A |
| | 2027 design traffic flow | | | |
| Arm 2 | 0.17 | 1.31 | 0.15 | A |
| Arm 3 | 0.03 | 1.45 | 0.03 | A |
| Arm 4 | 0.10 | 1.53 | 0.09 | A |
| Arm 5 | 0.02 | 2.33 | 0.02 | A |
| | 2027 reference traffic flow | | | |
| Arm 2 | 0.17 | 1.31 | 0.15 | A |
| Arm 3 | 0.03 | 1.45 | 0.03 | A |
| Arm 4 | 0.10 | 1.53 | 0.09 | A |
| Arm 5 | 0.02 | 2.33 | 0.02 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour " model duration: 13:30 - 15:00*
*"D2 - 2027 reference traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:01:57*

## File summary

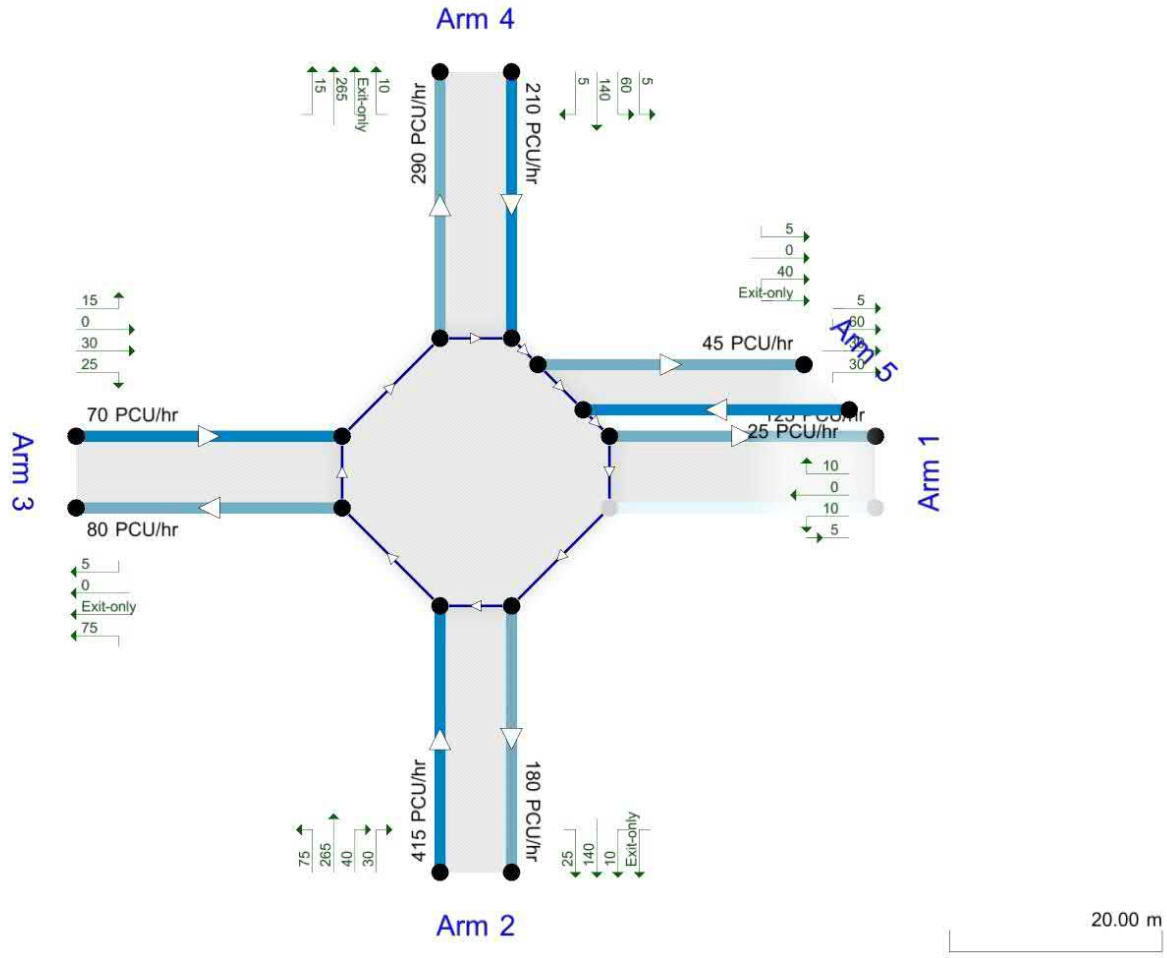
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2018 observed traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 observed traffic flow, Ching Ming Festival Peak Hour | 2018 observed traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.39 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| **2** | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| **3** | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| **4** | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| **5** | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 415.00 | 100.000 |
| 3 | FLAT | ✓ | 70.00 | 100.000 |
| 4 | FLAT | ✓ | 210.00 | 100.000 |
| 5 | FLAT | ✓ | 25.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 30.000 | 5.000 | 75.000 | 265.000 | 40.000 |
| | 3 | 30.000 | 25.000 | 0.000 | 15.000 | 0.000 |
| | 4 | 60.000 | 140.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 5.000 | 10.000 | 0.000 | 10.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.01 | 0.18 | 0.64 | 0.10 |
| | 3 | 0.43 | 0.36 | 0.00 | 0.21 | 0.00 |
| | 4 | 0.29 | 0.67 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.40 | 0.00 | 0.40 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.13 | 1.28 | 0.15 | A |
| 3 | 0.03 | 1.42 | 0.03 | A |
| 4 | 0.08 | 1.50 | 0.09 | A |
| 5 | 0.02 | 2.30 | 0.02 | A |

# Main Results for each time segment

## Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 414.41 | 14.97 | 0.00 | 3225.54 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 69.89 | 349.49 | 0.00 | 2609.27 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 209.65 | 129.81 | 0.00 | 2618.59 | 0.080 | 0.09 | 1.493 | A |
| 5 | 25.00 | 24.94 | 294.52 | 0.00 | 1591.18 | 0.016 | 0.02 | 2.298 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.496 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

# 2027 reference traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Ching Ming Festival Peak Hour | 2027 reference traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.42 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 475.00 | 100.000 |
| 3 | FLAT | ✓ | 75.00 | 100.000 |
| 4 | FLAT | ✓ | 230.00 | 100.000 |
| 5 | FLAT | ✓ | 25.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 35.000 | 5.000 | 80.000 | 290.000 | 65.000 |
| | 3 | 35.000 | 25.000 | 0.000 | 15.000 | 0.000 |
| | 4 | 65.000 | 155.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 5.000 | 10.000 | 0.000 | 10.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.01 | 0.17 | 0.61 | 0.14 |
| | 3 | 0.47 | 0.33 | 0.00 | 0.20 | 0.00 |
| | 4 | 0.28 | 0.67 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.40 | 0.00 | 0.40 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.15 | 1.31 | 0.17 | A |
| 3 | 0.03 | 1.45 | 0.03 | A |
| 4 | 0.09 | 1.53 | 0.10 | A |
| 5 | 0.02 | 2.33 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 474.31 | 14.97 | 0.00 | 3225.54 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 74.88 | 404.40 | 0.00 | 2560.91 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 229.61 | 164.75 | 0.00 | 2588.25 | 0.089 | 0.10 | 1.525 | A |
| 5 | 25.00 | 24.94 | 324.46 | 0.00 | 1570.98 | 0.016 | 0.02 | 2.328 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.450 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.528 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.310 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

# 2027 design traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Ching Ming Festival Peak Hour | 2027 design traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.42 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| **2** | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| **3** | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| **4** | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| **5** | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 475.00 | 100.000 |
| 3 | FLAT | ✓ | 75.00 | 100.000 |
| 4 | FLAT | ✓ | 230.00 | 100.000 |
| 5 | FLAT | ✓ | 25.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 35.000 | 5.000 | 80.000 | 290.000 | 65.000 |
| | 3 | 35.000 | 25.000 | 0.000 | 15.000 | 0.000 |
| | 4 | 65.000 | 155.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 5.000 | 10.000 | 0.000 | 10.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.01 | 0.17 | 0.61 | 0.14 |
| | 3 | 0.47 | 0.33 | 0.00 | 0.20 | 0.00 |
| | 4 | 0.28 | 0.67 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.40 | 0.00 | 0.40 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.15 | 1.31 | 0.17 | A |
| 3 | 0.03 | 1.45 | 0.03 | A |
| 4 | 0.09 | 1.53 | 0.10 | A |
| 5 | 0.02 | 2.33 | 0.02 | A |

# Main Results for each time segment

## Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 474.31 | 14.97 | 0.00 | 3225.54 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 74.88 | 404.40 | 0.00 | 2560.91 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 229.61 | 164.75 | 0.00 | 2588.25 | 0.089 | 0.10 | 1.525 | A |
| 5 | 25.00 | 24.94 | 324.46 | 0.00 | 1570.98 | 0.016 | 0.02 | 2.328 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.450 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.528 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.310 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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**Filename:** Junction I (Weekday).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:09:19

» 2027 reference traffic flow, Weekday AM Peak Hour
» 2027 design traffic flow, Weekday AM Peak Hour
» 2027 reference traffic flow, Weekday PM Peak Hour
» 2027 design traffic flow, Weekday PM Peak Hour
» 2021 observed traffic flow, Weekday AM Peak Hour
» 2021 observed traffic flow, Weekday PM Peak Hour

## Summary of junction performance

| | Weekday AM Peak Hour | | | | Weekday PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| **2021 observed traffic flow** | | | | | | | | |
| Arm 2 | 0.10 | 1.23 | 0.09 | A | 0.10 | 1.23 | 0.09 | A |
| Arm 3 | 0.02 | 1.35 | 0.02 | A | 0.00 | 0.00 | 0.00 | A |
| Arm 4 | 0.09 | 1.47 | 0.08 | A | 0.08 | 1.44 | 0.08 | A |
| Arm 5 | 0.00 | 0.00 | 0.00 | A | 0.02 | 2.23 | 0.02 | A |
| **2027 design traffic flow** | | | | | | | | |
| Arm 2 | 0.14 | 1.26 | 0.12 | A | 0.13 | 1.27 | 0.12 | A |
| Arm 3 | 0.03 | 1.40 | 0.02 | A | 0.00 | 0.00 | 0.00 | A |
| Arm 4 | 0.11 | 1.52 | 0.10 | A | 0.10 | 1.47 | 0.09 | A |
| Arm 5 | 0.00 | 0.00 | 0.00 | A | 0.02 | 2.25 | 0.02 | A |
| **2027 reference traffic flow** | | | | | | | | |
| Arm 2 | 0.14 | 1.26 | 0.12 | A | 0.13 | 1.27 | 0.12 | A |
| Arm 3 | 0.03 | 1.40 | 0.02 | A | 0.00 | 0.00 | 0.00 | A |
| Arm 4 | 0.11 | 1.52 | 0.10 | A | 0.10 | 1.47 | 0.09 | A |
| Arm 5 | 0.00 | 0.00 | 0.00 | A | 0.02 | 2.25 | 0.02 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D2 - 2027 reference traffic flow, Weekday AM Peak Hour " model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D4 - 2027 reference traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D5 - 2027 design traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D6 - 2021 observed traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D7 - 2021 observed traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:09:15*

## File summary

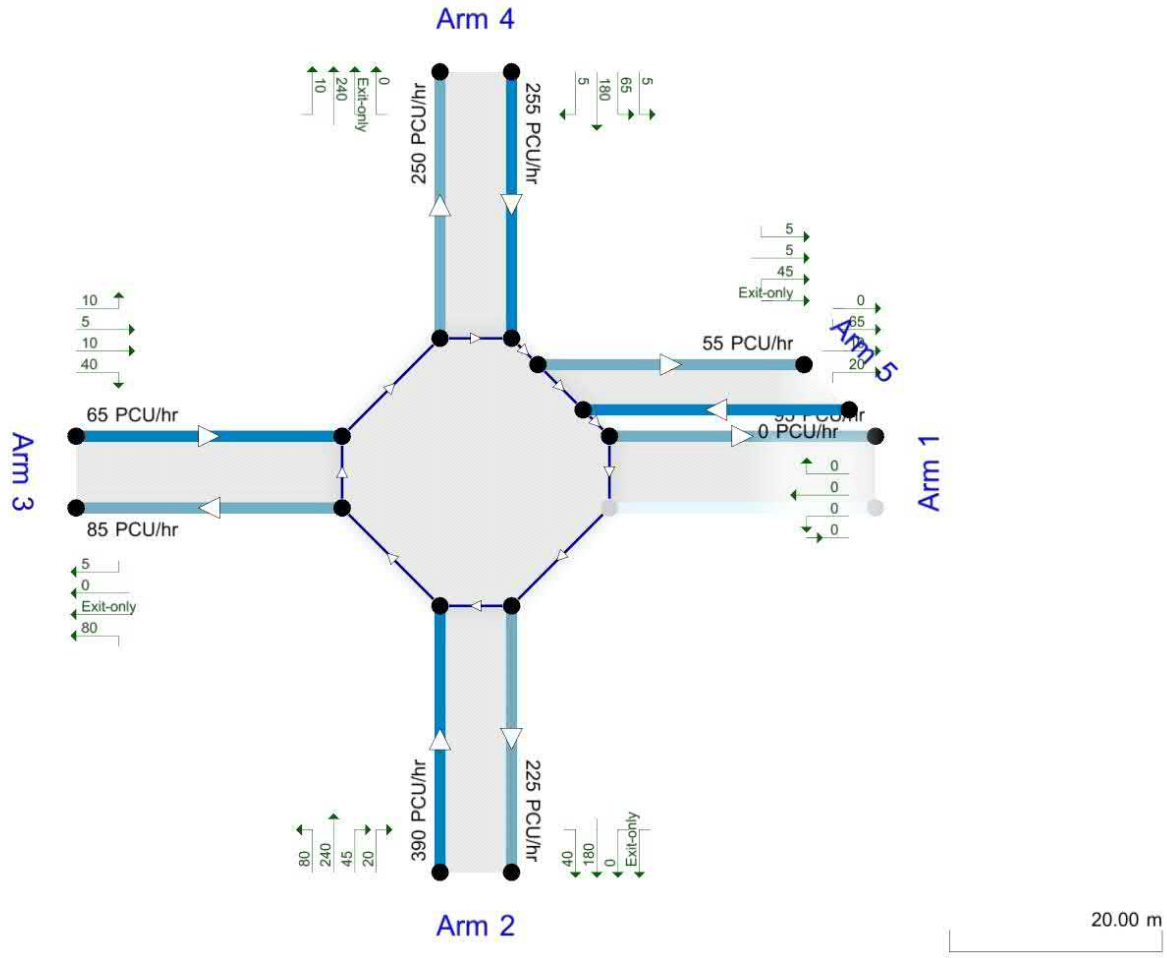
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D2 - 2027 reference traffic flow, Weekday AM Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2027 reference traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday AM Peak Hour | 2027 reference traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.37 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| **2** | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| **3** | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| **4** | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| **5** | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 390.00 | 100.000 |
| 3 | FLAT | ✓ | 65.00 | 100.000 |
| 4 | FLAT | ✓ | 255.00 | 100.000 |
| 5 | FLAT | ✓ | 0.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 20.000 | 5.000 | 80.000 | 240.000 | 45.000 |
| | 3 | 10.000 | 40.000 | 0.000 | 10.000 | 5.000 |
| | 4 | 65.000 | 180.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.05 | 0.01 | 0.21 | 0.62 | 0.12 |
| | 3 | 0.15 | 0.62 | 0.00 | 0.15 | 0.08 |
| | 4 | 0.25 | 0.71 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.12 | 1.26 | 0.14 | A |
| 3 | 0.02 | 1.40 | 0.03 | A |
| 4 | 0.10 | 1.52 | 0.11 | A |
| 5 | 0.00 | 0.00 | 0.00 | A |

# Main Results for each time segment

## Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 389.45 | 4.99 | 0.00 | 3235.01 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 64.90 | 309.56 | 0.00 | 2644.44 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 254.57 | 124.82 | 0.00 | 2622.92 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 324.47 | 0.00 | 1570.97 | 0.000 | 0.00 | 0.000 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.397 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

# 2027 design traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday AM Peak Hour | 2027 design traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.37 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 390.00 | 100.000 |
| 3 | FLAT | ✓ | 65.00 | 100.000 |
| 4 | FLAT | ✓ | 255.00 | 100.000 |
| 5 | FLAT | ✓ | 0.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 20.000 | 5.000 | 80.000 | 240.000 | 45.000 |
| | 3 | 10.000 | 40.000 | 0.000 | 10.000 | 5.000 |
| | 4 | 65.000 | 180.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.05 | 0.01 | 0.21 | 0.62 | 0.12 |
| | 3 | 0.15 | 0.62 | 0.00 | 0.15 | 0.08 |
| | 4 | 0.25 | 0.71 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.12 | 1.26 | 0.14 | A |
| 3 | 0.02 | 1.40 | 0.03 | A |
| 4 | 0.10 | 1.52 | 0.11 | A |
| 5 | 0.00 | 0.00 | 0.00 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 389.45 | 4.99 | 0.00 | 3235.01 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 64.90 | 309.56 | 0.00 | 2644.44 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 254.57 | 124.82 | 0.00 | 2622.92 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 324.47 | 0.00 | 1570.97 | 0.000 | 0.00 | 0.000 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.397 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

# 2027 reference traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday PM Peak Hour | 2027 reference traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.39 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 370.00 | 100.000 |
| 3 | FLAT | ✓ | 0.00 | 100.000 |
| 4 | FLAT | ✓ | 235.00 | 100.000 |
| 5 | FLAT | ✓ | 30.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 10.000 | 5.000 | 55.000 | 260.000 | 40.000 |
| | 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 4 | 30.000 | 195.000 | 0.000 | 0.000 | 10.000 |
| | 5 | 5.000 | 0.000 | 10.000 | 15.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.03 | 0.01 | 0.15 | 0.70 | 0.11 |
| | 3 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 4 | 0.13 | 0.83 | 0.00 | 0.00 | 0.04 |
| | 5 | 0.17 | 0.00 | 0.33 | 0.50 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.12 | 1.27 | 0.13 | A |
| 3 | 0.00 | 0.00 | 0.00 | A |
| 4 | 0.09 | 1.47 | 0.10 | A |
| 5 | 0.02 | 2.25 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 369.48 | 24.94 | 0.00 | 3216.08 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 329.52 | 0.00 | 2626.86 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 234.62 | 54.92 | 0.00 | 2683.60 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 29.93 | 239.61 | 0.00 | 1628.24 | 0.018 | 0.02 | 2.252 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.266 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

# 2027 design traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday PM Peak Hour | 2027 design traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.39 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 370.00 | 100.000 |
| 3 | FLAT | ✓ | 0.00 | 100.000 |
| 4 | FLAT | ✓ | 235.00 | 100.000 |
| 5 | FLAT | ✓ | 30.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 10.000 | 5.000 | 55.000 | 260.000 | 40.000 |
| | 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 4 | 30.000 | 195.000 | 0.000 | 0.000 | 10.000 |
| | 5 | 5.000 | 0.000 | 10.000 | 15.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.03 | 0.01 | 0.15 | 0.70 | 0.11 |
| | 3 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 4 | 0.13 | 0.83 | 0.00 | 0.00 | 0.04 |
| | 5 | 0.17 | 0.00 | 0.33 | 0.50 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.12 | 1.27 | 0.13 | A |
| 3 | 0.00 | 0.00 | 0.00 | A |
| 4 | 0.09 | 1.47 | 0.10 | A |
| 5 | 0.02 | 2.25 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 369.48 | 24.94 | 0.00 | 3216.08 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 329.52 | 0.00 | 2626.86 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 234.62 | 54.92 | 0.00 | 2683.60 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 29.93 | 239.61 | 0.00 | 1628.24 | 0.018 | 0.02 | 2.252 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.266 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

# 2021 observed traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday AM Peak Hour | 2021 observed traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.33 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 300.00 | 100.000 |
| 3 | FLAT | ✓ | 55.00 | 100.000 |
| 4 | FLAT | ✓ | 215.00 | 100.000 |
| 5 | FLAT | ✓ | 0.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 20.000 | 5.000 | 65.000 | 200.000 | 10.000 |
| | 3 | 10.000 | 35.000 | 0.000 | 10.000 | 0.000 |
| | 4 | 55.000 | 150.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.02 | 0.22 | 0.67 | 0.03 |
| | 3 | 0.18 | 0.64 | 0.00 | 0.18 | 0.00 |
| | 4 | 0.26 | 0.70 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.09 | 1.23 | 0.10 | A |
| 3 | 0.02 | 1.35 | 0.02 | A |
| 4 | 0.08 | 1.47 | 0.09 | A |
| 5 | 0.00 | 0.00 | 0.00 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 299.59 | 4.99 | 0.00 | 3235.01 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 54.92 | 234.68 | 0.00 | 2710.39 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 214.65 | 79.88 | 0.00 | 2661.93 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 279.56 | 0.00 | 1601.28 | 0.000 | 0.00 | 0.000 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.472 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

# 2021 observed traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday PM Peak Hour | 2021 observed traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.37 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 295.00 | 100.000 |
| 3 | FLAT | ✓ | 0.00 | 100.000 |
| 4 | FLAT | ✓ | 205.00 | 100.000 |
| 5 | FLAT | ✓ | 30.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 10.000 | 5.000 | 45.000 | 220.000 | 15.000 |
| | 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 4 | 25.000 | 165.000 | 5.000 | 0.000 | 10.000 |
| | 5 | 5.000 | 0.000 | 10.000 | 15.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.03 | 0.02 | 0.15 | 0.75 | 0.05 |
| | 3 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 4 | 0.12 | 0.80 | 0.02 | 0.00 | 0.05 |
| | 5 | 0.17 | 0.00 | 0.33 | 0.50 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.09 | 1.23 | 0.10 | A |
| 3 | 0.00 | 0.00 | 0.00 | A |
| 4 | 0.08 | 1.44 | 0.08 | A |
| 5 | 0.02 | 2.23 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 294.60 | 29.93 | 0.00 | 3211.34 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 264.62 | 0.00 | 2684.02 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 204.67 | 29.96 | 0.00 | 2705.28 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 29.93 | 209.67 | 0.00 | 1648.45 | 0.018 | 0.02 | 2.223 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.224 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.224 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.224 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.226 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.226 | A |

# Annex 3

Supplementary document for FEHD's SI application

普光明園

貴署檔案：(22) in FEHD PC 72-40/62/2018/051 Pt. 5

食物環境衛生署署長
私營骨灰安置所事務辦事處
九龍長沙灣道681號
貿易廣場5樓501-502室

個案經理：Madam Chan/張卓成先生 (Tel: 2350 7395)

敬啟者：

**有關：　根據《私人骨灰安置所條例(第630章)》(《條例》)**
**申請指明文書**

| | |
|---|---|
| 骨灰安置所名稱： | 普光明寺 |
| 申請指明文書類別： | 就截算前骨灰安置所申請牌照(包括2017年6月30日仍未售出的龕位) |

關於城市規劃委員會將於2023年7月14日審議本寺就截算前骨灰安置所牌照申請(2017年6月30日仍未售出的龕位)之規劃申請(編號：Y/ST/49)。

因有關「未售骨灰龕位分佈圖」尚在修改中，現先致函通知 貴署有關本寺就未售出龕位的數量調整為3,000個，而已售出的龕位數量維持不變（1,779個）。未售龕位的分佈詳情及相關圖紙將於稍後補交予 貴署審核。

如有任何疑問可直接聯絡本寺林先生聯絡(電話：9853 3433)。

For and on behalf of
PUGUANGMING TEMPLE LIMITED
普光明園有限公司

Authorized Signature(s)
普光明園有限公司
日期：

RECEIVED
21 JUN 2023
Private Columbaria Affairs Office
FEHD

香港沙田大圍美田路白田二區96號
電話：(852) 2699 8063　傳真：(852) 2699 8081

PLANPLUS 思顧
CONSULTANCY 隽問

# Section 12A Application for Rezoning from "Residential (Group B)" & "Green Belt" to "Other Specified Uses (Religious Institution with Columbarium)" Zone for Puguangming Temple and Columbarium (Proposal 2) at Lot Nos. 2 & 671 in D.D.181 in Tai Wai, Sha Tin, New Territories

## Planning Application No. Y/ST/49

## Further Information 14

**July 2023**

Reference : PPC-PLG-10053b

# Annex 1

Traffic Management Plan

# Town Planning Study to Puguangming Temple

## Application for License for Columbarium Use

## Traffic Management Plan
## (Proposal - 2)

**Report**

**July 2023**

**CTA Consultants Limited**
**志達顧問有限公司**

# 1. INTRODUCTION

## 1.1 Objective

1.1.1 This Report is to present a Traffic Management Plan in accordance with Section 97 of the Private Columbaria Ordinance to facilitate the application for license.

1.1.2 This Management Plan covers those approved niches by TPB in 2022 (i.e. **1,779 niches**), together with the proposed niches submitting to TPB (i.e. **3,000 niches**), which gives a total of **4,779 niches**.

1.1.3 CTA Consultants Ltd. ("CTA") was therefore commissioned as the traffic consultant for preparing a Management Plan in supporting the proposal is technically feasible and acceptable. The plan focuses on the following areas:

i) Control of the incoming visitors in an acceptable level.

ii) Visitor Management.

iii) Contingency Plan in the event of fire or other emergency situations

## 1.2 Background

1.2.1 According to information provided by the client, the utilization of niches/tablets is summarized in **Table 1.1** below.

**Table 1.1 Summary of Utilization of Niches/Tablets**

| | No. of Niches/Tablets occupied in 2018 | No. of Niches/Tablets Approved in 2022 | This Application (Including the Approved 1,779 no. |
|---|---|---|---|
| **Niche** | 319 | 1,779 | **4,779** |
| **Tablet** | 345 (Total 810 sold) | 810 | **810** |

## 1.3 Visitor Flows in Ching Ming Festivals

*Ching Ming Festival, 2018*

a) To reveal the traffic conditions on the festival day, a pedestrian survey was conducted during Ching Ming Festival on 5 April 2018.

b) The Surveyed results are shown in **Table 1.2** and **1.3**

c) The total incoming/outgoing daily flow is **595 / 512 visitors** (based on 319 niches and 345 tablets)

d) The incoming/outgoing hourly peak flow is **181/146 visitors**. (based on 319 niches and 345 tablets)

## Table 1.2 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (15 mins Interval)

| 15 mins Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| 800 | 815 | 8 | 0 | 5 | 0 | 13 | 0 |
| 815 | 830 | 5 | 0 | 0 | 0 | 5 | 0 |
| 830 | 845 | 10 | 3 | 8 | 0 | 18 | 3 |
| 845 | 900 | 11 | 0 | 8 | 2 | 19 | 2 |
| 900 | 915 | 16 | 2 | 11 | 0 | 27 | 2 |
| 915 | 930 | 10 | 0 | 3 | 2 | 13 | 2 |
| 930 | 945 | 0 | 2 | 0 | 1 | 0 | 3 |
| 945 | 1000 | 3 | 0 | 8 | 3 | 11 | 3 |
| 1000 | 1015 | 13 | 5 | 8 | 5 | 21 | 10 |
| 1015 | 1030 | 6 | 0 | 7 | 5 | 13 | 5 |
| 1030 | 1045 | 13 | 10 | 6 | 8 | 19 | 18 |
| 1045 | 1100 | 11 | 2 | 12 | 0 | 23 | 2 |
| 1100 | 1115 | 18 | 6 | 21 | 4 | 39 | 10 |
| 1115 | 1130 | 26 | 23 | 24 | 17 | 50 | 40 |
| 1130 | 1145 | 40 | 10 | 21 | 16 | 61 | 26 |
| 1145 | 1200 | 23 | 19 | 8 | 9 | 31 | 28 |
| 1200 | 1215 | 19 | 21 | 16 | 13 | 35 | 34 |
| 1215 | 1230 | 16 | 13 | 2 | 21 | 18 | 34 |
| 1230 | 1245 | 6 | 8 | 10 | 5 | 16 | 13 |
| 1245 | 1300 | 10 | 35 | 3 | 21 | 13 | 56 |
| 1300 | 1315 | 8 | 29 | 8 | 12 | 16 | 41 |
| 1315 | 1330 | 13 | 0 | 10 | 10 | 23 | 10 |
| 1330 | 1345 | 0 | 26 | 6 | 13 | 6 | 39 |
| 1345 | 1400 | 0 | 6 | 5 | 8 | 5 | 14 |
| 1400 | 1415 | 3 | 5 | 7 | 5 | 10 | 10 |
| 1415 | 1430 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1430 | 1445 | 0 | 6 | 2 | 5 | 2 | 11 |
| 1445 | 1500 | 6 | 4 | 4 | 4 | 10 | 8 |
| 1500 | 1515 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1515 | 1530 | 3 | 5 | 7 | 3 | 10 | 8 |
| 1530 | 1545 | 10 | 6 | 8 | 4 | 18 | 10 |
| 1545 | 1600 | 3 | 7 | 10 | 3 | 13 | 10 |
| 1600 | 1615 | 0 | 3 | 0 | 0 | 0 | 3 |
| 1615 | 1635 | 3 | 7 | 3 | 3 | 6 | 10 |
| 1635 | 1645 | 3 | 2 | 2 | 4 | 5 | 6 |
| 1645 | 1700 | 0 | 8 | 0 | 5 | 0 | 13 |
| 1700 | 1715 | 0 | 9 | 0 | 7 | 0 | 16 |
| 1715 | 1730 | 0 | 4 | 0 | 2 | 0 | 6 |
| 1730 | 1745 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 1800 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | | **328** | **286** | **267** | **226** | **595** | **512** |

**Table 1.3 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (1 hour Interval)**

| 1 hour Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| **800** | **900** | 34 | 3 | 21 | 2 | 55 | 5 |
| **815** | **915** | 42 | 5 | 27 | 2 | 69 | 7 |
| **830** | **930** | 47 | 5 | 30 | 4 | 77 | 9 |
| **845** | **945** | 37 | 4 | 22 | 5 | 59 | 9 |
| **900** | **1000** | 29 | 4 | 22 | 6 | 51 | 10 |
| **915** | **1015** | 26 | 7 | 19 | 11 | 45 | 18 |
| **930** | **1030** | 22 | 7 | 23 | 14 | 45 | 21 |
| **945** | **1045** | 35 | 15 | 29 | 21 | 64 | 36 |
| **1000** | **1100** | 43 | 17 | 33 | 18 | 76 | 35 |
| **1015** | **1115** | 48 | 18 | 46 | 17 | 94 | 35 |
| **1030** | **1130** | 68 | 41 | 63 | 29 | 131 | 70 |
| **1045** | **1145** | 95 | 41 | **78** | 37 | 173 | 78 |
| **1100** | **1200** | 107 | 58 | 74 | 46 | **181** | 104 |
| **1115** | **1215** | **108** | 73 | 69 | 55 | 177 | 128 |
| **1130** | **1230** | 98 | 63 | 47 | 59 | 145 | 122 |
| **1145** | **1245** | 64 | 61 | 36 | 48 | 100 | 109 |
| **1200** | **1300** | 51 | 77 | 31 | **60** | 82 | 137 |
| **1215** | **1315** | 40 | 85 | 23 | 59 | 63 | 144 |
| **1230** | **1330** | 37 | 72 | 31 | 48 | 68 | 120 |
| **1245** | **1345** | 31 | **90** | 27 | 56 | 58 | **146** |
| **1300** | **1400** | 21 | 61 | 29 | 43 | 50 | 104 |
| **1315** | **1415** | 16 | 37 | 28 | 36 | 44 | 73 |
| **1330** | **1430** | 9 | 37 | 25 | 29 | 34 | 66 |
| **1345** | **1445** | 9 | 17 | 21 | 21 | 30 | 38 |
| **1400** | **1500** | 15 | 15 | 20 | 17 | 35 | 32 |
| **1415** | **1515** | 18 | 10 | 20 | 15 | 38 | 25 |
| **1430** | **1530** | 15 | 15 | 20 | 15 | 35 | 30 |
| **1445** | **1545** | 25 | 15 | 26 | 14 | 51 | 29 |
| **1500** | **1600** | 22 | 18 | 32 | 13 | 54 | 31 |
| **1515** | **1615** | 16 | 21 | 25 | 10 | 41 | 31 |
| **1530** | **1630** | 16 | 23 | 21 | 10 | 37 | 33 |
| **1545** | **1645** | 9 | 19 | 15 | 10 | 24 | 29 |
| **1600** | **1700** | 6 | 20 | 5 | 12 | 11 | 32 |
| **1615** | **1715** | 6 | 26 | 5 | 19 | 11 | 45 |
| **1630** | **1730** | 3 | 23 | 2 | 18 | 5 | 41 |
| **1645** | **1745** | 0 | 21 | 0 | 14 | 0 | 35 |
| **1700** | **1800** | 0 | 13 | 0 | 9 | 0 | 22 |

## 2. TRAFFIC & PUBLIC TRANSPORT ARRANGEMENT AND/OR MANAGEMENT

### 2.1 The Transport Plan

**The Plan consists of:**

**a) Admission Control**

- **Pre–Registration**
- **Implementation Period**

**b) Visitor Management**

**c) Contingency Plan in the event of fire or other emergency situations**

### 2.2 Traffic & Public Transport Arrangement and/or Management

#### 2.2.1 *Pre–Registration*

i) The Visitors coming to Puguangming Temple in Festival periods have to be restricted into 10 Sections, each section for 1 hour:

- From 8 am to 6 pm, each section will last for 1 hour.

ii) People coming for niches / tablets has to be **Pre–Registration**.

iii) Pre-Registration will be by both hotline booking and on-line booking.

iv) Each section will be restricted to maximum **250 people**, which is able to give a total of maximum **2,500 people a day**.

#### 2.2.2 *Implementation Period*

i) This Plan is to be executed on the Festival Day plus **3 weekends** before the festival day and **3 weekends** after the festival day.

#### 2.2.3 *Existing Footpath*

i) No car bus is allowed to access the site.

ii) As advised by AP, the EVA will not be necessary.

iii) Thus, the existing footpath will remain as present and the visitors will use this road to walk to the columbarium.

iv) The existing footpath is shown in **Figure FP 1**.

## 2.3 Pedestrian Management, Admission Control and Holding Capacity for Visitors

### 2.3.1 *Pedestrian Management and Admission Control*

i) The Management and Controlling Mechanism is as follows:

a) A Reception Area is placed at the entrance for management and advising the visitors to follow the visitor guidelines and rules before entering the columbarium

b) The staff of the Temple will divert all in-coming visitors to the holding area first before releasing them to the Columbarium Building

c) If the Columbarium Building is found over-crowded, the staff will let people to wait inside the holding area temporarily until the over-crowding is relieved

d) The Management and Controlling Mechanism is illustrated in **Figure TP 2.1**.

### 2.3.2 *Holding Capacity*

i) Referring to **Figure TP 2.2**, there will be 3 places (A, B and C) proposed forholding visitors to let them waiting for queuing before entering the building.

ii) **Figure TP 2.3** shows the conditions of the existing places.

iii) Base on the proposed Management Plan, , the maximum number of visitors to be held at any one time in the Temple during the festival days will be **250 persons**

iv) Holding Area Outside the Building

Holding area of about **717m$^2$** (Place A (657m$^2$) + Place B (60m$^2$**)** is provided as shown in **Figure TP 2.2**. These spaces can hold **1,195 visitors** as shown in the calculation below:

*Calculation of Person can be held in the Holding Area*
*Size of holding area = 717m$^2$*
*Space per person = 0.6m$^2$*
*Nos. of persons accommodated = 717 / 0.6*
*= 1,195 persons*

v) Holding Area Inside the Building

The GFA of the building (certified by AP "Chaterwealth Professional Limited") is 1,415.853. The UFA of the building as advised by Client is 975.92 $m^2$ (~69% of the GFA).

Assume the space that can hold the visitor is only 70% of the UFA, the space within the building available for visitors will then be 683 $m^2$. This space can hold **341 person** as shown in the calculation below:

*Calculation of Person can be held in the Columbarium building*
*UFA of Columbarium = 683 $m^2$*
*Space per person = 2 $m^2$*
*Nos. of person can be accommodated = 683 / 2*
*= 341 persons*

vi) The total number of people the Building can hold is

*1,195 + 341 = **1,536***

vii) The total number of people can be held in the Building is **1,536**, which is greater than the expected demand of **250** and is considered sufficient to meet the expected demand.

## 2.4 Contingency Plan in the event of fire or other emergency situations

2.4.1 The objective is to have a management plan that is able to allow visitors to have a safe arrangement during emergency situations, including in the event of fire.

2.4.2 Based on the discussion in Section 2.3.2, the expected maximum number of people held in the Temple will be **250**. The emergency plan is to try handle these people for emergency situation.

2.4.3 Three places are selected to be the "place of safe" as shown in **Figure TP 2.2**. Place A can hold **1,095** no. of visitors, while Place B and Place C can hold **100** and **125** no of visitors respectively. The total holding capacity is **1,320**. The assessment is illustrated in **Table 2.2** below:

**Table 2.2 Holding Capacity for Emergency**

| Place | Area (sq. m.) | Holding capacity (Area/0.6 sq. m.) | Remarks |
|---|---|---|---|
| A | 657 | 1,095 | **>250** Acceptable |
| B | 60 | 100 | |
| C | 75 | 125 | |
| | **Total** | **1,320** | |

2.4.4 The total number of people can be held in the places A, B and C is **1,320**, which is greater than the expected demand of **250** and is considered sufficient to meet the expected demand.

2.4.5 The discharge routes from places A, B and C are also shown in **Figure TP 2.4**. The places A, B and C are transit holding areas in the case when the exit to outside is not accessible.

2.4.6 The above calculation is only a theoretical maximum. In reality, people during emergency will leave the site as quickly as possible and people will not choose to stay in the premises. Therefore, the spaces provided during the emergency is much greater than the actual need.

## 3. SUMMARY

3.1 The followings are the summary of the this Traffic Management Plan:

i) The proposed management plan proposes visitors are come by a **Pre-registration Arrangement**.

ii) This Plan is to be executed on the **Festival Day** plus **3 weekends before** the festival day and **3 weekends after** the festival day.

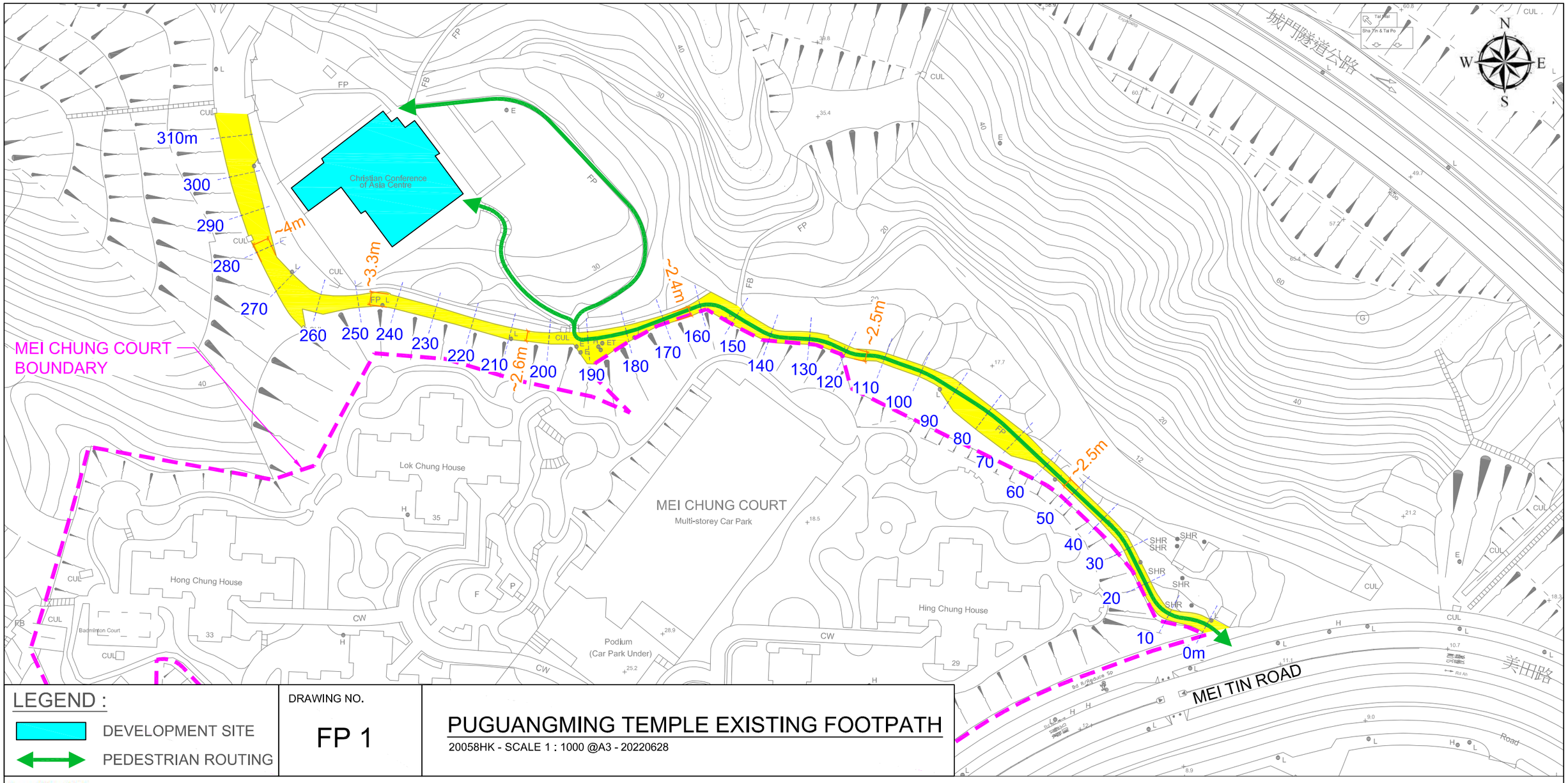
iii) The whole day will be divided into **10 sections**. Each section will only last for **one hour**, and each section will only allow **250 people** to come.

iv) Holding area, as shown in **Figure TP 2.2**, is provided at the Eastern and southern side of Puguangming Temple. This area is acting as a buffer area for:

a) Managing regulate people in entering the Columbarium, and

b) Holding people temporarily during the festival days when the columbarium building is found overcrowded.

v) Three places are designed for "*place of ultimate safe*" in the event of emergency. The arrangement is illustrated in **Figure TP 2.4**.




LEGEND :

DEVELOPMENT SITE

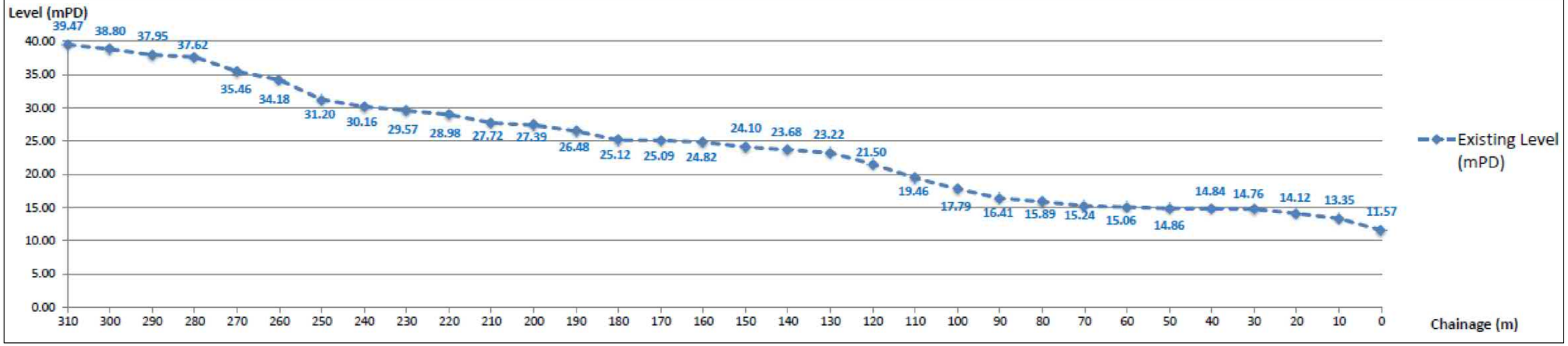
PEDESTRIAN ROUTING

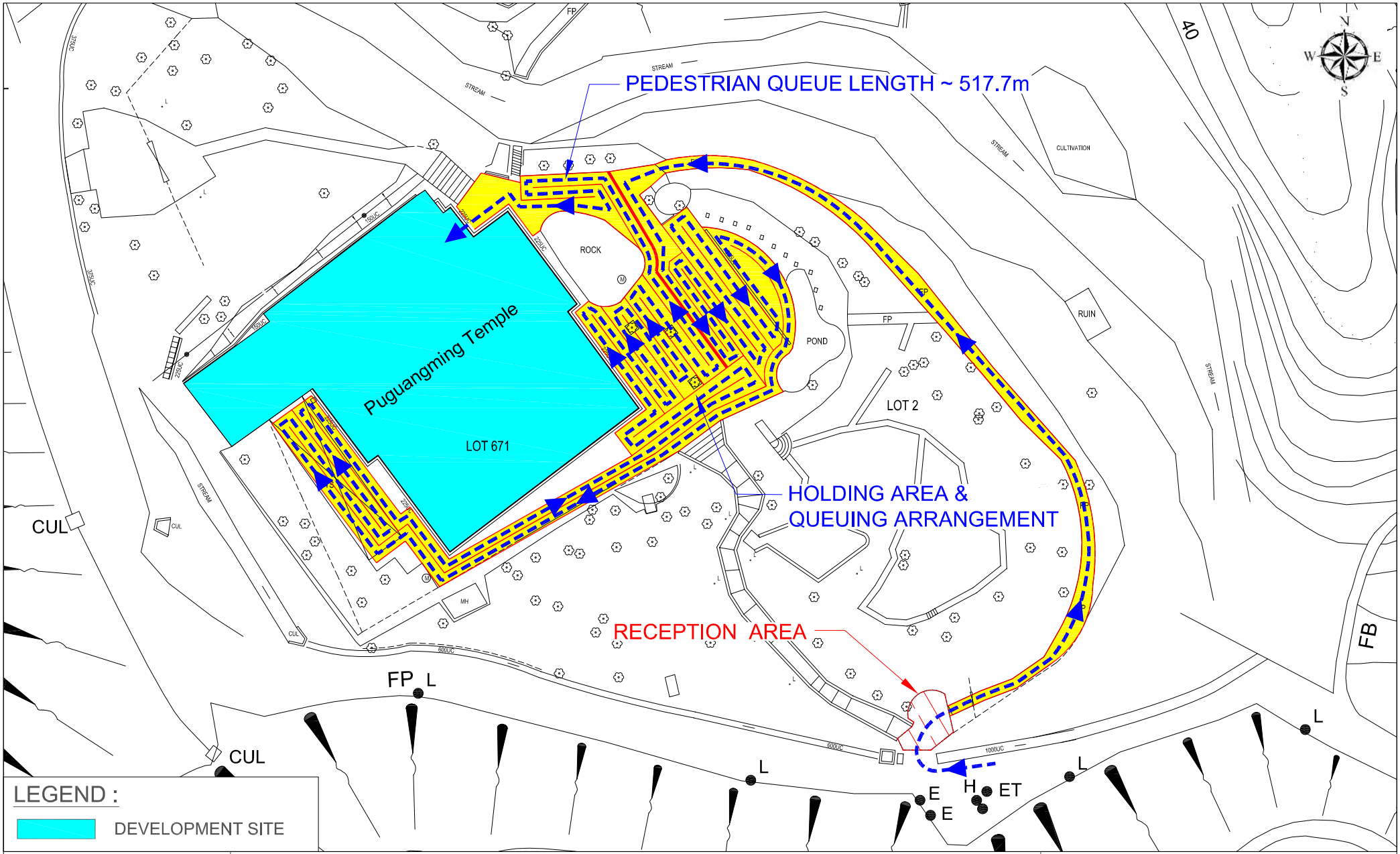
DRAWING NO.

FP 1

# PUGUANGMING TEMPLE EXISTING FOOTPATH

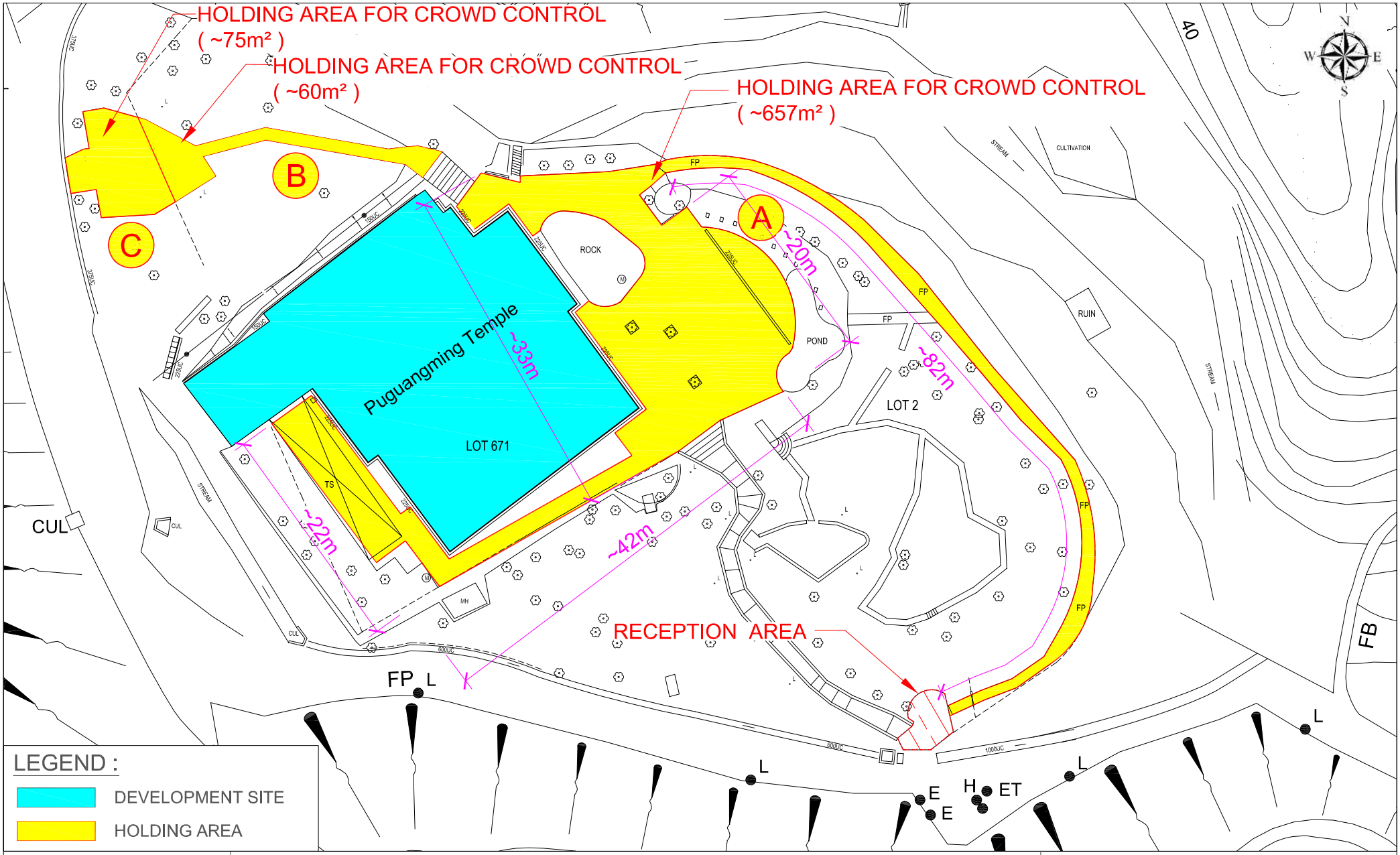
20058HK - SCALE 1 : 1000 @A3 - 20220628






| | | | |
|---|---|---|---|
| FIGURE NO.: TP 2.1 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan | | |
| PROJECT NO.: 20058HK | DRAWING TITLE: THE MANAGEMENT AND CONTROLLING MECHANISM | | |
| SCALE: 1 : 500 @ A4 | DATE: 17 FEB 2023 | | |

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| | |
|---|---|
| FIGURE NO.: TP 2.2 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXPECTED PEDESTRIAN ARRANGEMENT DURING FESTIVAL DAYS |
| SCALE: 1 : 500 @ A4 | DATE: 17 FEB 2023 |

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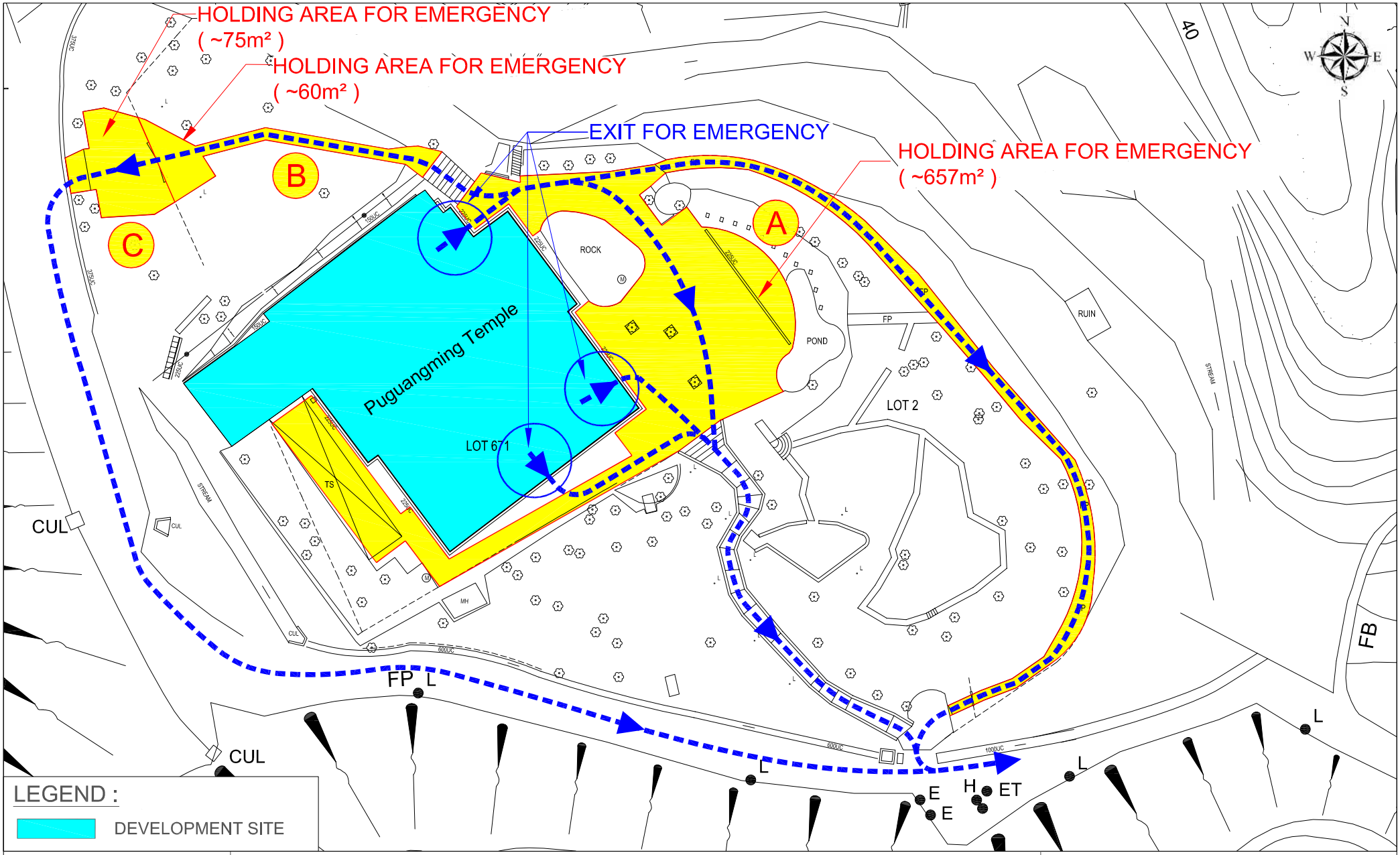


LEGEND :

DEVELOPMENT SITE

| | |
|---|---|
| FIGURE NO.: TP 2.3 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: SITE PHOTO OF EXISTING HOLDING AREA |
| SCALE: 1 : 1000 @A4 | DATE: 17 FEB 2023 |

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| | |
|---|---|
| FIGURE NO.: TP 2.4 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: PROPOSED ARRANGEMENT FOR "PLACE OF ULTIMATE SAFE" IN THE EVENT OF EMERGENCY |
| SCALE: 1 : 500 @A4 | DATE: 01 MAR 2023 |

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# Annex 2

Traffic Impact Assessment report

# Puguangming Temple
# Application for License for Columbarium Use

# Traffic Impact Assessment
# (Proposal - 2)

## Report

**July 2023**

**CTA Consultants Limited**
**志達顧問有限公司**

# 1. INTRODUCTION

## 1.1 Background

1.1.1 CTA Consultants Limited ("CTA") is commissioned by the Applicant to carry out a Traffic Impact Assessment Report in supporting the Planning Application for increasing the number of niches in Puguangming Temple.

1.1.2 The Subject Site is located at Mei Tin Road, Tai Wai as shown in **Figure 1.1**. The Subject Site is at present a columbarium with niches/tablets.

1.1.3 **1,779 niches**, comply with the **Private Columbaria Ordinance (i.e. before the date of 30/6/2017**), was approved by TPB in 2022.

1.1.4 The applicant would like to apply for another **3,000 niches** that will give a total of **4,779 niches**.

1.1.5 According to information provided by the client, the utilization of niches/tablets in 2018 and the current status of the niches are summarized in **Table 1.1** below.

**Table 1.1 Summary of Utilization of Niches/Tablets**

| | No. of Niches/Tablets occupied in 2018 | No. of Niches/Tablets Approved in 2022 | This Application (Including the Approved 1,779 niches |
|---|---|---|---|
| **Niches** | 319 | 1,779 | **4,779** |
| **Tablets** | 345 (Total 810 sold) | 810 | **810** |

## 1.2 Study Objectives

1.2.1 The main objectives of the study are as follows:

i) to assess the existing traffic conditions in the vicinity of the proposed columbarium development;

ii) to forecast traffic demands on the adjacent road network in the design year 2027 (i.e. Full operation year 2024 + 3 years);

iii) to estimate the likely traffic generated by the proposed development;

iv) to assess the impacts of traffic/ pedestrian generated by the temple in the vicinity;

v) to recommend improvement measures, if necessary, to alleviate any traffic problems on the road network.

## 1.3 Structure of the Report

1.3.1 Following this introductory chapter, there are 7 further chapters.

- **Chapter 2 – Existing Traffic Conditions**
- **Chapter 3 – Future Traffic Conditions**
- **Chapter 4 – Vehicular Traffic Impact Assessment**
- **Chapter 5 – Public Transport Demand**
- **Chapter 6 – Parking Provision**
- **Chapter 7 – Pedestrian Traffic Impact Assessment**
- **Chapter 8 – Summary and Conclusion**

# 2. EXISTING TRAFFIC CONDITIONS

## 2.1 Existing Road Network

2.1.1 The existing road network in the vicinity of the proposed Columbarium is shown in **Figure 2.1**. Visitors are mainly access through Mei Tin Road.

2.1.2 Mei Tin Road is a single 2-lane 2-way Local Road, connecting with Pik Tin Street and Tung Lo Wan Hill Road. It serves as road link providing access for the residential development at Tai Wai.

2.1.3 As shown in **Figure 2.1**, 9 junctions were identified to be critical for assessment of traffic impact due to the proposed Columbarium. They are listed in below **Table 2.1** and their existing junction layout arrangements are shown in **Figures 2.2** to **2.10** respectively.

**Table 2.1 Identified Critical Junctions**

| Ref. | Junction | Type | Figure No. |
|---|---|---|---|
| A | Mei Tin Road / Heung Fan Liu Street | Signal | **2.2** |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | **2.3** |
| C | Mei Tin Road / Chik Fai Street | Signal | **2.4** |
| D | Mei Tin Road / Pik Tin Street | Priority | **2.5** |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | **2.6** |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | Roundabout | **2.7** |
| G | Mei Tin Road / Chik Wan Street | Signal | **2.8** |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | **2.9** |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | Roundabout | **2.10** |

2.1.4 No transport facilities are at present provided in the Puguangming Temple, such as car park, loading/unloading and pick up/drop off space.

2.1.5 Therefore, people accessing the temple will use MTR / GMB /Bus / Taxi / Private Car + Walk

## 2.2 Public Transport Facilities

2.2.1 Puguangming Temple can be accessed by various types of public transports. The Subject Site is about 1,000m away from Tai Wai Railway Station. Therefore, some visitors may prefer to take GMB / buses to get access to the Subject Site.

2.2.2 The details of public transport facilities in the vicinity are shown in **Figure 2.11**. The existing Bus and GMB routes are summarized in **Table 2.2** below.

**Table 2.2 Existing Road-based Public Transport Services in the Vicinity**

| Service | Route | Origin - Destination | Services Day | Frequency (min) |
|---|---|---|---|---|
| Franchised Bus | 46P[1] | Mei Tin – Kwai Fong Railway Station | Mon to Sat, except Public Holiday | 10 – 30 |
| | 80 | Mei Lam – Kwun Tong Ferry | Mon to Sun | 7 – 20 |
| | 80A[1] | Mei Lam - Kwun Tong Ferry | Mon To Fri (except Public Holidays) | Two per day |
| | 81 | Wo Che - Jordan (West Kowloon Station) | Mon to Sun | 10 - 20 |
| | 81S[1] | Mei Tin Estate – Nathan Road (Public Square Street) | Mon to Fri, except Public Holiday | 30 |
| | 82B[1] | Mei Tin – Tai Wai Railway Station | Mon to Fri, except Public Holiday | Two per day |
| | 82K | Mei Lam – Wong Nai Tau | Mon to Sun | 30 – 40 |
| | 283 | Shatin Central – Mei Chung Court (Circular) | Mon to Sun | 10 – 15 |
| | 286P[1] | Mei Chung Court – Cheung Sha Wan | Mon to Fri, except Public Holiday | 15 |
| | 286X | Hin Keng – Sham Shui Po (Circular) | Mon to Sun | 12 – 20 |
| | 288C[1] | Shui Chuen O - Tai Wai Station | Mon to Fri, except Public Holiday | Two per day |
| | 985[1] | Mei Tin Estate (Mei Chi House) – Wan Chai (Hennessy Road) | Sat, except Public Holiday | 8 – 10 |
| | 985A[1] | Mei Tin Estate (Mei Chi House) - Wan Chai | Mon to Fri, except Public Holiday | 8 – 10 |
| | 989[1] | Sai Wan Ho - Fo Tan (Chun Yeung Estate) | Mon to Fri, except Public Holiday | Four per peak period |
| | NA41[1] | Shui Chuen O - Tai Wai Station - HZMB Hong Kong Port | Mon to Sun | One per day |
| GMB | 63A | Mei Chung Court – Tai Wai Station (Circular) | Mon to Sun | 3 – 7 |
| | 63B | Granville Garden – Tai Wai Station (Circular) | Mon to Sun | 6 – 10 |
| | 63K | Mei Tin Estate Public Transport Interchange – Tai Wai Station (Circular) | Mon to Sun | 3 – 7 |
| | 63S[2] | Mei Tin Estate Public Transport Interchange – Mong Kok (Circular) | Mon to Sun | 8 – 15 |

*Note:* [1] *Peak Hour Service only*

[2] *Night Time Service only*

## 2.3 Parking Facilities in the Vicinity

2.3.1 There are 3 numbers of multi-storey car parks in the vicinity of the Subject Site, namely Mei Chung Court, May Shing Court and Mei Lam.

2.3.2 The locations of the 3 car parks and pedestrian routing to the proposed columbarium are shown in **Figures 2.12** and **2.13**.

## 2.4 Traffic Survey

2.4.1 Due to the Social Distancing Rules under the effect of COVID-19, a maximum of 4 people in each group are allowed. Following this Rule, Puguangming Temple only allows a maximum of 4 people to stay at any rooms/apartment at any one time. Thus, it is believed that the no. of visitors and vehicles (between 2019 and 2022) to the temple would be much lower than normal situation.

2.4.2 To give a much more reasonable and reliable base for assessment, the previous traffic survey carried out in Year 2018 is adopted for this Report.

***Ching Ming Festival, 2018***

a) To reveal the traffic conditions on the festival day, a pedestrian survey was conducted during Ching Ming Festival on 5 April 2018.

b) The Surveyed results are shown in **Table 2.3** and **2.4**.

c) The total incoming/outgoing daily flow is **595/512 visitors**

d) The incoming/outgoing hourly peak flow is **181/146 visitors**

## Table 2.3 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (15 mins Interval)

| 15 mins Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| 800 | 815 | 8 | 0 | 5 | 0 | 13 | 0 |
| 815 | 830 | 5 | 0 | 0 | 0 | 5 | 0 |
| 830 | 845 | 10 | 3 | 8 | 0 | 18 | 3 |
| 845 | 900 | 11 | 0 | 8 | 2 | 19 | 2 |
| 900 | 915 | 16 | 2 | 11 | 0 | 27 | 2 |
| 915 | 930 | 10 | 0 | 3 | 2 | 13 | 2 |
| 930 | 945 | 0 | 2 | 0 | 1 | 0 | 3 |
| 945 | 1000 | 3 | 0 | 8 | 3 | 11 | 3 |
| 1000 | 1015 | 13 | 5 | 8 | 5 | 21 | 10 |
| 1015 | 1030 | 6 | 0 | 7 | 5 | 13 | 5 |
| 1030 | 1045 | 13 | 10 | 6 | 8 | 19 | 18 |
| 1045 | 1100 | 11 | 2 | 12 | 0 | 23 | 2 |
| 1100 | 1115 | 18 | 6 | 21 | 4 | 39 | 10 |
| 1115 | 1130 | 26 | 23 | 24 | 17 | 50 | 40 |
| 1130 | 1145 | 40 | 10 | 21 | 16 | 61 | 26 |
| 1145 | 1200 | 23 | 19 | 8 | 9 | 31 | 28 |
| 1200 | 1215 | 19 | 21 | 16 | 13 | 35 | 34 |
| 1215 | 1230 | 16 | 13 | 2 | 21 | 18 | 34 |
| 1230 | 1245 | 6 | 8 | 10 | 5 | 16 | 13 |
| 1245 | 1300 | 10 | 35 | 3 | 21 | 13 | 56 |
| 1300 | 1315 | 8 | 29 | 8 | 12 | 16 | 41 |
| 1315 | 1330 | 13 | 0 | 10 | 10 | 23 | 10 |
| 1330 | 1345 | 0 | 26 | 6 | 13 | 6 | 39 |
| 1345 | 1400 | 0 | 6 | 5 | 8 | 5 | 14 |
| 1400 | 1415 | 3 | 5 | 7 | 5 | 10 | 10 |
| 1415 | 1430 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1430 | 1445 | 0 | 6 | 2 | 5 | 2 | 11 |
| 1445 | 1500 | 6 | 4 | 4 | 4 | 10 | 8 |
| 1500 | 1515 | 6 | 0 | 7 | 3 | 13 | 3 |
| 1515 | 1530 | 3 | 5 | 7 | 3 | 10 | 8 |
| 1530 | 1545 | 10 | 6 | 8 | 4 | 18 | 10 |
| 1545 | 1600 | 3 | 7 | 10 | 3 | 13 | 10 |
| 1600 | 1615 | 0 | 3 | 0 | 0 | 0 | 3 |
| 1615 | 1635 | 3 | 7 | 3 | 3 | 6 | 10 |
| 1635 | 1645 | 3 | 2 | 2 | 4 | 5 | 6 |
| 1645 | 1700 | 0 | 8 | 0 | 5 | 0 | 13 |
| 1700 | 1715 | 0 | 9 | 0 | 7 | 0 | 16 |
| 1715 | 1730 | 0 | 4 | 0 | 2 | 0 | 6 |
| 1730 | 1745 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1745 | 1800 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | | **328** | **286** | **267** | **226** | **595** | **512** |

**Table 2.4 Surveyed Visitor Counts at Puguangming Temple in 2018 Ching Ming Festival (1 hour Interval)**

| 1 hour Interval | | Niches (319 nos.) | | Tablets (345 nos.) | | Niches/Tablets (664 nos.) | |
|---|---|---|---|---|---|---|---|
| Time | | IN | OUT | IN | OUT | IN | OUT |
| **800** | **900** | 34 | 3 | 21 | 2 | 55 | 5 |
| **815** | **915** | 42 | 5 | 27 | 2 | 69 | 7 |
| **830** | **930** | 47 | 5 | 30 | 4 | 77 | 9 |
| **845** | **945** | 37 | 4 | 22 | 5 | 59 | 9 |
| **900** | **1000** | 29 | 4 | 22 | 6 | 51 | 10 |
| **915** | **1015** | 26 | 7 | 19 | 11 | 45 | 18 |
| **930** | **1030** | 22 | 7 | 23 | 14 | 45 | 21 |
| **945** | **1045** | 35 | 15 | 29 | 21 | 64 | 36 |
| **1000** | **1100** | 43 | 17 | 33 | 18 | 76 | 35 |
| **1015** | **1115** | 48 | 18 | 46 | 17 | 94 | 35 |
| **1030** | **1130** | 68 | 41 | 63 | 29 | 131 | 70 |
| **1045** | **1145** | 95 | 41 | **78** | 37 | 173 | 78 |
| **1100** | **1200** | 107 | 58 | 74 | 46 | **181** | 104 |
| **1115** | **1215** | **108** | 73 | 69 | 55 | 177 | 128 |
| **1130** | **1230** | 98 | 63 | 47 | 59 | 145 | 122 |
| **1145** | **1245** | 64 | 61 | 36 | 48 | 100 | 109 |
| **1200** | **1300** | 51 | 77 | 31 | **60** | 82 | 137 |
| **1215** | **1315** | 40 | 85 | 23 | 59 | 63 | 144 |
| **1230** | **1330** | 37 | 72 | 31 | 48 | 68 | 120 |
| **1245** | **1345** | 31 | **90** | 27 | 56 | 58 | **146** |
| **1300** | **1400** | 21 | 61 | 29 | 43 | 50 | 104 |
| **1315** | **1415** | 16 | 37 | 28 | 36 | 44 | 73 |
| **1330** | **1430** | 9 | 37 | 25 | 29 | 34 | 66 |
| **1345** | **1445** | 9 | 17 | 21 | 21 | 30 | 38 |
| **1400** | **1500** | 15 | 15 | 20 | 17 | 35 | 32 |
| **1415** | **1515** | 18 | 10 | 20 | 15 | 38 | 25 |
| **1430** | **1530** | 15 | 15 | 20 | 15 | 35 | 30 |
| **1445** | **1545** | 25 | 15 | 26 | 14 | 51 | 29 |
| **1500** | **1600** | 22 | 18 | 32 | 13 | 54 | 31 |
| **1515** | **1615** | 16 | 21 | 25 | 10 | 41 | 31 |
| **1530** | **1630** | 16 | 23 | 21 | 10 | 37 | 33 |
| **1545** | **1645** | 9 | 19 | 15 | 10 | 24 | 29 |
| **1600** | **1700** | 6 | 20 | 5 | 12 | 11 | 32 |
| **1615** | **1715** | 6 | 26 | 5 | 19 | 11 | 45 |
| **1630** | **1730** | 3 | 23 | 2 | 18 | 5 | 41 |
| **1645** | **1745** | 0 | 21 | 0 | 14 | 0 | 35 |
| **1700** | **1800** | 0 | 13 | 0 | 9 | 0 | 22 |

e) The expected visitor trips on festival days are derived based on the trip rates applied to the proposed number of Niches/Tablets as follows:

**Table 2.5 Expected Visitor Trips (Without implantation of Traffic Management Plan)**

| Existing | | Approved | | This Application (Including the Approved 1,779 no.) | |
|---|---|---|---|---|---|
| **No. of Niches/Tablets** | **Peak Flow (ped/hr)** | **No. of Niches/Tablets** | **Flow (ped/hr)** | **No. of Niches/Tablets** | **Flow (ped/hr)** |
| 319 Niches<br>+ 345 Tablets occupied<br>= 664 Niches/Tablets | 108 | 1,779 Niches<br>+ 810 Tablets<br>= 2,589 Niches/Tablets | 421 | 4,779 Niches<br>+ 810 Tablets<br>= 5,589 Niches/Tablets | 909 |
| 319 Niches | 108 | 1,779 Niches | 602 | **4,779 Niches** | **1.617** |

2.4.3 **1,617 ped/hr** is adopted for assessment for conservative approach.

## 2.5 Traffic Flows at Ching Ming Festival

2.5.1 Traffic surveys in the form of manual classified counts were also conducted at the above-mentioned critical junctions in **Table 2.1**. The 2018 observed traffic flows are shown in **Figure 2.14**. Existing operational performance of the critical junctions are listed in **Table 2.7** below.

## 2.6 Traffic Flows at Weekday

2.6.1 Traffic surveys in the form of manual classified counts were also conducted at the above-mentioned critical junctions in **Table 2.1** on normal weekday. The 2021 observed traffic flows are shown in **Figure 2.15**.

2.6.2 Due to the COVID-19, the surveyed traffic flows may be much less that of the normal conditions. Therefore, additional surveys are carried at the ATC Core station 5002 (at Shatin Road) to try to find out "corrected" factor. **Table 2.6** gives the surveyed results as compared to the ATC Core station 5002.

**Table 2.6 Derivation of COVID-19 Factor**

| | Weekday Flow (Veh/hr) | | | | |
|---|---|---|---|---|---|
| | South Bound | | North Bound | | Total |
| | AM Peak | PM Peak | AM Peak | PM Peak | |
| **ATC Core station 5002 (Year 2018)** | 2,730 | 2,400 | 2,470 | 2,280 | - |
| **Growth Factor Flow from 2018 to 2021** (1) | 2,813 | 2,473 | 2,545 | 2,349 | **10,179** |
| **Surveyed Flow** | 2,482 | 2,297 | 2,084 | 2,201 | **9,064** |
| **COVID-19 Factor** | | | | | **1.12** |

2.6.3 The COVID-19 Factor of **1.12** is then applied to the surveyed traffic flows in **Figure 2.15** to give the COVID-19 corrected surveyed traffic flows shown in **Figure 2.16** for the use in the later section of this report. Existing operational performance of the critical junctions are listed in **Table 2.7** below.

**Table 2.7 Operational Performance of Identified Critical Junctions in Observed Year**

| Ref. | Junction | Method of Control | Year 2018 (Observed) RC/DFC(1) | Year 2021 (COVID-19 Corrected) RC/DFC(1) | |
|---|---|---|---|---|---|
| | | | Festival Day | Weekday | |
| | | | Peak | AM Peak | PM Peak |
| A | Mei Tin Road / Heung Fan Liu Street | Signal | >+100% | +85% | >+100% |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | >+100% | >+100% | +79% |
| C | Mei Tin Road / Chik Fai Street | Signal | +60% | +90% | +86% |
| D | Mei Tin Road / Pik Tin Street | Priority | 0.21 | 0.35 | 0.22 |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | >+100% | >+100% | >+100% |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | Roundabout | 0.34 | 0.43 | 0.42 |
| G | Mei Tin Road / Chik Wan Street | Signal | >+100% | +60% | +97% |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | >+100% | +84% | +70% |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | Roundabout | 0.13 | 0.09 | 0.09 |

*Note: (1) RC = Reserve Capacity for signal junction*

*DFC = Design Ratio of Flow to Capacity for Priority Junction or Roundabout*

2.6.4 The assessment results in **Table 2.7** indicate that all critical junctions are at present operating with ample capacities.

# 3. FUTURE TRAFFIC CONDITIONS

## 3.1 The proposed Management Plan

3.1.1 The columbarium will be operated under a Management Plan "**Traffic Management Plan**" submitted separately.

3.1.2 The plan will base on a Pre-registration arrangement. The arrangement is as follows:

a) Pre–Registration

i) The Visitors coming to Puguangming Temple in Festival periods has to be restricted into 10 Sections, each section for 1 hour:

ii) From 8 am to 6 pm, each section will last for 1 hour.

iii) People coming has to be **Pre–Registration**.

iv) Each section will be restricted to **250 people**, which is able to give a total of **2,500 people a day**.

b) Implementation Period

i) This Plan is to be executed on the Ching Ming and Chung Yeung Festival Day plus **3 weekends before the festival day** and **3 weekends after the festival day**.

3.1.3 The proposed **250 people per hour** is much less than the expected no. of people of **602** per hour for the approved 1,779 no. of niches as shown in **Table 2.5.**

## 3.2 Design year

3.2.1 It is anticipated that the proposed columbarium will be in full operation in 2024. In order to assess the impact of the development related traffic on the local road network, it is necessary to forecast the traffic flows for 2027, the adopted design year (3 years beyond full operation year). This is also the strategic study year currently adopted by the Hong Kong Government for the overall long-term planning of Hong Kong's transport system.

## 3.3 Reference Traffic Flows

3.3.1 To estimate the 2027 reference traffic flows (without the proposed development) during peak festival days in the local road network, an appropriate growth factor has to be identified for the area in the first instance.

3.3.2 The following approaches have been adopted in order to derive a growth factor in this district.

*Historical Trend*

3.3.3 Numerous of traffic count stations are located in the vicinity of the proposed development. The traffic counts reported in the Annual Traffic Census (ATC), which is published by Transport Department, over a period of six years, i.e. 2014 to 2019 are summarized in **Table 3.1**.

**Table 3.1 Historical Traffic Data from Annual Traffic Census (ATC)**

| ATC Stn | Road Name | Annual Average Daily Traffic (AADT) | | | | | | Avg. Annual Growth Rate |
|---|---|---|---|---|---|---|---|---|
| | | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| 5417 | Mei Tin Road (Che Kung Miu Road - Tsuen Nam Road) | 35,750 | 38,760 | 39,340* | 39,450* | 39,600* | 41,140 | 2.85% |
| 5212 | Hung Mui Kuk Road Che Kung Miu Road - Tin Sam Street) | 27,250 | 27,880* | 28,300* | 28,370* | 32,110* | 31,140 | 2.70% |
| 5449 | Tai Po Rd – Tai Wai (Shing Ho Rd – Mei Tin Rd) | 9,770 | 9,120 | 9,220* | 9,160* | 9,310* | 7,860 | -4.26% |
| 5617 | Mei Tin Rd (Tai Po Rd – Tai Wai – Tsuen Nam Rd) | 30,830* | 28,730 | 28,760 | 28,840* | 28,940* | 28,190* | -1.77% |
| 6012 | Hung Mui Kuk Road (Lion Rock Tunnel Road - Tin Sam Street) | 30,320* | 31,010* | 31,480* | 32,240 | 33,620 | 33,590* | 2.07% |
| 6614 | Pik Tin St (Mei Tin Rd – End) | 2,890 | 3,020 | 3,000 | 2,910 | 2,640 | 3,050 | 1.08% |
| **TOTAL** | | **73,810** | **71,880** | **72,460** | **73,150** | **74,510** | **72,690** | **-0.31%** |

***Note: *AADT estimated by Growth factor***

*2019-Based TPEDM planning data*

3.3.4 Reference has also been made to the "2019-Based TPEDM planning data" published by Planning Department for years 2019 and 2031. The average annual growth rates in terms of population and employment from 2019 to 2031 are shown in **Table 3.2**.

**Table 3.2 2019-based Population and Employment Growth from 2019 to 2031**

| Sha Tin District | | | | |
|---|---|---|---|---|
| Data | Year | | | Average Annual Growth Rate |
| | 2019 | 2026 | 2031 | |
| **Population** | 483,000 | 493,750 | 461,100 | -0.39% |
| **Employment** | 200,050 | 186,250 | 179,400 | -0.90% |
| **Total** | **683,050** | **680,000** | **640,500** | **-0.53%** |

3.3.5 From **Table 3.2**, it is found that the average annual growth rates of population and employment in Sha Tin from year 2019 to 2031 are -0.53% per annum.

*Adopted Growth Rate*

3.3.6 A.A.D.T. of ATC indicates that the traffic flows in the local road network have an decreasing trend with annual growth rate of -0.31% during past years 2014 - 2019.

3.3.7 Whilst, the planning data indicates that the population and employment in the area are expected to develop with annual growth rate of -0.53% from 2019 to 2031.

3.3.8 For a conservative approach, the annual growth rate of **+1.0%** p.a. is adopted, which represents the strategic growth of traffic on the main roads in Tai Wai. It is deemed sufficient to allow any unexpected future growth as a result of some changes related to land use or redevelopment in the area.

## 3.4 Traffic Generations of Adjacent New Developments

3.4.1 To fully reflect the growth traffic, trip generation of the future vicinity developments have been considered. According to information from Town Planning Board and on-site observation, 4 numbers of approved/ constructed residential developments located at Tai Wai Area have been included in this TIA study. The locations are shown in **Figure 3.1**. and tabled in Table 3.3 below:

**Table 3.3 Adjacent Developments**

| Ref | Development | GFA ($m^2$) | Nos. of Units | Avg. Flat Size ($m^2$) |
|---|---|---|---|---|
| A | Residential Dev at Various Lots in D.D. 181, Heung Fan Liu | 52,156 | 1,325 | 39.4 |
| B | Mei Ying Court | ~12,000 | 216 | 55.6 |
| C | Mei Pak Court | ~14,500 | 288 | 50.3 |
| D | Tai Wai Station Property Development | Residential: 190,480<br>Retail: 62,000<br>Post-secondary College: 15,000 | 3,090 | 61.6 |

3.4.2 The estimation on trip generations and attractions of the adjacent residential development is based on the information from the application. **Table 3.4** shows the summary of the AM and PM Peak Hour trip of those planned developments.

**Table 3.4 Adopted Trip Gen. & Att. of Adjacent Developments**

| Ref | Nos. of Units | Avg. Flat Size ($m^2$) | Adopted Trips (AM Peak) | | | | Adopted Trips (PM Peak) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Trip Rate (pcu/hr/flat) | | Trips (pcu/hr) | | Trip Rate (pcu/hr/flat) | | Trips (pcu/hr) | |
| | | | Gen. | Att. | Gen. | Att. | Gen. | Att. | Gen. | Att. |
| A | 1,325 | 39.4 | 0.1021 | 0.0709 | **135** | **94** | 0.0415 | 0.0464 | **55** | **61** |
| B | 216 | 55.6 | 0.0761 | 0.0573 | **16** | **12** | 0.0350 | 0.0451 | **8** | **10** |
| C | 288 | 50.3 | 0.0761 | 0.0573 | **22** | **17** | 0.0350 | 0.0451 | **10** | **13** |
| D | 3,090 | 61.6 | 0.1117 | 0.0729 | **345** | **225** | 0.0454 | 0.0551 | **140** | **170** |
| D | Retail (GFA 62,000$m^2$) | | (pcu/hr/100$m^2$ GFA) | | **205** | **207** | (pcu/hr/100$m^2$ GFA) | | **238** | **279** |
| | | | 0.3307 | 0.3342 | | | 0.3839 | 0.4504 | | |
| D | Post-secondary College (GFA 15,000$m^2$) | | (pcu/hr) | | **53** | **57** | (pcu/hr) | | **37** | **17** |
| | | | 53 | 57 | | | 37 | 17 | | |
| | ***Subtotal of D*** | | | | ***603*** | ***489*** | ***Subtotal of D*** | | ***415*** | ***466*** |
| **Total** | | | | | **776** | **612** | **Total** | | **488** | **550** |

*1) Although Mei Ying Court and Mei Pak Court had been already completed in Year 2017, their trips are still added in assessment as conservative approach since they may not be fully occupied during the Year 2018 survey.*
*2) Upper limit of the TPDM trip rates is adopted for a conservative approach.*

3.4.3 For conservative approach, the traffic generation/ attraction of adjacent development during PM peak hour on normal weekdays is included in the 2027 reference traffic flows. The reference traffic in year 2027 is derived following the equation below:

**2027 Reference Flows (Without Proposed Development)** = **2018 Observed Flows (Ching Ming Festival)** x **Adopted Growth Factor (i.e. +1.0% p.a. for 9 years[(1)])** + **Traffic Flows of Adjacent Planned Development (i.e. Sites A+B+C+D)**

**2027 Reference Flows (Without Proposed Development)** = **2021 Observed Flows (Weekday)** x **Adopted Growth Factor (i.e. +1.0% p.a. for 6 years[(1)])** + **Traffic Flows of Adjacent Planned Development (i.e. Sites A+B+C+D)**

3.4.4 The 2027 reference traffic flows are presented in **Figures 3.2** and **3.3**.

## 3.5 Traffic Generations and Attractions of Proposed Columbarium Development

3.5.1 Based on the pre-registration arrangement and allowable no. of visitors is 250 visitors per hour for 10 sections a day.

3.5.2 As mentioned in the Traffic Management Plan, the Expected Visitors under the management plan is shown in **Table 3.5**.

**Table 3.5 Expected Visitor Trip under the Management Plan**

| Date | Visitor | Peak hour flow (ppl/hr) | |
|---|---|---|---|
| | | In | out |
| **Festival Days** | 10 Sections<br>Each 1 hr = 250 | 250 | 250 |
| | Daily = 2,500 | | |

***Modal Split***

3.5.3 A modal split survey has been conducted on the existing columbarium users and shown in **Table 3.6**.

**Table 3.6 Modal Split for Visitors to the Proposed Columbarium**

| Transport Mode | Attraction/ Generation |
|---|---|
| Franchised Bus | 26% |
| GMB | 27% |
| Car | 15% |
| Taxi | 19% |
| Walk | 13% |
| **Total** | 100% |

***Assessment on Public Transport***

3.5.4 Based on the peak hour person trips in **Tables 2.3** and **2.4**, the Net increase of visitors would be 250 - 181 = **69 visitors in AM Peak (entering the Site)** and 250 - 146 = **104 visitors in Noon/PM Peak (leaving the Site)**. And also based on the modal split in **Table 3.5**, the net increase of peak hour person trips by different modes of transports are derived in **Table 3.7**.

**Table 3.7 Net Increase of Peak Hour Person Trips of the Proposed Columbarium**

| Transport Mode | Peak Hour Person Trips | | |
|---|---|---|---|
| | Modal Split | Peak Attraction (To Temple) | Peak Generation (Leaving Temple) |
| Franchised Bus | 26% | 18 | 27 |
| GMB | 27% | 19 | 29 |
| Car | 15% | 11 | 16 |
| Taxi | 19% | 14 | 20 |
| Walk | 13% | 7 | 12 |
| **Total** | **100%** | **69** | **104** |

3.5.5 By applying the assumed vehicle capacity for different transport modes to peak hour person trips for trip generations for conservative approach, the **net** increase of peak hour traffic flows (in pcu/hr) generated by proposed columbarium are shown in **Table 3.8**.

**Table 3.8 Net Increase of Traffic Generation and Attraction of the Proposed Columbarium**

| Transport Mode | Occupancy (in person) | Peak Hour Trip Generations | |
|---|---|---|---|
| | | Peak Attraction (To Temple) | Peak Generation (Leaving Temple) |
| Franchised Bus | 120 | 0 | 0 |
| GMB | 19 | 0 | 0 |
| Car | 3 | 4 | 6 |
| Taxi | 3 | 5 | 7 |
| **Total** | - | **9** | **13** |

*Remarks:* *(1) Demand of Franchised Bus& GMB could be satisfied by existing services (refer to Chapter 5)*
*(2) The average occupancy of a private car assumes 3 persons*
*(3) The average occupancy of a taxi assumes 3 passengers*

3.5.6 Therefore, the estimated peak hour traffic generation of the proposed columbarium in festival day will be **9 pcus in** / **13 pcus out**.

3.5.7 It is understood that the visitors would mostly come to the columbarium during the Ching Ming/Chung Yeung festival and the weekends before/after these festival days. The visitors coming to columbarium during weekdays would not be high. The trips of in weekday would be lower than festival days/ weekend. Therefore, **15 pcus in** / **15 pcus out** would be adopted as the traffic generation of the proposed columbarium in normal weekday.

## 3.6 Design Traffic Forecast

3.6.1 The traffic generated from the proposed development was then assigned to the road network. After that, the development traffic flows were then superimposed onto the 2027 reference traffic flows (without proposed development) as shown in **Figures 3.2** and **3.3** to derive the 2027 design traffic forecasts (with proposed columbarium).

**2027 Design Flows (with proposed developments)** = **2027 Reference Flows (without Proposed Development)** + **Proposed Columbarium Traffic**

3.6.2 The 2027 peak hour design traffic flows (with proposed Puguangming Temple) are shown in **Figures 3.4** and **3.5**.

# 4. VEHICULAR TRAFFIC IMPACT ASSESSMENT

## 4.1 Operational Assessment

4.1.1 Based on the design traffic flows in **Figures 3.4** and **3.5**, a junction capacity assessment is carried out for the key junctions and the results of the assessment are summarized in **Tables 4.1** and **4.2** below.

**Table 4.1 Junction Performance of Critical Junctions in Reference Year 2027 (Without Proposed Columbarium)**

| Ref. | Junction | Method of Control | Year 2027 RC/DFC (1) | | |
|---|---|---|---|---|---|
| | | | Festival Day | Weekday | |
| | | | Peak | AM Peak | PM Peak |
| A | Mei Tin Road / Heung Fan Liu Street | Signal | >+100% | +56% | >+100% |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | >+100% | +86% | +64% |
| C | Mei Tin Road / Chik Fai Street | Signal | +40% | +68% | +61% |
| D | Mei Tin Road / Pik Tin Street | Priority | 0.25 | 0.44 | 0.26 |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | >+100% | >+100% | >+100% |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | R/A | 0.46 | 0.63 | 0.64 |
| G | Mei Tin Road / Chik Wan Street | Signal | +89% | +43% | +68% |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | +58% | +28% | +28% |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | R/A | 0.15 | 0.12 | 0.12 |

*Note: (1) RC = Reserve Capacity for signal junction*
*DFC = Design Ratio of Flow to Capacity for Priority Junction or Roundabout*

**Table 4.2 Junction Performance of Critical Junctions in Design Year 2027 (With Proposed Columbarium)**

| Ref. | Junction | Method of Control | Year 2027 RC/DFC (1) | | |
|---|---|---|---|---|---|
| | | | Festival Day | Weekday | |
| | | | Peak | AM Peak | PM Peak |
| A | Mei Tin Road / Heung Fan Liu Street | Signal | >+100% | +55% | >+100% |
| B | Mei Tin Road/ Tsing Sha Highway Slip Road | Signal | >+100% | +85% | +63% |
| C | Mei Tin Road / Chik Fai Street | Signal | +40% | +67% | +60% |
| D | Mei Tin Road / Pik Tin Street | Priority | 0.26 | 0.44 | 0.26 |
| E | Tai Po Road (Tai Wai Section) / Mei Tin Road | Signal | >+100% | >+100% | >+100% |
| F | Mei Tin Road / Hung Mui Kuk Road / Che Kung Miu Road | R/A | 0.46 | 0.64 | 0.64 |
| G | Mei Tin Road / Chik Wan Street | Signal | +89% | +43% | +67% |
| H | Heung Fan Liu Street/ Mei Fai Street | Signal | +58% | +28% | +28% |
| I | Chuk Wan Street/ Sha Tin Heights Road/ Lower Shing Mun Road/ Yin Wan Lane/ Tsing Sha Highway Slop Road | R/A | 0.15 | 0.12 | 0.12 |

*Note: (1) RC = Reserve Capacity for signal junction*
*DFC = Design Ratio of Flow to Capacity for Priority Junction or Roundabout*

4.1.2 Based on the assessment presented in **Tables 4.1** and **4.2**, the junctions will be operating with reasonable spare capacities in year 2027 with the full occupation of the proposed columbarium during Ching Ming Festival and weekday.

# 5. PUBLIC TRANSPORT DEMAND

## 5.1 Survey on Existing Public Transport Service

5.1.1 The proposed development is not close to MTR station and the public transport service is not comprehensive. A preliminary and localized public transport survey was carried out at the existing bus/GMB stops on Mei Tin Road and Mei Chung Court as illustrated in **Figure 5.1**.

5.1.2 The survey was carried out from 09:00am to 17:00pm of during Ching Ming Festival in 2018. The findings are presented in the **Table 5.1** below.

**Table 5.1 Observed Occupancy of Public Transport in the Vicinity**

| Duration | Direction | Routes | Observed Trips | Max. Utilization Rate | Average Utilization Rate | Occupancy (passenger) | Surplus Capacity (passenger) |
|---|---|---|---|---|---|---|---|
| **Peak Hour** | **Northbound (To Mei Shing Court)** | | | | | | |
| | Franchised Bus | 283 | 6 | 65% | 50% | 360 | 360 |
| | Minibus | 63A | 18 | 85% | 70% | 202 | 86 |
| **Peak Hour** | **Southbound (To Tai Wai)** | | | | | | |
| | Franchised Bus | 283 | 4 | 50% | 45% | 216 | 264 |
| | Minibus | 63A | 20 | 80% | 75% | 240 | 80 |

*Remarks:* *(1) Full capacity of 120 passengers for Franchised Bus is assumed.*

*(2) Full capacity of 16 passengers for Minibus is assumed.*

5.1.3 The surveyed result indicates that there are surplus capacities for the existing public transport services during the peak hours in Ching Ming Festival 2018.

## 5.2 Assessment on Public Transport Demand

*Proposed Columbarium*

5.2.1 From **Table 3.7**, the peak hour person trips during Ching Ming Festival have been estimated. The expected demand of public transport services during peak hour is calculated and presented in **Table 5.2**.

**Table 5.2 Expected Net Increase Demand of Public Transport Services due to the Proposed Columbarium in Design Year 2027**

| Transport Mode | | Pedestrian Trips during Peak Hour (1-way)(1) | Transport Modal Split | Expected Net Increase Demand of Proposed Development During Peak Hour (passenger) |
|---|---|---|---|---|
| Peak Hour | **Northbound (To Mei Shing Court)** | | | |
| | Franchised Bus | 250 - 181 = 69 | 26% | 69 x 26% = 18 |
| | Minibus | 69 | 27% | 69 x 27% = 19 |
| Peak Hour | **Southbound (To Tai Wai)** | | | |
| | Franchised Bus | 250 - 146 = 104 | 26% | 104 x 26% = 27 |
| | Minibus | 104 | 27% | 104 x 27% = 29 |

*(1) Refer to Section 3.5*

*Adjacent Developments*

5.2.2 As derived from **Section 3.2**, an annual growth rate of **+1.0%** has been adopted to estimate the future growth of traffic and population in the district. For conservative approach, the same annual growth rate is applied to estimate the future public transport demand due to adjacent developments in design year 2027.

5.2.3 The calculation of future public transport demand in the vicinity is summarized in **Table 5.3** below:

**Table 5.3 Expected Public Transport Demand due to Adjacent Development in Design Year 2027**

| Duration | Direction | Routes | Existing Occupancy (passenger) | Future Occupancy (passenger) |
|---|---|---|---|---|
| **Peak Hour** | **Northbound (To Mei Shing Court)** | | | |
| | Franchised Bus | 283 | 360 | 394* |
| | Minibus | 63A | 202 | 221* |
| **Peak Hour** | **Southbound (To Tai Wai)** | | | |
| | Franchised Bus | 283 | 216 | 236* |
| | Minibus | 63A | 240 | 262* |

*Note: *Future occupancy in 2027 is derived from existing occupancy (2018) with +1% growth rate.*

5.2.4 The expected demand of public transport services due to the proposed development is shown in **Table 5.4**.

**Table 5.4 Expected Occupancy of Public Transport in Design Year 2027**

| Duration | Direction | Routes | Full Capacity [A] | 2027 Expected Occupancy (passenger) (1% growth p.a.) (1)(2) [B] | Surplus Capacity (passenger) (1)(2)(3) [A] – [B] | Demand (Satisfied or Not) (4) |
|---|---|---|---|---|---|---|
| Peak Hour | **Northbound (To Mei Shing Court)** | | | | | |
| | Franchised Bus | 283 | 120 x 6 = 720 | 394 | 720 - 394 = 326 | 31 (✓) |
| | Minibus | 63A | 16 x 18 = 288 | 221 | 288 - 221 + (19 - 16) x 18 = 67 + 54 = 121 | 32 (✓) |
| Peak Hour | **Southbound (To Tai Wai)** | | | | | |
| | Franchised Bus | 283 | 120 x 4 = 480 | 236 | 244 | 40 (✓) |
| | Minibus | 63A | 16 x 20 = 320 | 262 | 320 - 262 + (19 - 16) x 20 = 118 | 42 (✓) |

*Remarks:* *(1) Full capacity of 120 passengers for Franchised Bus is assumed.*

*(2) Full capacity of 16 passengers for Minibus is assumed.*

*(3) Full capacity of 19 passengers for Minibus is observed to be used in 2021.*

*(4) From Table 5.2*

5.2.5 Based on the result from above **Table 5.4**, it is indicated that the existing public transport services of Franchised Bus and GMB are with ample reserve capacity to meet the demand due to the proposed development in design year 2027.

# 6. PARKING PROVISION

## 6.1 Existing Parking Situation

6.1.1 Due to site constraints, no transport facilities are provided in the Puguangming Temple, such as car parking space, loading/unloading and pick up/drop off space.

6.1.2 According to the survey, it is revealed that a peak hour of 6 car parks is required by the columbarium visitors in Chung Yeung Festival 2018. They have parked their cars in the adjacent car parks (as mentioned in **Section 2.3**).

6.1.3 The majority of visitors use Mei Chung Court Carpark. Therefore, a survey on parking space occupancy has been conducted at Mei Chung Court Carpark and presented in **Appendix 1**.

6.1.4 It is shown in **Appendix 1** that there are **17** nos. surplus hourly private car parking spaces during the peak hour from 13:30pm to 14:30pm at Mei Ching Court for the public.

**Table 6.1 Parking Utilization at Mei Chung Court Carpark during Ching Ming Festival**

| Time | Total Hourly Carpark Spaces | No. of Surplus Parking Spaces |
|---|---|---|
| 0900-1000 | 37 | 24 |
| 1000-1100 | 37 | 23 |
| 1100-1200 | 37 | 21 |
| 1200-1300 | 37 | 20 |
| 1300-1400 | 37 | 17 |
| 1400-1500 | 37 | 17 |
| 1500-1600 | 37 | 16 |
| 1600-1700 | 37 | 16 |

## 6.2 Future Parking Demand

6.2.1 Based on the estimated traffic attraction of private cars derived in **Table 3.8**, the parking demand for the proposed columbarium during peak hours in festival days is analysed and presented in the calculation below and **Table 6.2**.

- Parking survey indicated a demand of 6 parking spaces for 181 visitors per hour.
- For a 250 visitors per hour, the parking demand will then be
  = (6/181) x 250
  = 8.3 parking spaces (say **9 parking spaces**)

**Table 6.2 Future Parking Demand of Proposed Columbarium**

| Expected Parking Space Demand | Surplus Hourly Parking Space | Demand Satisfied or Not |
|---|---|---|
| 9 | = 17*(1-1%)$^{9}$<br>= 16 | ✓ |

6.2.2 From **Table 6.2**, there are sufficient private car hourly parking spaces in Mei Chung Court to cater for the future demand due to proposed columbarium.

# 7. PEDESTRIAN TRAFFIC IMPACT ASSESSMENT

## 7.1 Visitor Flows in Design Year

7.1.1 To assess the existing footpath during the Festival Days, the pedestrian flow data is estimated based on the pedestrian survey conducted during Ching Ming Festival on 5 April 2018 with about 664 niches/tablets being sold and occupied.

7.1.2 According to **Table 3.4**, there will be a peak flow of **500 visitors** (250 + 250, 2-way flows) per hour traveling to/from Puguangming Temple via the existing footpath in the future.

## 7.2 LOS Assessment on Design Year

7.2.1 In order to ensure a desirable walking environment along the access, the concept of Level-of-Service (LOS) has been applied. LOS directly relates to the pedestrian comfort and ease with which pedestrians proceed along the walkway.

7.2.2 The Break Points of LOS levels are determined on the basis of flow rate, pedestrian spacing, and the probabilities of conflict at various concentrations. These standards with relevant descriptions are summarized in **Table 7.1**.

**Table 7.1 LOS Standard Criteria**

| LOS | Flow Rate (ped/min/m) | Pedestrian Space ($m^2$/p) | Description |
|---|---|---|---|
| A | ≤16 | >5.6 | Pedestrians freely select walking speed and conflicts between pedestrians are unlikely. |
| B | ≤23 | >3.7 – 5.6 | Pedestrians freely select walking speed and bypass other pedestrians in primarily one directional flows. Minor conflicts will occur where reverse direction or crossing movements exist, requiring slightly lowering mean pedestrian speeds and potential volumes. |
| C | ≤33 | >2.2 – 3.7 | Pedestrians are restricted in selecting walking speed and bypass other pedestrians. Conflicts are highly likely to occur where reverse direction or crossing movements exist, requiring frequent adjustment of speed and direction. |
| D | ≤49 | >1.4 – 2.2 | Most pedestrians would have their normal walking speed restricted and reduced. Multiple conflicts with other pedestrians will occur where pedestrian are involved in reverse-flow and crossing movements. |

| LOS | Flow Rate (ped/min/m) | Pedestrian Space ($m^2$/p) | Description |
|---|---|---|---|
| E | ≤75 | >0.75 – 1.4 | Virtually all pedestrians would have their normal walking speeds restricted, requiring frequent adjustment of gait. At the lower range, forward progress would only be made by shuffling. Insufficient area would be available to bypass slower-moving pedestrians. Extreme difficulties for pedestrians attempting reverse-flow and cross-flow movements. |
| F | Varies | ≤0.75 | All pedestrian walking speeds are extremely restricted and forward progress can only be made by shuffling. Frequent and unavoidable contact with other pedestrians will occur. Reverse or crossing movements would be virtually impossible. |

*Source: Chapter 10, Volume 6 of Transport Planning and Design Manual (T.P.D.M.)/Chapter 11 of Highways Capacity Manual 2000.*

7.2.3 For the width as shown in **Figures 7.1** and **7.2** and based on the figures given in **Table 3.4**, the total number of person-trips using the existing footpath and vicinity footpaths is shown in **Figure 7.3** and the assessment are given in **Tables 7.2 to 7.10**.

**Table 7.2 Person-trips Assessment (Ching Ming Festival)**

| Section | Actual Width (m) | Effective Width (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr) | Peak Flow Rate (ped/min/m) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| B | 2.4 | 1.9(1) | 177+128 = 305(4) | 305 | 500(5) – 305 = 195 (100%) | 500(5) | 4.39 | A | √ |
| C | 3.3 | 2.8(1) | 250 | 250 x 1.01^9 = 275 | 195 x 46% = 90 (46%) | 275 + 90 = 365 | 2.17 | A | √ |
| D | 3.5 | 3(1) | 320 | 350 | 100 (50%) | 450 | 2.5 | A | √ |
| E | 3.5 | 3(1) | 135 | 150 | 10 (4%) | 160 | 0.89 | A | √ |
| G | 4.2 | 3.7(1) | 285 | 310 | 90 (46%) | 400 | 1.8 | A | √ |
| H | 3.8 | 3.3(1) | 425 | 465 | 100 (50%) | 565 | 2.85 | A | √ |
| I | 4.3 | 3.8(1) | 480 | 525 | 55 (28%) | 580 | 2.54 | A | √ |
| J | 5.2 | 4.7(1) | 50 | 55 | 10 (4%) | 65 | 0.23 | A | √ |

*Note: (1) 0.5m deduced from wall/fence; 1m deduced from shop*

*(2) Growth by 1% for 9 years*

*(3) √: Acceptable*

*(4) From Table 2.4, In/out flow of 11:15 – 12:15*

*(5) Restricted under management plan*

## Table 7.3 Person-trips Assessment (Weekday AM)

| Section | Actual Width (m) | Effective Width (m) (1) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(2) | Peak Flow Rate (ped/min/ m) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| B | 2.4 | 1.9 | 5 | 5 | 75 – 5 = 70 (100%) | 5 x 4,779/319 = 75(4) | 0.48 | A | √ |
| C | 3.3 | 2.8 | 25 | 25 | 70 x 46% = 30 (46%) | 25 + 30 = 55 | 0.66 | A | √ |
| D | 3.5 | 3 | 10 | 10 | 35 (50%) | 45 | 0.33 | A | √ |
| E | 3.5 | 3 | 10 | 10 | 5 (4%) | 15 | 0.25 | A | √ |
| G | 4.2 | 3.7 | 170 | 185 | 30 (46%) | 215 | 0.08 | A | √ |
| H | 3.8 | 3.3 | 325 | 355 | 35 (50%) | 390 | 0.97 | A | √ |
| I | 4.3 | 3.8 | 475 | 520 | 20 (28%) | 540 | 1.97 | A | √ |
| J | 5.2 | 4.7 | 50 | 55 | 5 (4%) | 60 | 2.37 | A | √ |

***Note:*** *(1) 0.5m deduced from wall/fence; 1m deduced from shop*

*(2) Growth by 1%*

*(3) √: Acceptable*

*(4) Ratio of niches (existing 319 & total 4,779)*

## Table 7.4 Person-trips Assessment (Weekday PM)

| Section | Actual Width (m) | Effective Width (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(2) | Peak Flow Rate (ped/min/ m) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| B | 2.4 | 1.9(1) | 15 | 15 | 225 – 15 = 210 (100%) | 15 x 4,779/319 = 225(4) | 1.97 | A | √ |
| C | 3.3 | 2.8(1) | 60 | 65 | 95 (46%) | 65 + 95 = 160 | 0.95 | A | √ |
| D | 3.5 | 3(1) | 20 | 20 | 105 (50%) | 125 | 0.69 | A | √ |
| E | 3.5 | 3(1) | 15 | 15 | 10 (4%) | 25 | 0.14 | A | √ |
| G | 4.2 | 3.7(1) | 65 | 70 | 95 (46%) | 165 | 0.74 | A | √ |
| H | 3.8 | 3.3(1) | 405 | 445 | 105 (50%) | 550 | 2.78 | A | √ |
| I | 4.3 | 3.8(1) | 465 | 510 | 60 (28%) | 570 | 2.5 | A | √ |
| J | 5.2 | 4.7(1) | 20 | 20 | 10 (4%) | 30 | 0.11 | A | √ |

***Note:*** *(1) 0.5m deduced from wall/fence; 1m deduced from shop*

*(2) Growth by 1%*

*(3) √: Acceptable*

*(4) Ratio of niches (existing 319 & total 4,779)*

## Table 7.5 V/C Ratio of Critical Crossing (Ching Ming Festival)

| Section | Lateral Width of Ped. Crossing (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Pedestrian Crossing Capacity(2) (ped/hr) | V/C | Remark (3) |
|---|---|---|---|---|---|---|---|---|
| F | 4 | 160 | 160 x 1.01^9 = 175 | 195 x 54% = 105 (54%) | 175 + 105 = 280 | Pedestrian Crossing Capacity(3) PC = 1900*1/4*4 = 1900 | 0.15 | √ |
| G2 | 3.6 | 60 | 65 | 10 (4%) | 75 | 1710 (Capacity)(3) | 0.04 | √ |
| H2 | 3.5 | 425 | 465 | 100 (50%) | 565 | 1665 (Capacity)(3) | 0.34 | √ |
| I2 | 3.5 | 160 | 175 | 40 (21%) | 215 | Pedestrian Crossing Capacity PC = 1900*25/90*3.5 = 1845 | 0.12 | √ |

***Note***: *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 1/4 of the "cycle time" was used by the pedestrian*

*(3) √: Acceptable*

## Table 7.6 V/C Ratio of Critical Crossing (Weekday AM)

| Section | Lateral Width of Ped. Crossing (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Pedestrian Crossing Capacity(2) (ped/hr) | V/C | Remark (3) |
|---|---|---|---|---|---|---|---|---|
| F | 4 | 5 | 5 x 1.01^9 = 5 | 70 x 54% = 40 (54%) | 5 + 40 = 45 | Pedestrian Crossing Capacity(4) PC = 1900*1/4*4 = 1900 | 0.02 | √ |
| G2 | 3.6 | 55 | 60 | 5 (4%) | 65 | 1710 (Capacity)(4) | 0.04 | √ |
| H2 | 3.5 | 325 | 355 | 35 (50%) | 390 | 1665 (Capacity)(4) | 0.23 | √ |
| I2 | 3.5 | 150 | 165 | 15 (21%) | 180 | Pedestrian Crossing Capacity PC = 1900*25/90*3.5 = 1845 | 0.10 | √ |

***Note***: *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 1/4 of the "cycle time" was used by the pedestrian*

*(3) √: Acceptable*

## Table 7.7 V/C Ratio of Critical Crossing (Weekday PM)

| Section | Lateral Width of Ped. Crossing (m) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2) | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Pedestrian Crossing Capacity(2) (ped/hr) | V/C | Remark (3) |
|---|---|---|---|---|---|---|---|---|
| F | 4 | 20 | 20 x 1.01^9 = 20 | 210 x 54% = 115 (54%) | 20 + 115 = 135 | Pedestrian Crossing Capacity(4) PC = 1900*1/4*4 = 1900 | 0.07 | √ |
| G2 | 3.6 | 35 | 40 | 10 (4%) | 50 | 1710 (Capacity)(4) | 0.03 | √ |
| H2 | 3.5 | 405 | 445 | 105 (50%) | 550 | 1665 (Capacity)(4) | 0.33 | √ |
| I2 | 3.5 | 140 | 155 | 45 (21%) | 200 | Pedestrian Crossing Capacity PC = 1900*25/90* 3.5 = 1845 | 0.11 | √ |

*Note:* *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 1/4 of the "cycle time" was used by the pedestrian*

*(3) √: Acceptable*

## Table 7.8 Waiting Area of Critical Crossing (Ching Ming Festival)

| Section | Waiting Space Area ($m^2$) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2 | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Waiting Pedestrian (ped/cycle) (2) | Avg. Ped. Space(3) ($m^2$/ped) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| F | 7 | 160 | 160 x 1.01^9 = 175 | 195 x 54% = 105 (54%) | 175 + 105 = 280 | 280/40 x 0.75 = 5 | 1.40 | A | √ |
| G2 | 8 | 60 | 65 | 10 (4%) | 75 | 1 | 8.00 | A | √ |
| H2 | 30 | 425 | 465 | 100 (50%) | 565 | 11 | 2.73 | A | √ |
| I2 | 25 | 160 | 175 | 40 (21%) | 215 | 4 | 6.25 | A | √ |

*Note:* *(1) Growth by 1%*

*(2) The crossings were treated as signalized crossings. Assume 90s "cycle time", "No. of cycle" = 3600/90 = 40, 3/4 of the "cycle time" was pedestrian waiting time*

*Waiting Pedestrian = Two-way Ped. Flow x Red Time Proportion / No. of Cycle*

*(3) √: Acceptable*

**Table 7.9 Waiting Area of Critical Crossing (Weekday AM)**

| Section | Waiting Space Area ($m^2$) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2 | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Waiting Pedestrian (ped/cycle) (2) | Avg. Ped. Space(3) ($m^2$/ped) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| F | 7 | 5 | 5 x 1.01^9 = 5 | 70 x 54% = 40 (54%) | 5 + 40 = 45 | 45/40 x 0.75 = 1 | 7.00 | A | √ |
| G2 | 8 | 55 | 60 | 10 (4%) | 65 | 1 | 8.00 | A | √ |
| H2 | 30 | 325 | 355 | 35 (50%) | 390 | 7 | 4.29 | A | √ |
| I2 | 25 | 150 | 165 | 15 (21%) | 180 | 3 | 8.33 | A | √ |

**Table 7.10 Waiting Area of Critical Crossing (Weekday PM)**

| Section | Waiting Space Area ($m^2$) | Background Pedestrian 2-way Flow (ped/hr) | Year 2027 Reference Pedestrian 2-way Flow (ped/hr) (2 | Additional Pedestrian 2-way Flow (ped/hr) | Future Pedestrian 2-way Flow (ped/hr)(1) | Waiting Pedestrian (ped/cycle) (2) | Avg. Ped. Space(3) ($m^2$/ped) | LOS | Remark (3) |
|---|---|---|---|---|---|---|---|---|---|
| F | 7 | 20 | 20 x 1.01^9 = 20 | 210 x 54% = 115 (54%) | 20 + 115 = 135 | 135/40 x 0.75 = 3 | 2.33 | A | √ |
| G2 | 8 | 35 | 40 | 10 (4%) | 50 | 1 | 8.00 | A | √ |
| H2 | 30 | 405 | 445 | 105 (50%) | 550 | 10 | 3.00 | A | √ |
| I2 | 25 | 140 | 155 | 45 (21%) | 200 | 3 | 6.25 | A | √ |

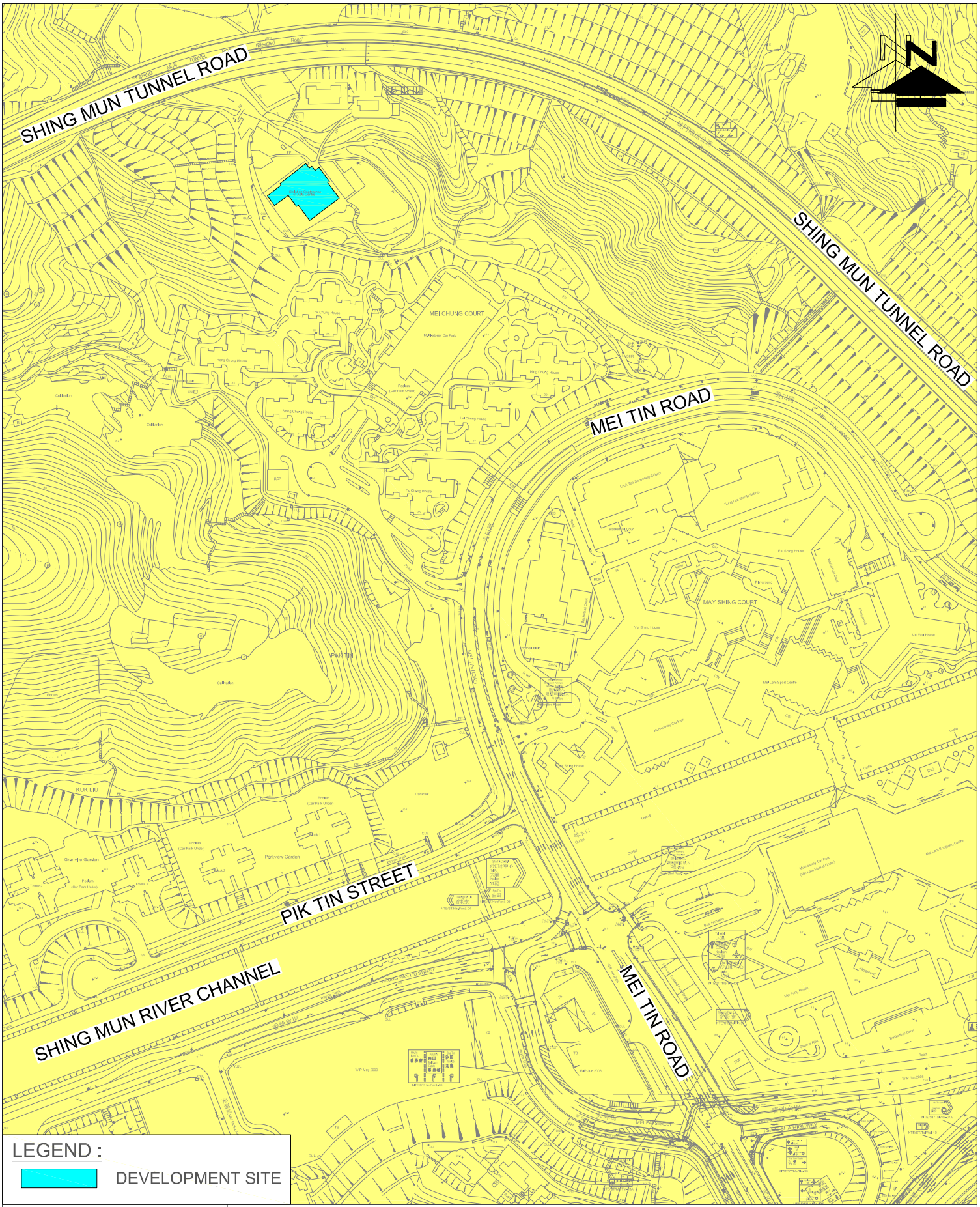
7.2.4 Based on the above calculation and assessment, LOS A or low V/C ratio could be achieved, which is considered acceptable in traffic engineering points of view.

# 8. SUMMARY AND CONCLUSION

8.1.1 From the traffic forecast based on traffic survey during 2018 Ching Ming Festival, and the assessment results of the junction capacity in the vicinity, it indicates that there will not be significant adverse impact caused by the full occupation of **5,589 niches/tablets** (4,779 niches + 810 tablets) during Ching Ming Festival in the design year 2027.

8.1.2 The impacts on the adjacent road networks have been assessed. All of these are found to be technically feasible and acceptable.

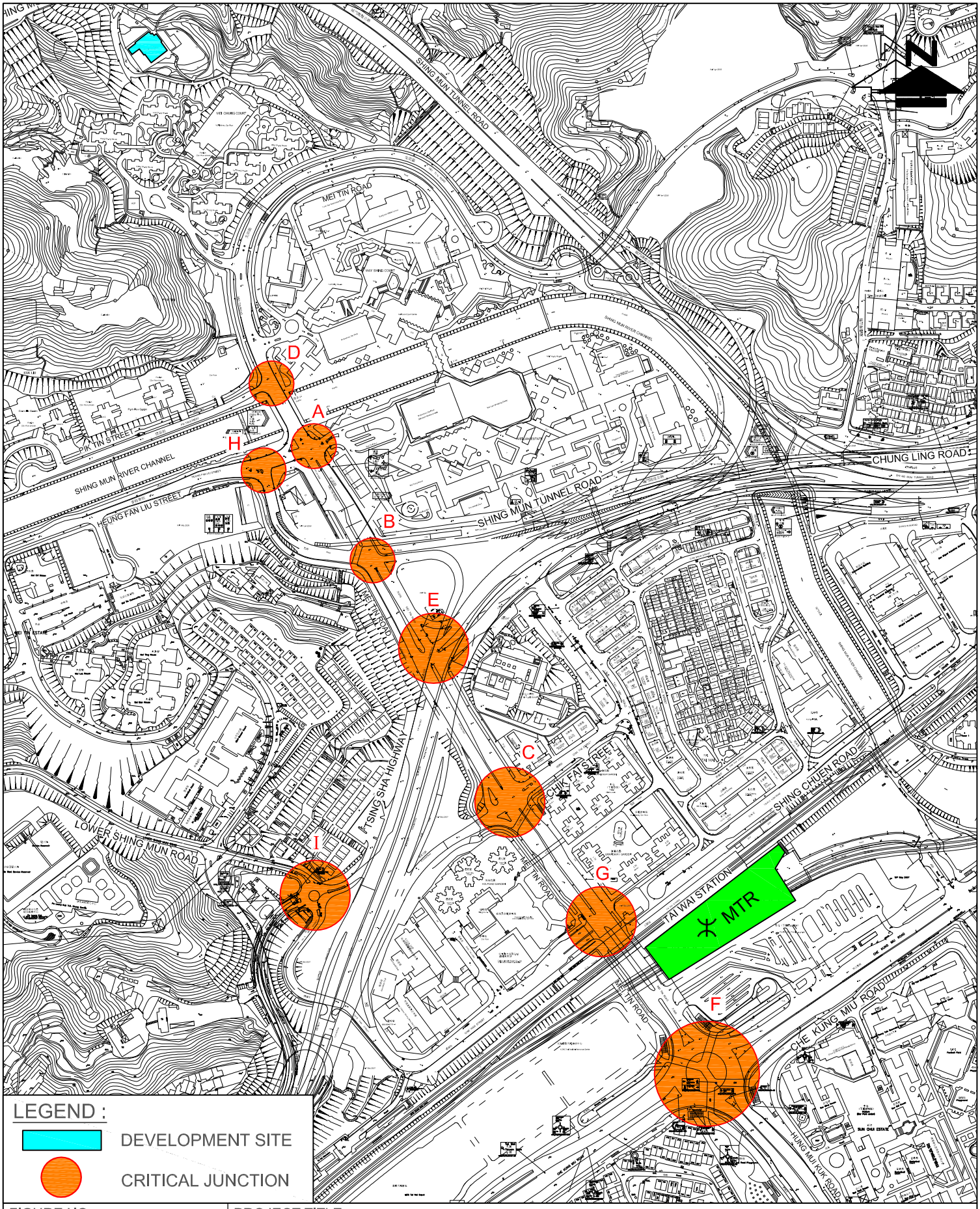
8.1.3 Therefore, the proposed scheme of Puguangminig Temple is considered to be acceptable from the traffic and transportation Point of view.



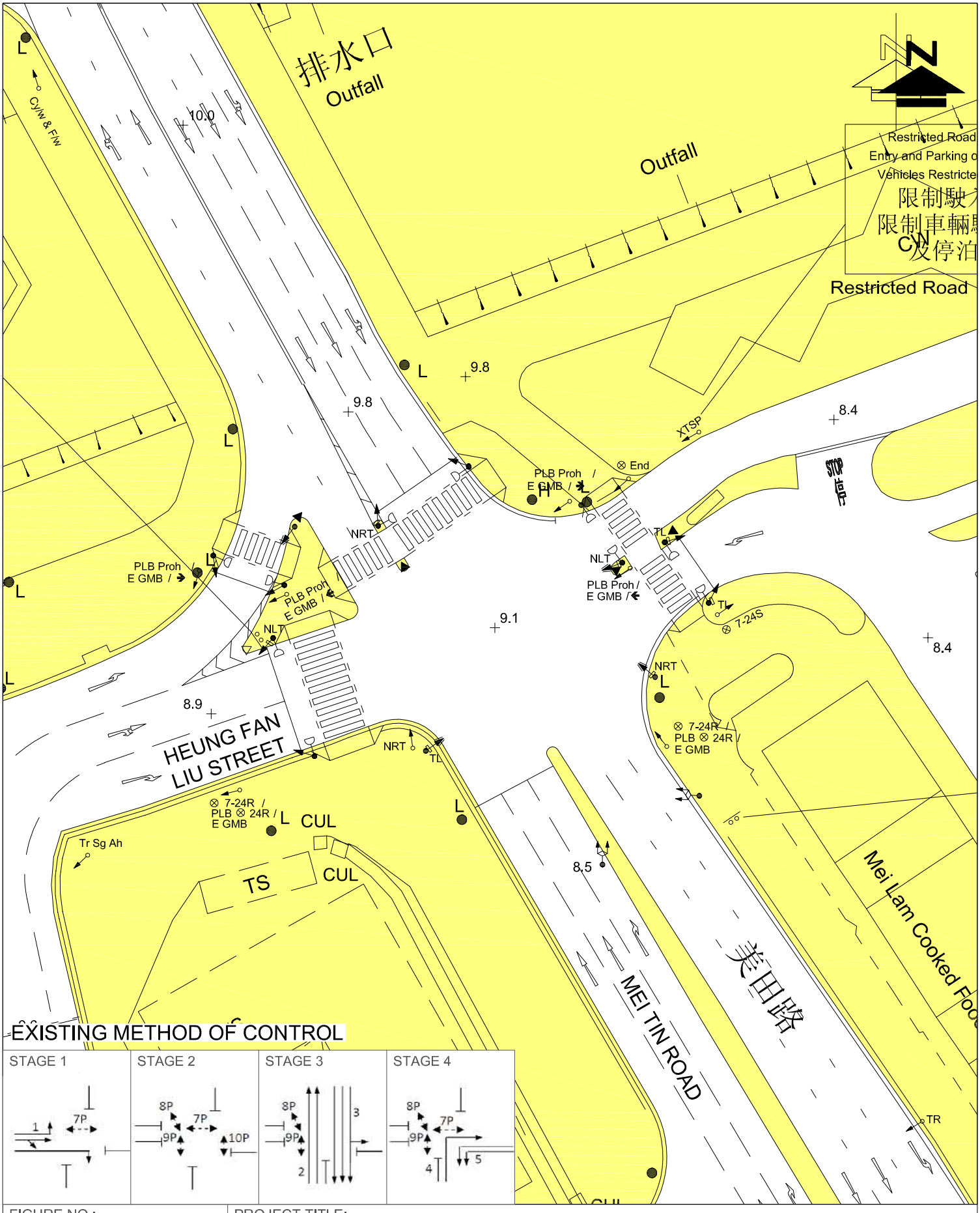

LEGEND :

DEVELOPMENT SITE

| | |
|---|---|
| FIGURE NO.: 1.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: SITE LOCATION PLAN |
| SCALE: 1 : 3000 (IN A4 SIZE) / DATE: 23 OCT 2020 | CTA Consultants Limited 志達顧問有限公司 |



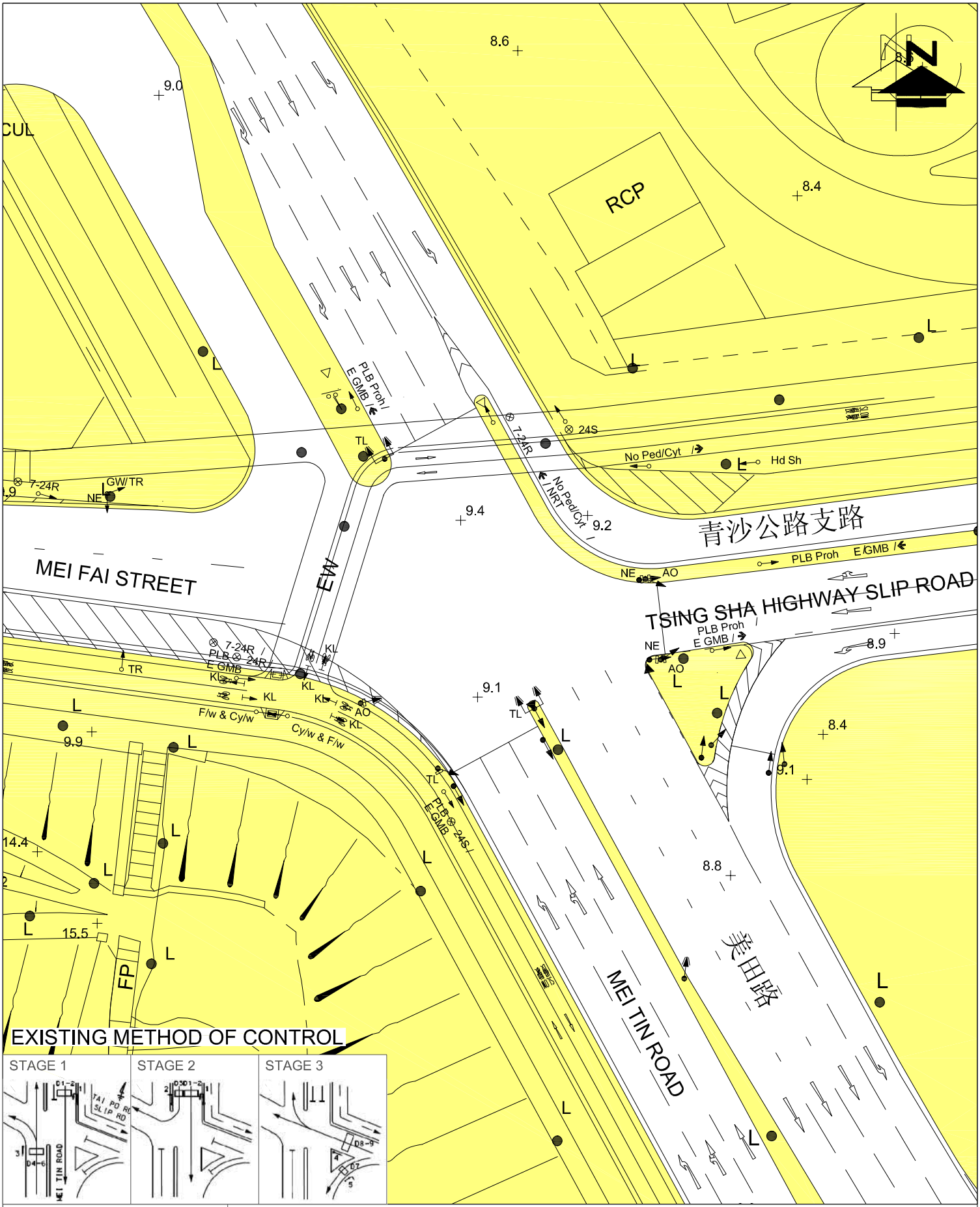

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|---|---|
| FIGURE NO.: 2.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: KEY JUNCTIONS AND EXISTING ROAD NETWORK |
| SCALE: 1 : 5500 (IN A4 SIZE) / DATE: 21 APR 2021 | CTA Consultants Limited 志達顧問有限公司 |



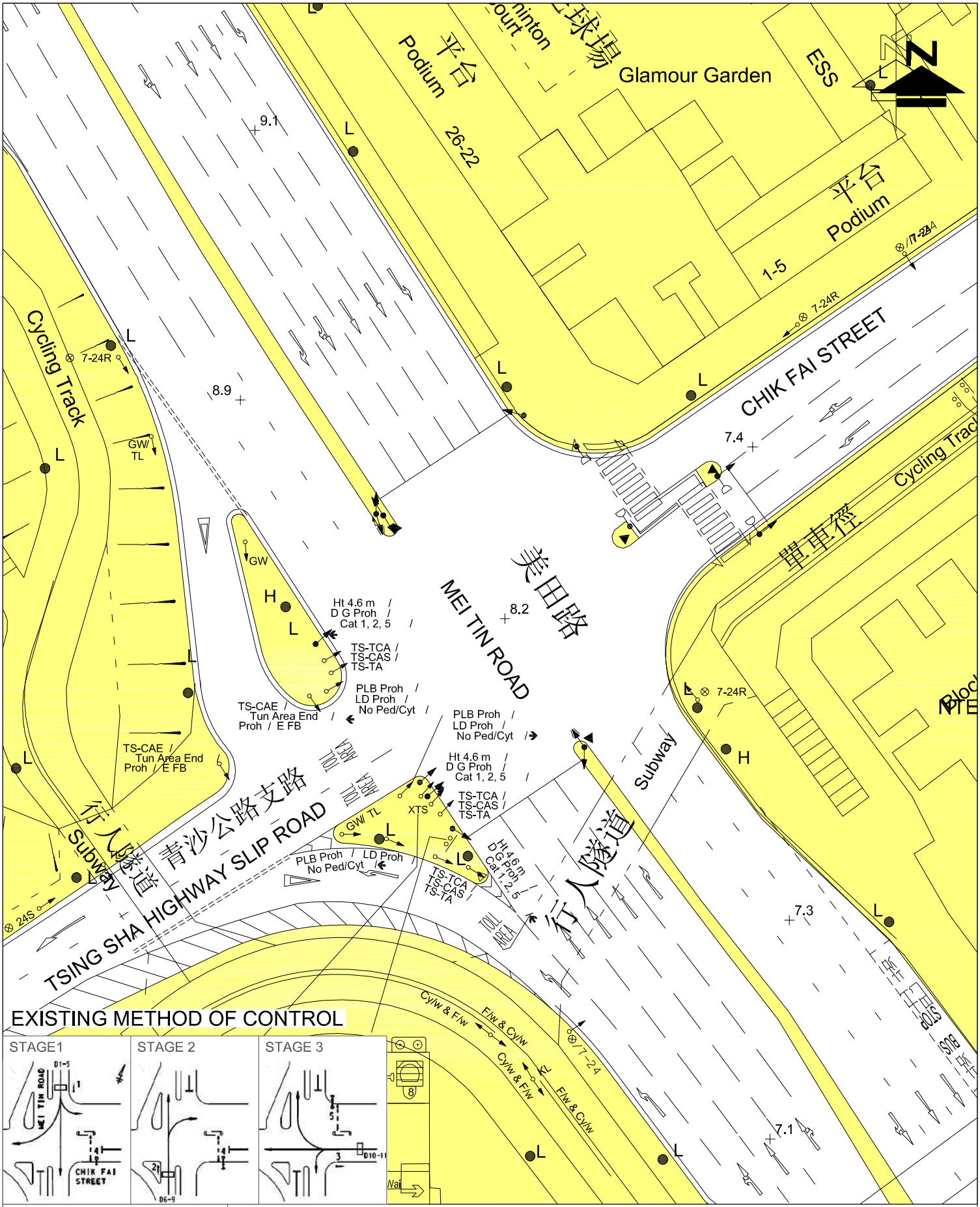

## EXISTING METHOD OF CONTROL




| | |
|---|---|
| FIGURE NO.: 2.2 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / HEUNG FAN LIU STREET (A) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |

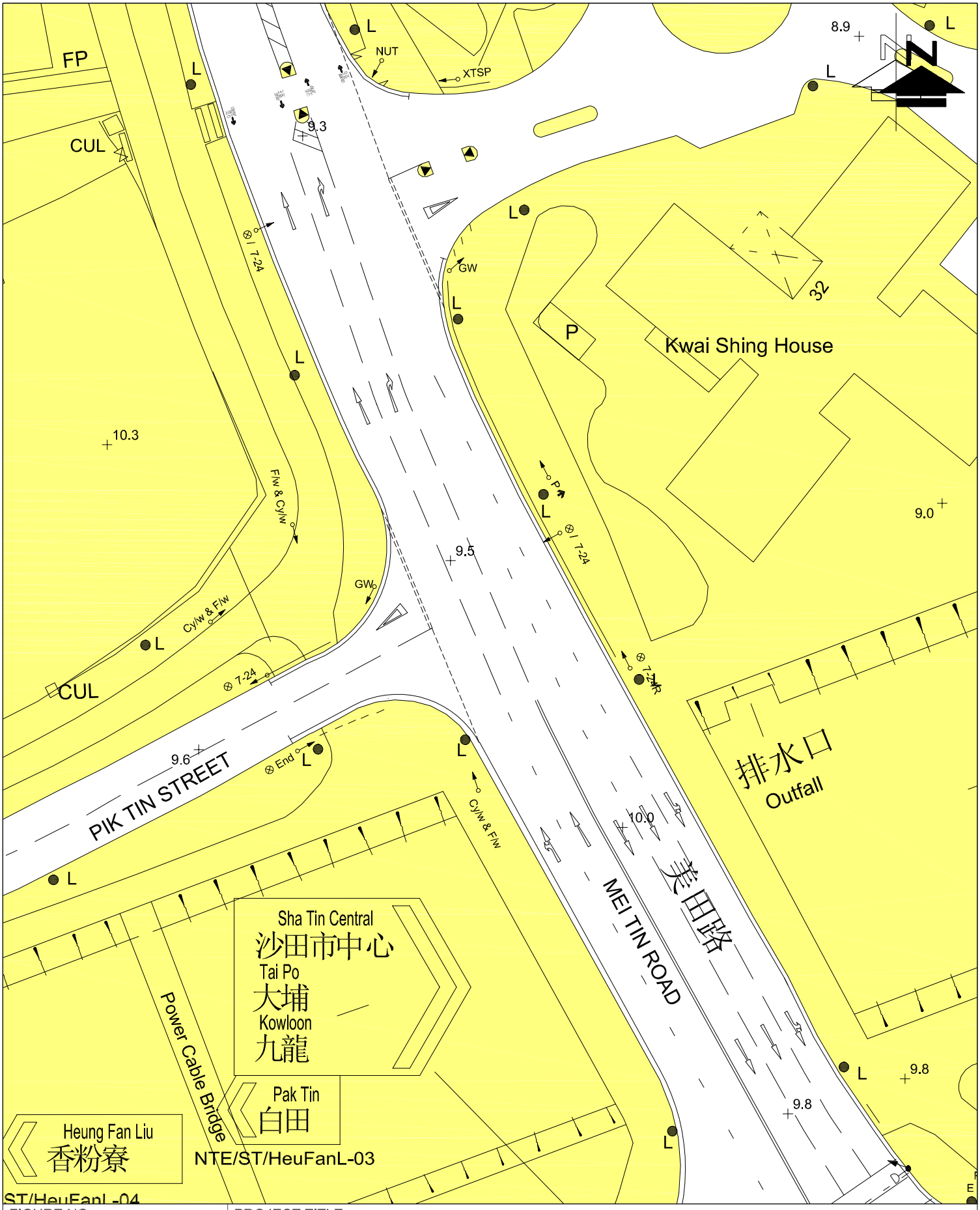



| | |
|---|---|
| FIGURE NO.: 2.3 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / TSING SHA HIGHWAY SLIP ROAD (B) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |

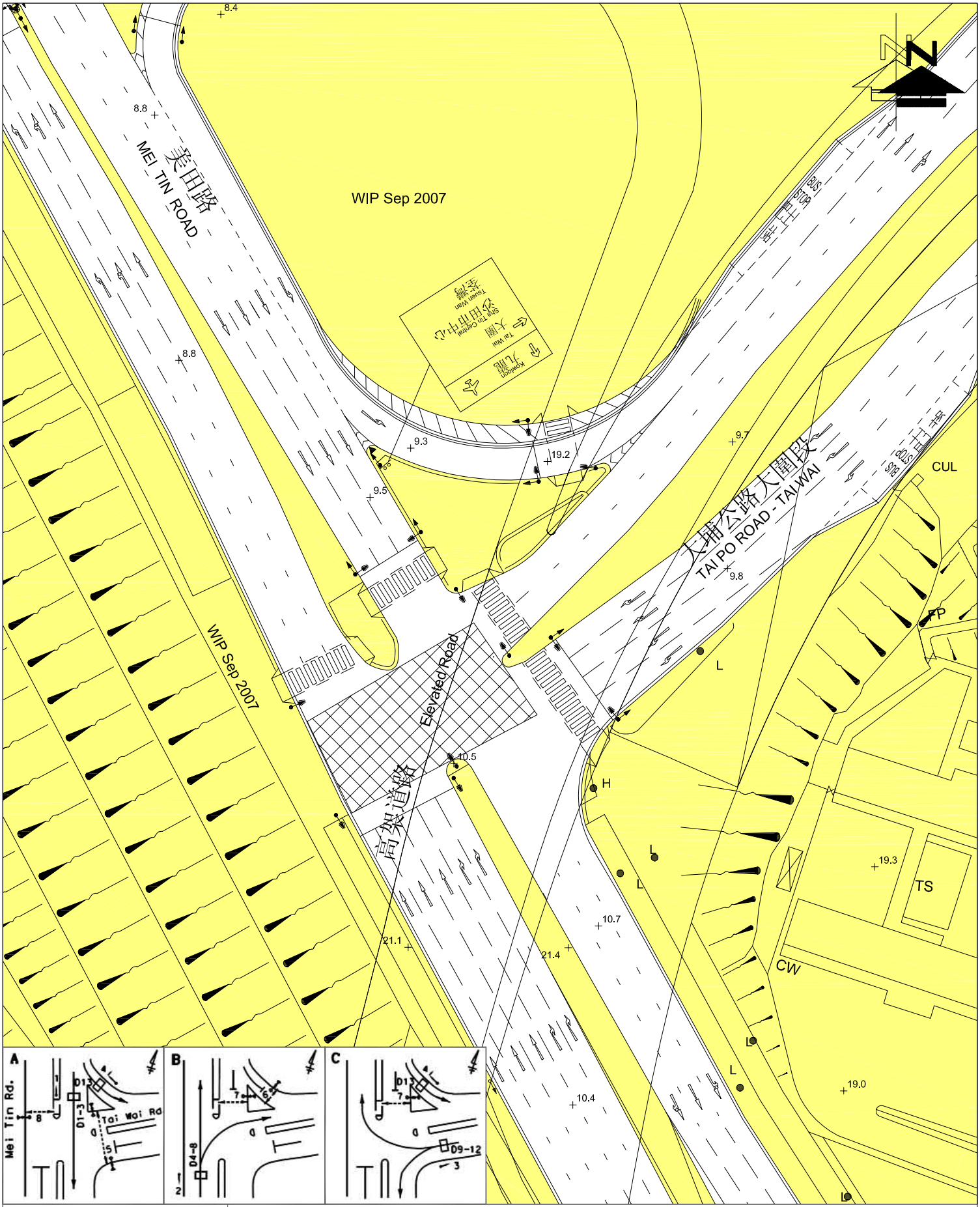



| | |
|---|---|
| FIGURE NO.: 2.4 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / CHIK FAI STREET (C) |
| SCALE: 1 : 500 (IN A4 SIZE) | DATE: 11 MAY 2021 |

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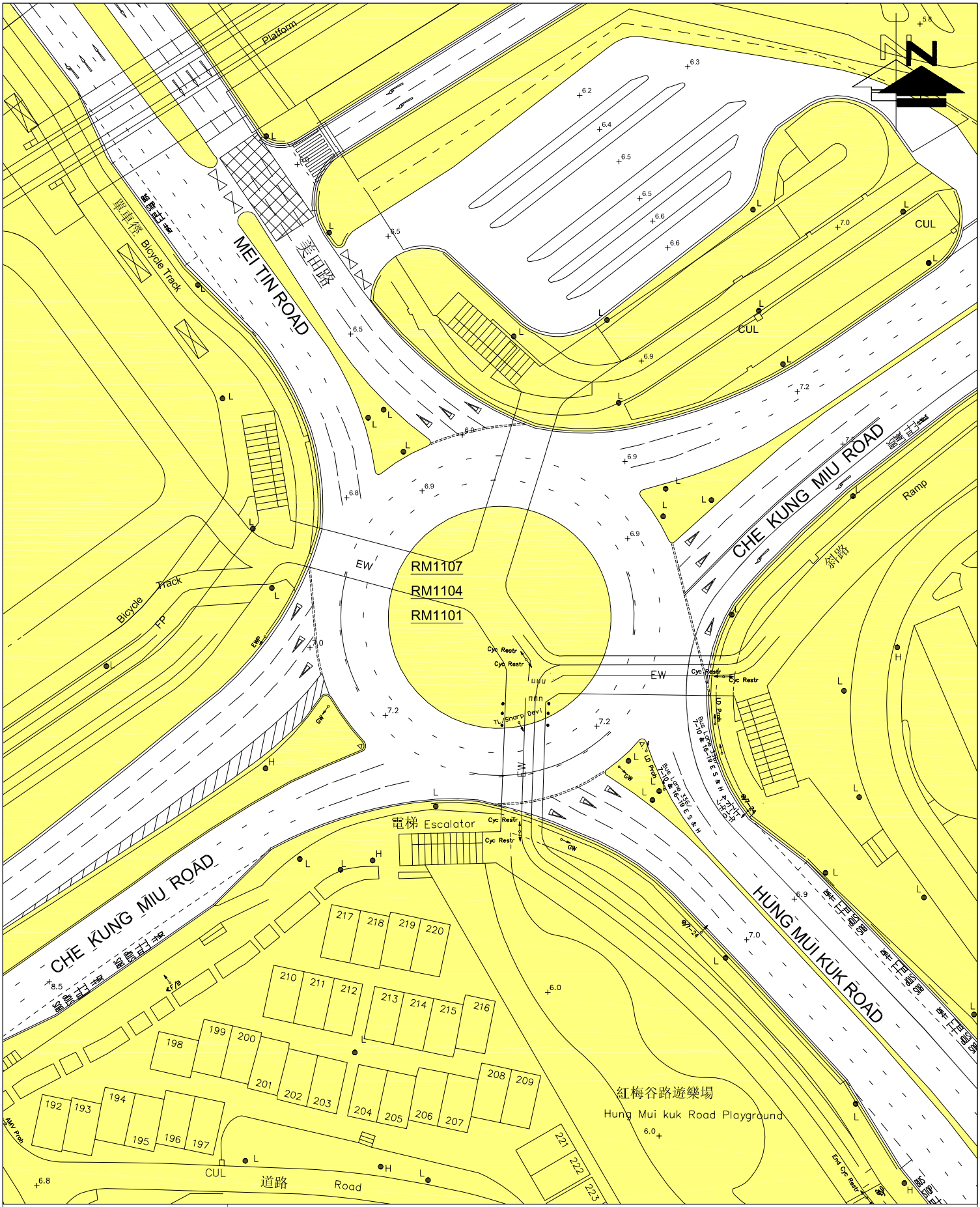



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|---|---|
| FIGURE NO.: 2.5 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / PIK TIN STREET (D) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 23 OCT 2020 | CTA Consultants Limited 志達顧問有限公司 |



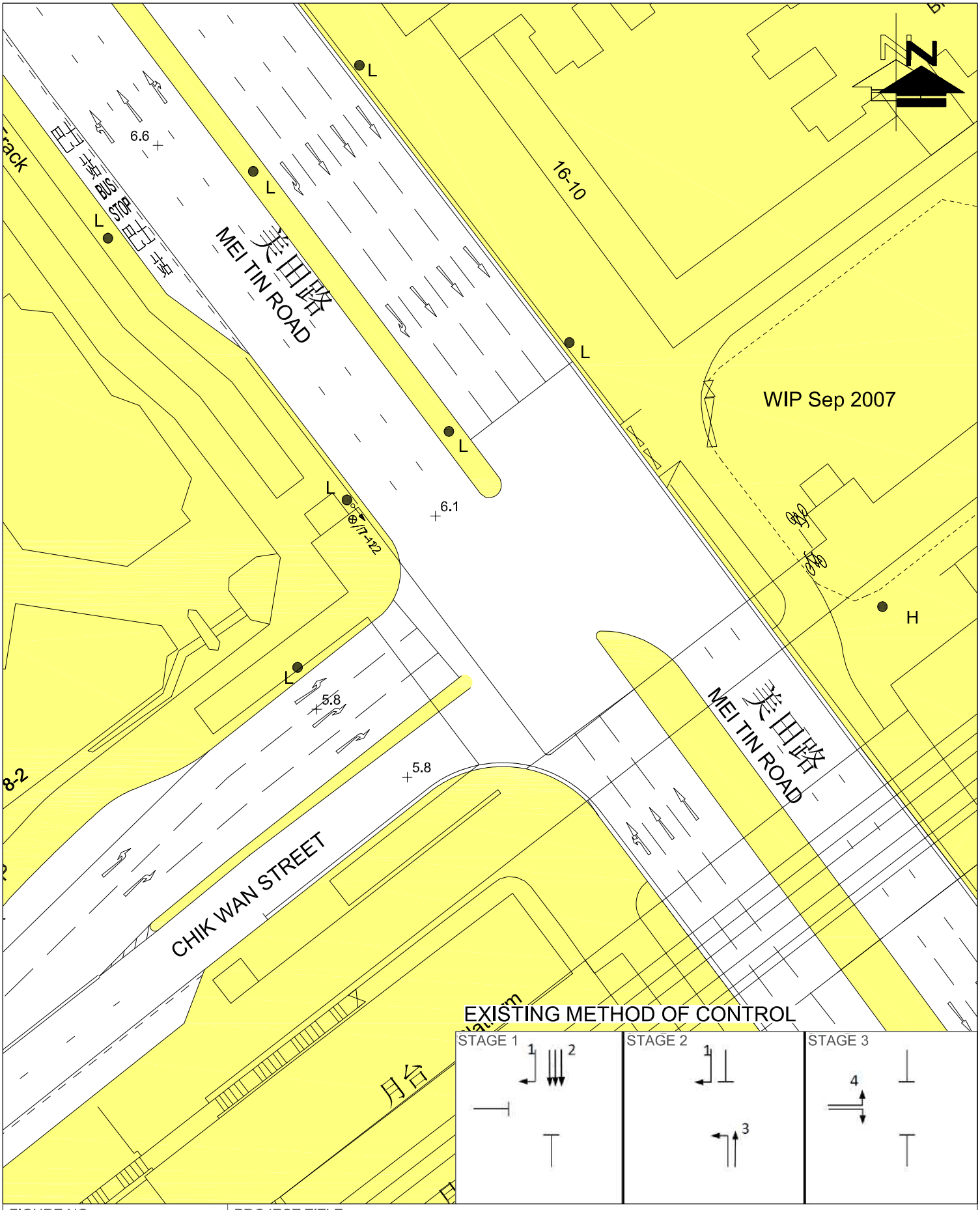

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|---|---|
| FIGURE NO.: 2.6 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF TAI PO ROAD - TAI WAI / MEI TIN ROAD (E) |
| SCALE: 1 : 700 (IN A4 SIZE) | DATE: 12 NOV 2021 |

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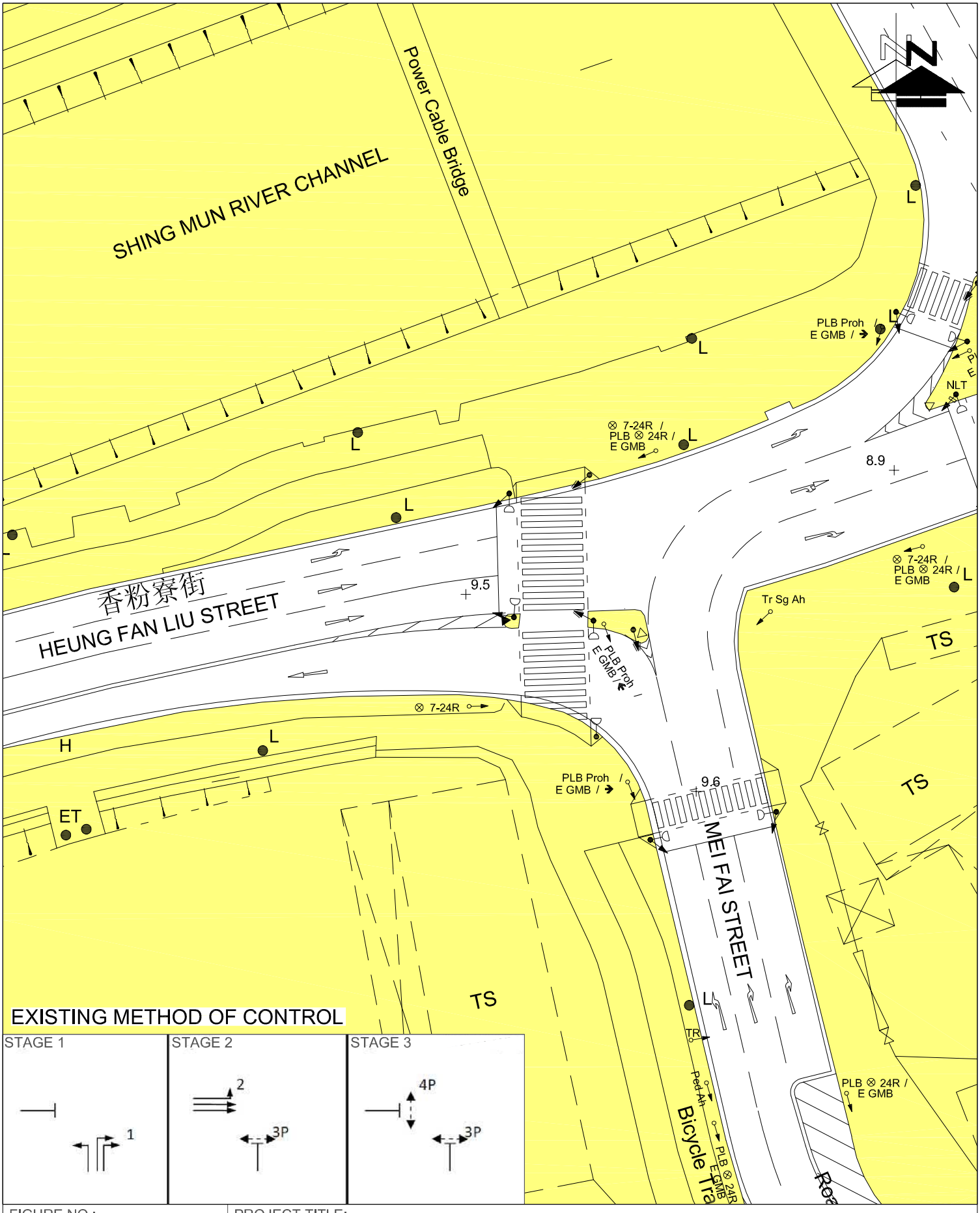



| | |
|---|---|
| FIGURE NO.: 2.7 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / HUNG MUI KUK ROAD / CHE KUNG MIU ROAD (F) |
| SCALE: 1 : 1000 (IN A4 SIZE) | DATE: 11 MAY 2021 |

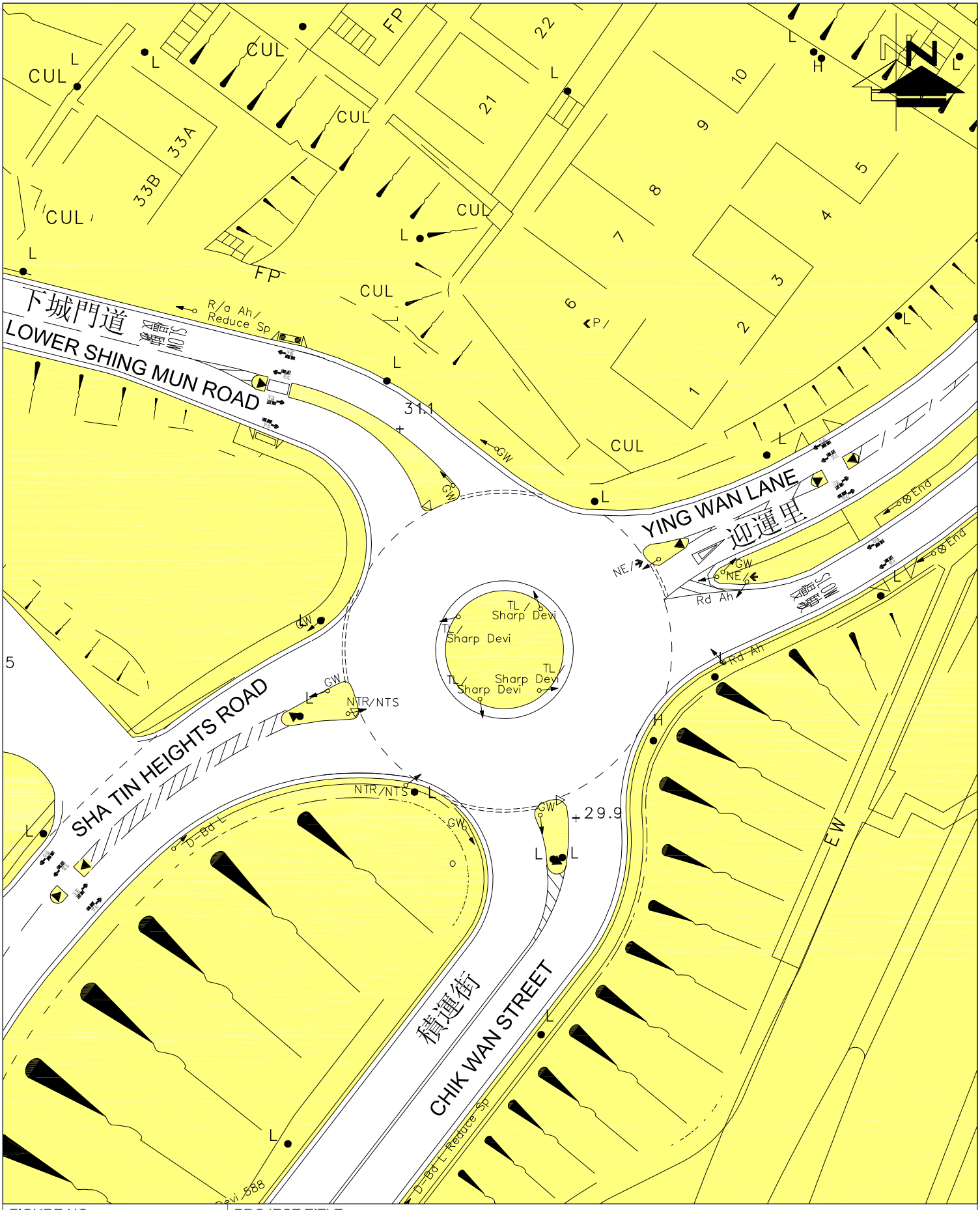
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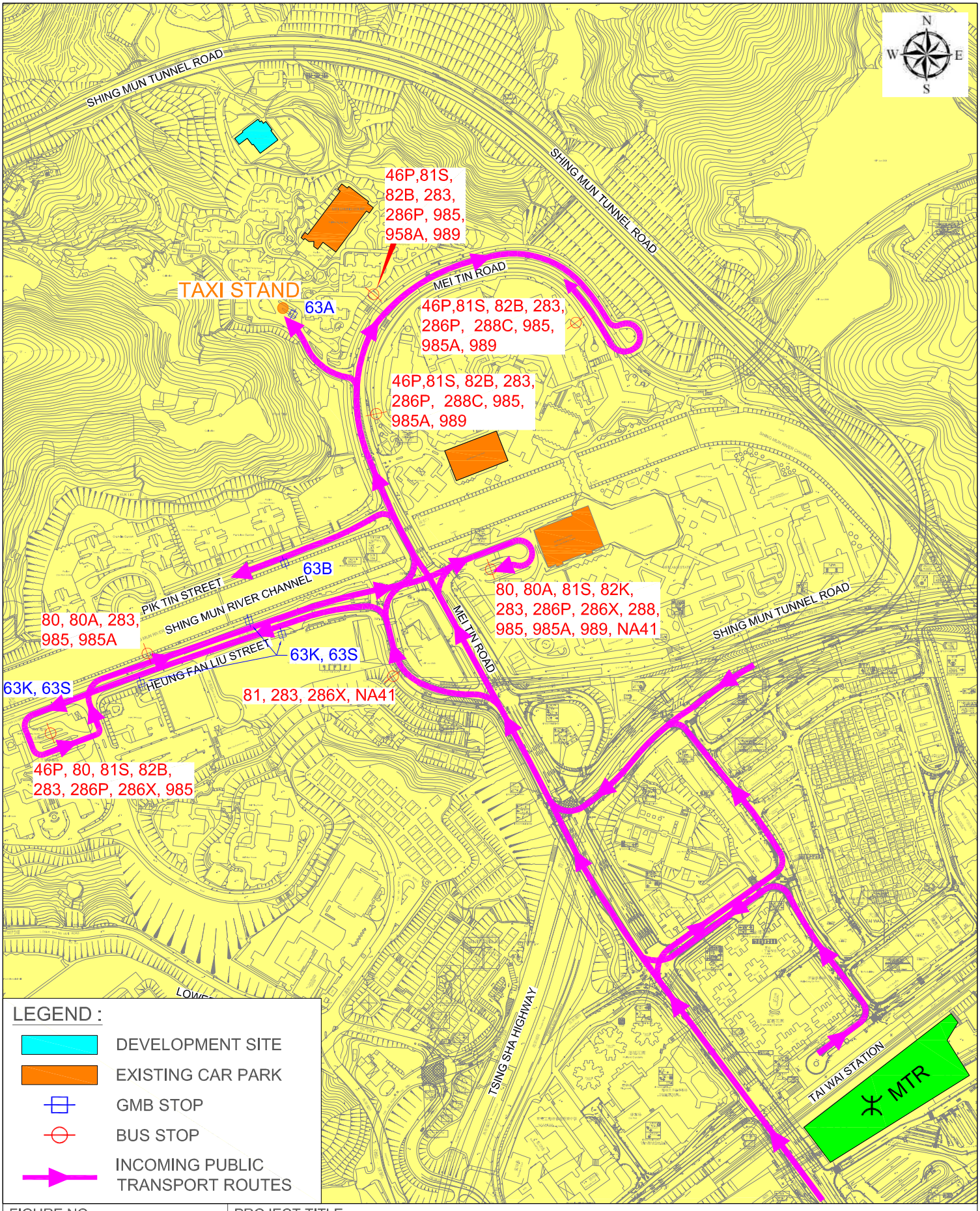

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|---|---|
| FIGURE NO.: 2.8 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF MEI TIN ROAD / CHIK WAN STREET (G) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |




| | |
|---|---|
| FIGURE NO.: 2.9 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF HEUNG FAN LIU STREET / MEI FAI STREET (H) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 03 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |

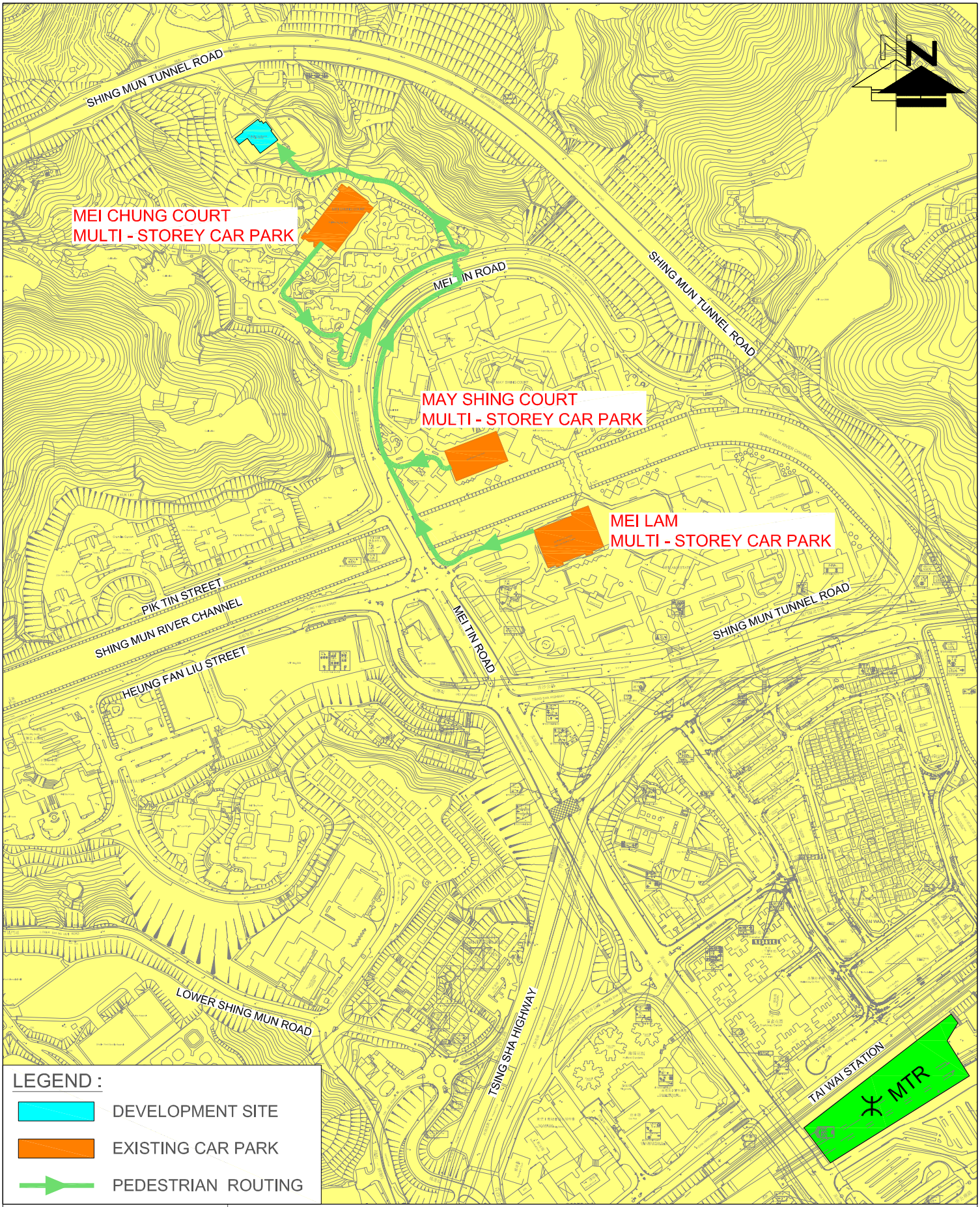



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| FIGURE NO.: 2.10 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: EXISTING JUNCTION LAYOUT OF SHA TIN HEIGHTS ROAD / LOWER SHING MUN ROAD ROUNDABOUT (I) |
| SCALE: 1 : 500 (IN A4 SIZE) / DATE: 23 APR 2021 | CTA Consultants Limited 志達顧問有限公司 |



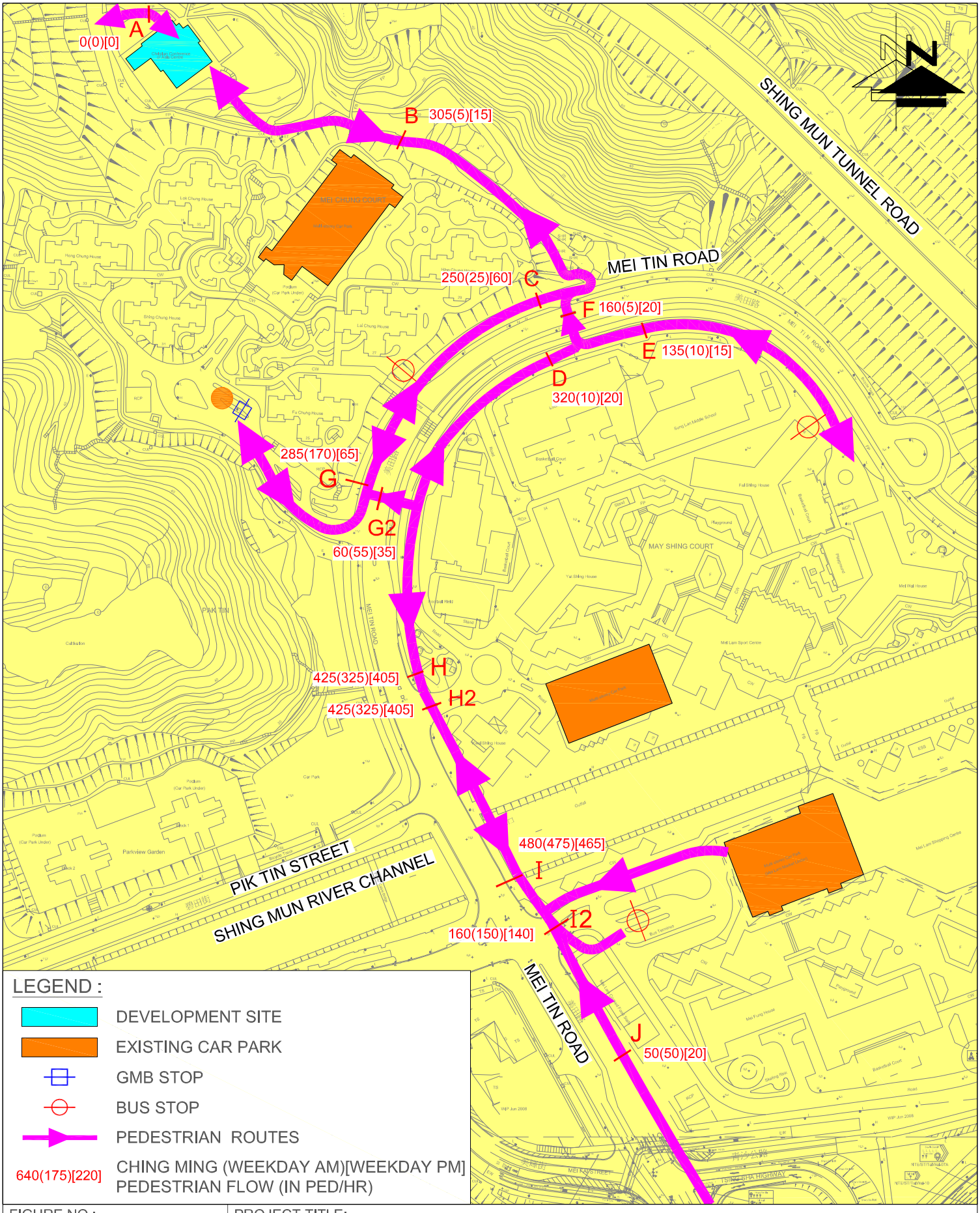

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| FIGURE NO.: 2.11 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: PUBLIC TRANSPORT FACILITIES IN THE VICINITY |
| SCALE: 1 : 5000 @ A4 | DATE: 01 MAR 2023 |

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| | |
|---|---|
| FIGURE NO.: 2.12 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: PARKING FACILITIES IN THE VICINITY |
| SCALE: 1 : 5000 @A4 | DATE: 21 APR 2021 |

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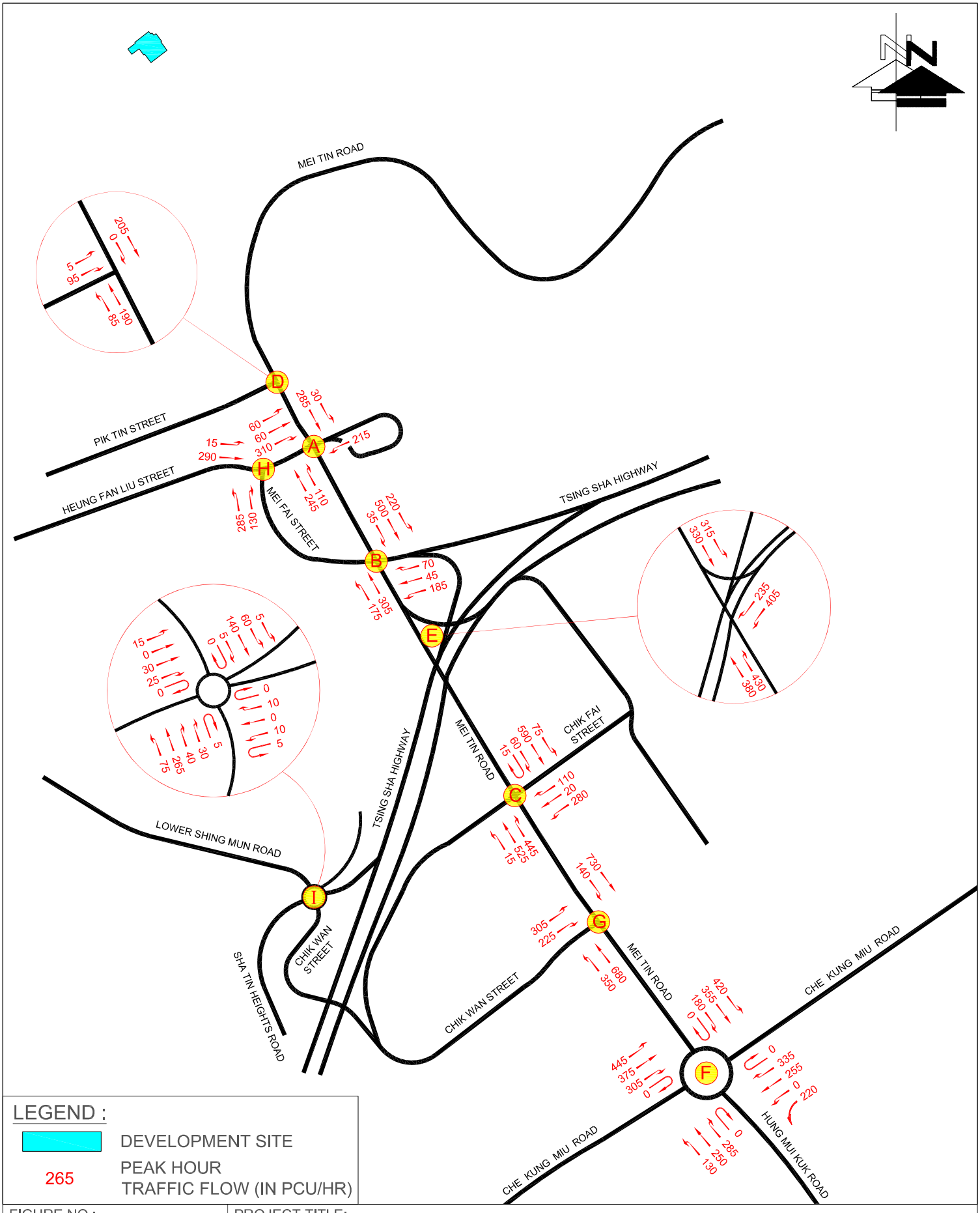



## LEGEND :

- DEVELOPMENT SITE
- EXISTING CAR PARK
- GMB STOP
- BUS STOP
- PEDESTRIAN ROUTES
- 640(175)[220] CHING MING (WEEKDAY AM)[WEEKDAY PM] PEDESTRIAN FLOW (IN PED/HR)

| | |
|---|---|
| FIGURE NO.: 2.13 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2018 OBSERVED PEDESTRIAN FLOWS |
| SCALE: 1 : 2500 @ A4 | DATE: 01 MAR 2023 |

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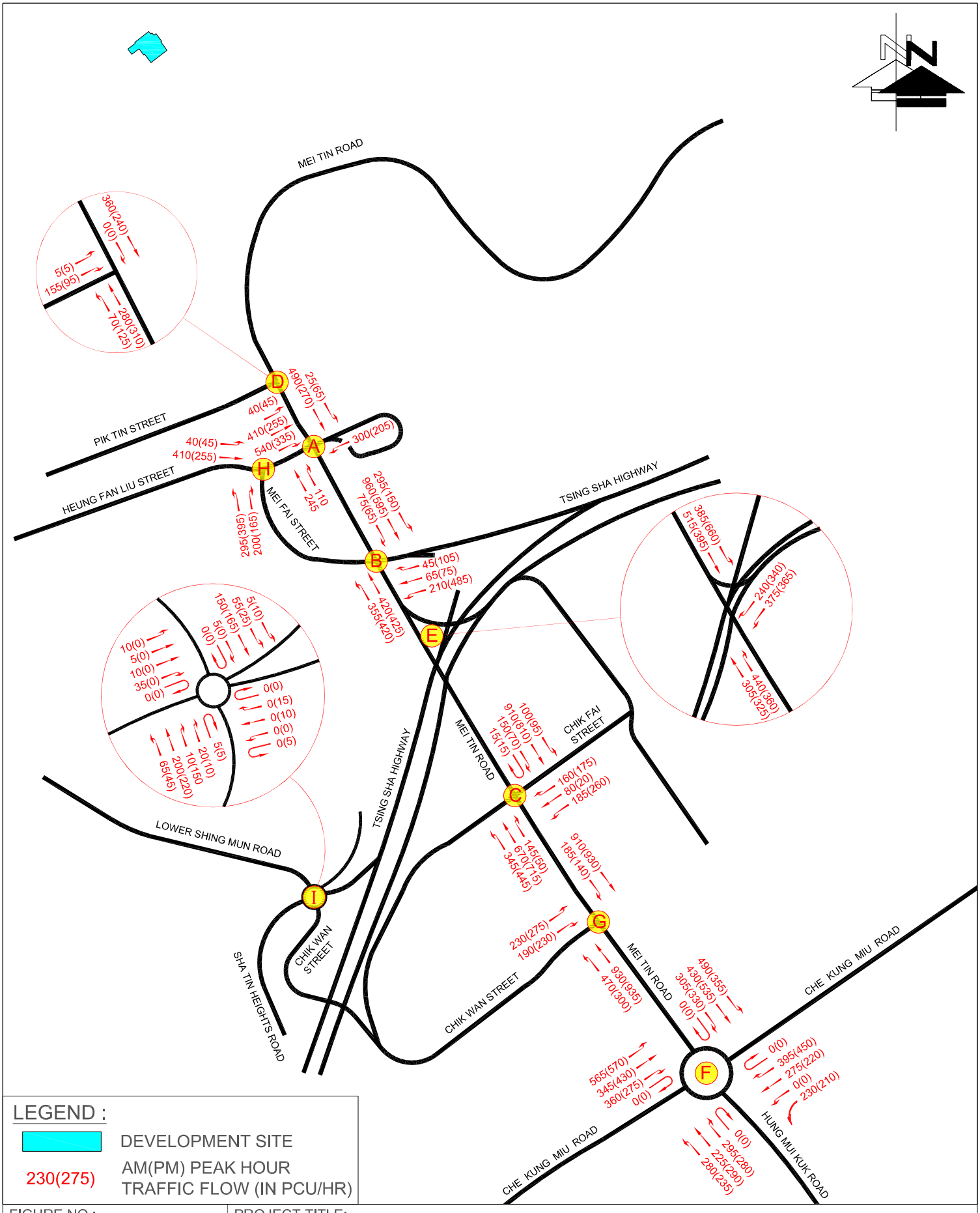

LEGEND :

DEVELOPMENT SITE

265 PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 2.14 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2018 OBSERVED TRAFFIC FLOWS (CHING MING FESTIVAL) |
| SCALE: 1 : 5500 (IN A4 SIZE) | DATE: 15 JUN 2021 |

CTA Consultants Limited 志達顧問有限公司

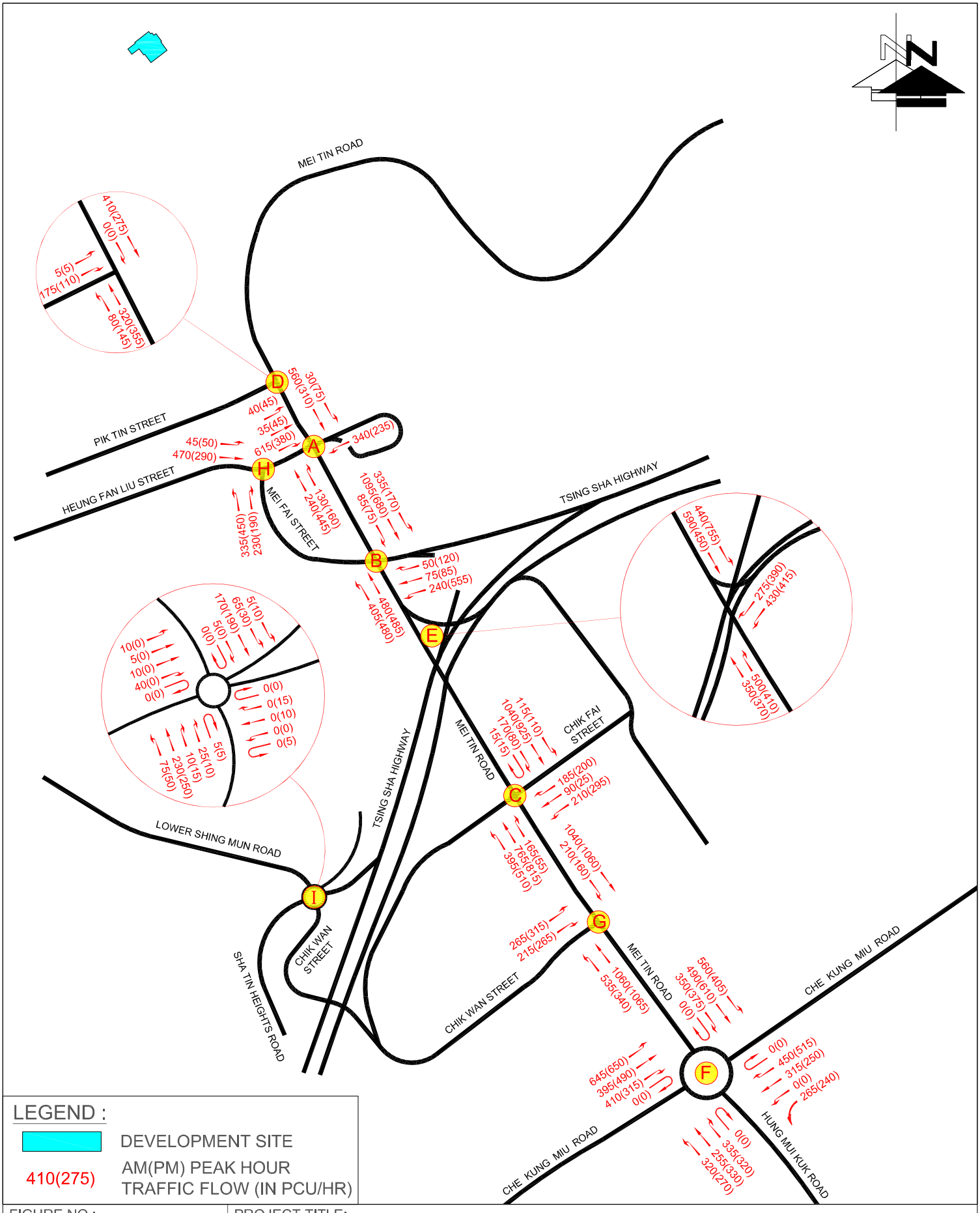



LEGEND :

DEVELOPMENT SITE

230(275) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 2.15 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2021 OBSERVED TRAFFIC FLOWS (WEEKDAY) |
| SCALE: 1 : 5500 (IN A4 SIZE) / DATE: 11 MAY 2021 | CTA Consultants Limited 志達顧問有限公司 |




LEGEND :

DEVELOPMENT SITE

410(275) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 2.16 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY) |
| SCALE: 1 : 5500 (IN A4 SIZE) / DATE: 15 JUN 2021 | CTA Consultants Limited 志達顧問有限公司 |



PRIVATE RESIDENTIAL DEVELOPMENT AT VARIOUS LOTS IN D.D. 181, HEUNG FAN LIU, SHA TIN



MEI PARK COURT



TAI WAI STATION PROPERTY DEVELOPMENT



MEI YING COURT

SHING MUN TUNNEL ROAD

PIK TIN STREET

SHING MUN RIVER CHANNEL

HEUNG FAN LIU STREET

MEI TIN ROAD

TSING SHA HIGHWAY

TAI WAI STATION

A

B

C

D

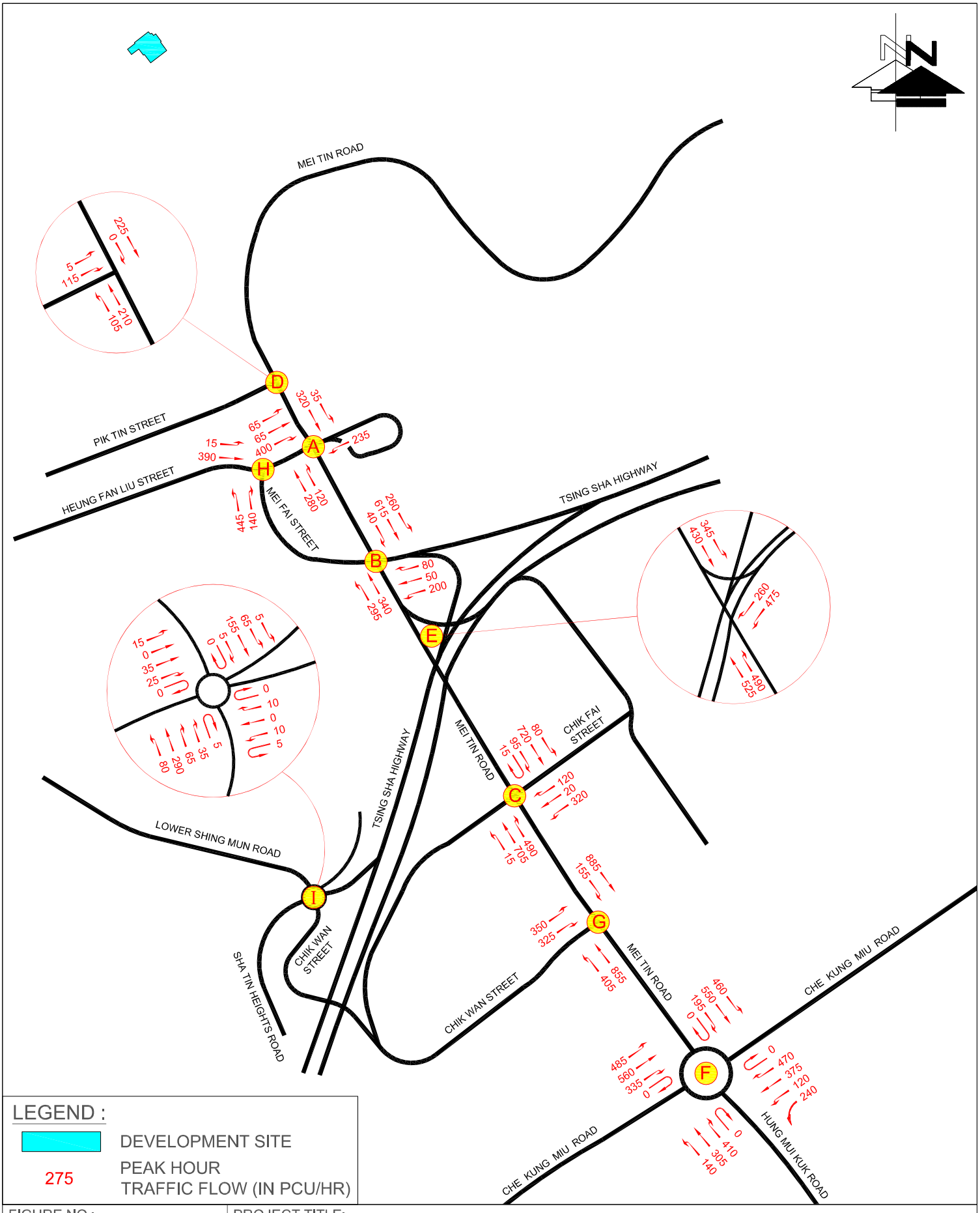
N

LEGEND :

DEVELOPMENT SITE

| | |
|---|---|
| FIGURE NO.: 3.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: FUTURE ADJACENT DEVELOPMENT AT TAI WAI |
| SCALE: 1 : 7000 (IN A4 SIZE) | DATE: 23 OCT 2020 |

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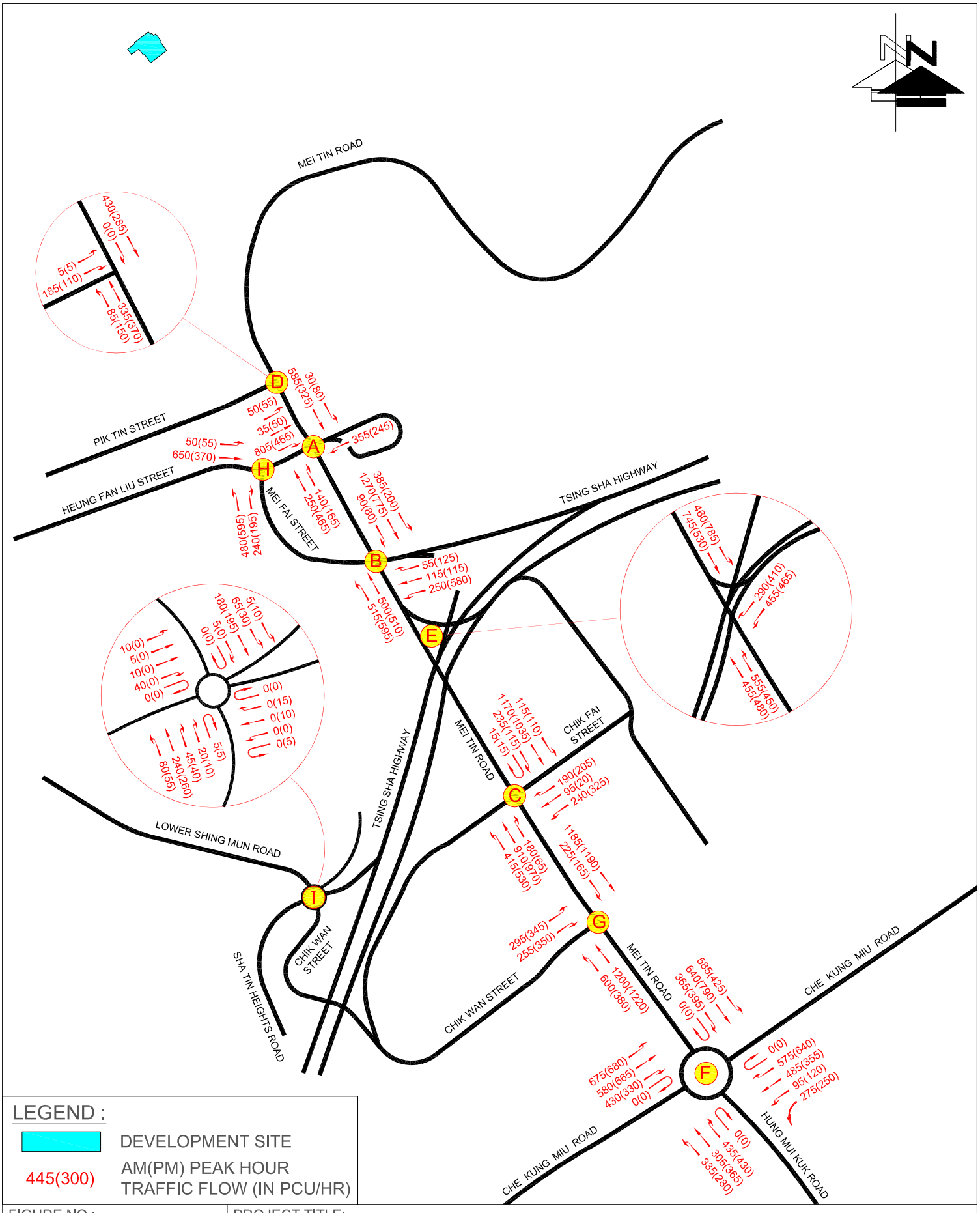



LEGEND :

DEVELOPMENT SITE

275 PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.2 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 REFERENCE TRAFFIC FLOWS (CHING MING FESTIVAL) |
| SCALE: N.T.S. @A4 / DATE: 1 JUN 2023 | CTA Consultants Limited 志達顧問有限公司 |

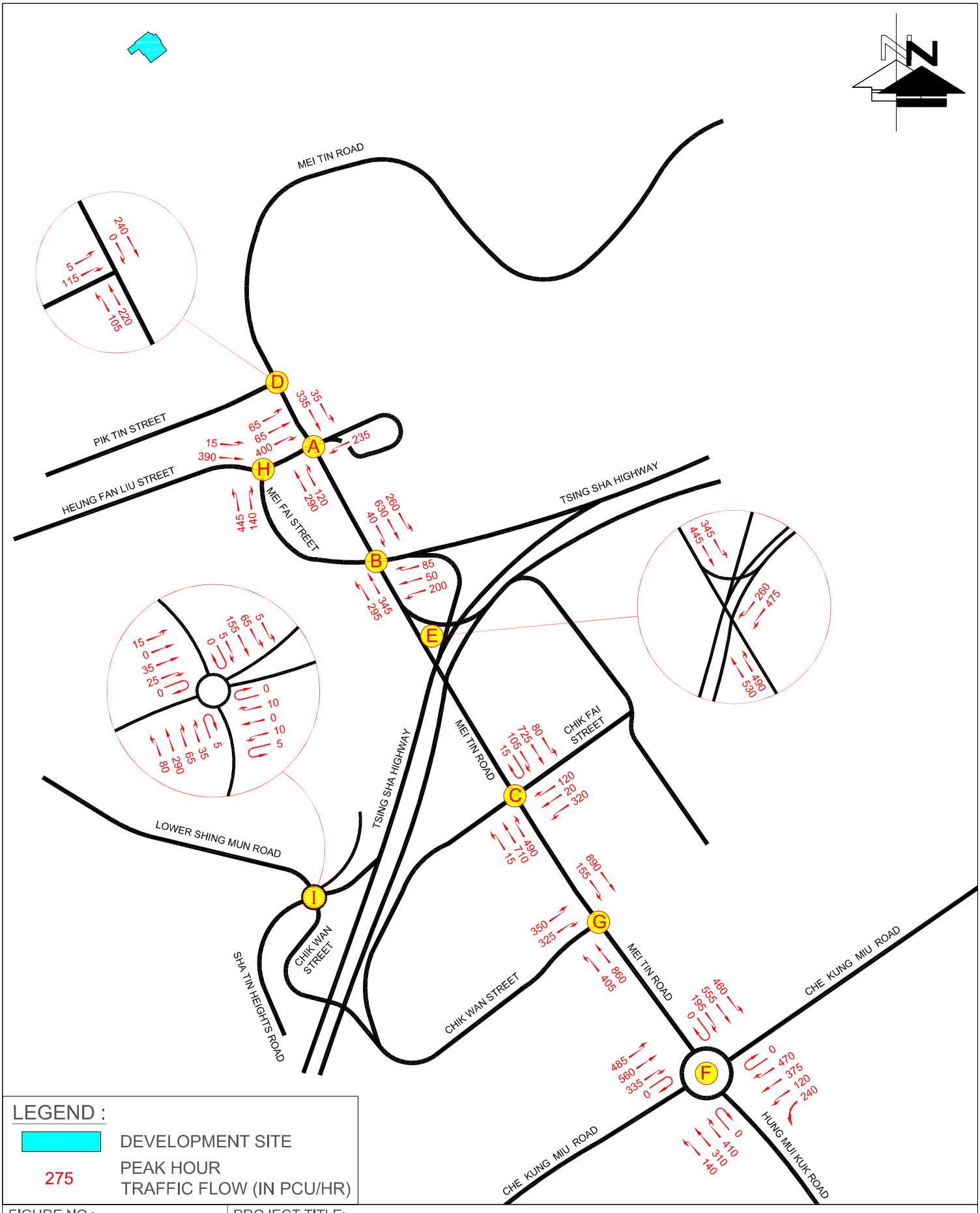



LEGEND :

DEVELOPMENT SITE

445(300) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.3 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 REFERENCE TRAFFIC FLOWS (WEEKDAY) |
| SCALE: N.T.S. @A4 / DATE: 1 JUN 2023 | CTA Consultants Limited 志達顧問有限公司 |

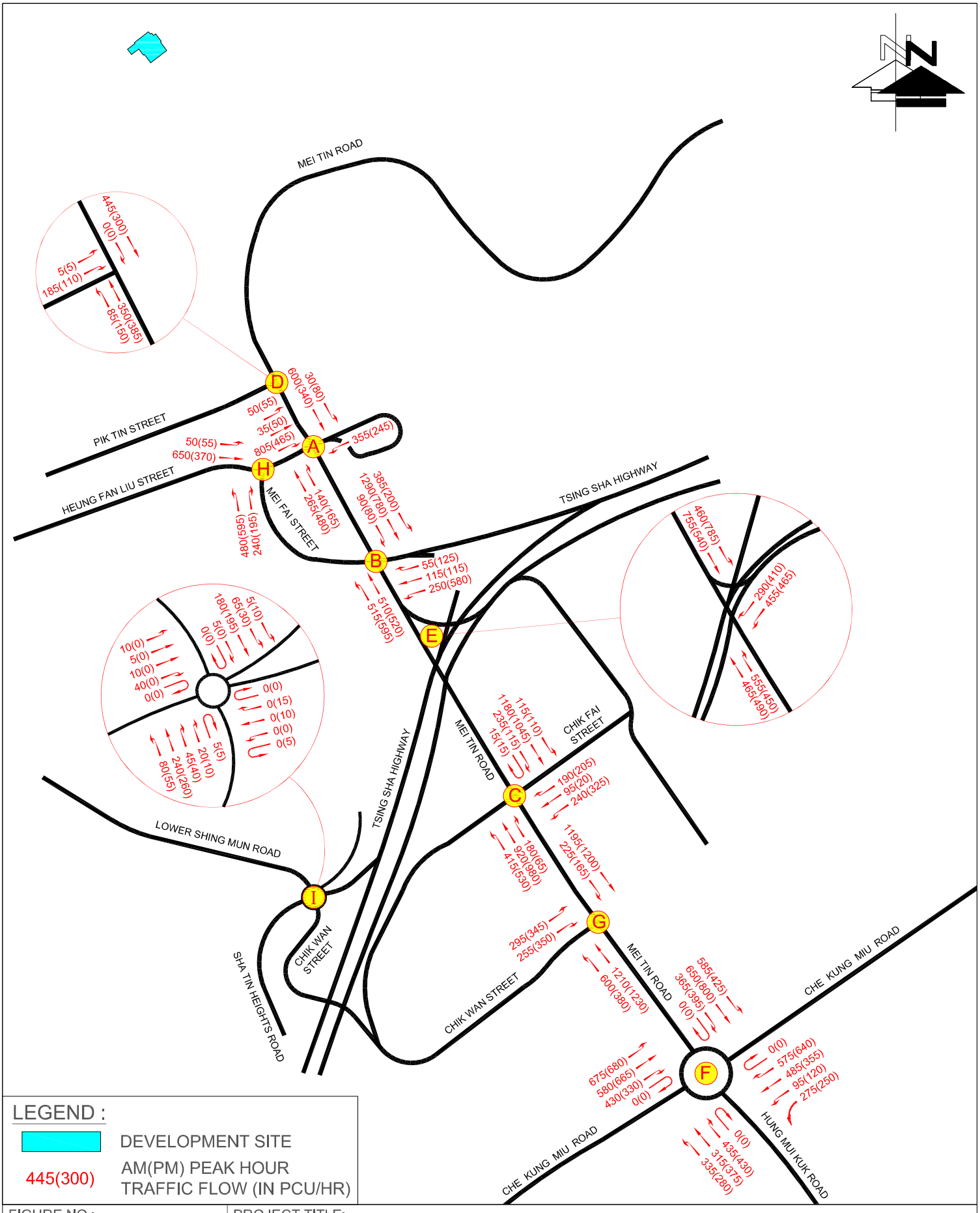



LEGEND :

DEVELOPMENT SITE

275 PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.4 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 DESIGN TRAFFIC FLOWS (CHING MING FESTIVAL) |
| SCALE: N.T.S. @A4 / DATE: 1 JUN 2023 | CTA Consultants Limited 志達顧問有限公司 |

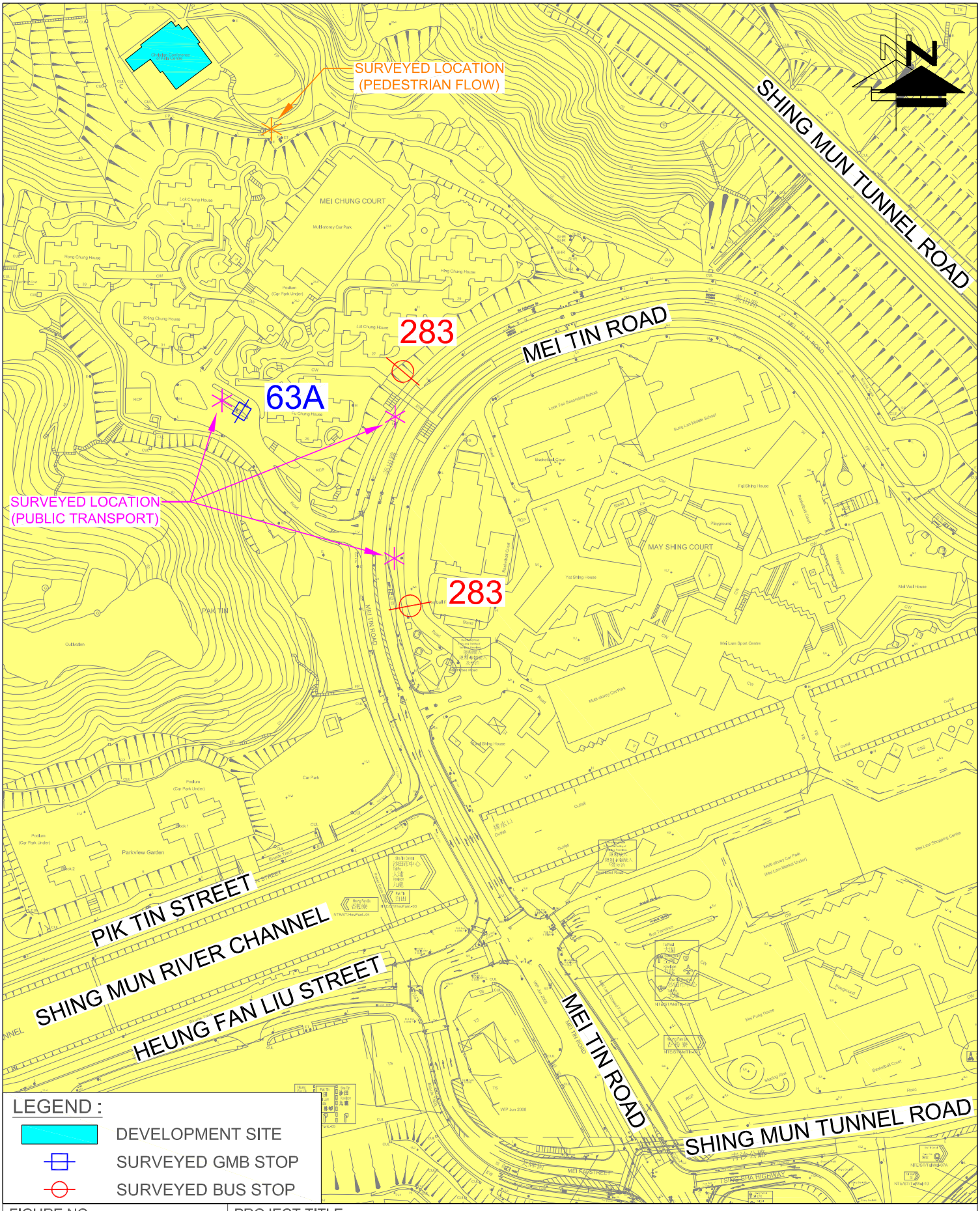



LEGEND :

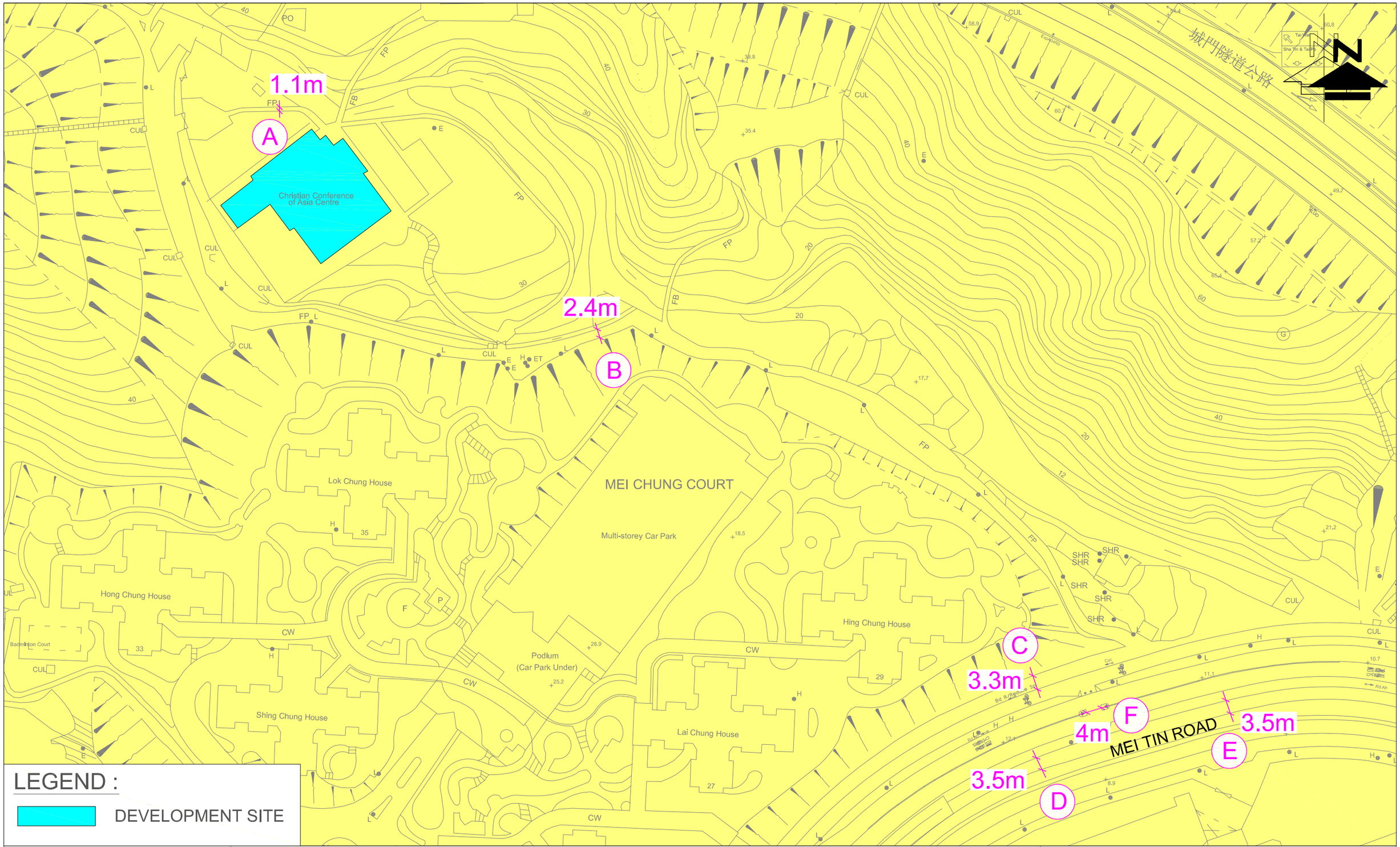
DEVELOPMENT SITE

445(300) AM(PM) PEAK HOUR TRAFFIC FLOW (IN PCU/HR)

| | |
|---|---|
| FIGURE NO.: 3.5 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 DESIGN TRAFFIC FLOWS (WEEKDAY) |
| SCALE: N.T.S. @A4 / DATE: 1 JUN 2023 | CTA Consultants Limited 志達顧問有限公司 |




| | |
|---|---|
| FIGURE NO.: 5.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: SURVEYED LOCATION PLAN |
| SCALE: 1 : 2500 (IN A4 SIZE) / DATE: 23 OCT 2020 | CTA Consultants Limited 志達顧問有限公司 |

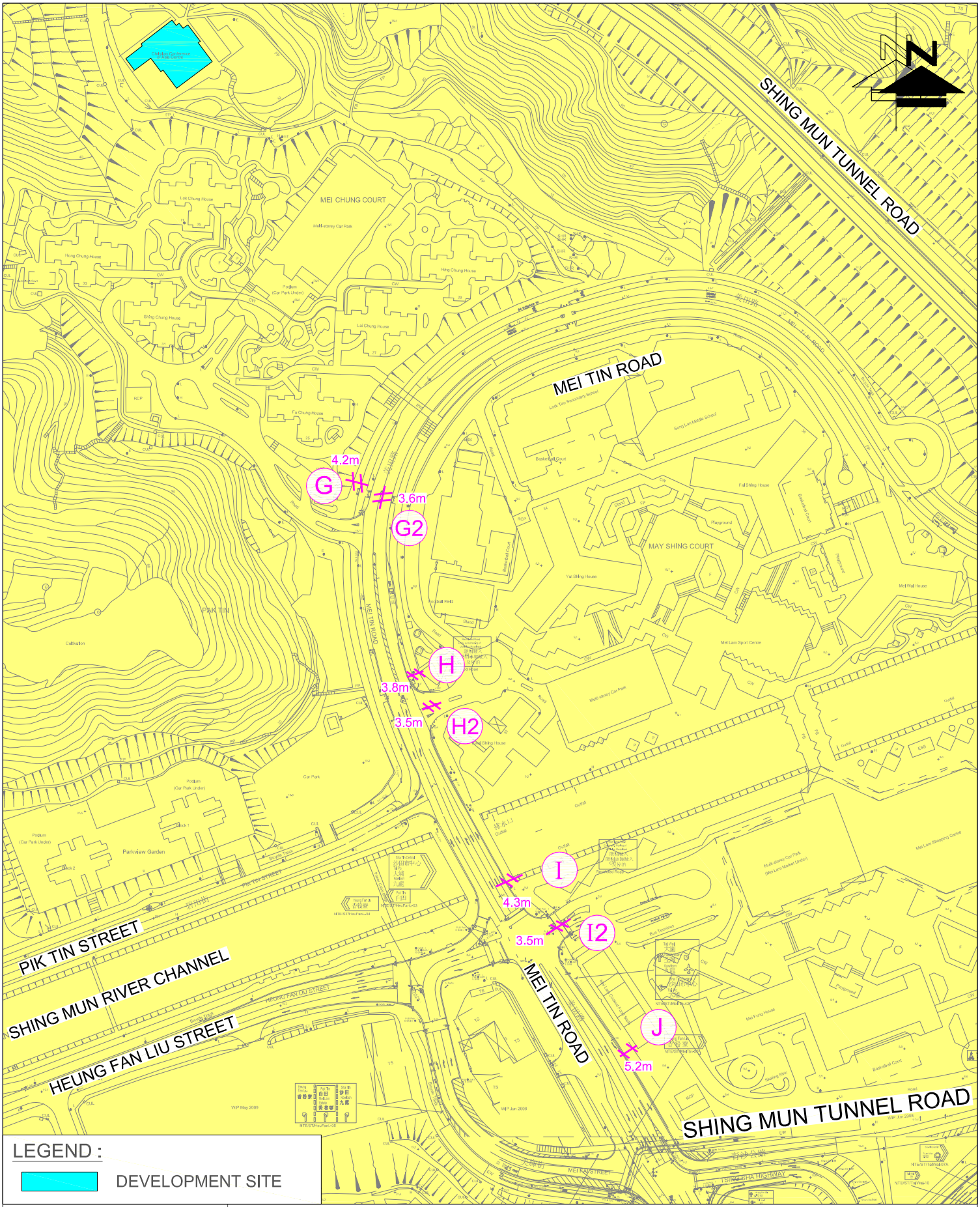



LEGEND :

DEVELOPMENT SITE

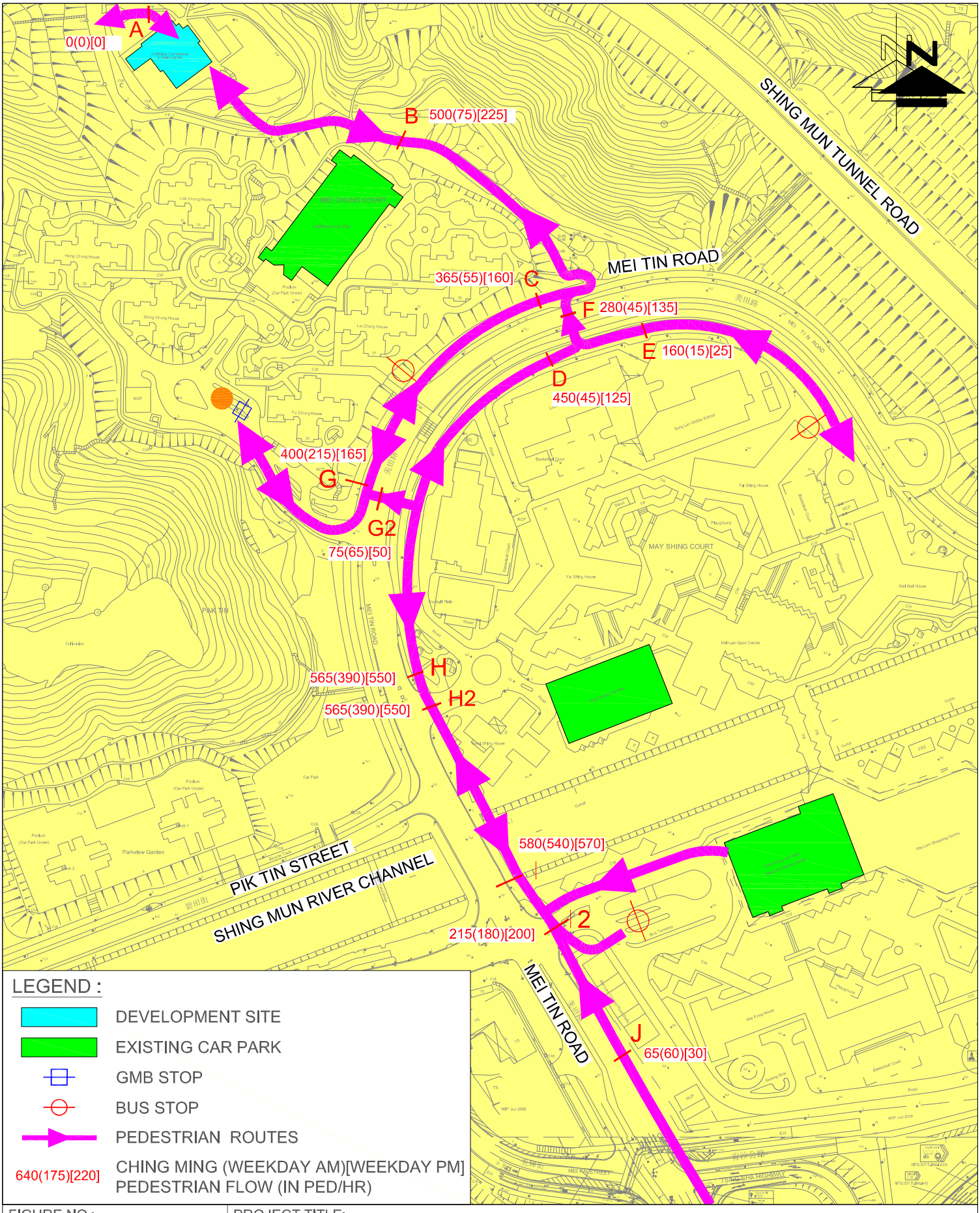
| | |
|---|---|
| FIGURE NO.: 7.1 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: INDEX PLAN OF CRITICAL SECTIONS - 1 |
| SCALE: 1 : 800 (IN A3 SIZE) / DATE: 29 JUN 2022 | |

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| | |
|---|---|
| FIGURE NO.: 7.2 | PROJECT TITLE: Application for License for Puguangming Temple |
| PROJECT NO.: 20058HK | DRAWING TITLE: INDEX PLAN OF CRITICAL SECTIONS - 2 |
| SCALE: 1 : 2500 @ A4 | DATE: 10 NOV 2021 |

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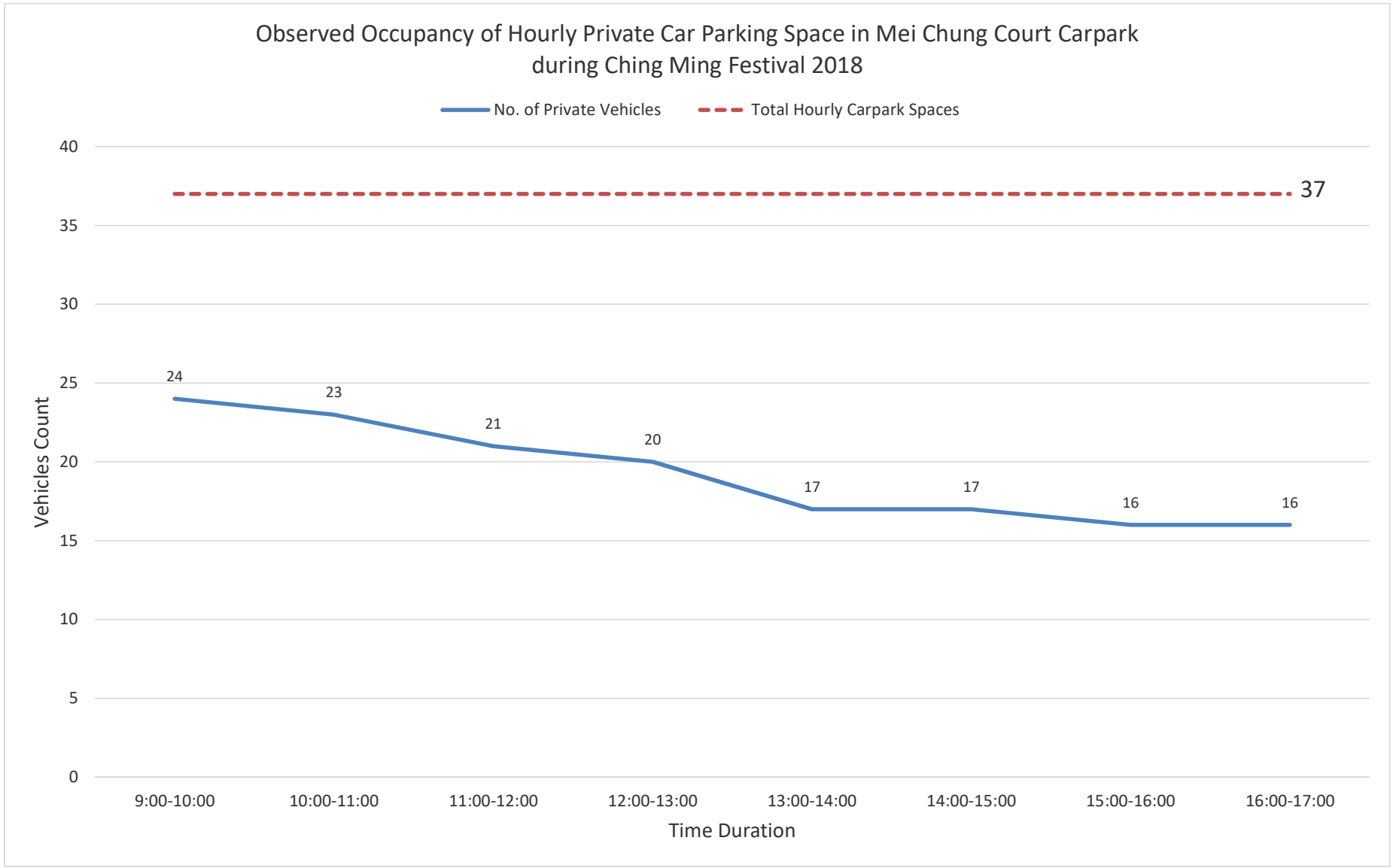



| | |
|---|---|
| FIGURE NO.: 7.3 | PROJECT TITLE: Puguangming Temple Application for License for Columbarium Use Traffic Management Plan |
| PROJECT NO.: 20058HK | DRAWING TITLE: 2027 DESIGN PEDESTRIAN FLOWS |
| SCALE: 1 : 2500 @ A4 | DATE: 30 MAY 2023 |

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# Appendix 1

# Parking Survey


Observed Occupancy of Hourly Private Car Parking Space in Mei Chung Court Carpark during Ching Ming Festival 2018
No. of Private Vehicles
Total Hourly Carpark Spaces
Vehicles Count
Time Duration
40
35
30
25
20
15
10
5
0
37
24
23
21
20
17
17
16
16
9:00-10:00
10:00-11:00
11:00-12:00
12:00-13:00
13:00-14:00
14:00-15:00
15:00-16:00
16:00-17:00

# Appendix 2

# Junction Calculation Sheets

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**

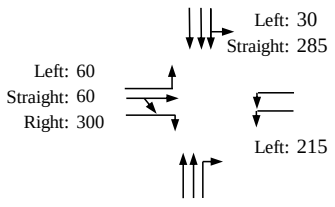
Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 2115 | 2115 | 1960 | 1960 | 60 | 0.031 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 68% | 2255 | 4510 | 2145 | 4105 | 188 | 0.088 | 0.088 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 2255 | 0 | 1960 | 0 | 172 | 0.088 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 1915 | 3970 | 1665 | 3505 | 102 | 0.061 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 2055 | 0 | 1840 | 0 | 113 | 0.061 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 1915 | 3970 | 1915 | 3970 | 118 | 0.062 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 127 | 0.062 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 2055 | 2055 | 1855 | 1855 | 110 | 0.059 | 0.059 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 30% | 1915 | 6025 | 1890 | 6000 | 99 | 0.053 | 0.053 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 108 | 0.052 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 108 | 0.052 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | 7p | A,B,D | green time =50Gm+08Fm=58s | |
| | 8p | B,C,D | green time =49Gm+08Fm=57s | |
| | 9p | B,C,D | green time =49Gm+08Fm=57s | |
| | 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr)

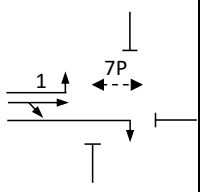



A.M. Check Phase

| | |
|---|---|
| εy | 0.200 |
| L (sec) | 40 |
| C (sec) | 90 |
| y pract. | 0.500 |
| R.C. (%) | 151% |

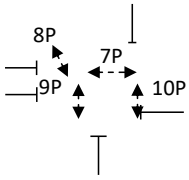
Stage / Phase Diagrams

Stage A



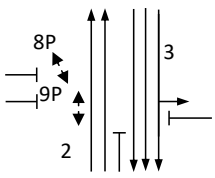

I/G = 5s

Stage B All PED. (25s)



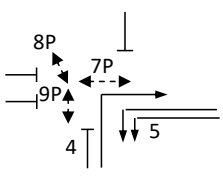

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

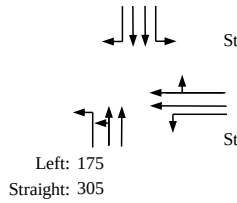
Junction: **(B) Tsing Sha Highway/ Mei Tin Road**

Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 2105 | 0 | 1870 | 0 | 70 | 0.037 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 3975 | 45 | 0.021 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 185 | 0.102 | 0.102 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 1945 | 6135 | 1770 | 5930 | 143 | 0.081 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 19% | 2085 | 0 | 2055 | 0 | 166 | 0.081 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 170 | 0.081 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 4170 | 2085 | 4170 | 250 | 0.120 | 0.120 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 0 | 2085 | 0 | 250 | 0.120 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 35 | 0.018 | |

Notes:

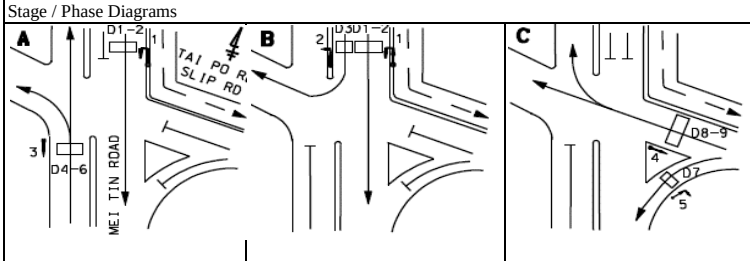
Traffic Flow (pcu / hr)




Peak Hour Check Phase

| | |
|---|---|
| εy | 0.222 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 261% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

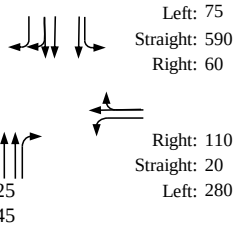
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 75 | 0.041 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 8420 | 2105 | 8300 | 197 | 0.093 | 0.093 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 197 | 0.093 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 2105 | 0 | 2105 | 0 | 197 | 0.093 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 2105 | 0 | 1985 | 0 | 60 | 0.030 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 167 | 0.085 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 179 | 0.085 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 179 | 0.085 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 445 | 0.234 | 0.234 |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 1965 | 1965 | 1890 | 1890 | 280 | 0.148 | 0.148 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 85% | 2105 | 2105 | 2005 | 2005 | 130 | 0.065 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

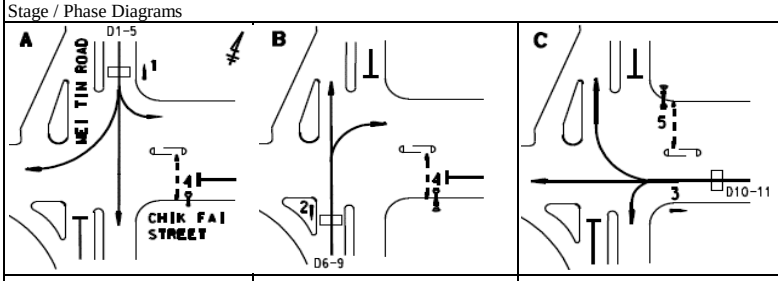
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.476 |
| L (sec) | 14 |
| C (sec) | 90 |
| y pract. | 0.760 |
| R.C. (%) | 60% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**

Description: **2018 OBSERVED TRAFFIC FLOWS**

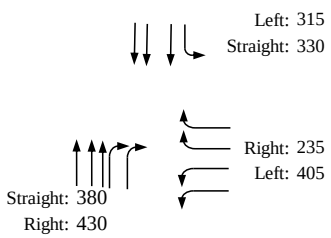
| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 2065 | 2065 | 2005 | 2005 | 315 | 0.157 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 105 | 0.053 | 0.053 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 112 | 0.053 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 112 | 0.053 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6315 | 2105 | 6315 | 127 | 0.060 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 127 | 0.060 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 127 | 0.060 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 216 | 0.109 | 0.109 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 214 | 0.109 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 1965 | 4120 | 1830 | 3865 | 192 | 0.105 | 0.105 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 2155 | 0 | 2035 | 0 | 213 | 0.105 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 1965 | 3930 | 1855 | 3685 | 118 | 0.064 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 1965 | 0 | 1830 | 0 | 117 | 0.064 | |

Pedestrian Phase

| | | | |
|---|---|---|---|
| P1 | A | green time =06Gm+15Fm=21s | |
| P2 | B | green time =17Gm+07Fm=24s | |
| P3 | B, C | green time =27Gm+09Fm=36s | |
| P4 | A | green time =05Gm+10Fm=15s | |

Notes:

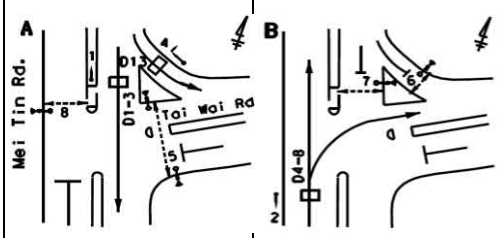
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.267 |
| L (sec) | 12 |
| C (sec) | 90 |
| y pract. | 0.780 |
| R.C. (%) | 192% |

Stage / Phase Diagrams




| | | |
|---|---|---|
| I/G = 5s | I/G = 5s | I/G = 5s |

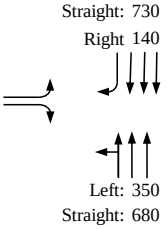
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 2105 | 2105 | 1915 | 1915 | 140 | 0.073 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6175 | 2105 | 6175 | 249 | 0.118 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 249 | 0.118 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 1965 | 0 | 1965 | 0 | 232 | 0.118 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 6175 | 1785 | 5995 | 350 | 0.196 | 0.196 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 340 | 0.162 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 340 | 0.162 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 305 | 0.171 | 0.171 |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 113 | 0.057 | |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 112 | 0.057 | |

Notes:

Traffic Flow (pcu / hr)

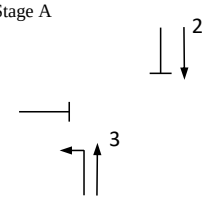



A.M. Check Phase

| | |
|---|---|
| εy | 0.367 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 118% |

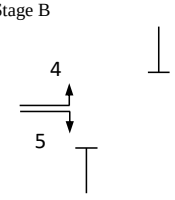
Stage / Phase Diagrams

Stage A



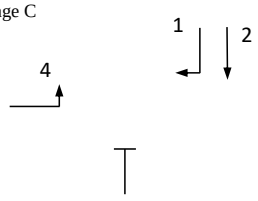

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**

Description: **2018 OBSERVED TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 15 | 0.008 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 4210 | 145 | 0.069 | 0.069 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 145 | 0.069 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 285 | 0.160 | 0.160 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 2105 | 4070 | 1960 | 3745 | 68 | 0.035 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 1965 | 0 | 1785 | 0 | 62 | 0.035 | |
| Pedestrian Phase | | | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | |
| | | | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr)

Left: 15
Straight: 290

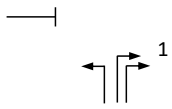
Right: 130
Left: 285

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.229 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 136% |

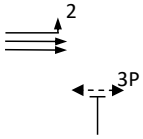
Stage / Phase Diagrams

A



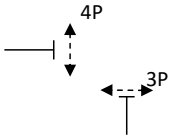

I/G = 3s

B




I/G = 6s

C




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

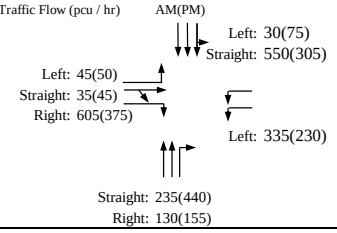
Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 45 | 0.025 | | 50 | 0.027 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 89% | 79% | 2255 | 4510 | 2115 | 2130 | 4075 | 4090 | 332 | 0.157 | 0.157 | 219 | 0.103 | 0.103 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 100% | 2255 | 0 | 1960 | 1960 | 0 | 0 | 308 | 0.157 | | 201 | 0.103 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 100% | 1915 | 3970 | 1665 | 1665 | 3505 | 3505 | 159 | 0.096 | | 109 | 0.066 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 100% | 2055 | 0 | 1840 | 1840 | 0 | 0 | 176 | 0.096 | | 121 | 0.066 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 0% | 1915 | 3970 | 1915 | 1915 | 3970 | 3970 | 113 | 0.059 | | 212 | 0.111 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 122 | 0.059 | | 228 | 0.111 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 100% | 2055 | 2055 | 1855 | 1855 | 1855 | 1855 | 130 | 0.070 | 0.070 | 155 | 0.084 | 0.084 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 16% | 63% | 1915 | 6025 | 1905 | 1870 | 6015 | 5980 | 184 | 0.096 | 0.096 | 119 | 0.064 | 0.064 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 198 | 0.096 | | 131 | 0.064 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 198 | 0.096 | | 131 | 0.064 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | 7p | A,B,D | green time =50Gm+08Fm=58s | |
| | 8p | B,C,D | green time =49Gm+08Fm=57s | |
| | 9p | B,C,D | green time =49Gm+08Fm=57s | |
| | 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

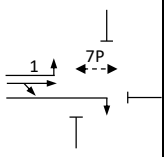



| A.M. Check Phase | |
|---|---|
| εy | 0.324 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 85% |

| P.M. Check Phase | |
|---|---|
| εy | 0.250 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 140% |

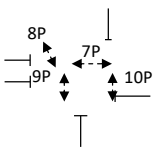
Stage / Phase Diagrams

Stage A



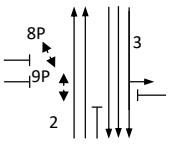

I/G = 5s

Stage B All PED. (25s)



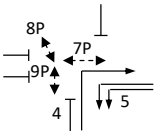

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 84% | 100% | 2105 | 0 | 1905 | 1870 | 0 | 0 | 59 | 0.031 | | 120 | 0.064 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4010 | 3975 | 66 | 0.031 | | 85 | 0.040 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 235 | 0.129 | 0.129 | 545 | 0.299 | 0.299 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 100% | 1945 | 6135 | 1770 | 1770 | 5890 | 5875 | 261 | 0.148 | | 286 | 0.162 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 47% | 57% | 2085 | 0 | 2015 | 2000 | 0 | 0 | 298 | 0.148 | | 323 | 0.162 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 311 | 0.148 | | 340 | 0.162 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 4170 | 2085 | 2085 | 4170 | 4170 | 540 | 0.259 | 0.259 | 335 | 0.161 | 0.161 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 0 | 2085 | 2085 | 0 | 0 | 540 | 0.259 | | 335 | 0.161 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 85 | 0.045 | | 75 | 0.039 | |

Notes:

Traffic Flow (pcu / hr)

Right: 85(75)
Straight: 1080(670)
Left: free flow

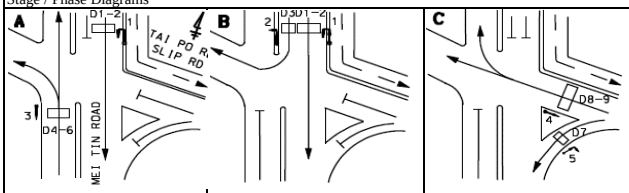
Right: 50(120)
Straight: 75(85)
Left: 235(545)

Left: 400(470)
Straight: 470(480)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.388 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 113% |

| P.M. Check Phase | |
|---|---|
| εy | 0.460 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 79% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

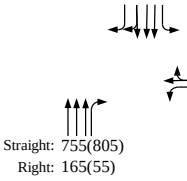
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 110 | 0.060 | | 105 | 0.058 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 8420 | 2105 | 2105 | 8300 | 8300 | 342 | 0.162 | 0.162 | 303 | 0.144 | 0.144 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 342 | 0.162 | | 303 | 0.144 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 342 | 0.162 | | 303 | 0.144 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 0 | 1985 | 1985 | 0 | 0 | 170 | 0.086 | | 80 | 0.040 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 240 | 0.122 | 0.122 | 256 | 0.130 | 0.130 |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 274 | 0.130 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 274 | 0.130 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 165 | 0.087 | | 55 | 0.029 | |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1890 | 1890 | 1890 | 1890 | 210 | 0.111 | | 290 | 0.153 | 0.153 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 67% | 91% | 2105 | 2105 | 2025 | 1995 | 2025 | 1995 | 270 | 0.133 | 0.133 | 215 | 0.108 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

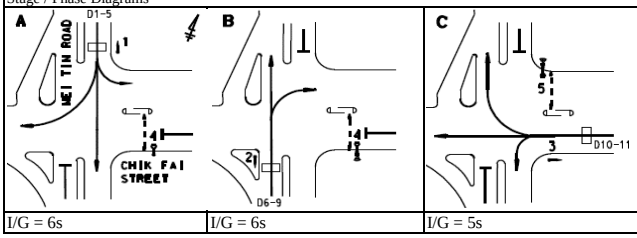
Traffic Flow (pcu / hr) AM(PM)




| A.M. Check Phase | |
|---|---|
| εy | 0.418 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 90% |

| P.M. Check Phase | |
|---|---|
| εy | 0.428 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 86% |

Stage / Phase Diagrams




| I/G = 6s | I/G = 6s | I/G = 5s |
|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 100% | 2065 | 2065 | 2005 | 2005 | 2005 | 2005 | 435 | 0.217 | | 740 | 0.369 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 185 | 0.094 | 0.094 | 142 | 0.072 | 0.072 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 198 | 0.094 | | 152 | 0.072 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 198 | 0.094 | | 152 | 0.072 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6315 | 2105 | 2105 | 6315 | 6315 | 115 | 0.055 | | 122 | 0.058 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 115 | 0.055 | | 122 | 0.058 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 115 | 0.055 | | 122 | 0.058 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 249 | 0.125 | 0.125 | 204 | 0.103 | 0.103 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 246 | 0.125 | | 201 | 0.103 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 100% | 1965 | 4120 | 1830 | 1830 | 3865 | 3865 | 199 | 0.109 | 0.109 | 194 | 0.106 | 0.106 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 100% | 2155 | 0 | 2035 | 2035 | 0 | 0 | 221 | 0.109 | | 216 | 0.106 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 100% | 1965 | 3930 | 1855 | 1855 | 3685 | 3685 | 136 | 0.073 | | 191 | 0.103 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 100% | 1965 | 0 | 1830 | 1830 | 0 | 0 | 134 | 0.073 | | 189 | 0.103 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | P1 | A | green time =06Gm+15Fm=21s |
| | P2 | B | green time =17Gm+07Fm=24s |
| | P3 | B, C | green time =27Gm+09Fm=36s |
| | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

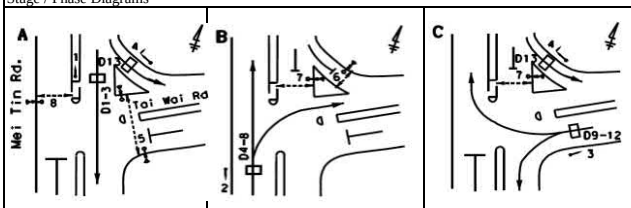
Left: 435(740)
Straight: 580(445)

Right: 270(380)
Left: 420(410)
Straight: 345(365)
Right: 495(405)

| A.M. Check Phase | |
|---|---|
| εy | 0.328 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 147% |

| P.M. Check Phase | |
|---|---|
| εy | 0.281 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 188% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s |
|---|---|---|

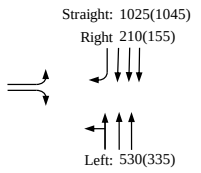
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 100% | 2105 | 2105 | 1915 | 1915 | 1915 | 1915 | 210 | 0.110 | 0.110 | 155 | 0.081 | 0.081 |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6175 | 2105 | 2105 | 6175 | 6175 | 349 | 0.166 | | 356 | 0.169 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 349 | 0.166 | | 356 | 0.169 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 0 | 1965 | 1965 | 0 | 0 | 326 | 0.166 | | 333 | 0.169 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 80% | 1965 | 6175 | 1785 | 1820 | 5995 | 6030 | 530 | 0.297 | 0.297 | 418 | 0.230 | 0.230 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 523 | 0.248 | | 484 | 0.230 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 523 | 0.248 | | 484 | 0.230 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 260 | 0.146 | | 310 | 0.174 | |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 108 | 0.054 | 0.054 | 131 | 0.066 | 0.066 |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 107 | 0.054 | | 129 | 0.066 | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

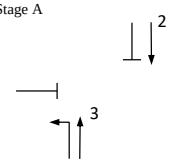



| A.M. Check Phase | |
|---|---|
| εy | 0.461 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 60% |

| P.M. Check Phase | |
|---|---|
| εy | 0.377 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 97% |

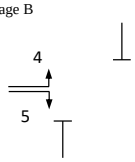
Stage / Phase Diagrams

Stage A



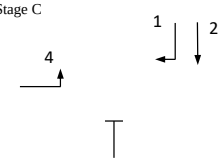

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2021 COVID-19 CORRECTED TRAFFIC FLOW (WEEKDAY)**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 45 | 0.025 | | 50 | 0.028 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4210 | 4210 | 230 | 0.109 | 0.109 | 143 | 0.068 | 0.068 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 230 | 0.109 | | 143 | 0.068 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 330 | 0.185 | 0.185 | 445 | 0.249 | 0.249 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 4070 | 1960 | 1960 | 3745 | 3745 | 118 | 0.060 | | 97 | 0.049 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 100% | 1965 | 0 | 1785 | 1785 | 0 | 0 | 107 | 0.060 | | 88 | 0.049 | |
| Pedestrian Phase | | | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | | | | | | | |
| | | | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | | | | | | | |

Notes:

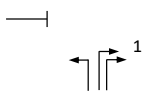
Traffic Flow (pcu / hr) AM(PM)

Left: 45(50)
Straight: 460(285)
Right: 225(185)
Left: 330(445)

| Peak Hour Check Phase | | P.M. Check Phase | |
|---|---|---|---|
| εy | 0.294 | εy | 0.317 |
| L (sec) | 36 | L (sec) | 36 |
| C (sec) | 90 | C (sec) | 90 |
| y pract. | 0.540 | y pract. | 0.540 |
| R.C. (%) | 84% | R.C. (%) | 70% |

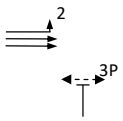
Stage / Phase Diagrams

Stage A



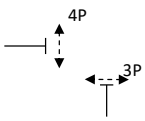

I/G = 3s

Stage B




I/G = 6s

Stage C




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**

Description: **2027 REFERENCE TRAFFIC FLOWS**

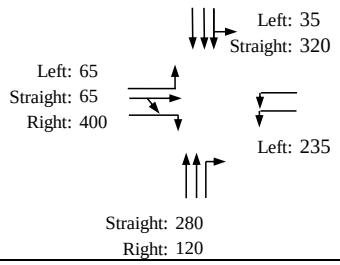
| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 2115 | 2115 | 1960 | 1960 | 65 | 0.033 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 73% | 2255 | 4510 | 2140 | 4100 | 243 | 0.113 | 0.113 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 2255 | 0 | 1960 | 0 | 222 | 0.113 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 1915 | 3970 | 1665 | 3505 | 112 | 0.067 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 2055 | 0 | 1840 | 0 | 123 | 0.067 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 1915 | 3970 | 1915 | 3970 | 135 | 0.071 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 145 | 0.071 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 2055 | 2055 | 1855 | 1855 | 120 | 0.065 | 0.065 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 31% | 1915 | 6025 | 1890 | 6000 | 112 | 0.059 | 0.059 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 122 | 0.059 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 122 | 0.059 | |

Pedestrian Phase

| | | | |
|---|---|---|---|
| 7p | A,B,D | green time =50Gm+08Fm=58s | |
| 8p | B,C,D | green time =49Gm+08Fm=57s | |
| 9p | B,C,D | green time =49Gm+08Fm=57s | |
| 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr)

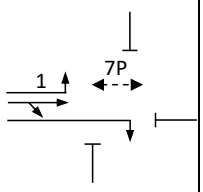



A.M. Check Phase

| | |
|---|---|
| εy | 0.237 |
| L (sec) | 40 |
| C (sec) | 90 |
| y pract. | 0.500 |
| R.C. (%) | 111% |

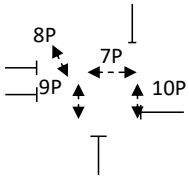
Stage / Phase Diagrams

Stage A



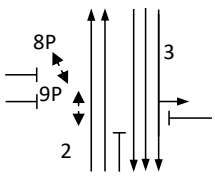

I/G = 5s

Stage B All PED. (25s)



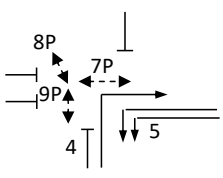

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**

Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 2105 | 0 | 1870 | 0 | 80 | 0.043 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 3975 | 80 | 0.038 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 200 | 0.110 | 0.110 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 1945 | 6135 | 1770 | 5890 | 191 | 0.108 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 48% | 2085 | 0 | 2015 | 0 | 217 | 0.108 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 227 | 0.108 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 4170 | 2085 | 4170 | 308 | 0.147 | 0.147 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 0 | 2085 | 0 | 308 | 0.147 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 40 | 0.021 | |

Notes:

Traffic Flow (pcu / hr)

Right: 40
Straight: 615
Left: free flow

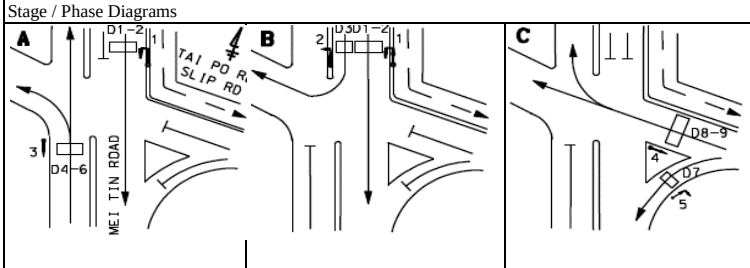
Right: 80
Straight: 80
Left: 200

Left: 295
Straight: 340

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.257 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 211% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 6s | I/G = 7s | | |
|---|---|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

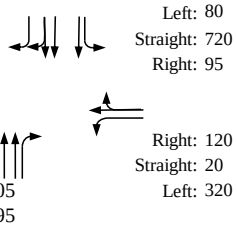
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) Peak Hour | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) Peak Hour | Total Revised Saturation Flow (pcu/hr) Peak Hour | Peak Hour Flow (pcu/hr) | Peak Hour y Value | Peak Hour Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 80 | 0.044 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 8420 | 2105 | 8300 | 240 | 0.114 | 0.114 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 240 | 0.114 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 2105 | 0 | 2105 | 0 | 240 | 0.114 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 2105 | 0 | 1985 | 0 | 95 | 0.048 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 224 | 0.114 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 240 | 0.114 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 240 | 0.114 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 495 | 0.261 | 0.261 |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 1965 | 1965 | 1890 | 1890 | 320 | 0.169 | 0.169 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 86% | 2105 | 2105 | 2000 | 2000 | 140 | 0.070 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

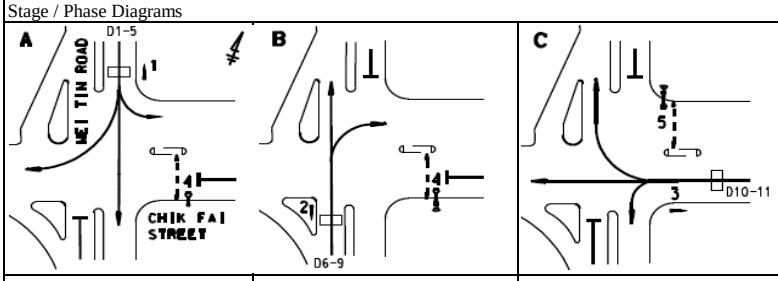
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.544 |
| L (sec) | 14 |
| C (sec) | 90 |
| y pract. | 0.760 |
| R.C. (%) | 40% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**

Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 2065 | 2065 | 2005 | 2005 | 345 | 0.172 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 137 | 0.070 | 0.070 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 147 | 0.070 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 147 | 0.070 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6315 | 2105 | 6315 | 175 | 0.083 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 175 | 0.083 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 175 | 0.083 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 247 | 0.124 | 0.124 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 243 | 0.124 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 1965 | 4120 | 1830 | 3865 | 225 | 0.123 | 0.123 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 2155 | 0 | 2035 | 0 | 250 | 0.123 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 1965 | 3930 | 1855 | 3685 | 131 | 0.071 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 1965 | 0 | 1830 | 0 | 129 | 0.071 | |

| | | | | |
|---|---|---|---|---|
| Pedestrian Phase | | P1 | A | green time =06Gm+15Fm=21s |
| | | P2 | B | green time =17Gm+07Fm=24s |
| | | P3 | B, C | green time =27Gm+09Fm=36s |
| | | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr)

Left: 345
Straight: 430

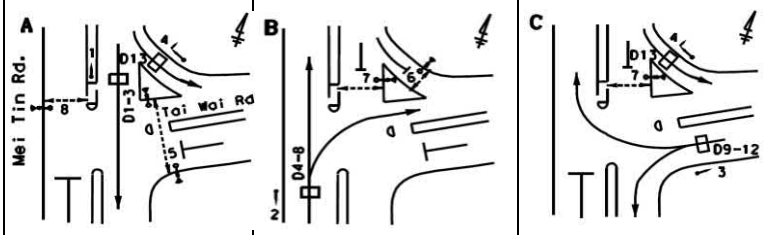
Right: 260
Left: 475

Straight: 525
Right: 490

A.M. Check Phase

| | |
|---|---|
| εy | 0.317 |
| L (sec) | 12 |
| C (sec) | 90 |
| y pract. | 0.780 |
| R.C. (%) | 146% |

Stage / Phase Diagrams




| | | |
|---|---|---|
| I/G = 5s | I/G = 5s | I/G = 5s |

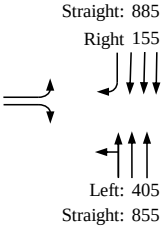
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 2105 | 2105 | 1915 | 1915 | 155 | 0.081 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6175 | 2105 | 6175 | 302 | 0.143 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 302 | 0.143 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 1965 | 0 | 1965 | 0 | 282 | 0.143 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 6175 | 1785 | 5995 | 405 | 0.227 | 0.227 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 428 | 0.203 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 428 | 0.203 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 350 | 0.196 | 0.196 |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 164 | 0.082 | |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 161 | 0.082 | |

Notes:

Traffic Flow (pcu / hr)

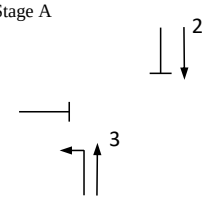



A.M. Check Phase

| | |
|---|---|
| εy | 0.423 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 89% |

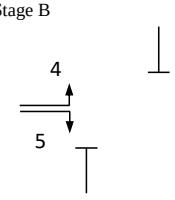
Stage / Phase Diagrams

Stage A



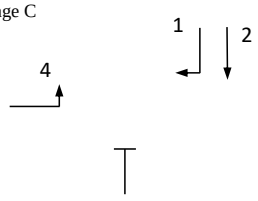

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 15 | 0.008 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 4210 | 195 | 0.093 | 0.093 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 195 | 0.093 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 445 | 0.249 | 0.249 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 2105 | 4070 | 1960 | 3745 | 73 | 0.037 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 1965 | 0 | 1785 | 0 | 67 | 0.037 | |
| Pedestrian Phase | | | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | |
| | | | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr)

Left: 15
Straight: 390

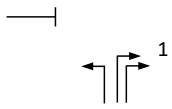
Right: 140
Left: 445

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.342 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 58% |

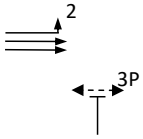
Stage / Phase Diagrams

A



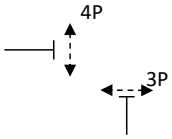

I/G = 3s

B




I/G = 6s

C




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 50 | 0.027 | | 55 | 0.030 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 92% | 81% | 2255 | 4510 | 2110 | 2125 | 4070 | 4085 | 435 | 0.206 | 0.206 | 268 | 0.126 | 0.126 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 100% | 2255 | 0 | 1960 | 1960 | 0 | 0 | 405 | 0.206 | | 247 | 0.126 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 100% | 1915 | 3970 | 1665 | 1665 | 3505 | 3505 | 169 | 0.101 | | 116 | 0.070 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 100% | 2055 | 0 | 1840 | 1840 | 0 | 0 | 186 | 0.101 | | 129 | 0.070 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 0% | 1915 | 3970 | 1915 | 1915 | 3970 | 3970 | 121 | 0.063 | | 224 | 0.117 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 129 | 0.063 | | 241 | 0.117 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 100% | 2055 | 2055 | 1855 | 1855 | 1855 | 1855 | 140 | 0.075 | 0.075 | 165 | 0.089 | 0.089 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 15% | 63% | 1915 | 6025 | 1905 | 1870 | 6015 | 5980 | 195 | 0.102 | 0.102 | 127 | 0.068 | 0.068 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 210 | 0.102 | | 139 | 0.068 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 210 | 0.102 | | 139 | 0.068 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | 7p | A,B,D | green time =50Gm+08Fm=58s |
| | 8p | B,C,D | green time =49Gm+08Fm=57s |
| | 9p | B,C,D | green time =49Gm+08Fm=57s |
| | 10p | B | green time =17Gm+08Fm=25s |

Notes:

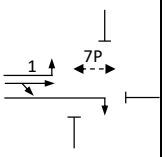
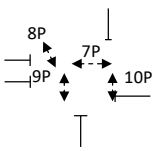
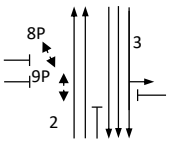
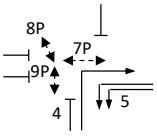
Traffic Flow (pcu / hr) AM(PM)

Left: 30(80)
Straight: 585(325)
Left: 50(55)
Straight: 35(50)
Right: 805(465)
Left: 355(245)
Straight: 250(465)
Right: 140(165)

| A.M. Check Phase | |
|---|---|
| εy | 0.384 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 56% |

| P.M. Check Phase | |
|---|---|
| εy | 0.283 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 112% |

Stage / Phase Diagrams

| Stage A | Stage B All PED. (25s) | Stage C | Stage D |
|---|---|---|---|
|   |   |   |   |
| I/G = 5s | I/G = 4s | I/G = 3s | I/G = 6s |

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 67% | 100% | 2105 | 0 | 1940 | 1870 | 0 | 0 | 82 | 0.042 | | 125 | 0.067 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4045 | 3975 | 88 | 0.042 | | 115 | 0.055 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 250 | 0.137 | 0.137 | 580 | 0.319 | 0.319 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 100% | 1945 | 6135 | 1770 | 1770 | 5870 | 5855 | 306 | 0.173 | | 334 | 0.189 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 61% | 70% | 2085 | 0 | 1995 | 1980 | 0 | 0 | 345 | 0.173 | | 374 | 0.189 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 364 | 0.173 | | 397 | 0.189 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 4170 | 2085 | 2085 | 4170 | 4170 | 638 | 0.306 | 0.306 | 383 | 0.183 | 0.183 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 0 | 2085 | 2085 | 0 | 0 | 638 | 0.306 | | 383 | 0.183 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 90 | 0.047 | | 80 | 0.042 | |

Notes:

Traffic Flow (pcu / hr)

Right: 90(80)
Straight: 1275(765)
Left: free flow

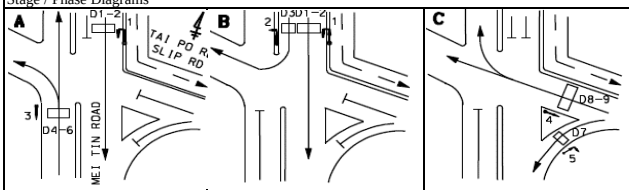
Right: 55(125)
Straight: 115(115)
Left: 250(580)

Left: 515(595)
Straight: 500(510)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.443 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 86% |

| P.M. Check Phase | |
|---|---|
| εy | 0.502 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 64% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

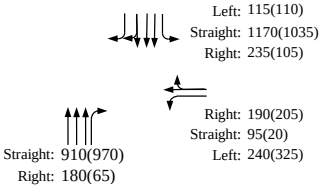
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 115 | 0.063 | | 110 | 0.060 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 8420 | 2105 | 2105 | 8300 | 8300 | 390 | 0.185 | 0.185 | 345 | 0.164 | 0.164 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 390 | 0.185 | | 345 | 0.164 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 390 | 0.185 | | 345 | 0.164 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 0 | 1985 | 1985 | 0 | 0 | 235 | 0.118 | | 105 | 0.053 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 290 | 0.147 | 0.147 | 309 | 0.157 | 0.157 |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 310 | 0.147 | | 331 | 0.157 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 310 | 0.147 | | 331 | 0.157 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 180 | 0.095 | | 65 | 0.034 | |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1890 | 1890 | 1890 | 1890 | 240 | 0.127 | | 325 | 0.172 | 0.172 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 67% | 91% | 2105 | 2105 | 2025 | 1995 | 2025 | 1995 | 285 | 0.141 | 0.141 | 225 | 0.113 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

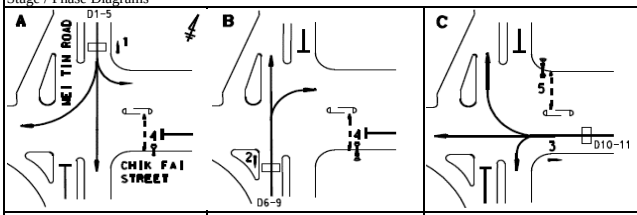
Traffic Flow (pcu / hr) AM(PM)




| A.M. Check Phase | |
|---|---|
| εy | 0.473 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 68% |

| P.M. Check Phase | |
|---|---|
| εy | 0.493 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 61% |

Stage / Phase Diagrams




| I/G = 6s | I/G = 6s | I/G = 5s |
|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 100% | 2065 | 2065 | 2005 | 2005 | 2005 | 2005 | 460 | 0.229 | | 785 | 0.392 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 237 | 0.121 | 0.121 | 169 | 0.086 | 0.086 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 254 | 0.121 | | 181 | 0.086 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 254 | 0.121 | | 181 | 0.086 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6315 | 2105 | 2105 | 6315 | 6315 | 152 | 0.072 | | 160 | 0.076 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 152 | 0.072 | | 160 | 0.076 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 152 | 0.072 | | 160 | 0.076 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 279 | 0.141 | 0.141 | 226 | 0.114 | 0.114 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 276 | 0.141 | | 224 | 0.114 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 100% | 1965 | 4120 | 1830 | 1830 | 3865 | 3865 | 215 | 0.118 | 0.118 | 220 | 0.120 | 0.120 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 100% | 2155 | 0 | 2035 | 2035 | 0 | 0 | 240 | 0.118 | | 245 | 0.120 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 100% | 1965 | 3930 | 1855 | 1855 | 3685 | 3685 | 146 | 0.079 | | 204 | 0.110 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 100% | 1965 | 0 | 1830 | 1830 | 0 | 0 | 144 | 0.079 | | 201 | 0.110 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | P1 | A | green time =06Gm+15Fm=21s |
| | P2 | B | green time =17Gm+07Fm=24s |
| | P3 | B, C | green time =27Gm+09Fm=36s |
| | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

Left: 460(785)
Straight: 745(530)

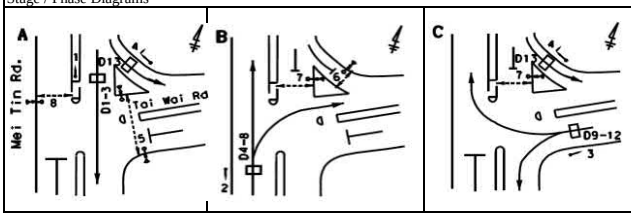
Right: 290(405)
Left: 455(465)

Straight: 455(480)
Right: 555(450)

| A.M. Check Phase | |
|---|---|
| εy | 0.379 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 114% |

| P.M. Check Phase | |
|---|---|
| εy | 0.320 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 153% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s |
|---|---|---|

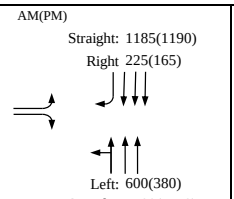
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 100% | 2105 | 2105 | 1915 | 1915 | 1915 | 1915 | 225 | 0.117 | 0.117 | 165 | 0.086 | 0.086 |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6175 | 2105 | 2105 | 6175 | 6175 | 404 | 0.192 | | 406 | 0.193 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 404 | 0.192 | | 406 | 0.193 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 0 | 1965 | 1965 | 0 | 0 | 377 | 0.192 | | 379 | 0.193 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 79% | 1965 | 6175 | 1785 | 1820 | 5995 | 6030 | 600 | 0.336 | 0.336 | 483 | 0.266 | 0.266 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 600 | 0.285 | | 558 | 0.265 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 600 | 0.285 | | 558 | 0.265 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 295 | 0.165 | | 340 | 0.190 | |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 128 | 0.065 | 0.065 | 179 | 0.090 | 0.090 |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 127 | 0.065 | | 176 | 0.090 | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

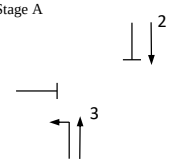



| A.M. Check Phase | |
|---|---|
| εy | 0.518 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 43% |

| P.M. Check Phase | |
|---|---|
| εy | 0.442 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 68% |

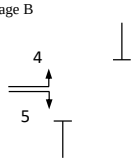
Stage / Phase Diagrams

Stage A



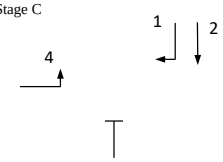

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 REFERENCE TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 50 | 0.028 | | 55 | 0.031 | |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4210 | 4210 | 325 | 0.154 | 0.154 | 185 | 0.088 | 0.088 |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 325 | 0.154 | | 185 | 0.088 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 480 | 0.269 | 0.269 | 595 | 0.333 | 0.333 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 4070 | 1960 | 1960 | 3745 | 3745 | 126 | 0.064 | | 102 | 0.052 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 100% | 1965 | 0 | 1785 | 1785 | 0 | 0 | 114 | 0.064 | | 93 | 0.052 | |
| Pedestrian Phase | | ⇢ | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | | | | | | | |
| | | ⇢ | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | | | | | | | |

Notes:

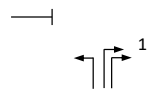
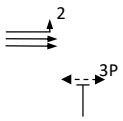
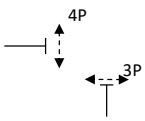
Traffic Flow (pcu / hr) AM(PM)

Left: 50(55)
Straight: 650(370)
Right: 240(195)
Left: 480(595)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.423 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 28% |

| P.M. Check Phase | |
|---|---|
| εy | 0.421 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 28% |

Stage / Phase Diagrams

| Stage A | Stage B | Stage C |
|---|---|---|
|   |   |   |
| I/G = 3s | I/G = 6s | I/G = 5s |

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

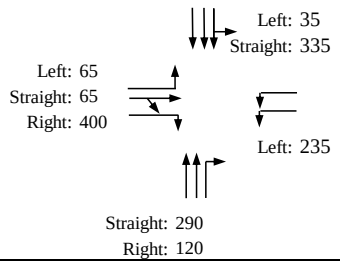
Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | | 1 | A | 5.0 | 19 | 0 | 1 | 100% | 2115 | 2115 | 1960 | 1960 | 65 | 0.033 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 73% | 2255 | 4510 | 2140 | 4100 | 243 | 0.113 | 0.113 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 2255 | 0 | 1960 | 0 | 222 | 0.113 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 1915 | 3970 | 1665 | 3505 | 112 | 0.067 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 2055 | 0 | 1840 | 0 | 123 | 0.067 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 1915 | 3970 | 1915 | 3970 | 140 | 0.073 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 150 | 0.073 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 2055 | 2055 | 1855 | 1855 | 120 | 0.065 | 0.065 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 30% | 1915 | 6025 | 1895 | 6005 | 117 | 0.062 | 0.062 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 127 | 0.062 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 2055 | 0 | 2055 | 0 | 127 | 0.062 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | 7p | A,B,D | green time =50Gm+08Fm=58s | |
| | 8p | B,C,D | green time =49Gm+08Fm=57s | |
| | 9p | B,C,D | green time =49Gm+08Fm=57s | |
| | 10p | B | green time =17Gm+08Fm=25s | |

Notes:

Traffic Flow (pcu / hr)

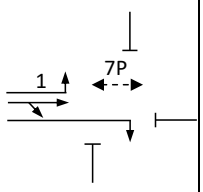



A.M. Check Phase

| | |
|---|---|
| εy | 0.240 |
| L (sec) | 40 |
| C (sec) | 90 |
| y pract. | 0.500 |
| R.C. (%) | 108% |

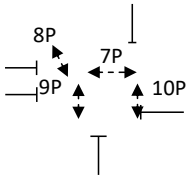
Stage / Phase Diagrams

Stage A



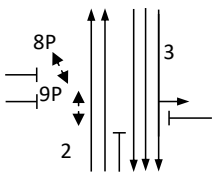

I/G = 5s

Stage B All PED. (25s)



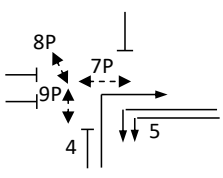

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

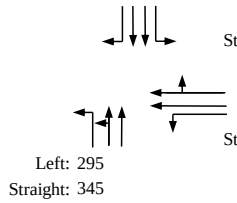
Junction: **(B) Tsing Sha Highway/ Mei Tin Road**

Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 100% | 2105 | 0 | 1870 | 0 | 85 | 0.045 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 3975 | 80 | 0.038 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 200 | 0.110 | 0.110 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 1945 | 6135 | 1770 | 5890 | 192 | 0.109 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 47% | 2085 | 0 | 2015 | 0 | 219 | 0.109 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 229 | 0.109 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 4170 | 2085 | 4170 | 315 | 0.151 | 0.151 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 2085 | 0 | 2085 | 0 | 315 | 0.151 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 40 | 0.021 | |

Notes:

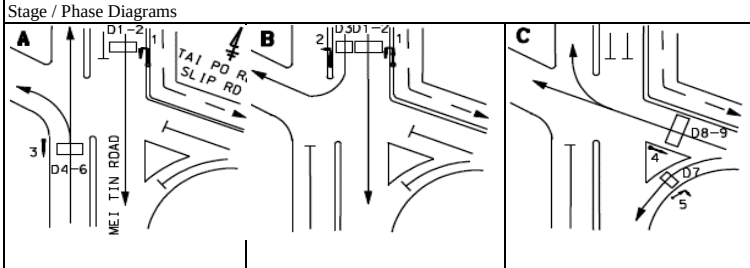
Traffic Flow (pcu / hr)




Peak Hour Check Phase

| | |
|---|---|
| εy | 0.261 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 207% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 1965 | 1965 | 1820 | 1820 | 80 | 0.044 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 8420 | 2105 | 8300 | 242 | 0.115 | 0.115 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 242 | 0.115 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 2105 | 0 | 2105 | 0 | 242 | 0.115 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 2105 | 0 | 1985 | 0 | 105 | 0.053 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 226 | 0.115 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 242 | 0.115 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 242 | 0.115 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 2105 | 2105 | 1900 | 1900 | 495 | 0.261 | 0.261 |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 1965 | 1965 | 1890 | 1890 | 320 | 0.169 | 0.169 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 86% | 2105 | 2105 | 2000 | 2000 | 140 | 0.070 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

Traffic Flow (pcu / hr)



Left: 80
Straight: 725
Right: 105



Right: 120
Straight: 20
Left: 320

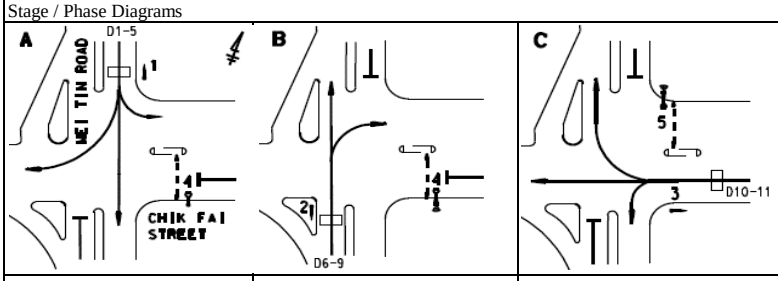


Straight: 710
Right: 495

A.M. Check Phase

| | |
|---|---|
| εy | 0.545 |
| L (sec) | 14 |
| C (sec) | 90 |
| y pract. | 0.760 |
| R.C. (%) | 40% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**

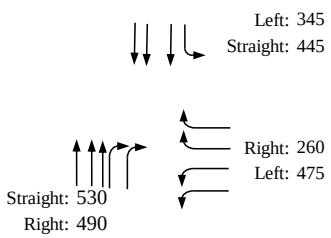
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 2065 | 2065 | 2005 | 2005 | 345 | 0.172 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 1965 | 6175 | 1965 | 6175 | 142 | 0.072 | 0.072 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 152 | 0.072 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 152 | 0.072 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6315 | 2105 | 6315 | 177 | 0.084 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 177 | 0.084 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 177 | 0.084 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 247 | 0.124 | 0.124 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 243 | 0.124 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 1965 | 4120 | 1830 | 3865 | 225 | 0.123 | 0.123 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 2155 | 0 | 2035 | 0 | 250 | 0.123 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 1965 | 3930 | 1855 | 3685 | 131 | 0.071 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 1965 | 0 | 1830 | 0 | 129 | 0.071 | |

| Pedestrian Phase | | | | |
|---|---|---|---|---|
| | P1 | A | green time =06Gm+15Fm=21s | |
| | P2 | B | green time =17Gm+07Fm=24s | |
| | P3 | B, C | green time =27Gm+09Fm=36s | |
| | P4 | A | green time =05Gm+10Fm=15s | |

Notes:

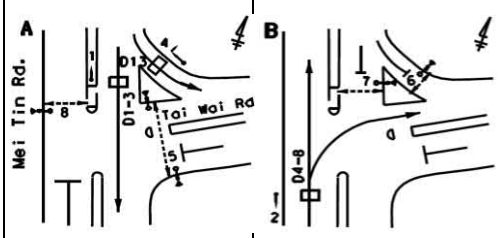
Traffic Flow (pcu / hr)




A.M. Check Phase

| | |
|---|---|
| εy | 0.319 |
| L (sec) | 12 |
| C (sec) | 90 |
| y pract. | 0.780 |
| R.C. (%) | 144% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s | | |
|---|---|---|---|---|

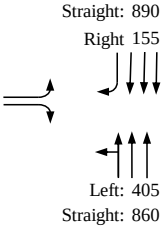
**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | Total Revised Saturation Flow (pcu/hr) | Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | Peak Hour | | | Peak Hour | Peak Hour | Flow (pcu/hr) | y Value | Critical y |
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 2105 | 2105 | 1915 | 1915 | 155 | 0.081 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 6175 | 2105 | 6175 | 303 | 0.144 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 303 | 0.144 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 1965 | 0 | 1965 | 0 | 283 | 0.144 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 6175 | 1785 | 5995 | 405 | 0.227 | 0.227 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 430 | 0.204 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 430 | 0.204 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 350 | 0.196 | 0.196 |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 2105 | 4210 | 1985 | 3945 | 164 | 0.082 | |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 2105 | 0 | 1960 | 0 | 161 | 0.082 | |

Notes:

Traffic Flow (pcu / hr)

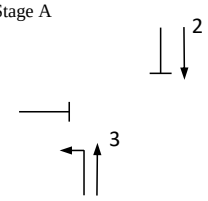



A.M. Check Phase

| | |
|---|---|
| εy | 0.423 |
| L (sec) | 10 |
| C (sec) | 90 |
| y pract. | 0.800 |
| R.C. (%) | 89% |

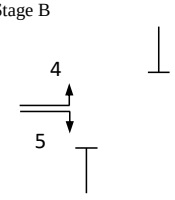
Stage / Phase Diagrams

Stage A



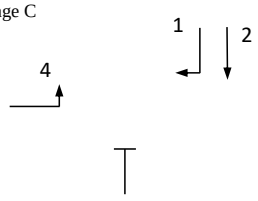

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) Peak Hour | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) Peak Hour | Total Revised Saturation Flow (pcu/hr) Peak Hour | Peak Hour Flow (pcu/hr) | Peak Hour y Value | Peak Hour Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 15 | 0.008 | |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 4210 | 2105 | 4210 | 195 | 0.093 | 0.093 |
| | E | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 2105 | 0 | 2105 | 0 | 195 | 0.093 | |
| Mei Fai Street | N | | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 1965 | 1965 | 1785 | 1785 | 445 | 0.249 | 0.249 |
| | N | | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 2105 | 4070 | 1960 | 3745 | 73 | 0.037 | |
| | N | | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 1965 | 0 | 1785 | 0 | 67 | 0.037 | |
| Pedestrian Phase | | | 3p | B,C | Min. green time =11Gm+11Fm=22s | | | | | | | | | | | |
| | | | 4p | C | Min. green time =11Gm+13Fm=24s | | | | | | | | | | | |

Notes:

Traffic Flow (pcu / hr)

Left: 15
Straight: 390

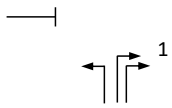
Right: 140
Left: 445

Peak Hour Check Phase

| | |
|---|---|
| εy | 0.342 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 58% |

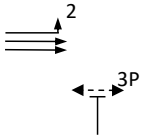
Stage / Phase Diagrams

A



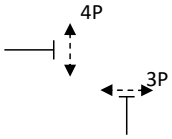

I/G = 3s

B




I/G = 6s

C




I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

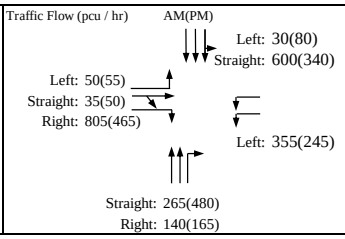
Junction: **(A) Heung Fan Liu Street/ Mei Tin Road**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heung Fan Liu Street | E | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 50 | 0.027 | | 55 | 0.030 | |
| | E | | 1 | A | 5.0 | 0 | 20 | 0 | 92% | 81% | 2255 | 4510 | 2110 | 2125 | 4070 | 4085 | 435 | 0.206 | 0.206 | 268 | 0.126 | 0.126 |
| | E | | 1 | A | 5.0 | 0 | 10 | 0 | 100% | 100% | 2255 | 0 | 1960 | 1960 | 0 | 0 | 405 | 0.206 | | 247 | 0.126 | |
| Heung Fan Liu Street | W | | 5 | D | 3.0 | 10 | 0 | 1 | 100% | 100% | 1915 | 3970 | 1665 | 1665 | 3505 | 3505 | 169 | 0.101 | | 116 | 0.070 | |
| | W | | 5 | D | 3.0 | 13 | 0 | 0 | 100% | 100% | 2055 | 0 | 1840 | 1840 | 0 | 0 | 186 | 0.101 | | 129 | 0.070 | |
| Mei Tin Road | N | | 2 | C,D | 3.0 | 0 | 0 | 1 | 0% | 0% | 1915 | 3970 | 1915 | 1915 | 3970 | 3970 | 128 | 0.067 | | 232 | 0.121 | |
| | N | | 2 | C,D | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 137 | 0.067 | | 248 | 0.121 | |
| | N | | 4 | D | 3.0 | 0 | 14 | 0 | 100% | 100% | 2055 | 2055 | 1855 | 1855 | 1855 | 1855 | 140 | 0.075 | 0.075 | 165 | 0.089 | 0.089 |
| Mei Tin Road | S | | 3 | C | 3.0 | 38 | 0 | 1 | 15% | 61% | 1915 | 6025 | 1905 | 1870 | 6015 | 5980 | 199 | 0.105 | 0.105 | 131 | 0.070 | 0.070 |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 215 | 0.105 | | 144 | 0.070 | |
| | S | | 3 | C | 3.0 | 0 | 0 | 0 | 0% | 0% | 2055 | 0 | 2055 | 2055 | 0 | 0 | 215 | 0.105 | | 144 | 0.070 | |

| | | | |
|---|---|---|---|
| Pedestrian Phase | 7p | A,B,D | green time =50Gm+08Fm=58s |
| | 8p | B,C,D | green time =49Gm+08Fm=57s |
| | 9p | B,C,D | green time =49Gm+08Fm=57s |
| | 10p | B | green time =17Gm+08Fm=25s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

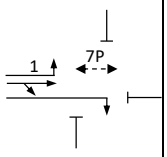



| A.M. Check Phase | |
|---|---|
| εy | 0.387 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 55% |

| P.M. Check Phase | |
|---|---|
| εy | 0.285 |
| L (sec) | 40 |
| C (sec) | 120 |
| y pract. | 0.600 |
| R.C. (%) | 110% |

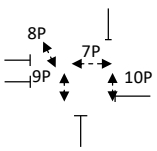
Stage / Phase Diagrams

Stage A



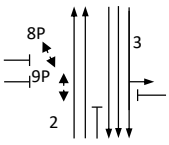

I/G = 5s

Stage B All PED. (25s)



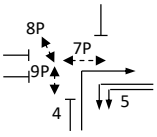

I/G = 4s

Stage C




I/G = 3s

Stage D




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(B) Tsing Sha Highway/ Mei Tin Road**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tsing Sha Highway | W | | 4 | C | 3.5 | 0 | 12 | 0 | 72% | 100% | 2105 | 0 | 1930 | 1870 | 0 | 0 | 84 | 0.043 | | 130 | 0.070 | |
| | W | | 4 | C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4035 | 3975 | 91 | 0.043 | | 115 | 0.055 | |
| | W | | 5 | C | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 250 | 0.137 | 0.137 | 580 | 0.319 | 0.319 |
| Mei Tin Road | N | | 3 | A | 3.3 | 15 | 0 | 1 | 100% | 100% | 1945 | 6135 | 1770 | 1770 | 5870 | 5860 | 309 | 0.175 | | 337 | 0.190 | |
| | N | | 3 | A | 3.3 | 20 | 0 | 0 | 59% | 68% | 2085 | 0 | 1995 | 1985 | 0 | 0 | 349 | 0.175 | | 377 | 0.190 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 367 | 0.175 | | 401 | 0.190 | |
| Mei Tin Road | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 4170 | 2085 | 2085 | 4170 | 4170 | 645 | 0.309 | 0.309 | 390 | 0.187 | 0.187 |
| | S | | 1 | A,B | 3.3 | 0 | 0 | 0 | 0% | 0% | 2085 | 0 | 2085 | 2085 | 0 | 0 | 645 | 0.309 | | 390 | 0.187 | |
| | S | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 90 | 0.047 | | 80 | 0.042 | |

Notes:

Traffic Flow (pcu / hr)

Right: 90(80)
Straight: 1290(780)
Left: free flow

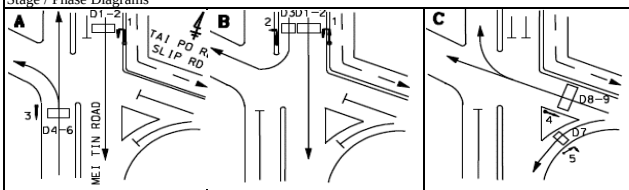
Right: 60(130)
Straight: 115(115)
Left: 250(580)

Left: 515(595)
Straight: 510(520)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.447 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 85% |

| P.M. Check Phase | |
|---|---|
| εy | 0.506 |
| L (sec) | 10 |
| C (sec) | 120 |
| y pract. | 0.825 |
| R.C. (%) | 63% |

Stage / Phase Diagrams




I/G = 5s | I/G = 6s | I/G = 7s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

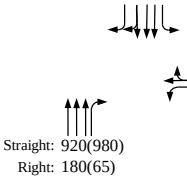
Junction: **(C) Mei Tin Road/ Chik Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | A | 3.5 | 19 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1820 | 1820 | 1820 | 1820 | 115 | 0.063 | | 110 | 0.060 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 8420 | 2105 | 2105 | 8300 | 8300 | 393 | 0.187 | 0.187 | 348 | 0.165 | 0.165 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 393 | 0.187 | | 348 | 0.165 | |
| | S | | 1 | A | 3.5 | 0 | 28 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 393 | 0.187 | | 348 | 0.165 | |
| | S | | 1 | A | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 0 | 1985 | 1985 | 0 | 0 | 240 | 0.121 | | 110 | 0.055 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 293 | 0.149 | 0.149 | 312 | 0.159 | 0.159 |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 314 | 0.149 | | 334 | 0.159 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 314 | 0.149 | | 334 | 0.159 | |
| | N | | 2 | B | 3.5 | 0 | 14 | 0 | 100% | 100% | 2105 | 2105 | 1900 | 1900 | 1900 | 1900 | 180 | 0.095 | | 65 | 0.034 | |
| Chik Fai Street | W | | 3 | C | 3.5 | 38 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1890 | 1890 | 1890 | 1890 | 240 | 0.127 | | 325 | 0.172 | 0.172 |
| | W | | 3 | C | 3.5 | 0 | 25 | 0 | 67% | 91% | 2105 | 2105 | 2025 | 1995 | 2025 | 1995 | 285 | 0.141 | 0.141 | 225 | 0.113 | |

Pedestrian Phase
4p A,B green time =52Gm+08Fm=60s
5p C green time =07D+15Gm+08Fm=30s

Notes:

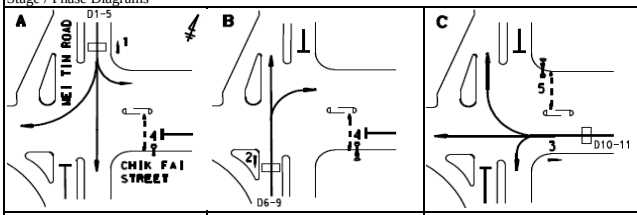
Traffic Flow (pcu / hr) AM(PM)




| A.M. Check Phase | |
|---|---|
| εy | 0.477 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 67% |

| P.M. Check Phase | |
|---|---|
| εy | 0.496 |
| L (sec) | 14 |
| C (sec) | 120 |
| y pract. | 0.795 |
| R.C. (%) | 60% |

Stage / Phase Diagrams




I/G = 6s | I/G = 6s | I/G = 5s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(E) Mei Tin Road/ Tai Po Road (Tai Wai Section)**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 4 | A, C | 4.5 | 50 | 0 | 1 | 100% | 100% | 2065 | 2065 | 2005 | 2005 | 2005 | 2005 | 460 | 0.229 | | 785 | 0.392 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 6175 | 1965 | 1965 | 6175 | 6175 | 240 | 0.122 | 0.122 | 172 | 0.087 | 0.087 |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 184 | 0.087 | |
| | S | | 1 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 257 | 0.122 | | 184 | 0.087 | |
| Mei Tin Road | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6315 | 2105 | 2105 | 6315 | 6315 | 155 | 0.074 | | 163 | 0.078 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 155 | 0.074 | | 163 | 0.078 | |
| | N | | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 155 | 0.074 | | 163 | 0.078 | |
| | N | | 2 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 279 | 0.141 | 0.141 | 226 | 0.114 | 0.114 |
| | N | | 2 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 276 | 0.141 | | 224 | 0.114 | |
| Tai Po Road (Tai Wai Section) | W | | 3 | C | 3.5 | 20 | 0 | 1 | 100% | 100% | 1965 | 4120 | 1830 | 1830 | 3865 | 3865 | 215 | 0.118 | 0.118 | 220 | 0.120 | 0.120 |
| | W | | 3 | C | 4.0 | 25 | 0 | 0 | 100% | 100% | 2155 | 0 | 2035 | 2035 | 0 | 0 | 240 | 0.118 | | 245 | 0.120 | |
| | W | | 3 | C | 3.5 | 0 | 25 | 1 | 100% | 100% | 1965 | 3930 | 1855 | 1855 | 3685 | 3685 | 146 | 0.079 | | 204 | 0.110 | |
| | W | | 3 | C | 3.5 | 0 | 20 | 1 | 100% | 100% | 1965 | 0 | 1830 | 1830 | 0 | 0 | 144 | 0.079 | | 201 | 0.110 | |

| | | | | |
|---|---|---|---|---|
| Pedestrian Phase | | P1 | A | green time =06Gm+15Fm=21s |
| | | P2 | B | green time =17Gm+07Fm=24s |
| | | P3 | B, C | green time =27Gm+09Fm=36s |
| | | P4 | A | green time =05Gm+10Fm=15s |

Notes:

Traffic Flow (pcu / hr) AM(PM)

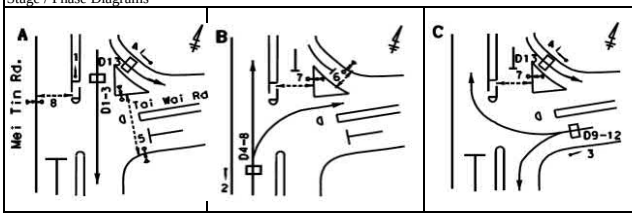
Left: 460(785)
Straight: 755(540)

Right: 290(405)
Left: 455(465)
Straight: 465(490)
Right: 555(450)

| A.M. Check Phase | |
|---|---|
| εy | 0.381 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 113% |

| P.M. Check Phase | |
|---|---|
| εy | 0.322 |
| L (sec) | 12 |
| C (sec) | 120 |
| y pract. | 0.810 |
| R.C. (%) | 152% |

Stage / Phase Diagrams




| I/G = 5s | I/G = 5s | I/G = 5s |
|---|---|---|

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(G) Mei Tin Road/ Chik Wan Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) Left | Radius (m) Right | Nearside 0/1 | Pro. Turning (%) A.M. | Pro. Turning (%) P.M. | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) A.M. | Revised Saturation Flow (pcu/hr) P.M. | Total Revised Saturation Flow (pcu/hr) A.M. | Total Revised Saturation Flow (pcu/hr) P.M. | A.M. Peak Flow (pcu/hr) | A.M. Peak y Value | A.M. Peak Critical y | P.M. Peak Flow (pcu/hr) | P.M. Peak y Value | P.M. Peak Critical y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mei Tin Road | S | | 1 | C | 3.5 | 0 | 15 | 0 | 100% | 100% | 2105 | 2105 | 1915 | 1915 | 1915 | 1915 | 225 | 0.117 | 0.117 | 165 | 0.086 | 0.086 |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 6175 | 2105 | 2105 | 6175 | 6175 | 407 | 0.194 | | 409 | 0.194 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 407 | 0.194 | | 409 | 0.194 | |
| | S | | 2 | A,C | 3.5 | 0 | 0 | 1 | 0% | 0% | 1965 | 0 | 1965 | 1965 | 0 | 0 | 380 | 0.194 | | 382 | 0.194 | |
| Mei Tin Road | N | | 3 | A | 3.5 | 15 | 0 | 1 | 100% | 78% | 1965 | 6175 | 1785 | 1825 | 5995 | 6035 | 600 | 0.336 | 0.336 | 486 | 0.267 | 0.267 |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 605 | 0.287 | | 562 | 0.267 | |
| | N | | 3 | A | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 605 | 0.287 | | 562 | 0.267 | |
| Chik Wan Street | E | | 4 | B,C | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 295 | 0.165 | | 340 | 0.190 | |
| | E | | 5 | B | 3.5 | 0 | 25 | 0 | 100% | 100% | 2105 | 4210 | 1985 | 1985 | 3945 | 3945 | 128 | 0.065 | 0.065 | 179 | 0.090 | 0.090 |
| | E | | 5 | B | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 0 | 1960 | 1960 | 0 | 0 | 127 | 0.065 | | 176 | 0.090 | |

Notes:

Traffic Flow (pcu / hr) AM(PM)

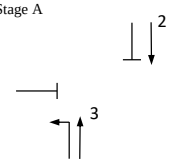
Straight: 1195(1200)
Right 225(165)
Left: 295(340)
Right: 255(355)
Left: 600(380)
Straight: 1210(1230)

| A.M. Check Phase | |
|---|---|
| εy | 0.518 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 43% |

| P.M. Check Phase | |
|---|---|
| εy | 0.443 |
| L (sec) | 16 |
| C (sec) | 90 |
| y pract. | 0.740 |
| R.C. (%) | 67% |

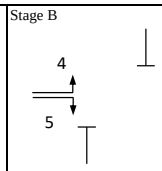
Stage / Phase Diagrams

Stage A



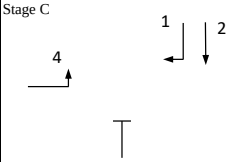

I/G = 6s

Stage B




I/G = 7s

Stage C




I/G = 6s

**TRAFFIC SIGNALS CALCULATION** Job No: 20058HK **CTA Consultants Ltd.**

Junction: **(H) Heung Fan Liu Street/ Mei Fai Street**
Description: **2027 DESIGN TRAFFIC FLOWS**

| Approach | Direction | Movement notation | Phase | Stage | Width (m) | Radius (m) | | Nearside 0/1 | Pro. Turning (%) | | Saturation Flow (pcu/hr) | Total Saturation Flow (pcu/hr) | Revised Saturation Flow (pcu/hr) | | Total Revised Saturation Flow (pcu/hr) | | A.M. Peak | | | P.M. Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Left | Right | | A.M. | P.M. | | | A.M. | P.M. | A.M. | P.M. | Flow (pcu/hr) | y Value | Critical y | Flow (pcu/hr) | y Value | Critical y |
| Heung Fan Liu Street | E | → | 2 | B | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 50 | 0.028 | | 55 | 0.031 | |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 4210 | 2105 | 2105 | 4210 | 4210 | 325 | 0.154 | 0.154 | 185 | 0.088 | 0.088 |
| | E | → | 2 | B | 3.5 | 0 | 0 | 0 | 0% | 0% | 2105 | 0 | 2105 | 2105 | 0 | 0 | 325 | 0.154 | | 185 | 0.088 | |
| Mei Fai Street | N | ↰ | 1 | A | 3.5 | 15 | 0 | 1 | 100% | 100% | 1965 | 1965 | 1785 | 1785 | 1785 | 1785 | 480 | 0.269 | 0.269 | 595 | 0.333 | 0.333 |
| | N | ↱ | 1 | A | 3.5 | 0 | 20 | 0 | 100% | 100% | 2105 | 4070 | 1960 | 1960 | 3745 | 3745 | 126 | 0.064 | | 102 | 0.052 | |
| | N | ↱ | 1 | A | 3.5 | 0 | 15 | 1 | 100% | 100% | 1965 | 0 | 1785 | 1785 | 0 | 0 | 114 | 0.064 | | 93 | 0.052 | |

Pedestrian Phase
3p B,C Min. green time =11Gm+11Fm=22s
4p C Min. green time =11Gm+13Fm=24s

Notes:

Traffic Flow (pcu / hr) AM(PM)

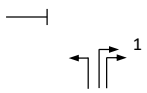
Left: 50(55)
Straight: 650(370)
Right: 240(195)
Left: 480(595)

| Peak Hour Check Phase | |
|---|---|
| εy | 0.423 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 28% |

| P.M. Check Phase | |
|---|---|
| εy | 0.421 |
| L (sec) | 36 |
| C (sec) | 90 |
| y pract. | 0.540 |
| R.C. (%) | 28% |

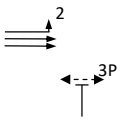
Stage / Phase Diagrams

Stage A



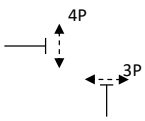

I/G = 3s

Stage B




I/G = 6s

Stage C




I/G = 5s

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction D (CM_p2).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:01:15

» (Default Analysis Set) - 2018 observed traffic flow, Ching Ming Festival Peak Hour
» (Default Analysis Set) - 2027 reference traffic flow, Ching Ming Festival Peak Hour
» (Default Analysis Set) - 2027 design traffic flow, Ching Ming Festival Peak Hour

## Summary of junction performance

| | Ching Ming Festival Peak Hour | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS |
| | A1 - 2018 observed traffic flow | | | |
| Stream B-AC | 0.26 | 9.48 | 0.21 | A |
| Stream C-A | - | - | - | - |
| Stream C-B | 0.01 | 6.46 | 0.01 | A |
| Stream A-B | - | - | - | - |
| Stream A-C | - | - | - | - |
| | A1 - 2027 design traffic flow | | | |
| Stream B-AC | 0.34 | 10.30 | 0.26 | B |
| Stream C-A | - | - | - | - |
| Stream C-B | 0.01 | 6.54 | 0.01 | A |
| Stream A-B | - | - | - | - |
| Stream A-C | - | - | - | - |
| | A1 - 2027 reference traffic flow | | | |
| Stream B-AC | 0.34 | 10.21 | 0.25 | B |
| Stream C-A | - | - | - | - |
| Stream C-B | 0.01 | 6.53 | 0.01 | A |
| Stream A-B | - | - | - | - |
| Stream A-C | - | - | - | - |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour " model duration: 13:30 - 14:30*
*"D2 - 2027 reference traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 14:30*
*"D3 - 2027 design traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 14:30*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:01:14*

## File summary

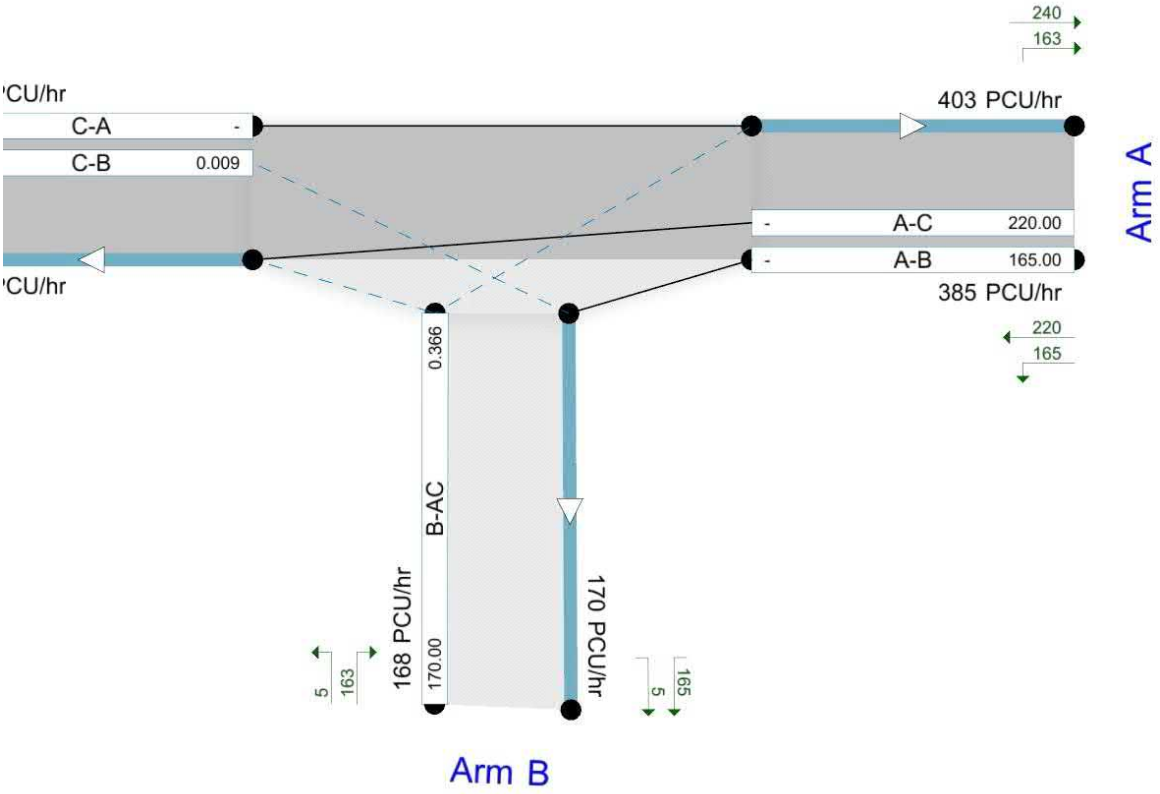
| | |
|---|---|
| **Title** | Tai Wai Temple |
| **Location** | Tai Wai |
| **Site Number** | |
| **Date** | 8/5/2017 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing modelled flow through junction (PCU/hr).
Streams (upstreams) show Total Demand (PCU/hr); Streams (downstreams) show RFC ()
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 "; Demand Set "D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# (Default Analysis Set) - 2018 observed traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 observed traffic flow, Ching Ming Festival Peak Hour | 2018 observed traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 9.34 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 275.00 | 100.000 |
| B | FLAT | ✓ | 100.00 | 100.000 |
| C | FLAT | ✓ | 210.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 85.000 | 190.000 |
| | B | 95.000 | 0.000 | 5.000 |
| | C | 205.000 | 5.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.31 | 0.69 |
| | B | 0.95 | 0.00 | 0.05 |
| | C | 0.98 | 0.02 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.21 | 9.48 | 0.26 | A |
| C-A | - | - | - | - |
| C-B | 0.01 | 6.46 | 0.01 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 98.96 | 0.00 | 479.70 | 0.208 | 0.26 | 9.430 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 4.96 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 99.99 | 0.00 | 479.69 | 0.208 | 0.26 | 9.480 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 479.69 | 0.208 | 0.26 | 9.480 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 479.69 | 0.208 | 0.26 | 9.480 | A |
| C-A | 205.00 | 205.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 562.43 | 0.009 | 0.01 | 6.457 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 190.00 | 190.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 reference traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Ching Ming Festival Peak Hour | 2027 reference traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 10.06 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| A | A | (untitled) | | Major |
| B | B | (untitled) | | Minor |
| C | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| 1 | B-C | 668.537 | 0.065 | 0.163 | - | - |
| 1 | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 315.00 | 100.000 |
| B | FLAT | ✓ | 120.00 | 100.000 |
| C | FLAT | ✓ | 230.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 105.000 | 210.000 |
| | B | 115.000 | 0.000 | 5.000 |
| | C | 225.000 | 5.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.33 | 0.67 |
| | B | 0.96 | 0.00 | 0.04 |
| | C | 0.98 | 0.02 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

### Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.25 | 10.21 | 0.34 | B |
| C-A | - | - | - | - |
| C-B | 0.01 | 6.53 | 0.01 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 118.66 | 0.00 | 472.50 | 0.254 | 0.34 | 10.136 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 4.96 | 0.00 | 556.55 | 0.009 | 0.01 | 6.526 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 119.99 | 0.00 | 472.49 | 0.254 | 0.34 | 10.212 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 556.55 | 0.009 | 0.01 | 6.526 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 120.00 | 0.00 | 472.49 | 0.254 | 0.34 | 10.212 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 556.55 | 0.009 | 0.01 | 6.526 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 120.00 | 0.00 | 472.49 | 0.254 | 0.34 | 10.212 | B |
| C-A | 225.00 | 225.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 556.55 | 0.009 | 0.01 | 6.526 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 210.00 | 210.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 design traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Ching Ming Festival Peak Hour | 2027 design traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 10.15 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 325.00 | 100.000 |
| B | FLAT | ✓ | 120.00 | 100.000 |
| C | FLAT | ✓ | 245.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 105.000 | 220.000 |
| | B | 115.000 | 0.000 | 5.000 |
| | C | 240.000 | 5.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.32 | 0.68 |
| | B | 0.96 | 0.00 | 0.04 |
| | C | 0.98 | 0.02 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.26 | 10.30 | 0.34 | B |
| C-A | - | - | - | - |
| C-B | 0.01 | 6.54 | 0.01 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 118.65 | 0.00 | 469.54 | 0.256 | 0.34 | 10.222 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 4.96 | 0.00 | 555.07 | 0.009 | 0.01 | 6.543 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 119.99 | 0.00 | 469.53 | 0.256 | 0.34 | 10.299 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 555.07 | 0.009 | 0.01 | 6.543 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 120.00 | 0.00 | 469.53 | 0.256 | 0.34 | 10.299 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 555.07 | 0.009 | 0.01 | 6.543 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

## Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 120.00 | 120.00 | 0.00 | 469.53 | 0.256 | 0.34 | 10.299 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 5.00 | 5.00 | 0.00 | 555.07 | 0.009 | 0.01 | 6.543 | A |
| A-B | 105.00 | 105.00 | 0.00 | - | - | - | - | - |
| A-C | 220.00 | 220.00 | 0.00 | - | - | - | - | - |

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.5.523 [19102,19/06/2015]
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction D (Weekday).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:07:01

» (Default Analysis Set) - 2027 reference traffic flow, Weekday AM Peak Hour
» (Default Analysis Set) - 2027 design traffic flow, Weekday AM Peak Hour
» (Default Analysis Set) - 2027 reference traffic flow, Weekday PM Peak Hour
» (Default Analysis Set) - 2027 design traffic flow, Weekday PM Peak Hour
» (Default Analysis Set) - 2021 observed traffic flow, Weekday AM Peak Hour
» (Default Analysis Set) - 2021 observed traffic flow, Weekday PM Peak Hour

## Summary of junction performance

| | Weekday AM Peak Hour | | | | Weekday PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| | A1 - 2021 observed traffic flow | | | | | | | |
| Stream B-AC | 0.55 | 12.38 | 0.35 | B | 0.28 | 10.10 | 0.22 | B |
| Stream C-A | - | - | - | - | - | - | - | - |
| Stream C-B | 0.00 | 0.00 | 0.00 | A | 0.00 | 0.00 | 0.00 | A |
| Stream A-B | - | - | - | - | - | - | - | - |
| Stream A-C | - | - | - | - | - | - | - | - |
| | A1 - 2027 design traffic flow | | | | | | | |
| Stream B-AC | 0.78 | 14.97 | 0.44 | B | 0.36 | 11.18 | 0.26 | B |
| Stream C-A | - | - | - | - | - | - | - | - |
| Stream C-B | 0.00 | 0.00 | 0.00 | A | 0.00 | 0.00 | 0.00 | A |
| Stream A-B | - | - | - | - | - | - | - | - |
| Stream A-C | - | - | - | - | - | - | - | - |
| | A1 - 2027 reference traffic flow | | | | | | | |
| Stream B-AC | 0.77 | 14.74 | 0.44 | B | 0.35 | 11.05 | 0.26 | B |
| Stream C-A | - | - | - | - | - | - | - | - |
| Stream C-B | 0.00 | 0.00 | 0.00 | A | 0.00 | 0.00 | 0.00 | A |
| Stream A-B | - | - | - | - | - | - | - | - |
| Stream A-C | - | - | - | - | - | - | - | - |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D2 - 2027 reference traffic flow, Weekday AM Peak Hour " model duration: 13:30 - 14:30*
*"D3 - 2027 design traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 14:30*
*"D4 - 2027 reference traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 14:30*
*"D5 - 2027 design traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 14:30*
*"D6 - 2021 observed traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 14:30*
*"D7 - 2021 observed traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 14:30*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:06:59*

## File summary

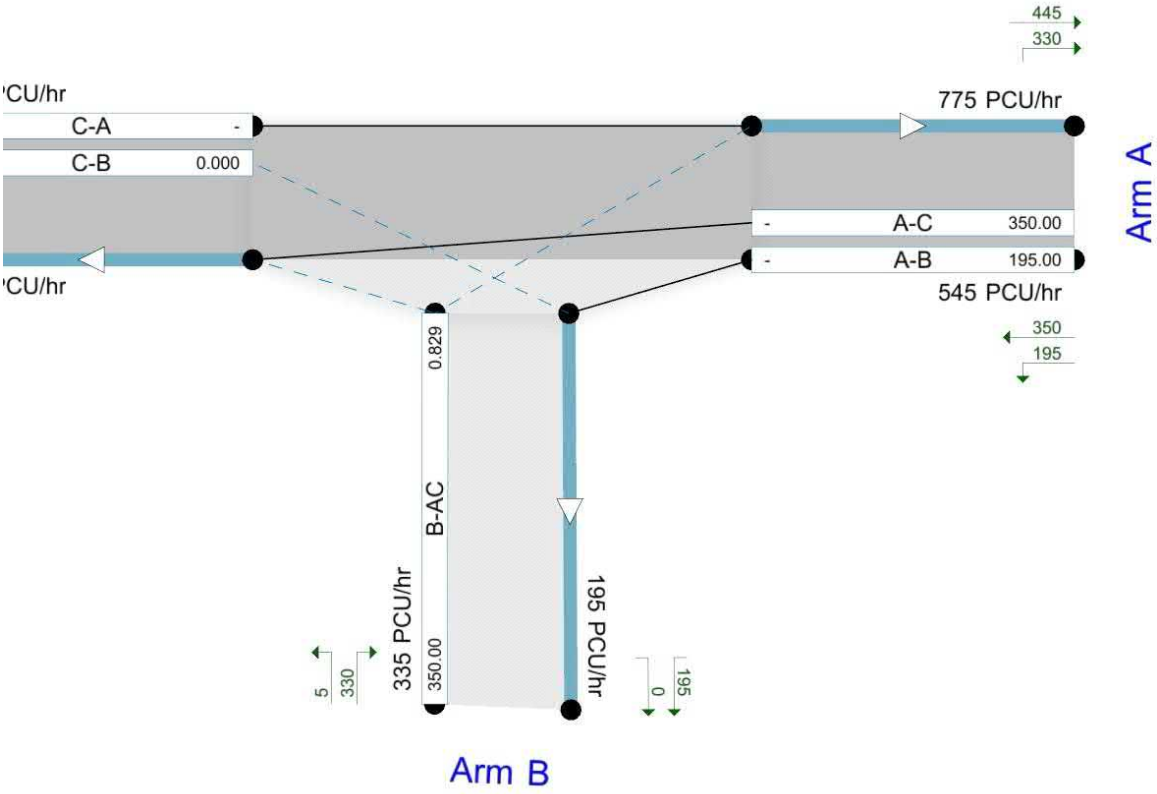
| | |
|---|---|
| **Title** | Tai Wai Temple |
| **Location** | Tai Wai |
| **Site Number** | |
| **Date** | 8/5/2017 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing modelled flow through junction (PCU/hr).
Streams (upstreams) show Total Demand (PCU/hr); Streams (downstreams) show RFC ()
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 "; Demand Set "D2 - 2027 reference traffic flow, Weekday AM Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# (Default Analysis Set) - 2027 reference traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday AM Peak Hour | 2027 reference traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 14.74 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 420.00 | 100.000 |
| B | FLAT | ✓ | 190.00 | 100.000 |
| C | FLAT | ✓ | 430.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 85.000 | 335.000 |
| | B | 185.000 | 0.000 | 5.000 |
| | C | 430.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.20 | 0.80 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.44 | 14.74 | 0.77 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 186.97 | 0.00 | 434.15 | 0.438 | 0.76 | 14.398 | B |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 541.09 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.96 | 0.00 | 434.15 | 0.438 | 0.77 | 14.735 | B |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 541.09 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.99 | 0.00 | 434.15 | 0.438 | 0.77 | 14.741 | B |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 541.09 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.99 | 0.00 | 434.15 | 0.438 | 0.77 | 14.741 | B |
| C-A | 430.00 | 430.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 541.09 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 335.00 | 335.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 design traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday AM Peak Hour | 2027 design traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 14.97 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| A | A | (untitled) | | Major |
| B | B | (untitled) | | Minor |
| C | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| C | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| 1 | B-C | 668.537 | 0.065 | 0.163 | - | - |
| 1 | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 435.00 | 100.000 |
| B | FLAT | ✓ | 190.00 | 100.000 |
| C | FLAT | ✓ | 445.00 | 100.000 |

# Turning Proportions

#### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 85.000 | 350.000 |
| | B | 185.000 | 0.000 | 5.000 |
| | C | 445.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.20 | 0.80 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.44 | 14.97 | 0.78 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 186.93 | 0.00 | 430.41 | 0.441 | 0.77 | 14.610 | B |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.96 | 0.00 | 430.41 | 0.441 | 0.78 | 14.964 | B |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.98 | 0.00 | 430.41 | 0.441 | 0.78 | 14.970 | B |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 190.00 | 189.99 | 0.00 | 430.41 | 0.441 | 0.78 | 14.970 | B |
| C-A | 445.00 | 445.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 85.00 | 85.00 | 0.00 | - | - | - | - | - |
| A-C | 350.00 | 350.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 reference traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday PM Peak Hour | 2027 reference traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 11.05 | B |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 520.00 | 100.000 |
| B | FLAT | ✓ | 115.00 | 100.000 |
| C | FLAT | ✓ | 285.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 150.000 | 370.000 |
| | B | 110.000 | 0.000 | 5.000 |
| | C | 285.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.29 | 0.71 |
| | B | 0.96 | 0.00 | 0.04 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.26 | 11.05 | 0.35 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 113.61 | 0.00 | 440.71 | 0.261 | 0.35 | 10.961 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 526.37 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 114.99 | 0.00 | 440.71 | 0.261 | 0.35 | 11.052 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 526.37 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 115.00 | 0.00 | 440.71 | 0.261 | 0.35 | 11.052 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 526.37 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 115.00 | 0.00 | 440.71 | 0.261 | 0.35 | 11.052 | B |
| C-A | 285.00 | 285.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 526.37 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 370.00 | 370.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2027 design traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday PM Peak Hour | 2027 design traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 11.18 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| 1 | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| 1 | B-C | 668.537 | 0.065 | 0.163 | - | - |
| 1 | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 535.00 | 100.000 |
| B | FLAT | ✓ | 115.00 | 100.000 |
| C | FLAT | ✓ | 300.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 150.000 | 385.000 |
| | B | 110.000 | 0.000 | 5.000 |
| | C | 300.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.28 | 0.72 |
| | B | 0.96 | 0.00 | 0.04 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.26 | 11.18 | 0.36 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 113.59 | 0.00 | 436.98 | 0.263 | 0.35 | 11.086 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.16 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 114.99 | 0.00 | 436.98 | 0.263 | 0.35 | 11.180 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.16 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 115.00 | 0.00 | 436.98 | 0.263 | 0.36 | 11.180 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.16 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 115.00 | 115.00 | 0.00 | 436.98 | 0.263 | 0.36 | 11.180 | B |
| C-A | 300.00 | 300.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 524.16 | 0.000 | 0.00 | 0.000 | A |
| A-B | 150.00 | 150.00 | 0.00 | - | - | - | - | - |
| A-C | 385.00 | 385.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2021 observed traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday AM Peak Hour | 2021 observed traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 12.38 | B |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

## Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

## Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| **A** | FLAT | ✓ | 350.00 | 100.000 |
| **B** | FLAT | ✓ | 160.00 | 100.000 |
| **C** | FLAT | ✓ | 360.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 70.000 | 280.000 |
| | B | 155.000 | 0.000 | 5.000 |
| | C | 360.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.20 | 0.80 |
| | B | 0.97 | 0.00 | 0.03 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

### Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.35 | 12.38 | 0.55 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 157.84 | 0.00 | 450.83 | 0.355 | 0.54 | 12.201 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 159.98 | 0.00 | 450.83 | 0.355 | 0.54 | 12.375 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 159.99 | 0.00 | 450.83 | 0.355 | 0.55 | 12.377 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

### Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 160.00 | 160.00 | 0.00 | 450.83 | 0.355 | 0.55 | 12.377 | B |
| C-A | 360.00 | 360.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 551.39 | 0.000 | 0.00 | 0.000 | A |
| A-B | 70.00 | 70.00 | 0.00 | - | - | - | - | - |
| A-C | 280.00 | 280.00 | 0.00 | - | - | - | - | - |

# (Default Analysis Set) - 2021 observed traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| (Default Analysis Set) | N/A | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday PM Peak Hour | 2021 observed traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 14:30 | 60 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Major Road Direction | Arm Order | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|
| 1 | (untitled) | T-Junction | Two-way | A,B,C | 10.10 | B |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description | Arm Type |
|---|---|---|---|---|
| **A** | A | (untitled) | | Major |
| **B** | B | (untitled) | | Minor |
| **C** | C | (untitled) | | Major |

### Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width For Right Turn (m) | Visibility For Right Turn (m) | Blocks? | Blocking Queue (PCU) |
|---|---|---|---|---|---|---|---|---|
| **C** | 14.50 | | 0.00 | | 2.20 | 50.00 | | |

*Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.*

### Minor Arm Geometry

| Arm | Minor Arm Type | Lane Width (m) | Lane Width (Left) (m) | Lane Width (Right) (m) | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate Flare Length | Flare Length (PCU) | Visibility To Left (m) | Visibility To Right (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B** | One lane | 3.20 | | | | | | | | | | 50 | 50 |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|---|---|---|---|---|---|---|
| **1** | B-A | 528.889 | 0.061 | 0.153 | 0.097 | 0.219 |
| **1** | B-C | 668.537 | 0.065 | 0.163 | - | - |
| **1** | C-B | 602.919 | 0.147 | 0.147 | - | - |

*The slopes and intercepts shown above do NOT include any corrections or adjustments.*

*Streams may be combined, in which case capacity will be adjusted.*

*Values are shown for the first time segment only; they may differ for subsequent time segments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| A | FLAT | ✓ | 435.00 | 100.000 |
| B | FLAT | ✓ | 100.00 | 100.000 |
| C | FLAT | ✓ | 240.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.000 | 125.000 | 310.000 |
| | B | 95.000 | 0.000 | 5.000 |
| | C | 240.000 | 0.000 | 0.000 |

### Turning Proportions (PCU) - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.00 | 0.29 | 0.71 |
| | B | 0.95 | 0.00 | 0.05 |
| | C | 1.00 | 0.00 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 1.000 | 1.000 | 1.000 |
| | B | 1.000 | 1.000 | 1.000 |
| | C | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction 1 (for whole period)

| | | To | | |
|---|---|---|---|---|
| | | A | B | C |
| From | A | 0.0 | 0.0 | 0.0 |
| | B | 0.0 | 0.0 | 0.0 |
| | C | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| B-AC | 0.22 | 10.10 | 0.28 | B |
| C-A | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | A |
| A-B | - | - | - | - |
| A-C | - | - | - | - |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 98.89 | 0.00 | 456.53 | 0.219 | 0.28 | 10.035 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

### Main results: (13:45-14:00)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 99.99 | 0.00 | 456.53 | 0.219 | 0.28 | 10.096 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

### Main results: (14:00-14:15)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 456.53 | 0.219 | 0.28 | 10.096 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

## Main results: (14:15-14:30)

| Stream | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|
| B-AC | 100.00 | 100.00 | 0.00 | 456.53 | 0.219 | 0.28 | 10.096 | B |
| C-A | 240.00 | 240.00 | 0.00 | - | - | - | - | - |
| C-B | 0.00 | 0.00 | 0.00 | 538.88 | 0.000 | 0.00 | 0.000 | A |
| A-B | 125.00 | 125.00 | 0.00 | - | - | - | - | - |
| A-C | 310.00 | 310.00 | 0.00 | - | - | - | - | - |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction F (CM_p2).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:01:49

» 2018 observed traffic flow, Ching Ming Festival Peak Hour
» 2027 reference traffic flow, Ching Ming Festival Peak Hour
» 2027 design traffic flow, Ching Ming Festival Peak Hour

## Summary of junction performance

| | Ching Ming Festival Peak Hour | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS |
| | 2018 observed traffic flow | | | |
| Arm 1 | 0.22 | 1.36 | 0.18 | A |
| Arm 2 | 0.28 | 1.50 | 0.22 | A |
| Arm 3 | 0.51 | 1.64 | 0.34 | A |
| Arm 4 | 0.49 | 1.86 | 0.33 | A |
| | 2027 design traffic flow | | | |
| Arm 1 | 0.47 | 1.75 | 0.32 | A |
| Arm 2 | 0.43 | 1.81 | 0.30 | A |
| Arm 3 | 0.83 | 2.16 | 0.45 | A |
| Arm 4 | 0.86 | 2.55 | 0.46 | A |
| | 2027 reference traffic flow | | | |
| Arm 1 | 0.47 | 1.74 | 0.32 | A |
| Arm 2 | 0.43 | 1.81 | 0.30 | A |
| Arm 3 | 0.83 | 2.16 | 0.45 | A |
| Arm 4 | 0.85 | 2.54 | 0.46 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour " model duration: 13:30 - 15:00*
*"D2 - 2027 reference traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:01:47*

## File summary

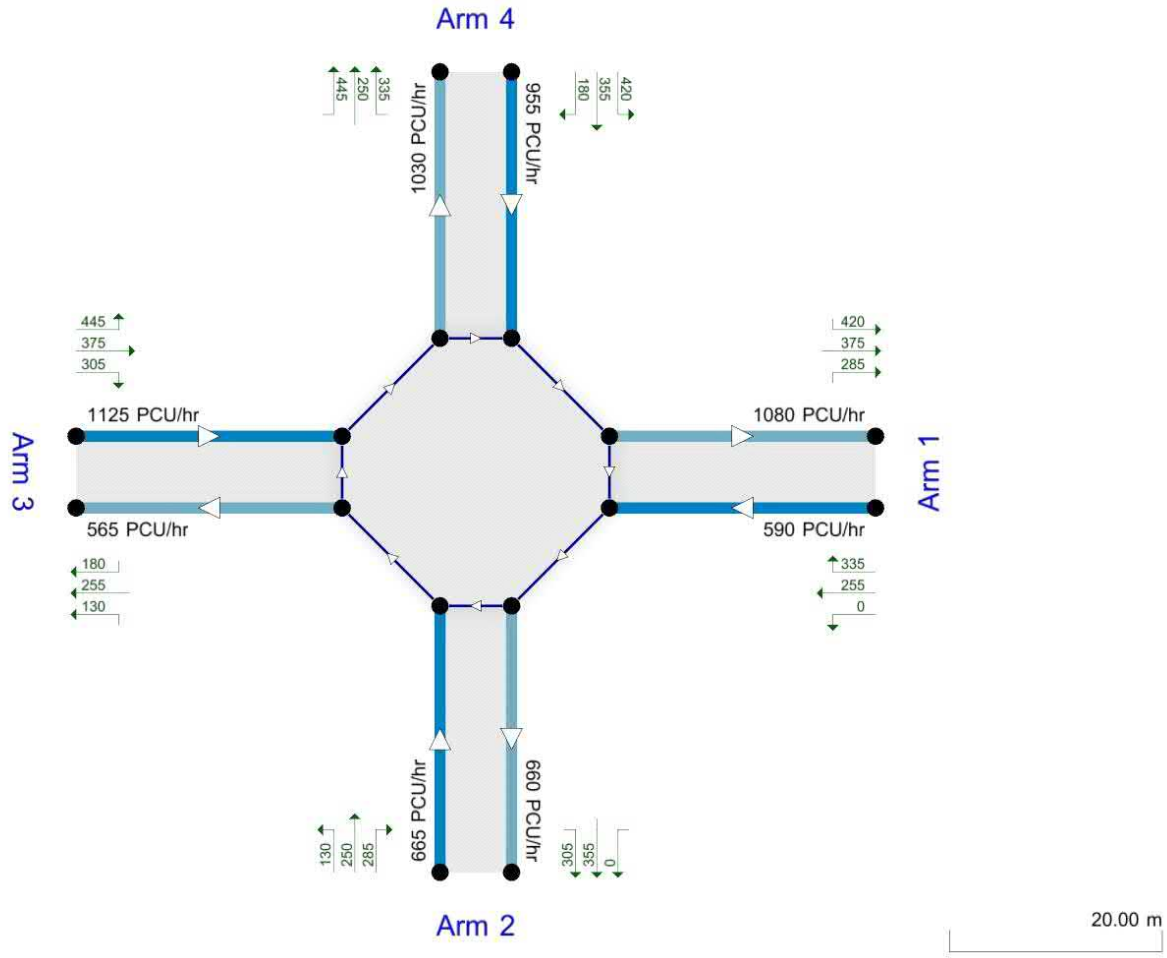
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2018 observed traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 observed traffic flow, Ching Ming Festival Peak Hour | 2018 observed traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.62 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Che Kung Mui Road WB | |
| **2** | 2 | Hung Mui Kuk Road | |
| **3** | 3 | Che Kung Mui Road EB | |
| **4** | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| **2** | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| **3** | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| **4** | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 590.00 | 100.000 |
| 2 | FLAT | ✓ | 665.00 | 100.000 |
| 3 | FLAT | ✓ | 1125.00 | 100.000 |
| 4 | FLAT | ✓ | 955.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 255.000 | 335.000 |
| | 2 | 285.000 | 0.000 | 130.000 | 250.000 |
| | 3 | 375.000 | 305.000 | 0.000 | 445.000 |
| | 4 | 420.000 | 355.000 | 180.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.43 | 0.57 |
| | 2 | 0.43 | 0.00 | 0.20 | 0.38 |
| | 3 | 0.33 | 0.27 | 0.00 | 0.40 |
| | 4 | 0.44 | 0.37 | 0.19 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.18 | 1.36 | 0.22 | A |
| 2 | 0.22 | 1.50 | 0.28 | A |
| 3 | 0.34 | 1.64 | 0.51 | A |
| 4 | 0.33 | 1.86 | 0.49 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 589.11 | 838.35 | 0.00 | 3233.12 | 0.182 | 0.22 | 1.361 | A |
| 2 | 665.00 | 663.89 | 768.74 | 0.00 | 3066.38 | 0.217 | 0.28 | 1.498 | A |
| 3 | 1125.00 | 1122.96 | 868.60 | 0.00 | 3323.24 | 0.339 | 0.51 | 1.634 | A |
| 4 | 955.00 | 953.04 | 963.29 | 0.00 | 2893.09 | 0.330 | 0.49 | 1.853 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 590.00 | 590.00 | 840.00 | 0.00 | 3231.75 | 0.183 | 0.22 | 1.362 | A |
| 2 | 665.00 | 665.00 | 770.00 | 0.00 | 3065.38 | 0.217 | 0.28 | 1.499 | A |
| 3 | 1125.00 | 1125.00 | 870.00 | 0.00 | 3322.05 | 0.339 | 0.51 | 1.637 | A |
| 4 | 955.00 | 955.00 | 965.00 | 0.00 | 2891.74 | 0.330 | 0.49 | 1.857 | A |

# 2027 reference traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Ching Ming Festival Peak Hour | 2027 reference traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.10 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 970.00 | 100.000 |
| 2 | FLAT | ✓ | 855.00 | 100.000 |
| 3 | FLAT | ✓ | 1380.00 | 100.000 |
| 4 | FLAT | ✓ | 1205.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 5.000 | 120.000 | 375.000 | 470.000 |
| | 2 | 410.000 | 0.000 | 140.000 | 305.000 |
| | 3 | 560.000 | 335.000 | 0.000 | 485.000 |
| | 4 | 460.000 | 550.000 | 195.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.01 | 0.12 | 0.39 | 0.48 |
| | 2 | 0.48 | 0.00 | 0.16 | 0.36 |
| | 3 | 0.41 | 0.24 | 0.00 | 0.35 |
| | 4 | 0.38 | 0.46 | 0.16 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.32 | 1.74 | 0.47 | A |
| 2 | 0.30 | 1.81 | 0.43 | A |
| 3 | 0.45 | 2.16 | 0.83 | A |
| 4 | 0.46 | 2.54 | 0.85 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 968.13 | 1077.11 | 0.00 | 3035.97 | 0.320 | 0.47 | 1.738 | A |
| 2 | 855.00 | 853.29 | 1042.81 | 0.00 | 2848.40 | 0.300 | 0.43 | 1.802 | A |
| 3 | 1380.00 | 1376.71 | 1187.65 | 0.00 | 3050.34 | 0.452 | 0.82 | 2.146 | A |
| 4 | 1205.00 | 1201.61 | 1307.04 | 0.00 | 2621.43 | 0.460 | 0.85 | 2.529 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1079.99 | 0.00 | 3033.59 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1044.99 | 0.00 | 2846.66 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1379.99 | 1189.99 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1204.99 | 1309.99 | 0.00 | 2619.10 | 0.460 | 0.85 | 2.545 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1080.00 | 0.00 | 3033.58 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1045.00 | 0.00 | 2846.66 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1380.00 | 1190.00 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1205.00 | 1310.00 | 0.00 | 2619.09 | 0.460 | 0.85 | 2.545 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1080.00 | 0.00 | 3033.58 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1045.00 | 0.00 | 2846.66 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1380.00 | 1190.00 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1205.00 | 1310.00 | 0.00 | 2619.09 | 0.460 | 0.85 | 2.545 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1080.00 | 0.00 | 3033.58 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1045.00 | 0.00 | 2846.66 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1380.00 | 1190.00 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1205.00 | 1310.00 | 0.00 | 2619.09 | 0.460 | 0.85 | 2.545 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1080.00 | 0.00 | 3033.58 | 0.320 | 0.47 | 1.743 | A |
| 2 | 855.00 | 855.00 | 1045.00 | 0.00 | 2846.65 | 0.300 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1380.00 | 1190.00 | 0.00 | 3048.33 | 0.453 | 0.83 | 2.157 | A |
| 4 | 1205.00 | 1205.00 | 1310.00 | 0.00 | 2619.09 | 0.460 | 0.85 | 2.545 | A |

# 2027 design traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Ching Ming Festival Peak Hour | 2027 design traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.11 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 970.00 | 100.000 |
| 2 | FLAT | ✓ | 860.00 | 100.000 |
| 3 | FLAT | ✓ | 1380.00 | 100.000 |
| 4 | FLAT | ✓ | 1210.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 5.000 | 120.000 | 375.000 | 470.000 |
| | 2 | 410.000 | 0.000 | 140.000 | 310.000 |
| | 3 | 560.000 | 335.000 | 0.000 | 485.000 |
| | 4 | 460.000 | 555.000 | 195.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.01 | 0.12 | 0.39 | 0.48 |
| | 2 | 0.48 | 0.00 | 0.16 | 0.36 |
| | 3 | 0.41 | 0.24 | 0.00 | 0.35 |
| | 4 | 0.38 | 0.46 | 0.16 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.32 | 1.75 | 0.47 | A |
| 2 | 0.30 | 1.81 | 0.43 | A |
| 3 | 0.45 | 2.16 | 0.83 | A |
| 4 | 0.46 | 2.55 | 0.86 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 968.12 | 1082.08 | 0.00 | 3031.86 | 0.320 | 0.47 | 1.742 | A |
| 2 | 860.00 | 858.27 | 1042.81 | 0.00 | 2848.40 | 0.302 | 0.43 | 1.806 | A |
| 3 | 1380.00 | 1376.70 | 1192.64 | 0.00 | 3046.07 | 0.453 | 0.82 | 2.151 | A |
| 4 | 1210.00 | 1206.59 | 1307.03 | 0.00 | 2621.44 | 0.462 | 0.85 | 2.538 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1084.99 | 0.00 | 3029.46 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1044.99 | 0.00 | 2846.66 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1379.99 | 1194.99 | 0.00 | 3044.06 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1209.99 | 1309.99 | 0.00 | 2619.10 | 0.462 | 0.86 | 2.554 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1085.00 | 0.00 | 3029.45 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1045.00 | 0.00 | 2846.66 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1380.00 | 1195.00 | 0.00 | 3044.05 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1210.00 | 1310.00 | 0.00 | 2619.09 | 0.462 | 0.86 | 2.554 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1085.00 | 0.00 | 3029.45 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1045.00 | 0.00 | 2846.66 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1380.00 | 1195.00 | 0.00 | 3044.05 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1210.00 | 1310.00 | 0.00 | 2619.09 | 0.462 | 0.86 | 2.554 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1085.00 | 0.00 | 3029.45 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1045.00 | 0.00 | 2846.66 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1380.00 | 1195.00 | 0.00 | 3044.05 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1210.00 | 1310.00 | 0.00 | 2619.09 | 0.462 | 0.86 | 2.554 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970.00 | 970.00 | 1085.00 | 0.00 | 3029.45 | 0.320 | 0.47 | 1.747 | A |
| 2 | 860.00 | 860.00 | 1045.00 | 0.00 | 2846.65 | 0.302 | 0.43 | 1.811 | A |
| 3 | 1380.00 | 1380.00 | 1195.00 | 0.00 | 3044.05 | 0.453 | 0.83 | 2.163 | A |
| 4 | 1210.00 | 1210.00 | 1310.00 | 0.00 | 2619.09 | 0.462 | 0.86 | 2.554 | A |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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**Filename:** Junction F (Weekday).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:07:31

» 2027 reference traffic flow, Weekday AM Peak Hour
» 2027 design traffic flow, Weekday AM Peak Hour
» 2027 reference traffic flow, Weekday PM Peak Hour
» 2027 design traffic flow, Weekday PM Peak Hour
» 2021 observed traffic flow, Weekday AM Peak Hour
» 2021 observed traffic flow, Weekday PM Peak Hour

## Summary of junction performance

| | Weekday AM Peak Hour | | | | Weekday PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| **2021 observed traffic flow** | | | | | | | | |
| Arm 1 | 0.28 | 1.53 | 0.22 | A | 0.29 | 1.55 | 0.22 | A |
| Arm 2 | 0.38 | 1.71 | 0.28 | A | 0.39 | 1.73 | 0.28 | A |
| Arm 3 | 0.63 | 1.79 | 0.39 | A | 0.66 | 1.87 | 0.40 | A |
| Arm 4 | 0.75 | 2.20 | 0.43 | A | 0.74 | 2.17 | 0.42 | A |
| **2027 design traffic flow** | | | | | | | | |
| Arm 1 | 0.73 | 2.28 | 0.42 | A | 0.72 | 2.32 | 0.42 | A |
| Arm 2 | 0.74 | 2.47 | 0.43 | A | 0.73 | 2.42 | 0.42 | A |
| Arm 3 | 1.35 | 2.88 | 0.57 | A | 1.45 | 3.12 | 0.59 | A |
| Arm 4 | 1.75 | 3.94 | 0.64 | A | 1.78 | 3.96 | 0.64 | A |
| **2027 reference traffic flow** | | | | | | | | |
| Arm 1 | 0.73 | 2.28 | 0.42 | A | 0.71 | 2.31 | 0.42 | A |
| Arm 2 | 0.73 | 2.46 | 0.42 | A | 0.72 | 2.40 | 0.42 | A |
| Arm 3 | 1.34 | 2.87 | 0.57 | A | 1.44 | 3.09 | 0.59 | A |
| Arm 4 | 1.73 | 3.92 | 0.63 | A | 1.75 | 3.92 | 0.64 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D2 - 2027 reference traffic flow, Weekday AM Peak Hour " model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D4 - 2027 reference traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D5 - 2027 design traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D6 - 2021 observed traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D7 - 2021 observed traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:07:27*

## File summary

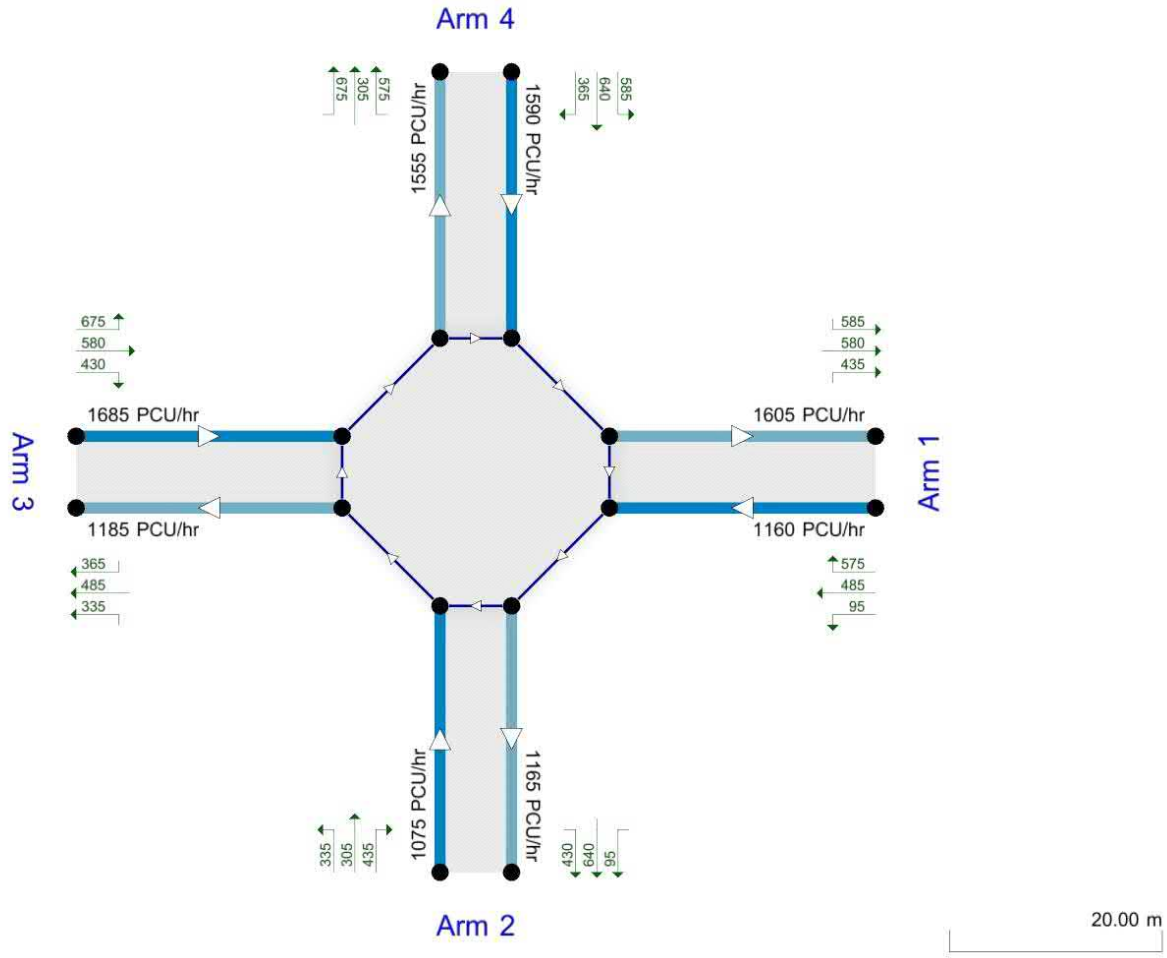
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D2 - 2027 reference traffic flow, Weekday AM Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2027 reference traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday AM Peak Hour | 2027 reference traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.97 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Che Kung Mui Road WB | |
| **2** | 2 | Hung Mui Kuk Road | |
| **3** | 3 | Che Kung Mui Road EB | |
| **4** | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| **2** | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| **3** | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| **4** | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 1160.00 | 100.000 |
| 2 | FLAT | ✓ | 1075.00 | 100.000 |
| 3 | FLAT | ✓ | 1685.00 | 100.000 |
| 4 | FLAT | ✓ | 1590.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 5.000 | 95.000 | 485.000 | 575.000 |
| | 2 | 435.000 | 0.000 | 335.000 | 305.000 |
| | 3 | 580.000 | 430.000 | 0.000 | 675.000 |
| | 4 | 585.000 | 640.000 | 365.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.08 | 0.42 | 0.50 |
| | 2 | 0.40 | 0.00 | 0.31 | 0.28 |
| | 3 | 0.34 | 0.26 | 0.00 | 0.40 |
| | 4 | 0.37 | 0.40 | 0.23 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.42 | 2.28 | 0.73 | A |
| 2 | 0.42 | 2.46 | 0.73 | A |
| 3 | 0.57 | 2.87 | 1.34 | A |
| 4 | 0.63 | 3.92 | 1.73 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1157.09 | 1429.33 | 0.00 | 2745.14 | 0.423 | 0.73 | 2.263 | A |
| 2 | 1075.00 | 1072.09 | 1425.76 | 0.00 | 2543.82 | 0.423 | 0.73 | 2.440 | A |
| 3 | 1685.00 | 1679.67 | 1316.54 | 0.00 | 2940.09 | 0.573 | 1.33 | 2.845 | A |
| 4 | 1590.00 | 1583.18 | 1445.61 | 0.00 | 2511.92 | 0.633 | 1.70 | 3.849 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1159.99 | 1434.95 | 0.00 | 2740.49 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1074.99 | 1429.97 | 0.00 | 2540.47 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1684.97 | 1319.98 | 0.00 | 2937.14 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1589.94 | 1449.98 | 0.00 | 2508.47 | 0.634 | 1.72 | 3.919 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1160.00 | 1434.99 | 0.00 | 2740.46 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1075.00 | 1429.99 | 0.00 | 2540.45 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1684.99 | 1320.00 | 0.00 | 2937.13 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1589.98 | 1449.99 | 0.00 | 2508.46 | 0.634 | 1.72 | 3.919 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1160.00 | 1434.99 | 0.00 | 2740.46 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1075.00 | 1430.00 | 0.00 | 2540.45 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1685.00 | 1320.00 | 0.00 | 2937.13 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1589.99 | 1450.00 | 0.00 | 2508.46 | 0.634 | 1.73 | 3.919 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1160.00 | 1435.00 | 0.00 | 2740.46 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1075.00 | 1430.00 | 0.00 | 2540.45 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1685.00 | 1320.00 | 0.00 | 2937.13 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1590.00 | 1450.00 | 0.00 | 2508.45 | 0.634 | 1.73 | 3.919 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1160.00 | 1160.00 | 1435.00 | 0.00 | 2740.46 | 0.423 | 0.73 | 2.277 | A |
| 2 | 1075.00 | 1075.00 | 1430.00 | 0.00 | 2540.45 | 0.423 | 0.73 | 2.456 | A |
| 3 | 1685.00 | 1685.00 | 1320.00 | 0.00 | 2937.13 | 0.574 | 1.34 | 2.874 | A |
| 4 | 1590.00 | 1590.00 | 1450.00 | 0.00 | 2508.45 | 0.634 | 1.73 | 3.919 | A |

# 2027 design traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday AM Peak Hour | 2027 design traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 2.98 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 1155.00 | 100.000 |
| 2 | FLAT | ✓ | 1085.00 | 100.000 |
| 3 | FLAT | ✓ | 1685.00 | 100.000 |
| 4 | FLAT | ✓ | 1600.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 95.000 | 485.000 | 575.000 |
| | 2 | 435.000 | 0.000 | 335.000 | 315.000 |
| | 3 | 580.000 | 430.000 | 0.000 | 675.000 |
| | 4 | 585.000 | 650.000 | 365.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.08 | 0.42 | 0.50 |
| | 2 | 0.40 | 0.00 | 0.31 | 0.29 |
| | 3 | 0.34 | 0.26 | 0.00 | 0.40 |
| | 4 | 0.37 | 0.41 | 0.23 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.42 | 2.28 | 0.73 | A |
| 2 | 0.43 | 2.47 | 0.74 | A |
| 3 | 0.57 | 2.88 | 1.35 | A |
| 4 | 0.64 | 3.94 | 1.75 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1152.09 | 1439.25 | 0.00 | 2736.94 | 0.422 | 0.73 | 2.268 | A |
| 2 | 1085.00 | 1082.05 | 1420.76 | 0.00 | 2547.80 | 0.426 | 0.74 | 2.450 | A |
| 3 | 1685.00 | 1679.65 | 1321.51 | 0.00 | 2935.84 | 0.574 | 1.34 | 2.854 | A |
| 4 | 1600.00 | 1593.09 | 1440.61 | 0.00 | 2515.87 | 0.636 | 1.73 | 3.873 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1154.99 | 1444.95 | 0.00 | 2732.23 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1084.99 | 1424.97 | 0.00 | 2544.44 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1684.97 | 1324.98 | 0.00 | 2932.87 | 0.575 | 1.34 | 2.884 | A |
| 4 | 1600.00 | 1599.94 | 1444.98 | 0.00 | 2512.42 | 0.637 | 1.74 | 3.945 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1155.00 | 1444.99 | 0.00 | 2732.21 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1085.00 | 1424.99 | 0.00 | 2544.43 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1684.99 | 1325.00 | 0.00 | 2932.86 | 0.575 | 1.35 | 2.884 | A |
| 4 | 1600.00 | 1599.98 | 1444.99 | 0.00 | 2512.41 | 0.637 | 1.75 | 3.945 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1155.00 | 1444.99 | 0.00 | 2732.20 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1085.00 | 1425.00 | 0.00 | 2544.42 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1685.00 | 1325.00 | 0.00 | 2932.86 | 0.575 | 1.35 | 2.884 | A |
| 4 | 1600.00 | 1599.99 | 1445.00 | 0.00 | 2512.41 | 0.637 | 1.75 | 3.945 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1155.00 | 1445.00 | 0.00 | 2732.20 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1085.00 | 1425.00 | 0.00 | 2544.42 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1685.00 | 1325.00 | 0.00 | 2932.85 | 0.575 | 1.35 | 2.884 | A |
| 4 | 1600.00 | 1600.00 | 1445.00 | 0.00 | 2512.41 | 0.637 | 1.75 | 3.945 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1155.00 | 1155.00 | 1445.00 | 0.00 | 2732.20 | 0.423 | 0.73 | 2.282 | A |
| 2 | 1085.00 | 1085.00 | 1425.00 | 0.00 | 2544.42 | 0.426 | 0.74 | 2.466 | A |
| 3 | 1685.00 | 1685.00 | 1325.00 | 0.00 | 2932.85 | 0.575 | 1.35 | 2.884 | A |
| 4 | 1600.00 | 1600.00 | 1445.00 | 0.00 | 2512.41 | 0.637 | 1.75 | 3.945 | A |

# 2027 reference traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday PM Peak Hour | 2027 reference traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 3.04 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 1115.00 | 100.000 |
| 2 | FLAT | ✓ | 1075.00 | 100.000 |
| 3 | FLAT | ✓ | 1675.00 | 100.000 |
| 4 | FLAT | ✓ | 1610.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 120.000 | 355.000 | 640.000 |
| | 2 | 430.000 | 0.000 | 280.000 | 365.000 |
| | 3 | 665.000 | 330.000 | 0.000 | 680.000 |
| | 4 | 425.000 | 790.000 | 395.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.11 | 0.32 | 0.57 |
| | 2 | 0.40 | 0.00 | 0.26 | 0.34 |
| | 3 | 0.40 | 0.20 | 0.00 | 0.41 |
| | 4 | 0.26 | 0.49 | 0.25 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.42 | 2.31 | 0.71 | A |
| 2 | 0.42 | 2.40 | 0.72 | A |
| 3 | 0.59 | 3.09 | 1.44 | A |
| 4 | 0.64 | 3.92 | 1.75 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1112.16 | 1508.80 | 0.00 | 2679.52 | 0.416 | 0.71 | 2.293 | A |
| 2 | 1075.00 | 1072.15 | 1385.77 | 0.00 | 2575.62 | 0.417 | 0.71 | 2.391 | A |
| 3 | 1675.00 | 1669.31 | 1431.26 | 0.00 | 2841.96 | 0.589 | 1.42 | 3.055 | A |
| 4 | 1610.00 | 1603.10 | 1420.48 | 0.00 | 2531.78 | 0.636 | 1.73 | 3.848 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1114.99 | 1514.95 | 0.00 | 2674.44 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1074.99 | 1389.97 | 0.00 | 2572.28 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1674.96 | 1434.98 | 0.00 | 2838.78 | 0.590 | 1.43 | 3.092 | A |
| 4 | 1610.00 | 1609.94 | 1424.97 | 0.00 | 2528.23 | 0.637 | 1.74 | 3.920 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1514.99 | 0.00 | 2674.41 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1075.00 | 1389.99 | 0.00 | 2572.26 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1674.99 | 1435.00 | 0.00 | 2838.77 | 0.590 | 1.43 | 3.092 | A |
| 4 | 1610.00 | 1609.98 | 1424.99 | 0.00 | 2528.22 | 0.637 | 1.75 | 3.920 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1514.99 | 0.00 | 2674.40 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1075.00 | 1390.00 | 0.00 | 2572.26 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1675.00 | 1435.00 | 0.00 | 2838.76 | 0.590 | 1.44 | 3.092 | A |
| 4 | 1610.00 | 1609.99 | 1425.00 | 0.00 | 2528.21 | 0.637 | 1.75 | 3.920 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1515.00 | 0.00 | 2674.40 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1075.00 | 1390.00 | 0.00 | 2572.26 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1675.00 | 1435.00 | 0.00 | 2838.76 | 0.590 | 1.44 | 3.092 | A |
| 4 | 1610.00 | 1610.00 | 1425.00 | 0.00 | 2528.21 | 0.637 | 1.75 | 3.920 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1515.00 | 0.00 | 2674.40 | 0.417 | 0.71 | 2.308 | A |
| 2 | 1075.00 | 1075.00 | 1390.00 | 0.00 | 2572.26 | 0.418 | 0.72 | 2.403 | A |
| 3 | 1675.00 | 1675.00 | 1435.00 | 0.00 | 2838.76 | 0.590 | 1.44 | 3.092 | A |
| 4 | 1610.00 | 1610.00 | 1425.00 | 0.00 | 2528.21 | 0.637 | 1.75 | 3.920 | A |

# 2027 design traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday PM Peak Hour | 2027 design traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 3.07 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 1115.00 | 100.000 |
| 2 | FLAT | ✓ | 1085.00 | 100.000 |
| 3 | FLAT | ✓ | 1675.00 | 100.000 |
| 4 | FLAT | ✓ | 1620.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 120.000 | 355.000 | 640.000 |
| | 2 | 430.000 | 0.000 | 280.000 | 375.000 |
| | 3 | 665.000 | 330.000 | 0.000 | 680.000 |
| | 4 | 425.000 | 800.000 | 395.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.11 | 0.32 | 0.57 |
| | 2 | 0.40 | 0.00 | 0.26 | 0.35 |
| | 3 | 0.40 | 0.20 | 0.00 | 0.41 |
| | 4 | 0.26 | 0.49 | 0.24 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.42 | 2.32 | 0.72 | A |
| 2 | 0.42 | 2.42 | 0.73 | A |
| 3 | 0.59 | 3.12 | 1.45 | A |
| 4 | 0.64 | 3.96 | 1.78 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1112.15 | 1518.69 | 0.00 | 2671.35 | 0.417 | 0.71 | 2.305 | A |
| 2 | 1085.00 | 1082.10 | 1385.74 | 0.00 | 2575.65 | 0.421 | 0.72 | 2.407 | A |
| 3 | 1675.00 | 1669.26 | 1441.21 | 0.00 | 2833.45 | 0.591 | 1.43 | 3.077 | A |
| 4 | 1620.00 | 1612.98 | 1420.44 | 0.00 | 2531.81 | 0.640 | 1.76 | 3.889 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1114.99 | 1524.95 | 0.00 | 2666.18 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1084.99 | 1389.97 | 0.00 | 2572.28 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1674.96 | 1444.98 | 0.00 | 2830.22 | 0.592 | 1.44 | 3.115 | A |
| 4 | 1620.00 | 1619.94 | 1424.97 | 0.00 | 2528.23 | 0.641 | 1.77 | 3.963 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1524.98 | 0.00 | 2666.15 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1085.00 | 1389.99 | 0.00 | 2572.26 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1674.99 | 1445.00 | 0.00 | 2830.21 | 0.592 | 1.45 | 3.115 | A |
| 4 | 1620.00 | 1619.98 | 1424.99 | 0.00 | 2528.22 | 0.641 | 1.78 | 3.963 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1524.99 | 0.00 | 2666.15 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1085.00 | 1390.00 | 0.00 | 2572.26 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1675.00 | 1445.00 | 0.00 | 2830.21 | 0.592 | 1.45 | 3.115 | A |
| 4 | 1620.00 | 1619.99 | 1425.00 | 0.00 | 2528.21 | 0.641 | 1.78 | 3.963 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1525.00 | 0.00 | 2666.14 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1085.00 | 1390.00 | 0.00 | 2572.26 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1675.00 | 1445.00 | 0.00 | 2830.21 | 0.592 | 1.45 | 3.115 | A |
| 4 | 1620.00 | 1620.00 | 1425.00 | 0.00 | 2528.21 | 0.641 | 1.78 | 3.963 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1115.00 | 1115.00 | 1525.00 | 0.00 | 2666.14 | 0.418 | 0.72 | 2.320 | A |
| 2 | 1085.00 | 1085.00 | 1390.00 | 0.00 | 2572.26 | 0.422 | 0.73 | 2.420 | A |
| 3 | 1675.00 | 1675.00 | 1445.00 | 0.00 | 2830.21 | 0.592 | 1.45 | 3.115 | A |
| 4 | 1620.00 | 1620.00 | 1425.00 | 0.00 | 2528.21 | 0.641 | 1.78 | 3.963 | A |

# 2021 observed traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday AM Peak Hour | 2021 observed traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.85 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 670.00 | 100.000 |
| 2 | FLAT | ✓ | 800.00 | 100.000 |
| 3 | FLAT | ✓ | 1270.00 | 100.000 |
| 4 | FLAT | ✓ | 1225.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 275.000 | 395.000 |
| | 2 | 295.000 | 0.000 | 280.000 | 225.000 |
| | 3 | 345.000 | 360.000 | 0.000 | 565.000 |
| | 4 | 490.000 | 430.000 | 305.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.41 | 0.59 |
| | 2 | 0.37 | 0.00 | 0.35 | 0.28 |
| | 3 | 0.27 | 0.28 | 0.00 | 0.44 |
| | 4 | 0.40 | 0.35 | 0.25 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.22 | 1.53 | 0.28 | A |
| 2 | 0.28 | 1.71 | 0.38 | A |
| 3 | 0.39 | 1.79 | 0.63 | A |
| 4 | 0.43 | 2.20 | 0.75 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 668.86 | 1092.50 | 0.00 | 3023.26 | 0.222 | 0.28 | 1.529 | A |
| 2 | 800.00 | 798.48 | 973.12 | 0.00 | 2903.82 | 0.276 | 0.38 | 1.710 | A |
| 3 | 1270.00 | 1267.49 | 913.34 | 0.00 | 3284.97 | 0.387 | 0.63 | 1.782 | A |
| 4 | 1225.00 | 1222.03 | 998.05 | 0.00 | 2865.62 | 0.427 | 0.74 | 2.187 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1094.99 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1269.99 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1224.99 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.195 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1095.00 | 0.00 | 3021.20 | 0.222 | 0.28 | 1.530 | A |
| 2 | 800.00 | 800.00 | 975.00 | 0.00 | 2902.33 | 0.276 | 0.38 | 1.711 | A |
| 3 | 1270.00 | 1270.00 | 915.00 | 0.00 | 3283.56 | 0.387 | 0.63 | 1.786 | A |
| 4 | 1225.00 | 1225.00 | 1000.00 | 0.00 | 2864.08 | 0.428 | 0.75 | 2.196 | A |

# 2021 observed traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday PM Peak Hour | 2021 observed traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| F | Che Kung Miu Road/Mei Tin Road/Hung Mui Kuk Road | Roundabout | 1,2,3,4 | | | 1.88 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Che Kung Mui Road WB | |
| 2 | 2 | Hung Mui Kuk Road | |
| 3 | 3 | Che Kung Mui Road EB | |
| 4 | 4 | Mei Tin Road | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 13.00 | 12.60 | 40.00 | 75.00 | 33.50 | |
| 2 | 10.00 | 13.00 | 11.50 | 50.00 | 75.00 | 26.00 | |
| 3 | 12.00 | 13.00 | 12.50 | 40.00 | 75.00 | 23.00 | |
| 4 | 10.00 | 13.00 | 11.50 | 35.00 | 75.00 | 25.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | 0.826 | 3925.347 |
| 2 | | (calculated) | (calculated) | 0.795 | 3677.795 |
| 3 | | (calculated) | (calculated) | 0.855 | 4066.219 |
| 4 | | (calculated) | (calculated) | 0.790 | 3654.359 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | FLAT | ✓ | 670.00 | 100.000 |
| 2 | FLAT | ✓ | 805.00 | 100.000 |
| 3 | FLAT | ✓ | 1275.00 | 100.000 |
| 4 | FLAT | ✓ | 1220.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.000 | 0.000 | 220.000 | 450.000 |
| | 2 | 280.000 | 0.000 | 235.000 | 290.000 |
| | 3 | 430.000 | 275.000 | 0.000 | 570.000 |
| | 4 | 355.000 | 535.000 | 330.000 | 0.000 |

### Turning Proportions (PCU) - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.00 | 0.00 | 0.33 | 0.67 |
| | 2 | 0.35 | 0.00 | 0.29 | 0.36 |
| | 3 | 0.34 | 0.22 | 0.00 | 0.45 |
| | 4 | 0.29 | 0.44 | 0.27 | 0.00 |

# Vehicle Mix

### Average PCU Per Vehicle - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 |

### Heavy Vehicle Percentages - Junction F (for whole period)

| | | To | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| From | 1 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 |

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | 0.22 | 1.55 | 0.29 | A |
| 2 | 0.28 | 1.73 | 0.39 | A |
| 3 | 0.40 | 1.87 | 0.66 | A |
| 4 | 0.42 | 2.17 | 0.74 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 668.85 | 1137.35 | 0.00 | 2986.23 | 0.224 | 0.29 | 1.553 | A |
| 2 | 805.00 | 803.46 | 998.05 | 0.00 | 2883.99 | 0.279 | 0.39 | 1.730 | A |
| 3 | 1275.00 | 1272.35 | 1018.13 | 0.00 | 3195.34 | 0.399 | 0.66 | 1.870 | A |
| 4 | 1220.00 | 1217.07 | 983.00 | 0.00 | 2877.51 | 0.424 | 0.73 | 2.164 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1139.99 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1274.99 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1219.99 | 985.00 | 0.00 | 2875.94 | 0.424 | 0.74 | 2.173 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 670.00 | 670.00 | 1140.00 | 0.00 | 2984.04 | 0.225 | 0.29 | 1.555 | A |
| 2 | 805.00 | 805.00 | 1000.00 | 0.00 | 2882.45 | 0.279 | 0.39 | 1.732 | A |
| 3 | 1275.00 | 1275.00 | 1020.00 | 0.00 | 3193.74 | 0.399 | 0.66 | 1.875 | A |
| 4 | 1220.00 | 1220.00 | 985.00 | 0.00 | 2875.93 | 0.424 | 0.74 | 2.173 | A |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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**Filename:** Junction I (CM_p2).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:02:00

» 2018 observed traffic flow, Ching Ming Festival Peak Hour
» 2027 reference traffic flow, Ching Ming Festival Peak Hour
» 2027 design traffic flow, Ching Ming Festival Peak Hour

## Summary of junction performance

| | Ching Ming Festival Peak Hour | | | |
|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS |
| | 2018 observed traffic flow | | | |
| Arm 2 | 0.15 | 1.28 | 0.13 | A |
| Arm 3 | 0.03 | 1.42 | 0.03 | A |
| Arm 4 | 0.09 | 1.50 | 0.08 | A |
| Arm 5 | 0.02 | 2.30 | 0.02 | A |
| | 2027 design traffic flow | | | |
| Arm 2 | 0.17 | 1.31 | 0.15 | A |
| Arm 3 | 0.03 | 1.45 | 0.03 | A |
| Arm 4 | 0.10 | 1.53 | 0.09 | A |
| Arm 5 | 0.02 | 2.33 | 0.02 | A |
| | 2027 reference traffic flow | | | |
| Arm 2 | 0.17 | 1.31 | 0.15 | A |
| Arm 3 | 0.03 | 1.45 | 0.03 | A |
| Arm 4 | 0.10 | 1.53 | 0.09 | A |
| Arm 5 | 0.02 | 2.33 | 0.02 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour " model duration: 13:30 - 15:00*
*"D2 - 2027 reference traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Ching Ming Festival Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:01:57*

## File summary

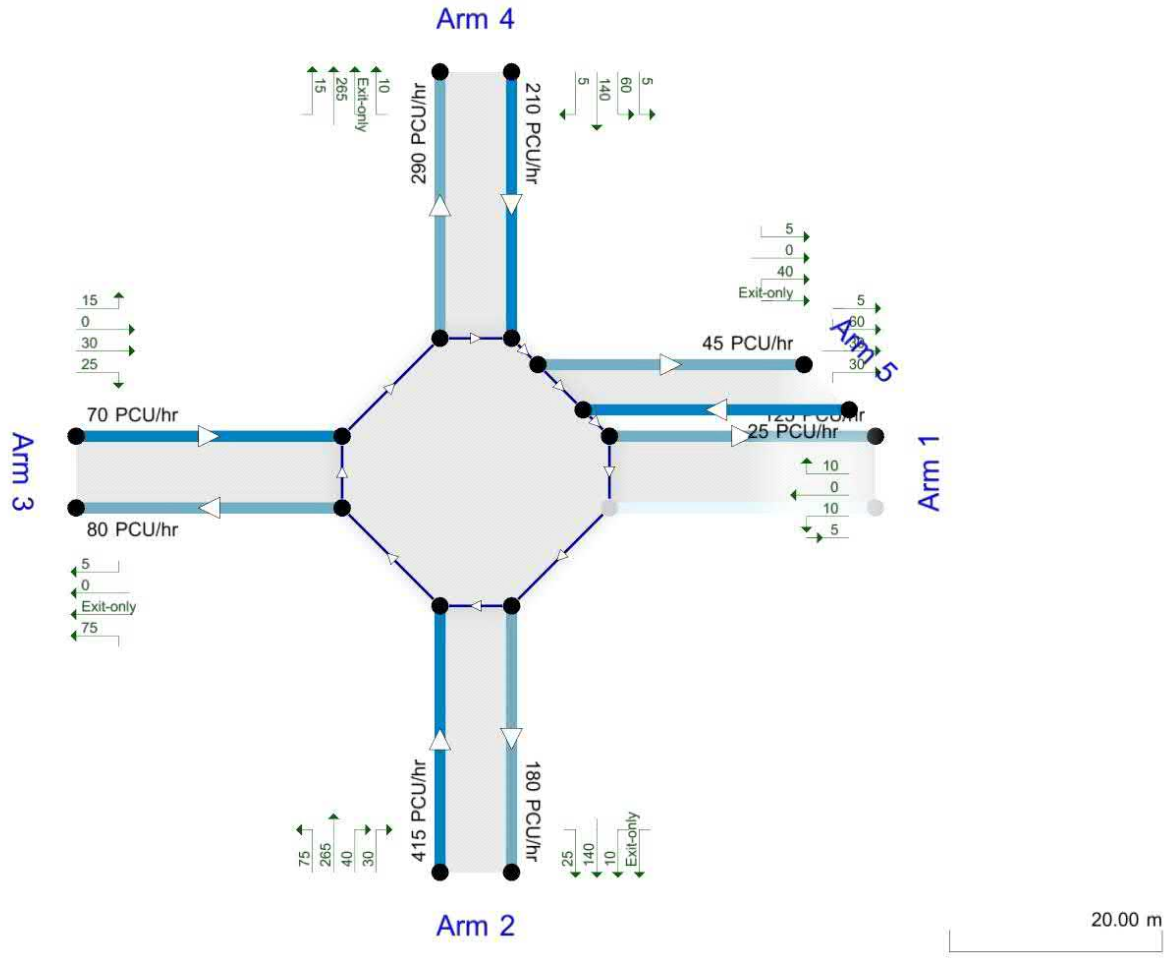
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D1 - 2018 observed traffic flow, Ching Ming Festival Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2018 observed traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2018 observed traffic flow, Ching Ming Festival Peak Hour | 2018 observed traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.39 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| **2** | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| **3** | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| **4** | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| **5** | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 415.00 | 100.000 |
| 3 | FLAT | ✓ | 70.00 | 100.000 |
| 4 | FLAT | ✓ | 210.00 | 100.000 |
| 5 | FLAT | ✓ | 25.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 30.000 | 5.000 | 75.000 | 265.000 | 40.000 |
| | 3 | 30.000 | 25.000 | 0.000 | 15.000 | 0.000 |
| | 4 | 60.000 | 140.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 5.000 | 10.000 | 0.000 | 10.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.01 | 0.18 | 0.64 | 0.10 |
| | 3 | 0.43 | 0.36 | 0.00 | 0.21 | 0.00 |
| | 4 | 0.29 | 0.67 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.40 | 0.00 | 0.40 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.13 | 1.28 | 0.15 | A |
| 3 | 0.03 | 1.42 | 0.03 | A |
| 4 | 0.08 | 1.50 | 0.09 | A |
| 5 | 0.02 | 2.30 | 0.02 | A |

# Main Results for each time segment

## Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 414.41 | 14.97 | 0.00 | 3225.54 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 69.89 | 349.49 | 0.00 | 2609.27 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 209.65 | 129.81 | 0.00 | 2618.59 | 0.080 | 0.09 | 1.493 | A |
| 5 | 25.00 | 24.94 | 294.52 | 0.00 | 1591.18 | 0.016 | 0.02 | 2.298 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.496 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 415.00 | 415.00 | 15.00 | 0.00 | 3225.51 | 0.129 | 0.15 | 1.280 | A |
| 3 | 70.00 | 70.00 | 350.00 | 0.00 | 2608.82 | 0.027 | 0.03 | 1.417 | A |
| 4 | 210.00 | 210.00 | 130.00 | 0.00 | 2618.42 | 0.080 | 0.09 | 1.494 | A |
| 5 | 25.00 | 25.00 | 295.00 | 0.00 | 1590.86 | 0.016 | 0.02 | 2.298 | A |

# 2027 reference traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Ching Ming Festival Peak Hour | 2027 reference traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.42 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 475.00 | 100.000 |
| 3 | FLAT | ✓ | 75.00 | 100.000 |
| 4 | FLAT | ✓ | 230.00 | 100.000 |
| 5 | FLAT | ✓ | 25.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 35.000 | 5.000 | 80.000 | 290.000 | 65.000 |
| | 3 | 35.000 | 25.000 | 0.000 | 15.000 | 0.000 |
| | 4 | 65.000 | 155.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 5.000 | 10.000 | 0.000 | 10.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.01 | 0.17 | 0.61 | 0.14 |
| | 3 | 0.47 | 0.33 | 0.00 | 0.20 | 0.00 |
| | 4 | 0.28 | 0.67 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.40 | 0.00 | 0.40 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.15 | 1.31 | 0.17 | A |
| 3 | 0.03 | 1.45 | 0.03 | A |
| 4 | 0.09 | 1.53 | 0.10 | A |
| 5 | 0.02 | 2.33 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 474.31 | 14.97 | 0.00 | 3225.54 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 74.88 | 404.40 | 0.00 | 2560.91 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 229.61 | 164.75 | 0.00 | 2588.25 | 0.089 | 0.10 | 1.525 | A |
| 5 | 25.00 | 24.94 | 324.46 | 0.00 | 1570.98 | 0.016 | 0.02 | 2.328 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.450 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.528 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.310 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

# 2027 design traffic flow, Ching Ming Festival Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Ching Ming Festival Peak Hour | 2027 design traffic flow | Ching Ming Festival Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.42 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| **2** | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| **3** | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| **4** | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| **5** | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 475.00 | 100.000 |
| 3 | FLAT | ✓ | 75.00 | 100.000 |
| 4 | FLAT | ✓ | 230.00 | 100.000 |
| 5 | FLAT | ✓ | 25.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 35.000 | 5.000 | 80.000 | 290.000 | 65.000 |
| | 3 | 35.000 | 25.000 | 0.000 | 15.000 | 0.000 |
| | 4 | 65.000 | 155.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 5.000 | 10.000 | 0.000 | 10.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.01 | 0.17 | 0.61 | 0.14 |
| | 3 | 0.47 | 0.33 | 0.00 | 0.20 | 0.00 |
| | 4 | 0.28 | 0.67 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.40 | 0.00 | 0.40 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.15 | 1.31 | 0.17 | A |
| 3 | 0.03 | 1.45 | 0.03 | A |
| 4 | 0.09 | 1.53 | 0.10 | A |
| 5 | 0.02 | 2.33 | 0.02 | A |

# Main Results for each time segment

## Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 474.31 | 14.97 | 0.00 | 3225.54 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 74.88 | 404.40 | 0.00 | 2560.91 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 229.61 | 164.75 | 0.00 | 2588.25 | 0.089 | 0.10 | 1.525 | A |
| 5 | 25.00 | 24.94 | 324.46 | 0.00 | 1570.98 | 0.016 | 0.02 | 2.328 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.450 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.528 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.308 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 475.00 | 475.00 | 15.00 | 0.00 | 3225.51 | 0.147 | 0.17 | 1.310 | A |
| 3 | 75.00 | 75.00 | 405.00 | 0.00 | 2560.38 | 0.029 | 0.03 | 1.447 | A |
| 4 | 230.00 | 230.00 | 165.00 | 0.00 | 2588.04 | 0.089 | 0.10 | 1.526 | A |
| 5 | 25.00 | 25.00 | 325.00 | 0.00 | 1570.61 | 0.016 | 0.02 | 2.328 | A |

# Junctions 8

## ARCADY 8 - Roundabout Module

Version: 8.0.5.523 [19102,19/06/2015]
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** Junction I (Weekday).arc8
**Path:** \\CTA_NAS01\Project\CTA Consultants Limited\CTA - Project\20058HK - 2020 App for License for Puguangming Temple\Cal\TIA\2023-05-31
**Report generation date:** 1/6/2023 15:09:19

» 2027 reference traffic flow, Weekday AM Peak Hour
» 2027 design traffic flow, Weekday AM Peak Hour
» 2027 reference traffic flow, Weekday PM Peak Hour
» 2027 design traffic flow, Weekday PM Peak Hour
» 2021 observed traffic flow, Weekday AM Peak Hour
» 2021 observed traffic flow, Weekday PM Peak Hour

## Summary of junction performance

| | Weekday AM Peak Hour | | | | Weekday PM Peak Hour | | | |
|---|---|---|---|---|---|---|---|---|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| **2021 observed traffic flow** | | | | | | | | |
| Arm 2 | 0.10 | 1.23 | 0.09 | A | 0.10 | 1.23 | 0.09 | A |
| Arm 3 | 0.02 | 1.35 | 0.02 | A | 0.00 | 0.00 | 0.00 | A |
| Arm 4 | 0.09 | 1.47 | 0.08 | A | 0.08 | 1.44 | 0.08 | A |
| Arm 5 | 0.00 | 0.00 | 0.00 | A | 0.02 | 2.23 | 0.02 | A |
| **2027 design traffic flow** | | | | | | | | |
| Arm 2 | 0.14 | 1.26 | 0.12 | A | 0.13 | 1.27 | 0.12 | A |
| Arm 3 | 0.03 | 1.40 | 0.02 | A | 0.00 | 0.00 | 0.00 | A |
| Arm 4 | 0.11 | 1.52 | 0.10 | A | 0.10 | 1.47 | 0.09 | A |
| Arm 5 | 0.00 | 0.00 | 0.00 | A | 0.02 | 2.25 | 0.02 | A |
| **2027 reference traffic flow** | | | | | | | | |
| Arm 2 | 0.14 | 1.26 | 0.12 | A | 0.13 | 1.27 | 0.12 | A |
| Arm 3 | 0.03 | 1.40 | 0.02 | A | 0.00 | 0.00 | 0.00 | A |
| Arm 4 | 0.11 | 1.52 | 0.10 | A | 0.10 | 1.47 | 0.09 | A |
| Arm 5 | 0.00 | 0.00 | 0.00 | A | 0.02 | 2.25 | 0.02 | A |

*Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle.*

*"D2 - 2027 reference traffic flow, Weekday AM Peak Hour " model duration: 13:30 - 15:00*
*"D3 - 2027 design traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D4 - 2027 reference traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D5 - 2027 design traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*
*"D6 - 2021 observed traffic flow, Weekday AM Peak Hour" model duration: 13:30 - 15:00*
*"D7 - 2021 observed traffic flow, Weekday PM Peak Hour" model duration: 13:30 - 15:00*

*Run using Junctions 8.0.5.523 at 1/6/2023 15:09:15*

## File summary

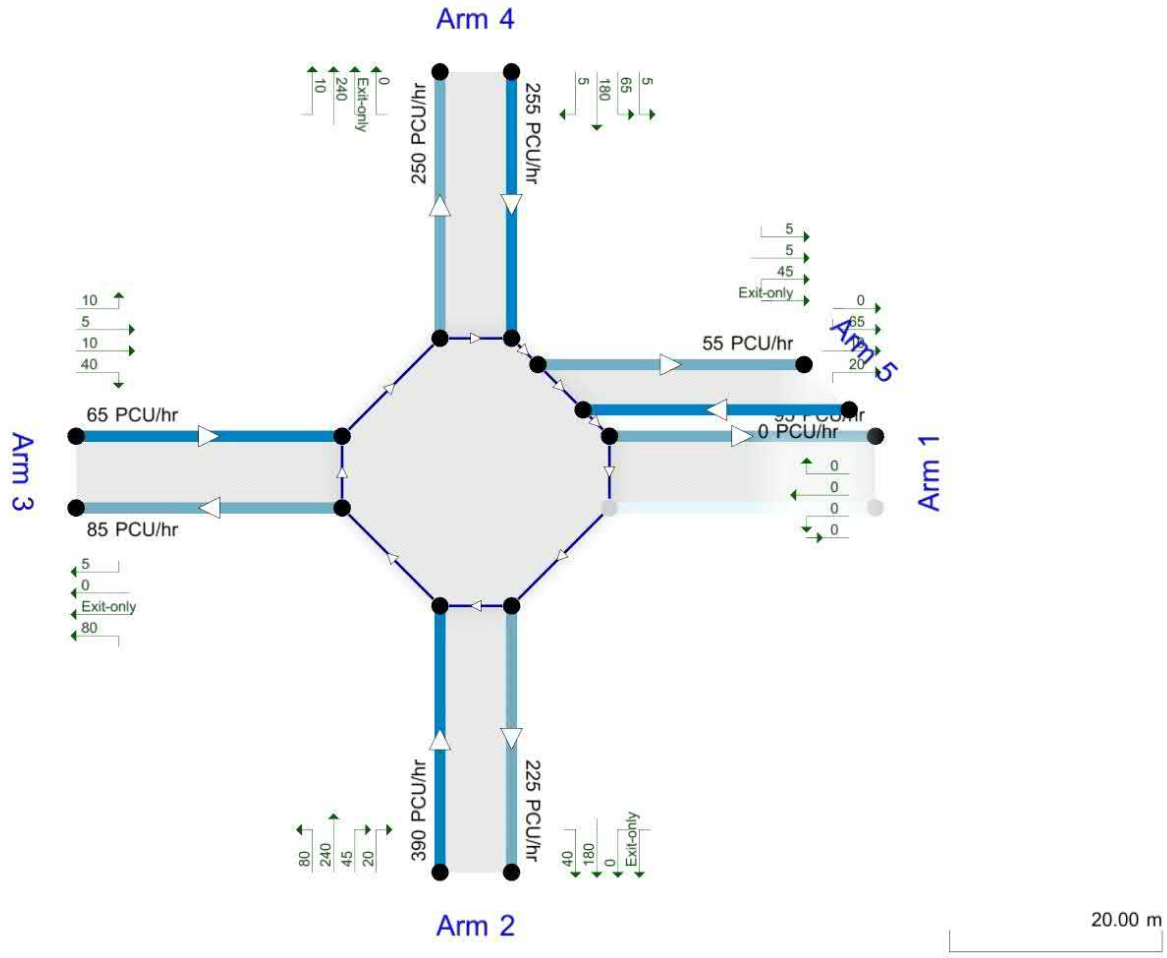
| | |
|---|---|
| **Title** | (untitled) |
| **Location** | |
| **Site Number** | |
| **Date** | 14/11/2019 |
| **Version** | |
| **Status** | (new file) |
| **Identifier** | |
| **Client** | |
| **Jobnumber** | |
| **Enumerator** | user |
| **Description** | |

## Analysis Options

| Vehicle Length (m) | Do Queue Variations | Calculate Residual Capacity | Residual Capacity Criteria Type | RFC Threshold | Average Delay Threshold (s) | Queue Threshold (PCU) |
|---|---|---|---|---|---|---|
| 5.75 | | | N/A | 0.85 | 36.00 | 20.00 |

## Units

| Distance Units | Speed Units | Traffic Units Input | Traffic Units Results | Flow Units | Average Delay Units | Total Delay Units | Rate Of Delay Units |
|---|---|---|---|---|---|---|---|
| m | kph | PCU | PCU | perHour | s | -Min | perMin |




Showing original traffic demand (PCU/hr)
Time Segment: (13:30-13:45)
Showing Analysis Set "A1 - "; Demand Set "D2 - 2027 reference traffic flow, Weekday AM Peak Hour "

*The junction diagram reflects the last run of ARCADY.*

# 2027 reference traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

### Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday AM Peak Hour | 2027 reference traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

### Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.37 | A |

### Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

### Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| **1** | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| **2** | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| **3** | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| **4** | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| **5** | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 390.00 | 100.000 |
| 3 | FLAT | ✓ | 65.00 | 100.000 |
| 4 | FLAT | ✓ | 255.00 | 100.000 |
| 5 | FLAT | ✓ | 0.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 20.000 | 5.000 | 80.000 | 240.000 | 45.000 |
| | 3 | 10.000 | 40.000 | 0.000 | 10.000 | 5.000 |
| | 4 | 65.000 | 180.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.05 | 0.01 | 0.21 | 0.62 | 0.12 |
| | 3 | 0.15 | 0.62 | 0.00 | 0.15 | 0.08 |
| | 4 | 0.25 | 0.71 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

### Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.12 | 1.26 | 0.14 | A |
| 3 | 0.02 | 1.40 | 0.03 | A |
| 4 | 0.10 | 1.52 | 0.11 | A |
| 5 | 0.00 | 0.00 | 0.00 | A |

# Main Results for each time segment

## Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 389.45 | 4.99 | 0.00 | 3235.01 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 64.90 | 309.56 | 0.00 | 2644.44 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 254.57 | 124.82 | 0.00 | 2622.92 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 324.47 | 0.00 | 1570.97 | 0.000 | 0.00 | 0.000 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.397 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

# 2027 design traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday AM Peak Hour | 2027 design traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.37 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

### Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

### Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

### Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

### General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 390.00 | 100.000 |
| 3 | FLAT | ✓ | 65.00 | 100.000 |
| 4 | FLAT | ✓ | 255.00 | 100.000 |
| 5 | FLAT | ✓ | 0.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 20.000 | 5.000 | 80.000 | 240.000 | 45.000 |
| | 3 | 10.000 | 40.000 | 0.000 | 10.000 | 5.000 |
| | 4 | 65.000 | 180.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.05 | 0.01 | 0.21 | 0.62 | 0.12 |
| | 3 | 0.15 | 0.62 | 0.00 | 0.15 | 0.08 |
| | 4 | 0.25 | 0.71 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.12 | 1.26 | 0.14 | A |
| 3 | 0.02 | 1.40 | 0.03 | A |
| 4 | 0.10 | 1.52 | 0.11 | A |
| 5 | 0.00 | 0.00 | 0.00 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 389.45 | 4.99 | 0.00 | 3235.01 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 64.90 | 309.56 | 0.00 | 2644.44 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 254.57 | 124.82 | 0.00 | 2622.92 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 324.47 | 0.00 | 1570.97 | 0.000 | 0.00 | 0.000 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.395 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 390.00 | 390.00 | 5.00 | 0.00 | 3235.00 | 0.121 | 0.14 | 1.264 | A |
| 3 | 65.00 | 65.00 | 310.00 | 0.00 | 2644.05 | 0.025 | 0.03 | 1.397 | A |
| 4 | 255.00 | 255.00 | 125.00 | 0.00 | 2622.76 | 0.097 | 0.11 | 1.519 | A |
| 5 | 0.00 | 0.00 | 325.00 | 0.00 | 1570.61 | 0.000 | 0.00 | 0.000 | A |

# 2027 reference traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 reference traffic flow, Weekday PM Peak Hour | 2027 reference traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.39 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 370.00 | 100.000 |
| 3 | FLAT | ✓ | 0.00 | 100.000 |
| 4 | FLAT | ✓ | 235.00 | 100.000 |
| 5 | FLAT | ✓ | 30.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 10.000 | 5.000 | 55.000 | 260.000 | 40.000 |
| | 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 4 | 30.000 | 195.000 | 0.000 | 0.000 | 10.000 |
| | 5 | 5.000 | 0.000 | 10.000 | 15.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.03 | 0.01 | 0.15 | 0.70 | 0.11 |
| | 3 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 4 | 0.13 | 0.83 | 0.00 | 0.00 | 0.04 |
| | 5 | 0.17 | 0.00 | 0.33 | 0.50 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.12 | 1.27 | 0.13 | A |
| 3 | 0.00 | 0.00 | 0.00 | A |
| 4 | 0.09 | 1.47 | 0.10 | A |
| 5 | 0.02 | 2.25 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 369.48 | 24.94 | 0.00 | 3216.08 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 329.52 | 0.00 | 2626.86 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 234.62 | 54.92 | 0.00 | 2683.60 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 29.93 | 239.61 | 0.00 | 1628.24 | 0.018 | 0.02 | 2.252 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.266 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

# 2027 design traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2027 design traffic flow, Weekday PM Peak Hour | 2027 design traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.39 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 370.00 | 100.000 |
| 3 | FLAT | ✓ | 0.00 | 100.000 |
| 4 | FLAT | ✓ | 235.00 | 100.000 |
| 5 | FLAT | ✓ | 30.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 10.000 | 5.000 | 55.000 | 260.000 | 40.000 |
| | 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 4 | 30.000 | 195.000 | 0.000 | 0.000 | 10.000 |
| | 5 | 5.000 | 0.000 | 10.000 | 15.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.03 | 0.01 | 0.15 | 0.70 | 0.11 |
| | 3 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 4 | 0.13 | 0.83 | 0.00 | 0.00 | 0.04 |
| | 5 | 0.17 | 0.00 | 0.33 | 0.50 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.12 | 1.27 | 0.13 | A |
| 3 | 0.00 | 0.00 | 0.00 | A |
| 4 | 0.09 | 1.47 | 0.10 | A |
| 5 | 0.02 | 2.25 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 369.48 | 24.94 | 0.00 | 3216.08 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 329.52 | 0.00 | 2626.86 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 234.62 | 54.92 | 0.00 | 2683.60 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 29.93 | 239.61 | 0.00 | 1628.24 | 0.018 | 0.02 | 2.252 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.264 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

### Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 370.00 | 370.00 | 25.00 | 0.00 | 3216.02 | 0.115 | 0.13 | 1.266 | A |
| 3 | 0.00 | 0.00 | 330.00 | 0.00 | 2626.44 | 0.000 | 0.00 | 0.000 | A |
| 4 | 235.00 | 235.00 | 55.00 | 0.00 | 2683.54 | 0.088 | 0.10 | 1.469 | A |
| 5 | 30.00 | 30.00 | 240.00 | 0.00 | 1627.98 | 0.018 | 0.02 | 2.252 | A |

# 2021 observed traffic flow, Weekday AM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday AM Peak Hour | 2021 observed traffic flow | Weekday AM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.33 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| 1 | 1 | Slip Road | |
| 2 | 2 | Chik Wan Street | |
| 3 | 3 | Sha Tin Heights Road | |
| 4 | 4 | Lower Shing Mun Road | |
| 5 | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| 1 | 0.00 | 99999.00 |
| 2 | 0.00 | 99999.00 |
| 3 | 0.00 | 99999.00 |
| 4 | 0.00 | 99999.00 |
| 5 | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 300.00 | 100.000 |
| 3 | FLAT | ✓ | 55.00 | 100.000 |
| 4 | FLAT | ✓ | 215.00 | 100.000 |
| 5 | FLAT | ✓ | 0.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 20.000 | 5.000 | 65.000 | 200.000 | 10.000 |
| | 3 | 10.000 | 35.000 | 0.000 | 10.000 | 0.000 |
| | 4 | 55.000 | 150.000 | 5.000 | 0.000 | 5.000 |
| | 5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.07 | 0.02 | 0.22 | 0.67 | 0.03 |
| | 3 | 0.18 | 0.64 | 0.00 | 0.18 | 0.00 |
| | 4 | 0.26 | 0.70 | 0.02 | 0.00 | 0.02 |
| | 5 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.09 | 1.23 | 0.10 | A |
| 3 | 0.02 | 1.35 | 0.02 | A |
| 4 | 0.08 | 1.47 | 0.09 | A |
| 5 | 0.00 | 0.00 | 0.00 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 299.59 | 4.99 | 0.00 | 3235.01 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 54.92 | 234.68 | 0.00 | 2710.39 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 214.65 | 79.88 | 0.00 | 2661.93 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 279.56 | 0.00 | 1601.28 | 0.000 | 0.00 | 0.000 | A |

## Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.470 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 300.00 | 300.00 | 5.00 | 0.00 | 3235.00 | 0.093 | 0.10 | 1.226 | A |
| 3 | 55.00 | 55.00 | 235.00 | 0.00 | 2710.11 | 0.020 | 0.02 | 1.355 | A |
| 4 | 215.00 | 215.00 | 80.00 | 0.00 | 2661.83 | 0.081 | 0.09 | 1.472 | A |
| 5 | 0.00 | 0.00 | 280.00 | 0.00 | 1600.98 | 0.000 | 0.00 | 0.000 | A |

# 2021 observed traffic flow, Weekday PM Peak Hour

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

| Name | Roundabout Capacity Model | Description | Locked | Network Flow Scaling Factor (%) | Reason For Scaling Factors |
|---|---|---|---|---|---|
| | ARCADY | | | 100.000 | |

## Demand Set Details

| Name | Scenario Name | Time Period Name | Description | Traffic Profile Type | Model Start Time (HH:mm) | Model Finish Time (HH:mm) | Model Time Period Length (min) | Time Segment Length (min) | Single Time Segment Only | Locked |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 observed traffic flow, Weekday PM Peak Hour | 2021 observed traffic flow | Weekday PM Peak Hour | | FLAT | 13:30 | 15:00 | 90 | 15 | | |

# Junction Network

## Junctions

| Junction | Name | Junction Type | Arm Order | Grade Separated | Large Roundabout | Junction Delay (s) | Junction LOS |
|---|---|---|---|---|---|---|---|
| I | Lower Shing Mun Road/ Sha Tin Heights Road/ Chik Wan Street/ Ying Wan Lane | Roundabout | 1,2,3,4,5 | | | 1.37 | A |

## Junction Network Options

| Driving Side | Lighting |
|---|---|
| Left | Normal/unknown |

# Arms

## Arms

| Arm | Arm | Name | Description |
|---|---|---|---|
| **1** | 1 | Slip Road | |
| **2** | 2 | Chik Wan Street | |
| **3** | 3 | Sha Tin Heights Road | |
| **4** | 4 | Lower Shing Mun Road | |
| **5** | 5 | Ying Wan Lane | |

## Capacity Options

| Arm | Minimum Capacity (PCU/hr) | Maximum Capacity (PCU/hr) |
|---|---|---|
| **1** | 0.00 | 99999.00 |
| **2** | 0.00 | 99999.00 |
| **3** | 0.00 | 99999.00 |
| **4** | 0.00 | 99999.00 |
| **5** | 0.00 | 99999.00 |

## Roundabout Geometry

| Arm | V - Approach road half-width (m) | E - Entry width (m) | l' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Exit Only |
|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only | ✓ |
| 2 | 10.00 | 12.50 | 11.30 | 12.00 | 32.00 | 40.00 | |
| 3 | 9.00 | 11.50 | 10.30 | 10.00 | 32.00 | 37.50 | |
| 4 | 7.50 | 10.50 | 9.00 | 17.00 | 32.00 | 25.50 | |
| 5 | 5.50 | 6.00 | 5.80 | 19.00 | 32.00 | 28.50 | |

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

| Arm | Enter slope and intercept directly | Entered slope | Entered intercept (PCU/hr) | Final Slope | Final Intercept (PCU/hr) |
|---|---|---|---|---|---|
| 1 | | (calculated) | (calculated) | Exit-only | Exit-only |
| 2 | | (calculated) | (calculated) | 0.949 | 3239.743 |
| 3 | | (calculated) | (calculated) | 0.881 | 2917.088 |
| 4 | | (calculated) | (calculated) | 0.868 | 2731.286 |
| 5 | | (calculated) | (calculated) | 0.675 | 1789.941 |

*The slope and intercept shown above include any corrections and adjustments.*

# Traffic Flows

## Demand Set Data Options

| Default Vehicle Mix | Vehicle Mix Varies Over Time | Vehicle Mix Varies Over Turn | Vehicle Mix Varies Over Entry | Vehicle Mix Source | PCU Factor for a HV (PCU) | Default Turning Proportions | Estimate from entry/exit counts | Turning Proportions Vary Over Time | Turning Proportions Vary Over Turn | Turning Proportions Vary Over Entry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | ✓ | ✓ | HV Percentages | 2.00 | | | | ✓ | ✓ |

# Entry Flows

## General Flows Data

| Arm | Profile Type | Use Turning Counts | Average Demand Flow (PCU/hr) | Flow Scaling Factor (%) |
|---|---|---|---|---|
| 1 | Exit-only | ✓ | Exit-only | Exit-only |
| 2 | FLAT | ✓ | 295.00 | 100.000 |
| 3 | FLAT | ✓ | 0.00 | 100.000 |
| 4 | FLAT | ✓ | 205.00 | 100.000 |
| 5 | FLAT | ✓ | 30.00 | 100.000 |

# Turning Proportions

### Turning Counts / Proportions (PCU/hr) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 10.000 | 5.000 | 45.000 | 220.000 | 15.000 |
| | 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | 4 | 25.000 | 165.000 | 5.000 | 0.000 | 10.000 |
| | 5 | 5.000 | 0.000 | 10.000 | 15.000 | 0.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Turning Proportions (PCU) - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 2 | 0.03 | 0.02 | 0.15 | 0.75 | 0.05 |
| | 3 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| | 4 | 0.12 | 0.80 | 0.02 | 0.00 | 0.05 |
| | 5 | 0.17 | 0.00 | 0.33 | 0.50 | 0.00 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Vehicle Mix

### Average PCU Per Vehicle - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 3 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 4 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | 5 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

### Heavy Vehicle Percentages - Junction I (for whole period)

| | | To | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| From | 1 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

*Arm 1 is exit only and so the above grid should be ignored for this Arm.*

# Results

## Results Summary for whole modelled period

| Arm | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS |
|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 0.09 | 1.23 | 0.10 | A |
| 3 | 0.00 | 0.00 | 0.00 | A |
| 4 | 0.08 | 1.44 | 0.08 | A |
| 5 | 0.02 | 2.23 | 0.02 | A |

## Main Results for each time segment

### Main results: (13:30-13:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 294.60 | 29.93 | 0.00 | 3211.34 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 264.62 | 0.00 | 2684.02 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 204.67 | 29.96 | 0.00 | 2705.28 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 29.93 | 209.67 | 0.00 | 1648.45 | 0.018 | 0.02 | 2.223 | A |

### Main results: (13:45-14:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.224 | A |

### Main results: (14:00-14:15)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.224 | A |

## Main results: (14:15-14:30)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.224 | A |

## Main results: (14:30-14:45)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.226 | A |

## Main results: (14:45-15:00)

| Arm | Total Demand (PCU/hr) | Entry Flow (PCU/hr) | Circulating Flow (PCU/hr) | Pedestrian Demand (Ped/hr) | Capacity (PCU/hr) | RFC | End Queue (PCU) | Delay (s) | LOS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Exit-only | Exit-only | Exit-only | 0.00 | Exit-only | Exit-only | Exit-only | Exit-only | Exit-only |
| 2 | 295.00 | 295.00 | 30.00 | 0.00 | 3211.28 | 0.092 | 0.10 | 1.233 | A |
| 3 | 0.00 | 0.00 | 265.00 | 0.00 | 2683.69 | 0.000 | 0.00 | 0.000 | A |
| 4 | 205.00 | 205.00 | 30.00 | 0.00 | 2705.24 | 0.076 | 0.08 | 1.439 | A |
| 5 | 30.00 | 30.00 | 210.00 | 0.00 | 1648.22 | 0.018 | 0.02 | 2.226 | A |

OTHER SPECIFIED USES

| Column 1<br>Uses always permitted | Column 2<br>Uses that may be permitted with or without conditions on application to the Town Planning Board |
|---|---|

For "Religious Institution with Columbarium" Only

Religious Institution
Columbarium

Planning Intention

This zone is primarily for land intended for religious and columbarium uses.

Remarks

(1) 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 1,416m$^2$.

(2) 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 shall exceed a maximum building height of 3 storeys.

(3) The number of niches for columbarium use under Column 1 shall not exceed 4,779.

(4) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the gross floor area/ building height restrictions/ number of niches stated in paragraphs (1) to (3) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

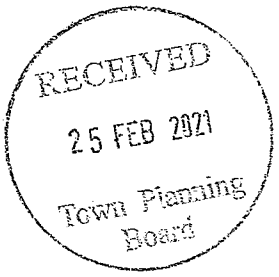
Comment No. 5-572

# 意見書提交

致： 城市規劃委員會 (香港北角渣華道 333 號北角政府合署 15 樓)

由： 普光明園有限公司

內容： 有關普光明寺申請土地改變用途之意見書合共 693 份
(申請編號：Y/ST/48 及 Y/ST/49)




簽收：

日期： 2021/2/25

# 意見書

有關: 【普光明寺】向城市規劃委員會申請土地改變用途

普光明寺一直秉承《施之以誠。功德迴向。善行佈施》的理念，靈灰位是寺內其中一項配套設施作為佛弟子及善信供奉先人之用途，與及為先人提供一處安居之所，現階段政府立法對私營骨灰安置所進行規範化，本寺亦深表贊同及全面作出配合從而符合相關發牌標準。

普光明寺於 2020 年 12 月份向城市規劃委員會申請土地改變用途，將現有座落於《新界沙田大圍丈量約份 181 約地段第 2 號及第 671 號》的土地由【住宅(乙類)】地帶及【綠化地帶】改劃為【其他指定用途】註明【宗教機構及靈灰安置所】地帶。

規劃申請編號: Y/ST/148 及 Y/ST/149

現希各善信簽名支持本寺申請上述土地改變用途，並簽回以下同意書於 2021 年 1 月 8 日前寄回本寺，如有任何疑問可致電 2699 8061 查詢。

普光明寺啟

二零二零年十二月二十二日

本人 ☑ 同意 ☐ 不同意 支持普光明寺申請上述土地改變用途。

原因 : 因先人之安居之所、蒙衷欣之

RECEIVED
25 FEB 2021
Town Planning Board

提供意見人資料:

姓名 : 黃佩芙 電話 : [redacted]

簽署 : 黃佩芙 日期 : 2020-12-25

005

Designing Hong Kong 創建香港 .com

24 February 2021
Chairman and Members
Town Planning Board
15/F, North Point Government Offices
333 Java Road, North Point, Hong Kong
Fax: 2877 0245;
Email: tpbpd@pland.gov.hk

**To rezone the application site from "Residential (Group B)" and "Green Belt" to "Other Specified Uses" annotated "Religious Institution with Columbarium" (Application No. Y/ST/48 & Y/ST/49)**

Dear Chairman and Members,

Designing Hong Kong Limited **objects** the captioned for the following reasons:

- Part of the proposed area is zoned as "**Green Belt (GB)**". The planning intention of this zone is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets. There is a general presumption against development within this zone.

- According to the update from the Development Bureau on 29 March 2018, **columbarium use is not permitted** under the lease on the proposed site. However, the Puguangming Temple has been operating for years. We concern the Town Planning Board may rewarding an unauthorized use of land by approving the captioned application.

- As the application shares the same road with the resident of Mei Chung Court, May Shing Court and Mei Lam Estate, we concern the approval of the application may bring adverse traffic impact to the surrounding neighbourhood, especially during the Ching Ming Festival and Chung Yeung Festival.

- There are **limited public transport access** to the proposed site. The public transport system may not support the increase of passengers and bring inconvenience to other passengers and residents in the area.

- The approval of the application would set an undesirable precedent for other applications within the "Green Belt (GB)" zone, and lead to a general degradation of the rural environment of the area.

Here we submit our concerns for your consideration.

Yours,
**Designing Hong Kong Limited**

tpbpd@pland.gov.hk

寄件者: hoklai wong <wonghoklaioffice@gmail.com>
寄件日期: 2021年02月26日星期五 21:51
收件者: tpbpd@pland.gov.hk
主旨: 反對Y/ST/48及Y/ST/49的改劃申請

沙田區議會
Shatin District Council

黃學禮議員辦事處
Office of **Mr. Wong Hok Lai**, Member of S.T.D.C.

wonghoklaioffice@gmail.com 2278 4088 2415 4088 美田邨美庭樓地下一室

敬啟者：

**反對 Y/ST/48 及 Y/ST/49 的改劃申請**

貴會早前通知有關沙田銅鑼灣山路丈量約份第 181 約地段第 2 號及第 671 號更改規劃(申請編號：Y/ST/48 及 Y/ST/49)的來函已收悉。本人現代表本區居民，再次來函強烈反對有關申請。

反對原因如下：

1.該地段現時建有多年來違法經營的骨灰龕場普光明寺，極其鄰近民居，不符合社區原有規劃，亦違反該土地的地契條款。該骨灰龕場現屬於「表二」龕場，未知能否更改為屬於「表一」的合法龕場。若更改土地用途申請獲批准，將對市民構成誤解，發出錯誤訊息誤以為龕場合法，繼而招致損失。

2.違法骨灰龕場經常進行宗教儀式，對鄰近居民造成噪音滋擾以及燃點香燭冥鏹造成空氣污染。大量因燃燒香燭冥鏹的廢料飄入美松苑，對居民造成影響，祭祀發出的聲響嚴重影響居民作息。龕場營運以來，附近街道出現大量棄置祭品以及垃圾，嚴重影響環境衞生，更惹來大量野猴滋擾民居。

3.違法骨灰龕場導致大量市民進出該地，尤其春秋二祭期間，令該區交通不勝負荷。是次申請所指的 14,540 個龕位已對區內造成交通壓力及滋擾居民，因美松苑對出美田路曾多次發生交通意外，在申請者提交的資料中建議擴闊普光明寺外的道路以行車，該道路為白田村三區村民進出的主要道路，並連接行人路改造這段道路會做成交通危險，而施工其間更會造成不同程度的滋擾，因此我認為這次申請並不合適。

4.普光明寺於前年 12 月提交的有關交通評估的補充資料並沒有對上述申請的本質帶來任何改變，其中數據評估有過份樂觀之嫌，未能釋除本區居民對於其交通影響的疑慮。

5.本人與本區居民過往已曾多次以來信、街站、示威、請願等方式向　貴會表達強烈反對相關申請。普光明寺於 2016 年第一次向　貴會申請於上寺更改規劃（編號：Y/ST/33）時，便已遭到本人、本區居民、乃至社會輿論的一致反對，多次要求延期後最終於 2018 年初撤回有關申請。普光明寺於去年再次闖關　貴會申請改劃，今年則將申請分拆成二案捲土重來，惟其新申請與此前被各界所一致反對之原案幾近無異，在舊酒新瓶之前題下，我們實無法相信有何新理據應對此申請予以接納。本人必須強調，本區居民絕對反對普光明寺的改劃申請，亦絕不接受普光明寺以宗教為名以斂財為實在區內經營嚴重破壞本區環境、交通和衛生的非法龕場。

6.本人與本區居民亦留意到「各界關注骨灰龕法案大聯盟」於今日向　貴會所提出之申述書（即「有關：反對 Y/ST/48 及 49 把『住宅（乙類）』地帶及『綠化地帶』改劃為『其他指定用途』註明『宗教機構及靈灰安置所』地帶」）。本人認為，有關申訴書有系統、科學、宏觀而詳盡地闡述了一直以來社會各界反對有關改劃的原由，誠冀　貴會予以重視，審慎細閱。

本人代表本區居民的申述如上。

此致

城市規劃委員會

沙田區議員

黃學禮　謹啟

二零二一年二月二十六日

574

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

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**有關的規劃申請編號 The application no. to which the comment relates**
Y/ST/48 , Y/ST/49

意見詳情 (如有需要，請另頁說明)
**Details of the Comment** (use separate sheet if necessary)

祥見附文

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

簽署 Signature _____ 日期 Date 17-02-2021

574

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.

檔案編號：STRC2021-011
敬啟者：

**新界沙田大圍丈量約份第 181 約地段第 2 號、第 671**
**把「住宅(乙類)」地帶及「綠化地帶」改劃為「其他指定用途」註明「宗教機構及靈灰安置所」地帶(申請編號：Y/ST/48)及(申請編號：Y/ST/49)**

本人就上述標題之申請提出反對意見。反對的理由如下：

一：眾所周知申請方以極為惡劣的銷售手法經營，之前沒有提出改劃之餘又欺騙消費者，向市民出售骨灰龕，違反土地用途及違反地契條款，近年申請人信來信往提出改劃，改劃規模可謂是當區之冠，骨灰龕數量驚人，若批准有關申請，變相鼓勵違規發展，做成極壞先例。

二：反對申請位置太接近民居，與美松苑樂松閣相距不到一百呎，進行宗教法事，焚燒冥鏹香燭等產生的噪音及煙火，均對環境造成污染，而且對附近居民造成心理影響，影響居住安寧。

三：申請骨灰龕位數量龐大，其所帶來之人流對附近地區的交通造成嚴重影響，現時前往「普光明寺」並無一條標準車路，必經之路(美田路)在美松苑路段只有雙向兩條行車線，道路狹窄，也沒有公共停車位供駕車人士使用，屋邨停車場已經爆滿，平日可見美田路擠滿違泊車輛，倘若「普光明寺」成功申請，重陽節及清明節期間，開車前往祭拜市民勢必令周邊一帶交通道路難以負荷，再者，現時只有 63A 轉線小巴可作為接駁前往「普光明寺」交通工具，該專線小巴早已超出負荷，特別於週末經常出現大排人龍情況，公共交通工具配套不足，難以滿足節假日前往祭拜之人流。

四：該帶欠缺緊急車輛停泊或行駛的道路，人流眾多，一旦遇到意外，會影響救援情況。

綜合上述，本人反對是次之申請。

此致
城市規劃委員會

沙田鄉事委員會主席·莫錦貴

2021-2-16

香港北角渣華道 333 號
北角政府合署 15 樓
致：城市規劃委員會

- 3267

**有關：反對普光明寺更改土地用途為宗教機構(寺廟)及靈灰安置所的申請**
**(申請編號：Y/ST/49-申請人提交的進一步資料)**

本人從　貴署於2023年4月28日發出之信函中，得悉普光明寺向城市規劃委員會(下稱城規會)提出申請把原作為綠化地帶和住宅用地之地段改作宗教機構(寺廟)及靈灰安置所的申請而提交進一步資料，特此來函表示反對，理由如下：

1. 普光明寺以宗教為由，以此伸延之靈灰安置所的申請於法和於理不合：
   • 普光明寺在住宅(乙類)土地上建寺作宗教機構用途本無不妥，但既然其土地用途本身已為特別許可，普光明寺宣稱之宗教用途就應為其唯一土地用途，更何況地政總署亦裁定其行為已違反地契，奈何十多年來卻無人執法。
   • 普光明寺宣稱其提供之靈位安置服務只提供予佛教徒，與公營及其他私營骨灰龕場有所分別。但其卻曾登報公開放售予公眾及公司作購買，可見其對城規會的土地用途申請只為牟利作藉口。

2. 普光明寺因其骨灰安放之土地用途對環境造成嚴重破壞，已嚴重違反其綠化土地之使用原意：
   • 政府應就其破壞行為作出懲罰，並非批准其改變土地用途之申請，變相『獎勵』普光明寺名正言順出售骨灰盈利。
   • 普光明寺位處綠化土地及住宅(乙類)土地之交界，該處為白田村和美松苑之毗鄰，城門隧道之下，為野生動物包括猴子和野豬經常出沒的地方。其焚燒冥鏹等行為污染附近之空氣質素，嚴重威脅此區生態圈之平衡。

3. 普光明寺對附近26座公屋、居屋及私人樓宇帶來嚴重滋擾：
   • 普光明寺最近之樓宇為美松苑樂松閣，兩建築物距離不足 100呎，樂松閣居民經常因其宗教活動包括頌經等活動導致生活作息被擾，以及焚燒冥鏹令空氣質素變差，這會直接對居民健康之影響。
   • 美田路一帶之的公用排污系統已到達飽和，無法容納任何將來發展所帶來的污水。

4. 若其成功申請改變土地用途，附近的交通配套不可能負荷。

• 普光明寺位於美松苑之後方，該處只有一條巴士線路由沙田駛至，加上只是一條單程路上城門隧道或駛至美林村美槐樓繞路離開，交通配套不足以容納 2 萬骨灰龕使用者之後人到訪。

• 有居民反映臨近清明及重陽節時段，有村外人士攜帶冥鏹乘搭唯一進村之小巴至普光明寺，普光明寺亦在其網站介紹到訪人士乘搭該小巴，可見交通配套之匱乏。

總括而言，普光明寺已經在灰色地帶遊走多年，出於法律、公義、公益及生態綠化保育等角度對該寺之申請改變土地用途持反對意見。其借執法部門監管不力之機非法售賣骨灰龕及供人拜祭多年，不但剝削附近居民之權益，亦破壞本來優美之綠化土地，更重要是把對骨灰龕有需求之公眾人仕之權益置於劍鋒之上。地政署已早早裁決其違犯地契，但普光明寺在明知犯法的前提下借條例緩衝期屢次向城規會申請改變用途，並中途撤回以借行政漏洞延長其死線，本人懇請城規會從環境、法律、交通等角度在其未撤回申請時直接否決其申請，為香港目前私營非法骨灰龕場玩弄的無恥技倆畫上句號。

本人姓名：Queenie Leung

簽名：

日期：07 May 2023

RECEIVED
15 DEC 2021
Town Planning Board



城市規劃委員會：

**反對普光明寺更改土地用途為宗教機構（寺廟）及靈灰安置所的申請**

**（申請編號：Y/ST/48, Y/ST/49）**

本人得悉普光明寺於今年 3 月 30 日向城市規劃委員會(下稱城規會)提出申請把原作為綠化地帶和住宅用地之地段改作宗教機構(寺廟)及靈灰安置所的申請，特此來函表示反對，理由如下：

1. 普光明寺以宗教為由，以此伸延之靈灰安置所的申請於法和於理不合：
   ・普光明寺宣稱骨灰安放只是基本佛教寺廟的服務，既然如此基本，何以其最高價之單人骨灰龕位卻以 125,000 港元出售，並需每年繳交 7,000 港元管理費予寺廟？對比真正提供基本骨灰安放的公營場所的最高價 3,000 港元之永久安置權，其差額竟達 44 倍，普光明寺無疑是借宗教為名，牟利為實。
   ・全港合格並持牌之私人骨灰安置場所在條例通過後共有八間，其皆為合法合理地經正常程序申請並獲得通過，容許普光明寺以宗教為名在不法不義的情況下把原作綠化及住宅用途之用地變更為骨灰安放場所的話，無疑是對其他守法之骨灰龕供應公司不公。
2. 普光明寺因其骨灰安放之土地用途對環境造成嚴重破壞，已嚴重違反其綠化土地之使用原意：
   ・現時普光明寺正進行全寺修葺工程，不時有廢置工業廢料被非法遺棄，嚴重破壞環境，但卻因位址偏僻使相關部門難以執法。修葺時處理工程廢料這種基本公民要求也未能滿足，談何其能在改變土地用途後能維護社區和綠化地之本來功用？
   ・普光明寺宣稱其能提供 2 萬個骨灰龕位，以其目前的宗教活動之焚燒冥鏹量已使社區和郊區不勝負荷。若其能通過申請，將來到普光明寺拜祭之人仕所產生之冥鏹量必定對該生態環境帶來不可逆轉之破壞。
3. 普光明寺對附近 26 座公屋、居屋及私人樓宇帶來嚴重滋擾：
   ・美松苑居民曾在其屋苑範圍內張貼橫額抗議，普光明寺卻在其顧客到訪時進入美松苑破壞橫額只求粉飾太平，該寺能為求私利而作出此等非法行為，若土地用途成功改變，為求銷售必定變本加厲，對附近治安帶來不可量測之負面影響。
   ・附近只有一條馬路出入，缺少泊車位置，附近居民亦曾反映相關節日時違泊情況非常嚴重，對居民帶來嚴重不便。

4. 若其成功申請改變土地用途，附近的交通配套不勝負荷：

• 美田路至美松苑只有一條直上城門隧道之公路，若其申請成功通過，交通本來就不足以應付需求，亦沒有地段發展潛力擴充此區域的交通配套，只會對公眾及居民帶來不便。

• 該帶欠缺緊急車輛停泊或行駛的道路，人流眾多，一旦遇到意外，會影響救援情況。

其他意見：空氣污染

總括而言，普光明寺已經在灰色地帶遊走多年，出於法律、公義、公益及生態綠化保育等角度對該寺之申請改變土地用途持反對意見。其借執法部門監管不力之機非法售賣骨灰龕及供人拜祭多年，不但剝削附近居民之權益，亦破壞本來優美之綠化土地，更重要是把對骨灰龕有需求之公眾人仕之權益置於劍峰之上。地政署已早早裁決其違犯地契，但普光明寺在明知犯法的前提下借條例緩衝期屢次向城規會申請改變用途，並中途徹回以借行政漏洞延長其死線，本人懇請城規會從環境、法律、交通等角度在其未徹回申請時直接否決其申請，為香港目前非法骨灰龕場玩弄的無恥技倆畫上句號。

本人姓名：~~[illegible]~~ 徐思濠

簽名：[signature]

日期：6-12-2021

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

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**To : Secretary, Town Planning Board**
By hand or post : 15/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong
By Fax : 2877 0245 or 2522 8426
By e-mail : tpbpd@pland.gov.hk

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有關的規劃申請編號 **The application no. to which the comment relates**
**Y/ST/48 Received on 01/09/2021**

意見詳情 (如有需要，請另頁說明)
**Details of the Comment** (use separate sheet if necessary)

(16/6/2021 至 16/7/2021)
承早前城市規劃委員會進行的咨詢中，管業處已進行相關的問卷調查。
而綜合問卷調查結果，於收回之問卷中 93%業戶則反對上述申請，只有
7%業戶表示贊成。而業戶亦提出其他意見，①增建安置所後，會增加區
內交通流量壓力，影響區內居民安全②影響環境衛生、噪音滋擾及治安
問題，影響區內居民生活③違反土地用途，將非合法行為變成合法化營
商龕位 ④會造成嚴重的空氣污染及會有猴子集結搶奪食物。最後，鑑
於有關增加龕位已曾作出多次諮詢，而本苑居民對此均作出反對，故希
望城市規劃委員會考慮永久撤銷諮詢。(詳見附件)

「提意見人」姓名/名稱 Name of person/company making this comment 翠景花園業委會主席
佐偉強 先生

簽署 Signature _____ 日期 Date 27 SEP 2021

PARK VIEW GARDEN OWNER COMMITTEE 翠景花園業主委員會
Park View Garden Mgt Office 翠景花園管業處

致城市規劃委員會秘書：

688

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

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有關的規劃申請編號 **The application no. to which the comment relates**
**Y/ST/49 Received on 27/08/2021**

意見詳情 (如有需要，請另頁說明)
**Details of the Comment** (use separate sheet if necessary)

(16/6/2021 及 16/4/2021)
承早前城市規劃委員會進行的咨詢中，管業處已進行相關的問卷調查。
而綜合問卷調查結果，於收回之問卷中 93%業戶則反對上述申請，只有
7%業戶表示贊成。而業戶亦提出其他意見，①增建安置所後，會增加區
內交通流量壓力，影響區內居民安全②影響環境衛生、噪音滋擾及治安
問題，影響區內居民生活③違反土地用途，將非合法行為變成合法化營
商龕位 ④會造成嚴重的空氣污染及會有猴子集結搶奪食物。最後，鑑
於有關增加龕位已曾作出多次諮詢，而本苑居民對此均作出反對，故希
望城市規劃委員會考慮永久撤銷諮詢。(詳見附件)

「提意見人」姓名/名稱 Name of person/company making this comment 翠景花園業委會主席 任偉強先生

簽署 Signature _____ 日期 Date 27 SEP 2021

PARK VIEW GARDEN OWNER COMMITTEE 翠景花園業主委員會

Park View Garden Mgt Office 翠景花園 管業處

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

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有關的規劃申請編號 **The application no. to which the comment relates**
**Y/ST/48 Received on 18/06/2021**

意見詳情 (如有需要，請另頁說明)
**Details of the Comment** (use separate sheet if necessary)

承早前城市規劃委員會進行的咨詢中，管業處已進行相關的問卷調查。而綜合問卷調查結果，於收回之問卷中 93%業戶則反對上述申請，只有 7%業戶表示贊成。而業戶亦提出其他意見，①增建安置所後，會增加區內交通流量壓力，影響區內居民安全②影響環境衛生、噪音滋擾及治安問題，影響區內居民生活③違反土地用途，將非合法行為變成合法化營商龕位 ④會造成嚴重的空氣污染及會有猴子集結搶奪食物。最後，鑑於有關增加龕位已曾作出多次諮詢，而本苑居民對此均作出反對，故希望城市規劃委員會考慮永久撤銷諮詢。(詳見附件)

「提意見人」姓名/名稱 Name of person/company making this comment 翠景花園業委會主席 任偉強

簽署 Signature _____ 日期 Date 30/6/2021



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

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有關的規劃申請編號 **The application no. to which the comment relates**
**Y/ST/49 Received on 18/06/2021**

意見詳情 (如有需要，請另頁說明)
**Details of the Comment** (use separate sheet if necessary)

承早前城市規劃委員會進行的咨詢中，管業處已進行相關的問卷調查。而綜合問卷調查結果，於收回之問卷中 93%業戶則反對上述申請，只有 7%業戶表示贊成。而業戶亦提出其他意見，①增建安置所後，會增加區內交通流量壓力，影響區內居民安全②影響環境衛生、噪音滋擾及治安問題，影響區內居民生活③違反土地用途，將非合法行為變成合法化營商龕位 ④會造成嚴重的空氣污染及會有猴子集結搶奪食物。最後，鑑於有關增加龕位已曾作出多次諮詢，而本苑居民對此均作出反對，故希望城市規劃委員會考慮永久撤銷諮詢。(詳見附件)

「提意見人」姓名/名稱 Name of person/company making this comment 翠景花園業委會主席 任偉強

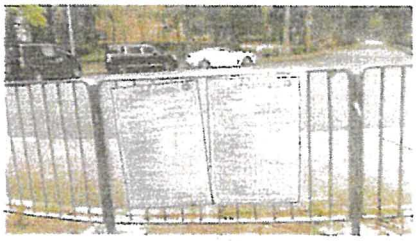
簽署 Signature _____ 日期 Date 30/6/2021

# 通 NOTICE 告

檔案編號:HLD/HAPM/HYP-RP0010/MEM21-059

致：翠景花園各業戶

## 有關：普光明寺修改土地用途申請(申請編號：Y/ST/48 及 Y/ST/49)



本處近日得悉『城規會』公佈一則規劃申請，計劃修改普光明寺的土地用途，由原有的住宅及綠化地帶修改為『**宗教機構及靈灰安置所**』地帶，並現正進行諮詢。

查該地段現時建有多年來懷疑違法經營的骨灰龕場普光明寺，實有違反土地用途及地契條款之嫌。因此是次修改土地用途變相將**現有懷疑違法經營之龕場合法化**。再者，是次申請如獲通過，可能大幅增加估計約 16,329 個龕位(Y/ST/48-共 14,540 個、Y/ST/49-共 1,789 個)，定當進一步增加本區內交通壓力，而附近街道出現大量棄置祭品及垃圾，影響環境衛生及噪音滋擾。

敬請各業戶就上述事宜積極提出意見，並於 **2021 年 4 月 30 日(星期五)或之前**填妥下列回條，並投入各座大堂收集箱內，以便管業處收集後再作跟進。

如有任何疑問，歡迎賜電 2607 0281 與管業處職員聯絡。

翠景花園管業處

二零二一年四月十九日

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## 回條 Reply Slip

致：城市規劃委員會　　傳真號碼:2877-0245

沙田民政事務署　　傳真號碼:2681-1625

咨詢事項: (Y/ST/48、Y/ST/49)

有關：普光明寺修改土地用途申請

本人 ☐ 贊成上述建議

☐ 對上述建議沒有意見

☑ 反對上述建議，原因 管業處於 4月19日就上述事宜發予各業戶之問卷，綜合問卷調查結果於收回之80卷中83名業戶反對上述申請，只有7名業戶(翠景花園業委會主席)

姓名：任偉豪　　簽署：

日期：6/5/2021　　電話：2607-0281

恒益物業管理有限公司

Hang Yick Properties Management Limited

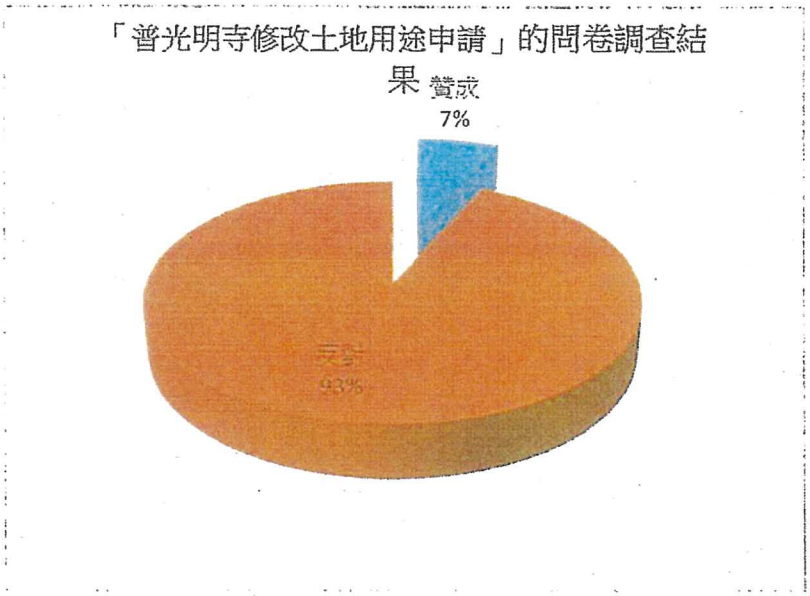
# 通 NOTICE 告

檔案編號：HLD/HAPM/HYP-RP0010/MEM21-067

致：翠景花園各業戶

## 有關：「普光明寺修改土地用途申請」問卷調查結果

管業處於4月19日就上述事宜發予各業戶之問卷，於4月30日截止時共收回137份問卷，約佔總業戶人數31.8%。現匯報調查結果如下：




綜合問卷調查結果，於收回之問卷中93%業戶則反對上述申請，只有7%業戶表示贊成。

另有業戶提出其他意見，包括①增建安置所後，會增加區內交通流量壓力，影響區內居民安全②影響環境衛生、噪音滋擾及治安問題，影響區內居民生活③違反土地用途，將非合法行為變成合法化營商龕位 ④會造成嚴重的空氣污染及會有猴子集結搶奪食物。管業處已將各業戶意見的諮詢文件交回相關政府部門及將問卷調查結果通知黃學禮議員協助跟進。本處籍此感謝各業戶提供寶貴意見。

如有任何疑問，歡迎賜電2607-0281與管業處職員聯絡。

翠景花園管業處

二〇二一年五月五日

(Should owners / occupiers require an English version of this notice, please kindly contact the management office)

此通告張貼至 20/5/2021

恒益物業管理有限公司

**Hang Yick Properties Management Limited**

美松苑業主立案法團
The Incorporated Owners of
Mei Chung Court

沙田大圍美松苑興松閣地下法團會址
G/F Hing Chung House, Mei Chung Court, Tai Wai, Shatin
聯絡電話☎ 2603 0831 傳真 2603 0121

本函編號: MC/IO/N/2023/010

3268

致: 美松苑各業戶

## 收集反對「普光明寺」改變土地用途的實體及網上意見書

後山「普光明寺」骨灰龕問題困擾本苑居民良久，該寺近期向「城規會」提交進一步資料申請更改土地用途(申請編號 Y/ST/49-申請人提交的進一步資料)。

「美松苑業主立案法團」已草擬一份意見書並會放置於每一位住戶信箱。意見書內容大致表達「普光明寺」申請的不合法及不理性，反對該次申請被「城規會」予以通過。希望「美松苑」各業主、住戶於詳閱後寫上姓名、日期及親筆簽名，再投放於地下大堂收集箱內。若實體信不足，請向保安員要求相應份數。

是次意見書之遞交將於 2023 年 5 月 19 日截止，請各住戶於**5 月 16 日前**投放至地下大堂收集箱，業主立案法團將會一次過把收集所得信件實體遞交至北角「城規會」，右方 QR Code 亦為「城規會」Y/ST/49 申請之網上意見收集渠道，請各業主、住戶踴躍填寫實體信及網上意見書，為自己、為家人及美松苑向不法不義之商人作出回應。

美松苑業主立案法團

2023 年 5 月 5 日

3273

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

**KFBG's comments on four planning applications**
19/05/2023 13:19

From: EAP KFBG <eap@kfbg.org>
To: "tpbpd@pland.gov.hk" <tpbpd@pland.gov.hk>
File Ref:

4 attachments

230519 s16 MP 341c.pdf 230519 s16 HT 20.pdf 230519 s17 ST 626.pdf 230519 s12a ST 49c.pdf

Dear Sir/ Madam,

Attached please see our comments regarding four applications. There are four pdf files attached to this email. If you cannot see/ download/ open these files, please notify us through email.

Thank You and Best Regards,

Ecological Advisory Programme
Kadoorie Farm and Botanic Garden

Email Disclaimer:
The information contained in this e-mail (including any attachments) is confidential and is intended solely for the addressee. If you are not the intended recipient, please notify the sender immediately and delete this e-mail from your system. Any unauthorised use, disclosure, copying, printing, forwarding or dissemination of any part of this information is prohibited. KFBG does not accept responsibility and shall not be liable for the content of any e-mail transmitted by its staff for any reason other than bona fide official purposes. There is no warranty that this e-mail is error or virus free. You should not rely on any information that is not transmitted via secure technology.

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)

19th May, 2023. **By email only**

Dear Sir/ Madam,

**To rezone the application site from "Residential (Group B)" and "Green Belt" to "Other Specified Uses" annotated "Religious Institution with Columbarium" (Y/ST/49)**

1. We refer to the captioned.

2. We in general maintain our concerns regarding this application and please make reference to our previous submission for this application (in **Appendix 1**). We would also like the Board to look at an updated aerial photo taken in 2022 showing the application site and its surroundings (**Figure 1**).

3. Thank you for your attention.

Ecological Advisory Programme
Kadoorie Farm and Botanic Garden

**Figure 1.** Aerial photo (taken in 2022) showing the application site and its surroundings (approximately marked by the red circle).



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)

25th February, 2021. **By email only**

Dear Sir/ Madam,

**To rezone the application site from "Residential (Group B)" and "Green Belt" to "Other Specified Uses" annotated "Religious Institution with Columbarium" (Y/ST/48)**

**&**

**To rezone the application site from "Residential (Group B)" and "Green Belt" to "Other Specified Uses" annotated "Religious Institution with Columbarium" (Y/ST/49)**

1. We refer to the captioned.

2. The application sites are within Green Belt and Residential (Group B) zones; both zones are not intended for columbarium use. In addition, according to the information from the Statutory Planning Portal 2 website of the Town Planning Board, there are two rejected planning applications covering the current application sites. The reasons for rejection are reproduced below.

A/ST/657 (Proposed Flat Use; rejected on 16/11/2007)

(a) *the proposed development was not in line with the planning intention of "Green Belt" ("GB") zone which was 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 was a general presumption against development in "GB" zone and no strong planning justifications had been provided in the submission for a departure from this planning intention;*

(b) *the application site was largely covered with dense and natural vegetation. The proposed development and the proposed access road would lead to clearance of the vegetation and tree felling. There was insufficient information in the submission to demonstrate that the proposed*

*development would not have adverse impacts on nature conservation and the existing valuable landscape;*

(c) *there was insufficient information to demonstrate that the proposed development would not have adverse traffic impacts on the surrounding roads and junctions; and*

(d) *approval of the application would set an undesirable precedent for other similar development proposals in the "GB" zone. The cumulative effect of approving such proposals would encourage proliferation of residential developments in the "GB" zone resulting in adverse cumulative traffic impact.*

A/ST/675 (Proposed Private Garden for Flats; rejected on 23/01/2009)

(a) *the application site was largely covered with dense and natural vegetation. The proposed private garden and the proposed access road would lead to clearance of the vegetation and tree felling both inside and outside the application site which would have adverse impacts on the ecological and landscape value of the "GB" zone. There was insufficient information in the submission to demonstrate that the proposed development would not have adverse impacts on nature conservation and the existing valuable landscape; and*

(b) *approval of the subject application would set an undesirable precedent for other similar development proposals in the "GB" zone. The cumulative effect of approving such proposals would encourage proliferation of residential developments in the "GB" zone.*

3. We would like the Board to look at an aerial photo taken in Nov 2020 showing the application sites and their surroundings (**Figure 1**).

4. As shown in the gists of both applications, the sites are close to a watercourse and Mei Chung Court. We urge the Board to liaise with relevant authorities as to whether there would be potential impacts on water quality and air quality caused by the proposal(s). We also urge the Board to consider whether the proposal(s) would increase the hill fire risk in the area.

5. Thank you for your attention.

Ecological Advisory Programme
Kadoorie Farm and Botanic Garden

**Figure 1.** Aerial photo (taken in Nov 2020) showing the application site and its surroundings (approximately marked by the red circle).



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**反對Y/ST/49 _普光明寺的改劃申請**
18/05/2023 19:34

From: [redacted]
To: Town Planning Board <tpbpd@pland.gov.hk>
File Ref:

1 attachment

反對 Y-ST-49 普光明寺規劃申請_20230517.pdf

致：城規會秘書處
由：各界關注骨灰龕法案大聯盟
日：2023.05.18
有關：反對Y/ST/49 把「住宅（乙類）」地帶及「綠化地帶」改劃為「其他指定用途」註明「宗教機構及靈灰安置所」地帶

致：城規會秘書處

有關：反對 Y/ST/49 把「 住宅（ 乙類）」地帶及「綠化地帶」改劃為「其他指定用途」 註明「宗教機構及靈灰安置所」地帶

各界關注骨灰龕法案大聯盟反對 Good Faith Limited 就違規發展中的普光明寺向城規會提出規劃申請締號 Y/ST/49，把「 住宅（ 乙類）」地帶及「綠化地帶」改劃為「其他指定用途」 註明「宗教機構及靈灰安置所」地帶。理由如下：

1. 申請人於

   A. 2016 年 5 月 27 日開始提出改劃申請編號 s12_Y/ST/33，共申請了 5 次延期，受到附近居民大力反對，最後一次於 2018 年 2 月 20 日主動撤回該規劃申請。

   B. 相隔 4 個月，於 2018 年 6 月 27 日再次提出申請編號 s12_Y/ST/40，申請龕位數目由 20,000 個減至 14,540 個，又再提出 4 次延期申請，在最後 2019.09.20 的延期申請後主動撤回；

   C. 申請人再於 2021.01.05 再提申 s12_Y/ST/48，經過不少於 2 次延期申請後，於 2022 年下旬又主動撤回；

   D. 申請人在同日(2021.01.05)再提 s12_Y/ST/49，又已 3 次提出延期，而申請的龕位數量在最後一次補充資料時大幅減低至 4,779 個龕位。

申請人在 2021.01.05 提交的申請書中聲稱並沒有與申請地點屬相同地帶的先前申請(見下圖)，與事實不符。

**申請編號 Application No. : Y/ST/49**

**與申請地點屬相同地帶的先前申請**
**Previous Applications Relating to the Application Site with Same Zoning(s)**

| 申請編號 Application No. | 擬議修訂 Proposed Amendment(s) | 城市規劃委員會的決定(日期) Decision of Town Planning Board (Date) |
|---|---|---|
| 沒有 Nil | | |

大聯盟欲向城規會指出有關申請需注意的地方，並強烈反對 Y/ST/49 的改劃申請。

2. 大聯盟首先要指出，普光明寺根據香港法例第 630 章「私營骨灰安置所條例」，已於 2017 年 12 月 30 日至 2018 年 3 月 29 日期間向骨灰所辦分別申請「暫免法律責任書」，同時亦將構築物內的 20,000 個龕位分兩個申請，分別是 2017 年 6 月 30 日已售及 2017 年 6 月 30 日後未售龕位兩個申請。

3. 大聯盟發現申請人提供的資料與骨灰所辦公佈的申請摘要資料有不少差別之處，大聯盟要求骨灰所辦進一步核實並向城規會反映。差別情況如下：

**差別一：**

根據 Ref: PPC-PLG-100536 Report Version 4.0，第 4.2.5 段表示在圖表 4.2 列出的龕位狀況時題示的總龕位數目是 16,262 個，與 Y/ST/49 的第一份申請摘要所列出的單位數目 14,540 有所差別；而最後在 7.0 的補充資料又大幅減少至 4,779 個。

**差別二：**

根據最新一份補充資料 Ref: PPC-PLG-100536 Report Version 7.0，申請將申請的龕位總數減至 4,779 個。但總數與骨灰所辦及 4.0 版的數量又不盡相同。

| | 2017 年 6 月 30 日前出售(包括已上位及未上位)的龕位數目 | | 2017 年 6 月 30 日後未出售 | | 總數 |
|---|---|---|---|---|---|
| | 單人 | 雙人 | 單人 | 雙人 | |
| 骨灰所辦 | 2,646 | | 20,154 | | 22,800(骨灰份數) |
| 普光明寺 4.0 版 | 912(當中 16 個屬慈善用途) | 867(1,734) | 8,812 | 5,671(11,342) | 16,271(22,800) |
| 普光明寺 7.0 版 | 912(當中 16 個屬慈善用途) | 867(1,734) | 1,948 | 1,052(2,104) | 4,779(6,698) |

申請人在 7.0 版申請的骨灰龕數量大幅減少至 4,779 個骨灰龕(6,698 份骨灰)，似乎係申請人經過多次申請，當中提出擴闊現有的行人路，讓穿梳巴士行駛，但可能估計獲批的機會不高，因此將申請的數量大幅減少，爭取獲批的機會，打開缺口，製造先例，日後再逐步申請。

大聯盟請委員注意，申請人向骨灰所辦申請的可安放骨灰份達達 22,800 份骨灰，有關設施亦已設立。另一方面，土地持有人嘉信有限公司於 2009 年以$32,000,000 購買該寺，若只用作安放 4,779 個龕位並不劃算。

**差別三：**

2017 年 6 月 30 日之前出售但未上位的數目有所差別

| | 已售已上位及未上位 | | 已售未上位 | | 總數(骨灰份數) |
|---|---|---|---|---|---|
| | 單人 | 雙人(骨灰份數) | 單人 | 雙人(骨灰份數) | |
| 骨灰所辦 | (332) | | (2,314) | | (2,646) |
| Y/ST/48 | 912(當中 16 個屬慈善用途) | 867(1,734) | NA | NA | 1,779(2,646) |
| Y/ST/49 7.0 | 912 | 867(1,734) | 1,948 | 1,052(2,104) | 4,779(6,698) |

申請人在 7.0 版列出的龕位數目，大幅減少，與普光明寺向骨灰所辦提交的資料不盡相同，根據普光名寺提交給骨灰所辦的資料，2017 年 6 月 30 日前已售(包括已上位及未上位)的骨灰份數

為 2,646 份[1]，當然上位的數字可以增加，但因在 2017 年 6 月 30 日後未獲發牌的龕場是不可進行任何形式的買賣或租賃，因此，申請人必須清楚說明在 4,779(6,698)份骨灰當中，2017 年 6 月 30 日前後的分配。

4. 普光明寺現時的地段，於 2006 年由亞洲基督教會售予「鴻信集團有限公司」，再於 2009 年 8 月 15 日以 3 千 2 百萬轉售在一間在英屬維爾京群島非香港註冊的「嘉信有限公司」(即申請人 Good Faith Limited)，才進行改建工程，並於 2010 年 5 月 2 日進行開光，鄰近居民亦於當天堵塞前往的通道抗議，要求寺方停售骨灰龕[2]。發展局於 2010 年 12 月 30 日首份私營骨灰安置所表列名單，普光明寺被列入表二名單之內[3]，亦即違反規劃用途及土地契約，食衛局亦多次教育市民違規龕場將來未必一定可以獲發牌照，著市民小心揀龕場。於 2014 年 6 月 18 日，食衛局更頒佈「私營骨灰安置所條例草案」，大部份違規龕場的生意額亦因此下降。因此，大聯盟質疑普光明寺聲稱在 2017 年 6 月 30 日前已出售 2,646 個龕位，當中只有由 2018 年的 320 至 2023 年 4 月提交的最新補充資料的 332 個)已上位，大聯盟質疑已出售龕位的準確性，希望食環署能進一步核實。

5. 申請人聲稱申請 14,540 個截算前的龕位，但事實上，該申請與 s12_Y/ST/33 申請 20,000 個龕位的規劃申請所佔用的樓宇面積、地積比及上蓋面積大致一樣，這反映今次的申請已覆蓋原有的 20,000 個龕位。

<table>
<tr><td>規劃申請</td><td colspan="3">s12a_Y/ST/33</td><td colspan="3">S12a_Y/ST/40</td><td colspan="3">s12a_Y/ST/49</td></tr>
<tr><td rowspan="4">總樓面面積及/或地積比率</td><td></td><td>平方米</td><td>地積比</td><td></td><td>平方米</td><td>地積比</td><td></td><td>平方米</td><td>地積比</td></tr>
<tr><td>住用</td><td>--</td><td>--</td><td>住用</td><td>--</td><td>--</td><td>住用</td><td>--</td><td>--</td></tr>
<tr><td rowspan="2">非住用</td><td rowspan="2">約 2,120.90</td><td rowspan="2">約 0.33</td><td>Lots 2 & 671</td><td>1,450.42</td><td>0.36</td><td>Lots 2 & 671</td><td>約 1,412.6</td><td>約 0.35</td></tr>
<tr><td>Lot 829 RP</td><td>641.33</td><td>0.29</td><td>--</td><td>--</td><td>--</td></tr>
<tr><td rowspan="3">幢數</td><td>住用</td><td colspan="2"></td><td>住用</td><td colspan="2">--</td><td colspan="3">--</td></tr>
<tr><td>非住用</td><td colspan="2">3</td><td>非住用</td><td colspan="2">3</td><td colspan="3">3</td></tr>
<tr><td>綜合用途</td><td colspan="2"></td><td>綜合用途</td><td colspan="2">--</td><td colspan="3">--</td></tr>
<tr><td rowspan="2">上蓋面積</td><td colspan="3" rowspan="2">約 15-19%</td><td>Lots 2 & 671</td><td colspan="2">19%</td><td colspan="3">18%</td></tr>
<tr><td>Lot 829 RP</td><td colspan="2">15%</td><td colspan="3">--</td></tr>
<tr><td>單位數目</td><td colspan="3">20,000 骨灰龕位</td><td colspan="3">14,540 骨灰龕位</td><td colspan="3">4,779 骨灰龕位</td></tr>
</table>

[1] https://www.fehd.gov.hk/pclb/tc_chi/pdf/C53-S-L.pdf
[2] http://orientaldaily.on.cc/cnt/news/20100503/00176_037.html
[3] https://www.devb.gov.hk/filemanager/en/content_756/Columbarium_List_20101216.pdf no.23

6. 申請人企圖將普光明寺營運骨灰龕場等同在 1967 年第一 <沙田分區大綱草圖編號 LST/47> 前已存在的路德會於 1950 年代設立的神學院，及後的亞洲基督教議會中心相題並論，以「政府、機構及社區」、「宗教機構」用途相符，混淆視聽，企圖矇混過關。大聯盟必須指出，普光明寺主要業務是經營 2 萬個灰位的骨灰龕場，「以寺之名、營龕為實」，根本不能與當時的神學院及基督教會議中心相題並論。

7. 當時規劃署亦表示，根據沙田分區計劃大綱圖，上址為「綠化地帶」及「住宅（乙類）」用途；骨灰龕位不屬經常准許用途，須先向城市規劃委員會提交申請，不過申請人於 2010 開始營運，至 2016 年才首次向城規會提出改劃申請。

8. 普光明寺亦違反地契，地契說明不可存放人體遺骸，有關法律定義的訴訟亦於 2015 年底的弘道堂案被上訴庭駁回後已確立「骨灰屬人體遺骸」，地政處亦於 2016 年初已向普光明寺發出警告信，該寺並沒有理會，現已被地政署釘契。

9. 該寺不旦明知故犯，違規發展在先，2010 年至 2016 年中從沒有向城規會提出改劃申請，但有記者於 2015 年 4 月發展普光明寺的職員訛稱「已申請緊，好快就合格」[4]城規會若批准有關申請，相變鼓勵違規發展行動，做成極壞先例。

10. 普光明寺鄰近沿美田路一帶共有兩個公屋邨、兩個居屋苑及兩個私人樓宇，

| 屋邨/屋苑名稱 | 座數 | 住戶數 |
|---|---|---|
| 美林村 | 4 | 4,100 |
| 美田村 | 8 | 6,700 |
| 美城苑 | 3 | 2,192 |
| 美松苑 | 6 | 1,940 |
| 美柏苑 | 1 | 288 |
| 美盈苑 | 1 | 216 |
| 翠景花園 | 2 | 430 |
| 恒峰花園 | 3 | 666 |
| 總數 | 28 | 16,532 |

估計人口超過超過 5 萬，美田路為主要通道，若普光明寺在該處營辦骨灰龕場，勢將加重該區的交通及人流的壓力，該區亦欠缺泊車及停車位置，對當區居民做成不便。

申請人稱聲有助解決骨灰位不足的問題。大聯盟必須指出，食衛局已推行 18 區覓地建公營龕場，在 2017 年至 2023 年已有超過 30 萬個龕位供應，在未來十年，亦合共會有數以十萬龕位計的龕位供應，因此，龕位不足只是過渡時期。

11. 大聯盟認為該區屬綠化帶，位於山上，污水不當處理，會做成環境污染問題。

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4

https://www.hk01.com/%E6%B8%AF%E8%81%9E/14547/-%E9%87%9D%E7%B9%94%E5%A4%A7%E7%8E%8B-%E7%BE%85%E5%AE%9A%E9%82%A6%E5%AE%B6%E6%97%8F%E6%88%90%E5%93%A1-%E8%88%87%E9%81%95%E8%A6%8F%E9%BE%95%E5%A0%B4%E6%99%AE%E5%85%89%E6%98%8E%E5%AF%BA%E9%97%9C%E4%BF%82%E5%AF%86%E5%88%87

12. 普光明寺位於山上，只靠一條由美田路旁的一條小徑，附近沒有緊急車輛停泊或行駛的道路，人流眾多，一旦遇到意外，會影響救援情況。

13. 申請地點大部份座落於綠化帶，綠化帶的規劃意向，主要是利用天然地理環境作為市區和近郊的發展區的界限，以抑制市區範圍的擴展，並提供土地作靜態康樂場地。根據一般推定，此地帶不宜進行發展。廟宇並非經常准許有途，除非在製定分區大綱草圖已存在，則可以透過 s16 提出申請。申請人於 2010 年在沒有申請情況下發展骨灰龕場，已違反規劃限制，而發展骨灰龕場，亦違反規劃意向，此例不可破。

基於以上原因，大聯盟反對 Y/ST/49 把「 住宅（ 乙類）」地帶及「綠化地帶」改劃為「其他指定用途」 註明「宗教機構及靈灰安置所」地帶。

各界關注骨灰龕法案大聯盟
2023 年 5 月 17 日

致：城市規劃委員會

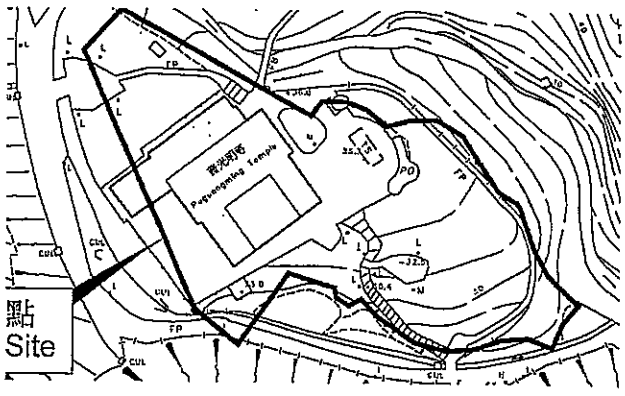
本人得悉普光明寺於去年 2021 年 3 月 30 日向城市規劃委員會提出申請把原作為綠化地帶和住宅用地之地段改作宗教機構(寺廟)及靈灰安置所的申請，特此來函表示反對，及抒發本人意見及感受。

政府在二零一零年提出，全港十八區均需設骨灰龕以解決供求問題。普光明寺作為骨灰安置所離美松苑最近不足一百尺，雖其觸及華人諱忌，作為美松苑居民縱不情願，作為香港公民亦不應因此拒絕分擔香港急需骨灰安置所的需求義務。我並不以美松苑居民反對普光明寺申請更改土地用途，而是以一個尊重法律、尊重環境和尊重信仰的香港居民請求城規會駁回普光明寺是次更改土地用途之申請。

**城規會應參考過往相似案例否決普光明寺是次申請；**

城規會於二零一五年一月十三日審議編號 A/TM/487、否決青雲觀興建骨灰龕場之申請。青雲觀與普光明寺同樣在私營骨灰龕條例草案附表中列為表二之私營骨灰龕場，兩者皆提供過萬個骨灰龕位及位於綠化地帶，規劃署在審決書中指出青雲觀位處山腰，只得一條單程雙向路連接，根本不可能解決計劃落成後拜祭人流造成之交通問題。近似地，白田村連接美松苑一帶只有一條雙程單向路連接，美松苑居民出入交通本來就只能依靠村巴和一條往來沙田之巴士線，應付本苑居民交通需求已力有不逮，談何應付將來過萬個拜祭人士？

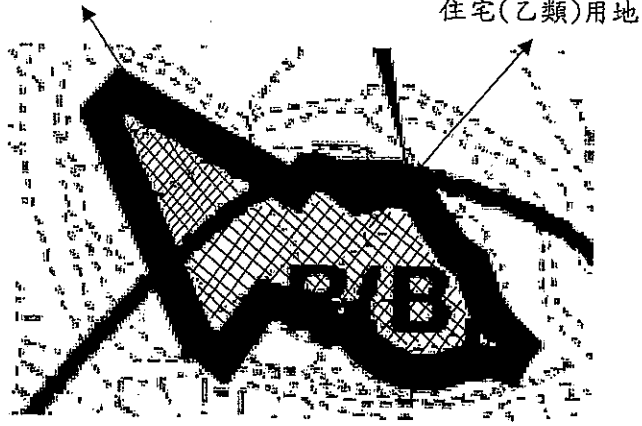
(圖一)




綠化用地

(圖二)

住宅(乙類)用地




**普光明寺位處綠化地帶及住宅(乙類)土地兩個土地用途之用地，即使城規會通過綠化土地用途欄二，亦不符合住宅(乙類)第二欄之要求：**

現時普光明寺持有人向城規會申請更改土地用途，把 1950 年時開始以住宅(乙類)用地中歸屬欄二的『宗教機構』用途之土地改變為綠化地帶中欄二之靈灰安

置所。普光明寺目前之用途在 1985 年刊憲的沙田分區規劃大綱地圖中已被城規會酌情處理，在未經審核的前提下直接歸納為住宅(乙類)用地的第二欄用途，並且沒有被施加任何限制。
如上圖二所示，即使普光明寺佔地面積約佔三分之一的綠化用地能成功過審改變用途，成為靈灰安置所，其剩餘佔地面積約三分之二的土地仍然是住宅(乙類)用地中的『宗教用途』，城規會不應容忍普光明寺僭建『宗教用地』釋義，靈灰安置所不可亦不應包涵在以佛教機構內，否則眾多土地用途及城市規劃皆因此而造成混亂。

**普光明寺對環境造成的破壞不可逆轉及對民居造成嚴重影響：**

普光明寺目前已售龕位總數為 14,540 個，還可以提供 1,789 個骨灰龕，自從 2021 年入紙城規會申請改變土地用途後，普光明寺到目前為止仍然在現有建築物上進行加建工程，若城規會通過其申請，不排除普光明寺能在未來提供過 2 萬甚至更多的骨灰龕位。普光明寺的加建工程已經使白田村連接美松苑一帶的雙向單程路交通擠塞及對附近環境造成破壞，沿路亦沒有空間加強交通規劃滿足將來燒衣拜祭的硬性需求，遑論將來過萬拜祭者焚燒冥鏹造成的環境污染。

**普光明寺以宗教為名，謀利為實，即使美松苑一帶被改建成骨灰安置所亦應是政府經詳細審核可行性及實行之公營機構，不可淪為私營商家謀取暴利之工具：**

普光明寺宣稱骨灰安放是基本佛教寺廟的服務，普光明寺之單人骨灰龕位卻以定價 125,000 港元出售，並需每年繳交 7,000 港元管理費予寺廟， 對比真正提供基本骨灰安放的公營場所的最高價 3,000 港元之永久安置權，其差額高達 44 倍，普光明寺這種定價取向無疑借宗教為名，牟利為實。

綜上所述，城規會應否決編號 Y/ST/48 及 Y/ST/49 由普光明寺提出，把沙田大圍丈量約份第 181 約地段第 2 號及第 671 號，將該地段由綠化地帶和住宅用地之地段改作宗教機構(寺廟)及靈灰安置所的申請。

姓名：
簽名：
日期：4/8/2022

RECEIVED
- 5 AUG 2022
Town Planning Board

# Chapter 18: Traffic impact assessment issues in respect of pre-cut-off columbaria applying for a licence

## (A) Overview

(1) On 22 November 2017, the Government announced two policy initiatives to address the issues of waiving payment for the regularisation exercise and traffic impact assessment (TIA) in respect of pre-cut-off columbaria applying for a licence. The press release concerned is at **Annex 26**.

(2) The requirements on TIA are shown in the table below:

| **The specified instrument under application** | **The columbarium is required to obtain TPB's approval** (Note 1) | **Pre-cut-off columbarium** (Note 2) | **The licence under application/ the planning application covers only niches already sold before 30 June 2017** | **Crowd/traffic management** | | **Remarks** |
|---|---|---|---|---|---|---|
| | | | | **A TIA is required** | **A management plan is required** | |
| Exemption | No | Yes | N/A | No | No | This arrangement was made before the commencement of the PCO |
| Licence | N/A (Note 3) | Yes | No matter yes or no | No | Yes | Same as before |
| Licence | Yes | Yes | Yes | No | Yes | New arrangement |
| Licence | Yes | Yes | No (i.e. unsold niches are included) | Yes | Yes | Same as before |
| Licence | Yes (Note 4) | No | No matter yes or no | Yes (Note 5) | Yes | Same as before |

Note 1: "TPB" means the Town Planning Board. TPB's approval must be obtained if the columbarium has not complied with the planning-related requirements.

Note 2: A pre-cut-off columbarium means a columbarium that was in operation, and in which ashes were interred in niches, immediately before 8 a.m. on 18 June 2014 ("the cut-off time").

Note 3: Planning permission in respect of the columbarium has been granted, or rezoning or planning permission is not required.

Note 4: If TPB's approval has been obtained, there is no need to submit application for planning permission to the TPB.

Note 5: Even though the location/premises relating to the application is/are not covered in the statutory plans or "columbarium" use is an always permitted use in the relevant plans, the applicant may still be required by other departments concerned to submit a TIA where necessary.

## (B) Management plan to be submitted to the PCLB

All licence applicants are required to submit management plans to the PCLB in accordance with the following arrangements:

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| **(i)** | **If the columbarium has met the planning-related requirements** |
| 1 | Submission of a TIA in respect of the management plan is not required. |
| 2 | The applicant must provide in the management plan the following information and propose measures to be implemented by the columbarium to minimize disruption to nearby residents/persons, especially during the Ching Ming and Chung Yeung Festivals:<br>• the holding capacity for visitors of the columbarium;<br>• the numbers of persons and vehicles going to the columbarium during the peak days of the Ching Ming and Chung Yeung Festivals. In this connection, the data on traffic and pedestrian flows within the site boundary of the columbarium (including the hourly data) during the Ching Ming Festival in 2018 should be collected and included in the management plan;<br>• crowd and traffic management measures to be implemented by the columbarium on-site; and<br>• other information required as set out in the management plan template. |
| **(ii)** | **If the pre-cut-off columbarium has not met the planning-related requirements (i.e. TPB's approval is required) and the application covers only niches already sold before 30 June 2017** |
| 1 | Submission of a TIA in respect of the management plan is not required. |
| 2 | The applicant should obtain TPB's consent/approval before submitting the management plan to the PCLB. When advising on the planning application, the relevant departments will not ask for a TIA from the applicant. |
| 3 | The applicant should submit proposed plans (including niche information) certified by qualified persons in respect of the licence application to the PCLB before submitting the planning application to the TPB. Only when the PCAO has completed vetting of the niche information and accepted such information as a basis for further processing of the licence application should the applicant submit the planning application to the TPB.<br>Once vetting of niche information is completed, the PCAO will notify the relevant departments of the verification result. As such, in advising the TPB |

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| | on the proposed traffic and crowd management measures in respect of the planning application submitted to the TPB, the relevant departments will consider whether to adopt an empirical evidence approach relating to niches sold before 30 June 2017. |
| 4 | The applicant must provide in the management plan the following information and propose measures to be implemented by the columbarium to minimize disruption to nearby residents/persons, especially during the Ching Ming and Chung Yeung Festivals:<br>• the holding capacity for visitors of the columbarium;<br>• the numbers of persons and vehicles going to the columbarium during the peak days of the Ching Ming and Chung Yeung Festivals. In this connection, the data on traffic and pedestrian flows within the site boundary of the columbarium (including the hourly data) during the Ching Ming Festival in 2018 should be collected and included in the management plan;<br>• crowd and traffic management measures to be implemented by the columbarium on-site; and<br>• other information required as set out in the management plan template.<br>The management plan should include the crowd and traffic management measures accepted (and the conditions imposed) by the relevant departments and the TPB when the TPB approved the planning application. |
| **(iii)** | **If the pre-cut-off columbarium has not met the planning-related requirements (i.e. TPB's approval is required) and the application covers unsold niches** |
| 1 | The applicant should obtain TPB's consent/approval before submitting the management plan to the PCLB. When advising on the planning application, the relevant departments will ask for a TIA from the applicant. |
| 2 | The applicant should submit proposed plans (including niche information) certified by qualified persons in respect of the licence application to the PCLB before submitting the planning application to the TPB. Only when the PCAO has completed vetting of the niche information and accepted such information as a basis for further processing of the licence application should the applicant submit the planning application to the TPB.<br>Once vetting of niche information is completed, the PCAO will notify the relevant departments of the verification result. As such, in advising the TPB on the proposed traffic and crowd management measures in respect of the planning application submitted to the TPB, the relevant departments will consider whether to adopt an empirical evidence approach relating to niches sold before 30 June 2017. |

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|---|---|
| 3 | The applicant must provide in the management plan the following information and propose measures to be implemented by the columbarium to minimize disruption to nearby residents/persons, especially during the Ching Ming and Chung Yeung Festivals:<br>• the holding capacity for visitors of the columbarium;<br>• the numbers of persons and vehicles going to the columbarium during the peak days of the Ching Ming and Chung Yeung Festivals. In this connection, the data on traffic and pedestrian flows within the site boundary of the columbarium (including the hourly data) during the Ching Ming Festival in 2018 should be collected and included in the management plan;<br>• crowd and traffic management measures to be implemented by the columbarium on-site; and<br>• other information required as set out in the management plan template.<br>The management plan should include the crowd and traffic management measures accepted (and the conditions imposed) by the relevant departments and the TPB when the TPB approved the planning application. |

If the columbarium has not met the planning-related requirements (i.e. TPB's consent/approval is required) and the applicant intends to sell niches, given the above arrangements on TIA, the licence applicant (who must be the same applicant) may consider submitting the following two applications at the same time:

(1) an application for licence and TSOL covering only the total number of niches already sold before 30 June 2017; and

(2) an application for licence and TSOL covering only the total number of unsold niches as at 30 June 2017.

The extent of occupation of land in respect of each of the above applications must cover the facilities necessary for/ancillary to the use of the premises as a columbarium.

- For applications in items (1) and (2) above,

  if a religious ash pagoda existed before the cut-off time and falls within the definition of a religious ash pagoda in section 57(14) of the PCO, the application may cover the pre-cut-off religious ash pagoda. The applicant is required to provide information on the niches in the religious ash pagoda. These niches must include:

- those in which ashes of religious practitioners were interred free of charge after the cut-off time and before 30 June 2017; and

- yet-to-be-disposed-of niches in the pre-cut-off religious ash pagoda to be used for interment free of charge of ashes of religious practitioners pending SHA's approval of the specification application.

- The niche information (including the number of niches sold and filled before 30 June 2017 and the corresponding number of sets of ashes; the number of niches sold and unfilled before the said date and the corresponding number of sets of ashes that may still be interred therein; and/or the number of unsold niches and the corresponding number of sets of ashes that may be interred therein) submitted to the TPB by the applicant must be the same as that shown in the application for licence submitted to the PCLB.

- If the applicant chooses to submit applications for licence as stated in items (1) and (2) above, he/she must submit completed application summaries prepared according to the specified templates at **Annex 30** (for application covering only niches already **sold** before 30 June 2017) and at **Annex 31** (for application covering only **unsold** niches as at 30 June 2017). The applicant may also consider first lodging with the TPB a planning application attaching the niche information required for an application for licence as stated in item (1). When the applicant has obtained the TPB's approval in respect of the planning application relating to item (1) and has met all the requirements for applying for a licence, the PCLB may consider granting approval to the application for licence as stated in item (1).

- After completion of the TIA, the applicant may lodge with the TPB another planning application relating to an application for licence as stated in item (2) above. When the applicant has obtained the TPB's approval in respect of the planning application relating to item (2) and has met all the requirements for applying for a licence, the PCLB may consider granting approval to the application for licence as stated in item (2).

- A fee is charged in accordance with Schedule 6 to the PCO for each licence granted by the PCLB. Please note that a licence fee paid is not refundable upon revocation of the licence.

- The PCAO vets proposed plans and niche information submitted by the applicant and then submits the application details and the result of vetting to the PCLB for its consideration.

- When examining the management plan accompanying the application for licence and the proposed ash interment capacity, the PCLB will take into account the verification result of the PCAO. As such, the applicant should submit to the PCLB as early as possible the proposed plans and niche information certified by qualified persons to facilitate PCAO's vetting before submitting the management plan.

- In the event that the number of niches accepted by the PCLB is smaller than that approved by the TPB in respect of the planning application, the former **is deemed** by the PCLB **to be the approved** ash interment capacity.

中華人民共和國香港特別行政區
Hong Kong Special Administrative Region of the People's Republic of China
立法會 LEGISLATIVE COUNCIL
李梓敬 議員 Hon. Dominic LEE Tsz-king

致:
規劃署
署長
鍾文傑先生, JP

有關：立法會議員李梓敬-約見規劃署會議

是次來函是希望邀請貴署，就有關大圍美松苑附近的普光明寺把「 住宅（ 乙類）」地帶及「綠化地帶」改劃為「其他指定用途」 註明「宗教機構及靈灰安置所」地帶事宜，李梓敬議員就此事件須要約見署長或助理署長，一同出席本次會議。藉此於貴署商討符合以上原則的解決方案。

本函亦附上早前曾聯繫城市規劃委員會之信件，供署方參考了解事情經過。

李議員期望能盡快促成此次會議，並且會面時間約一小時左右，詳細情況請聯繫 與李梓敬議員辦事陳先生聯絡。謝謝。

李梓敬立法會議員辦事處
(陳健文代行)

二零二二年六月十四日

副本抄送:

1) 規劃署副署長/全港,姜錦燕女士 太平紳士 gkykiang@pland.gov.hk
2) 規劃署副署長/地區, 葉子季先生 tckyip@pland.gov.hk
3) 規劃署助理署長/新界區 譚燕萍女士 dyptam@pland.gov.hk
4) 城市規劃委員會秘書處 tpbpd@pland.gov.hk
5) 發展局常任秘書長(規劃及地政) 甯漢豪女士, JP pspl@devb.gov.hk

香港中區添美道1號中信大廈1326室 Room 1326, Citic Tower, 1 Tim Mei Avenue, Central, Hong Kong
電話 TEL: 傳真 FAX: 網站 WEBSITE: npp.org.hk 電郵 E-MAIL: dominic.office@npp.org.hk

中華人民共和國香港特別行政區
Hong Kong Special Administrative Region of the People's Republic of China
立法會 LEGISLATIVE COUNCIL
李梓敬 議員 Hon. Dominic LEE Tsz-king

香港北角渣華道 333 號
北角政府合署 15 樓
致：城市規劃委員會

反對普光明寺更改土地用途為宗教機構（寺廟）及靈灰安置所的申請
（申請編號：Y/ST/48,Y/ST/49）

本辦事處於 3 月 22 日，收到普光明寺要求更改土地用途的諮詢文件。就諮詢文件內容，本人曾向美松及美城苑居民作出諮詢，**普光明寺借執法部門監管不力之機非法售賣骨灰龕及供人拜祭多年.而地政署已早早裁決其違犯地契,但普光明寺在明知犯法的前提下借條例緩衝期屢次向城規會申請改變用途，並中途撤回以借行政漏洞延長其死線**，綜合居民意見，特此來函表示反對，理由如下：

第一：普光明寺自 2010 年違反土地行政，規劃規定及土地契約的規定違法興建，十多年卻無人執法。普光明寺其土地用途本身已為特別許可，普光明寺宣稱之宗教用途就應為其唯一土地用途，其提供之靈位安置服務只提供予佛教徒，與公營及其他私營骨灰龕場有所分別，但其卻曾登報公開放售予公眾及公司作購買，可見其對城規會的土地用途申請只為牟利作藉口。

第二：普光明寺因其骨灰安放之土地用途對環境造成嚴重破壞，已嚴重違反其綠化土地之使用原意：

- 普光明寺位處綠化土地及住宅（乙類）土地之交界，該處為白田村和美松苑之比鄰，城門隧道之下，為野生動物包括猴子和野豬經常出沒的地方。其焚燒冥強等行為污染附近之空氣質素，嚴重威脅此區生態園之平衡。
- 政府應就其破壞行為作出懲罰，並非批准其改變土地用途之申請，變相『獎勵』普光明寺名正言順出售骨灰盈利。

第三：普光明寺對附近 26 座公屋、居屋及私人樓宇帶來嚴重滋擾：

- 普光明寺最近之樓宇為美松苑樂松閣，兩建築物距離不足 100 呎，樂松閣居民經常因其宗教活動包括頌經等活動導致生活作息被擾，以及焚燒冥鏹令空氣質素變差，這會直接影響居民健康。
- 美田路一帶的公用排污系統已到達飽和，無法容納任何將來其違規擴建發展所帶來的污水。

第四：普光明寺若成功申請改變土地用途，附近的交通配套不可能負荷:

- 普光明寺位於美松苑之後方，該處只有一條巴士線路由沙田駛至，加上只是一條單程路上城門隧道或駛至美林村美槐樓繞路離開，交通配套不足以容納 2 萬骨灰龕使用者之後人到訪。
- 有居民反映臨近清明及重陽節時段，有村外人士攜帶冥鏹乘搭唯一進村之小巴至普光明寺，普光明寺亦在其網站介紹到訪人士乘搭該小巴，可見交通配套之匱乏。

香港中區添美道1號中信大廈1326室 Room 1326, Citic Tower, 1 Tim Mei Avenue, Central, Hong Kong
電話 TEL: 傳真 FAX: 網站 WEBSITE: npp.org.hk 電郵 E-MAIL: dominic.office@npp.org.hk

中華人民共和國香港特別行政區
Hong Kong Special Administrative Region of the People's Republic of China
立法會 LEGISLATIVE COUNCIL
李梓敬 議員 Hon. Dominic LEE Tsz-king

總合居民意見，普光明寺已經在灰色地帶遊走多年,出於法律、公義、公益及生態綠化保育等角度,大部分居民反對普光明寺之申請改變土地用途。並要求城規會否決編號 Y/ST/48 及 Y/ST/49 由普光明寺提出，把沙田大圍丈量約份第 181 約地段第 2 號及第 671 號，將該地段由綠化地帶和住宅用地之地段改作宗教機構(寺廟)及靈灰安置所的申請。

如有問題或查詢，可致電(地區直接聯絡方式：　　／電郵　　)與社區幹事(松田)陳健文聯絡。謝謝。

順祝

工作順利！

立法會議員（新界東北）李梓敬
社區幹事（松田） 陳健文
謹啟

二零二二年三月二十八日

副本抄送：

1）沙田民政事務專員 柯家樂太平坤士(carolor@had.gov.hk)

2）規劃署 沙田、大埔及北區規劃專員 陳巧賢女士(mhychan@pland.gov.hk)

香港中區添美道1號中信大廈1326室 Room 1326, Citic Tower, 1 Tim Mei Avenue, Central, Hong Kong
電話 TEL: (852) 傳真 FAX: 網站 WEBSITE: npp.org.hk 電郵 E-MAIL: dominic.office@npp.org.hk

規 劃 署

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

**Planning Department**

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

| | | |
|---|---|---|
| 來函檔號 | Your Reference | N/A |
| 本署檔號 | Our Reference | PD/ST 6-20/1/1 |
| 電話號碼 | Tel. No. : | 2158 6220 |
| 傳真機號碼 | Fax No. : | 2691 2806 |

電郵（dominicleeshatin@gmail.com）

香港中區
添美道 1 號
中信大廈 1326 室
李梓敬議員

**有關：立法會議員李梓敬-約見規劃署會議**

李議員辦事處於本年六月十四日來函邀請規劃署就有關普光明寺的規劃申請事宜出席會議的電郵，本署已於六月二十三日與李議員及居民/地區代表會面，現作書面回覆如下。

城市規劃委員會（下稱「城規會」）於二零二一年一月二十五日收到編號 Y/ST/48 及 Y/ST/49 的規劃申請，建議更改普光明寺的土地用途，由「住宅（乙類）」地帶及「綠化地帶」改劃為「其他指定用途」註明「宗教機構及靈灰安置所」地帶。本署現正按《城市規劃條例》處理有關申請。

本署備悉議員在信中及於會上綜合居民就有關申請提出的反對意見及關注，包括普光明寺涉嫌違規售賣未有牌照的靈灰龕位、該寺的運作對生態環境和居民造成的滋擾，以及影響附近的公共排污和交通配套等。本署將會就改劃申請諮詢相關部門，並將你們的意見及部門回應連同申請一併提交城規會考慮。

李議員及居民代表在會議上提交的信件和相片提及位於普光明寺一帶的懷疑僭建物和非法砍伐樹木事宜，本署已於本年六月二十九日將有關資料轉交相關部門（包括屋宇署、漁農自然護理署及地政總署），相信有關部門會就此作適當的跟進。

感謝李議員及各居民代表就沙田區的規劃事宜提出寶貴的意見。

規劃署署長

（陳巧賢 、代行）

二零二二年六月二十九日

副本送：
城市規劃委員會秘書處
發展局
沙田民政事務署
食物環境衞生署
運輸署
環境保護署
漁農自然護理署
屋宇署
地政總署